



*Empowered lives.
Resilient nations.*

INVITATION TO BID

**CONSTRUCTION OF WATER SAVING TECHNOLOGIES TRAINING POLYGON AT THE STATE
UNITARY ENTERPRISE (SUE) "SCIENTIFIC TRAINING CENTER OF TIAME" IN URTACHICHICK
DISTRICT OF TASHKENT REGION**

ITB No.: ITB/007/18

Project: UNITED NATIONS DEVELOPMENT PROGRAMME

Country: UZBEKISTAN

Issued on: 30 November 2018

Contents

Section 1. Letter of Invitation.....	4
Section 2. Instruction to Bidders	5
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	20
Section 5a: Schedule of Requirements and Technical Specifications/Bill of Quantities	23
Facilities consist of the following:	24
Section 5b: Other Related Requirements	1
Section 6: Returnable Bidding Forms / Checklist	4
Form A: Bid Submission Form	5
Form B: Bidder Information Form	6
Form C: Joint Venture/Consortium/Association Information Form	8
Form D: Eligibility and Qualification Form	9
Form E: Format of Technical Bid	11
FORM F: Price Schedule Form	14
FORM G: Performance Security	36

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
 - Form A: Bid Submission Form
 - Form B: Bidder Information Form
 - Form C: Joint Venture/Consortium/Association Information Form
 - Form D: Qualification Form
 - Form E: Format of Technical Bid
 - Form F: Price Schedule
 - Form G: Performance 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 pu.uz@undp.org, indicating whether you intend to submit a Bid or otherwise. 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

Name: Procurement Unit

Date: **November 30, 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 these organizations.</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.
4. Conflict of Interests	4.1	<p>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.
	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.
	4.3	<p>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>
	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.
B. PREPARATION OF BIDS		
5. General Considerations	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.
	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.

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.
13. Currencies	<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.
14. Joint Venture, Consortium or Association	<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> <ul style="list-style-type: none"> i. Bear the name of the Bidder; ii. Be addressed to UNDP as specified in the BDS; and iii. 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> <p>a) Electronic files that form part of the Bid must be in accordance with the format and requirements indicated in BDS;</p> <p>b) 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> <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> <ul style="list-style-type: none"> a) Preliminary Examination including Eligibility b) Arithmetical check and ranking of bidders who passed preliminary examination by price. c) Qualification assessment (if pre-qualification was not done) a) Evaluation of Technical Bids

	<p>b) Evaluation of prices</p> <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 works, as deemed necessary;

	<ul style="list-style-type: none"> e) Physical inspection of the Bidder's offices, branches or other places where business transpires, with or without notice to the Bidder; f) Other means that UNDP may deem appropriate, at any stage within the selection process, prior to awarding the contract.
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> <ul style="list-style-type: none"> 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; 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 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>34.4 If the Bidder does not accept the correction of errors made by UNDP, its Bid shall be rejected.</p>

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%20

	and%20Taxes_Advanced%20Payment%20Guarantee%20Form.docx&action=default
43. Liquidated Damages	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.
44. Payment Provisions	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.
45. Vendor Protest	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: http://www.undp.org/content/undp/en/home/procurement/business/protest-and-sanctions.html
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 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 OR Russian
2		Submitting Bids for Parts or sub-parts of the Schedule of Requirements (partial bids)	Not Allowed
3	20	Alternative Bids	Shall not be considered
4	21	Pre-Bid conference	Will be Conducted Date and Time (GMT +5): December 19, 2018 2:30 PM Venue: UNDP CO, Tashkent Address: 4, Taras Shevchenko street, Tashkent, 100029, Uzbekistan Bidders who are interested in attending Pre-Bid conference must send notification in writing to pu.uz@undp.org not later than 16.00 (GMT +5) on 18 December 2018 by providing full name, occupation and relationship of the individual who will attend the conference on behalf of the Bidder. Access to UNDP building only with passport.
5	16	Bid Validity Period	120 calendar days
6	13	Bid Security	Not Required
7	41	Advanced Payment upon signing of contract	Allowed up to a maximum of 15% of contract value. Please refer to "Clause 42. Bank Guarantee" of "Section 2. Instruction to Bidders" for more details on conditions for releasing Advance Payment.
8	42	Liquidated Damages	Will be imposed as follows: Percentage of contract price per day of delay: 0.5% but not more than 15% of total contract amount Max. no. of days of delay: 30 calendar days Next course of action: contract termination.
9	40	Performance Security	Required in the amount of 10% from the total contract price.

			<p>The bidder is required to provide a performance security from the recognized bank at contract signature stage.</p> <p>Duration of the performance security should be valid beyond the date of completion of works for 12 months warranty period.</p> <p>Performance security should be issued in UNDP form provided in Form G: Form of Performance Security.</p>
10	12	Currency of Bid	<p>United States Dollars (USD) for foreign suppliers.</p> <p>Uzbekistan soum (UZS) for local suppliers.</p> <p>Please refer to Clause "13. Currencies" of "Section 2. Instruction to Bidders" for more details on bid currency.</p>
11	31	Deadline for submitting requests for clarifications/ questions	3 working days before the submission deadline
12	31	Contact Details for submitting clarifications/questions	<p>Focal Person in UNDP: Procurement unit</p> <p>Address: 4, Taras Shevchenko street, Tashkent, 100029, Uzbekistan</p> <p>E-mail address: pu.uz@undp.org</p>
13	18, 19 and 21	Manner of Disseminating Supplemental Information to the ITB and responses/clarifications to queries	<p>Direct communication to prospective Proposers by email and Posting on the website www.uz.undp.org, www.un.uz, www.ungm.org</p>
14	23	Deadline for Submission	18:00 Tashkent time (GMT +5), 2 January 2019
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><u>Courier/Hand Delivery:</u></p> <p>4, Taras Shevchenko street, Tashkent, 100029, Uzbekistan for sealed envelopes; and</p> <p>Please put the following inscription of the envelope:</p> <p>"Ref: ITB/007/18 Construction of water saving technologies training polygon"</p> <p>Do not open before 2 January 2019, 18.00 (GMT +5).</p> <p><u>Submission by email:</u></p> <p>bids.uz@undp.org in .pdf format.</p> <p>Please put the following subject to the email submission:</p> <p>"Ref: ITB/007/18 Construction of water saving technologies training polygon"</p> <p>UNDP will not accept email submissions addressed to another email account or without above required subject.</p>

16	22	Electronic submission (email or eTendering) requirements	<ul style="list-style-type: none"> Format: PDF files only File names must be maximum 60 characters long and must not contain any letter or special character other than from Latin alphabet/keyboard. All files must be free of viruses and not corrupted. Max. File Size per transmission: 15 MB Mandatory subject of email: <u>ITB/007/18 Construction of water saving technologies training polygon</u> 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: 4, Taras Shevchenko street, Tashkent, 100029, Uzbekistan
17	25	Date, time and venue for the opening of bid	Date and Time (GMT +5): January 3, 2019 11:00 AM Venue: UNDP CO, Tashkent
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>March 26, 2019</i>
20		Maximum expected duration of contract	6 (six) months upon receiving prepayment
21	35	UNDP will award the contract to:	One proposer only Subcontracting is allowed. Subcontracted work should not exceed 30% of the total amount of work listed in the scope of work. At the same time, it is necessary to submit a full package of subcontractor's documents specified in the tender document. The subcontractor's qualification must also comply with requirements outlined in this tender.
22	39	Type of Contract	Contract for Civil Works 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 Works 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
- Performance Security submitted as per ITB requirements with compliant validity period

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	<ul style="list-style-type: none"> ▪ Duly authorized to act as Agent on behalf of the Manufacturer, or Power of Attorney, if bidder is not a manufacturer ▪ Official appointment as local representative, if Bidder is submitting a Bid on behalf of an entity located outside country ▪ Patent Registration Certificates, if any of technologies submitted in the Bid is patented by the Bidder ▪ Export/Import Licenses, if applicable 	Form B: Bidder Information Form
	<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 and/or services being procured ▪ Certificate of Registration of the business, including Articles of Incorporation, or equivalent document ▪ Tax Registration/Payment Certificate issued by the Internal Revenue Authority evidencing that the Bidder is updated with its tax payment obligations, or Certificate of Tax exemption, if any such privilege is enjoyed by the Bidder ▪ Local Government permit to locate and operate in the country of registration ▪ Quality Certificate (e.g., ISO, etc.) and/or other similar certificates, accreditations, awards and citations received by the Bidder, if any ▪ List and value of projects performed for the last 3 years of similar 	

	<p>nature and complexity, including client's contact details</p> <ul style="list-style-type: none"> ▪ CV of Project manager/Engineer assigned for supervision of all works assumed by this contract ▪ Environmental Compliance Certificates, Accreditations, Markings/Labels, and other evidences of the Bidder's practices which contributes to the ecological sustainability and reduction of adverse environmental impact (e.g., use of non-toxic substances, recycled raw materials, energy-efficient equipment, reduced carbon emission, etc.), either in its business practices or in the goods it manufactures ▪ A certified copy of the technical passports and other documents confirming the Applicant's ownership of the construction equipment according to the list given in the section "Evaluation criteria" below or certified copies of lease agreements for the lease of this equipment and equipment ▪ Warranty: Confirmation on compliance with warranty requirements (refer to Section Qualification, Schedule of Requirements) and provision of warranty procedures for carrying out replacements/repairs in the country of use. ▪ Timetable to Project Schedule. 	
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
Litigation History	No consistent history of court/arbitral award decisions against the Bidder for the last 5 years.	Form D: Qualification Form
Previous Experience	Minimum 3 years of relevant experience.	Form D: Qualification Form
	Minimum 3 contracts of similar value, nature and complexity implemented over the last 3years. <i>(For JV/Consortium/Association, all Parties cumulatively should meet requirement).</i>	Form D: Qualification Form
Financial Standing	Minimum average annual turnover equivalent to USD 150,000 for 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.	Form F: Price Schedule 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 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.

	Price comparison shall be based on the landed price, direct costs, 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.	
Technical Capacity	Availability of at least of below listed personnel, machinery and equipment to be deployed on construction site for execution of works until successful completion: No. Name Unit Quantity 1 Excavator with bucket capacity of 0.75 m3 pcs 1 2 Excavator with bucket capacity of 0.5 m3 pcs 1 3 Crane of 5-10 t pcs 2 4 Buldozer of 96 kW pcs 1 5 High-sided truck of 5 t pcs 1 6 Welding machine pcs 1 7 Lorry loader of 5 t pcs 1 8 Dump truck of up to 5 t pcs 1 Minimum qualification requirements for engineer: - University degree in civil engineering - At least 5 years relevant engineering experience.	
Warranty period	- The minimum term of warranty for all construction-installation works and materials 1 (one) year after commissioning - Guarantee for the equipment must be for 24 (twenty-four) months from the date of signing Acceptance Certificates by UNDP. - Performance security in the amount of 10% from the total contract price from the recognized bank prior to signature of contract to cover defects and maintenance for 12 months warranty period after acceptance by UNDP. Duration of such performance security should be valid beyond the date of completion of works for 12 months warranty period. Performance security should be issued in UNDP form provided in Form G: Form of Performance Security and must be presented by the Bidder upon request from UNDP. Failure to present performance security upon request will be result on disqualification of the Bidder.	

SECTION 5A: SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS/BILL OF QUANTITIES

Scope of Work

SUE "Scientific Training Center» of Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIAME)" is the base for students' on-the-job training and the masters' and for PhD students' research practices.

Therefore, for development of scientific training base of the Institute, it is intended to construct the **Training Polygon on Water saving technologies** in Irrigation at the SUE "Scientific Training Center of TIAME" in Urtachirchick district of Tashkent region.

Object under construction is located in Urtachichick district of Tashkent region, 25 km south of the city of Tashkent. Landscape is presented by the plain of Tashkent-Golodnospetsky depression – a piedmont hilly loessoid plain. Landscape diversity has contributed to development of arid type pedogenic conditions in even lands and sierozemic type - in foothills.

Common features of climate - sharp continentality, droughtiness, heat and light abundance are distinctive for the entire region. Particularities of the specific area characterize the normal factors of Nurafshon weather station. Ground water has a cover of 2.0–3.0 m thickness. In construction area, there are road systems with paved surface and field roads that might be used during construction. For power supply, mobile power stations can be used.

For execution of construction work, the Contractor shall organize the building plots on site.

For execution of a number of specialist services related to mounting of pumping station and transformer substation, specialized contractors can be hired.

Current Site Condition

1. Site is located in the old-irrigated land.
2. Soil is represented by a heavy clay loam.
3. Soil subsidence – 1st type.
4. Seismicity – 7 magnitude (estimated – 8 magnitude).
5. Soil by type belongs to a light sierozem and sierozemic-gray-brown.
6. Water table is 2-3 m below the surface.
7. Frost level – 0.6.

The Site with a total area of 4.7 ha gross and 4.2 ha in plan net consists of 8 plots. Irrigation network is open, in earth channel. Area, crops, and planting system are given in Table-1.1 **Table-1.1**

Number of Plots	Area, ha	Crop	Planting System, m	Remarks
1	0.497	Orchard / Vegetables	4x3/0.9x0.3	Spacing tree/spacing emitter
	0.503		4x3/0.9x0.3	
2	0.734	Wheat and Melons, and Gourds	9x12	Spacing installation of sprinklers
	0.766		12x12	
3	0.306	Greenhouse	0.6x0.3	Spacing emitter
4	0.5	Cotton	0.9	Ridge-and-furrow irrigation
5	0.5	Vegetables	1.2x0.25	Subsoil irrigation
6	0.27	Melons and Gourds	0.6x0.3	Spacing emitter
7	0.05	Lisimeter	2x2	30 meshes
8	0.07	Vegetables	0.6x0.3	Spacing emitter
Total area, net	4.2			

Facilities consist of the following:

- Perimeter fencing with security post;
- Landscaping and exterior lighting;
- Drip irrigation system with plot area of 1.65 ha;
- Irrigation system by sprinkling method with plot area of 1.5 ha;
- Subsoil irrigation system with plot area of 0.5 ha;
- Improved ridge-and-furrow irrigation with plot area of 0.5 ha;
- Lisimeter station 0.05 ha;
- Source of water supply and fertilizer application;
- Central control board with monitoring system;
- Classroom for 20 students;
- Warehouse;
- Canopy;
- Lavatory for 2 seats;
- Utilities systems.

Architectural Design and Planning Concepts

Perimeter fencing. Project envisages perimeter fencing with profile 80x80x2, L=2100 mm, in amounts of 280 pcs, as well as 3 doors and 2 wickets.

Classroom (control room, classroom and monitoring room) is a one-story masonry building with the size of 6.0x14.0 in plan, consisting of classroom, monitoring room and security post.

Parking lot for 14 vehicles covered with asphalt of 50 mm thickness.

Pit latrine for 2 seats with the size of 4.0x3.5 in plan.

Field roads. There is a system of field roads for agricultural production and regular control of irrigation with access ways to each control structure, pumping station and other structures.

Landscaping of 1760 m² area and exterior lighting is envisaged.

Sediment basin represents a reservoir with the size of 20x2.2x4 and 176 m³ volume. Working storage is 120 m³. Sediment basin shall be cleaned by the motor pump into existing canal or cleaned manually at the end of vegetation.

Structures. 2 outlet structures and check dams, standard and tied to redeveloped site. Check dam is located at PK32+05 of existing flume network.

Pumping Station with 45 m³/h pump and 15 kW motor for provision of required head and the normal performance of the system is envisaged. There shall be sediment basin, fine mesh filter, fertilizer application device at the pumping station.

Characteristics of Pumping Station

No.	Name	Unit	Indications
1	Type of pump	pcs	K80-50-200
2	Flow rate	m ³ /h	45.0
3	Lift height	m	55.0
4	Speed	rpm	2900
5	Voltage	V	380
6	Motor rating	kW	15

Canopy with the size of 6x5.5m in plan for protection of pumping station and other equipment is envisaged.

Canopy - open; warehouse with the size of 6x6 m in plan for protection of pipelines and other equipment.

Lavatory for 2 seats with excavation volume of 22.05 m³ is envisaged.

Fire-fighting. Motor pump and fire extinguishing panel with all required inventory for fire-fighting. In the event of fire, water is pumped from sediment basin for fire-fighting.

Main pipelines (MP) for transmission of the irrigation water from pumping station to separating pipeline. Main pipelines

are from polyethylene, Ø 110 mm. Diameter of the main pipeline is calculated based on water volume, transmission distance, and friction factor of the material from which pipe is manufactured. At the head, it is limited to gate valves, Ø 100 mm, at the end point – gate valves, Ø 50 mm, and the discharge unit of winter closing-down of SKO system. Main pipeline is laid at 0.8 m depth. Pipeline-assembly method - edge welding by the heated member. Length of main pipeline is 225 m.

Plot pipelines (PP). Total length of the plot pipelines is 670.0 m, they are designed for water transmission from the water source (sediment basin) to the irrigation area. At the head, it is limited to gate valves Ø 50, 63 and 75 mm, at the end point – Ø 50, 63, 75 mm, and the discharge unit of winter closing-down of SKO system. Plot pipeline is laid at 0.8 m depth. Pipeline-assembly method - edge welding by the heated member. Length of the plot pipelines – UT-1-48.0 m, UT-3-56 m and UT-6-48 m, Ø 50 mm, from polyethylene. UT-2-48 m, UT-5-91 m and UT-7-76 m, Ø 63 mm, from polyethylene. UT-4-50 m, UT-8-65 m, UT-9-76 m and UT-10-140 m, Ø 75 mm, from polyethylene.

Control well. 3 control wells shall be installed.

Sinks. At the end of each plot pipeline, the discharge unit for seasonal or emergency discharge from the pipelines shall be installed, representing a sleeve, Ø 50.63 mm and 75 mm, with a tap at the end part. Structure is located at 1.7 m depth, up to the tap – 0.7 m. Upon completion of the irrigation period, tap is opened manually, water is emptied by gravity from PP into a cesspool and drained.

Irrigation flumes in amounts of 35 pcs and 5 m length, each for the ridge-and-furrow irrigation .

Irrigation pipelines of plots - polyethylene drip lines, Ø 20 mm, with built-in emitters, spacing of emitters for orchards - 3.0 m, flow rate - 2 pcs 4.0 l/h each. Location – surface-mounted. Designed for transmission of the irrigation water directly to the cultivated bedding (root zone).

Irrigation pipelines - drip lines, polyethylene, Ø 16 mm, with built-in emitters, spacing of emitters - 0.3 and 0.25 m, flow - 1 pc x 2.0 l/h. Location is surface-mounted. Designed for transmission of the irrigation water directly to the cultivated bedding (root zone).

Fasteners of polyethylene pipelines – details of SKO system and sprinkling, typical sizes from 110 to 16 mm,

Lisimeter station – engineering structure used for keeping track of dynamics and nature of moisture entry to the soil, changes in the soil solutions chemical composition, including affected by the different factors (fertilizer, irrigation methods, precipitation pattern, as well as depending on the peculiarities of plant formation). Erection of lisimeter structure is proposed for the open-ended field tests of different applications (agrochemical, agrophysical, reclamative, ecological). Total number of options – 30 plots (baths). Design thickness of the groundwater sheet – 25-30 cm, representing a thickness of plough layer as recommended by the climatic cropping patterns. Options of samples (plots) are isolated from each other by the special plastic partitions (meshes) which contribute to pureness and reliability of the experiments.

Tensiometric Station. For lysimetric studies which allow to identify various components of soil's hydrological budget, water exchange of ground water with aeration zone and share of ground water in consumptive use of the plants, evapotranspiration discharge, tensiometric station shall be installed. The station consists of lisimeter, sensors and background fields for provision of the up to date researches on soil improvement. Two tensiometers shall be installed at the station. The first station is shallow - 30 cm, and the second one is deep - 60 cm.

