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# **INVITATION TO BID**

### **Construction of Marketplace for Villagers in Bahçe District Osmaniye Province**

- ITB No.: UNDP-TUR-ITB(UR)-2022-94
- Project: Uplands Rural Development Project
- Country: Turkey
- Issued on: 3 August 2022

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# 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
- o Form C: Joint Venture/Consortium/Association Information Form
- Form D: Qualification Form
- o Form E: Format of Technical Bid
- Form F: Price Schedule/Bill of Quantities
- Form G: Form of Bid Security

Please be informed that this procurement process is being conducted through the online tendering system of UNDP. Bidders who wish to submit an offer must be registered in the system.

- Visit this page for system user guides and videos in different languages: <u>http://www.undp.org/content/undp/en/home/operations/procurement/business/procurement-</u> <u>notices/resources/</u>
- If already registered, go to <u>https://etendering.partneragencies.org</u> and sign in using your username and password.
- Use "Forgotten password" link if you do not remember your password. Do not create a new profile.
- If you have never registered in the system before, you can register by visiting the link below and follow the instructions in the user guide (attached): <u>https://etendering.partneragencies.org</u>
  - o Username: event.guest
  - Password: why2change
- It is strongly recommended to create a username with two parts: your first name and last name separated by a ".", (similar to the one shown above). Once registered you will receive a valid password to the registered email address which you can use for signing in and changing your password.
  - Please note that your new password should meet the following criteria:
    - Minimum 8 characters
    - o At least one UPPERCASE LETTER
    - o At least one lowercase letter
    - At least one number

You can view and download tender documents with the guest account as per the above username and password, However, if you are interested to participate, you must register in the system and subscribe to this tender to be notified when amendments are made.

**E-Mail and Hard Copy Submissions are not accepted. Bids shall be submitted through e-tendering <u>only</u>. However, <u>Original Bid Security shall be delivered to the below address within 7 days after bid submission</u> <u>deadline</u> indicated in e-tendering system, with a PDF copy submitted as part of the electronic submission.** 

Focal Point: Ömer Tugrul Zor, Procurement Specialist,

Oran Mahallesi, Mustafa Fehmi Gerçeker Sokak, No:12 06450 Çankaya/Ankara, Turkey

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 the eTendering System. Note that e-tendering system time zone is in **EST/EDT (New York)** time zone.

Please acknowledge receipt of this ITB by utilizing the "Accept Invitation" function in eTendering system. 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.

Sincerely;

