



*Empowered lives.
Resilient nations.*

INVITATION TO BID

Replacing Parts of the Sewage Network in the Old City of Aleppo in Two Lots

ITB No.: **UNDP-SYR-ITB-108-18**

Project: **DIM 144 – Sewage Network Rehabilitation – Aleppo (Old City)**

Country: Syrian Arab Republic

Issued on: 29 October 2018

Contents

Section 1. Letter of Invitation.....	4
Section 2. Instruction to Bidders	5
A. GENERAL PROVISIONS.....	5
1. Introduction.....	5
2. Fraud & Corruption, Gifts and Hospitality.....	5
3. Eligibility.....	5
4. Conflict of Interests	6
B. PREPARATION OF BIDS.....	6
5. General Considerations.....	6
6. Cost of Preparation of Bid	7
7. Language	7
8. Documents Comprising the Bid.....	7
9. Documents Establishing the Eligibility and Qualifications of the Bidder.....	7
10. Technical Bid Format and Content.....	7
11. Price Schedule.....	7
12. Bid Security	7
13. Currencies.....	8
14. Joint Venture, Consortium or Association	8
15. Only One Bid	9
16. Bid Validity Period.....	9
17. Extension of Bid Validity Period.....	9
18. Clarification of Bid (from the Bidders).....	10
19. Amendment of Bids.....	10
20. Alternative Bids	10
21. Pre-Bid Conference.....	10
C. SUBMISSION AND OPENING OF BIDS.....	11
22. Submission.....	11
Hard copy (manual) submission.....	11
Email and eTendering submissions.....	11
23. Deadline for Submission of Bids and Late Bids	11
24. Withdrawal, Substitution, and Modification of Bids.....	12
25. Bid Opening.....	12
D. EVALUATION OF BIDS.....	12
26. Confidentiality.....	12

27. Evaluation of Bids.....	12
28. Preliminary Examination.....	13
29. Evaluation of Eligibility and Qualification.....	13
30. Evaluation of Technical Bid and prices.....	13
31. Due diligence	13
32. Clarification of Bids.....	14
33. Responsiveness of Bid.....	14
34. Nonconformities, Reparable Errors and Omissions.....	14
E. AWARD OF CONTRACT.....	15
35. Right to Accept, Reject, Any or All Bids	15
36. Award Criteria	15
37. Debriefing.....	15
38. Right to Vary Requirements at the Time of Award.....	15
39. Contract Signature.....	15
40. Contract Type and General Terms and Conditions.....	15
41. Performance Security.....	15
42. Bank Guarantee for Advanced Payment.....	15
43. Liquidated Damages	16
44. Payment Provisions	16
45. Vendor Protest.....	16
46. Other Provisions.....	16
Section 3. Bid Data Sheet.....	17
Section 4. Evaluation Criteria	21
Section 5a: Schedule of Requirements and Technical Specifications/Bill of Quantities.....	23
Section 5b: Other Related Requirements	23
Section 6: Returnable Bidding Forms / Checklist	57
Form A: Bid Submission Form	58
Form B: Bidder Information Form.....	59
Form C: Joint Venture/Consortium/Association Information Form	61
Form D: Eligibility and Qualification Form	62
Form E: Technical Bid FORMAT	64

Section 1. Letter of Invitation

The United Nations Development Programme (UNDP) hereby invites you to submit a Bid to this Invitation to Bid (ITB) for the above-referenced subject.

This ITB includes the following documents and the General Terms and Conditions of Contract which is inserted in the Bid Data Sheet:

- Section 1: This Letter of Invitation
- Section 2: Instruction to Bidders
- Section 3: Bid Data Sheet (BDS)
- Section 4: Evaluation Criteria
- Section 5: Schedule of Requirements and Technical Specifications
- Section 6: Returnable Bidding Forms
 - o Form A: Bid Submission Form
 - o Form B: Bidder Information Form
 - o Form C: Joint Venture/Consortium/Association Information Form
 - o Form D: Qualification Form
 - o Form E: Format of Technical Bid
 - o Form F: Price Schedule
 - o Form G: Form of Bid Security

If you are interested in submitting a Bid in response to this ITB, please prepare your Bid in accordance with the requirements and procedure as set out in this ITB and submit it by the Deadline for Submission of Bids set out in Bid Data Sheet.

Please acknowledge receipt of this ITB by sending an email to Hanan.al-ali@undp.org , indicating whether you intend to submit a Bid or otherwise. You may also utilize the "Accept Invitation" function in eTendering system, where applicable. This will enable you to receive amendments or updates to the ITB. Should you require further clarifications, kindly communicate with the contact person/s identified in the attached Data Sheet as the focal point for queries on this ITB.

UNDP looks forward to receiving your Bid and thank you in advance for your interest in UNDP procurement opportunities.

Issued by

approved by

Name: Hanan Al Ali
Title: Procurement Associate
Date: **October 29, 2018**

Name: Mirvat Hammoud
Title: Head of Procurement Team
Date: **October 29, 2018**

Section 2. Instruction to Bidders

GENERAL PROVISIONS	
1. Introduction	<p>1.1 Bidders shall adhere to all the requirements of this ITB, including any amendments made in writing by UNDP. This ITB is conducted in accordance with the UNDP Programme and Operations Policies and Procedures (POPP) on Contracts and Procurement which can be accessed at https://popp.undp.org/SitePages/POPPBSUnit.aspx?TermID=254a9f96-b883-476a-8ef8-e81f93a2b38d</p> <p>1.2 Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of the Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this ITB.</p> <p>1.3 UNDP reserves the right to cancel the procurement process at any stage without any liability of any kind for UNDP, upon notice to the bidders or publication of cancellation notice on UNDP website.</p> <p>1.4 As part of the bid, it is desired that the Bidder registers at the United Nations Global Marketplace (UNGM) website (www.ungm.org). The Bidder may still submit a bid even if not registered with the UNGM. However, if the Bidder is selected for contract award, the Bidder must register on the UNGM prior to contract signature.</p>
2. Fraud & Corruption, Gifts and Hospitality	<p>2.1 UNDP strictly enforces a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical or unprofessional practices, and obstruction of UNDP vendors and requires all bidders/vendors observe the highest standard of ethics during the procurement process and contract implementation. UNDP's Anti-Fraud Policy can be found at http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_andinvestigation.html#anti</p> <p>2.2 Bidders/vendors shall not offer gifts or hospitality of any kind to UNDP staff members including recreational trips to sporting or cultural events, theme parks or offers of holidays, transportation, or invitations to extravagant lunches or dinners.</p> <p>2.3 In pursuance of this policy, UNDP:</p> <p>(a) Shall reject a bid if it determines that the selected bidder has engaged in any corrupt or fraudulent practices in competing for the contract in question;</p> <p>(b) Shall declare a vendor ineligible, either indefinitely or for a stated period, to be awarded a contract if at any time it determines that the vendor has engaged in any corrupt or fraudulent practices in competing for, or in executing a UNDP contract.</p> <p>2.4 All Bidders must adhere to the UN Supplier Code of Conduct, which may be found at http://www.un.org/depts/ptd/pdf/conduct_english.pdf</p>
3. Eligibility	<p>3.1 A vendor should not be suspended, debarred, or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization. Vendors are therefore required to disclose to UNDP whether they are subject to any sanction or temporary suspension imposed by</p>

	<p>these organizations.</p> <p>3.2 It is the Bidder's responsibility to ensure that its employees, joint venture members, sub-contractors, service providers, suppliers and/or their employees meet the eligibility requirements as established by UNDP.</p>
4. Conflict of Interests	<p>4.1 Bidders must strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. Bidders found to have a conflict of interest shall be disqualified. Without limitation on the generality of the above, Bidders, and any of their affiliates, shall be considered to have a conflict of interest with one or more parties in this solicitation process, if they:</p> <ul style="list-style-type: none"> a) Are or have been associated in the past, with a firm or any of its affiliates which have been engaged by UNDP to provide services for the preparation of the design, specifications, Terms of Reference, cost analysis/estimation, and other documents to be used for the procurement of the goods and services in this selection process; b) Were involved in the preparation and/or design of the programme/project related to the goods and/or services requested under this ITB; or c) Are found to be in conflict for any other reason, as may be established by, or at the discretion of UNDP. <p>4.2 In the event of any uncertainty in the interpretation of a potential conflict of interest, Bidders must disclose to UNDP, and seek UNDP's confirmation on whether or not such conflict exists.</p> <p>4.3 Similarly, the Bidders must disclose in their Bid their knowledge of the following:</p> <ul style="list-style-type: none"> a) If the owners, part-owners, officers, directors, controlling shareholders, of the bidding entity or key personnel who are family members of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving goods and/or services under this ITB; and b) All other circumstances that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices. <p>Failure to disclose such an information may result in the rejection of the Bid or Bids affected by the non-disclosure.</p> <p>4.4 The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP's further evaluation and review of various factors such as being registered, operated and managed as an independent business entity, the extent of Government ownership/share, receipt of subsidies, mandate and access to information in relation to this ITB, among others. Conditions that may lead to undue advantage against other Bidders may result in the eventual rejection of the Bid.</p>
B. PREPARATION OF BIDS	
5. General Considerations	<p>5.1 In preparing the Bid, the Bidder is expected to examine the ITB in detail. Material deficiencies in providing the information requested in the ITB may result in rejection of the Bid.</p> <p>5.2 The Bidder will not be permitted to take advantage of any errors or omissions in the ITB. Should such errors or omissions be discovered, the Bidder must notify the UNDP accordingly.</p>

6. Cost of Preparation of Bid	6.1 The Bidder shall bear all costs related to the preparation and/or submission of the Bid, regardless of whether its Bid is selected or not. UNDP shall not be responsible or liable for those costs, regardless of the conduct or outcome of the procurement process.
7. Language	7.1 The Bid, as well as any and all related correspondence exchanged by the Bidder and UNDP, shall be written in the language (s) specified in the BDS.
8. Documents Comprising the Bid	8.1 The Bid shall comprise of the following documents and related forms which details are provided in the BDS: <ul style="list-style-type: none"> a) Documents Establishing the Eligibility and Qualifications of the Bidder; b) Technical Bid; c) Price Schedule; d) Bid Security, if required by BDS; e) Any attachments and/or appendices to the Bid.
9. Documents Establishing the Eligibility and Qualifications of the Bidder	9.1 The Bidder shall furnish documentary evidence of its status as an eligible and qualified vendor, using the Forms provided under Section 6 and providing documents required in those forms. In order to award a contract to a Bidder, its qualifications must be documented to UNDP's satisfaction.
10. Technical Bid Format and Content	10.1 The Bidder is required to submit a Technical Bid using the Standard Forms and templates provided in Section 6 of the ITB. 10.2 Samples of items, when required as per Section 5, shall be provided within the time specified and unless otherwise specified by the Purchaser, at no expense to the UNDP. If not destroyed by testing, samples will be returned at Bidder's request and expense, unless otherwise specified. 10.3 When applicable and required as per Section 5, the Bidder shall describe the necessary training programme available for the maintenance and operation of the equipment offered as well as the cost to the UNDP. Unless otherwise specified, such training as well as training materials shall be provided in the language of the Bid as specified in the BDS. 10.4 When applicable and required as per Section 5, the Bidder shall certify the availability of spare parts for a period of at least five (5) years from date of delivery, or as otherwise specified in this ITB.
11. Price Schedule	11.1 The Price Schedule shall be prepared using the Form provided in Section 6 of the ITB and taking into consideration the requirements in the ITB. 11.2 Any requirement described in the Technical Bid but not priced in the Price Schedule, shall be assumed to be included in the prices of other activities or items, as well as in the final total price.
12. Bid Security	12.1 A Bid Security, if required by BDS, shall be provided in the amount and form indicated in the BDS. The Bid Security shall be valid for a minimum of thirty (30) days after the final date of validity of the Bid. 12.2 The Bid Security shall be included along with the Bid. If Bid Security is required by the ITB but is not found in the Bid, the offer shall be rejected.

	<p>12.3 If the Bid Security amount or its validity period is found to be less than what is required by UNDP, UNDP shall reject the Bid.</p> <p>12.4 In the event an electronic submission is allowed in the BDS, Bidders shall include a copy of the Bid Security in their bid and the original of the Bid Security must be sent via courier or hand delivery as per the instructions in BDS.</p> <p>12.5 The Bid Security may be forfeited by UNDP, and the Bid rejected, in the event of any, or combination, of the following conditions:</p> <ul style="list-style-type: none"> a) If the Bidder withdraws its offer during the period of the Bid Validity specified in the BDS, or; b) In the event the successful Bidder fails: <ul style="list-style-type: none"> i. to sign the Contract after UNDP has issued an award; or ii. to furnish the Performance Security, insurances, or other documents that UNDP may require as a condition precedent to the effectivity of the contract that may be awarded to the Bidder.
<p>13. Currencies</p>	<p>13.1 All prices shall be quoted in the currency or currencies indicated in the BDS. Where Bids are quoted in different currencies, for the purposes of comparison of all Bids:</p> <ul style="list-style-type: none"> a) UNDP will convert the currency quoted in the Bid into the UNDP preferred currency, in accordance with the prevailing UN operational rate of exchange on the last day of submission of Bids; and b) In the event that UNDP selects a Bid for award that is quoted in a currency different from the preferred currency in the BDS, UNDP shall reserve the right to award the contract in the currency of UNDP's preference, using the conversion method specified above.
<p>14. Joint Venture, Consortium or Association</p>	<p>14.1 If the Bidder is a group of legal entities that will form or have formed a Joint Venture (JV), Consortium or Association for the Bid, they shall confirm in their Bid that : (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the JV, Consortium or Association jointly and severally, which shall be evidenced by a duly notarized Agreement among the legal entities, and submitted with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and between UNDP and the designated lead entity, who shall be acting for and on behalf of all the member entities comprising the joint venture.</p> <p>14.2 After the Deadline for Submission of Bid, the lead entity identified to represent the JV, Consortium or Association shall not be altered without the prior written consent of UNDP.</p> <p>14.3 The lead entity and the member entities of the JV, Consortium or Association shall abide by the provisions of Clause 9 herein in respect of submitting only one Bid.</p> <p>14.4 The description of the organization of the JV, Consortium or Association must clearly define the expected role of each of the entities in the joint venture in delivering the requirements of the ITB, both in the Bid and the JV, Consortium or Association Agreement. All entities that comprise the JV, Consortium or Association shall be subject to the eligibility and qualification assessment by UNDP.</p> <p>14.5 A JV, Consortium or Association in presenting its track record and experience</p>

	<p>should clearly differentiate between:</p> <ul style="list-style-type: none"> a) Those that were undertaken together by the JV, Consortium or Association; and b) Those that were undertaken by the individual entities of the JV, Consortium or Association. <p>14.6 Previous contracts completed by individual experts working privately but who are permanently or were temporarily associated with any of the member firms cannot be claimed as the experience of the JV, Consortium or Association or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials</p> <p>14.7 JV, Consortium or Associations are encouraged for high value, multi-sectoral requirements when the spectrum of expertise and resources required may not be available within one firm.</p>
15. Only One Bid	<p>15.1 The Bidder (including the individual members of any Joint Venture) shall submit only one Bid, either in its own name or as part of a Joint Venture.</p> <p>15.2 Bids submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the following:</p> <ul style="list-style-type: none"> a) they have at least one controlling partner, director or shareholder in common; or b) any one of them receive or have received any direct or indirect subsidy from the other/s; or c) they have the same legal representative for purposes of this ITB; or d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Bid of another Bidder regarding this ITB process; e) they are subcontractors to each other's Bid, or a subcontractor to one Bid also submits another Bid under its name as lead Bidder; or some key personnel proposed to be in the team of one Bidder participates in more than one Bid received for this ITB process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Bid.
16. Bid Validity Period	<p>16.1 Bids shall remain valid for the period specified in the BDS, commencing on the Deadline for Submission of Bids. A Bid valid for a shorter period may be rejected by UNDP and rendered non-responsive.</p> <p>16.2 During the Bid validity period, the Bidder shall maintain its original Bid without any change, including the availability of the Key Personnel, the proposed rates and the total price.</p>
17. Extension of Bid Validity Period	<p>17.1 In exceptional circumstances, prior to the expiration of the Bid validity period, UNDP may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing, and shall be considered integral to the Bid.</p> <p>17.2 If the Bidder agrees to extend the validity of its Bid, it shall be done without any change to the original Bid.</p> <p>17.3 The Bidder has the right to refuse to extend the validity of its Bid, in which case, the Bid shall not be further evaluated.</p>

18. Clarification of Bid (from the Bidders)	<p>18.1 Bidders may request clarifications on any of the ITB documents no later than the date indicated in the BDS. Any request for clarification must be sent in writing in the manner indicated in the BDS. If inquiries are sent other than specified channel, even if they are sent to a UNDP staff member, UNDP shall have no obligation to respond or confirm that the query was officially received.</p> <p>18.2 UNDP will provide the responses to clarifications through the method specified in the BDS.</p> <p>18.3 UNDP shall endeavour to provide responses to clarifications in an expeditious manner, but any delay in such response shall not cause an obligation on the part of UNDP to extend the submission date of the Bids, unless UNDP deems that such an extension is justified and necessary.</p>
19. Amendment of Bids	<p>19.1 At any time prior to the deadline of Bid submission, UNDP may for any reason, such as in response to a clarification requested by a Bidder, modify the ITB in the form of an amendment to the ITB. Amendments will be made available to all prospective bidders.</p> <p>19.2 If the amendment is substantial, UNDP may extend the Deadline for submission of Bid to give the Bidders reasonable time to incorporate the amendment into their Bids.</p>
20. Alternative Bids	<p>20.1 Unless otherwise specified in the BDS, alternative Bids shall not be considered. If submission of alternative Bid is allowed by BDS, a Bidder may submit an alternative Bid, but only if it also submits a Bid conforming to the ITB requirements. Where the conditions for its acceptance are met, or justifications are clearly established, UNDP reserves the right to award a contract based on an alternative Bid.</p> <p>20.2 If multiple/alternative bids are being submitted, they must be clearly marked as "Main Bid" and "Alternative Bid"</p>
21. Pre-Bid Conference	<p>21.1 When appropriate, a pre-bid conference will be conducted at the date, time and location specified in the BDS. All Bidders are encouraged to attend. Non-attendance, however, shall not result in disqualification of an interested Bidder. Minutes of the Bidder's conference will be disseminated on the procurement website and shared by email or on the e-Tendering platform as specified in the BDS. No verbal statement made during the conference shall modify the terms and conditions of the ITB, unless specifically incorporated in the Minutes of the Bidder's Conference or issued/posted as an amendment to ITB.</p>