Weather Station. For optimal selection of the irrigation water flow in the plots, it is necessary to have a long-term weather forecast, consider temperature, moisture, pressure, speed and strength of wind, precipitation and many other weather conditions. To this effect, installation of the weather station with computer-aided met adaptor (panel without digital display) is envisaged with the following specifications:

No.	Name	Indications
1	Measurement ranges: - wind speed - direction of wind - atmospheric pressure - ambient temperature - relative air humidity	1 to 60 m/s 0 to 360 degrees 600 to 1073 hPa (450 to 805mm Mercury) minus 50 to plus 50 °C 10 to 98%

2	Tolerance, maximum: - for measuring circuit of direction of speed - for measuring circuit of atmospheric pressure - for measuring circuit of ambient temperature - for measuring circuit of relative air humidity	±10 degrees 0.4 mm Mercury at t minus 30 inclusive to plus 50 °C; ±0.2 at t minus 50 to minus 30 °C ±0,4 at t minus 50 to minus 10 °C ±5% at t minus 10 inclusive to plus 50 °C ±
3	Wind sensor threshold, m/s, maximum:	for wind speed 0.8 for direction of wind 1.2
4	Power source for weather station is DC power supply	voltage (12±1) V and current not less than 1A
5	Power consumption by Weather Station, maximum	15 W

During its installation it should be considered that maximum distance in which robust communication of external sensor and basic unit is preserved shall be 100 m in direct visibility and that presence of hindrances between sensor and basic unit leads to reduction of this distance. Material constituting hindrance is also essential.

Requirement of Major Construction Machinery and Motor Transport

For implementation of construction in the period specified by the Project, the Contractor, based on standard performance, construction time and scope of work, shall be provided with the major construction machinery and the motor transport according to the below list.

No.	Name	Unit	Quantity
1	Excavator with bucket capacity of 0.75 m ³	pcs	1
2	Excavator with bucket capacity of 0.5 m ³	pcs	1
3	Crane of 5-10 t	pcs	2
4	Bulldozer of 96 kW	pcs	1
5	High-sided truck of 5 t	pcs	1
6	Welding machine	pcs	1
7	Lorry loader of 5 t	pcs	1
8	Dump truck of up to 5 t	pcs	1

Special Conditions

The Contractor shall undertake a commitment for:

- Performance and workmanship in full compliance with the approved design and estimate documentation, scope of work, specifications, building codes, as well as other applicable regulatory documents.
- Timely corrective actions detected during acceptance of works and within the warranty period.
- Procurement and installation of the new equipment for execution of work at site.
- Individual testing of installed equipment and participation in its integrated testing witnessed by the Employer's inspector.
- Submission of certificates for installed equipment and handover certificates for installed equipment to the Employer.
- Ensure a proper guarding of materials, equipment and other assets at the construction site until full completion of works and their acceptance by the Employer.
- Cleaning of the construction site and adjoining territory upon completion of works within 5 days from the date of acceptance of site, removal of the construction materials, machines, equipment and other assets of the Contractor, as well as debris.
- Remedy at no charge, at the request of the Employer, all identified deficiencies if during execution of works the Contractor had made deviations from the contract conditions which degraded a quality of works, within 10 (ten) calendar days from the date of handing over of a relevant demand to the Contractor in a written form by the Employer.

All procured and supplied equipment and materials shall correspond to the specifications posted on the official websites of the manufacturers and the requirements of government standards of Uzbekistan.

All procured and supplied equipment shall be new, original, undisturbed.

Procured and supplied equipment shall have internal sealing of components at places of their connections or fixing for subsequent maintenance.

All procured and supplied materials and equipment shall have relevant certificates, technical passports and other documents verifying their quality and useful life. Copies of these certificates, etc. shall be provided by the Contractor to the Employer before commencement of works to be executed with these materials and equipment.

All materials and equipment applied by the Contractor shall be certified and permitted to be applied in Uzbekistan, as well as manufactured not later than twenty-four months after the date of delivery.

The Contractor shall be responsible for compliance of used materials and equipment with the design specifications, the government standards, the technical regulations and the fire requirements.

The Contractor shall guarantee that procured and supplied equipment are handed over free and clear of all liens and encumbrances and is not pledged, arrested or otherwise burdened.

Quality guaranty for work shall be valid for twelve months from the date of signing by the parties of the Site Acceptance Certificate.

Quality guaranty for equipment shall be valid for twenty-four months from the date of signing by the parties of the Site Acceptance Certificate.

Guarantee period for procured and supplied equipment shall be confirmed by existence of the warranty flyer indicating warranty service's terms and all the necessary data.

The Contractor shall provide a post-guarantee maintenance of equipment under separate contract.

The Employer shall provide to the Contractor the terminal points of temporary power supply and water supply under separate agreement if design load is reasoned, and on condition of:

- Full compensation of operating costs for used sources of temporary networks;
- Compensation of used power under separately agreed tariff.

Upon completion of construction-installation and repair works, the Contractor shall submit:

- Certificates of laboratory testing of the installed equipment;
- Test protocol for the earthing ring;
- As-built drawings for installed structures and service lines;
- Technical passports for equipment;
- Compliance certificates for construction materials and structures;
- Hidden works acceptance certificates;
- Invoice for incurred charges

All expenses of the Contractor shall be considered at cost calculation of the construction and installation activities, namely:

- Costs associated with equipment, furniture and implements, with allowances made for transportation and stockpiling-storage charges
- Costs associated with taxable earnings, with allowances made for employee charges
- Costs associated with construction materials, products and structures, with allowances made for transportation and stockpiling-storage charges
- Operating costs of vehicles and machinery
- Other production costs
- Other costs of the Contractor

SCOPE OF WORK			
#	DESCRIPTION OF WORKS AND RESOURCES	UNIT	QUANTITY
SECTION-1. PERIMETER FENCING			
1	GUARDRAILING FROM STEEL SECTION INSTALLED HORIZONTALLY, HEIGHT UP TO 2M	100 M	7.100

2	PROFILE 80X80X3. L=2100MM	PCS	280.000
3	3D FENCE, Ø 4 2050X2500MM	M2	1,453.000
4	CRAMP 60X30X2.5MM	PCS	1,120.000
5	DRYWALL SCREW, Ø 5, 5X38 ISO 15480	PCS	1,120.000
6	FLANGE/PRESSING/	PCS	280.000
7	TARGET/PLASTIC/	PCS	280.000
8	BOTTOMING OF SANDY GRAVEL	10 M3	0.560
9	STRIP CONCRETE FOUNDATION	100 M3	0.252
10	INSTALLATION OF REINFORCEMENT FOR SEPARATE RODS	100 T	0.006
11	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK. DIE-ROLLED SECTION, CLASS AIII, Ø 12 MM	T	0.597
SECTION 2. DOOR AND WICKET			
1	MANUAL TRENCH EXCAVATION	100 M3	0.020
2	GRAVEL BOTTOMING OF 10 CM THICKNESS	10 M3	0.020
3	STRIP CONCRETE FOUNDATION	100 M3	0.018
4	INSTALLATION OF METAL DOORS WITH EXTENDABLE OR SWING LEAF AND WICKETS WITH SURFACE MOUNTED COMPONENTS	100 M2	0.100
5	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK. DIE-ROLLED SECTION, CLASS AIII, Ø 12 MM	T	0.007
6	POLE FROM PROFILE 80X80X3	RM	24.096
7	PROFILE 40X20X3	RM	60.240
8	PROFILE 20X20X2	RM	130.520
9	HINGE FOR DOOR AND FENCE	PCS	16.000
10	LOCK/ SET FOR ALL DOORS	PCS	5.000
11	PAINTING OF METAL PRIMED SURFACE WITH ENAMEL HV-124, TWICE	100 M2	0.254
SECTION 3. FENCE OF TRANSFORMER SUBSTATION			
1	MANUAL SOIL EXCAVATION IN TRENCHES	100 M3	0.013
2	BOTTOMING OF SANDY GRAVEL	10 M3	0.013
3	STRIP CONCRETE FOUNDATION	100 M3	0.005
4	INSTALLATION OF SAFETY FENCING FOR EQUIPMENT	T	0.337
5	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK. DIE-ROLLED, SECTION CLASS AIII, Ø 12 MM	T	0.004
6	POLE FROM PROFILE 80X80X3	RM	15.060
7	PROFILE 40X20X3	RM	36.144
8	PROFILE 20X20X2	RM	114.456
9	HINGE FOR DOOR AND FENCE	PCS	2.000
10	BAR 40X4	RM	23.000
11	PAINTING OF METAL PRIMED SURFACE WITH ENAMEL HV-124, TWICE	100 M2	0.168
12	LOCK/ SET FOR ALL DOORS	PCS	1.000
SECTION 4. LANDSCAPING			
1	SUBBASE AND LEVELING BLANKET INSTALLATION OF BED FROM CRUSHED STONE, 15 CM THICKNESS, 4.5M WIDTH	100 M3	14.84
2	CRUSHED STONE OF FRACTION 5-10/15/MM	M3	1484
3	LAYING OF METAL GAZE IN CEMENT CONCRETE PAVEMENT	1000 M2	5.376
4	REINFORCEMENT GRILLAGE 2.5X1M, Ø 4MM, 150MMX150MM	M2	5376
5	CONCRETE BANDAGE INSTALLATION OF 10 MM THICKNESS. 3.5M WIDTH	100 M2	1100
6	INSTALLATION OF SUBBASE AND LEVELING BLANKET FOR BED FROM SAND AND	100 M3	1.76

	GRAVEL MIX FOR DOOR OF 15 CM THICKNESS, 3.5M WIDTH		
7	NATURAL SAND AND GRAVEL MIX	M3	176
8	LEVELLING WITH BULDOZERS OF 79 [108] KW [HP]	1000 M2	1.76
SECTION 5. CONSTRUCTION OF SEDIMENT BASIN			
1	EXCAVATION TO DISPOSAL AREA IN TRENCH OF UP TO 500 M3 WITH EXCAVATOR WITH 0.4 /0.35-0.45/ BUCKET, M3, SOIL GROUP: 2	1000 M3	0.230
2	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2 #HAND FINE EXCAVATION. BOTTOM AND WALLS STRIPPING WITH DROP CUT TO TRENCHES AND FOUNDATION PITS TO BE EXCAVATED MECHANICALLY	100 M3	0.230
3	RUBBY BOTTOMING	10 M3	1.150
4	INSTALLATION OF REBAR CAGES WITH REINFORCED, GRID A-3, Ø 12MM,, Ø 20MM	100 T	0.020
5	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK. DIE-ROLLED SECTION, CLASS AIII, Ø 12 MM	T	1.987
6	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK. DIE-ROLLED SECTION, CLASS AIII, Ø 20-22 MM	T	0.012
7	BLINDING	100 M3	0.050
8	INSTALLATION OF CONCRETE WALL OF CHAMBER V15	100 M3	0.191
	INSTALLATION OF CONCRETE WALL OF CHAMBER V15	100 M3	0.260
9	INSTALLATION OF CONCRETE BOTTOM V15	100 M3	0.100
10	WATERPROOFING OF HORIZONTAL SURFACE. FLUID GLASS CEMENT	100 M2	1.056
11	INSTALLATION OF CEMENT SCREED OF 20 MM THICKNESS	100 M2	0.800
12	INSTALLATION OF WATERTIGHT FACE FROM POLYETHYLENE FILM	100 M2	1.000
13	INSULATING ADHESIVE TAPE OF VERTICAL CONCRETE SURFACE WITH ROLL MATERIAL	100 M2	1.024
14	ROOFING FELT WITH GRIT COVERING OF DAMP-PROOF, GRADE TG-350	M2	102.400
15	PAINT INSULATION OF HORIZONTAL CONCRETE SURFACE WITH HOT BITUMEN IN TWO LAYERS	100 M2	1.126
SECTION 6. STRUCTURES			
1	EXCAVATION TO DISPOSAL AREA IN TRENCH OF UP TO 500 M3 WITH EXCAVATOR WITH 0.4 /0.35-0.45/ BUCKET, M3, SOIL GROUP: 2	1000 M3	0.041
2	HAND QUALITY BACKFILLING	1000 M3	0.004
3	HAND QUALITY BACKFILLING WITH COMPACTION	100 M3	0.004
4	RUBBY BOTTOMING	10 M3	0.080
5	INSTALLATION OF SLABBY BED	100 M3	0.013
6	INSTALLATION OF ABUTMENTS, PIERS AND OTHER WALLS	100 M3	0.047
7	INSULATING ADHESIVE TAPE OF VERTICAL CONCRETE SURFACE WITH ROLL MATERIAL IN TWO LAYERS	100 M2	0.120
8	PAINT INSULATION OF HORIZONTAL CONCRETE SURFACE WITH HOT BITUMEN IN TWO LAYERS	100 M2	0.140
9	LAYING OF POLYETHYLENE PIPE Ø 315 MM	KM	0.018
	METALWORK		
10	PLAIN GATE LARGE, SLIDING AND WHEELED. WEIGHT UP TO 1 T WITH FIXED FRAME ST3	T	0.298
11	SCREW-TYPE HAND GEAR HOIST. WEIGHT UP TO 0.2 T	SET	3.000
12	COST OF PLAIN GATE WITH FRAME GS150X60 ST.3	PCS	2.000
13	COST OF PLAIN GATE WITH FRAME GS150X100 ST.3	PCS	1.000

14	HAND HOIST MODEL 0.5V FOR GATES PS150X60 ST.3	PCS	2.000
15	HAND HOIST MODEL 1V FOR GATES PS150X100 ST.3	PCS	1.000
SECTION 7. PUMPING STATION			
1	INSTALLATION OF CENTRIFUGAL, CONSOLE PUMPS COMPLETE WITH ELECTRIC MOTOR. WEIGHT UP TO 0.3 T	PUMP	2.000
2	PUMP A160. K80-50-200A, N=2900 RPM N=15 KW U=380 KW	PCS	2.000
3	TRUE UNION REINFORCEMENT HAND-DRIVEN OR WITHOUT DRIVE FOR NOMINAL PRESSURE UP TO 10 MPA. NOMINAL DIAMETER 15 MM	PCS	7.000
4	COUPLED VALVE, Ø 15MM; SWITCHGEAR 1.0 MPA; 15CH8P2	PCS	7.000
5	FLANGE WELDING TO STEEL PIPELINES Ø 80 MM	FLANGE	4.000
6	FLANGE DN 080 PN 16, GOST 12815-80	PCS	4.000
7	FLANGE WELDING TO STEEL PIPELINES, Ø 100 MM	FLANGE	20.000
8	FLANGE DN 100 PN 16, GOST 12815-80	PCS	18.000
9	FLANGE 1-100-10, GOST 12815-80 FOR POLYETHYLENE COUPLING	PCS	2.000
10	INSTALLATION OF GATE VALVE DU 80 PN 16	PCS	2.000
11	GATE VALVE 32CH1R, DU 80 PN 16	PCS	2.000
12	INSTALLATION OF GATE VALVE DU 100 PN 16	PCS	9.000
13	GATE VALVE 32CH1R, DU 100 PN 16	PCS	9.000
14	INSTALLATION OF RETURN VALVES, Ø 80 MM	GATE VALVE	1.000
15	INLET RETURN VALVE 19CH42R, DU 80, SWITCHGEAR 0.25 MPA	PCS	1.000
16	INSTALLATION OF RETURN VALVES, Ø 100 MM	GATE VALVE	2.000
17	INLET RETURN VALVE 19CH21R, DU 100, SWITCHGEAR 1.0 MPA	PCS	2.000
18	INSTALLATION OF METERS [WATER-METERS] Ø UP TO 100 MM	METER	1.000
19	FLOWMETER DU 100, SWITCHGEAR 1.0 MPA DOROT DIM-AF-4	PCS	1.000
20	INSTALLATION OF T-VALVE PRESSURE GAUGE	SET	16.000
21	PRESSURE GAUGE SHOWING MEASUREMENT LIMITS, MPT-100	PCS	5.000
22	VACUUM GAUGE, GOST 27758-88 DV-05	PCS	2.000
23	THREE-WAY VALVE 11B18BK DU 15, SWITCHGEAR 1.0 MPA FOR PRESSURE GAUGE	PCS	7.000
24	BALL VALVE DU 25 ECONOM 4502	PCS	2.000
25	INSTALLATION OF EJECTOR FOR MANURE, Ø 100 MM	GATE VALVE	1.000
26	EJECTOR FOR MANURE DU 100, SWITCHGEAR 1.0 MPA, VENTURI-1	PCS	1.000
27	SINGLE CHAMBER FILTER, CLARIFYING, VERTICAL. HEIGHT OF TILE LINE 1 M, Ø, 1000 MM	T	0.004
28	3/75MM/ T TYPE DISC FILTER Q=50M3/NAS AQ136T	PCS	2.000
29	INSTALLATION OF POLYETHYLENE FITTINGS. ELBOW BENDS. TURNS. SLEEVES. ADAPTORS	10 PCS	1.000
30	ELBOW BEND, GOST 17375-83 90 DEGREE, Ø 108X4	PCS	8.000
31	ELBOW BEND, GOST 17375-83 90 DEGREE, Ø 89X3.5	PCS	3.000
32	TAPING PIN M16X180, 20 PCS, GOST 22042-76	KG	5.260
33	BOLT M16X100, 80 PCS, GOST 7798-70	KG	11.000
34	PLAIN WASHER M16X100, 80 PCS, GOST 7798-78	KG	0.904
35	NUT M16X100, 80 PCS, GOST 7798-70	KG	2.656
36	200 L TANK FOR MANURE	PCS	1.000
37	SHEET 8X200X400, 2 PCS, GOST 19903-74	KG	12.800
38	PIPE GOST 10704-91, Ø 89X3.5, L=8 RM, WEIGHT, 1 RM=6.36KG	KG	50.900
39	PIPE GOST 10704-91, Ø 108X4. L=30 RM, WEIGHT, 1 RM=7.77KG	KG	225.330
40	RUBBER PLATE 1. SHEET TMKSH-S-5 GOST 7338-77. S=2.0 M2	KG	12.000