UNDP Türkiye Country Office

## **SECTION 2. INSTRUCTION TO BIDDERS**

#### **A. GENERAL PROVISIONS**

1.	Introduction	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 <a href="https://popp.undp.org/SitePages/POPPBSUnit.aspx?TermID=254a9f96-b883-476a-8ef8-e81f93a2b38d">https://popp.undp.org/SitePages/POPPBSUnit.aspx?TermID=254a9f96-b883-476a-8ef8-e81f93a2b38d</a>
		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.
		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.
		1.4	As part of the bid, it is desired that the Bidder registers at the United Nations Global Marketplace (UNGM) website ( <u>www.ungm.org</u> ). 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.
2.	Fraud & Corruption, Gifts and Hospitality	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 <a href="http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_andinvestigation.html#anti">http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_andinvestigation.html#anti</a>
		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.
		2.3	In pursuance of this policy, UNDP:
			<ul><li>(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;</li><li>(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.</li></ul>
		2.4	All Bidders must adhere to the UN Supplier Code of Conduct, which may be found at <u>http://www.un.org/depts/ptd/pdf/conduct_english.pdf</u>
3.	Eligibility	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.
		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	<ul> <li>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:</li> <li>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;</li> <li>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</li> <li>c) Are found to be in conflict for any other reason, as may be established by, or at the discretion of UNDP.</li> <li>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.</li> </ul>
	4.3	Similarly, the Bidders must disclose in their Bid their knowledge of the following:
		<ul> <li>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</li> <li>b) All other circumstances that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices.</li> <li>Failure to disclose such information may result in the rejection of the Bid or Bids affected by the non-disclosure.</li> </ul>
	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 C	OF BID	S
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> <li>a) Documents Establishing the Eligibility and Qualifications of the Bidder;</li> <li>b) Technical Bid;</li> <li>c) Price Schedule;</li> <li>d) Bid Security, if required by BDS;</li> <li>e) Any attachments and/or appendices to the Bid.</li> </ul>
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.
	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.
	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.
	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:
	<ul> <li>a) If the Bidder withdraws its offer during the period of the Bid Validity specified in the BDS, or;</li> <li>b) In the event the successful Bidder fails: <ul> <li>i. to sign the Contract after UNDP has issued an award; or</li> <li>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.</li> </ul> </li> </ul>
13. Currencies	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 compariso	on
	of all Bids:	
	<ul> <li>a) UNDP will convert the currency quoted in the Bid into the UNDP preferre currency, in accordance with the prevailing UN operational rate of exchange on the last day of submission of Bids; and</li> </ul>	
	b) In the event that UNDP selects a Bid for award that is quoted in a current 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.	ne
14. Joint Venture, Consortium or Association	14.1 If the Bidder is a group of legal entities that will form or have formed a Joi Venture (JV), Consortium or Association for the Bid, they shall confirm in the Bid that : (i) they have designated one party to act as a lead entity, duly veste with authority to legally bind the members of the JV, Consortium or Association jointly and severally, which shall be evidenced by a duly notarized Agreeme 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.	eir ed on nt ed he
	14.2 After the Deadline for Submission of Bid, the lead entity identified to represe the JV, Consortium or Association shall not be altered without the prior writte consent of UNDP.	
	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 on Bid.	
	14.4 The description of the organization of the JV, Consortium or Association muclearly define the expected role of each of the entities in the joint venture delivering the requirements of the ITB, both in the Bid and the JV, Consortium or Association Agreement. All entities that comprise the JV, Consortium Association shall be subject to the eligibility and qualification assessment I UNDP.	in m or
	14.5 A JV, Consortium or Association in presenting its track record and experient should clearly differentiate between:	ce
	a) Those that were undertaken together by the JV, Consortium or Associatio and	n;
	b) Those that were undertaken by the individual entities of the JV, Consortiu or Association.	m
	14.6 Previous contracts completed by individual experts working privately but we are permanently or were temporarily associated with any of the member firm cannot be claimed as the experience of the JV, Consortium or Association those of its members, but should only be claimed by the individual exper themselves in their presentation of their individual credentials	ns or
	14.7 JV, Consortium or Associations are encouraged for high value, multi-sector requirements when the spectrum of expertise and resources required may n be available within one firm.	
15. Only One Bid	15.1 The Bidder (including the individual members of any Joint Venture) shall submonly one Bid, either in its own name or as part of a Joint Venture.	nit
	<ul><li>15.2 Bids submitted by two (2) or more Bidders shall all be rejected if they are four to have any of the following:</li><li>a) they have at least one controlling partner, director or shareholder common; or</li></ul>	

	<ul> <li>b) any one of them receive or have received any direct or indirect subsidy from the other/s; or</li> <li>c) they have the same legal representative for purposes of this ITB; or</li> <li>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;</li> <li>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.</li> </ul>
16. Bid Validity Period	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.
	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.
17. Extension of Bid Validity Period	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.
	17.2 If the Bidder agrees to extend the validity of its Bid, it shall be done without any change to the original Bid.
	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.
18. Clarification of Bid (from the Bidders)	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.
	18.2 UNDP will provide the responses to clarifications through the method specified in the BDS.
	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.
19. Amendment of Bids	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.
	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.
20. Alternative Bids	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.