C. SUBMISSION AND OPENING OF BIDS

22. Submission	<p>22.1 The Bidder shall submit a duly signed and complete Bid comprising the documents and forms in accordance with requirements in the BDS. The Price Schedule shall be submitted together with the Technical Bid. Bid can be delivered either personally, by courier, or by electronic method of transmission as specified in the BDS.</p> <p>22.2 The Bid shall be signed by the Bidder or person(s) duly authorized to commit the Bidder. The authorization shall be communicated through a document evidencing such authorization issued by the legal representative of the bidding entity, or a Power of Attorney, accompanying the Bid.</p> <p>22.3 Bidders must be aware that the mere act of submission of a Bid, in and of itself, implies that the Bidder fully accepts the UNDP General Contract Terms and Conditions.</p>
Hard copy (manual) submission	<p>22.4 Hard copy (manual) submission by courier or hand delivery allowed or specified in the BDS shall be governed as follows:</p> <p>a) The signed Bid shall be marked "Original", and its copies marked "Copy" as appropriate. The number of copies is indicated in the BDS. All copies shall be made from the signed original only. If there are discrepancies between the original and the copies, the original shall prevail.</p> <p>(b) The Technical Bid and Price Schedule must be sealed and submitted together in an envelope, which shall:</p> <ol style="list-style-type: none"> Bear the name of the Bidder; Be addressed to UNDP as specified in the BDS; and Bear a warning not to open before the time and date for Bid opening as specified in the BDS. <p>If the envelope with the Bid is not sealed and marked as required, UNDP shall assume no responsibility for the misplacement, loss, or premature opening of the Bid.</p>
Email and eTendering submissions	<p>22.5 Electronic submission through email or eTendering, if allowed as specified in the BDS, shall be governed as follows:</p> <ol style="list-style-type: none"> Electronic files that form part of the Bid must be in accordance with the format and requirements indicated in BDS; Documents which are required to be in original form (e.g. Bid Security, etc.) must be sent via courier or hand delivered as per the instructions in BDS. <p>22.6 Detailed instructions on how to submit, modify or cancel a bid in the eTendering system are provided in the eTendering system Bidder User Guide and Instructional videos available on this link: http://www.undp.org/content/undp/en/home/operations/procurement/business/procurement-notice/resources/</p>
23. Deadline for Submission of Bids and Late Bids	<p>23.1 Complete Bids must be received by UNDP in the manner, and no later than the date and time, specified in the BDS. UNDP shall only recognise the actual date and time that the bid was received by UNDP</p> <p>23.2 UNDP shall not consider any Bid that is received after the deadline for the</p>

	submission of Bids.
24. Withdrawal, Substitution, and Modification of Bids	<p>24.1 A Bidder may withdraw, substitute or modify its Bid after it has been submitted at any time prior to the deadline for submission.</p> <p>24.2 Manual and Email submissions: A bidder may withdraw, substitute or modify its Bid by sending a written notice to UNDP, duly signed by an authorized representative, and shall include a copy of the authorization (or a Power of Attorney). The corresponding substitution or modification of the Bid, if any, must accompany the respective written notice. All notices must be submitted in the same manner as specified for submission of Bids, by clearly marking them as "WITHDRAWAL" "SUBSTITUTION," or "MODIFICATION"</p> <p>24.3 eTendering: A Bidder may withdraw, substitute or modify its Bid by Cancelling, Editing, and re-submitting the Bid directly in the system. It is the responsibility of the Bidder to properly follow the system instructions, duly edit and submit a substitution or modification of the Bid as needed. Detailed instructions on how to cancel or modify a Bid directly in the system are provided in the Bidder User Guide and Instructional videos.</p> <p>24.4 Bids requested to be withdrawn shall be returned unopened to the Bidders (only for manual submissions), except if the bid is withdrawn after the bid has been opened.</p>
25. Bid Opening	<p>25.1 UNDP will open the Bid in the presence of an ad-hoc committee formed by UNDP of at least two (2) members.</p> <p>25.2 The Bidders' names, modifications, withdrawals, the condition of the envelope labels/seals, the number of folders/files and all other such other details as UNDP may consider appropriate, will be announced at the opening. No Bid shall be rejected at the opening stage, except for late submissions, in which case, the Bid shall be returned unopened to the Bidders.</p> <p>25.3 In the case of e-Tendering submission, bidders will receive an automatic notification once the Bid is opened.</p>
D. EVALUATION OF BIDS	
26. Confidentiality	<p>26.1 Information relating to the examination, evaluation, and comparison of Bids, and the recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process, even after publication of the contract award.</p> <p>26.2 Any effort by a Bidder or anyone on behalf of the Bidder to influence UNDP in the examination, evaluation and comparison of the Bids or contract award decisions may, at UNDP's decision, result in the rejection of its Bid and may subsequently be subject to the application of prevailing UNDP's vendor sanctions procedures.</p>
27. Evaluation of Bids	<p>27.1 UNDP will conduct the evaluation solely on the basis of the Bids received.</p> <p>27.2 Evaluation of Bids shall be undertaken in the following steps:</p> <ol style="list-style-type: none"> Preliminary Examination including Eligibility Arithmetical check and ranking of bidders who passed preliminary examination by price. Qualification assessment (if pre-qualification was not done)

	<ul style="list-style-type: none"> a) Evaluation of Technical Bids b) Evaluation of prices <p>Detailed evaluation will be focussed on the 3 - 5 lowest priced bids. Further higher priced bids shall be added for evaluation if necessary</p>
28. Preliminary Examination	<p>28.1 UNDP shall examine the Bids to determine whether they are complete with respect to minimum documentary requirements, whether the documents have been properly signed, and whether the Bids are generally in order, among other indicators that may be used at this stage. UNDP reserves the right to reject any Bid at this stage.</p>
29. Evaluation of Eligibility and Qualification	<p>29.1 Eligibility and Qualification of the Bidder will be evaluated against the Minimum Eligibility/Qualification requirements specified in the Section 4 (Evaluation Criteria).</p> <p>29.2 In general terms, vendors that meet the following criteria may be considered qualified:</p> <ul style="list-style-type: none"> a) They are not included in the UN Security Council 1267/1989 Committee's list of terrorists and terrorist financiers, and in UNDP's ineligible vendors' list; b) They have a good financial standing and have access to adequate financial resources to perform the contract and all existing commercial commitments, c) They have the necessary similar experience, technical expertise, production capacity, quality certifications, quality assurance procedures and other resources applicable to the supply of goods and/or services required; d) They are able to comply fully with the UNDP General Terms and Conditions of Contract; e) They do not have a consistent history of court/arbitral award decisions against the Bidder; and f) They have a record of timely and satisfactory performance with their clients.
30. Evaluation of Technical Bid and prices	<p>30.1 The evaluation team shall review and evaluate the Technical Bids on the basis of their responsiveness to the Schedule of Requirements and Technical Specifications and other documentation provided, applying the procedure indicated in the BDS and other ITB documents. When necessary, and if stated in the BDS, UNDP may invite technically responsive bidders for a presentation related to their technical Bids. The conditions for the presentation shall be provided in the bid document where required.</p>
31. Due diligence	<p>31.1 UNDP reserves the right to undertake a due diligence exercise, aimed at determining to its satisfaction, the validity of the information provided by the Bidder. Such exercise shall be fully documented and may include, but need not be limited to, all or any combination of the following:</p> <ul style="list-style-type: none"> a) Verification of accuracy, correctness and authenticity of information provided by the Bidder; b) Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team; c) Inquiry and reference checking with Government entities with jurisdiction on the Bidder, or with previous clients, or any other entity that may have done business with the Bidder; d) Inquiry and reference checking with previous clients on the performance on on-going or completed contracts, including physical inspections of previous

	<p>works, as deemed necessary;</p> <p>e) Physical inspection of the Bidder's offices, branches or other places where business transpires, with or without notice to the Bidder;</p> <p>f) Other means that UNDP may deem appropriate, at any stage within the selection process, prior to awarding the contract.</p>
32. Clarification of Bids	<p>32.1 To assist in the examination, evaluation and comparison of Bids, UNDP may, at its discretion, request any Bidder for a clarification of its Bid.</p> <p>32.2 UNDP's request for clarification and the response shall be in writing and no change in the prices or substance of the Bid shall be sought, offered, or permitted, except to provide clarification, and confirm the correction of any arithmetic errors discovered by UNDP in the evaluation of the Bids, in accordance with the ITB.</p> <p>32.3 Any unsolicited clarification submitted by a Bidder in respect to its Bid, which is not a response to a request by UNDP, shall not be considered during the review and evaluation of the Bids.</p>
33. Responsiveness of Bid	<p>33.1 UNDP's determination of a Bid's responsiveness will be based on the contents of the bid itself. A substantially responsive Bid is one that conforms to all the terms, conditions, specifications and other requirements of the ITB without material deviation, reservation, or omission.</p> <p>33.2 If a bid is not substantially responsive, it shall be rejected by UNDP and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.</p>
34. Nonconformities, Reparable Errors and Omissions	<p>34.1 Provided that a Bid is substantially responsive, UNDP may waive any non-conformities or omissions in the Bid that, in the opinion of UNDP, do not constitute a material deviation.</p> <p>34.2 UNDP may request the Bidder to submit the necessary information or documentation, within a reasonable period, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.</p> <p>34.3 For the bids that have passed the preliminary examination, UNDP shall check and correct arithmetical errors as follows:</p> <p>a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of UNDP there is an obvious misplacement of the decimal point in the unit price; in which case, the line item total as quoted shall govern and the unit price shall be corrected;</p> <p>b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and</p> <p>c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail.</p> <p>34.4 If the Bidder does not accept the correction of errors made by UNDP, its Bid shall</p>

	be rejected.
E. AWARD OF CONTRACT	
35. Right to Accept, Reject, Any or All Bids	35.1 UNDP reserves the right to accept or reject any bid, to render any or all of the bids as non-responsive, and to reject all Bids at any time prior to award of contract, without incurring any liability, or obligation to inform the affected Bidder(s) of the grounds for UNDP's action. UNDP shall not be obliged to award the contract to the lowest priced offer.
36. Award Criteria	36.1 Prior to expiration of the period of Bid validity, UNDP shall award the contract to the qualified and eligible Bidder that is found to be responsive to the requirements of the Schedule of Requirements and Technical Specification, and has offered the lowest price.
37. Debriefing	37.1 In the event that a Bidder is unsuccessful, the Bidder may request for a debriefing from UNDP. The purpose of the debriefing is to discuss the strengths and weaknesses of the Bidder's submission, in order to assist the Bidder in improving its future Bids for UNDP procurement opportunities. The content of other Bids and how they compare to the Bidder's submission shall not be discussed.
38. Right to Vary Requirements at the Time of Award	38.1 At the time of award of Contract, UNDP reserves the right to vary the quantity of goods and/or services, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.
39. Contract Signature	39.1 Within fifteen (15) days from the date of receipt of the Contract, the successful Bidder shall sign and date the Contract and return it to UNDP. Failure to do so may constitute sufficient grounds for the annulment of the award, and forfeiture of the Bid Security, if any, and on which event, UNDP may award the Contract to the Second highest rated or call for new Bids.
40. Contract Type and General Terms and Conditions	40.1 The types of Contract to be signed and the applicable UNDP Contract General Terms and Conditions, as specified in BDS, can be accessed at http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
41. Performance Security	41.1 A performance security, if required in the BDS, shall be provided in the amount specified in BDS and form available at https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Solicitation_Performance%20Guarantee%20Form.docx&action=default within a maximum of fifteen (15) days of the contract signature by both parties. Where a performance security is required, the receipt of the performance security by UNDP shall be a condition for rendering the contract effective.
42. Bank Guarantee for Advanced Payment	42.1 Except when the interests of UNDP so require, it is UNDP's standard practice to not make advance payment(s) (i.e., payments without having received any outputs). If an advance payment is allowed as per the BDS, and exceeds 20% of the total contract price, or USD 30,000, whichever is less, the Bidder shall submit a Bank Guarantee in the full amount of the advance payment in the form available at

	https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Contract%20Management%20Payment%20and%20Taxes_Advanced%20Payment%20Guarantee%20Form.docx&action=default
43. Liquidated Damages	<p>43.1 If specified in the BDS, UNDP shall apply Liquidated Damages for the damages and/or risks caused to UNDP resulting from the Contractor's delays or breach of its obligations as per Contract.</p>
44. Payment Provisions	<p>44.1 Payment will be made only upon UNDP's acceptance of the goods and/or services performed. The terms of payment shall be within thirty (30) days, after receipt of invoice and certification of acceptance of goods and/or services issued by the proper authority in UNDP with direct supervision of the Contractor. Payment will be effected by bank transfer in the currency of the contract.</p>
45. Vendor Protest	<p>45.1 UNDP's vendor protest procedure provides an opportunity for appeal to those persons or firms not awarded a contract through a competitive procurement process. In the event that a Bidder believes that it was not treated fairly, the following link provides further details regarding UNDP vendor protest procedures:</p> <p>http://www.undp.org/content/undp/en/home/procurement/business/protest-and-sanctions.html</p>
46. Other Provisions	<p>46.1 In the event that the Bidder offers a lower price to the host Government (e.g. General Services Administration (GSA) of the federal government of the United States of America) for similar goods and/or services, UNDP shall be entitled to the same lower price. The UNDP General Terms and Conditions shall have precedence.</p> <p>46.2 UNDP is entitled to receive the same pricing offered by the same Contractor in contracts with the United Nations and/or its Agencies. The UNDP General Terms and Conditions shall have precedence.</p> <p>46.3 The United Nations has established restrictions on employment of (former) UN staff who have been involved in the procurement process as per bulletin ST/SGB/2006/15</p> <p>http://www.un.org/en/ga/search/view_doc.asp?symbol=ST/SGB/2006/15&referer</p>

Section 3. Bid Data Sheet

The following data for the goods and/or services to be procured shall complement, supplement, or amend the provisions in the Invitation to Bid In the case of a conflict between the Instructions to Bidders, the Bid Data Sheet, and other annexes or references attached to the Bid Data Sheet, the provisions in the Bid Data Sheet shall prevail.

BDS No.	Ref. to Section.2	Data	Specific Instructions / Requirements
1	7	Language of the Bid	English
2		Submitting Bids for Parts or sub-parts of the Schedule of Requirements (partial bids)	Allowed per lot, however partial bidding within the same lot is not allowed
3	20	Alternative Bids	Shall not be considered
4	21	Pre-Bid conference (Site-visit)	<p>Will be Conducted</p> <p>Date: November 6, 2018 10:00 AM</p> <p>The UNDP focal point for the arrangement is: Focal Point: Mr. Yasser Al Issa Mobile: 0941111285 Email: yasser.alissa@undp.org</p> <p>The site visit is a MANDATORY requirement. Bidders who did not attend the site visit are not eligible to submit a bid.</p>
5	16	Bid Validity Period	90 days
6	13	Bid Security	Required in the amount of USD 500 for Lot1 & 3,000 USD for Lot2
7	41	Advanced Payment upon signing of contract	Not Allowed

8	42	Liquidated Damages	Will be imposed as follows: under the following conditions: Percentage of contract price per day of delay:0.5% Max. no. of days of delay: 20 W/D
9	40	Performance Security	Required in the Amount of: 10 % of contract value
10	12	Currency of Bid	United States Dollar However, for local supplier's payments will be in Syrian Pounds at the prevailing UN exchange rate at the date of the invoice <i>Reference date for determining UN Operational Exchange Rate: the date of deadline of Bid Submission</i>
11	31	Deadline for submitting requests for clarifications/ questions	6 days before the submission deadline
12	31	Contact Details for submitting clarifications/questions	Focal Person in UNDP: Hanan Al Ali Address: Mezzeh, West Villas, Ghazzawi Street, No.8 E-mail address: hanan.al-ali@undp.org
13	18, 19 and 21	Manner of Disseminating Supplemental Information to the ITB and responses/clarifications to queries	Direct communication to prospective Proposers by email and Posting on the website: - www.facebook.com/UNDP.Syria - http://www.sy.undp.org/content/syria/en/home/operations/procurement/ - http://procurement-notice.undp.org/ - https://www.ungm.org/
14	23	Deadline for Submission	Date and Time: November 14, 2018 1:00 PM (Syria time (GMT+2hrs))
14	22	Allowable Manner of Submitting Bids	<input checked="" type="checkbox"/> Courier/Hand Delivery <input checked="" type="checkbox"/> Submission by email

15	22	Bid Submission Address	<p><input checked="" type="checkbox"/> <u>By Courier / Hand Delivery:</u> Mezzeh, West Villas Ghazzawi Street #8 Damascus, Syrian Arab Republic Tel: +963 11 612 9811 Att. Hanan Al Ali, Procurement Associate</p> <p><input checked="" type="checkbox"/> <u>By Electronic submission:</u> Syria.bids@undp.org with subject: UNDP-SYR-ITB-108-18 (Replacing Parts of the Sewage Network in the Old City of Aleppo)</p>
16	22	Electronic submission (email or eTendering) requirements	<p><input checked="" type="checkbox"/> Official Address for e-submission: Syria.bids@undp.org</p> <p><input checked="" type="checkbox"/> Format: PDF files only</p> <p><input checked="" type="checkbox"/> Max. File Size per transmission: [5 MB]</p> <p><input checked="" type="checkbox"/> Max. No. of transmission: [4]</p> <p><input checked="" type="checkbox"/> Mandatory subject of email: UNDP-SYR-ITB-108-18 (Replacing Parts of the Sewage Network in the Old City of Aleppo)</p> <p><input checked="" type="checkbox"/> Time Zone to be Recognized: [Damascus, Syria]</p> <ul style="list-style-type: none"> Documents which are required in original (e.g. Bid Security) should be sent to the below address with a PDF copy submitted as part of the electronic submission: UNDP Syria Country Office, Procurement Unit, Mazzeah West Villas, Damascus, Syria <p>OR</p> <p>UNDP RBAS Regional Center in Jordan, attention Ms. Hanan Abu Baker, Procurement Analyst, at the following address: Abu-Baker Seraj Al-Din ST. Building # 11 – Abdoun Al Shamali</p>
17	25	Date, time and venue for the opening of bid	<p>Date and Time: November 14, 2018 3:00 PM</p> <p>Venue: UNDP Syria Main Office.</p>
18	27, 36	Evaluation Method for the Award of Contract	Lowest priced technically responsive, eligible and qualified bid.
19		Expected date for commencement of Contract	<i>Upon contract signature</i>
20		Maximum expected duration of contract	45 days from receipt of the site after contract signature

21	35	UNDP will award the contract to:	One or more Proposers, depending on the following factors : each proposer might be awarded one lot
22	39	Type of Contract	Contract for Goods and/or Services to UNDP http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
23	39	UNDP Contract Terms and Conditions that will apply	UNDP General Terms and Conditions for Contracts http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
24		Other Information Related to the ITB	N/A

Section 4. Evaluation Criteria

Preliminary Examination Criteria

Bids will be examined to determine whether they are complete and submitted in accordance with ITB requirements as per below criteria on a Yes/No basis:

- Appropriate signatures
- Power of Attorney
- Minimum Bid documents provided
- Bid Validity
- Bid Security (if required) submitted as per ITB requirements with compliant validity period

3. Minimum Eligibility and Qualification Criteria

Eligibility and Qualification will be evaluated on a Pass/Fail basis.

If the Bid is submitted as a Joint Venture/Consortium/Association, each member should meet the minimum criteria, unless otherwise specified.

Subject	Criteria	Document Submission requirement
ELIGIBILITY		
Legal Status	Vendor is a legally registered entity.	Form B: Bidder Information Form
Eligibility	Vendor is not suspended, nor debarred, nor otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization in accordance with ITB clause 3.	Form A: Bid Submission Form
Conflict of Interest	No conflicts of interest in accordance with ITB clause 4.	Form A: Bid Submission Form
Bankruptcy	Has not declared bankruptcy, is not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against the vendor that could impair its operations in the foreseeable future.	Form A: Bid Submission Form
Certificates and Licenses	<input checked="" type="checkbox"/> Certificate of Registration of the business, including Articles of Incorporation, or equivalent document if Bidder is not a corporation.	Form B: Bidder Information Form
QUALIFICATION		
History of Non-Performing Contracts¹	Non-performance of a contract did not occur as a result of contractor default for the last 3 years.	Form D: Qualification Form

¹ Non-performance, as decided by UNDP, shall include all contracts where (a) non-performance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Non-performance shall not include contracts where Employers decision was overruled by the

Litigation History	No consistent history of court/arbitral award decisions against the Bidder for the last 3 years.	Form D: Qualification Form
Previous Experience	Minimum 3 years of relevant experience.	Form D: Qualification Form
	Minimum 2 contracts of similar value, nature and complexity implemented by the company. <i>(For JV/Consortium/Association, all Parties cumulatively should meet requirement).</i>	Form D: Qualification Form
Financial Standing	Minimum average annual turnover of twice the proposed bid value for any of the last 3 years. <i>(For JV/Consortium/Association, all Parties cumulatively should meet requirement).</i>	Form D: Qualification Form
	Bidder must demonstrate the current soundness of its financial standing and indicate its prospective long-term profitability. <i>(For JV/Consortium/Association, all Parties cumulatively should meet requirement).</i>	Form D: Qualification Form
Technical Evaluation	The technical bids shall be evaluated on a pass/fail basis for compliance or non-compliance with the technical specifications identified in the bid document.	Form E: Technical Bid Form
Financial Evaluation	Detailed analysis of the price schedule based on requirements listed in Section 5 and quoted for by the bidders in Form F. Price comparison shall be based on the landed price, including transportation, insurance and the total cost of ownership (including spare parts, consumption, installation, commissioning, training, special packaging, etc., where applicable) Comparison with budget/internal estimates.	Form F: Price Schedule Form

dispute resolution mechanism. Non-performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

Section 5a: Schedule of Requirements and Technical Specifications/Bill of Quantities

دفتر الشروط والمواصفات الفنية الخاصة

مشروع استبدال خطوط صرف صحي في المدينة القديمة لعام 2018

دفتر الشروط والمواصفات الفنية الخاصة

/ الفصل الأول /

المادة (5-1) فحص المواد:

لإدارة المشروع الحق بأن تطلب من المتعهد فحص المواد المنوي استعمالها في أعمال التعهد من قبل مخبر وهذا الفحص يجري من قبل خبراء تسميهم وتعتمدهم الإدارة. ويعطى هؤلاء الخبراء كل التسهيلات لمعاينة المواد واختبار العينات والإشراف على الفحوص وتكون نفقة تحضير العينات وسائر الفحوص على عاتق وحساب المتعهد. أما نفقة الخبراء المعيّنين من قبل إدارة المشروع فتكون على حسابها وللإدارة الحق بأن تفحص على نفقة المتعهد عينات من أية مادة من المواد الواردة إلى الورشة كلما رأت لزوماً لذلك في أي مخبر تعتمده في القطر العربي السوري.