41	HINGE THI-2.001	PCS	1.000
42	ANCHOR BOLT M20 COMPLETE	PCS	8.000
43	STEELWORK FOR ELECTRODE LEVEL ALARM /ROS-301/, WEIGHT=3.5KG	T	0.004
44	STEELWORK, MODEL ROS-301 THI-2.02	KG	3.500
SECTION 8. CLASSROOM			
	EARTHWORK		
1	TRENCHING TO DISPOSAL AREA WITH BACK DIGGER WITH 0.4 M3 BUCKET, SOIL GROUP: 2	1000 M3	0.012
2	MANUAL SOIL EXCAVATION IN TRENCHES, UP TO 2M WIDTH, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2	100 M3	0.020
3	BOTTOMING OF SANDY GRAVEL	M3	2.200
4	STRIP CONCRETE FOUNDATION	100 M3	0.180
5	STRIP CONCRETE FOUNDATION	100 M3	0.070
6	PAINT INSULATION OF HORIZONTAL CONCRETE SURFACE WITH HOT BITUMEN IN TWO LAYERS	100 M2	0.640
7	INSULATING ADHESIVE TAPE OF HORIZONTAL CONCRETE SURFACE WITH ROLL MATERIAL IN ONE LAYER FOR 56 M2/IN QUOTATION ALL RESOURCES ARE FOR TWO LAYERS/	100 M2	0.320
	WALLS AND FINISHING WORK		
8	BACKFILLING	1000 M3	0.018
9	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKET. SOIL GROUP 1	100 M3	0.020
10	BLOCKWORK, MASONRY, EXTERIOR, SIMPLE WITH HEIGHT OF STOREY UP TO 4 M	M3	70
11	BURNT BRICK	PCS	20035
12	INSTALLATION OF REINFORCED CONCRETE LINTELS FOR DOORS AND WINDOWS	100 M3	0.002
13	REINFORCING ROD FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK, SMOOTH, CLASS AI, Ø 10 MM	T	0.028
14	INSTALLATION OF CONCRETE BASEMENT WALLS AND BACK WALLS FOR WALL-PLATE, 20 CM	100 M3	0.064
15	CONCRETE SUBBASE INSTALLATION OF 10 CM THICKNESS FOR FLOOR	M3	14.200
16	INSTALLATION OF ROOF TIMBER/TIE BEAM 5X20/	M3	2.060
17	TIE BEAM 5X20	M3	2.060
18	INSTALLATION OF FRAME ELEMENTS FROM BARS	M3	2
19	CEILING /WOOD STRIP/3X15	M3	2
20	WINTERIZING OF COVERS WITH SLABS FROM FOAM MATERIAL AND FLAG FIBER GLASS IN 1 LAYER	100 M2	1.540
21	FOAM MATERIAL OF 4 MM THICKNESS	M2	77
22	FLAG FIBER-GLASS PLASTIC OF 4 MM THICKNESS	M2	77
23	LOW CARBON STEEL WIRE FOR VARIOUS PURPOSES, GALVANISED, Ø 6.0-6.3 MM	T	0.006
24	INSTALLATION OF WOOD-ALUMINIUM. ALUMINIUM. STEEL-PLASTIC BLOCKS IN EXTERIOR AND INTERIOR DOORWAYS: IN STONE WALLS WITH OPENING AREA OF UP TO 3 M2	100 M2	0.057
25	ALUMINIUM DOORSETS, "AKFA" TYPE WITH THE SIZE OF 0.9X2.1M	M2	5.670
26	INSTALLATION OF WINDOWS FROM WOOD-ALUMINIUM. ALUMINIUM. STEEL-PLASTIC BLOCKS IN STONE WALLS OF RESIDENTIAL AND PUBLIC BUILDINGS (REVOLVING. FOLDING. REVOLVING-FOLDING): WITH OPENING AREA OF UP TO 2 M2	100 M2	0.105
27	ALUMINIUM WINDOWS, "AKFA" TYPE WITH THE SIZE OF 1.35X1.35M	M2	10.470
28	EXTERIOR AND INTERNAL SURFACE PLASTERING	100 M2	3.030
29	FILLING OF WOODEN WALLS WITH HIGH-QUALITY PAINTWORK, INTERNAL PART,	100 M2	3.560

	TWICE		
30	PAINTING OF FACES, TWICE	100 M2	2.500
31	HIGH-QUALITY PAINTING WITH WATER-DISPERSIVE ACRYLIC COMPOUND, INTERNAL PART, TWICE	100 M2	3.560
32	SUBBASE INSTALLATION OF CONCRETE FLOOR OF 10 CM THICKNESS	M3	6
33	INSTALLATION OF COVERS FROM LINOLEUM WITH GLUE TYPE KN-2	100 M2	0.720
34	INSTALLATION OF PLASTIC SKIRTS BY THREAD CUTTING SCREWS	100 M	0.600
35	CEILING LINING OF MEDIUM COMPLEXITY WITH "KNAUF" GYPSUM BOARD SLABS WITH INSTALLATION OF FRAME	100 M2	0.720
36	FILLING AT HIGH-QUALITY PAINTWORK OF WOODEN CEILING, TWICE	100 M2	1.440
37	OIL PAINTING OF CEILING	100 M2	0.720
	ROOFING		
38	INSTALLATION OF FRAME ELEMENTS FROM BARS/WALL-PLATES 10X10 CM AND LEDGER BOARD 4X15 CM/	M3	0.950
39	WALL-PLATES 10X10 CM, 0.38M3 AND LEDGER BOARD 4MX15 CM, 0.4M3	M3	0.950
40	INSTALLATION OF ROOF TIMBER 4MX15 CM	M3	1
41	ROOF TIMBER 4MX15 CM	M3	1
42	INSTALLATION OF FRAME ELEMENTS FROM BARS/POLES 10X10 CM AND ROOF BOARDING 4X4 CM/	M3	0.630
43	POLE 10X10 CM, 0.072M3 AND ROOF BOARDING 4X4 CM, 0.45M3	M3	0.630
44	INSTALLATION OF STRETCH CEILING FROM PLASTIC	100 M2	0.510
45	PLASTIC	M2	51
46	WOOD STRIP 3X3	M	145
47	ROOFING FROM METAL TILE, PROFILED SHEETING FROM TRAPEZOIDAL AND SINUSOID SECTION COATED OVER THE READY LEDGER BOARD: COMPLEX ROOF	100 M2	1.340
48	PROFILED SHEETING, GREEN, FOR ROOF OF 4 THICKNESS	M2	134
49	SNOW SHIELD	M	34
50	TROUGH	M	44
51	GUTTER SYSTEM, L=3M	M	24
52	FEATHER/CLAMP/	PCS	14
53	BRACKET	PCS	44
54	DRIVING POINT	PCS	88
55	ANGLE	M	44
SECTION EQUIPMENT			
56	AIR CONDITIONER, CAPACITY 12	PCS	2
57	AIR CONDITIONER, CAPACITY 18	PCS	1
67	BLINDS	M2	10.500
68	OIL HEATER / 12 RIBS	PCS	3
69	RACK 5M	PCS	4
SECTION 9 CANOPY OVER PUMPING STATION			
	EARTHWORK		
1	MANUAL SOIL EXCAVATION IN TRENCHES FOR POLE	100 M3	0.015
2	HAND FINE EXCAVATION	100 M3	0.002
	CONCRETE WORKS		
3	RUBBY BOTTOMING	10 M3	0.015
4	INSTALLATION OF CONCRETE FOUNDATION OF GENERAL PURPOSE FOR UP TO 3 M3 COLUMN PILLAR	100 M3	0.012
5	REINFORCING ROD, Ø 20MM	KG	14.820
6	SUBBASE INSTALLATION OF CONCRETE FLOOR OF 15 CM THICKNESS	M3	3.200

7	SUBBASE INSTALLATION OF CONCRETE FLOOR OF 15 CM THICKNESS	M3	6.800
8	LATTICE WORKS /POLES. SUPPORTS. TRUSSES, ETC./	T	0.287
9	PIPE-POLE, Ø 108/4, ST3	KG	287.280
10	LATTICE WORKS, POLES. SUPPORTS. TRUSSES, ETC./ERECTION BY MANUAL HOISTS WITH THEIR INSTALLATION AND DISMANTLING IN THE COURSE OF WORK/ OR MANUALL /OF MINOR DETAILS/	T	0.674
11	ANGLE 50X50X5 ST3	KG	673.720
12	ROOFING FROM METAL TILE. PROFILED SHEETING FROM TRAPEZOIDAL AND SINUSOID SECTION. COATED OVER READY LEDGER BOARD: SIMPLE ROOF	100 M2	0.420
13	PROFILED SHEETING FOR ROOF /6X7/ OF 4 THICKNESS	M2	42
14	BEAM /WOOD STRIP/ 40X45	M3	0.200
15	GUARDRAILING FROM GRILLAGE	100 M	0.200
16	GRILLAGE FOR FENCE	M2	38.700
17	HINGE FOR DOOR	PCS	2
18	KNOB	PCS	1
19	WIRE 8MM, 60 M	KG	23.700
	SUNDRY WORK		
20	RUBBLY SUBBASE INSTALLATION	M3	3.350
21	INSTALLATION OF REINFORCEMENT FOR SEPARATE RODS	100 T	0.000
22	REINFORCING ROD, Ø 20MM	KG	14.820
23	PAINTING OF METAL AND WOODEN PRIMED SURFACE WITH ENAMEL HV-124	100 M2	1.200
24	LOCK FOR DOORS	PCS	1
SECTION 10. CONSTRUCTION OF CANOPY			
1	TRENCHING TO DISPOSAL AREA WITH BACK DIGGER WITH 0.4 BUCKET, M3, SOIL GROUP: 2	1000 M3	0.005
2	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2 #HAND FINE EXCAVATION. BOTTOM AND WALLS STRIPPING WITH DROP CUT TO MECHANICALLY EXCAVATED TRENCH AND FOUNDATION PIT	100 M3	0.010
3	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKET. SOIL GROUP 1	100 M3	0.006
4	BOTTOMING OF SANDY GRAVEL	M3	9.350
5	CONCRETE SUBBASE INSTALLATION FOR CANOPY V15	M3	6.350
6	CONCRETE SUBBASE INSTALLATION FOR CANOPY V15	M3	5.050
7	STRIP CONCRETE FOUNDATION V15 FOR POLES	100 M3	0.020
8	INSTALLATION OF REINFORCEMENT FOR SEPARATE RODS	100 T	0.000
9	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK. DIE-ROLLED, SECTION CLASS AIII, Ø 20-22 MM	T	0.015
10	INSTALLATION OF SUPPORTING POLES FOR CANOPY, PIPE, POLE, Ø 108/4	T	0.312
11	STEEL PIPES, ELECTRO-WELDED, LONGITUDINAL, Ø 108.4MM, STEEL GRADE 15.20 AND 08KP	M	31
12	LATTICE WORKS /POLES. SUPPORTS. TRUSSES, ETC./	T	2.152
13	ANGLE. SHEET. REINFORCING ROD AND BAR	KG	2152
14	INSTALLATION OF FRAME ELEMENTS FROM BARS 40X45MM	M3	0.200
15	ROOFING FROM METAL TILE. PROFILED SHEETING FROM TRAPEZOIDAL AND SINUSOID SECTION. COATED OVER READY LEDGER BOARD: COMPLEX ROOF	100 M2	1.320
16	PROFILED SHEETING, GREEN, FOR ROOF OF 4 THICKNESS	M2	132
17	PAINTING OF METAL AND WOODEN PRIMED SURFACE WITH ENAMEL HV-124	100 M2	1.200

SECTION 11. LAVATORY			
1	TRENCHING TO DISPOSAL AREA WITH BACK DIGGER WITH 0.4 BUCKET, M3, SOIL GROUP: 2	1000 M3	0.022
2	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M WIDTH, UP TO 2M DEPTH WITHOUT TIMBERING, SLOPED, SOIL GROUP 2	100 M3	0.022
3	INSTALLATION OF WALLS AND PLAIN BOTTOM OF MORE THAN 150 MM THICKNESS OF SQUARE STRUCTURES	100 M3	0.118
4	PAINT INSULATION OF HORIZONTAL CONCRETE SURFACE WITH HOT BITUMEN IN TWO LAYERS	100 M2	0.275
5	INSULATING ADHESIVE TAPE OF VERTICAL CONCRETE SURFACE WITH ROLL MATERIAL IN TWO LAYERS	100 M2	0.275
6	PLASTERING OF SURFACE WITH WHITEWASH, SIMPLE, ON STONE AND CONCRETE	100 M2	1.015
7	INSTALLATION OF REBAR CAGES WITH REINFORCED GRID A-3 200X200 AND 150X150, Ø 14MM	100 T	0.009
8	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK, DIE-ROLLED, SECTION CLASS AIII, Ø 14 MM	T	0.933
9	WIRE, Ø 4 AND 8MM	KG	10
10	INSTALLATION OF WALLS AND PLAIN BOTTOM OF MORE THAN 150 MM THICKNESS OF SQUARE STRUCTURES	100 M3	0.017
11	BLOCKWORK, MASONRY EXTERIOR SIMPLE WITH HEIGHT OF STOREY UP TO 4 M	M3	8
12	BRICK	PCS	5500
13	ROOFING FROM METAL TILE, PROFILED SHEETING FROM TRAPEZOIDAL AND SINUSOID SECTION, COATED OVER READY LEDGER BOARD: SIMPLE ROOF	100 M2	0.160
14	PROFILED SHEETING, GREEN, FOR ROOF OF 4 THICKNESS	M2	16
15	SNOW SHIELD	M	4
16	TROUGH	M	4
17	GUTTER SYSTEM	M	3
18	FEATHER/CLAMP/	PCS	4
19	BRACKET	PCS	4
20	DRIVING POINT	PCS	10
21	SNOW SHIELD	M	4
21a	ANGLE	RM	15.600
22	DISCHARGE PIPE, LIGHT TYPE FROM POLYETHYLENE, LOW PRESSURE, Ø 150/4 MM	10 M	0.800
23	INSTALLATION OF FRAME ELEMENTS FROM SHAPED TIMBER	M3	0.905
24	WALL-PLATES 10X10 CM	M3	0.140
25	LEDGER BOARD 4X15 CM	M3	0.100
26	ROOF TIMBER 4MX15 CM	M3	0.500
27	POLE 10X10 CM	M3	0.054
28	GRATING 4X4 CM	M3	0.070
29	WOOD STRIP 3X3 45M	M3	0.041
30	INSTALLATION OF MANHOLE, WEIGHT=65KG	PCS	1
31	INSTALLATION OF WOODEN-ALUMINIUM, ALUMINIUM, STEEL-PLASTIC BLOCKS IN EXTERIOR AND INTERIOR DOORWAYS: IN STONE WALLS WITH OPENING AREA OF UP TO 3 M2	100 M2	0.064
32	ALUMINIUM DOORSETS, "AKFA" TYPE WITH THE SIZE OF 0.7X1.9M, 2 PCS AND 0.9X2,1M -,2 PCS	M2	6.440

33	INSTALLATION OF WINDOW	100 M2	0.005
34	ALUMINIUM WINDOWS, "AKFA" TYPE WITH THE SIZE OF 0.5X0.5M, 2 PCS	M2	0.500
35	INSTALLATION OF STRETCH CEILING FROM PLASTIC	100 M2	0.135
36	PLASTIC	M2	13.500
37	INSTALLATION OF GLAZED TILE	100 M2	0.420
38	GLAZED TILE	M2	42
39	INSTALLATION OF LINTEL	100 M3	0.001
40	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK, DIE-ROLLED, SECTION CLASS AIII, Ø 12 MM	T	0.030
41	INSTALLATION OF SINK	10 SETS	0.200
42	SINK	PCS	2
43	INSTALLATION OF SQUATTING PAN WITH HIGH-LEVEL CISTERN	10 SETS	0.200
44	BOWL OF GENOA	PCS	2
45	FAUCET WITH PLUMBING TRAP	PCS	2
46	MIRROR 80X50 CM	PCS	2
47	POLYETHYLENE PIPE LAYING, Ø 25 MM	KM	0.024
48	POLYETHYLENE PIPE, Ø 25/6MM	M	12
49	POLYETHYLENE PIPE, Ø 25/4MM	M	12
50	SLEEVE, Ø 25MM	PCS	1
51	TEE-JOINT, Ø 25MM	PCS	2
52	ELBOW BEND, Ø 25MM	PCS	4
53	CRANE, Ø 25MM	PCS	4
54	TANK 300 L	PCS	1
SECTION 12. CONTROL WELL			
	WELL FOR MP AND PP		
1	EXCAVATION TO DISPOSAL AREA IN TRENCH OF UP TO 500 M3 WITH EXCAVATOR WITH 0.4 /0.35-0.45/ BUCKET, M3, SOIL GROUP: 2	1000 M3	0.020
2	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2 #HAND FINE EXCAVATION. BOTTOM AND WALLS STRIPPING WITH DROP CUT TO TRENCHES AND FOUNDATION PITS TO BE EXCAVATED MECHANICALLY	100 M3	0.049
3	REFILLING OF TRENCH AND BORROW PIT WITH EARTHMOVING UP TO 5 M WITH BULDOZERS OF 96 [130] KW [HP]. SOIL GROUP 1	1000 M3	0.008
4	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKET. SOIL GROUP 1	100 M3	0.026
5	BOTTOMING OF SANDY GRAVEL OF THICKNESS 10 CM	10 M3	0.040
6	INSTALLATION OF COMPONENTS FROM PREFABRICATED CONCRETE FOR WELLS WITH MORTAR CAULKING	100 M3	0.021
7	WELL KS 10-2	M3	0.240
8	WELL KS 15-2	M3	0.400
9	WELL PD 15-1	M3	0.370
10	WELL KS 20-2-1A	M3	0.500
11	WELL PD 20-1	M3	0.580
12	INSTALLATION OF COMPONENTS FROM PREFABRICATED CONCRETE FOR CEILING PANEL	100 M3	0.006
13	INTERMEDIATE CONCRETE SLAB PP 10-1-2B	M3	0.080
14	INTERMEDIATE CONCRETE SLAB PP 15-1-2B	M3	0.200
15	INTERMEDIATE CONCRETE SLAB PP 20-1-2B	M3	0.360
16	INSTALLATION OF MANHOLE	PCS	3.000
17	INSTALLATION OF GATE VALVE, PVC WITH FLANGE, Ø 50MM	PCS	3.000

18	GATE VALVE, PVC WITH FLANGE, Ø 50 MM	PCS	3.000
19	INSTALLATION OF GATE VALVE, PVC WITH FLANGE, Ø 63MM	PCS	3.000
20	GATE VALVE, PVC WITH FLANGE, Ø 63 MM	PCS	3.000
21	INSTALLATION OF GATE VALVE, PVC WITH FLANGE, Ø 75MM	PCS	5.000
22	GATE VALVE, PVC WITH FLANGE, Ø 75 MM	PCS	5.000
23	INSTALLATION OF POLYETHYLENE FITTINGS ELBOW BENDS. TEE-JOINTS. SLEEVES. ADAPTORS	10 PCS	2.400
24	TEE-JOINT 110X50X110 POLYETHYLENE VF7	PCS	3.000
25	TEE-JOINT 110X63X110 POLYETHYLENE VF8	PCS	3.000
26	TEE-JOINT 110X75X110 POLYETHYLENE VF9	PCS	4.000
27	ELBOW BEND 90 DEGREE, Ø 110 MM POLYETHYLENE	PCS	2.000
28	ADAPTOR, Ø 110X75MM, POLYETHYLENE	PCS	1.000
29	FOOTING 20X20X40 CM	PCS	15.000
30	ELBOW BEND 90 DEGREE, Ø 75 MM, POLYETHYLENE	PCS	5.000
31	ELBOW BEND 90 DEGREE, Ø 63 MM, POLYETHYLENE	PCS	3.000
32	ELBOW BEND 90 DEGREE, Ø 50 MM, POLYETHYLENE	PCS	3.000
SECTION 13. SINK			
1	EXCAVATION TO DISPOSAL AREA IN TRENCH OF UP TO 500 M3 WITH EXCAVATOR WITH 0.4 /0.35-0.45/ BUCKET, M3, SOIL GROUP: 2	1000 M3	0.054
2	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2 #HAND FINE EXCAVATION. BOTTOM AND WALLS STRIPPING WITH DROP CUT TO TRENCHES AND FOUNDATION PITS TO BE EXCAVATED MECHANICALLY	100 M3	0.065
3	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKET. SOIL GROUP 1	100 M3	0.120
4	BOTTOMING OF SANDY GRAVEL	10 M3	0.100
5	BOTTON STEINING, DRY, FROM RIPRAP, Ø 10-15 CM	100 M3	0.005
6	INSTALLATION OF MANHOLE	PCS	7
7	INSTALLATION OF COMPONENTS FROM PREFABRICATED CONCRETE FOR WELLS WITH MORTAR CAULKING	100 M3	0.034
8	WELL KS 10-2, 14 PCS	M3	3.360
9	INSTALLATION OF COMPONENTS FROM PREFABRICATED CONCRETE FOR CEILING PANEL	100 M3	0.006
10	INTERMEDIATE CONCRETE SLAB PP 10-1-2B, 7 PCS	M3	0.560
11	INSTALLATION OF GATE VALVE, PVC WITH FLANGE, Ø 50 MM	PCS	3
12	GATE VALVE, PVC WITH FLANGE, Ø 5 0MM	PCS	3
13	INSTALLATION OF GATE VALVE, PVC WITH FLANGE, Ø 63 MM	PCS	3
14	GATE VALVE, PVC WITH FLANGE, Ø 63 MM	PCS	3
15	INSTALLATION OF GATE VALVE, PVC WITH FLANGE, Ø 75 MM	PCS	4
16	GATE VALVE, PVC WITH FLANGE, Ø 7 5MM	PCS	4
17	INSTALLATION OF POLYETHYLENE FITTINGS ELBOW BENDS, TEE-JOINTS, SLEEVES, ADAPTORS	10 PCS	1
18	ELBOW BEND 90 DEGREE, Ø 75 MM, POLYETHYLENE	PCS	4.000
19	ELBOW BEND 90 DEGREE, Ø 63 MM, POLYETHYLENE	PCS	3
20	ELBOW BEND 90 DEGREE, Ø 50 MM, POLYETHYLENE	PCS	3.000
21	PAINT INSULATION OF VERTICAL CONCRETE SURFACE WITH HOT BITUMEN IN TWO LAYERS	100 M2	0.460
SECTION 14. IRRIGATION FLUMES			
1	EXCAVATION TO DISPOSAL AREA IN TRENCH OF UP TO 500 M3 WITH EXCAVATOR WITH 0.4 /0.35-0.45/ BUCKET, M3, SOIL GROUP: 2	1000 M3	0.022

2	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2 #HAND FINE EXCAVATION. BOTTOM AND WALLS STRIPPING WITH DROP CUT TO TRENCHES AND FOUNDATION PITS TO BE EXCAVATED MECHANICALLY	100 M3	0.011
3	RUBBY BOTTOMING	10 M3	0.750
4	INSTALLATION OF INTAKE AND OUTLET PORTALS	100 M3	0.010
5	INSTALLATION OF COMPONENTS FROM PREFABRICATED CONCRETE FOR FLUMES WITH MORTAR CAULKING	100 M3	0.035
6	IRRIGATION FLUMES LI-50. 4.4/3. L=5M	PCS	35.000
SECTION 15. WATER-EFFICIENT PROCESSES			
	DRIP IRRIGATION		
	INSTALLATION OF EMITTER WITH FITTINGS FOR TREES		
1	POLYETHYLENE PIPE LAYING OF DRIP IRRIGATION WITH BUILT-IN EMITTERS IN INTENSE ORCHARDS AND VINEYARDS ON SOIL, Ø 20 MM	KM	2.285
2	INSTALLATION OF POLYETHYLENE FITTINGS ELBOW BENDS. TARGETS. NOZZLES	10 PCS	3.600
3	NOZZLE, Ø 20 MM, POLYETHYLENE	PCS	36.000
4	TARGET, Ø 20 MM, POLYETHYLENE	PCS	18.000
5	ELBOW BEND, Ø 20 MM, POLYETHYLENE	PCS	18.000
	INSTALLATION OF EMITTERS WITH FITTINGS FOR VEGETABLES		
6	POLYETHYLENE PIPE LAYING, Ø 20 MM	KM	0.060
7	POLYETHYLENE PIPE LAYING OF DRIP IRRIGATION WITH BUILT-IN EMITTERS IN ROW PLANTING OF VEGETABLES ON SOI, Ø 16 MM	KM	7.589
8	INSTALLATION OF POLYETHYLENE FITTINGS ELBOW BENDS. TARGETS. NOZZLES	10 PCS	12.000
9	ELBOW BEND, Ø 20 MM, POLYETHYLENE	PCS	60.000
10	NOZZLE, Ø 16 MM, POLYETHYLENE	PCS	120.000
11	TARGET, Ø 16 MM, POLYETHYLENE	PCS	60.000
	SPRINKLING		
12	POLYETHYLENE PIPE LAYING, OVERHEAD, Ø 50 MM	KM	0.950
13	INSTALLATION OF SPRINKLERS	PCS	92.000
14	SPRINKLER 1/2	PCS	92.000
15	INSTALLATION OF POLYETHYLENE FITTINGS ELBOW BENDS. TARGETS. NOZZLES	10 PCS	1.600
16	TARGET, Ø 50 MM, POLYETHYLENE	PCS	8.000
17	NOZZLE, Ø 50 MM, POLYETHYLENE	PCS	16.000
18	ELBOW BEND, Ø 50 MM, POLYETHYLENE	PCS	8.000
19	8MM GALVANISED ROD 1.2M	PCS	92.000
20	ADAPTER+FLOW REGULATING VALVE	PCS	92.000
21	PVC PIPE 13MM. POLYETHYLENE PIPE 12 MM	PCS	92.000
22	EXTERIOR AND INTERIOR CONVECTOR. PLUG BUNG	PCS	92.000
	SUBSOIL IRRIGATION No.3. 5. 6. 8		
23	TRENCH EXCAVATION FOR SUBSOIL IRRIGATION WITH TRACTOR, SOIL GROUP:2	KM	0.414
24	HAND BACKFILLING OF TRENCH, SOIL WITH HUMUS 413/42. SOIL GROUP 1	100 M3	4.550
25	HAULAGE OF HUMUS UP TO 30 KM	T	46.200
26	HUMUS	M3	42.000
27	POLYETHYLENE PIPE LAYING OF DRIP IRRIGATION WITH BUILT-IN EMITTERS IN INTENSE ORCHARDS AND VINEYARDS ON SOIL, Ø 20 MM	KM	14.900
28	INSTALLATION OF POLYETHYLENE FITTINGS ELBOW BENDS. TARGETS. NOZZLES	10 PCS	35.800

29	NOZZLE, Ø 20 MM, POLYETHYLENE	PCS	358.000
30	TARGET, Ø 20 MM, POLYETHYLENE	PCS	209.000
31	ELBOW BEND, Ø 20 MM, POLYETHYLENE	PCS	209.000
	RIDGE-AND-FURROW IRRIGATION No.4		
32	LAYING OF IRRIGATION POLYETHYLENE PIPE, Ø 32 MM	KM	0.127
33	INSTALLATION OF POLYETHYLENE FILM T=10 MICRON, WEIGHT=34 KG	100 M2	50.000
	LISIMETER STATION No.7		
	ITEM-1		
34	TRENCHING TO DISPOSAL AREA WITH BACK DIGGER WITH 0.25 BUCKET, M3, SOIL GROUP: 2	1000 M3	0.405
35	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP , SOIL GROUP 2 #HAND FINE EXCAVATION, BOTTOM AND WALLS STRIPPING WITH DROP CUT TO MECHANICALLY EXCAVATED TRENCH AND FOUNDATION PIT	100 M3	0.450
36	REFILLING OF TRENCH AND BORROW PIT WITH EARTHMOVING UP TO 5 M WITH BULDOZERS OF 96 [130] KW [HP]. SOIL GROUP1	1000 M3	0.170
37	AT EARTHMOVING TO EVERY SUBSEQUENT 5 M ADD TO THE STANDARDS 01-01-034-1	1000 M3	0.170
38	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKET. SOIL GROUP 2	100 M3	0.200
39	BLINDING	100 M3	0.160
40	LAYING OF STEEL WATER PIPE, Ø 1220 MM	KM	0.023
41	STEEL PIPES, Ø 1220 MM, 14 CM THICKNESS	RM	23.000
42	LAYING OF STEEL WATER PIPE, Ø 102 MM	KM	0.023
43	STEEL PIPES, Ø 102MM OF 3.2 MM THICKNESS	RM	23.000
44	POLYETHYLENE PIPE LAYING, Ø 108 MM	KM	0.012
45	POLYETHYLENE PIPE, Ø 108 MM, 3.2 MM THICKNESS	RM	12.000
46	LAYING OF STEEL WATER PIPE Ø 20 MM	KM	0.012
47	STEEL PIPES, Ø 20MM OF 2.0 MM THICKNESS	RM	12.000
48	NORMAL ANTICORROSION BITUMEN-RUBBER OR BITUMEN-POLYMERIC INSULATION ON STEEL PIPELINES, Ø 1200 MM	KM	0.023
49	NORMAL ANTICORROSION BITUMEN-RUBBER OR BITUMEN-POLYMERIC INSULATION ON STEEL PIPELINES, Ø 100 MM	KM	0.023
50	NORMAL ANTICORROSION BITUMEN-RUBBER OR BITUMEN-POLYMERIC INSULATION ON STEEL PIPELINES, Ø 20 MM	KM	0.012
51	INSTALLATION OF FITTINGS STEEL WELDED, Ø 20-102 MM	T	0.049
52	STEEL ELBOW BEND 90 DEGREE, Ø 102 MM	PCS	10.000
53	STEEL ELBOW BEND 90 DEGREE, Ø 20 MM	PCS	10.000
54	STEEL PLATE 1.3X1.3M OF 2.0 MM THICKNESS, 10 PCS	KG	265.330
55	GLAZING WITH GAGE GLASS OF 6MM THICKNESS. SIZE L=1800X2000 MM. 2800X2000. 1300X2000.2300X2000. 3300X2000	100 M2	0.230
56	HERMETIC ADHESIVE FOR GLASS SEALING	PCS	6.000
57	MASONRY FROM SLAG BLOCKS, WEIGHT UP TO 0.5 T	M3	62.000
58	SLAG BLOCK 33X16X16 CM	PCS	7,000.000
59	BETTERED SURFACE PLASTERING OF WALLS WITH CEMENT-LIME OR CEMENT MORTAR ON STONE AND CONCRETE	100 M2	2.450
60	INSTALLATION OF FILL OF 10 CM THICKNESS	100 M3	0.095
61	RUBBY BOTTOMING OF 10 CM THICKNESS	10 M3	0.950
62	BOTTOMING OF SANDY GRAVEL OF 10 CM THICKNESS	10 M3	1.400
63	PIEZOMETER, Ø 20 MM	RM	30.000
64	INSTALLATION OF STEEL PIPE FOR GRATING	KM	0.013

65	STEEL PIPES, Ø 32 MM	RM	13.000
66	REINFORCING ROD, Ø 14MM, FOR GRATING	KG	6.300
67	PAINT INSULATION OF HORIZONTAL CONCRETE SURFACE WITH HOT BITUMEN IN TWO LAYERS	100 M2	1.600
68	INSULATING ADHESIVE TAPE OF HORIZONTAL CONCRETE SURFACE WITH ROLL MATERIAL IN ONE LAYER FOR 160 M2/IN QUOTATION ALL RESOURCES ARE FOR TWO LAYERS/	100 M2	0.800
	ITEM-2		
69	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2 #HAND FINE EXCAVATION. BOTTOM AND WALLS STRIPPING WITH DROP CUT TO TRENCHES AND FOUNDATION PITS TO BE EXCAVATED MECHANICALLY	100 M3	0.008
70	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKET, SOIL GROUP 2	100 M3	0.008
71	INSTALLATION OF FRAME ELEMENTS FROM BARS	M3	1.342
72	BEAM 10X10 CM 1.15M3 - 115RM AND WOOD STRIP 4X3 CM, 0.192M3 - 160RM	M3	1.342
73	ROOFING FROM METAL TILE. PROFILED SHEETING FROM TRAPEZOIDAL AND SINUSOID SECTION. COATED OVER READY LEDGER BOARD: COMPLEX ROOF	100 M2	0.950
74	PROFILED SHEETING, GREEN, FOR ROOF OF 3 MM THICKNESS	M2	95.000
	LAYING OF MAIN PIPELINES AND PLOT PIPELINES		
75	TRENCHING TO DISPOSAL AREA WITH BACK DIGGER WITH 0.25 BUCKET, M3, SOIL GROUP: 2	1000 M3	0.238
76	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2 #HAND FINE EXCAVATION. BOTTOM AND WALLS STRIPPING WITH DROP CUT TO TRENCHES AND FOUNDATION PITS TO BE EXCAVATED MECHANICALLY	100 M3	0.264
77	POLYETHYLENE PIPE LAYING, Ø 50 MM	KM	0.152
78	POLYETHYLENE PIPE LAYING, Ø 65 MM	KM	0.187
79	POLYETHYLENE PIPE LAYING, Ø 75 MM	KM	0.331
80	POLYETHYLENE PIPE LAYING, Ø 100 MM	KM	0.225
81	REFILLING OF TRENCH AND BORROW PIT WITH EARTHMOVING UP TO 5 M WITH BULDOZERS OF 96 [130] KW [HP]. 1 SOIL GROUP	1000 M3	0.188
82	AT EARTHMOVING TO EVERY SUBSEQUENT 5 M ADD TO THE STANDARDS 01-01-034-1	1000 M3	0.188
83	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKETS. SOIL GROUP 1	100 M3	0.523
	IMPORTED EQUIPMENT		
84	SENSOR/MOISTURE, WIND, ETC./	PCS	55
85	WEATHER STATION	PCS	1
SECTION 16. AUTOMATION AND ENERGY SUPPLY			
SECTION 16.1 AUTOMATION			
	PROCUREMENT AND INSTALLATION		
1	PANELS INSTALLED IN POCKET WITH THRUST DOWELS. WEIGHT UP TO 15 KG #/LIGHTING PANELS/	PCS	2.000
2	CONTROL BOX YA5111-3574 UHL4	PCS	2.000
3	PANEL #(LABORATORY PANELS)	PCS	1.000
4	CENTRAL SIGNALING BOX - LEVEL CONTROL ADJUSTMENT	PCS	1.000
5	TRANSDUCER INSTALLED ON RESERVOIR PRESSURE-OPERATED, MPA UP TO 6.3#(PRIMARY TRANSDUCERS OF LEVEL GAGE)	PCS	2.000
6	LEVEL RELAY SENSOR ROS-301	PCS	2.000
	INTEGRATED CABLE SYSTEM		

7	WIRE PULLING IN PIPES AND METAL JACKETS. SINGLE-CORE OR MULTIPLE-CORE FIRST WIRE IN COMMON SCREENING BRAID. TOTAL CROSS SECTION, MM2, UP TO 2.5	100 M	0.500
8	CABLE, CORE SECTION 4.2.5 MM2 AKVVG	1000 M	0.020
9	CABLE, AKVVGE 4X2.5 MM2	1000 M	0.030
10	POLYETHYLENE PIPES, Ø 25 MM	M	50.000
	EARTHWORK		
11	TRENCHING TO DISPOSAL AREA WITH BACK DIGGER WITH 0.25 BUCKET, M3, SOIL GROUP: 2	1000 M3	0.012
12	REFILLING OF TRENCH AND BORROW PIT WITH EARTHMOVING UP TO 5 M WITH BULDOZERS OF 96 [130] KW [HP]. 1 SOIL GROUP	1000 M3	0.012
13	AT EARTHMOVING TO EVERY SUBSEQUENT 5 M ADD TO THE STANDARDS 01-01-034-1	1000 M3	0.012
SECTION 16.2 EXTERNAL POWER SUPPLY OHL-0.4 KV			
	DISMANTLING AND INSTALLATION OF EXISTING OHL-10 KV (CONDUCTORS AND LINE ACCESSORIES)		
1	DISMANTLING OF UNINSULATED ALUMINIUM CONDUCTOR STEEL SUPPORTED, CORE SECTION 35 MM2, IN UNPOPULATED AREA. INSULATORS AND LINE ACCESSORIES, FULL WEIGHT - 1200 KG, DISMANTLING	KM	1.290
2	DISMANTLING OF ONE-LINK DISCONNECTOR VOLTAGE UP TO 10 KV. CURRENT A, UP TO 5000 #/SINGLE-POLE DISCONNECTOR/ DISMANTLING	PCS	1.000
3	INSTALLATION OF ONE-LINK DISCONNECTOR VOLTAGE UP TO 10 KV. CURRENT A, UP TO 5000 #/SINGLE-POLE DISCONNECTOR/	PCS	1.000
4	INSTALLATION OF UNINSULATED ALUMINIUM CONDUCTOR STEEL SUPPORTED, CORE SECTION 35 MM2 IN UNPOPULATED AREA. INSULATORS AND LINE ACCESSORIES, FULL WEIGHT - 1200 KG	KM	1.290
5	BOX FOR 3-4-CORE CABLE VOLTAGE UP TO 1 KV, CORE SECTION, MM2, UP TO 35 #/ POT-HEAD / TERMINAL / METAL BOXES	PCS	2.000
6	TRUE UNION RM1	PCS	2.000
	PROCUREMENT AND INSTALLATION OF CONDUCTORS		
7	INSTALLATION OF UNINSULATED ALUMINIUM CONDUCTOR STEEL SUPPORTED, CORE SECTION 25 MM2, IN UNPOPULATED AREA	KM	1.400
8	STEEL, GALVANISED CONDUCTOR, 1 GROUP, FOR OVERHEAD LINES AND ALUMINIUM WIRES MODEL AS, CORE SECTION 25/4.2 MM2, ACCOUNTED FOR 3 LINES+10%	T	0.660
9	CABLE, WEIGHT, 1 M, UP TO 30 KG #/UP TO 35 KV IN READY TRENCH/	100 M	0.500
10	POWER CABLES FOR VOLTAGE UP TO 660V WITH ALUMINUM CORE. VIFA MODEL (VINYL-INSULATED FLEXIBLE ALUMINUM POWER CABLE IN VINYL SHEATHING), NUMBER OF CORES AND CORE SECTION, MM2, 4X25	1000 M	0.050
	PROCUREMENT AND INSTALLATION OF INSULATORS AND LINE ACCESSORIES		
11	PIN-TYPE LINE INSULATOR=SHF-20-V	100 PCS	0.420
12	CAP FROM POLYAMIDE-6 =101.086 .K-6	100 PCS	0.300
13	CLAMP PS-2	PCS	16.000
14	BOLT B5	PCS	4.000
15	CLAMP PA-2	PCS	48.000
16	WIRE FASTENING	PCS	42.000
17	SHACKLE INSULATOR	PCS	24.000
18	DROP LINK PRT -2	PCS	4.000
19	CROSSARM TM3	PCS	6.000
20	CROSSARM TM6	PCS	4.000

21	CRAMP SK-7	PCS	2.000
22	ARM LINK SRS -7-17	PCS	2.000
23	CLAMPS H1, H7, H9 AND H23	PCS	20.000
24	COVER PLATE OG 2 AND OG 5	PCS	10.000
25	BRACKET U1	PCS	4.000
26	BRACKET RA1	PCS	6.000
27	BRACKET KM1	PCS	2.000
28	ANGLE 80X80X3 L=2300MM	KG	16.928
29	APPARATUS CLAMP A2A	PCS	2.000
30	BANDAGE G1	PCS	10.000
31	CONDUCTOR 3P1	1000 M	0.010
32	JAMMER KM3	PCS	8.000
	HAULAGE		
33	HAULAGE FROM ON-SITE STORAGE UP TO PICKETS OF OHL IN OFF-ROAD CONDITIONS. HAULAGE OF INSULATORS AND LINE ACCESSORIES TO 1 KM	T	0.450
34	TO EVERY SUBSEQUENT KM ADD 3303-9-2 TO THE STANDARDS. 3309-9-3 TWICE	T	0.450
35	HAULAGE WITH VEHICLE TO 30 KM. CARGO CLASS 1	T	0.450
	HANDLING OPERATIONS		
36	MANUAL HANDLING OF LINE ACCESSORIES	T	0.450
SECTION 16.3 ELECTRICAL EQUIPMENT			
	PROCUREMENT AND INSTALLATION OF ELECTRICAL EQUIPMENT		
1	POWER DISTRIBUTING PANEL ON METALWORK WITH INSTALLATION OF CIRCUIT-BREAKER: 5X16A, 1X25A, 2X50A, AT INPUT -100A	PCS	1.000
2	DISTRIBUTING PANEL PR8503-1001-21UHL1	PCS	1.000
3	PANELS INSTALLED IN POCKET WITH THRUST DOWELS. WEIGHT UP TO 15 KG #/LIGHTING PANELS/	PCS	2.000
4	LIGHT BOARD, OSHV-6	PCS	1.000
5	LIGHT BOARD, YAOU-8501	PCS	1.000
6	METER OF ACTIVE REACTIVE ENERGY OF DIRECT CONNECTION 3X230/400V, 10/100A/	PCS	1.000
7	ENERGOMETER SE303 S31	PCS	1.000
8	SINGLE-DOUBLE-THREE-POLE CIRCUIT-BREAKER. INSTALLED ON WALL OR COLUMN PILLAR. CURRENT A, UP TO 250 #/SETTING SWITCH, AUTOMATIC OR NONAUTOMATIC/	PCS	1.000
9	AUTOMATIC CIRCUIT BREAKER 250A, VA 5135	PCS	1.000
10	LUMINARY WITH LED LAMPS. 220V, 28W AND 220V, 100W	PCS	48.000
11	LUMINARY LED GW 220B. 28VT	PCS	4.000
12	LUMINARY LED GA 220B. 100VT	PCS	44.000
13	LUMINARY FOR OUTDOOR INSTALLATION. 220V	PCS	1.000
14	LUMINARY NSP02	PCS	1.000
15	LUMINARY FOR FLUORESCENT LAMPS, OVERHEAD. 220V, 4X18W	PCS	8.000
16	LUMINARY ARS-R	PCS	8.000
17	DUSTPROOF-AND-MOISTUREPROOF LUMINARY, SUSPENDEd. 220V	100 PCS	0.050
18	LUMINARY PUN-60	PCS	5.000
19	FLUORESCENT LAMP. 220V, 20W, LB-20	PCS	32.000
20	ENERGY-SAVING LAMP. 220V, 32W, AKFA-32	PCS	6.000
21	SWITCHES. INTERCHANGING SWITCHES AND WALL-SOCKETS. SWITCH, SEMIHERMETIC AND HERMETIC	100 PCS	0.060
22	HERMETIC SWITCH, 220V, 6A, A1 6-007	PCS	3.000
23	SWITCH OF NORMAL DESIGN. 220V, 6A, A1 6-007	PCS	3.000