مادة (1 - 6) - المواد واللوازم المطلوب تقديمها من المتعهد:

- أ- يعتبر المتعهد مسؤولاً عن تأمين المواد واللوازم والمعدات والأدوات كافة ومختلف التجهيزات الفنية اللازمة لإنجاز جميع الأعمال المطلوبة حسب ما هو وارد في العقد، على نفقته الخاصة ويجب أن تكون جميع هذه المواد واللوازم والتجهيزات المحضرة لموقع العمل ومستوفية للشروط والمواصفات الفنية المطلوبة منه في العقد كافة وتحصل على موافقة إدارة المشروع (مهندسي الإشراف) قبل توريدها أو وضعها في المكان.
- ب- تعتبر جميع المواد واللوازم والمعدات والأدوات المحضرة من قبل المتعهد منذ وصولها إلى موقع العمل محجوزة لصالح المشروع ولا يجوز استعمالها إلا في الأشغال المطلوبة في العقد ولا يحق للمتعهد أن ينقلها أو يتصرف بها كلها أو بعضها إلى خارج الورشة إلا بموافقة خطية من الجهة العامة.
- ج- على المتعهد أن يتخذ كافة التدابير اللازمة لتأمين استمرار توريد الموارد واللوازم المقتضية لمختلف أعمال المشروع بالشكل وبالمقادير التي تتضمن مواصلة سير الأعمال باطراد وانتظام وفق البرنامج المصدق من قبل جهاز الإشراف دون أي انقطاع أو تأخير.
- د- إذا وجدت إدارة المشروع (مهندسي الإشراف) المواد واللوازم أو المعدات والأدوات المحضرة من قبل المتعهد لاستعمالها في المشروع غير صالحة للعمل أو غير مطابقة لشروط العقد، فإن لها الحق بأن ترفض قبولها وتطلب إخراجها أو استبدالها بغيرها، وعلى المتعهد في هذه الحال أن يزيلها فوراً من موقع العمل وأن يستبدلها على نفقته بأنواع أخرى صالحة تقبل بها إدارة المشروع وإذا تمنع المتعهد أو تأخر عن نقل أو استبدال المواد المرفوضة خلال المدة التي تحدد له فلإدارة المشروع الحق في أن تقوم بذلك على نفقته مهما بلغت تكاليف ذلك ولا يحق للمتعهد المطالبة بأي ضرر أو خسارة أو تعويض أو تمديد لمدة العقد بسبب الإجراءات التي تتخذها إدارة المشروع بموجب أحكام هذه المادة.
- هـ- يحق لإدارة المشروع أن تفحص على نفقة المتعهد أيّاً من المواد المحضرة لاستعمالها في أشغال العقد بواسطة أي مختبر من المختبرات الفنية في سورية كلما رأت لزوماً لذلك.

مادة (1 - 7) - التباين والأخطاء في التعليمات والمخططات:

- أ - على المتعهد قبل المباشرة في تنفيذ أي جزء من العقد أن يدقق ويتأكد من صحة المخططات ومطابقتها بعضها لبعض ولكل ما يقتضيه دفتر الشروط الفنية وجدول الأسعار وقائمة الكميات وغيرها من الأحكام، وعليه أن يطلب من إدارة المشروع تصحيح أي تباين أو تناقض أو نقص أو خطأ قد يلحظه في هذه المخططات أو الشروط

الفنية أو الكشف أو التعليمات المعطاة إليه (سواء أكانت التعليمات مكتوبة أم مرسومة وسواء أكانت مرافقة للعقد أم أعطيت للمتعهد فيما بعد أثناء التنفيذ).

و على المتعهد في مثل هذه الحالات العمل بموجب التعليمات النهائية الخطية التي تطلب إدارة المشروع منه اتباعها أثناء التنفيذ.

ب - إذا لم يراجع المتعهد إدارة المشروع خطياً بشأن أي تباين أو تناقض أو نقص في المخططات والشروط الفنية، وظهر بعد تنفيذ الأشغال، كلها أو بعضها أي خطأ لا يمكن قبوله أو تلافيه في أي من الأعمال الواردة في العقد إجمالاً أو تفصيلاً تقع على المتعهد مسؤولية ما يترتب على تصحيح أو هدم أو إعادة بناء القسم المتأثر بالخطأ الواقع وعليه إزالة نتائج هذا الخطأ على نفقته الخاصة مهما بلغت التكاليف.

ج - إن إدارة المشروع ومديرية الصرف الصحي بحلب هي المسؤولة عن صحة التصميم المقدمة من قبلها من الوجهتين الفنية والحسابية.

مادة (1 - 9) - ملكية ما يخرج في موقع العمل من آثار ومواد:

أ- إن كل ما يستخرج من موقع العمل أو يوجد فيه من قطع أثرية أو مواد تقدر لها قيمة اقتصادية تعود ملكيتها إلى الدولة السورية.

ويتربط على المتعهد أن يتخذ الإجراءات اللازمة كافة للمحافظة على هذه الآثار والمواد لمنع حصول أي كسر أو تشويه أو نقص أو ضرر فيها حتى يجري تسليمها للجهة الرسمية المختصة وتلقي تعليماتها حول أسلوب استعمالها أو التصرف بها.

وعند العثور على مثل هذه القطع ذات القيمة الأثرية والتاريخية يجب على المتعهد إعلام إدارة المشروع ومديرية الآثار العامة بحلب بذلك فوراً وعدم الاستمرار في العمل في المنطقة الخاصة بها إلا بعد الحصول على التعليمات اللازمة بشأنها.

مادة (1 - 10) - ممثل جهاز الإشراف أثناء التنفيذ:

يعتبر المهندسون والمراقبون الذين تعهد إليهم إدارة المشروع بمسؤولية المراقبة والإشراف على تنفيذ الأعمال ممثلين عنها في مراقبة كل ما يتعلق بصحة تطبيق أحكام العقد وتنفيذ المخططات والمواصفات الفنية والتعليمات التي تصدرها للمتعهد أثناء العمل.

وعلى المتعهد أن يقدم لهؤلاء المهندسين والمراقبين المعيّنين من قبل إدارة المشروع (مهندسي الإشراف) بغية تحقيق هذا الغرض التسهيلات اللازمة كافة التي تمكنهم من القيام بجميع واجباتهم خير قيام وأن يعمل بموجب التعليمات والملاحظات التي يصدرونها كافة بموجب أحكام العقد وهو مسؤول عن تأمين مكاتب مؤقتة في موقع العمل كافية صالحة لتأمين قيام المهندسين والمراقبين بكل ما يطلب منهم من واجبات رسمية حتى انتهاء الأعمال.

مادة (1 - 11) - معاينة الأشغال وفحص المواد:

أ- يحق لإدارة المشروع (مهندسي الإشراف) أو من تنتدبه كما يحق لأي من المسؤولين ذوي العلاقة أن يدخلوا في جميع الأوقات إلى موقع العمل للإشراف على سير التنفيذ في المشاغل والمعامل والمحلات الخارجية التي تقوم بتحضير أو صنع أي عمل أو لوازم أو مواد لها علاقة في أي جزء من أعمال العقد. وعلى المتعهد أن يقدم التسهيلات والمساعدات اللازمة كافة لتمكينهم من إجراء ما يروونه ضرورياً من فحص وتدقيق ومعاينة.

مادة (1 - 12) - وكلاء المتعهد والمراقبون أثناء التنفيذ:

أ - على للمتعهد عند غيابه عن موقع العمل أن ينوب عنه وكلاء مسؤولاً لتنظيم وتنفيذ العقد والعمل وفق التعليمات التي تعطيها إدارة المشروع أو أي من مندوبيها أثناء العمل لتحقيق مقتضياته، ويجب أن يقيم هذا الوكيل في موقع العمل طيلة ساعات استمرار التنفيذ كما يجب أن يكون مفوضاً من قبل المتعهد تفويضاً تاماً للعمل بالنيابة عنه أثناء غيابه في كل ما يتعلق بتنفيذ شروط العقد.

ب

د - يجب أن يبقى الوكيل المفوض في موقع العمل طيلة ساعات العمل التي يجري فيها التنفيذ لتلقي تعليمات إدارة المشروع، أو أي من مندوبيها في حال زيارتهم موقع العمل، ويعتبر غياب وكيل المتعهد أثناء ساعات الدوام العادية

عن موقع العمل دون موافقة إدارة المشروع (مهندسي الإشراف) على ذلك مقدماً مخالفة.

مادة (1 - 14) - التنازل عن العقد والعقود الثانوية:

لا يحق للمتعهد أن يتنازل عن أي عمل أو جزء منه من الأعمال التي أبرم العقد من أجل تحقيقها، ولا أن يعهد بها أو يلزمها كلياً أو بعضها إلى أشخاص آخرين كمتعهدين ثانويين إلا بموافقة خطية من إدارة المشروع (مهندسي الإشراف) وأن حصول المتعهد على مثل هذه الموافقة لا يعني بأي حال من الأحوال إلزام إدارة المشروع (مهندسي الإشراف) بأن تدخل في أي علاقة من أي نوع كانت مع المتعهدين الثانويين، كما لا يعفى المتعهد من التزاماته ومسؤولياته الفنية والإدارية والحقوقية والجزائية المفروضة عليه تجاه إدارة المشروع بموجب أحكام العقد.

مادة (1 - 17) - أحجار التحديد:

على المتعهد أن يحتفظ بالإشارات الخاصة بالمناسيب ولا يجوز رفعها بدون الحصول على إذن من دائرة المساحة.

مادة (1 - 18) - أنابيب وخطوط الهاتف والكهرباء:

يجب أن لا تنزع وأن لا تعطل أي أسلاك كهربائية ومواسير مياه أو تمديدات الهاتف أو غيرها حين قيام المتعهد بعمل الحفريات وعليه أن يراجع المصالح ذات العلاقة قبل أي مباشرة في العمل لإرشاده إلى مواقع الكبلات والتمديدات ليأخذ جميع الاحتياطات اللازمة لعدم تعطيلها وكل عطل يلحق بها يتحمل المتعهد مسؤولية المخالفة ويترتب عليه دفع جميع النفقات لإصلاح العطل من قبل المصالح ذات العلاقة.

مادة (1 - 19) - تخطيط الأشغال :

تقوم إدارة المشروع (مهندسي الإشراف) بتخطيط الأشغال والنقاط والإستقامات والاتجاهات الأساسية اللازمة ليتمكن المتعهد من المباشرة بتنفيذ الأشغال خلال عشرة أيام من تاريخ المباشرة ثم يترتب عليه استعمال أعمال التخطيط الأخرى اللازمة لسير العمل على نفقته الخاصة وبشكل يتفق مع المخططات الموضوعة لتنفيذ الأشغال وحسب طلب تعليمات المهندس المشرف على الأشغال والمتعهد مكلف بتثبيت جميع المعالم التي تعطيها الشركة العامة للصرف الصحي بشكل متين بواسطة ركائز من البيتون أو البناء ليجري الموافقة أثناء التنفيذ من قبل المهندس المشرف على الأشغال والمتعهد وكلما وجد ضرورة لعدم حصول أخطاء في العمل وفي حالة ضياع التخطيط من قبل المتعهد سيعاد عمله على نفقته وعند إجراء التخطيط ينظم ضبط بتسليم المتعهد جميع المعالم التي وضعت لتنظيم المشروع يرفع من قبل الطرفين المتعهد والمهندس المشرف على الأشغال وأن يكون في الورشة جميع المستلزمات اللازمة لذلك

مادة (1 - 24) - استعمال المواد :

لا يجوز استعمال المواد إلا بعد أن يقبلها المهندس المشرف على الأشغال فإذا وجد فيها أثناء استعمالها أنها غير مطابقة للشروط فعلى المتعهد أن يستبدلها وذلك ضمن المدة المحددة له.

مادة (1 - 25) - رفع المواد المرفوضة :

يجب أن ترفع المواد من قبل المتعهد في المدة التي يعينها المهندس المشرف على الأشغال عند عدم القيام بذلك ينظم ضبط وترفع المواد أمانة على حساب المتعهد وتخضع نفقاتها من استحقاقاته. حيثما وردت عبارة (دفتر الشروط العامة) تقصد بها دفتر الشروط والمواصفات الفنية العامة الصادر عن وزارة الإنشاء والتعمير.

المادة (1 - 26) تقديم النماذج وتحديد مصادر المواد :

على المتعهد قبل المباشرة بالأعمال وبمدة كافية أن يعين للإدارة مصادر المواد التي يستعملها في تنفيذ الأعمال لبيان مدى مطابقتها للمواصفات والشروط المطلوبة.

الفصل الثاني

المواد ومواصفاتها

المادة (2 - 1) تقديم المواد :

على المتعهد أن يقدم كافة المواد من الإسمنت والرمل والبص والماء والقوالب الخشبية والمعدنية وحديد التسليح وشريط التثبيت وغير ذلك من اللوازم لإنهاء وخلق وصب البيتون المسلح والعادي ولمختلف أنواعه حسب المخططات والشروط الفنية وتعليمات المهندس المشرف وعلى المتعهد تقديم نماذج من هذه المواد ودون استثناء للموافقة عليها قبل الاستعمال وبحيث تكون من أحسن المصادر ووفق مايلي:

المادة (2 - 2) الرمل المعد لصنع المونة والبيتون العادي والمسلح والتوريق :

يجب أن يكون الرمل ناتجاً عن طحن الأحجار الكلسية القاسية التي تستخرج من أجود المقالع المحلية أو الرمل النهري النظيف، وعلى المتعهد أن يقدم نماذج من الحجر المراد استخراج النحاة منه لفحصها قبل جلبها واستعمالها والإذن بإحضار كميات منها لموقع العمل ويجب أن يكون خالئاً من كافة المواد الترابية أو من بقايا نباتية أو مواد عضوية وأن يغربل ويغسل إذا رأى مهندس إدارة المشروع أو من ينوب عنه ضرورة لذلك ويجب أن يكون متدرجاً بالنعومة وأن لا يحوي ذرات تتجاوز أبعادها الأعظمية الحدود التالية:

- 1- النحاة الناعمة المكونة من الذرات التي لاتمر من منخل لا يزيد فتحته عن المليمتر.
 - 2- النحاة السمسمة المكونة من الذرات يزيد أكبر بعد فيها عن المليمتر ويقل عن الخمس ملم وللمهندس الحق في تعيين نسب النحاة الناعمة والسمسمة في كميات النحاة المستعملة في أعمال البيتون ومؤونة البناء حسب مقتضيات العمل المراد استعمالها فيه.
 - 3- يجب ألا تزيد كميات الغبرة الناعمة طحناً من 5% من كميات النحاة.
- ويقتضي بصورة خاصة غربلة الرمل اللازم للزريقات للحصول على النعومة المطلوبة. وترفض كل كمية لا تطابق النماذج المقبولة من حيث جودة النوع والنظافة والنعومة

المادة (2 - 3) البحص المعد لصنع البيتون العادي والمسلح:

يجب أن يكون البحص المستعمل في البيتون ناجماً عن تكسير الحجر الكلسي أو البازلتي الصلب القوي النظيف المستخرج من المقالع الحجرية المحلية وخالياً من الأتربة والأوساخ والمواد الطرية وعلى المتعهد أن يقدم للمهندس نماذج من البحص الذي يريد إحضاره إلى الورشة للموافقة عليه وترفض كل كمية ترد إلى الورشة غير مطابقة للنموذج الموافق عليه وتشمل مادة البحص الأنواع التالية:

- أ - العدسة لا يزيد أكبر بعد فيها عن (10) ملم
 - ب - الفولية ولا يزيد أكبر بعد فيها عن (25) ملم
 - ج - الجوزية ولا يزيد أكبر بعد فيها عن (50) ملم
- وللمهندس المشرف الحق في تعيين النسب المختلفة من كل هذه الأحجام الموافق على استعمالها في مختلف أعمال البيتون وفق مقتضى العمل وعلى المتعهد أن يتقيد بهذه النسب ولا يعدلها إلا بطلب من المهندس المشرف.

المادة (2 - 4) الماء :

يجب أن يكون الماء المستعمل في جميع أنواع البيتون والبناء نظيفاً خالياً من التراب والأوساخ والأملاح والمواد العضوية ولا يستعمل الماء في البيتون إلا بمقادير يعينها المهندس لكل وضع على حده بمقتضى الفحوص الخاصة التي يجريها بموقع العمل وعلى المتعهد أن يتقيد بهذه المقادير ولا يغيرها أو يعدلها إلا بطلب من المهندس المشرف.

المادة (2 - 5) الإسمنت :

إن تقديم الإسمنت اللازم لعموم الأشغال هو على عاتق المتعهد.

إن الإسمنت المطلوب هو الإسمنت الصناعي من نوع (بورتلندي) المتوفرة فيه الشروط المذكورة للمواصفات المفروضة بالأشغال العامة من حيث تركيبه ونتيجة تحليله وعلى أن يكون معبأً بأكياس ورقية فنية وفي حالة حسنة ومختوم من قبل

الشركة الصانعة ويفضل أن يكون من مصنوعات المعامل الوطنية، ويحق للإدارة إذا رأت ضرورة لذلك أن تأخذ نماذج حسب الأصول من الإسمنت الموجود في موقع العمل وترسلها إلى الفحص للتأكد من قوتها وتركيبها وذلك على نفقة المتعهد .
وعلى المتعهد وضع الإسمنت في مستودعات على سطوح خشبية تعلو سطح الأرض 30 سم على الأقل وأن يظل الإسمنت الموضوع على هذه السطوح بمظلة وبصورة عالية.

المادة (2 - 6) الحديد وشريط الترابط للبيتون المسلح :

يجب أن يكون الحديد المستعمل في جميع أعمال البيتون المسلح من نوع مقبول حائز على جميع الشروط المطلوبة والمواصفات الفنية المعتمدة لحديد التسليح المبروم في أعمال البيتون المصبوب في الموقع ذي حد مرونة قدره (24) كغ / مم² وجهد شد عند الانقطاع لا يقل عن (42) كغ / مم² .
وخالٍ من الصدأ والمواد الغريبة وإذا ثبت أنه ليس مستوفياً للشروط الفنية المطلوبة يرفض الحديد بأجمعه وتهدم الأقسام التي استعمل فيها.

مادة (2 - 7) – مزج المؤونة:

يجب أن تمزج الجبلة مرتين على الناشف ومرتين بعد رشها بالماء على أن تصبح منسجمة الشكل واللون تحضر على فسحة مصنوعة من عدسة البيتون أو من المسلح الملاصق ببعضه على أن يكون سطحه مستوياً يجب أن يكون الإسمنت والنحاة والماء المستعمل في المؤونة حائزاً على جميع الشروط المطلوبة ويجب أن لا يزيد حجم الجبلات مما يمكن استعماله خلال مدة لا تزيد عن نصف ساعة للجبلة الواحدة ولا يمكن السماح باستعمال مخلط لكميات التي تكون قد مضت عليها المدة وبدأت التصلب قبل وضعها بالبناء لمنع صناديق خاصة بالشكل والمقاييس التي يعينها المهندس لأجل عيارات الجبلات ولا يسمح بمزج واستعمال المؤونة في الطقس البارد إذا كانت درجة الحرارة دون 3 درجات سنترغراد فوق الصفر إلا إذا اتخذت تدابير فنية خاصة يوافق عليها المهندس ، يجب حفظ المؤونة من حرارة الشمس في فصل الصيف وذلك بعمل مظلة خاصة للجبلة.

مادة (2 - 8) – صب وصنع البيتون:

أولاً = عيارات البيتون :

- بيتون مسلح لأغطية الفوهات المطرية عيار 350 كغ لكل 400 ليتر رمل و800 ليتر بحص.
- بيتون مسلح بالقالب عيار 250 كغ اسمنت لكل 400 ليتر رمل و800 ليتر بحص.
- بيتون عادي عيار حسب المخططات وذلك لبيتون النظافة لغرف التفتيش وأسفل القساطل ولبناء الرديف الحجري.

ثانياً = طريقة الصنع:

- أما طريقة الصنع للبيتون فيجب استخدام جبالات خاصة لمزج البيتون بالعدد والسعة الكافية لتأمين صب البيتون في المواضيع اللازمة بانتظام ودون أي توقف أو تأخير يؤدي إلى أي ضعف في البيتون ويجب أن تكون هذه الجبالات من النوع الذي توافق عليه إدارة المشروع ويجب أن يتم جبل البيتون بمجايل مركزية وتنتقل بواسطة سيارة جبالة.
- لا يؤذن بمزج الجبلات باليد إلا للأشغال الصغيرة التي تسمح بها إدارة المشروع وفي هذا الحال يجب أن تمزج الجبلة أولاً على الناشف وبعده تمزج على الأقل ثلاثة مرات بعد رشها بالماء اللازم ويستمر المزج إلى أن تصبح الجبلة كلها حائزة على الشروط المقبولة
 - في حال ظهور نتائج غير مرضية لمزيج بيتون إحدى الخلطات توقف وتبعد عن العمل إلى أن يتم إصلاحها أو إبدالها بغيرها

ثالثاً = صب البيتون:

- لا يصب البيتون إلا بإذن خطي من قبل المتعهد، وما يصبه بدون إذن لا تحسب له قيمته.
- يصب البيتون في مواضعه بشكل يحفظ انسجامه وجودة اختلاط مواده.
- يجب ألا يفرغ البيتون من إرتفاعات عالية بل تنتقل إلى المستوى الذي يجري صبه.
- ترش وتنظف جميع ألواح القوالب قبل الشروع بالصب.

- على المتعهد أن يؤمن صب البيتون وينظم حركة العمل بشكل لا يؤثر بأي حال على متانة وترتيب ونظافة الحديد والقوالب
- لا يسمح بصب البيتون بالطقس البارد جداً وأيام الصقيع إلا في درجة حرارة تزيد عن 4 * مئوية.

رابعاً = هز البيتون :

يهز البيتون بالمواقع التي يحددها مهندس إدارة المشروع وذلك باستعمال جهاز الاهتزاز أما في المواقع الأخرى فيجب ذلك البيتون ليصبح مكتنزاً وجيلاً

خامساً = وقاية وحفظ البيتون بعد الصب :

- على المتعهد أن يحفظ البيتون من تأثيرات الطقس المضرة مدة يقدرها مهندس إدارة المشروع.
- يجب ألا يحمل البيتون بالأثقال إلا بعد مرور مدة كافية لتصلبه واكتسابه القوة اللازمة.
- يجب رش البيتون بالماء يومياً مرتين ولمدة عشرة أيام من تاريخ الصب.
- يجب أن يكون البيتون المصبوب محققاً للغاية المطلوبة ومقوماً خالياً من الشقوق ويقع على عاتق المتعهد هدم ورفع كل جزء من البيتون لم يتم صبه بالشروط المطلوبة وغير المحقق لشروط المقاومة المنصوص عنها في دفتر الشروط العامة.

الفصل الثالث

المادة (1) وصف المشروع :

الغاية من المشروع تنفيذ المجاري مع تعبيد وتزفيت مكان الحفرية في مختلف مواقع المشروع. وتشمل ما يلي:

- 1 - حفریات خنادق المجاري مع ضخ المياه.
- 1- تنفيذ المجاري من القساطل البولي إيثيلين وفق المقاطع المحددة في المصورات
- 2- تنفيذ المنشآت الخاصة (غرف التفتيش - غرف التوزيع المطمورة، وغيرها) من البيتون العادي والبيتون المسلح.
- 3- إعادة الردم فوق المجاري بالرمال والزرادة الفولية والبحص مع الرص حسب المخططات.
- 4- إعادة الطبقة السطحية فوق الزرادة الفولية بالبحص مع الرص.

المادة (2) التخطيط :

- أ- خلال عشرة أيام من تاريخ أمر المباشرة يترتب على المتعهد تقديم طلب لتسليمه موقع العمل وتخطيط المشروع، يقوم حينئذ مهندس إدارة المشروع بحضور المتعهد أو من ينوب عنه بتخطيط المحاور العامة للأعمال وتحديد إشارات التسوية وتسليمها للمتعهد وأن التخطيط التفصيلي للمشروع يقع على عاتق المتعهد بشكل يتفق مع المخططات المقدمة لكامل المشروع.
- ب- ينظم فوراً عقب انتهاء التخطيط ضبط يشرح جميع التفصيلات العملية وبعد توقيع الضبط المذكور من قبل مهندس إدارة المشروع تبلغ صورة مصدقة عنه إلى المتعهد.
- ج- يقدم المتعهد على نفقته اليد العاملة والأوتاد وجميع الأدوات والمواد التحضيرية اللازمة للامانة لعملية التخطيط وعلى المتعهد أيضاً أن يحافظ على الأوتاد والإشارات الأساسية كما يترتب عليه إعادة وضعها أو وضع بدل عنها عند فقدانها من مواضعها الأصلية للرجوع إليها أثناء المراقبة وتدقيق وتخطيط المشروع.

المادة (3) أعمال حفریات الأسبقة والمجاري مع إعادة الردم :

أ- الحفریات :

- على المتعهد تنفيذ المجاري وسط الشارع وعدم ردمها إلا بعد استلامها.
- قبل المباشرة بالحفریات إذا كانت الشوارع مزففة على المتعهد قص مكان الحفرية آلياً وحسب العروض التي يحتاجها كل قسطل دون زيادة أو نقصان.
- تحفر الخنادق حسب التخطيط النهائي للمجاري على أن تكون مستقيمة ومنتظمة المنحنيات وأن يكون منسوب قاعها

مطابقاً للمناسيب الموضوعة للمخططات وتعليمات مهندس إدارة المشروع أو من ينوب عنه. ويجب وضع ناتج الحفر على جانب واحد بعيداً عن حافة الخنادق بمسافة لا تقل عن متر واحد أما إذا كان المشروع هو استبدال فيجب ترحيل ناتج الحفر أول بأول ولا يجوز إعادة الردم من ناتج الحفر بل يجب الردم بالزرادة. كما يجب عدم قطع طرق المواصلات ولا طرق الري وذلك باتخاذ كافة التدابير اللازمة على حساب المتعهد وتحت مسؤوليته وتحفر الخنادق بعرض يساوي قطر لسطل خارجي مضافاً إليه مسافة مناسبة لتركيب القساطل كما هو مبين في المصورات.

- يجب أن تنفذ الحفريات حتى المنسوب المطلوب بدون زيادة وفي حال زيادة العمق عن المنسوب اللازم يقع على المتعهد مسؤولية إصلاح الخطأ وذلك بإملاء القسم الزائد بالبيتون العادي عيار 250/ كغ أسمنت أو البيتون المغموس أو تردم الأقسام الزائدة ببقايا المقالع وترص حسب شروط الردم بعد موافقة المهندس المشرف ويتحمل المتعهد نفقة هذه الأعمال مها بلغت.

- يتوجب على المتعهد أخذ الاحتياطات اللازمة لتدعيم الحفريات بشكل يمنع الانهيار ويتحمل المتعهد جميع مصاريف التدعيم ويكون مسؤولاً عنها بشكل كامل من ناحية تأمينها ومقاومتها حتى انتهاء العمل.

- يكون المتعهد مسؤولاً عن جميع مصادر المياه وخطوط المجاري وكابلات الكهرباء وخطوط الاتصالات وجميع الخدمات

الأخرى والمنشآت التي تعترض إنجاز الأعمال، ويكون المتعهد مسؤولاً عن أي ضرر يلحق بهذه الخدمات أثناء تنفيذ الأعمال وعلى نفقته الخاصة. حيث يترتب على المتعهد مراجعة الدوائر الرسمية لمعرفة مسار الخطوط قبل المباشرة بالحفر لتجنب الضرر بها ، و في حال ظهور ماء في أعمال الحفريات يتوجب على المتعهد استعمال الطريقة المناسبة لتصريف هذه المياه كاستعمال المضخات مثلاً وحسب تعليمات مهندس الإشراف وبشكل تبقى فيه الحفريات جافة ويشمل سعر الحفريات جميع المصاريف الناتجة عن هذا الإجراء.

في حال استعمال المتفجرات لإنجاز الحفريات الصخرية يترتب على المتعهد أن يتخذ كافة الاحتياطات اللازمة لدرء كل خطر على العمال وكل ضرر عن أملاك الغير كما يترتب عليه أن يخضع إلى كافة القوانين والأنظمة المرعية في هذا الصدد وعليه إزالة جميع الأجزاء المتفككة الناتجة عن التفجير.

ب - أعمال الردميات:

بعد وضع الرمل والزرادة حول القساطل وإلى منسوب +30سم من أعلى القساطل يقوم المتعهد بما يلي:

1 – إذا كانت المجاري حديثة أي إنشاء جديد فيتم الردم إلى أدنى خط المشروع أي -37سم على أن يتم الردم بالأترربة الخالية من الأنقاض والأوساخ والمواد الغريبة كالزبائل والرماد والأخشاب وجذور وورق الأشجار - الخ، وأن تكون المواد المستعملة مقبولة. تؤخذ أترربة الردم من أعمال الحفر، إذا لم تكف فمن مناطق أخرى بعد أخذ موافقة المهندس المشرف يجب أن تنفذ أعمال الردم على طبقات لا تزيد سماكتها عن (30) سم تفرش بشكل مستوي وترش بالماء وتضغط بشكل جيد بالمداخل الرجاجة تبعاً لنوعها وثقلها.

يكون المتعهد مسؤولاً عن كل هبوط يحصل في سطح الردم فيما بعد ويتحمل كافة الأضرار الناتجة عن ذلك.

يقوم المتعهد بترحيل جميع المواد الزائدة عن حاجة الردميات إلى المواقع التي تحددها إدارة المشروع بالتعاون مع مؤسسة الصرف الصحي وعليه فرشها وتسويتها.

تكون أعمال الردميات من ناتج الحفر الصالحة للردم محملة على أسعار حفريات المجاري ولا يدفع لها سعر منفصل.

2 – أما إذا كانت المجاري استبدال فيجب أن يتم الردم بمادة الزرادة والحصويات إلى منسوب -37 سم من خط المشروع للشارع على أن تفرش وترش بالماء وترص على طبقات لا تزيد سماكة كل طبقة عن 30 سم بعد الدحل والرص.

3 – أما إذا كانت المجاري من نوع البناء الحجري فينطبق عليها التعليمات الأولى / 1 / دون وضع الرمل.

المادة (4) جيل البيتون العادي المسلح :

يترتب على المتعهد تأمين البيتون من المجابيل المركزية على أن يتم نقلها بواسطة سيارات جبالة إلى مواقع العمل ويصب في الأماكن المحددة حسب العيارات والأبعاد المدونة على المخططات شرط تأمين البيتون أول بأول ولا يجوز استعمال البيتون بعد مجله بمدة تزيد عن 30 دقيقة وكل ما يتبقى من الخلطات بعد هذه الفترة ترفض ولا يسمح باستعمالها من جديد.

المادة (5) استعمال البيتون العادي والمسلح :

يستعمل البيتون العادي أو المسلح حالاً بعد جبهه، ويجب إعادة مزجه عند الضرورة قبل استعماله ويرفض ما جف منه ويجري صب البيتون على طبقة واحدة إذا كان سمكها لا يتجاوز ثلاثين سم وإلا فيجري صبه على طبقات متتابعة تنتهي بمنحدر مقطع لحسن اتصالها بالطبقات التالية، وتدفق كل طبقة تدفقاً محكماً حتى يتكثف البيتون بصورة ملائمة ولا يجوز إجراء الدقات بصورة متتالية منعاً لتصادد المونة على سطح البيتون. وعند متابعة عمل صب البيتون بعد جفاف القسم المصبوب سابقاً يخرمش سطح القسم المصبوب ويطلّى بمونة الأسمنت قبل صب البيتون الجديد. ويقتضي رش البيتون بالماء وتغطيته مدة عشرة أيام تحاشياً للجفاف السريع.

المادة (6) قوالب البيتون العادي والمسلح :

تكون القوالب إما معدنية أو خشبية حسبما هو وارد في المخططات والشروط الفنية وتركب هذه القوالب بشكل فني يوافق عليه المهندس المشرف، ويجب أن تكون بمتانة كافية لتحمل الأثقال والصدمات التي قد تتعرض لها أثناء التنفيذ. ولا ترفع موافقة إدارة المشروع على قبول استعمالها مسؤولية المتعهد عما قد يحدث نتيجة عدم متانتها. يجب أن لا ترفع القوالب بأجمعها أو قسم منها ما لم يؤمن ترخيص بذلك من المهندس المشرف مع العلم بأن هذا الترخيص لا يعطى قبل مرور أربعة إلى ثمانية أيام وذلك حسب حالة الطقس والاعتبارات الفنية الأخرى.

المادة (7) أعمال حديد التسليح :

- أ- يجب التأكد من نظافة قضبان حديد التسليح وخلوها من الصدأ والدهان والأتربة وخلافه.
 - ب- يجب أن تركيب قضبان الحديد بالعدد والقطر والترتيب المطلوب كما هو موضح بالمصورات وبمقتضى التعليمات التي يعطيها المهندس المشرف، يقوم المتعهد على حسابه بوضع الروابط اللازمة للحصول على هذه النتيجة.
 - ج- تربط قضبان الحديد بشريط حديد متين يحول دون حركة فيها أثناء الصب وترفع القضبان عن القوالب بواسطة كراسي حديدية بالشكل والعدد المقبول الذي يوافق عليه مهندسي الإشراف في المشروع .
 - د - إذا تعذر على المتعهد الحصول على كميات الحديد بالأوصاف والمقاسات والأقطار المطلوبة فلا يجوز استبدالها بأي كمية أخرى إلا بعد الحصول على موافقة خطية من المهندس المشرف.
 - هـ - في حالة صب قسم بدون أخذ إذن بذلك فعلى المتعهد أن يزيل هذا القسم المصبوب على نفقته إذا رأى المهندس المشرف داعياً لذلك
 - و- ينبغي أن تكون قضبان التسليح الطولي قطعة واحداً ولا يجوز أن تلحم قطعياً وإذا وجب الحال استعمال عدة قضبان قصيرة لتأليف قضيب طويل فإن نهايات القضبان تلوى على شكل قوس وتجمع ببعضها على أن يبلغ طولها المشترك مقدار يعادل ثلاثين مرة من قطر القضيب.
 - ز- يجب أن تكون حماية أو تغطية حديد التسليح بالبيتون كالاتي:
- (25) مم للسقوف و (40) مم سماكة التغطية الداخلية للجدران والريكرات و (30) مم للأعمدة والجسور والأساسات.
- ح - تشمل أعمال الحديد أعمال درجات السلالم للريكرات وفق المخططات وسعرها محمل على سعر البيتون المسلح.

المادة (8) أعمال صب البيتون :

- أ- لا يصب البيتون إلا بإذن خطي من مهندس إدارة المشروع . ويصب في مواضعه بشكل يحفظ انسجامه وتكاتفه بشكل يؤمن تناثر مواده ويدك ويرج بحيث تملأ جميع الفراغات وتغلف أسياخ الحديد من جميع جهاتها.
 - ب- ترش بالماء وتنظف جميع الألواح والقوالب قبل الشروع بالصب وتخصص جميع الأربطة والدعائم بشكل جيد ومقبول.
 - ج- لا يسمح بصب البيتون في الطقس البارد إذا كانت درجة الحرارة أقل من (3) درجات فوق الصفر إلا إذا أخذت تدابير فنية يوافق عليها المهندس المشرف:
- د قبل الشروع بإكمال الصب بعد كل توقف يجب تنظيف القسم المتصلب من البيتون جيداً وغسله ورفع الذرات غير الثابتة منه ورشه بروبة اسمنت مع الرمل الناعم لتأمين تماسكه مع البيتون الجديد الذي سيربط معه

المادة (9) أعمال الزريقة الأسمنتية :

تصنع مونة الزريقة الأسمنتية بخلطة (500) كغ أسمنت لكل 3م من الرمل الناعم وذلك لكل من طبقة الرشة المسماة

بسمكة (1.5) سم وطبقة التنعيم بسمكة (0.5) سم وسعرها محمل ضمن سعر البيتون المسلح. يجب أن تكون مواد الأسمنت والرمل والماء المستعملة في الزريقة حائزة على جميع المواصفات المطلوبة في المواد الخاصة بها في دفتر الشروط هذا ودفتر الشروط العامة تعمل الجبلات بكميات يمكن استعمالها خلال نصف ساعة وترفض جميع الكميات التي تزيد بعد مرور هذه المدة، كما يصقل وجه الزريقة ويفرك ويكبس حتى يصبح ناعماً وتحفظ الزريقة رطبة لمدة لا تقل عن عشرة أيام بعد مدها.

المادة (10) أعمال تمديد القساطل البولي إيثيلين:

أ- البيتون العادي أو المسلح: يترتب على المتعهد بعد إجراء الحفرية اللازمة وحسب الأبعاد والمناسيب المدونة في المخططات أن يقوم بتقديم البيتون العادي أو المسلح حسب العيار الوارد في الكشف التقديري وفرشه على كامل عرض الحفرية وحسب السمكة المدونة على النموذج مع إجراء التسوية المناسبة له علماً بأن البيتون يجب أن يؤمن من المجابل المركزية.

ب- طبقة التأسيس الرملية

في الأراضي التي يكون فيها منسوب المياه الجوفية مرتفعاً أو ذات التربة الضعيفة تنفذ طبقة من البيتون العادي أو المسلح حسب الكشف التقديري وبمعيار وسمكة تحددها المقاطع العرضية يقوم بعد ذلك المتعهد بوضع طبقة من الرمل تحت القساطل وبعد تمديد القساطل تحشى جوانبه وتردم إلى منسوب + 30 سم من أعلى القسطل على أن ترص جيداً. عند الضرورة يستبدل 30/ سم من الطبقة تحت القساطل بجماش أو تربة محسنة مع الرص ثم تضاف طبقة البيتون أو النحاة حسب القسطل (بيتوني أو بولي إيثيلين).

في الأراضي الصلبة والصخرية وبعد إنجاز الحفريات واستلامها من قبل مهندس إدارة المشروع وبعد التأكد من مطابقتها للشروط وأخذ قياساتها والتحقق من مناسيب القاع وفق المخططات، يقوم المتعهد بفرش طبقة من الرمل بسمكة تحددها المقاطع العرضية وقبل تمديد القساطل ويجب أن يكون الرمل نظيفاً وقاسياً وخالياً من المواد التي قد تؤثر على مادة القساطل وبذرات تتراوح أبعادها بين (0.2) و (6) ملم علماً بأن الردم بالرمل يتم إلى منسوب + 25 سم من أعلى القسطل بعد رصه جيداً.

بعد إنجاز تنفيذ الطبقة الرملية أو البيتون حسب المصورات يقوم المتعهد بأعمال تمديد القساطل.

ج - تمديد القساطل البولي إيثيلين

توزع القساطل على أحد جوانب الخندق المحفور مع مراعاة عدم إمكانية سقوطها في الخندق. قبل إنزال القساطل في الخندق تفحص القساطل لاستبعاد ما تعرض منها للصدمات أو تشققات أثناء النقل. كما تنظف هذه القساطل من الأوساخ العالقة بها. لا يباشر بالتركيب إلا بعد الانتهاء من التسوية وفرش الرمل أو البيتون العادي حسب ما يرد بالمقاطع العرضية لكامل الجزء المحدد بين نقطتي تسوية أو حفرتي تفتيش. لوصل القساطل توضع في الوصلات حلقات مطاطية ويتم التركيب كما يلي: تدخل الحلقة المطاطية ضمن رأس القسطل الموسع ثم يدهن ذيل القسطل بمادة شحمية خاصة ويدكك ضمن رأس القسطل السابق.

د - المواصفات الفنية للقساطل المصنوعة من البولي إيثيلين عالي الكثافة HD-PH من النوع SN4

أن تكون الأنابيب وقطع الإكسسوارات الملحقة بها (كوع 90 درجة/تفريعة Y/ سدات) مصنوعة من البولي إيثيلين عالي الكثافة HDPE (PE100) وذلك حسب المواصفة الأوروبية EN 13476 .

كما تصنع حلقات الوصل المطاطية (الجوانات) من المطاط المقسى حسب ما ورد في المواصفة الأوروبية EN 681 . يجب أن تكون الأنابيب والوصلات والقطع الخاصة المقدمة مخصصة للصرف الصحي .

يجب أن تؤمن الأنابيب والقطع الخاصة عمر تشغيل أدنى 50/ عاماً تحت تأثير كافة الحمولات المحيطة.

يجب أن تكون المادة الموجودة بتماس الجريان مقاومة للمواد الكيميائية وبخاصة للكبريتات و مركبات الكبريت وللأحماض والمواد البتروكيميائية.

يمنع استخدام المواد التي سبق تصنيعها كمادة أولية في تصنيع الأنابيب أو القطع المقدمة , أي يمنع استخدام المواد الناتجة عن إعادة التصنيع.

الاختبارات

يجري أخذ العينات من أنابيب البولي إيثيلين عالية المقاومة HDPE صلابته الحلقية لا تقل عن SN4 واختبارها في أحد المختبرات المعتمدة في حلب بحضور المتعهد و المهندس المشرف وذلك أثناء إجراء الاستلام الأولي للأنابيب قبل التركيب

إن كل أعمال أخذ العينات والاختبارات هي على نفقة المتعهد ومشمولة بأسعاره.