24	SWITCH SOCKET OF NORMAL DESIGN FOR FLUSH WIRING WITH EARTHING BOSS 220V, 10V	100 PCS	0.120
25	SWITCH SOCKET. 220V, 10V	PCS	12.000
26	BRACKET FOR SUSPENSION OF LUMINARIES S-233	PCS	9.000
27	BOX FOR FLUSH WIRING U-197	PCS	16.000
28	BOX FOR PIPE MOUNTING U-196	PCS	10.000
29	OVERHEAD SWITCHBOARD ШМ-1	PCS	44.000
30	STARTER FOR FLUORESCENT LAMPS 80S-220	PCS	32.000
31	INSTALLATION OF SECURITY AND FIRE ALARM SYSTEM	SET	1.000
32	SECURITY AND FIRE ALARM SYSTEM PPSU-5	PCS	1.000
33	COMBINED SENSOR OF SECURITY AND FIRE ALARM SYSTEM, POS	PCS	4.000
	PROCUREMENT AND INSTALLATION OF CABLES AND WIRES. LAYING OF STEEL PIPE		
34	CABLE, 1 M, WEIGHT UP TO 30 KG #/UP TO 35 KV IN READY TRENCH/	100 M	12.400
35	POWER CABLES FOR VOLTAGE UP TO 660V WITH ALUMINUM CORE. VIFA MODEL (VINYL-INSULATED FLEXIBLE ALUMINUM POWER CABLE IN VINYL SHEATHING), NUMBER OF CORES AND CORE SECTION, MM2:4X35	1000 M	1.070
36	POWER CABLES FOR VOLTAGE UP TO 660V WITH ALUMINUM CORE. VIFA MODEL (VINYL-INSULATED FLEXIBLE ALUMINUM POWER CABLE IN VINYL SHEATHING), NUMBER OF CORES AND CORE SECTION, MM2:4X16	1000 M	0.055
37	POWER CABLES FOR VOLTAGE UP TO 660V WITH ALUMINUM CORE. VIFA MODEL (VINYL-INSULATED FLEXIBLE ALUMINUM POWER CABLE IN VINYL SHEATHING), NUMBER OF CORES AND CORE SECTION, MM2:4X4	1000 M	0.025
38	POWER CABLES WITH ALUMINUM CORE. VIFA MODEL (VINYL-INSULATED FLEXIBLE ALUMINUM POWER CABLE IN VINYL SHEATHING), NUMBER OF CORES AND CORE SECTION, MM2:2X2.5	1000 M	0.090
39	WIRE IN PROTECTIVE ENCLOSURE OR CABLE TWO-THREE CORE, UNDER PLASTER ON WALL OR IN FURROWS	100 M	7.350
40	SUPPLY CONDUCTORS FOR ELECTRIC PLANTS WITH PVC INSULATION FOR VOLTAGE UP TO 450V WITH ALUMINIUM CORE, MODEL APV, CORE SECTION 2.5 MM2	1000 M	0.650
41	WIRE, MODEL APPVS-UP TO 380V, CORE SECTION 2X2.5MM2	1000 M	0.085
42	POLYETHYLENE PIPES FOR PROTECTION OF ELECTRIC LIGHTING CABLE UNDER FLOOR POURING, Ø UP TO 40 MM	100 M	0.610
43	POLYETHYLENE PIPES, Ø 40 MM	M	61.000
44	POLYETHYLENE PIPES FOR PROTECTION OF ELECTRIC LIGHTING CABLE, Ø UP TO 25 MM	100 M	0.700
45	POLYETHYLENE PIPES, Ø 25 MM	M	70.000
46	POLYETHYLENE PIPES FOR PROTECTION OF ELECTRIC LIGHTING CABLE, Ø UP TO 50 MM	100 M	10.700
47	POLYETHYLENE PIPES, Ø 50 MM	M	1,070.000
48	INSTALLATION OF ASBESTOS-CEMENT PIPE, Ø 100 MM	100 M	0.200
49	ASBESTOS-CEMENT PIPE, Ø 100 MM	RM	20.000
50	VARIOUS METAL	T	0.040
51	METAL CABINET WITH THE SIZE OF 800X500X400MM, PUEN-12	PCS	1.000
	MATERIALS		
52	ONE CABLE BRICK COVERAGE #/ COVERAGE OF CABLE LAID IN TRENCH/	100 M	0.200
53	BRICK	PCS	240.000
54	NATURAL SAND	M3	2.400
55	CONCRETE	M3	4.220

	EARTHWORK		
56	MANUAL SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2	100 M3	2.240
57	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKET, SOIL GROUP 2	100 M3	2.240
SECTION 16.4 PROCUREMENT AND INSTALLATION OF ASCAPC			
1	METERS. INSTALLED IN READY BED THREE PHASE #(METERS)	PCS	1.000
2	ELECTRONIC METER SE303 S31	PCS	1.000
3	CONDUCTOR, CORE SECTION, MM2, UP TO 6 #(IN DUCTING)	100 M	0.100
4	COPPER CONDUCTOR PV, 1X2.5 MM2	M	10.000
5	CABLE, 2-4-CORE, CORE SECTION UP TO 16 MM2	100 M	0.030
6	POWER CABLES FOR VOLTAGE UP TO 660V WITH ALUMINUM CORE. VIFA MODEL (VINYL-INSULATED FLEXIBLE ALUMINUM POWER CABLE IN VINYL SHEATHING), NUMBER OF CORES AND CORE SECTION, MM2:4X4	1000 M	0.003
7	COMPUTER CABLE KKPV 2X2X0.52	KM	0.001
8	TEST BLOCK	PCS	1.000
9	NONSTANDARD CABINET 600X600X300 WITH LOCK	PCS	1.000
10	DATA MODEM GSM NOVACOM RUS-VC55IT	PCS	1.000
11	METALWARE	KG	0.500
12	POWER SUPPLY ASSEMBLY BP-12V	PCS	1.000
13	SWITCH SOCKET	PCS	1.000
14	SIM CARD	PCS	1.000
15	SWITCH VA 47-29	PCS	1.000

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:

Delivery Term [INCOTERMS 2010] <i>(Pls. link this to price schedule)</i>	N/A
Exact Address of Delivery/Installation Location	Urtachichick district of Tashkent region
Mode of Transport Preferred	Land
UNDP Preferred Freight Forwarder, if any ²	N/A
Distribution of shipping documents <i>(if using freight forwarder)</i>	N/A Click here to enter text.
Customs, if required, clearing shall be done by:	N/A
Ex-factory / Pre-shipment inspection	N/A
Inspection upon delivery	Yes, all works, construction materials, equipment will be inspected upon installation
Installation Requirements	N/A
Testing Requirements	In accordance with the planning rules and regulations and installation of electrical equipment (IEE) (IEE attached)
Scope of Training on Operation and Maintenance	N/A
Commissioning	As per established act of commissioning (Act of commissioning attached)
Warranty Period	<ul style="list-style-type: none"> - The minimum term of warranty for all construction-installation and materials 1 (one) year after commissioning. - Guarantee for the equipment must be for 24 twenty-four months from the date of signing Acceptance Certificate by UNDP. - The bidder must provide performance security in the amount of 10% from the total contract price from the recognized bank at contract signature stage to cover defects and maintenance for 12 months warranty period. Duration of such performance security should be valid beyond the date of completion of works for 12 months warranty period. <p>Performance security should be issued in UNDP form provided in Form G: Form of Performance Security</p>
Local Service Support	The minimum term of quality assurance for construction – installation works and materials 1 (one) year after commissioning

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.

Technical Support Requirements	Technical support for construction works should be provided during warranty period (12 months) and for equipment 24 months.
After-sale services Requirements	<input checked="" type="checkbox"/> Warranty on construction and installation works for minimum period of 12 months <input checked="" type="checkbox"/> Technical Support: Technical support for construction works should be provided during warranty period (12 months) and for equipment 24 months. <input checked="" type="checkbox"/> Provision of Service Unit when pulled out for maintenance /repair <input checked="" type="checkbox"/> Others: 24 months guarantee for equipment from the date of signing Acceptance Certificates by UNDP.
Payment Terms	<p>United States Dollars (USD) for foreign suppliers:</p> <ol style="list-style-type: none"> 1. First payment in the amount of 10% from total contract price upon completion of at least of 15% of the total scope of work 2. Interim payment in the amount of 30 % from total contract price upon completion of 50 % of the total scope of work 3. Interim payment in the amount of 35% upon fulfilment of 80% of works 4. Final payment in the amount of 25% upon completion of 100% of works, signature of acceptance act by both parties, submission of payment invoice by the Contractor and acceptance by UNDP. <p>Uzbekistan soum (UZS) for local Uzbekistan suppliers:</p> <ol style="list-style-type: none"> 1. Advance payment in the amount of 15% from total contract price upon signature of contract by both parties 2. Interim payment in the amount of 25 % from total contract price upon completion of 50 % of the total scope of work 3. Interim payment in the amount of 35% upon fulfilment of 80% of works 4. Final payment in the amount of 25% upon completion of 100% of works, signature of acceptance act by both parties, submission of payment invoice by the Contractor and acceptance by UNDP.
Conditions for Release of Payment	<input type="checkbox"/> Pre-shipment inspection <input type="checkbox"/> Inspection upon arrival at destination <input checked="" type="checkbox"/> Installation <input checked="" type="checkbox"/> Testing <input type="checkbox"/> Training on Operation and Maintenance <input checked="" type="checkbox"/> Others: signing of the contract by both parties Written Acceptance of works based on full compliance with Bill of Quantities and following the payment schedule <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 OR Russian
---	--------------------------

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: Performance Security	<input type="checkbox"/>
▪ [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:	ITB/007/18		

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) <i>(If yes, provide a Copy of the valid Certificate):</i>	[Complete]
Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? <i>(If yes, provide a Copy of the valid Certificate):</i>	[Complete]
Does your Company have a written Statement of its Environmental Policy? <i>(If yes, provide a Copy)</i>	[Complete]
Does your organization demonstrate 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 contact for requests for clarifications during Bid evaluation	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]

Please attach the following documents:

- Company Profile, which should not exceed fifteen (15) pages, including printed brochures and product catalogues relevant to the goods and/or services being procured
- Certificate of Registration of the business, including Articles of Incorporation, or equivalent document
- Tax Registration/Payment Certificate issued by the Internal Revenue Authority evidencing that the Bidder is updated with its tax payment obligations, or Certificate of Tax exemption, if any such privilege is enjoyed by the Bidder
- Local Government permit to locate and operate in the country of registration
- Quality Certificate (e.g., ISO, etc.) and/or other similar certificates, accreditations, awards and citations received by the Bidder, if any
- List and value of projects performed for the last 3 years of similar nature and complexity, including client's contact details
- CV of Project manager/Engineer assigned for supervision of all works assumed by this contract
- Environmental Compliance Certificates, Accreditations, Markings/Labels, and other evidences of the Bidder's practices which contributes to the ecological sustainability and reduction of adverse environmental impact (e.g., use of non-toxic substances, recycled raw materials, energy-efficient equipment, reduced carbon emission, etc.), either in its business practices or in the goods it manufactures
- A certified copy of the technical passports and other documents confirming the Applicant's ownership of the construction equipment according to the list given in the section "Evaluation criteria" below or certified copies of lease agreements for the lease of this equipment and equipment
- Warranty: Confirmation on compliance with warranty requirements (refer to Section Qualification, Schedule of Requirements) and provision of warranty procedures for carrying out replacements/repairs in the country of use.
- Timetable to Project Schedule.

Form C: Joint Venture/Consortium/Association Information Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	ITB/007/18		

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 (address, telephone numbers, fax numbers, e-mail address)	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:	ITB/007/18		

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:	ITB/007/18		

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

- 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

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.

Goods and services to be Supplied and Technical Specifications	Your response				
	Compliance with technical specifications		Delivery Date <i>(confirm that you comply or indicate your delivery date)</i>	Quality Certificate/Export Licenses, etc. <i>(indicate all that apply and attach)</i>	Comments
	Yes, we comply	No, we cannot comply <i>(indicate discrepancies)</i>			

--	--	--	--	--	--

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>	
e.g. Delivery Term			
Warranty			
Local Service Support			

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:	ITB/007/18		

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]

A. Price Schedule

BILL OF QUANTITIES					
#	DESCRIPTION OF WORKS AND RESOURCES	UNIT	QUANTITY	UNIT PRICE (INDICATE CURRENCY)	TOTAL PRICE (INDICATE CURRENCY)
SECTION 1. PERIMETER FENCING					
1	GUARDRAILING FROM STEEL SECTION INSTALLED HORIZONTALLY, HEIGHT UP TO 2M	100 M	7.100		
2	PROFILE 80X80X3. L=2100MM	PCS	280.000		
3	3D FENCE, Ø 4 2050X2500MM	M2	1,453.000		
4	CRAMP 60X30X2.5MM	PCS	1,120.000		
5	DRYWALL SCREW, Ø 5, 5X38 ISO 15480	PCS	1,120.000		
6	FLANGE/PRESSING/	PCS	280.000		
7	TARGET/PLASTIC/	PCS	280.000		
8	BOTTOMING OF SANDY GRAVEL	10 M3	0.560		
9	STRIP CONCRETE FOUNDATION	100 M3	0.252		
10	INSTALLATION OF REINFORCEMENT FOR SEPARATE RODS	100 T	0.006		
11	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK. DIE-ROLLED SECTION, CLASS AIII, Ø 12 MM	T	0.597		
	Total for Section 1				
SECTION 2. DOOR AND WICKET					
1	MANUAL TRENCH EXCAVATION	100 M3	0.020		
2	GRAVEL BOTTOMING OF 10 CM THICKNESS	10 M3	0.020		
3	STRIP CONCRETE FOUNDATION	100 M3	0.018		
4	INSTALLATION OF METAL DOORS WITH EXTENDABLE OR SWING LEAF AND WICKETS WITH SURFACE MOUNTED COMPONENTS	100 M2	0.100		
5	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK. DIE-ROLLED SECTION, CLASS AIII, Ø 12 MM	T	0.007		

6	POLE FROM PROFILE 80X80X3	RM	24.096		
7	PROFILE 40X20X3	RM	60.240		
8	PROFILE 20X20X2	RM	130.520		
9	HINGE FOR DOOR AND FENCE	PCS	16.000		
10	LOCK/ SET FOR ALL DOORS	PCS	5.000		
11	PAINTING OF METAL PRIMED SURFACE WITH ENAMEL HV-124, TWICE	100 M2	0.254		
	Total for Section 2				
SECTION 3. FENCE OF TRANSFORMER SUBSTATION					
1	MANUAL SOIL EXCAVATION IN TRENCHES	100 M3	0.013		
2	BOTTOMING OF SANDY GRAVEL	10 M3	0.013		
3	STRIP CONCRETE FOUNDATION	100 M3	0.005		
4	INSTALLATION OF SAFETY FENCING FOR EQUIPMENT	T	0.337		
5	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK. DIE-ROLLED, SECTION CLASS AIII, Ø 12 MM	T	0.004		
6	POLE FROM PROFILE 80X80X3	RM	15.060		
7	PROFILE 40X20X3	RM	36.144		
8	PROFILE 20X20X2	RM	114.456		
9	HINGE FOR DOOR AND FENCE	PCS	2.000		
10	BAR 40X4	RM	23.000		
11	PAINTING OF METAL PRIMED SURFACE WITH ENAMEL HV-124, TWICE	100 M2	0.168		
12	LOCK/ SET FOR ALL DOORS	PCS	1.000		
	Total for Section 3				
SECTION 4. LANDSCAPING					
1	SUBBASE AND LEVELING BLANKET INSTALLATION OF BED FROM CRUSHED STONE, 15 CM THICKNESS, 4.5M WIDTH	100 M3	14.84		
2	CRUSHED STONE OF FRACTION 5-10/15/MM	M3	1484		
3	LAYING OF METAL GAZE IN CEMENT CONCRETE PAVEMENT	1000 M2	5.376		
4	REINFORCEMENT GRILLAGE 2.5X1M, Ø 4MM, 150MMX150MM	M2	5376		
5	CONCRETE BANDAGE INSTALLATION OF 10 MM THICKNESS. 3.5M WIDTH	100 M2	1100		
6	INSTALLATION OF SUBBASE AND LEVELING BLANKET FOR BED FROM SAND AND GRAVEL MIX FOR DOOR OF 15 CM THICKNESS, 3.5M WIDTH	100 M3	1.76		
7	NATURAL SAND AND GRAVEL MIX	M3	176		
8	LEVELLING WITH BULDOZERS OF 79 [108] KW [HP]	1000 M2	1.76		
	Total for Section 4				
SECTION 5. CONSTRUCTION OF SEDIMENT BASIN					
1	EXCAVATION TO DISPOSAL AREA IN TRENCH OF UP TO 500 M3 WITH EXCAVATOR WITH 0.4 /0.35-0.45/ BUCKET, M3, SOIL GROUP: 2	1000 M3	0.230		

2	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2 #HAND FINE EXCAVATION. BOTTOM AND WALLS STRIPPING WITH DROP CUT TO TRENCHES AND FOUNDATION PITS TO BE EXCAVATED MECHANICALLY	100 M3	0.230		
3	RUBBY BOTTOMING	10 M3	1.150		
4	INSTALLATION OF REBAR CAGES WITH REINFORCED, GRID A-3, Ø 12MM,, Ø 20MM	100 T	0.020		
5	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK. DIE-ROLLED SECTION, CLASS AIII, Ø 12 MM	T	1.987		
6	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK. DIE-ROLLED SECTION, CLASS AIII, Ø 20-22 MM	T	0.012		
7	BLINDING	100 M3	0.050		
8	INSTALLATION OF CONCRETE WALL OF CHAMBER V15	100 M3	0.191		
	INSTALLATION OF CONCRETE WALL OF CHAMBER V15	100 M3	0.260		
9	INSTALLATION OF CONCRETE BOTTOM V15	100 M3	0.100		
10	WATERPROOFING OF HORIZONTAL SURFACE. FLUID GLASS CEMENT	100 M2	1.056		
11	INSTALLATION OF CEMENT SCREED OF 20 MM THICKNESS	100 M2	0.800		
12	INSTALLATION OF WATERTIGHT FACE FROM POLYETHYLENE FILM	100 M2	1.000		
13	INSULATING ADHESIVE TAPE OF VERTICAL CONCRETE SURFACE WITH ROLL MATERIAL	100 M2	1.024		
14	ROOFING FELT WITH GRIT COVERING OF DAMP-PROOF, GRADE TG-350	M2	102.400		
15	PAINT INSULATION OF HORIZONTAL CONCRETE SURFACE WITH HOT BITUMEN IN TWO LAYERS	100 M2	1.126		
	Total for Section 5				
SECTION 6. STRUCTURES					
1	EXCAVATION TO DISPOSAL AREA IN TRENCH OF UP TO 500 M3 WITH EXCAVATOR WITH 0.4 /0.35-0.45/ BUCKET, M3, SOIL GROUP: 2	1000 M3	0.041		
2	HAND QUALITY BACKFILLING	1000 M3	0.004		
3	HAND QUALITY BACKFILLING WITH COMPACTION	100 M3	0.004		
4	RUBBY BOTTOMING	10 M3	0.080		
5	INSTALLATION OF SLABBY BED	100 M3	0.013		
6	INSTALLATION OF ABUTMENTS, PIERS AND OTHER WALLS	100 M3	0.047		
7	INSULATING ADHESIVE TAPE OF VERTICAL CONCRETE SURFACE WITH ROLL MATERIAL IN	100 M2	0.120		

	TWO LAYERS				
8	PAINT INSULATION OF HORIZONTAL CONCRETE SURFACE WITH HOT BITUMEN IN TWO LAYERS	100 M2	0.140		
9	LAYING OF POLYETHYLENE PIPE Ø 315 MM	KM	0.018		
	METALWORK				
10	PLAIN GATE LARGE, SLIDING AND WHEELED. WEIGHT UP TO 1 T WITH FIXED FRAME ST3	T	0.298		
11	SCREW-TYPE HAND GEAR HOIST. WEIGHT UP TO 0.2 T	SET	3.000		
12	COST OF PLAIN GATE WITH FRAME GS150X60 ST.3	PCS	2.000		
13	COST OF PLAIN GATE WITH FRAME GS150X100 ST.3	PCS	1.000		
14	HAND HOIST MODEL 0.5V FOR GATES PS150X60 ST.3	PCS	2.000		
15	HAND HOIST MODEL 1V FOR GATES PS150X100 ST.3	PCS	1.000		
	Total for Section 6				
SECTION 7. PUMPING STATION					
1	INSTALLATION OF CENTRIFUGAL, CONSOLE PUMPS COMPLETE WITH ELECTRIC MOTOR. WEIGHT UP TO 0.3 T	PUMP	2.000		
2	PUMP A160. K80-50-200A, N=2900 RPM N=15 KW U=380 KW	PCS	2.000		
3	TRUE UNION REINFORCEMENT HAND-DRIVEN OR WITHOUT DRIVE FOR NOMINAL PRESSURE UP TO 10 MPA. NOMINAL DIAMETER 15 MM	PCS	7.000		
4	COUPLED VALVE, Ø 15MM; SWITCHGEAR 1.0 MPA; 15CH8P2	PCS	7.000		
5	FLANGE WELDING TO STEEL PIPELINES Ø 80 MM	FLANGE	4.000		
6	FLANGE DN 080 PN 16, GOST 12815-80	PCS	4.000		
7	FLANGE WELDING TO STEEL PIPELINES, Ø 100 MM	FLANGE	20.000		
8	FLANGE DN 100 PN 16, GOST 12815-80	PCS	18.000		
9	FLANGE 1-100-10, GOST 12815-80 FOR POLYETHYLENE COUPLING	PCS	2.000		
10	INSTALLATION OF GATE VALVE DU 80 PN 16	PCS	2.000		
11	GATE VALVE 32CH1R, DU 80 PN 16	PCS	2.000		
12	INSTALLATION OF GATE VALVE DU 100 PN 16	PCS	9.000		
13	GATE VALVE 32CH1R, DU 100 PN 16	PCS	9.000		
14	INSTALLATION OF RETURN VALVES, Ø 80 MM	GATE VALVE	1.000		
15	INLET RETURN VALVE 19CH42R, DU 80, SWITCHGEAR 0.25 MPA	PCS	1.000		
16	INSTALLATION OF RETURN VALVES, Ø 100 MM	GATE VALVE	2.000		
17	INLET RETURN VALVE 19CH21R, DU 100, SWITCHGEAR 1.0 MPA	PCS	2.000		
18	INSTALLATION OF METERS [WATER-METERS] Ø	METER	1.000		

	UP TO 100 MM				
19	FLOWMETER DU 100, SWITCHGEAR 1.0 MPA DOROT DIM-AF-4	PCS	1.000		
20	INSTALLATION OF T-VALVE PRESSURE GAUGE	SET	16.000		
21	PRESSURE GAUGE SHOWING MEASUREMENT LIMITS, MPT-100	PCS	5.000		
22	VACUUM GAUGE, GOST 27758-88 DV-05	PCS	2.000		
23	THREE-WAY VALVE 11B18BK DU 15, SWITCHGEAR 1.0 MPA FOR PRESSURE GAUGE	PCS	7.000		
24	BALL VALVE DU 25 ECONOM 4502	PCS	2.000		
25	INSTALLATION OF EJECTOR FOR MANURE, Ø 100 MM	GATE VALVE	1.000		
26	EJECTOR FOR MANURE DU 100, SWITCHGEAR 1.0 MPA, VENTURI-1	PCS	1.000		
27	SINGLE CHAMBER FILTER, CLARIFYING, VERTICAL. HEIGHT OF TILE LINE 1 M, Ø, 1000 MM	T	0.004		
28	3/75MM/ T TYPE DISC FILTER Q=50M3/NAS AQ136T	PCS	2.000		
29	INSTALLATION OF POLYETHYLENE FITTINGS. ELBOW BENDS. TURNS. SLEEVES. ADAPTORS	10 PCS	1.000		
30	ELBOW BEND, GOST 17375-83 90 DEGREE, Ø 108X4	PCS	8.000		
31	ELBOW BEND, GOST 17375-83 90 DEGREE, Ø 89X3.5	PCS	3.000		
32	TAPING PIN M16X180, 20 PCS, GOST 22042-76	KG	5.260		
33	BOLT M16X100, 80 PCS, GOST 7798-70	KG	11.000		
34	PLAIN WASHER M16X100, 80 PCS, GOST 7798-78	KG	0.904		
35	NUT M16X100, 80 PCS, GOST 7798-70	KG	2.656		
36	200 L TANK FOR MANURE	PCS	1.000		
37	SHEET 8X200X400, 2 PCS, GOST 19903-74	KG	12.800		
38	PIPE GOST 10704-91, Ø 89X3.5, L=8 RM, WEIGHT, 1 RM=6.36KG	KG	50.900		
39	PIPE GOST 10704-91, Ø 108X4. L=30 RM, WEIGHT, 1 RM=7.77KG	KG	225.330		
40	RUBBER PLATE 1. SHEET TMKSH-S-5 GOST 7338-77. S=2.0 M2	KG	12.000		
41	HINGE THI-2.001	PCS	1.000		
42	ANCHOR BOLT M20 COMPLETE	PCS	8.000		
43	STEELWORK FOR ELECTRODE LEVEL ALARM /ROS-301/, WEIGHT=3.5KG	T	0.004		
44	STEELWORK, MODEL ROS-301 THI-2.02	KG	3.500		
	Total for Section 7				
SECTION 8. CLASSROOM					
	EARTHWORK				
1	TRENCHING TO DISPOSAL AREA WITH BACK DIGGER WITH 0.4 M3 BUCKET, SOIL GROUP: 2	1000 M3	0.012		
2	MANUAL SOIL EXCAVATION IN TRENCHES, UP TO 2M WIDTH, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2	100 M3	0.020		

3	BOTTOMING OF SANDY GRAVEL	M3	2.200		
4	STRIP CONCRETE FOUNDATION	100 M3	0.180		
5	STRIP CONCRETE FOUNDATION	100 M3	0.070		
6	PAINT INSULATION OF HORIZONTAL CONCRETE SURFACE WITH HOT BITUMEN IN TWO LAYERS	100 M2	0.640		
7	INSULATING ADHESIVE TAPE OF HORIZONTAL CONCRETE SURFACE WITH ROLL MATERIAL IN ONE LAYER FOR 56 M2/IN QUOTATION ALL RESOURCES ARE FOR TWO LAYERS/	100 M2	0.320		
	WALLS AND FINISHING WORK				
8	BACKFILLING	1000 M3	0.018		
9	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKET. SOIL GROUP 1	100 M3	0.020		
10	BLOCKWORK, MASONRY, EXTERIOR, SIMPLE WITH HEIGHT OF STOREY UP TO 4 M	M3	70		
11	BURNT BRICK	PCS	20035		
12	INSTALLATION OF REINFORCED CONCRETE LINTELS FOR DOORS AND WINDOWS	100 M3	0.002		
13	REINFORCING ROD FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK, SMOOTH, CLASS AI, Ø 10 MM	T	0.028		
14	INSTALLATION OF CONCRETE BASEMENT WALLS AND BACK WALLS FOR WALL-PLATE, 20 CM	100 M3	0.064		
15	CONCRETE SUBBASE INSTALLATION OF 10 CM THICKNESS FOR FLOOR	M3	14.200		
16	INSTALLATION OF ROOF TIMBER/TIE BEAM 5X20/	M3	2.060		
17	TIE BEAM 5X20	M3	2.060		
18	INSTALLATION OF FRAME ELEMENTS FROM BARS	M3	2		
19	CEILING /WOOD STRIP/3X15	M3	2		
20	WINTERIZING OF COVERS WITH SLABS FROM FOAM MATERIAL AND FLAG FIBER GLASS IN 1 LAYER	100 M2	1.540		
21	FOAM MATERIAL OF 4 MM THICKNESS	M2	77		
22	FLAG FIBER-GLASS PLASTIC OF 4 MM THICKNESS	M2	77		
23	LOW CARBON STEEL WIRE FOR VARIOUS PURPOSES, GALVANISED, Ø 6.0-6.3 MM	T	0.006		
24	INSTALLATION OF WOOD-ALUMINIUM. ALUMINIUM. STEEL-PLASTIC BLOCKS IN EXTERIOR AND INTERIOR DOORWAYS: IN STONE WALLS WITH OPENING AREA OF UP TO 3 M2	100 M2	0.057		
25	ALUMINIUM DOORSETS, "AKFA" TYPE WITH THE SIZE OF 0.9X2.1M	M2	5.670		
26	INSTALLATION OF WINDOWS FROM WOOD-ALUMINIUM. ALUMINIUM. STEEL-PLASTIC BLOCKS IN STONE WALLS OF RESIDENTIAL AND PUBLIC BUILDINGS (REVOLVING. FOLDING. REVOLVING-FOLDING): WITH OPENING AREA OF UP TO 2 M2	100 M2	0.105		

27	ALUMINIUM WINDOWS, "AKFA" TYPE WITH THE SIZE OF 1.35X1.35M	M2	10.470		
28	EXTERIOR AND INTERNAL SURFACE PLASTERING	100 M2	3.030		
29	FILLING OF WOODEN WALLS WITH HIGH-QUALITY PAINTWORK, INTERNAL PART, TWICE	100 M2	3.560		
30	PAINTING OF FACES, TWICE	100 M2	2.500		
31	HIGH-QUALITY PAINTING WITH WATER-DISPERSIVE ACRYLIC COMPOUND, INTERNAL PART, TWICE	100 M2	3.560		
32	SUBBASE INSTALLATION OF CONCRETE FLOOR OF 10 CM THICKNESS	M3	6		
33	INSTALLATION OF COVERS FROM LINOLEUM WITH GLUE TYPE KN-2	100 M2	0.720		
34	INSTALLATION OF PLASTIC SKIRTS BY THREAD CUTTING SCREWS	100 M	0.600		
35	CEILING LINING OF MEDIUM COMPLEXITY WITH "KNAUF" GYPSUM BOARD SLABS WITH INSTALLATION OF FRAME	100 M2	0.720		
36	FILLING AT HIGH-QUALITY PAINTWORK OF WOODEN CEILING, TWICE	100 M2	1.440		
37	OIL PAINTING OF CEILING	100 M2	0.720		
	ROOFING				
38	INSTALLATION OF FRAME ELEMENTS FROM BARS/WALL-PLATES 10X10 CM AND LEDGER BOARD 4X15 CM/	M3	0.950		
39	WALL-PLATES 10X10 CM, 0.38M3 AND LEDGER BOARD 4MX15 CM, 0.4M3	M3	0.950		
40	INSTALLATION OF ROOF TIMBER 4MX15 CM	M3	1		
41	ROOF TIMBER 4MX15 CM	M3	1		
42	INSTALLATION OF FRAME ELEMENTS FROM BARS/POLES 10X10 CM AND ROOF BOARDING 4X4 CM/	M3	0.630		
43	POLE 10X10 CM, 0.072M3 AND ROOF BOARDING 4X4 CM, 0.45M3	M3	0.630		
44	INSTALLATION OF STRETCH CEILING FROM PLASTIC	100 M2	0.510		
45	PLASTIC	M2	51		
46	WOOD STRIP 3X3	M	145		
47	ROOFING FROM METAL TILE, PROFILED SHEETING FROM TRAPEZOIDAL AND SINUSOID SECTION COATED OVER THE READY LEDGER BOARD: COMPLEX ROOF	100 M2	1.340		
48	PROFILED SHEETING, GREEN, FOR ROOF OF 4 THICKNESS	M2	134		
49	SNOW SHIELD	M	34		
50	TROUGH	M	44		
51	GUTTER SYSTEM, L=3M	M	24		
52	FEATHER/CLAMP/	PCS	14		
53	BRACKET	PCS	44		

54	DRIVING POINT	PCS	88		
55	ANGLE	M	44		
SECTION EQUIPMENT					
56	AIR CONDITIONER, CAPACITY 12	PCS	2		
57	AIR CONDITIONER, CAPACITY 18	PCS	1		
67	BLINDS	M2	10.500		
68	OIL HEATER / 12 RIBS	PCS	3		
69	RACK 5M	PCS	4		
	Total for Section 8				
SECTION 9. CANOPY OVER PUMPING STATION					
	EARTHWORK				
1	MANUAL SOIL EXCAVATION IN TRENCHES FOR POLE	100 M3	0.015		
2	HAND FINE EXCAVATION	100 M3	0.002		
	CONCRETE WORKS				
3	RUBBY BOTTOMING	10 M3	0.015		
4	INSTALLATION OF CONCRETE FOUNDATION OF GENERAL PURPOSE FOR UP TO 3 M3 COLUMN PILLAR	100 M3	0.012		
5	REINFORCING ROD, Ø 20MM	KG	14.820		
6	SUBBASE INSTALLATION OF CONCRETE FLOOR OF 15 CM THICKNESS	M3	3.200		
7	SUBBASE INSTALLATION OF CONCRETE FLOOR OF 15 CM THICKNESS	M3	6.800		
8	LATTICE WORKS /POLES. SUPPORTS. TRUSSES, ETC./	T	0.287		
9	PIPE-POLE, Ø 108/4, ST3	KG	287.280		
10	LATTICE WORKS, POLES. SUPPORTS. TRUSSES, ETC./ERECTION BY MANUAL HOISTS WITH THEIR INSTALLATION AND DISMANTLING IN THE COURSE OF WORK/ OR MANUALL /OF MINOR DETAILS/	T	0.674		
11	ANGLE 50X50X5 ST3	KG	673.720		
12	ROOFING FROM METAL TILE. PROFILED SHEETING FROM TRAPEZOIDAL AND SINUSOID SECTION. COATED OVER READY LEDGER BOARD: SIMPLE ROOF	100 M2	0.420		
13	PROFILED SHEETING FOR ROOF /6X7/ OF 4 THICKNESS	M2	42		
14	BEAM /WOOD STRIP/ 40X45	M3	0.200		
15	GUARDRAILING FROM GRILLAGE	100 M	0.200		
16	GRILLAGE FOR FENCE	M2	38.700		
17	HINGE FOR DOOR	PCS	2		
18	KNOB	PCS	1		
19	WIRE 8MM, 60 M	KG	23.700		
	SUNDRY WORK				
20	RUBBLY SUBBASE INSTALLATION	M3	3.350		
21	INSTALLATION OF REINFORCEMENT FOR SEPARATE RODS	100 T	0.000		

22	REINFORCING ROD, Ø 20MM	KG	14.820		
23	PAINTING OF METAL AND WOODEN PRIMED SURFACE WITH ENAMEL HV-124	100 M2	1.200		
24	LOCK FOR DOORS	PCS	1		
	Total for Section 9				
SECTION 10. CONSTRUCTION OF CANOPY					
1	TRENCHING TO DISPOSAL AREA WITH BACK DIGGER WITH 0.4 BUCKET, M3, SOIL GROUP: 2	1000 M3	0.005		
2	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2 #HAND FINE EXCAVATION. BOTTOM AND WALLS STRIPPING WITH DROP CUT TO MECHANICALLY EXCAVATED TRENCH AND FOUNDATION PIT	100 M3	0.010		
3	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKET. SOIL GROUP 1	100 M3	0.006		
4	BOTTOMING OF SANDY GRAVEL	M3	9.350		
5	CONCRETE SUBBASE INSTALLATION FOR CANOPY V15	M3	6.350		
6	CONCRETE SUBBASE INSTALLATION FOR CANOPY V15	M3	5.050		
7	STRIP CONCRETE FOUNDATION V15 FOR POLES	100 M3	0.020		
8	INSTALLATION OF REINFORCEMENT FOR SEPARATE RODS	100 T	0.000		
9	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK. DIE-ROLLED, SECTION CLASS AIII, Ø 20-22 MM	T	0.015		
10	INSTALLATION OF SUPPORTING POLES FOR CANOPY, PIPE, POLE, Ø 108/4	T	0.312		
11	STEEL PIPES, ELECTRO-WELDED, LONGITUDINAL, Ø 108.4MM, STEEL GRADE 15.20 AND 08KP	M	31		
12	LATTICE WORKS /POLES. SUPPORTS. TRUSSES, ETC./	T	2.152		
13	ANGLE. SHEET. REINFORCING ROD AND BAR	KG	2152		
14	INSTALLATION OF FRAME ELEMENTS FROM BARS 40X45MM	M3	0.200		
15	ROOFING FROM METAL TILE. PROFILED SHEETING FROM TRAPEZOIDAL AND SINUSOID SECTION. COATED OVER READY LEDGER BOARD: COMPLEX ROOF	100 M2	1.320		
16	PROFILED SHEETING, GREEN, FOR ROOF OF 4 THICKNESS	M2	132		
17	PAINTING OF METAL AND WOODEN PRIMED SURFACE WITH ENAMEL HV-124	100 M2	1.200		
	Total for Section 10				
SECTION 11. LAVATORY					
1	TRENCHING TO DISPOSAL AREA WITH BACK DIGGER WITH 0.4 BUCKET, M3, SOIL GROUP: 2	1000 M3	0.022		