الشركة الصانعة

يجب أن تقدم الشركة الصانعة للأنابيب بياناً تذكر فيه نوع المواصفات التي صنعت بموجبها الأنابيب وتاريخ الصنع.

الخواص الفيزيائية والكيميائية:

جميع الأنابيب والملحقات مصنعة من مادة البولي إيثيلين عالي الكثافة PE100 ولا تقل نسبة البولي إيثيلين عن 97% . لون الأنابيب أسود من الخارج وأي لون من الداخل.

المادة الأولية في تصنيع الأنابيب أو القطع المقدمة جديدة ويمنع استخدام المواد التي سبق تصنيعها كمادة أولية في تصنيع الأنابيب أو القطع المقدمة.

ويجب أن لا تقل الكثافة العادية لمادة البولي إيثيلين عن 930 كغ/م³ .

يجب أن تكون المادة الموجودة بتماس الجريان مقاومة للمواد الكيميائية وبخاصة للكبريتات و مركبات الكبريت وللأحماض والمواد البتروكيميائية.

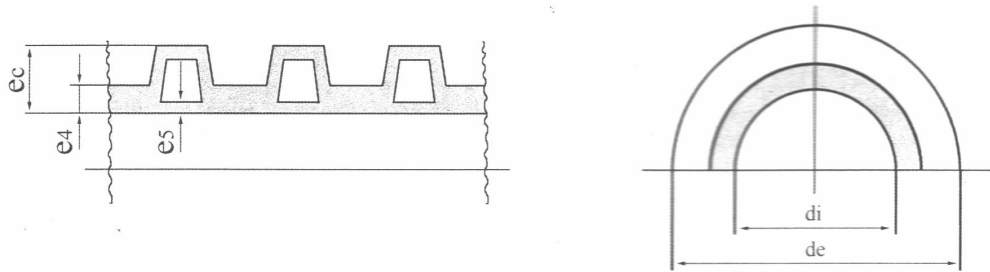
الخواص الميكانيكية:

يجب أن لا يقل التحمل على الشد عند الانقطاع لمادة الأنبوب عن 1.2KN/cm²

يجب على المتعهد أن يقدم مذكرة حسابية تثبت أن الأنابيب تتحمل حمولة ردم كثافته 1,8 طن/م³ وبارتفاع لا يقل عن 6م مضافاً لها حمولة دولا ب سيارة قيمته 100 KN بعامل أمان لا يقل عن 2.

المظهر الخارجي :

يجب ان تكون الأنابيب مصنعة وفق النموذج B للجدران (أضلاع التقوية على شكل شبه منحرف) كما هو مبين أدناه :



(الشكل رقم ١) Typical example of wall construction type B

يجب أن تكون السطوح الداخلية والخارجية للأنابيب والوصلات ناعمة ونظيفة وخالية من التلوث والبروزات والملوثات المرئية . وأي عدم انتظام في السطح من المحتمل أن يحول دون مطابقتها للمقاييس . يجب أن تكون نهايات الأنابيب والوصلات نظيفة القطع وذات قطع متعامد مع محور الأنبوب وذلك ضمن أي منطقة قطع موصى بها من قبل الصانع أو وفقاً لهندسة الجدار الإنشائي كما هو محدد من قبل الصانع.

- تنفيذ أعمال الردم:

وتتبع في تنفيذ أعمال الردم الخطوات التالية:

1- فرش التربة وتسويتها:

ويتم باليات الفرش والتسوية الصغيرة/ التركس والكريدر / بالسماكة التي تتناسب آليات الضغط المستعملة وعرض

الطريق وبالميل اللازمة وحسب ما يحدده مهندس إدارة المشروع.

2- إضافة المياه:

تضاف المياه للتربة على دفعات بواسطة صهاريح رشاشة ميكانيكية تضمن التحكم بتوزيع المياه ويتم فيها رش المياه بصورة منتظمة وبضغط يكفل نفوذ الماء ضمن التربة تقلب التربة جيداً بعد إضافة كل دفعة من المياه وتختلط بها حتى يتم الحصول على رطوبة متجانسة لكامل عمق الطبقة عندما تصل نسبة المياه إلى نسبة الرطوبة المطلوبة يسوي سطح الردم بالكريدر تمهيداً لضغطه. تؤخذ رطوبة التربة بعين الاعتبار عند إضافة المياه إليها كما يراعى في فصل الصيف ضرورة زيادة كمية المياه المضافة لتعويض ما يفقده التبخر.

3- الضغط:

يجري الضغط بعد تسوية سطح الردم باستعمال آلات الضغط التي يوافق عليها مهندس إدارة المشروع بحيث تناسب نوع تربة الردم المستعملة

المادة (11) تنفيذ غرف التفتيش :

تعمل غرف التفتيش في الأماكن المحددة في المخططات، ويجب أن تطابق مناسيب أرضياتها المناسيب المحددة في المقاطع الطولية. وتصب أساسات هذه الغرف حسب المخططات أما جدران هذه الغرف فتصب بالقالب من البيتون المسلح وفق السماكات والارتفاعات والتسليح المحددة في المخططات والمقاطع الطولية تثبت في جدران غرف التفتيش سلاسل من الحديد المبروم قطر (20) ملم وبالأطوال المحددة في المخططات. تنفذ في جدران غرف التفتيش فتحات بالأبعاد والمناسيب المطلوبة لدخول وصلات الصرف المنزلية والوصلات المطرية ووصلات المجور الرئيسي التي سترتبط فيما بعد بهذه الغرف حيث يتم إغلاق الفتحات الغير مستعملة مرحلياً ببناء من الحجر اللبن بدون زريقة حتى يتم الربط عليها مستقبلاً وتنفذ الزريقة مع الصقل للأرضية والجدران ينفذ سقف الغرفة من البيتون المسلح عيار (350) كغ اسمنت وفق السماكات والتسليح المبين في المخططات، ويوضع في سقف الغرفة غطاء من GRP يثبت في البيتون المسلح.

المادة (12) تصليح الطبقة السطحية للشوارع:

بعد إنجاز أعمال المجاري في الشوارع المزففة يقوم المتعهد بإصلاح الطبقة السطحية المؤلفة من طبقة بسماكة (30) سم من البحص المترج مع الدحل الجيد.

- الضغط:

بعد إتمام فرش وتسوية مواد طبقة الأساس يباشر بالضغط باستعمال المداخل الرجاجة ويبدأ الضغط في الجوانب موازياً لاستقامة الطريق وبانتقال تدريجي نحو محوره ولا تجوز المباشرة بالدخل في وسط الطريق تستعمل المداخل بالعدد والوزن الذي يوافق عليه مهندس إدارة المشروع ويتابع الضغط حتى تتشكل طبقة أساس ثابتة متماسكة لا تظهر عليها أية آثار لمرور المدحلة.

يقوم مهندس إدارة المشروع بالتحقق من ذلك ويعاد تصنيع المناطق المخالفة، تزال الأقسام التي تظهر فيها المواد متفككة ذات خشونة واضحة وتستبدل بمواد جديدة مطابقة للمواصفات يعاد تسويتها وضغطها حتى يتم الحصول على سطح متجانس لكامل الطبقة.

ملاحظات عامة:

على المتعهد الفائز الالتزام بقواعد السلامة والأمان المتبعة في تنفيذ الأعمال المشابهة مثل (تدعيم وحماية الحفريات، الإشارات التحذيرية، ممرات المشاة... الخ) و أن يأخذ بعين الاعتبار كافة الصعوبات المتوقعة في تنفيذ أعمال المشروع والتي يمكن أن نذكر منها تنفيذ المنشآت والخطوط في مواقع حركة المرور الكثيف و أعمال تنفيذ المنشآت الخاصة والتعديلات على بعض خطوط الشبكة القديمة القائمة حالياً وأعمال التحويلات ووصل الخطوط الحالية بالمجمعات التي ستندفج بموجب الدراسة حيث قد تدعو الضرورة إلى تنفيذ منشآت خاصة مؤقتة وخطوط تحويل مؤقتة و أحياناً دائمة لمياه

المجاري أو مياه الأمطار لضمان استمرار الجريان فيها خلال فترة تنفيذ أي منشأة أو تعديل أو تحويلة أو سدة أو تمديدات فرعية وغير ذلك من صعوبات التنفيذ. وعلى سبيل المثال في حال اعتراض مجاري فرعية للمجرى الرئيسي الجديد فتعتبر مسؤولية المتعهد أن يتلافها مؤقتاً بمجرى ترابي موازي للمجرى الرئيسي وتصرف مياهه بالضخ إلى أقرب غرفة تفنيش على المجرى القديم أما وصل التمديدات الفرعية بعد ذلك بالمجرى الجديد فيتم بواسطة مجمع يصب في أقرب غرفة تفنيش موجودة وتدفع تكاليف هذه الأعمال وفق كمياتها المنفذة وفق الأسعار الواردة في العقد.

على المتعهد أن يتأكد من مناسبة الدراسة بفتح سبور على المجرى المراد استبداله والتأكد من مناسبة بداية ونهاية المجرى وكذلك التأكد من مناسبة المجاري المتقاطعة معه قبل تنفيذ المجرى وإعلام إدارة المشروع (مهندسي الإشراف) و مؤسسة الصرف الصحي إن كانت هناك اختلاف في المناسيب وتقع مسؤولية تنفيذ المجرى بميول سيئة على المتعهد في حال عدم إعلام الجهات المذكورة عن أي خلاف في المناسيب.

The Book of Special Technical Conditions & Specifications

The Project of Replacing the Sewage Network in the Old City - 2018

The Book of Special Technical Conditions & Specifications

Chapter One

Article 1.5: Material Test

The management of the project has the right to demand the contractor to test the materials to be used in the contracting works in a laboratory. Such test shall be conducted by experts nominated and accredited by the management. These experts shall be given all facilitations to check up the materials, test the samples and supervise the tests. The cost of preparing the samples and all other tests shall be borne by the contractor. As for the experts' fees, the management of the project shall bear the expenses. The management has the right to test, at the contractor's expense, samples of any of the materials procured into the workshop whenever found necessary in any accredited laboratory in the Syrian Arab Republic.

Article 1.6: Materials and Requirements to be provided by the Contractor:

- a. The contractor shall be responsible for the provision and expenses of all the materials, requirements, equipment and tools as well as all the technical equipment needed for the execution of the required works as per the contract. All the materials, requirements and equipment procured into the worksite shall be in conformity with the technical conditions and specifications mentioned in the contract and must be approved by the project management (supervision engineers) before supplying and installing the items in place.
- b. All the materials, requirements, equipment and tools provided by the contractor shall be reserved for the project once on site and shall not be allowed to be used except for the works required and mentioned in the contract. The contractor has no right to neither transfer nor use them, whether wholly or partially, outside the workshop unless a written agreement is issued by the public party.
- c. The contractor shall take all the measures required for the sustainability of providing the resources and requirements for all the works of the project in the forms and quantities ensuring the regular continuity of work according to the timetable endorsed by the Project management t and without any discontinuity or delay.
- d. In case the project management (supervision engineers) found the materials, requirements, equipment and tools provided by the contractor to be used in the project unsuitable or not in conformity with the contract terms, it has the right to turn them down and demand replacements. In such case, the contractor shall have to immediately clear them from the worksite and replace them, at his expense, with other suitable one approved by the project management. In case the contractor refused or delayed the clearance or replacement of the

rejected materials within the period given to him, the Project management has the right to do so at his expense, no matter how much it cost, and the contractor has no right to claim compensations for any damage or loss or even extension to the contract owing to the measures taken by management Project management by virtue of the terms of this article.

- e. The Project management has the right to test, at the contractor's expense, any of the materials to be used in the contract works in any of the technical labs in Syria, whenever found necessary.

Article 1.7: Discrepancy and Mistakes in Instructions and Plans:

- a. Prior to the commencement of executing any part of the contract, the contract shall review and verify the validity and conformity of the plans in addition to the content of the book of technical conditions, price lists, quantities lists, etc. He shall demand from the Project management the correction of any noticed discrepancy, absence or mistake in the plans, technical conditions, checklists or instructions given to him (whether written or drawn, attached to the contract or later handed to him during the execution of works). In such cases, the contractor shall work according to the final written instructions that the Project management asks him to follow while carrying out the works.
- b. In case the contractor does not go back to the Project management in writing regarding any discrepancy, absence or mistake in the plans and technical conditions, and at a later stage there appeared to have some or all of them in a way that is unacceptable or unavoidable in any of the works mentioned in the contract, as a whole or in detail, the contractor shall be held responsible for the correction, demolition or rebuilding the part where the mistake lies and consequently remove the results of this mistake at his expense, no matter what.
- c. The Project management and the wastewater directorate in Aleppo shall be responsible for the validity of the plans it presents both technically and calculation-wise.

Article 1.9: Property of any excavated materials in the worksite

- a. Any antique relics or materials of economic value excavated in the worksite shall be appertained to the state. The contractor shall take all the measures required to maintain such relics and materials and prevent any fracture, distortion or damage to them until officially delivered to the concerned authorities and receive their instructions regarding their usage. When coming over such valuable archeological relics, the contractor shall immediately inform the Project management and the Directorate of Public Antiquities and suspend work in this area until receiving the instructions required.

Article 1.10: Representative of the Project management during the Execution of Work

The engineers and supervisors appointed by the Project management to supervise the execution of work shall be considered representatives of the Project management in terms of supervising the implementation of the contract terms and executing the plans, technical specifications and instructions given to the contractor.

For this purpose, the contractor shall grant these engineers and supervisors all the facilitations required to enable them of carrying out all their tasks properly and shall work in line with the instructions and remarks that they issue in accordance with the contract terms. Moreover, he shall be responsible for offering them temporary offices in the worksite to allow them to carry out their official tasks until the completion of work.

Article 1.11: Reviewing Work and Testing the Materials

- a. The Project management (supervision engineers) , its representative, or any of the concerned officials, shall have the right to enter the worksite, at any time, to supervise the execution of works inside the workshops, factories and outdoor workshops that prepare or manufacture any of the materials to be used in any part of the contract works. The contractor shall grant facilitations and needed assistance to enable them to do what they find necessary.

Article 1.12: Contractor's Deputies and Supervisors during the Execution of Work

- a. In case of absence from the worksite, the contractor shall nominate a deputy in charge of organizing and executing the contract and work according to the instructions given by the Project management or its representatives during the execution of work. The deputy shall be present on site during the working hours in addition to being fully commissioned by the contractor to replace him during his absence in terms of the execution of the contract terms.
- b. The commissioned deputy shall be present in the worksite throughout the working hours to receive the public party's instructions, or any of its representatives in the event of a field visit. The absence of the contractor's deputy from the worksite during the regular working hours without an advance approval by the Project management shall be considered a breach of contract.

Article 1.14: Renunciation of the Contract and Subcontracts

The contractor has no right to renounce any work, or part of the works he has signed to carry out, nor has he the right to delegate them, wholly or partially, to other people as subcontractors unless by virtue of the public party's written agreement, whose possession does not mean, under no circumstance, that the Project management (supervision engineers) must deal with subcontractors. In addition, the contractor shall not be exempted from his technical, administrative, legal and penal obligations and responsibilities to the Project management Project management by virtue of the contract terms.

Article 1.17: Level Signs

The contractor shall keep the level signs and shall not lift them without the permission of the Area Department.

Article 1.18: Telephone and Electricity Lines and Water Pipes:

None of the electricity cables, water pipes and telephone lines shall be removed or damaged during the excavation works. The contractor shall consult the relevant authorities prior the commencement of work to find the locations of the cables and supply lines and take all necessary precautions to avoid damaging them. Any damage to the above shall be the responsibility of the contractor who shall bear the costs of repairing them by the relevant parties.

Article 1.19: Locating the Works

The management (supervision engineers) shall locate the works, points, levels and main directions required by the contractor to start executing the works within ten days from the commencement date. He, then, has to use the other locating works required for work, at his

expense, and in conformity with the plans set to execute the works according to the instructions of the supervising engineer and the directorate of sewage. The contractor shall firmly landmark the location by concrete pillars so that the approval of the supervising engineer is given during the execution of work, and whenever found necessary to avoid mistakes. In case locating the works was damaged by the contractor, he shall redo it at his own expense. When locating the works, the contractor shall receive a document showing all the landmarks installed to organise the project set by both parties, the contractor and the supervising engineer, and stating that the workshop has all the requirements needed.

Article 1.24: Use of Materials

None of the materials shall be used until approved by the engineer supervising the works. In case the materials were found not in conformity with the conditions, the contractor shall replace them within the period given to him.

Article 1.25: Removal of the Rejected Materials:

The materials shall be removed by the contractor within the period determined by the engineer supervising the works. When failing to do so, the incident shall be documented, and the materials shall be kept in custody at the contractor's expense and cost shall be deducted from his fees.

Wherever the term (Book of General Conditions) is mentioned, it refers to the book of general and technical conditions and specifications issued by the Ministry of Housing & Construction.

Article 1.26: Submitting Samples and Stating the Sources of Materials

Long enough before the commencement of work, the contractor shall state the sources of the materials to be used in the execution of works to show their conformity with the required specifications and conditions.

Chapter Two

Materials and their Specifications

Article 2.1: Provision of Materials

The contractor shall provide all the materials including cement, sand, gravel, water, wooden and metal molds, reinforcement iron, linking wires, etc. to complete, mix and pour regular and reinforced concrete of all kinds according to the plans, technical conditions and the supervising engineer's instructions. The contractor shall submit samples of these materials, without any exceptions, for approval before using them. They need to be of the best sources and in line with the following:

Article 2.2: Sand to be used for the mortar, regular and reinforced concrete and rendering:

Sand must result from crushing hard limestone procured from the best local quarries or from clean river sand. The contractor shall submit samples of the stone to be used for the extraction of sand to be tested before being mixed and used and to get permission to procure the quantities needed to the worksite. It must have no soil substances, plant remnants or organic substances. If found necessary by the management engineer or his/her deputy, the sand must be sifted and washed. It must have gradual fineness with no particles exceeding the following maximal dimensions:

1. Fine gravel must consist of particles not passing through a sifter of 1mm holes
2. Granules made from particles between 1-5mm. The engineer has the right to determine the ratios of fine gravel and granules in the quantities used in concrete works and mortar according to the work requirements and purposes.
3. The dust quantities must not exceed 5% of the overall quantities.

Sifting the sand is necessary to reach the required fineness. Any quantity found not in conformity with the approved samples in terms of quality, cleanliness and fineness shall be rejected.

Article 2.3: Pebbles used in making regular and reinforced concrete:

Pebbles used in concrete must be produced from crushing limestone or clean hard basalt found in local quarries. They must have no dirt, soil or soft substances. The contractor shall submit samples of the pebbles to be used in the workshop for approval. Any quantity found not in conformity with the approved sample shall be rejected. Pebbles shall include the following types:

- a. Pea gravel: not exceeding 10mm
- b. Small crushed stone: not exceeding 25mm
- c. Big crushed stone: not exceeding 50mm

The supervising engineer has the right of determining the different ratios of each of the above sizes to be used in the different concrete works according the work requirements. The contractor shall comply with these ratios and not modify them unless otherwise told by the supervising engineer.

Article 2.4: Water

Water to be used in all concrete and building works shall be clean and have no soil, dirt, salts or organics materials. It shall not be used in concrete except by ratios determined by the engineer per case, according to the special test carried out in the worksite. The contractor shall comply with these ratios and not change or modify them unless otherwise told by the supervising engineer.

Article 2.5: Cement

The provision of cement for the general works shall be the contractor's responsibility.

The required cement is the industrial one (Portland) which has the conditions mentioned in the specifications of the general works in terms of its composition and analysis. Moreover, it must come in technical paper bags, in good condition and sealed by the manufacturing company, which had better be local. If found necessary, the management has the right to take samples of the cement from the worksite and test them, at the contractor's expense, to verify their strength and composition. The contractor shall keep the cement in warehouses and on wooden surfaces at least 30cm above the ground and shall have a shade high above.

Article 2.6: Iron and the linking wires for the reinforced concrete:

Iron to be used in all the reinforced concrete works shall be of a kind in conformity with all the required conditions and accredited technical specifications of deformed reinforcement iron in the onsite poured concrete works and with an elasticity rate of 24kg/mm^2 and a tensile stress no less than 42kg/mm^2 . It, moreover, shall be have no rust or foreign substances. In case found out that it does not conform to the required technical conditions, all the iron rods shall be rejected and the parts where it has been used shall be demolished.

Article 2.7: Mixing the Mortar

The concrete mixture shall be mixed twice when dry and twice after being sprinkled with water

provided that it becomes fully mixed in terms of form and colour. It shall be prepared on a clear area made from concrete granules or reinforced concrete provided that it has an even level. The cement, granules and water used in the mortar shall meet all the required conditions. Mixtures sizes must not exceed the quantities to be used within half an hour per mixture. Mixtures starting to solidify after that period must not be used to prevent special boxes in the forms and sizes determined by the engineer for the mixture ratios. No mortar shall be mixed or used in cold weather if the temperature is 3°C unless special technical measures approved by the engineer have been taken. The mortar shall be protected from the heat in summer by conducting a special shade for mixing mortar.

Article 2.8: Pouring and Making Concrete

1. Concrete ratios:
 - Reinforced concrete for the gutter covers, 350kg cement per 400lt of sand 800lt of granules
 - Moulded reinforced concrete, 250kg cement per 400lt of sand 800lt of granules
 - Regular concrete according to the plans for the inspection chambers, beneath sewage pipes and for building the stone supports
2. Manufacturing method
Special mixers shall be used to mix concrete in sufficient capacity and quantities to ensure pouring it where required regularly, without any pauses or delay leading to weaknesses in the concrete. These mixers must be approved by the project management. Concrete must be mixed in central mixing sites and transferred by a mixer truck.
 - Manual mixing is not allowed unless for minor works that the project management permit. In such case, the mixture shall be done while dry first then mixed at least three times after being watered. This continues until the mixture meets the required conditions.
 - In case having unsatisfactory results of mixing the concrete, it shall be stopped and removed unless it is fixed or replaced.
3. Pouring the concrete:
 - Concrete shall not be poured unless by the contractor's written permission. Any unpermitted poured concrete shall not be paid for.
 - Concrete shall be poured in place in a way maintaining its harmony and the quality of mixing its components
 - Concrete shall not be poured from high position, rather moved to the level to be poured on.
 - All the moulds surfaces shall be cleaned and sprinkled before starting pouring the concrete.
 - The contractor shall ensure pouring the concrete and organise the process without affecting the iron and moulds solidity, order and cleanliness.
 - Concrete shall not be poured in very cold weather and frosty days unless in temperatures above 4°C
4. Shaking the concrete:
Concrete shall be shaken in the sites determined by the project management engineer by using vibrators, while in other sites it shall be pressed to be good.
5. Protecting and maintaining concrete after pouring:
 - The contractor shall maintain the concrete from the harmful weather conditions for a period of time determined by the project management engineer.
 - The concrete shall not be loaded with weights unless after a period of time enough for its solidification
 - Concrete shall be sprinkled with water twice a day for 10 days from the date of pouring
 - The poured concrete shall meet the required purpose, resistant and with no cracks. The contractor shall bear the responsibility of demolishing and removing any part of the concrete that has not

been poured according to the required conditions and not meeting the resistance conditions mentioned in the book of general conditions.

Chapter Three

Article 1: Project Description

The purpose of the project is executing the sewage network with paving and tarmacking the excavated areas of the project. This includes the following:

1. Excavating the sewage trenches and pumping water
2. Executing the sewage network with polyethylene pipes according to the sizes mentioned in the plans
3. Executing special facilities (inspection chambers, covered distribution chambers, etc.) of regular and reinforced concrete
4. Refilling the trenches over the sewage pipes using sand, pea gravel and pebbles and pressing them according to the plans
5. Re-applying the surface layer over the pebbles and pressing it

Article 2: Planning

- a. Within ten days from the commencement date, the contractor shall submit a request to receive the worksite and locate the project. The project management engineer, with the presence of the contractor or his deputy, shall then locate the works, determine the level signs and hand them over to the contractor taking into account that the project detailed planning shall be the contractor's responsibility in a way in line with the submitted plans of the entire project.
- b. Afterwards, a document explaining all the practical details shall be immediately conducted. The contractor shall receive an official sealed copy of the document after being signed by the management engineer.
- c. The contractor shall, at his own expense, provide labour, poles and all the tools and materials needed for the locating process. He shall keep the main poles and signs and replace them, if lost, and re-locate them to monitor and evaluate the project planning.

Article 3: Sewage Network Excavation and Refilling Works

- a. Excavation Works:

The contractor shall execute the pipes on the road and avoid placing/refilling them until officially received.

- Prior to the commencement of the excavation, the contractor shall cut the tarmacked streets with machines and according to the widths in line with each sewage pipe, no more, no less.
- Trenches shall be dug according to the sewage network final planning and shall be straight with regular turns and that their bed level shall be in conformity with the levels set in the plans and the instructions of the project management engineer or his/her deputy. The resulting rubble shall be gathered on one side, at least one meter away from the trench edge. In case the project is about replacing pipes, the resulting rubble shall remove/transferred one at a time without being reused in refilling. Neither traffic nor water supply must be interrupted. The contractor shall be responsible for this and shall take all the necessary measures at his expense. Trenches shall be dug in widths equalling the pipe outside diameter plus a sufficient distance to install the pipes as is illustrated in the plans.
- Excavations shall be executed until the required level is reached without any excess. In case the depth exceeded the required level, the contractor shall bear the responsibility of correcting the mistake by filling the extra depths with 250kg regular concrete or with quarry stones that are pressed according to the rubble conditions after the supervising engineer's approval. The contractor shall bear the expense of such works no matter how much they cost.

- The contractor shall take all precautionary measures to support the excavations and prevent collapses and shall bear all the support expenses and be fully responsible for ensuring their resistance until work is concluded.
 - The contractor shall be responsible for all the water supply sources, sewage lines, electricity cables, telephone lines, the other services and the facilities in the worksite, and shall bear the responsibility for any damage caused during the execution of work, at his own expense. Therefore, he needs to consult the official departments to identify the lines locations before starting the excavation works. In case water leaked during the excavation works, the contractor shall use a proper way to drain it such as pumping it and/or according to the supervising engineer's instructions so that the trenches remain dry. The excavation price shall include all the costs resulting from such measures.
 - In case explosives were used to execute rocky excavations, the contractor shall take all the necessary precautions to keep the labour out of danger and avoid damages to others' property. He shall, moreover, abide by the relevant laws and regulations and remove the parts resulting from these explosions.
- b. **Refilling Works:**
After laying sand and gravel around the pipes up to +30cm from the top, the contractor shall:

1. Refill the rubble to the bottom line of the project, i.e. -37cm, if the sewage pipes are new provided that refilling is done with soil with no debris, waste and foreign substances such as waste, dust, wood, leaves, etc. and that the used materials are accepted. The refilling soil is taken from the excavation works. If insufficient, it can be taken from other areas after having the supervising engineer's approval. Refilling works shall be done on layers of no more than 30cm each to be laid evenly, sprinkled with water and properly pressed with vibrating rollers according to their kind and weight. The contractor shall be responsible for any collapse taking place in the surface of the refilled areas later on and shall bear full responsibility for the ensuing damages. The contractor shall remove/transfer all the extra amounts of rubble to the sites named by the project management in cooperation with the sewage directorate management where he shall lay and level it. The refilling works where usable rubble is used shall be included in the excavation prices and shall not be paid for separately.
2. If the sewage pipes are replaced, refilling works shall be done by using gravel and pebbles to the level of -37cm of the project line to the street provided that they are laid, sprinkled with water and pressed on layers of no more than 30cm each after being rolled and pressed.
3. If the sewage pipes are made of the stone type, instructions in /1/ shall apply without laying sand.

Article 4: Mixing regular and reinforced concrete:

The contractor shall ensure the provision of concrete from central mixing plants provided that it is transferred by mixer trucks to the worksites and poured in the named areas according to the ratios and dimensions mentioned in the plans. Concrete shall be procured intermittently and shall not be used if 30 minutes have passed on its mixing. All the remaining mixtures shall not be used again.

Article 5: Using regular and reinforced concrete:

Once mixed, regular and reinforced concrete shall be used, and shall be re-mixed if necessary before being used. Any dried quantities shall be rejected. Pouring concrete shall be conducted on one layer if it is no more than 30cm thick. Otherwise, it shall be conducted on consecutive layers that end with a divided slope for better connection with the following layers. Each layer shall be firmly pressed until the concrete masses. Pressing shall not be done consecutively to avoid the mortar surfacing on top of the concrete. When continuing to pour the concrete after the previous part dries, the surface shall be hardened and covered with cement mortar before pouring a new concrete layer. Concrete

shall be sprinkled with water and covered for ten days to avoid quick drying.

Article 6: Regular and reinforced concrete moulds:

Moulds shall be either metal or wooden, according to the plans and technical conditions, and shall be installed in a technical manner approved by the supervising engineer. They must be strong enough to tolerate the weight and shocks they may have during the execution of works. The project management's approval to use them shall not exempt the contractor from his responsibility for the moulds strength. They must be used, wholly or partially, except by the supervising engineer's approval taking into account that this approval is not given before 4-8 days pass depending on the weather conditions and other technical considerations.

Article 7: Reinforcement Steel Works:

- a. Steel bars must be clean and have no rust, paint, dirt, etc.
- b. Steel bars must be installed in the required numbers, diameters and order, as illustrated in the plans and according to the supervising engineer's instructions. The contractor shall, at his expense, fix the links needed to reach this result.
- c. Steel bars shall be tied with a firm iron wire preventing any movement during pouring concrete and shall be lifted off the moulds by iron pedestals in the accepted form and number as approved by the supervision engineers .
- d. In case the contractor failed to get the steel quantities in the required specifications, sizes and diameters, he shall not be allowed to replace them with other quantities unless he receives a written approval by the supervising engineer.
- e. In case a part of the concrete was poured without permission, the contractor shall remove it at his own expense if the supervising engineer sees necessary.
- f. Each of the linear reinforcement bars shall come in one piece; no welded parts shall be allowed. In case it was imperative to weld short bars together to form one long bar, the bar ends shall be arc-twisted and linked to each other provided that their overall length equals 30 times of the bar diameter.
- g. The reinforcement steel concrete protection shall be as follows:
25mm for ceilings, 40mm thick for the interior walls and manholes, and 30mm for the poles, bridges and bases.
- h. The steel works shall include making manhole ladders, according to the plans, whose prices shall be included in the reinforced concrete price.

Article 8: Concrete Pouring Works:

- a. Concrete shall not be poured unless a written approval by the project management engineer is given. It shall be poured in place in a way maintaining its harmony and density so that the materials are spread out well. It then shall be pressed and vibrated so that all the spaces are filled, and the steel bars are fully covered.
- b. All the boards and moulds shall be sprinkled with water and cleaned before pouring concrete. All the links and supports shall be thoroughly checked.
- c. Concrete shall not be poured in cold weather, if the temperature is less than 3°C unless technical measures approved by the supervising engineer are taken.
- d. Before completing the pouring after each pause, the solidified part of the concrete shall be thoroughly cleaned and washed. Unfixed particles shall be swept, and the concrete shall be covered with grout made from cement and fine sand to ensure its cohesion with the new concrete to be applied.

Article 9: Cement Render Works

A cement render mortar is made by mixing 500kg of cement per one cubic meter of fine sand for

each of the hard layers in 1.5cm thicknesses and 0.5cm for the soft layer. Its price shall be included in that of the reinforced concrete.

The cement, sand and water used in the render shall meet all the required specifications mentioned in this book of conditions and the book of general conditions.

Mixtures shall be made in quantities that can be used within half an hour. All quantities passing this period of time shall be rejected. The external render shall be polished, rubbed and pressed until becoming soft. The render shall be kept wet for at least ten days from the date of applying it.

Article 10: Polyethylene Pipes Installation Works

- a. Regular or reinforced concrete: After executing the excavation works according to the dimensions and levels mentioned in the plans, the contractor shall provide regular or reinforced concrete according to the ratios mentioned in the estimation report. Concrete shall be laid along the trenches and according to the thickness mentioned in the plan with being properly levelled. Concrete shall be procured from the central mixing workshops.
- b. The sand base layer: In lands where the groundwater level is high or where the soil is loose, a layer of regular or reinforced concrete is executed according to the estimation report in ratios and thicknesses determined by the cross sections. The contractor, afterwards, shall apply a layer of sand beneath the pipes and after installing the pipes, sand shall fill in the sides and cover them up to +30cm from the top of the pipes provided that it is well pressed.

When necessary, 30cm of the layer beneath the pipes may be replaced with dirt or fine soil to be pressed. After that, a layer of concrete or pebbles shall be applied depending on the kind of pipe (concrete or polyethylene).

In solid and rocky lands, and after concluding and receiving the excavations by the project management engineer and verifying their conformity with the conditions, their sizes and levels as per the plans, the contractor shall apply a layer of sand, whose thickness is determined by cross sections, before installing the pipes. The sand must be clean, hard and have no materials that may affect the pipes and in particles between 0.2-5mm, taking into account that refilling with sand is conducted to a +25cm above the pipe after being very well pressed. After concluding the sand or concrete layer, as per the plans, the contractor shall execute the installation of pipes.

- c. Installing polyethylene pipes:
Pipes shall be distributed along one side of the trench taking into account the unlikelihood of them falling down into the trench.

Before placing the pipes into the trench, they shall be examined to remove those having been shocked or cracked while transferring them. The pipes must be cleaned from sticking waste, and no installation shall take place until concluding the levelling and laying of sand or regular concrete, as per the cross sections, for all the section between the two points of levelling or inspection chambers. To connect pipes together, rubber rings shall be used by inserting them inside the widened pipe head then the tail is lubricated and inserted into the previous pipe head.

- d. The technical specifications of HDPE pipes – type SN4
The pipes and their accessories (90° elbow connector/ Y-shaped connector/ stoppers) shall be made from high density polyethylene (PE 100 HDPE) according to the European Specification EN12376.

Rubber rings shall be made from hardened rubber according to the European Specification EN681. The substance in contact with the flow must be resistant to chemicals, especially sulphates and the compositions of sulphur, acids and petrochemicals.

No materials previously made as raw materials shall be used in manufacturing pipes or their accessories, i.e. no recycled materials shall be used.

Tests:

Samples of the high-resistance HDPE pipes, whose strength is no less than SN4, shall be tested in one of the Aleppo accredited labs in the presence of the contractor and supervising engineer during the preliminary receipt of the pipes before installation. All the sample taking and testing works shall be borne by the contractor and included in his prices.

Manufacturing company:

The pipes manufacturing company shall submit a statement containing the specifications according to which the pipes have been manufactured as well as the production date.

Physical and chemical properties:

All the pipes and accessories shall be made from PE100 HDPE where the polyethylene ratio is no less than 97%.

The pipes colour shall be black on the exterior and have any colour on the interior.

The raw material used in the production of the pipes and accessories must be new. Recycled materials must not be used in the production of the pipes/accessories.

The polyethylene density must not be less than 930kg/m^3 .

The substance in contact with the flow must be resistant to chemicals, especially sulphates and the compositions of sulphur, acids and petrochemicals.

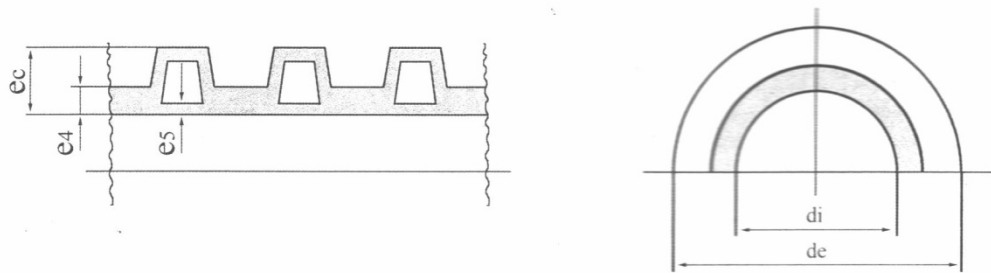
Mechanical properties:

Tolerance on the stress must not be less than 1.2KN/cm^2 when cutting the pipe matter.

The contractor shall submit a note showing that the pipes tolerate a rubble load with a 1.8ton/m^3 density and a height of no less than 6m in addition to the load of a car wheel of KN100 and a safety factor of 2, at least.

Outside appearance:

The pipes shall be manufactured according to pattern B of the walls (the supports in the shape of trapezium) as is below illustrated:



Typical example of wall construction type B (الشكل رقم ١)

The interior and exterior surfaces of the pipes and connectors shall be smooth, clean with no cracks, protrusions, visual blemishes or any uneven lines that may make them unmeet the specifications. The ends of the pipes and connectors must be properly cut and orthogonal with the pipe axis inside any area recommended by the manufacturer or according to the constructional wall engineering, as determined by the manufacturer.

- Executing the refilling works:

The steps below shall be followed when executing the refilling works:

1. Laying and levelling the earth:

To be done by small levelling vehicles (loaders and graders) in the thicknesses in line with the vehicles used, the road width, slopes and according to management engineer's instructions.

2. Adding water:

Water shall be added to the soil intermittently by mechanical sprinkling tanks that ensure the even distribution of water, which is sprinkled regularly and in a pressure that allows the water inside the soil. Then the soil shall be tossed thoroughly each time water is added to mix very well and reach full wetness deep down the layer. When water reaches the required level of wetness, the refilled area shall be levelled in preparation for its pressing.

The soil dampness shall be taken into account when adding water, as well as adding more water in summertime to make up for the evaporated water.

3. Pressing:

Pressing shall be conducted after levelling the rubble surface by using the pressing vehicles that the management engineer approves taking into account their suitability for the kind of the soil used.

Article 11: Executing Inspection Chambers

Inspection chambers shall be executed according to the plans. Their floor levels shall be in conformity with the levels determined in the linear sections. The bases of these chambers shall be poured according to the plans, while the walls are poured in moulds of reinforced concrete according to the the thicknesses, heights and reinforcements mentioned in the plans and linear sections.

Deformed iron ladders of a diameter of 20mm shall be fixed on the walls of the chambers as per the lengths mentioned in the plans. Moreover, the walls shall contain holes in the required dimensions and levels for inserting the house drainage pipes, gutter connectors and those of the main, which shall later be connected to these chambers. Unused holes at this stage shall be closed with unrendered bricks until used in the future. The render shall be executed with polishing the floor and

walls. The chamber ceiling shall be executed from 350kg reinforced concrete according to the thicknesses and reinforcement illustrated in the plans. A GRP cover shall be placed on the chamber ceiling and fixed in the reinforced concrete.

Article 12: Repairing the streets surface

On completion of the sewage network works in tarmacked roads, the contractor shall repair the top layer made from 30cm thick gravel with thorough rolling.

Pressing:

On completion of laying and levelling the base layer materials, pressure shall be applied by using vibrating rollers. It shall start on the sides and in parallel of the street straightness moving gradually towards the axis not vice versa. Steamrollers shall be used in the numbers and weights approved by the management engineer. Pressing shall continue until a fixed and consistent base layer with no roller traces is formed.

The management engineer then verifies the process and unsatisfactory areas shall be redone. The areas where the materials show clear hardness shall be removed and replaced with new ones in conformity with the specifications, then they are levelled and pressed until reaching a harmonious surface for the whole layer.

General Remarks:

The winning contractor shall abide by the security and safety rules followed in executing similar works such as supporting and protecting the excavations, warning signs, pedestrian crossings, etc. He shall, moreover, take into account all the expected difficulties that may occur while executing the project works, such as executing facilities and lines in areas of heavy traffic, special facilities works, adjustments to some existing old network lines, diversion works, connecting the existing lines to the complexes to be implemented under the study, where it may be necessary to execute temporary special facilities and temporary sub-lines, and in some instances, permanent sub-ducts for wastewater or rainwater to guarantee the flow of water inside them during the execution of any facility, adjusting, diverting, placing stoppers, sub-ducts or any other difficulty.

For instance, in case sub-ducts interrupted the new main, the contractor shall be responsible for avoiding this temporarily by conducting an earth line in parallel with the main one, whose water shall be drained by pumping it to the nearest inspection chamber on the old line. As for the connecting the sub-ducts to the new line, it shall be done by a connector flowing in the nearest inspection chamber around. The costs of these works shall be paid according to their executed number and as per the prices mentioned in the contract. The contractor shall check the study levels by opening holes onto the line to be replaced, check the beginning and end levels of the line, and check the levels of the intersected lines before executing the new line and inform the project management (supervision engineers) and the sewage directorate about any difference in the levels. The contractor shall bear the responsibility for executing any bad slopes in case the office was not informed about that.