2	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M WIDTH, UP TO 2M DEPTH WITHOUT TIMBERING, SLOPED, SOIL GROUP 2	100 M3	0.022		
3	INSTALLATION OF WALLS AND PLAIN BOTTOM OF MORE THAN 150 MM THICKNESS OF SQUARE STRUCTURES	100 M3	0.118		
4	PAINT INSULATION OF HORIZONTAL CONCRETE SURFACE WITH HOT BITUMEN IN TWO LAYERS	100 M2	0.275		
5	INSULATING ADHESIVE TAPE OF VERTICAL CONCRETE SURFACE WITH ROLL MATERIAL IN TWO LAYERS	100 M2	0.275		
6	PLASTERING OF SURFACE WITH WHITEWASH, SIMPLE, ON STONE AND CONCRETE	100 M2	1.015		
7	INSTALLATION OF REBAR CAGES WITH REINFORCED GRID A-3 200X200 AND 150X150, Ø 14MM	100 T	0.009		
8	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK, DIE-ROLLED, SECTION CLASS AIII, Ø 14 MM	T	0.933		
9	WIRE, Ø 4 AND 8MM	KG	10		
10	INSTALLATION OF WALLS AND PLAIN BOTTOM OF MORE THAN 150 MM THICKNESS OF SQUARE STRUCTURES	100 M3	0.017		
11	BLOCKWORK, MASONRY EXTERIOR SIMPLE WITH HEIGHT OF STOREY UP TO 4 M	M3	8		
12	BRICK	PCS	5500		
13	ROOFING FROM METAL TILE, PROFILED SHEETING FROM TRAPEZOIDAL AND SINUSOID SECTION, COATED OVER READY LEDGER BOARD: SIMPLE ROOF	100 M2	0.160		
14	PROFILED SHEETING, GREEN, FOR ROOF OF 4 THICKNESS	M2	16		
15	SNOW SHIELD	M	4		
16	TROUGH	M	4		
17	GUTTER SYSTEM	M	3		
18	FEATHER/CLAMP/	PCS	4		
19	BRACKET	PCS	4		
20	DRIVING POINT	PCS	10		
21	SNOW SHIELD	M	4		
21 a	ANGLE	RM	15.600		
22	DISCHARGE PIPE, LIGHT TYPE FROM POLYETHYLENE, LOW PRESSURE, Ø 150/4 MM	10 M	0.800		
23	INSTALLATION OF FRAME ELEMENTS FROM SHAPED TIMBER	M3	0.905		
24	WALL-PLATES 10X10 CM	M3	0.140		
25	LEDGER BOARD 4X15 CM	M3	0.100		
26	ROOF TIMBER 4MX15 CM	M3	0.500		

27	POLE 10X10 CM	M3	0.054		
28	GRATING 4X4 CM	M3	0.070		
29	WOOD STRIP 3X3 45M	M3	0.041		
30	INSTALLATION OF MANHOLE, WEIGHT=65KG	PCS	1		
31	INSTALLATION OF WOODEN-ALUMINIUM, ALUMINIUM, STEEL-PLASTIC BLOCKS IN EXTERIOR AND INTERIOR DOORWAYS: IN STONE WALLS WITH OPENING AREA OF UP TO 3 M2	100 M2	0.064		
32	ALUMINIUM DOORSETS, "AKFA" TYPE WITH THE SIZE OF 0.7X1.9M, 2 PCS AND 0.9X2,1M -,2 PCS	M2	6.440		
33	INSTALLATION OF WINDOW	100 M2	0.005		
34	ALUMINIUM WINDOWS, "AKFA" TYPE WITH THE SIZE OF 0.5X0.5M, 2 PCS	M2	0.500		
35	INSTALLATION OF STRETCH CEILING FROM PLASTIC	100 M2	0.135		
36	PLASTIC	M2	13.500		
37	INSTALLATION OF GLAZED TILE	100 M2	0.420		
38	GLAZED TILE	M2	42		
39	INSTALLATION OF LINTEL	100 M3	0.001		
40	REINFORCEMENT FOR IN-SITU REINFORCED CONCRETE CONSTRUCTIONS IN THE FORM OF MESH AND PLANE FRAMEWORK, DIE-ROLLED, SECTION CLASS AIII, Ø 12 MM	T	0.030		
41	INSTALLATION OF SINK	10 SETS	0.200		
42	SINK	PCS	2		
43	INSTALLATION OF SQUATTING PAN WITH HIGH-LEVEL CISTERN	10 SETS	0.200		
44	BOWL OF GENOA	PCS	2		
45	FAUCET WITH PLUMBING TRAP	PCS	2		
46	MIRROR 80X50 CM	PCS	2		
47	POLYETHYLENE PIPE LAYING, Ø 25 MM	KM	0.024		
48	POLYETHYLENE PIPE, Ø 25/6MM	M	12		
49	POLYETHYLENE PIPE, Ø 25/4MM	M	12		
50	SLEEVE, Ø 25MM	PCS	1		
51	TEE-JOINT, Ø 25MM	PCS	2		
52	ELBOW BEND, Ø 25MM	PCS	4		
53	CRANE, Ø 25MM	PCS	4		
54	TANK 300 L	PCS	1		
	Total for Section 11				
SECTION 12. CONTROL WELL					
	WELL FOR MP AND PP				
1	EXCAVATION TO DISPOSAL AREA IN TRENCH OF UP TO 500 M3 WITH EXCAVATOR WITH 0.4 /0.35-0.45/ BUCKET, M3, SOIL GROUP: 2	1000 M3	0.020		
2	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2 #HAND FINE EXCAVATION. BOTTOM AND WALLS STRIPPING WITH DROP CUT TO TRENCHES AND FOUNDATION PITS TO BE	100 M3	0.049		

	EXCAVATED MECHANICALLY				
3	REFILLING OF TRENCH AND BORROW PIT WITH EARTHMOVING UP TO 5 M WITH BULDOZERS OF 96 [130] KW [HP]. SOIL GROUP 1	1000 M3	0.008		
4	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKET. SOIL GROUP 1	100 M3	0.026		
5	BOTTOMING OF SANDY GRAVEL OF THICKNESS 10 CM	10 M3	0.040		
6	INSTALLATION OF COMPONENTS FROM PREFABRICATED CONCRETE FOR WELLS WITH MORTAR CAULKING	100 M3	0.021		
7	WELL KS 10-2	M3	0.240		
8	WELL KS 15-2	M3	0.400		
9	WELL PD 15-1	M3	0.370		
10	WELL KS 20-2-1A	M3	0.500		
11	WELL PD 20-1	M3	0.580		
12	INSTALLATION OF COMPONENTS FROM PREFABRICATED CONCRETE FOR CEILING PANEL	100 M3	0.006		
13	INTERMEDIATE CONCRETE SLAB PP 10-1-2B	M3	0.080		
14	INTERMEDIATE CONCRETE SLAB PP 15-1-2B	M3	0.200		
15	INTERMEDIATE CONCRETE SLAB PP 20-1-2B	M3	0.360		
16	INSTALLATION OF MANHOLE	PCS	3.000		
17	INSTALLATION OF GATE VALVE, PVC WITH FLANGE, Ø 50MM	PCS	3.000		
18	GATE VALVE, PVC WITH FLANGE, Ø 50 MM	PCS	3.000		
19	INSTALLATION OF GATE VALVE, PVC WITH FLANGE, Ø 63MM	PCS	3.000		
20	GATE VALVE, PVC WITH FLANGE, Ø 63 MM	PCS	3.000		
21	INSTALLATION OF GATE VALVE, PVC WITH FLANGE, Ø 75MM	PCS	5.000		
22	GATE VALVE, PVC WITH FLANGE, Ø 75 MM	PCS	5.000		
23	INSTALLATION OF POLYETHYLENE FITTINGS ELBOW BENDS. TEE-JOINTS. SLEEVES. ADAPTORS	10 PCS	2.400		
24	TEE-JOINT 110X50X110 POLYETHYLENE VF7	PCS	3.000		
25	TEE-JOINT 110X63X110 POLYETHYLENE VF8	PCS	3.000		
26	TEE-JOINT 110X75X110 POLYETHYLENE VF9	PCS	4.000		
27	ELBOW BEND 90 DEGREE, Ø 110 MM POLYETHYLENE	PCS	2.000		
28	ADAPTOR, Ø 110X75MM, POLYETHYLENE	PCS	1.000		
29	FOOTING 20X20X40 CM	PCS	15.000		
30	ELBOW BEND 90 DEGREE, Ø 75 MM, POLYETHYLENE	PCS	5.000		
31	ELBOW BEND 90 DEGREE, Ø 63 MM, POLYETHYLENE	PCS	3.000		
32	ELBOW BEND 90 DEGREE, Ø 50 MM, POLYETHYLENE	PCS	3.000		
	Total for Section 12				

SECTION 13. SINK					
1	EXCAVATION TO DISPOSAL AREA IN TRENCH OF UP TO 500 M3 WITH EXCAVATOR WITH 0.4 /0.35-0.45/ BUCKET, M3, SOIL GROUP: 2	1000 M3	0.054		
2	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2 #HAND FINE EXCAVATION. BOTTOM AND WALLS STRIPPING WITH DROP CUT TO TRENCHES AND FOUNDATION PITS TO BE EXCAVATED MECHANICALLY	100 M3	0.065		
3	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKET. SOIL GROUP 1	100 M3	0.120		
4	BOTTOMING OF SANDY GRAVEL	10 M3	0.100		
5	BOTTON STEINING, DRY, FROM RIPRAP, Ø 10-15 CM	100 M3	0.005		
6	INSTALLATION OF MANHOLE	PCS	7		
7	INSTALLATION OF COMPONENTS FROM PREFABRICATED CONCRETE FOR WELLS WITH MORTAR CAULKING	100 M3	0.034		
8	WELL KS 10-2, 14 PCS	M3	3.360		
9	INSTALLATION OF COMPONENTS FROM PREFABRICATED CONCRETE FOR CEILING PANEL	100 M3	0.006		
10	INTERMEDIATE CONCRETE SLAB PP 10-1-2B, 7 PCS	M3	0.560		
11	INSTALLATION OF GATE VALVE, PVC WITH FLANGE, Ø 50 MM	PCS	3		
12	GATE VALVE, PVC WITH FLANGE, Ø 50MM	PCS	3		
13	INSTALLATION OF GATE VALVE, PVC WITH FLANGE, Ø 63 MM	PCS	3		
14	GATE VALVE, PVC WITH FLANGE, Ø 63 MM	PCS	3		
15	INSTALLATION OF GATE VALVE, PVC WITH FLANGE, Ø 75 MM	PCS	4		
16	GATE VALVE, PVC WITH FLANGE, Ø 75MM	PCS	4		
17	INSTALLATION OF POLYETHYLENE FITTINGS ELBOW BENDS, TEE-JOINTS, SLEEVES, ADAPTORS	10 PCS	1		
18	ELBOW BEND 90 DEGREE, Ø 75 MM, POLYETHYLENE	PCS	4.000		
19	ELBOW BEND 90 DEGREE, Ø 63 MM, POLYETHYLENE	PCS	3		
20	ELBOW BEND 90 DEGREE, Ø 50 MM, POLYETHYLENE	PCS	3.000		
21	PAINT INSULATION OF VERTICAL CONCRETE SURFACE WITH HOT BITUMEN IN TWO LAYERS	100 M2	0.460		
	Total for Section 13				
SECTION 14. IRRIGATION FLUMES					
1	EXCAVATION TO DISPOSAL AREA IN TRENCH OF UP TO 500 M3 WITH EXCAVATOR WITH 0.4 /0.35-0.45/ BUCKET, M3, SOIL GROUP: 2	1000 M3	0.022		

2	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2 #HAND FINE EXCAVATION. BOTTOM AND WALLS STRIPPING WITH DROP CUT TO TRENCHES AND FOUNDATION PITS TO BE EXCAVATED MECHANICALLY	100 M3	0.011		
3	RUBBY BOTTOMING	10 M3	0.750		
4	INSTALLATION OF INTAKE AND OUTLET PORTALS	100 M3	0.010		
5	INSTALLATION OF COMPONENTS FROM PREFABRICATED CONCRETE FOR FLUMES WITH MORTAR CAULKING	100 M3	0.035		
6	IRRIGATION FLUMES LI-50. 4.4/3. L=5M	PCS	35.000		
	Total for Section 14				
SECTION 15. WATER-EFFICIENT PROCESSES					
	DRIP IRRIGATION				
	INSTALLATION OF EMITTER WITH FITTINGS FOR TREES				
1	POLYETHYLENE PIPE LAYING OF DRIP IRRIGATION WITH BUILT-IN EMITTERS IN INTENSE ORCHARDS AND VINEYARDS ON SOIL, Ø 20 MM	KM	2.285		
2	INSTALLATION OF POLYETHYLENE FITTINGS ELBOW BENDS. TARGETS. NOZZLES	10 PCS	3.600		
3	NOZZLE, Ø 20 MM, POLYETHYLENE	PCS	36.000		
4	TARGET, Ø 20 MM, POLYETHYLENE	PCS	18.000		
5	ELBOW BEND, Ø 20 MM, POLYETHYLENE	PCS	18.000		
	TOTAL				
	INSTALLATION OF EMITTERS WITH FITTINGS FOR VEGETABLES				
6	POLYETHYLENE PIPE LAYING, Ø 20 MM	KM	0.060		
7	POLYETHYLENE PIPE LAYING OF DRIP IRRIGATION WITH BUILT-IN EMITTERS IN ROW PLANTING OF VEGETABLES ON SOI, Ø 16 MM	KM	7.589		
8	INSTALLATION OF POLYETHYLENE FITTINGS ELBOW BENDS. TARGETS. NOZZLES	10 PCS	12.000		
9	ELBOW BEND, Ø 20 MM, POLYETHYLENE	PCS	60.000		
10	NOZZLE, Ø 16 MM, POLYETHYLENE	PCS	120.000		
11	TARGET, Ø 16 MM, POLYETHYLENE	PCS	60.000		
	TOTAL				
	SPRINKLING				
12	POLYETHYLENE PIPE LAYING, OVERHEAD, Ø 50 MM	KM	0.950		
13	INSTALLATION OF SPRINKLERS	PCS	92.000		
14	SPRINKLER 1/2	PCS	92.000		
15	INSTALLATION OF POLYETHYLENE FITTINGS ELBOW BENDS. TARGETS. NOZZLES	10 PCS	1.600		
16	TARGET, Ø 50 MM, POLYETHYLENE	PCS	8.000		
17	NOZZLE, Ø 50 MM, POLYETHYLENE	PCS	16.000		
18	ELBOW BEND, Ø 50 MM, POLYETHYLENE	PCS	8.000		
19	8MM GALVANISED ROD 1.2M	PCS	92.000		

20	ADAPTER+FLOW REGULATING VALVE	PCS	92.000		
21	PVC PIPE 13MM. POLYETHYLENE PIPE 12 MM	PCS	92.000		
22	EXTERIOR AND INTERIOR CONVECTOR. PLUG BUNG	PCS	92.000		
	TOTAL				
	SUBSOIL IRRIGATION No.3. 5. 6. 8				
23	TRENCH EXCAVATION FOR SUBSOIL IRRIGATION WITH TRACTOR, SOIL GROUP:2	KM	0.414		
24	HAND BACKFILLING OF TRENCH, SOIL WITH HUMUS 413/42. SOIL GROUP 1	100 M3	4.550		
25	HAULAGE OF HUMUS UP TO 30 KM	T	46.200		
26	HUMUS	M3	42.000		
27	POLYETHYLENE PIPE LAYING OF DRIP IRRIGATION WITH BUILT-IN EMITTERS IN INTENSE ORCHARDS AND VINEYARDS ON SOIL, Ø 20 MM	KM	14.900		
28	INSTALLATION OF POLYETHYLENE FITTINGS ELBOW BENDS. TARGETS. NOZZLES	10 PCS	35.800		
29	NOZZLE, Ø 20 MM, POLYETHYLENE	PCS	358.000		
30	TARGET, Ø 20 MM, POLYETHYLENE	PCS	209.000		
31	ELBOW BEND, Ø 20 MM, POLYETHYLENE	PCS	209.000		
	TOTAL				
	RIDGE-AND-FURROW IRRIGATION No.4				
32	LAYING OF IRRIGATION POLYETHYLENE PIPE, Ø 32 MM	KM	0.127		
33	INSTALLATION OF POLYETHYLENE FILM T=10 MICRON, WEIGHT=34 KG	100 M2	50.000		
	TOTAL				
	LISIMETER STATION No.7				
	ITEM-1				
34	TRENCHING TO DISPOSAL AREA WITH BACK DIGGER WITH 0.25 BUCKET, M3, SOIL GROUP: 2	1000 M3	0.405		
35	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP , SOIL GROUP 2 #HAND FINE EXCAVATION, BOTTOM AND WALLS STRIPPING WITH DROP CUT TO MECHANICALLY EXCAVATED TRENCH AND FOUNDATION PIT	100 M3	0.450		
36	REFILLING OF TRENCH AND BORROW PIT WITH EARTHMOVING UP TO 5 M WITH BULDOZERS OF 96 [130] KW [HP]. SOIL GROUP1	1000 M3	0.170		
37	AT EARTHMOVING TO EVERY SUBSEQUENT 5 M ADD TO THE STANDARDS 01-01-034-1	1000 M3	0.170		
38	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKET. SOIL GROUP 2	100 M3	0.200		
39	BLINDING	100 M3	0.160		
40	LAYING OF STEEL WATER PIPE, Ø 1220 MM	KM	0.023		
41	STEEL PIPES, Ø 1220 MM, 14 CM THICKNESS	RM	23.000		
42	LAYING OF STEEL WATER PIPE, Ø 102 MM	KM	0.023		
43	STEEL PIPES, Ø 102MM OF 3.2 MM THICKNESS	RM	23.000		

44	POLYETHYLENE PIPE LAYING, Ø 108 MM	KM	0.012		
45	POLYETHYLENE PIPE, Ø 108 MM, 3.2 MM THICKNESS	RM	12.000		
46	LAYING OF STEEL WATER PIPE Ø 20 MM	KM	0.012		
47	STEEL PIPES, Ø 20MM OF 2.0 MM THICKNESS	RM	12.000		
48	NORMAL ANTICORROSION BITUMEN-RUBBER OR BITUMEN-POLYMERIC INSULATION ON STEEL PIPELINES, Ø 1200 MM	KM	0.023		
49	NORMAL ANTICORROSION BITUMEN-RUBBER OR BITUMEN-POLYMERIC INSULATION ON STEEL PIPELINES, Ø 100 MM	KM	0.023		
50	NORMAL ANTICORROSION BITUMEN-RUBBER OR BITUMEN-POLYMERIC INSULATION ON STEEL PIPELINES, Ø 20 MM	KM	0.012		
51	INSTALLATION OF FITTINGS STEEL WELDED, Ø 20-102 MM	T	0.049		
52	STEEL ELBOW BEND 90 DEGREE, Ø 102 MM	PCS	10.000		
53	STEEL ELBOW BEND 90 DEGREE, Ø 20 MM	PCS	10.000		
54	STEEL PLATE 1.3X1.3M OF 2.0 MM THICKNESS, 10 PCS	KG	265.330		
55	GLAZING WITH GAGE GLASS OF 6MM THICKNESS. SIZE L=1800X2000 MM. 2800X2000. 1300X2000.2300X2000. 3300X2000	100 M2	0.230		
56	HERMETIC ADHESIVE FOR GLASS SEALING	PCS	6.000		
57	MASONRY FROM SLAG BLOCKS, WEIGHT UP TO 0.5 T	M3	62.000		
58	SLAG BLOCK 33X16X16 CM	PCS	7,000.000		
59	BETTERED SURFACE PLASTERING OF WALLS WITH CEMENT-LIME OR CEMENT MORTAR ON STONE AND CONCRETE	100 M2	2.450		
60	INSTALLATION OF FILL OF 10 CM THICKNESS	100 M3	0.095		
61	RUBBY BOTTOMING OF 10 CM THICKNESS	10 M3	0.950		
62	BOTTOMING OF SANDY GRAVEL OF 10 CM THICKNESS	10 M3	1.400		
63	PIEZOMETER, Ø 20 MM	RM	30.000		
64	INSTALLATION OF STEEL PIPE FOR GRATING	KM	0.013		
65	STEEL PIPES, Ø 32 MM	RM	13.000		
66	REINFORCING ROD, Ø 14MM, FOR GRATING	KG	6.300		
67	PAINT INSULATION OF HORIZONTAL CONCRETE SURFACE WITH HOT BITUMEN IN TWO LAYERS	100 M2	1.600		
68	INSULATING ADHESIVE TAPE OF HORIZONTAL CONCRETE SURFACE WITH ROLL MATERIAL IN ONE LAYER FOR 160 M2/IN QUOTATION ALL RESOURCES ARE FOR TWO LAYERS/	100 M2	0.800		
	TOTAL				
	ITEM-2				
69	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2 #HAND FINE EXCAVATION. BOTTOM	100 M3	0.008		

	AND WALLS STRIPPING WITH DROP CUT TO TRENCHES AND FOUNDATION PITS TO BE EXCAVATED MECHANICALLY				
70	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKET, SOIL GROUP 2	100 M3	0.008		
71	INSTALLATION OF FRAME ELEMENTS FROM BARS	M3	1.342		
72	BEAM 10X10 CM 1.15M3 - 115RM AND WOOD STRIP 4X3 CM, 0.192M3 - 160RM	M3	1.342		
73	ROOFING FROM METAL TILE. PROFILED SHEETING FROM TRAPEZOIDAL AND SINUSOID SECTION. COATED OVER READY LEDGER BOARD: COMPLEX ROOF	100 M2	0.950		
74	PROFILED SHEETING, GREEN, FOR ROOF OF 3 MM THICKNESS	M2	95.000		
	TOTAL				
	LAYING OF MAIN PIPELINES AND PLOT PIPELINES				
75	TRENCHING TO DISPOSAL AREA WITH BACK DIGGER WITH 0.25 BUCKET, M3, SOIL GROUP: 2	1000 M3	0.238		
76	HAND SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2 #HAND FINE EXCAVATION. BOTTOM AND WALLS STRIPPING WITH DROP CUT TO TRENCHES AND FOUNDATION PITS TO BE EXCAVATED MECHANICALLY	100 M3	0.264		
77	POLYETHYLENE PIPE LAYING, Ø 50 MM	KM	0.152		
78	POLYETHYLENE PIPE LAYING, Ø 65 MM	KM	0.187		
79	POLYETHYLENE PIPE LAYING, Ø 75 MM	KM	0.331		
80	POLYETHYLENE PIPE LAYING, Ø 100 MM	KM	0.225		
81	REFILLING OF TRENCH AND BORROW PIT WITH EARTHMOVING UP TO 5 M WITH BULDOZERS OF 96 [130] KW [HP]. 1 SOIL GROUP	1000 M3	0.188		
82	AT EARTHMOVING TO EVERY SUBSEQUENT 5 M ADD TO THE STANDARDS 01-01-034-1	1000 M3	0.188		
83	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKETS. SOIL GROUP 1	100 M3	0.523		
	TOTAL				
	IMPORTED EQUIPMENT				
	SENSOR/MOISTURE, WIND, ETC./	PCS	55		
	WEATHER STATION	PCS	1		
	TOTAL				
	Total for Section 15.				
SECTION 16. AUTOMATION AND ENERGY SUPPLY					
SECTION 16.1 AUTOMATION					
	PROCUREMENT AND INSTALLATION				
1	PANELS INSTALLED IN POCKET WITH THRUST DOWELS. WEIGHT UP TO 15 KG #/LIGHTING PANELS/	PCS	2.000		
2	CONTROL BOX YA5111-3574 UHL4	PCS	2.000		

3	PANEL #(LABORATORY PANELS)	PCS	1.000		
4	CENTRAL SIGNALING BOX - LEVEL CONTROL ADJUSTMENT	PCS	1.000		
5	TRANSDUCER INSTALLED ON RESERVOIR PRESSURE-OPERATED, MPA UP TO 6.3# (PRIMARY TRANSDUCERS OF LEVEL GAGE)	PCS	2.000		
6	LEVEL RELAY SENSOR ROS-301	PCS	2.000		
	INTEGRATED CABLE SYSTEM				
7	WIRE PULLING IN PIPES AND METAL JACKETS. SINGLE-CORE OR MULTIPLE-CORE FIRST WIRE IN COMMON SCREENING BRAID. TOTAL CROSS SECTION, MM2, UP TO 2.5	100 M	0.500		
8	CABLE, CORE SECTION 4.2.5 MM2 AKVVG	1000 M	0.020		
9	CABLE, AKVVG 4X2.5 MM2	1000 M	0.030		
10	POLYETHYLENE PIPES, Ø 25 MM	M	50.000		
	EARTHWORK				
11	TRENCHING TO DISPOSAL AREA WITH BACK DIGGER WITH 0.25 BUCKET, M3, SOIL GROUP: 2	1000 M3	0.012		
12	REFILLING OF TRENCH AND BORROW PIT WITH EARTHMOVING UP TO 5 M WITH BULDOZERS OF 96 [130] KW [HP]. 1 SOIL GROUP	1000 M3	0.012		
13	AT EARTHMOVING TO EVERY SUBSEQUENT 5 M ADD TO THE STANDARDS 01-01-034-1	1000 M3	0.012		
	Total for Section 17.1				
SECTION 17.2 EXTERNAL POWER SUPPLY OHL-0.4 KV					
	DISMANTLING AND INSTALLATION OF EXISTING OHL-10 KV (CONDUCTORS AND LINE ACCESSORIES)				
1	DISMANTLING OF UNINSULATED ALUMINIUM CONDUCTOR STEEL SUPPORTED, CORE SECTION 35 MM2, IN UNPOPULATED AREA. INSULATORS AND LINE ACCESSORIES, FULL WEIGHT - 1200 KG, DISMANTLING	KM	1.290		
2	DISMANTLING OF ONE-LINK DISCONNECTOR VOLTAGE UP TO 10 KV. CURRENT A, UP TO 5000 #/SINGLE-POLE DISCONNECTOR/ DISMANTLING	PCS	1.000		
3	INSTALLATION OF ONE-LINK DISCONNECTOR VOLTAGE UP TO 10 KV. CURRENT A, UP TO 5000 #/SINGLE-POLE DISCONNECTOR/	PCS	1.000		
4	INSTALLATION OF UNINSULATED ALUMINIUM CONDUCTOR STEEL SUPPORTED, CORE SECTION 35 MM2 IN UNPOPULATED AREA. INSULATORS AND LINE ACCESSORIES, FULL WEIGHT - 1200 KG	KM	1.290		
5	BOX FOR 3-4-CORE CABLE VOLTAGE UP TO 1 KV, CORE SECTION, MM2, UP TO 35 #/ POT-HEAD / TERMINAL / METAL BOXES	PCS	2.000		
6	TRUE UNION RM1	PCS	2.000		
	PROCUREMENT AND INSTALLATION OF CONDUCTORS				

7	INSTALLATION OF UNINSULATED ALUMINIUM CONDUCTOR STEEL SUPPORTED, CORE SECTION 25 MM2, IN UNPOPULATED AREA	KM	1.400		
8	STEEL, GALVANISED CONDUCTOR, 1 GROUP, FOR OVERHEAD LINES AND ALUMINIUM WIRES MODEL AS, CORE SECTION 25/4.2 MM2, ACCOUNTED FOR 3 LINES+10%	T	0.660		
9	CABLE, WEIGHT, 1 M, UP TO 30 KG #/UP TO 35 KV IN READY TRENCH/	100 M	0.500		
10	POWER CABLES FOR VOLTAGE UP TO 660V WITH ALUMINUM CORE. VIFA MODEL (VINYL-INSULATED FLEXIBLE ALUMINUM POWER CABLE IN VINYL SHEATHING), NUMBER OF CORES AND CORE SECTION, MM2, 4X25	1000 M	0.050		
	PROCUREMENT AND INSTALLATION OF INSULATORS AND LINE ACCESSORIES				
11	PIN-TYPE LINE INSULATOR=SHF-20-V	100 PCS	0.420		
12	CAP FROM POLYAMIDE-6 =101.086 .K-6	100 PCS	0.300		
13	CLAMP PS-2	PCS	16.000		
14	BOLT B5	PCS	4.000		
15	CLAMP PA-2	PCS	48.000		
16	WIRE FASTENING	PCS	42.000		
17	SHACKLE INSULATOR	PCS	24.000		
18	DROP LINK PRT -2	PCS	4.000		
19	CROSSARM TM3	PCS	6.000		
20	CROSSARM TM6	PCS	4.000		
21	CRAMP SK-7	PCS	2.000		
22	ARM LINK SRS -7-17	PCS	2.000		
23	CLAMPS H1, H7, H9 AND H23	PCS	20.000		
24	COVER PLATE OG 2 AND OG 5	PCS	10.000		
25	BRACKET U1	PCS	4.000		
26	BRACKET RA1	PCS	6.000		
27	BRACKET KM1	PCS	2.000		
28	ANGLE 80X80X3 L=2300MM	KG	16.928		
29	APPARATUS CLAMP A2A	PCS	2.000		
30	BANDAGE G1	PCS	10.000		
31	CONDUCTOR 3P1	1000 M	0.010		
32	JAMMER KM3	PCS	8.000		
	HAULAGE				
33	HAULAGE FROM ON-SITE STORAGE UP TO PICKETS OF OHL IN OFF-ROAD CONDITIONS. HAULAGE OF INSULATORS AND LINE ACCESSORIES TO 1 KM	T	0.450		
34	TO EVERY SUBSEQUENT KM ADD 3303-9-2 TO THE STANDARDS. 3309-9-3 TWICE	T	0.450		
35	HAULAGE WITH VEHICLE TO 30 KM. CARGO CLASS 1	T	0.450		
	HANDLING OPERATIONS				
36	MANUAL HANDLING OF LINE ACCESSORIES	T	0.450		

	Total for Section 16.2				
SECTION 16.3 ELECTRICAL EQUIPMENT					
	PROCUREMENT AND INSTALLATION OF ELECTRICAL EQUIPMENT				
1	POWER DISTRIBUTING PANEL ON METALWORK WITH INSTALLATION OF CIRCUIT-BREAKER: 5X16A, 1X25A, 2X50A, AT INPUT -100A	PCS	1.000		
2	DISTRIBUTING PANEL PR8503-1001-21UHL1	PCS	1.000		
3	PANELS INSTALLED IN POCKET WITH THRUST DOWELS. WEIGHT UP TO 15 KG #/LIGHTING PANELS/	PCS	2.000		
4	LIGHT BOARD, OSHV-6	PCS	1.000		
5	LIGHT BOARD, YAOU-8501	PCS	1.000		
6	METER OF ACTIVE REACTIVE ENERGY OF DIRECT CONNECTION 3X230/400V, 10/100A/	PCS	1.000		
7	ENERGOMETER SE303 S31	PCS	1.000		
8	SINGLE-DOUBLE-THREE-POLE CIRCUIT-BREAKER. INSTALLED ON WALL OR COLUMN PILLAR. CURRENT A, UP TO 250 #/SETTING SWITCH, AUTOMATIC OR NONAUTOMATIC/	PCS	1.000		
9	AUTOMATIC CIRCUIT BREAKER 250A, VA 5135	PCS	1.000		
10	LUMINARY WITH LED LAMPS. 220V, 28W AND 220V, 100W	PCS	48.000		
11	LUMINARY LED GW 220B. 28VT	PCS	4.000		
12	LUMINARY LED GA 220B. 100VT	PCS	44.000		
13	LUMINARY FOR OUTDOOR INSTALLATION. 220V	PCS	1.000		
14	LUMINARY NSP02	PCS	1.000		
15	LUMINARY FOR FLUORESCENT LAMPS, OVERHEAD. 220V, 4X18W	PCS	8.000		
16	LUMINARY ARS-R	PCS	8.000		
17	DUSTPROOF-AND-MOISTUREPROOF LUMINARY, SUSPENDED. 220V	100 PCS	0.050		
18	LUMINARY PUN-60	PCS	5.000		
19	FLUORESCENT LAMP. 220V, 20W, LB-20	PCS	32.000		
20	ENERGY-SAVING LAMP. 220V, 32W, AKFA-32	PCS	6.000		
21	SWITCHES. INTERCHANGING SWITCHES AND WALL-SOCKETS. SWITCH, SEMIHERMETIC AND HERMETIC	100 PCS	0.060		
22	HERMETIC SWITCH, 220V, 6A, A1 6-007	PCS	3.000		
23	SWITCH OF NORMAL DESIGN. 220V, 6A, A1 6-007	PCS	3.000		
24	SWITCH SOCKET OF NORMAL DESIGN FOR FLUSH WIRING WITH EARTHING BOSS 220V, 10V	100 PCS	0.120		
25	SWITCH SOCKET. 220V, 10V	PCS	12.000		
26	BRACKET FOR SUSPENSION OF LUMINARIES S-233	PCS	9.000		
27	BOX FOR FLUSH WIRING U-197	PCS	16.000		
28	BOX FOR PIPE MOUNTING U-196	PCS	10.000		
29	OVERHEAD SWITCHBOARD УМ-1	PCS	44.000		
30	STARTER FOR FLUORESCENT LAMPS 80S-220	PCS	32.000		

31	INSTALLATION OF SECURITY AND FIRE ALARM SYSTEM	SET	1.000		
32	SECURITY AND FIRE ALARM SYSTEM PPSU-5	PCS	1.000		
33	COMBINED SENSOR OF SECURITY AND FIRE ALARM SYSTEM, POS	PCS	4.000		
	PROCUREMENT AND INSTALLATION OF CABLES AND WIRES. LAYING OF STEEL PIPE				
34	CABLE, 1 M, WEIGHT UP TO 30 KG #/UP TO 35 KV IN READY TRENCH/	100 M	12.400		
35	POWER CABLES FOR VOLTAGE UP TO 660V WITH ALUMINUM CORE. VIFA MODEL (VINYL-INSULATED FLEXIBLE ALUMINUM POWER CABLE IN VINYL SHEATHING), NUMBER OF CORES AND CORE SECTION, MM2:4X35	1000 M	1.070		
36	POWER CABLES FOR VOLTAGE UP TO 660V WITH ALUMINUM CORE. VIFA MODEL (VINYL-INSULATED FLEXIBLE ALUMINUM POWER CABLE IN VINYL SHEATHING), NUMBER OF CORES AND CORE SECTION, MM2:4X16	1000 M	0.055		
37	POWER CABLES FOR VOLTAGE UP TO 660V WITH ALUMINUM CORE. VIFA MODEL (VINYL-INSULATED FLEXIBLE ALUMINUM POWER CABLE IN VINYL SHEATHING), NUMBER OF CORES AND CORE SECTION, MM2:4X4	1000 M	0.025		
38	POWER CABLES WITH ALUMINUM CORE. VIFA MODEL (VINYL-INSULATED FLEXIBLE ALUMINUM POWER CABLE IN VINYL SHEATHING), NUMBER OF CORES AND CORE SECTION, MM2:2X2.5	1000 M	0.090		
39	WIRE IN PROTECTIVE ENCLOSURE OR CABLE TWO-THREE CORE, UNDER PLASTER ON WALL OR IN FURROWS	100 M	7.350		
40	SUPPLY CONDUCTORS FOR ELECTRIC PLANTS WITH PVC INSULATION FOR VOLTAGE UP TO 450V WITH ALUMINIUM CORE, MODEL APV, CORE SECTION 2.5 MM2	1000 M	0.650		
41	WIRE, MODEL APPVS-UP TO 380V, CORE SECTION 2X2.5MM2	1000 M	0.085		
42	POLYETHYLENE PIPES FOR PROTECTION OF ELECTRIC LIGHTING CABLE UNDER FLOOR POURING, Ø UP TO 40 MM	100 M	0.610		
43	POLYETHYLENE PIPES, Ø 40 MM	M	61.000		
44	POLYETHYLENE PIPES FOR PROTECTION OF ELECTRIC LIGHTING CABLE, Ø UP TO 25 MM	100 M	0.700		
45	POLYETHYLENE PIPES, Ø 25 MM	M	70.000		
46	POLYETHYLENE PIPES FOR PROTECTION OF ELECTRIC LIGHTING CABLE, Ø UP TO 50 MM	100 M	10.700		
47	POLYETHYLENE PIPES, Ø 50 MM	M	1,070.000		
48	INSTALLATION OF ASBESTOS-CEMENT PIPE, Ø 100 MM	100 M	0.200		
49	ASBESTOS-CEMENT PIPE, Ø 100 MM	RM	20.000		

50	VARIOUS METAL	T	0.040		
51	METAL CABINET WITH THE SIZE OF 800X500X400MM, PUEN-12	PCS	1.000		
	MATERIALS				
52	ONE CABLE BRICK COVERAGE #/ COVERAGE OF CABLE LAID IN TRENCH/	100 M	0.200		
53	BRICK	PCS	240.000		
54	NATURAL SAND	M3	2.400		
55	CONCRETE	M3	4.220		
	EARTHWORK				
56	MANUAL SOIL EXCAVATION IN TRENCHES, UP TO 2M DEEP, WITHOUT TIMBERING, SLOPED, SOIL GROUP 2	100 M3	2.240		
57	HAND REFILLING OF TRENCH, PIT HOLLOW AND POCKET, SOIL GROUP 2	100 M3	2.240		
	Total for Section 16.3				
SECTION 16.4 PROCUREMENT AND INSTALLATION OF ASCAPC					
1	METERS. INSTALLED IN READY BED THREE PHASE # (METERS)	PCS	1.000		
2	ELECTRONIC METER SE303 S31	PCS	1.000		
3	CONDUCTOR, CORE SECTION, MM2, UP TO 6 # (IN DUCTING)	100 M	0.100		
4	COPPER CONDUCTOR PV, 1X2.5 MM2	M	10.000		
5	CABLE, 2-4-CORE, CORE SECTION UP TO 16 MM2	100 M	0.030		
6	POWER CABLES FOR VOLTAGE UP TO 660V WITH ALUMINUM CORE. VIFA MODEL (VINYL-INSULATED FLEXIBLE ALUMINUM POWER CABLE IN VINYL SHEATHING), NUMBER OF CORES AND CORE SECTION, MM2:4X4	1000 M	0.003		
7	COMPUTER CABLE KKPV 2X2X0.52	KM	0.001		
8	TEST BLOCK	PCS	1.000		
9	NONSTANDARD CABINET 600X600X300 WITH LOCK	PCS	1.000		
10	DATA MODEM GSM NOVACOM RUS-VC55IT	PCS	1.000		
11	METALWARE	KG	0.500		
12	POWER SUPPLY ASSEMBLY BP-12V	PCS	1.000		
13	SWITCH SOCKET	PCS	1.000		
14	SIM CARD	PCS	1.000		
15	SWITCH VA 47-29	PCS	1.000		
	Total for Section 16.4				
	Total for object				

Name of Bidder: _____

Authorised signature: _____

Name of authorised signatory: _____

Functional Title: _____

FORM G: Performance Security³

(This must be finalized 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 Contractor] (hereinafter called “the Contractor”) has undertaken, in pursuance of Contract No. [Click here to enter text](#).dated [Click here to enter a date](#) , to execute Services (hereinafter called “the Contract”):

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

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

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of [amount of guarantee] [in words and numbers], such sum being payable in the types and proportions of currencies in which the Contract Price 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 until a date 30 days from the date of issue by UNDP of a certificate of satisfactory performance and full completion of services by the Contractor.

SIGNATURE AND SEAL OF THE GUARANTOR BANK

Date

Name of Bank

Address

³ If the RFP/ITB requires the submission of a Performance Security, which shall be made a condition to the signing and effectivity of the contract, the Performance Security that the Proposer’s Bank will issue shall use the contents of this template