Technical Specifications

Annex 1

المواصفات الفنية المطلوبة لمشروع استبدال أجزاء من شبكة الصرف الصحي في أحياء حلب القديمة 2018

أمام الكلتاوية: LOT1:

Latest Delivery Date	Qty	Unit	Description/Specifications of Goods	Items to be Supplied*	No .
45 يوم من تاريخ توقيع العقد	425	م ³	تنفيذ حفريات ترابية من أجل المجاري مع فك بلاط رصف الشوارع والتدعيم حسب توجيهات الإدارة مع الترحيل و كل ما يلزم	حفريات ترابية	1
	5	م ³	تقديم وتنفيذ بلاطات بيتون مسلح عيار 250 كغ أسمنت / م ³ تحت القساطل سماكة 10 سم	بلاطات بيتون مسلح تحت القساطل	2
	9	م ³	تقديم وصب بيتون عادي بدون قالب عيار 150 كغ إسمنت / م ³ تحت مجاري الفوهات و الوصلات المنزلية والمطرية حسب السماكات و العروض المدونة على النماذج .	بيتون عادي بدون قالب	3
	140	م ³	تقديم وفرش رمل ناعم ومواد حبيبة تحت و حول القساطل حسب النموذج مع الرص على طبقات وكل ما يلزم	رمل ناعم ومواد حبيبة	4
	190	م ³	تقديم و فرش حصويات (زراة - حبيبات متدرجة) فوق القساطل حسب النموذج مع الرص و كل ما يلزم	حصويات (زراة - حبيبات متدرجة)	5
	50	م.ط	نقل وتركيب أنابيب بولي اتيلين عالية المقاومة HDPE قطر 22.5 سم وكل ما يلزم للتركيب فقط، وذلك من مستودعات الشركة العامة للصرف الصحي.	نقل وتركيب انابيب بولي اتيلين / 22.5 سم/	6
	35	م.ط	نقل وتركيب أنابيب بولي اتيلين عالية المقاومة HDPE قطر 30 سم وكل ما يلزم للتركيب فقط، وذلك من مستودعات الشركة العامة للصرف الصحي.	نقل وتركيب انابيب بولي اتيلين / 30 سم/	7
	80	م.ط	نقل وتركيب أنابيب بولي اتيلين عالية المقاومة HDPE قطر 40 سم وكل ما يلزم للتركيب فقط، وذلك من مستودعات الشركة العامة للصرف الصحي.	نقل وتركيب انابيب بولي اتيلين / 40 سم/	8
	14	م ³	تقديم وتنفيذ بيتون مسلح عيار 350 كغ/ م ³ ونسبة التسليح الوسطية 100 كغ حديد/ م ³ لزوم إنشاء فوهات التفتيش وفوهات التوزيع المظورة لربط الأبنية وفق النماذج الموضحة في المخططات حسب قطر القسطل مع سلاسل الحديد والزريقة وكل ما يلزم من مواد ويد عاملة.	بيتون مسلح لفوهات التفتيش والتوزيع	9
	5	عدد	تقديم وتركيب أغشية GRP بأبعاد 80×80 سم وقطر الفتحة لا يقل عن 55 سم	أغشية مصنوعة من GRP	10
	190	م ²	تعبيد ودحل بالبحص المتدرج سماكة 30 سم بعد الدحل.	تعبيد ودحل طبقة من البحص المتدرج	11
	210	م ²	إعادة تركيب ورصف بلاط الشوارع المفكوك مع كل مايلزم .	إعادة تركيب ورصف بلاط الشوارع المفكوك	12
	40	م ²	تقديم وتركيب بلاط شوارع خاص بالمدينة القديمة مماثل للموجود في منطقة العمل لتبليط الفراغات التي كانت موجودة قبل بدء العمل مع العدسة و كل ما يلزم ، وكذلك استبدال التالف مع العدسة وكل ما يلزم	تقديم وتركيب بلاط شوارع خاص بالمدينة القديمة	13

من دوار باب الحديد باتجاه الطبابة الشرعية: LOT2:

Latest Delivery Date	Qty	Unit	Description/Specifications of Goods	Items to be Supplied*	No
45 يوم من تاريخ توقيع العقد	4850	م ³	تنفيذ حفريات ترابية من أجل المجاري مع قص الزفت ألبا وضخ المياه والتدعيم حسب توجيهات الإدارة مع الترحيل وكل ما يلزم.	حفريات ترابية	1
	25	م ³	تقديم وتنفيذ بلاطات بيتون مسلح عيار 250 كغ أسمنت / م ³ تحت القساطل سماكة 10 سم.	بلاطات بيتون مسلح تحت القساطل	2
	40	م ³	تقديم وصب بيتون عادي بدون قالب عيار 150 كغ إسمنت / م ³ تحت مجاري الفوهات والوصلات المنزلية والمطرية حسب السماكات والعروض المدونة على النماذج.	بيتون عادي بدون قالب	3
	1240	م ³	تقديم وفرش رمل ناعم ومواد حبية تحت وحول القساطل حسب النموذج مع الرص على طبقات وكل ما يلزم.	رمل ناعم ومواد حبية	4
	2750	م ³	تقديم وفرش حصويات (زرادة - حبيبات متدرجة) فوق القساطل حسب النموذج مع الرص وكل ما يلزم.	حصويات (زرادة - حبيبات متدرجة)	5
	280	م.ط	قطر 22.5 سم HDPE نقل وتركيب أنابيب بولي اتيلين عالية المقاومة وكل ما يلزم للتركيب فقط، وذلك من مستودعات الشركة العامة للصرف الصحي	نقل وتركيب انابيب بولي اتيلين / 22.5 سم	6
	35	م.ط	قطر 30 سم HDPE نقل وتركيب أنابيب بولي اتيلين عالية المقاومة وكل ما يلزم للتركيب فقط، وذلك من مستودعات الشركة العامة للصرف الصحي	نقل وتركيب انابيب بولي اتيلين / 30 سم	7
	148	م.ط	قطر 60 سم HDPE نقل وتركيب أنابيب بولي اتيلين عالية المقاومة وكل ما يلزم للتركيب فقط، وذلك من مستودعات الشركة العامة للصرف الصحي.	نقل وتركيب انابيب بولي اتيلين / 60 سم	8
	350	م.ط	قطر 80 سم HDPE نقل وتركيب أنابيب بولي اتيلين عالية المقاومة وكل ما يلزم للتركيب فقط، وذلك من مستودعات الشركة العامة للصرف الصحي.	نقل وتركيب انابيب بولي اتيلين / 80 سم	9
	75	م ³	تقديم وتنفيذ بيتون مسلح عيار 350 كغ/ م ³ ونسبة التسليح الوسطية 90 كغ حديد/ م ³ لزوم إنشاء فوهات التفقيش وفوهات التوزيع المظمورة لربط الأبنية وفق النماذج الموضحة في المخططات حسب قطر القسطل مع سلال الحديد والزريقة وكل ما يلزم من مواد ويد عاملة.	بيتون مسلح لفوهات التفقيش والتوزيع	10
	8	عدد	تقديم وتركيب أغطية GRP بأبعاد 80×80 سم وقطر الفتحة لا يقل عن 55 سم	أغطية مصنوعة من GRP	11
	7	عدد	إنشاء مصافي مطرية من البيتون المسلح والغطاء حديد شبكي تنفذ جانب الرصيف وضمن الزفت بأبعاد داخلية 50*50 سم (نموذج E).	إنشاء مصافي مطرية بيتونية	12
	1310	م ²	تعبيد ودحل بالبحص المتدرج سماكة 30 سم بعد الدحل.	تعبيد ودحل	13

يشترط على العارض الالتزام بما يلي:

1. أن يكون مسجلاً في نقابة المقاولين في سوريا أو أن يكون مهندساً ولديه حساب مصرفي وعلى العارض تقديم وثائق تثبت ذلك من الجهات المعنية.
2. الالتزام بشروط ومعايير تشغيل العمال حسب قانون العمل السوري ومعايير برنامج الأمم المتحدة الإنمائي من حيث العمر والخبرة ودرجة الحاجة للعمل وكذلك أن يتم تشغيل عدد كافي من العمال (لا يقل عن 40 فرصة عمل للمجموعة الأولى و 60 فرصة عمل للمجموعة الثانية) وأن يقدم لائحة بأسمائهم إلى مدير المشروع المعين من قبل UNDP.
3. يشترط على العارض الالتزام بجميع الفصول والبنود والملاحق المختارة من "دفتر الشروط والمواصفات الفنية الخاصة / مشروع استبدال خطوط صرف صحي في المدينة القديمة لعام 2018"، والمرفقة مع هذا الإعلان.
4. يشترط على العارض أن يكون منقداً على الأقل مشروعين مشابهيين.
5. تقديم قائمة بالآليات والمعدات التي سيتم استخدامها في عملية التأهيل وبيان فيما إذا كانت مستأجرة أو مملوكة مع تقديم ما يثبت ذلك من لوائح.
6. تقديم جدول زمني لتنفيذ الأعمال مع عرض فني تفصيلي وفق الأعمال المطلوبة مع إفادة خطية بالالتزام بكافة الشروط والمتطلبات لكل مجموعة على حدا
7. مدة ضمان أعمال المشروع سنة بعد تنظيم محضر التنفيذ النهائي يكون العارض خلالها ملزم بتقديم الصيانة الكاملة لأي خلل طارئ ناتج عن سوء التنفيذ.
8. تنفيذ الأعمال وفق جميع المخططات والتفصيلات الهندسية العائدة للمشروع والمرفقة مع هذا الإعلان، ويقع على عاتق العارض تدقيق تلك المخططات لمطابقتها مع واقع موقع العمل قبل تقديم العرض، ولا يحق له لاحقاً (في حال رسو العرض عليه) الاعتراض على أي عدم تطابق و/أو المطالبة بفروق أسعار أو أية تعويضات آنية أو لاحقة.
9. تنفيذ أي إجراءات أو تعديلات جزئية أو ثانوية، طارئة أو غير ملحوظة على بعض مواصفات الأعمال وفق ما يراه جهاز الإشراف ضرورياً ومناسباً لإتمام العمل.
10. تقديم نماذج من بلاط الشوارع الجديد الخاص بالمدينة القديمة وأخذ موافقة جهاز الإشراف عليها قبل توريد و/أو تنفيذ كامل الكمية.
11. ترحيل جميع الأنقاض والهالك والمخلفات الناجمة عن كافة أعمال المشروع إلى المكب/المكبات المعتمدة من قبل مجلس مدينة حلب، وعلى نفقته الخاصة، فوراً وبشكل جزئي و/أو كامل لما يعيق منها حركة المرور والمشاة و/أو يؤثر سلباً على حسن سير أعمال المشروع.
12. إنهاء ترحيل جميع الأنقاض والهالك والمخلفات الناجمة عن كافة أعمال المشروع إلى المكب/المكبات المعتمدة من قبل مجلس مدينة حلب، وعلى نفقته الخاصة، بعد انتهاء جميع أعمال المشروع، ولا يتم تنظيم محضر استلام أعمال المشروع قبل إنجاز ذلك.
13. يتم الدفع عند تنفيذ كامل الأعمال وبموجب محضر استلام موقع من إدارة المشروع والجهة المستفيدة.
14. لا يتم صرف قيمة البند من العقد في حال عدم مطابقته مع الشروط المحددة.
15. المنظمة غير مسؤولة عن زيادة الأسعار بعد إرسال العقد وعلى العارض تنفيذ الأعمال بالأسعار التي تم التقدم بموجبها على المناقصة ولغاية انتهاء مدة تنفيذ المشروع.
16. تعتبر الزيارة الميدانية لمواقع العمل الزامية لمعاينة المواقع ومطابقة الاعمال قبل التقدم للمناقصة ولن يتم قبول العروض التي لم يشارك مقدميها بالزيارة الميدانية.

*Pls. attach delivery schedule, if relevant, and cluster by lot, if partial bids will be allowed. Specify delivery locations if goods multiple destinations.

The Technical Specifications Required for the Project of Replacing Parts of the Sewage Network in Old Aleppo 2018

Annex 1

Lot 1: In front of Kiltawieh

No.	Items to be Supplied*	Description/Specifications of Goods	Qty	Unit	Latest Delivery Date
1	Excavations	Executing excavations for the sewage network and uninstalling the pavements tiles and reinforcing the walls according to the directions of the management in addition to transferring debris and all that is required.	425	m ³	<i>45 days from the date of signing the contract</i>
2	Reinforced concrete pads beneath the sewage pipes	Providing and executing 250kg/ m ³ reinforced concrete pads with 10cm beneath the sewage pipes	5	m ³	
3	Unmolded regular concrete	Providing and pouring 150kg/ m ³ unmolded regular concrete under the manholes pipes and buildings connectors and gutters according to the thicknesses and widths mentioned in the plans.	9	m ³	
4	Fine sand and granular material	Providing and laying fine sand and granular material under and around the sewage pipes according to the plans with pressing the layers and all that is required.	140	m ³	
5	Granules (gravel – varied aggregates)	Providing and laying granules (gravel and aggregates) on the sewage pipes according to the plans with pressing the layers and all that is required	190	m ³	
6	HDPE pipes 22.5 cm	Transferring & Installing HDPE pipes, 22.5cm diameter, from the stores of general company of sewage in Aleppo and all that is required for pipe fittings.	50	m	
7	HDPE pipes 30 cm	Transferring & Installing HDPE pipes, 30cm diameter, from the stores of general company of sewage and all that is required for pipe fittings.	35	m	
8	HDPE pipes 40 cm	Transferring & Installing HDPE pipes, 40cm diameter, from the stores of general company of sewage and all that is required for pipe fittings.	80	m	
9	Reinforced concrete for the inspection chambers	Providing and executing 350kg/ m ³ reinforced concrete with an average reinforcement rate of 100 kg iron/ m ³ for the inspection chambers and covered distribution manholes to connect the buildings according to the plans and the sewage pipe diameter with iron ladders, cement rendering and all that is required of material and labor.	14	m ³	
10	Providing & Installing GRP Cover	Providing and installing GRP Covers 80*80cm, and diameter of 55cm at least.	5	No.	
11	Paving and rolling a layer of varied gravel	Providing, paving and rolling a 30cm thick varied gravel layer after rolling it	190	m ²	
12	Reinstalling and paving the uninstalled cobblestones	Reinstalling and paving the uninstalled street cobblestones, according to the supervisory body's instructions, with all that is required.	210	m ²	

13	Providing and installing street cobblestone for the old city	Providing and installing street cobblestones for the old city similar to the existing ones in the work site to fill in the holes that existed prior to the work commencement, according to the supervisory body's instructions, with all that is required.	40	m ²	
----	--	--	----	----------------	--

Lot 2: From Bab Al Hadeed Square to Tababeh Sharieh

No.	Items to be Supplied*	Description/Specifications of Goods	Qty	Unit	Latest Delivery Date
1	Excavations	Executing excavations for the sewage network by cutting the asphalt layer with machines and pumping water and reinforcing the walls according to the directions of the management in addition to transferring debris and all that is required.	4,850	m ³	<i>45 days from the date of signing the contract</i>
2	Reinforced concrete pads beneath the sewage pipes	Providing and executing 250kg/ m ³ reinforced concrete pads with 10cm beneath the sewage pipes	25	m ³	
3	Unmolded regular concrete	Providing and pouring 150kg/ m ³ unmolded regular concrete under the manholes pipes and buildings connectors and gutters according to the thicknesses and widths mentioned in the plans.	40	m ³	
4	Fine sand and granular material	Providing and laying fine sand and granular material under and around the sewage pipes according to the plans with pressing the layers and all that is required.	1240	m ³	
5	Granules (gravel – varied aggregates)	Providing and laying granules (gravel and aggregates) on the sewage pipes according to the plans with pressing the layers and all that is required	2,750	m ³	
6	HDPE pipes 22.5 cm	Transferring & Installing HDPE pipes, 22.5 cm diameter, from the stores of general company of sewage in Aleppo and all that is required for pipe fittings.	280	m	
7	HDPE pipes 30 cm	Transferring & Installing HDPE pipes, 30 cm diameter, from the stores of general company of sewage in Aleppo and all that is required for pipe fittings.	35	m	
8	HDPE pipes 60 cm	Transferring & Installing HDPE pipes, 60 cm diameter, from the stores of general company of sewage in Aleppo and all that is required for pipe fittings.	148	m	
9	HDPE pipes 80 cm	Transferring & Installing HDPE pipes, 80 cm diameter, from the stores of general company of sewage in Aleppo and all that is required for pipe fittings.	350	m	
10	Reinforced concrete for the inspection chambers	Providing and executing 350kg/ m ³ reinforced concrete with an average reinforcement rate of 90 kg iron/ m ³ for the inspection chambers and covered distribution manholes to connect the buildings according to the plans and the sewage pipe diameter with iron ladders, cement rendering and all that is required of material and labor.	75	m ³	
11	Providing & Installing GRP Cover	Providing and installing GRP Covers 80*80cm, and diameter of 55cm at least.	8	No.	
12	Gutter sifers made from grilled reinforced concrete	Making grilled reinforced concrete gutter sifers to be executed on the side of the pavement and built in asphalt and/or the pavement tiles, with inside dimensions of 50x50cm according to pattern E mentioned in the plans.	7	No.	
13	Paving and rolling a layer of varied gravel	Providing, paving and rolling a 30cm thick varied gravel layer after rolling it	1,310	m ²	

The bidder is required to comply with the following:

1. He must be registered in the Contractors' Union in Syria or be an engineer and has a bank account. The bidder must also submit documents from the concerned parties proving this.
2. Compliance with the terms and conditions of employment of workers according to the Syrian Labor Law and UNDP standards in terms of age, experience and need for work. Also, a sufficient number of workers (**no less than 40 job opportunities for Lot 1 & 60 job opportunities for Lot 2**) should be employed and a list of their names should be submitted to the UNDP project manager.
3. The bidder is required to comply with all the chapters, items and annexes selected from the "Book of Conditions and Special Technical Specifications / Replacement of Sewage Network in the Old City - 2018", which are herewith attached.
4. The bidder must have at least two similar projects.
5. Provide a list of the vehicles and equipment to be used in the rehabilitation process and indicate whether they are leased or owned
6. Provide a time schedule of the work with a detailed technical presentation according to the required works with a written statement of compliance with all conditions and requirements
7. The warranty period of the project works is one year from date of issuing the final execution minutes during which the bidder shall be obliged to provide full maintenance for any emergency defects resulting from poor implementation.
8. Executing the works according to all the plans and engineering details of the project and herewith attached. It is the responsibility of the bidder to check the plans to match them with the reality of the work site prior to submitting the bid. In case of winning the bid, he may not later object to any discrepancy and/or demand for price differences or compensations for any immediate or consequential damages.
9. Executing any emerging or unnoticed procedures, modifications or minor changes to certain work specifications as deemed necessary by the supervisory body "and appropriate" to complete the work.
10. Provide samples of the new street cobblestones of the old city and take the approval of the supervisory body before the supply and / or implementation of the full quantity.
11. Removal of all debris, rubble and waste resulting from all the works of the project to the landfill(s) approved by the City Council of Aleppo, and at his own expense, immediately "partially and / or

completely to avoid the obstruction of traffic and pedestrians and / or having any setback to the project works.

12. Completing the removal of all debris, rubble and waste from all the works of the project to the landfill / landfills approved by the Aleppo City Council, at his own expense, on completion of all project works.
13. Payment shall be made upon the execution of all works and in accordance with the receipt of the site from the project management and the beneficiary.
14. The value of any contract item shall not be paid out if it does not comply with the specified conditions.
15. UNDP is not responsible for the increase in prices after the contract is sent and the bidder must execute the works at the prices at which the bid was submitted until the end of the project execution period.
16. **The site visit is a mandatory requirement for the inspection of the sites and the matching of the works prior to the submission of the bid. Bidders who did not participate in the site visit are not eligible to submit a bid.**

**Pls. attach delivery schedule, if relevant, and cluster by lot, if partial bids will be allowed. Specify delivery locations if goods multiple destinations.*

Section 5b: Other Related Requirements

Further to the Schedule of Requirements in the preceding Table, Bidders are requested to take note of the following additional requirements, conditions, and related services pertaining to the fulfillment of the requirements: *[check the condition that applies to this ITB, delete the entire row if condition is not applicable to the goods being procured]*

Delivery Term [INCOTERMS 2010] <i>(Pls. link this to price schedule)</i>	DAP
Exact Address of Delivery/Installation Location	Aleppo, Syria
Mode of Transport Preferred	No preferred mode of transport
UNDP Preferred Freight Forwarder, if any ²	No preferred freight forwarder
Distribution of shipping documents <i>(if using freight forwarder)</i>	N/A
Customs, if required, clearing shall be done by:	UNDP
Ex-factory / Pre-shipment inspection	N/A
Inspection upon delivery	Will be conducted by UNDP and project beneficiaries.
Installation Requirements	N/A
Testing Requirements	N/A
Scope of Training on Operation and Maintenance	N/A
Commissioning	N/A
Warranty Period	One year
Local Service Support	N/A
Technical Support Requirements	N/A
After-sale services Requirements	<input checked="" type="checkbox"/> Warranty on all works shall be for one year starting from the date of issuing the official provisional acceptance letter from the beneficiary after the completion of all related works to the contract.
Payment Terms <i>(max. advanced payment is 20% as per UNDP policy)</i>	<input checked="" type="checkbox"/> 100% within 30 days upon UNDP's acceptance of the works and goods delivered as specified and receipt of invoice
Conditions for Release of Payment	<input checked="" type="checkbox"/> Inspection upon completion of works <input checked="" type="checkbox"/> Written Acceptance of works based on full compliance with ITB requirements
All documentations, including catalogues, instructions and operating manuals, shall be in this language	English

²A factor of the Incoterms stipulated in the ITB. The use of a UNDP preferred freight forwarder may be considered for purposes of ensuring forwarder's familiarity with procedures and processing of documentary requirements applicable to UNDP when clearing with customs authority of the country of destination.

Section 6: Returnable Bidding Forms / Checklist

This form serves as a checklist for preparation of your Bid. Please complete the Returnable Bidding Forms in accordance with the instructions in the forms and return them as part of your Bid submission. No alteration to format of forms shall be permitted and no substitution shall be accepted.

Before submitting your Bid, please ensure compliance with the Bid Submission instructions of the BDS 22.

Technical Bid:

Have you duly completed all the Returnable Bidding Forms?	
▪ Form A: Bid Submission Form	<input type="checkbox"/>
▪ Form B: Bidder Information Form	<input type="checkbox"/>
▪ Form C: Joint Venture/Consortium/ Association Information Form	<input type="checkbox"/>
▪ Form D: Qualification Form	<input type="checkbox"/>
▪ Form E: Format of Technical Bid/Bill of Quantities	<input type="checkbox"/>
▪ Form G: Form of Bid Security	
▪ [Add other forms as necessary]	<input type="checkbox"/>
Have you provided the required documents to establish compliance with the evaluation criteria in Section 4?	<input type="checkbox"/>

Price Schedule:

▪ Form F: Price Schedule Form	<input type="checkbox"/>
-------------------------------	--------------------------

Form A: Bid Submission Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

We, the undersigned, offer to supply the goods and related services required for [Insert Title of goods and services] in accordance with your Invitation to Bid No. [Insert ITB Reference Number] and our Bid. We hereby submit our Bid, which includes this Technical Bid and Price Schedule.

Our attached Price Schedule is for the sum of [Insert amount in words and figures and indicate currency].

We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/Consortium /Association members or subcontractors or suppliers for any part of the contract:

- a) is not under procurement prohibition by the United Nations, including but not limited to prohibitions derived from the Compendium of United Nations Security Council Sanctions Lists;
- b) have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization;
- c) have no conflict of interest in accordance with Instruction to Bidders Clause 4;
- d) do not employ, or anticipate employing, any person(s) who is, or has been a UN staff member within the last year, if said UN staff member has or had prior professional dealings with our firm in his/her capacity as UN staff member within the last three years of service with the UN (in accordance with UN post-employment restrictions published in ST/SGB/2006/15);
- e) have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future;
- f) undertake not to engage in proscribed practices, including but not limited to corruption, fraud, coercion, collusion, obstruction, or any other unethical practice, with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN and we embrace the principles of the United Nations Supplier Code of Conduct and adhere to the principles of the United Nations Global Compact.

We declare that all the information and statements made in this Bid are true and we accept that any misinterpretation or misrepresentation contained in this Bid may lead to our disqualification and/or sanctioning by the UNDP.

We offer to supply the goods and related services in conformity with the Bidding documents, including the UNDP General Conditions of Contract and in accordance with the Schedule of Requirements and Technical Specifications.

Our Bid shall be valid and remain binding upon us for the period specified in the Bid Data Sheet.

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

I, the undersigned, certify that I am duly authorized by [Insert Name of Bidder] to sign this Bid and bind it should UNDP accept this Bid.

Name: _____

Title: _____

Date: _____

Signature: _____

[Stamp with official stamp of the Bidder]

Form B: Bidder Information Form

Legal name of Bidder	[Complete]
Legal address	[Complete]
Year of registration	[Complete]
Bidder's Authorized Representative Information	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]
Are you a UNGM registered vendor?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, [insert UGNM vendor number]
Are you a UNDP vendor?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, [insert UNDP vendor number]
Countries of operation	[Complete]
No. of full-time employees	[Complete]
Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (If yes, provide a Copy of the valid Certificate):	[Complete]
Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? (If yes, provide a Copy of the valid Certificate):	[Complete]
Does your Company have a written Statement of its Environmental Policy? (If yes, provide a Copy)	[Complete]
Does your organization demonstrates significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues	[Complete]
Is your company a member of the UN Global Compact	[Complete]
Contact person that UNDP may	Name and Title: [Complete]

<p>contact for requests for clarifications during Bid evaluation</p>	<p>Telephone numbers: [Complete] Email: [Complete]</p>
<p>Please attach the following documents:</p>	<ul style="list-style-type: none"> ☒ Company Profile, which should not exceed fifteen (15) pages, including printed brochures and product catalogues relevant to the goods/services being procured ☒ Certificate of Registration of the business (registration in Contractors' Union, Or Engineering Syndicate), including Articles of Incorporation, or equivalent document if Bidder is not a corporation. ☒ Latest Audited Financial Statement (Income Statement and Balance Sheet) including Auditor's Report for the past 3 years ☒ Statement of Satisfactory Performance from the Top 2 Clients in terms of Contract Value. ☒ a list of the vehicles and equipment to be used in the rehabilitation process and indicate whether they are leased or owned. ☒ List and value of projects performed by the company with similar nature and complexity, plus client's contact details who may be contacted for further information on those contracts; ☒ CVs of the Key Staff and Engineers who will execute the work. ☒ Statement of compliance with the terms and conditions of employment of workers according to the Syrian Labor Law and UNDP standards in terms of age, experience and need for work. Also, a sufficient number of workers (no less than 40 job opportunities for Lot 1 & 60 job opportunities for Lot 2) should be employed ☒ One-year warranty statement ☒ Provide a time schedule of the work with a detailed technical presentation according to the required works with a written statement of compliance with all conditions and requirements ☒ All information regarding any past and current litigation during the last five (5) years, in which the bidder is involved, indicating the parties concerned, the subject of the litigation, the amounts involved, and the final resolution if already concluded.

Form C: Joint Venture/Consortium/Association Information Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

To be completed and returned with your Bid if the Bid is submitted as a Joint Venture/Consortium/Association.

No	Name of Partner and contact information <i>(address, telephone numbers, fax numbers, e-mail address)</i>	Proposed proportion of responsibilities (in %) and type of goods and/or services to be performed
1	[Complete]	[Complete]
2	[Complete]	[Complete]
3	[Complete]	[Complete]

Name of leading partner (with authority to bind the JV, Consortium, Association during the ITB process and, in the event a Contract is awarded, during contract execution)	[Complete]
--	------------

We have attached a copy of the below referenced document signed by every partner, which details the likely legal structure of and the confirmation of joint and severable liability of the members of the said joint venture:

☐ Letter of intent to form a joint venture **OR** ☐ JV/Consortium/Association agreement

We hereby confirm that if the contract is awarded, all parties of the Joint Venture/Consortium/Association shall be jointly and severally liable to UNDP for the fulfillment of the provisions of the Contract.

Name of partner: _____ Name of partner: _____

Signature: _____ Signature: _____

Date: _____ Date: _____

Name of partner: _____ Name of partner: _____

Signature: _____ Signature: _____

Date: _____ Date: _____

Form D: Eligibility and Qualification Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

If JV/Consortium/Association, to be completed by each partner.

History of Non- Performing Contracts

<input type="checkbox"/> Non-performing contracts did not occur during the last 3 years			
<input type="checkbox"/> Contract(s) not performed in the last 3 years			
Year	Non- performed portion of contract	Contract Identification	Total Contract Amount (current value in US\$)
		Name of Client: Address of Client: Reason(s) for non-performance:	

Litigation History (including pending litigation)

<input type="checkbox"/> No litigation history for the last 3 years			
<input type="checkbox"/> Litigation History as indicated below			
Year of dispute	Amount in dispute (in US\$)	Contract Identification	Total Contract Amount (current value in US\$)
		Name of Client: Address of Client: Matter in dispute: Party who initiated the dispute: Status of dispute: Party awarded if resolved:	

Previous Relevant Experience

Please list only previous similar assignments successfully completed in the last 3 years.

List only those assignments for which the Bidder was legally contracted or sub-contracted by the Client as a company or was one of the Consortium/JV partners. Assignments completed by the Bidder's individual experts working privately or through other firms cannot be claimed as the relevant experience of the Bidder, or that of the Bidder's partners or sub-consultants, but can be claimed by the Experts themselves in their CVs. The Bidder should be prepared to substantiate the claimed experience by presenting copies of relevant documents and references if so requested by UNDP.

Project name & Country of Assignment	Client & Reference Contact Details	Contract Value	Period of activity and status	Types of activities undertaken

Bidders may also attach their own Project Data Sheets with more details for assignments above.

☐ Attached are the Statements of Satisfactory Performance from the Top 3 (three) Clients or more.

Financial Standing

Annual Turnover for the last 3 years	Year	USD
	Year	USD
	Year	USD
Latest Credit Rating (if any), indicate the source		

Financial information (in US\$ equivalent)	Historic information for the last 3 years		
	Year 1	Year 2	Year 3
	<i>Information from Balance Sheet</i>		
Total Assets (TA)			
Total Liabilities (TL)			
Current Assets (CA)			
Current Liabilities (CL)			
	<i>Information from Income Statement</i>		
Total / Gross Revenue (TR)			
Profits Before Taxes (PBT)			
Net Profit			
Current Ratio			

☐ Attached are copies of the audited financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following condition:

- Must reflect the financial situation of the Bidder or party to a JV, and not sister or parent companies;
- Historic financial statements must be audited by a certified public accountant;
- Historic financial statements must correspond to accounting periods already completed and audited. No statements for partial periods shall be accepted.

Form E: Format of Technical Bid

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

The Bidder's Bid should be organized to follow this format of the Technical Bid. Where the bidder is presented with a requirement or asked to use a specific approach, the bidder must not only state its acceptance, but also describe how it intends to comply with the requirements. Where a descriptive response is requested, failure to provide the same will be viewed as non-responsive.

SECTION 1: Bidder's qualification, capacity and expertise (Please fill)

- 1.1 General organizational capability which is likely to affect implementation: management structure, financial stability and project financing capacity, project management controls, extent to which any work would be subcontracted (if so, provide details).
- 1.2 Relevance of specialized knowledge and experience on similar engagements done in the region/country.
- 1.3 Quality assurance procedures and risk mitigation measures.
- 1.4 Organization's commitment to sustainability.

SECTION 2: Scope of Supply, Technical Specifications, and Related Services (Please fill)

This section should demonstrate the Bidder's responsiveness to the specification by identifying the specific components proposed, addressing the requirements, as specified, point by point; providing a detailed description of the essential performance characteristics proposed; and demonstrating how the proposed bid meets or exceeds the requirements/specifications. All important aspects should be addressed in sufficient detail.

- 2.1 A detailed description of how the Bidder will deliver the required goods and services, keeping in mind the appropriateness to local conditions and project environment. Details how the different service elements shall be organized, controlled and delivered.
- 2.2 Explain whether any work would be subcontracted, to whom, how much percentage of the requirements, the rationale for such, and the roles of the proposed sub-contractors and how everyone will function as a team.
- 2.3 The bid shall also include details of the Bidder's internal technical and quality assurance review mechanisms.
- 2.4 Implementation plan including a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing.
- 2.5 Demonstrate how you plan to integrate sustainability measures in the execution of the contract.

Other Related services and requirements <i>(based on the information provided in Section 5b)</i>	Compliance with requirements		Details or comments on the related requirements
	Yes, we comply	No, we cannot comply <i>(indicate discrepancies)</i>	
Delivery Term			
Warranty			
Delivery Time			

SECTION 3: Management Structure and Key Personnel

- 3.1 Describe the overall management approach toward planning and implementing the project. Include an organization chart for the management of the project describing the relationship of key positions and designations. Provide a spreadsheet to show the activities of each personnel and the time allocated for his/her involvement.
- 3.2 Provide CVs for key personnel that will be provided to support the implementation of this project using the format below. CVs should demonstrate qualifications in areas relevant to the scope of goods and/or services.

Format for CV of Proposed Key Personnel

Name of Personnel	[Insert]
Position for this assignment	[Insert]
Nationality	[Insert]
Language proficiency	[Insert]
Education/Qualifications	<i>[Summarize college/university and other specialized education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.]</i>
	[Insert]
Professional certifications	<i>[Provide details of professional certifications relevant to the scope of goods and/or services]</i>
	<ul style="list-style-type: none"> ▪ Name of institution: [Insert] ▪ Date of certification: [Insert]
Employment Record/Experience	<i>[List all positions held by personnel (starting with present position, list in reverse order), giving dates, names of employing organization, title of position held and location of employment. For experience in last five years, detail the type of activities performed, degree of responsibilities, location of assignments and any other information or professional experience considered pertinent for this assignment.]</i>
	[Insert]
References	<i>[Provide names, addresses, phone and email contact information for two (2) references]</i>

	Reference 1: [Insert]
	Reference 2: [Insert]

I, the undersigned, certify that to the best of my knowledge and belief, the data provided above correctly describes my qualifications, my experiences, and other relevant information about myself.

Signature of Personnel

Date (Day/Month/Year)

FORM F: Price Schedule Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

The Bidder is required to prepare the Price Schedule following the below format. The Price Schedule must include a detailed cost breakdown of all goods and related services to be provided. Separate figures must be provided for each functional grouping or category, if any.

Any estimates for cost-reimbursable items, such as travel of experts and out-of-pocket expenses, should be listed separately.

Currency of the Bid: [Insert Currency]

Price Schedule

Lot 1: In front of Kiltawieh

No.	Items to be Supplied*	Description/Specifications of Goods	QTY	Unit	Unit Price	Total Price	Latest Delivery Time
1	Excavations	Executing excavations for the sewage network and uninstalling the pavements tiles and reinforcing the walls according to the directions of the management in addition to transferring debris and all that is required.	425	m ³			
2	Reinforced concrete pads beneath the sewage pipes	Providing and executing 250kg/ m ³ reinforced concrete pads with 10cm beneath the sewage pipes	5	m ³			
3	Unmolded regular concrete	Providing and pouring 150kg/ m ³ unmolded regular concrete under the manholes pipes and buildings connectors and gutters according to the thicknesses and widths mentioned in the plans.	9	m ³			
4	Fine sand and granular material	Providing and laying fine sand and granular material under and around the sewage pipes according to the plans with pressing the layers and all that is required.	140	m ³			
5	Granules (gravel – varied aggregates)	Providing and laying granules (gravel and aggregates) on the sewage pipes according to the plans with pressing the layers and all that is required	190	m ³			
6	HDPE pipes 22.5 cm	Transferring & Installing HDPE pipes, 22.5cm diameter, from the stores of general company of sewage in Aleppo and all that is	50	m			

		required for pipe fittings.					
7	HDPE pipes 30 cm	Transferring & Installing HDPE pipes, 30cm diameter, from the stores of general company of sewage and all that is required for pipe fittings.	35	m			
8	HDPE pipes 40 cm	Transferring & Installing HDPE pipes, 40cm diameter, from the stores of general company of sewage and all that is required for pipe fittings.	80	m			
9	Reinforced concrete for the inspection chambers	Providing and executing 350kg/ m ³ reinforced concrete with an average reinforcement rate of 100 kg iron/ m ³ for the inspection chambers and covered distribution manholes to connect the buildings according to the plans and the sewage pipe diameter with iron ladders, cement rendering and all that is required of material and labor.	14	m ³			
10	Providing & Installing GRP Cover	Providing and installing GRP Covers 80*80cm, and diameter of 55cm at least.	5	No.			
11	Paving and rolling a layer of varied gravel	Providing, paving and rolling a 30cm thick varied gravel layer after rolling it	190	m ²			
12	Reinstalling and paving the uninstalled cobblestones	Reinstalling and paving the uninstalled street cobblestones, according to the supervisory body's instructions, with all that is required.	210	m ²			
13	Providing and installing street cobblestone for the old city	Providing and installing street cobblestones for the old city similar to the existing ones in the work site to fill in the holes that existed prior to the work commencement, according to the supervisory body's instructions, with all that is required.	40	m ²			
Total Price (All Inclusive) DAP Aleppo, Old City							

Name of Bidder: _____

Authorised signature: _____

Name of authorised signatory: _____

Functional Title: _____

Lot 2: From Bab Al Hadeed Square to Tababeh Sharieh

No.	Items to be Supplied*	Description/Specifications of Goods	QTY	Unit	Unit Price	Total Price	Latest Delivery Time
1	Excavations	Executing excavations for the sewage network by cutting the asphalt layer with machines and pumping water and reinforcing the walls according to the directions of the management in addition to transferring debris and all that is required.	4,850	m ³			
2	Reinforced concrete pads beneath the sewage pipes	Providing and executing 250kg/ m ³ reinforced concrete pads with 10cm beneath the sewage pipes	25	m ³			
3	Unmolded regular concrete	Providing and pouring 150kg/ m ³ unmolded regular concrete under the manholes pipes and buildings connectors and gutters according to the thicknesses and widths mentioned in the plans.	40	m ³			
4	Fine sand and granular material	Providing and laying fine sand and granular material under and around the sewage pipes according to the plans with pressing the layers and all that is required.	1240	m ³			
5	Granules (gravel – varied aggregates)	Providing and laying granules (gravel and aggregates) on the sewage pipes according to the plans with pressing the layers and all that is required	2,750	m ³			
6	HDPE pipes 22.5 cm	Transferring & Installing HDPE pipes, 22.5 cm diameter, from the stores of general company of sewage in Aleppo and all that is required for pipe fittings.	280	m			
7	HDPE pipes 30 cm	Transferring & Installing HDPE pipes, 30 cm diameter, from the stores of general company of sewage in Aleppo and all that is required for pipe fittings.	35	m			
8	HDPE pipes 60 cm	Transferring & Installing HDPE pipes, 60 cm diameter, from the stores of general company of sewage in Aleppo and all that is required for pipe fittings.	148	m			
9	HDPE pipes 80 cm	Transferring & Installing HDPE pipes, 80 cm diameter, from the stores of general company of sewage in Aleppo and all that is required for pipe fittings.	350	m			
10	Reinforced concrete for the inspection chambers	Providing and executing 350kg/ m ³ reinforced concrete with an average reinforcement rate of 90 kg iron/ m ³ for the inspection chambers and covered distribution manholes to connect the buildings according to the plans and the sewage pipe diameter with iron ladders,	75	m ³			

		cement rendering and all that is required of material and labor.					
11	Providing & Installing GRP Cover	Providing and installing GRP Covers 80*80cm, and diameter of 55cm at least.	8	No.			
12	Gutter sifters made from grilled reinforced concrete	Making grilled reinforced concrete gutter sifters to be executed on the side of the pavement and built in asphalt and/or the pavement tiles, with inside dimensions of 50x50cm according to pattern E mentioned in the plans.	7	No.			
13	Paving and rolling a layer of varied gravel	Providing, paving and rolling a 30cm thick varied gravel layer after rolling it	1,310	m ²			
Total Price (All Inclusive) DAP Aleppo, Old City							

Name of Bidder: _____

Authorised signature: _____

Name of authorised signatory: _____

Functional Title: _____

FORM G: Form of Bid Security

**Bid Security must be issued using the official letterhead of the Issuing Bank.
Except for indicated fields, no changes may be made on this template.**

To: UNDP
[Insert contact information as provided in Data Sheet]

WHEREAS [Name and address of Bidder] (hereinafter called "the Bidder") has submitted a Bid to UNDP dated [Click here to enter a date.](#) to execute goods and/or services [Insert Title of Goods and/or Services] (hereinafter called "the Bid"):

AND WHEREAS it has been stipulated by you that the Bidder shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security if the Bidder:

- a) Fails to sign the Contract after UNDP has awarded it;
- b) Withdraws its Bid after the date of the opening of the Bids;
- c) Fails to comply with UNDP's variation of requirement, as per ITB instructions; or
- d) Fails to furnish Performance Security, insurances, or other documents that UNDP may require as a condition to rendering the contract effective.

AND WHEREAS we have agreed to give the Bidder such Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Bidder, up to a total of *[amount of guarantee] [in words and numbers]*, such sum being payable in the types and proportions of currencies in which the Price Bid is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of *[amount of guarantee as aforesaid]* without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

This guarantee shall be valid up to 30 days after the final date of validity of bids.

SIGNATURE AND SEAL OF THE GUARANTOR BANK

Signature: _____

Name: _____

Title: _____

Date: _____

Name of Bank _____

Address _____

[Stamp with official stamp of the Bank]