	20.2	If multiple/alternative bids are being submitted, they must be clearly marked as "Main Bid" and "Alternative Bid"
21. Pre-Bid Conference	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.
C. SUBMISSION AN	D OPE	NING OF BIDS
22. Submission	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.
	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.
	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.
Hard copy (manual) submission	22.4	Hard copy (manual) submission by courier or hand delivery allowed or specified in the BDS shall be governed as follows:
		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.
		<ul> <li>(b) The Technical Bid and Price Schedule must be sealed and submitted together in an envelope, which_shall: <ol> <li>Bear the name of the Bidder;</li> <li>Be addressed to UNDP as specified in the BDS; and</li> <li>Bear a warning not to open before the time and date for Bid opening as specified in the BDS.</li> </ol> </li> </ul>
		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.
Email and eTendering	22.5	Electronic submission through email or eTendering, if allowed as specified in the BDS, shall be governed as follows:
submissions		a) Electronic files that form part of the Bid must be in accordance with the format and requirements indicated in BDS;
		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.
	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: <u>http://www.undp.org/content/undp/en/home/operations/procurement/busine</u> <u>ss/procurement-notices/resources/</u>

23. Deadline for Submission of Bids and Late Bids	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
	23.2	UNDP shall not consider any Bid that is received after the deadline for the submission of Bids.
24. Withdrawal, Substitution, and	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.
Modification of Bids	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"
	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.
	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.
25. Bid Opening	25.1 25.2 25.3	UNDP will open the Bid in the presence of an ad-hoc committee formed by UNDP of at least two (2) members. 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. In the case of e-Tendering submission, bidders will receive an automatic notification once the Bid is opened.
D. EVALUATION OF	BIDS	
26. Confidentiality	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.
	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.
27. Evaluation of Bids	27.1	UNDP will conduct the evaluation solely on the basis of the Bids received.
	27.2	<ul> <li>Evaluation of Bids shall be undertaken in the following steps:</li> <li>a) Preliminary Examination including Eligibility</li> <li>b) Arithmetical check and ranking of bidders who passed preliminary examination by price.</li> <li>c) Qualification assessment (if pre-qualification was not done)</li> <li>a) Evaluation of Technical Bids</li> <li>b) Evaluation of prices</li> </ul>

	Detailed evaluation will be focussed on the 3 - 5 lowest priced bids. Further higher priced bids shall be added for evaluation if necessary
28. Preliminary Examination	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.
29. Evaluation of Eligibility and Qualification	29.1 Eligibility and Qualification of the Bidder will be evaluated against the Minimum Eligibility/Qualification requirements specified in the Section 4 (Evaluation Criteria).
	<ul> <li>29.2 In general terms, vendors that meet the following criteria may be considered qualified:</li> <li>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;</li> <li>b) They have a good financial standing and have access to adequate financial resources to perform the contract and all existing commercial commitments,</li> <li>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;</li> <li>d) They are able to comply fully with the UNDP General Terms and Conditions of Contract;</li> <li>e) They do not have a consistent history of court/arbitral award decisions against the Bidder; and</li> <li>f) They have a record of timely and satisfactory performance with their clients.</li> </ul>
30. Evaluation of Technical Bid and prices	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.
31. Due diligence	<ul> <li>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:</li> <li>a) Verification of accuracy, correctness and authenticity of information provided by the Bidder;</li> <li>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;</li> <li>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;</li> <li>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;</li> <li>e) Physical inspection of the Bidder's offices, branches or other places where business transpires, with or without notice to the Bidder;</li> <li>f) Other means that UNDP may deem appropriate, at any stage within the selection process, prior to awarding the contract.</li> </ul>
32. Clarification of Bids	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.
	32.2 UNDP's request for clarification and the response shall be in writing and no

	32.3	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. 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.
33. Responsiveness of Bid	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.
	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.
34. Nonconformities, Reparable Errors and Omissions	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.
	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.
	34.3	For the bids that have passed the preliminary examination, UNDP shall check and correct arithmetical errors as follows:
		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.
	34.4	If the Bidder does not accept the correction of errors made by UNDP, its Bid shall be rejected.
E. AWARD OF CON	TRAC	r
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 14

		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 award letter, the successful Bidder shall sign the Contract. 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 <u>https://popp.undp.org/ layouts/15/WopiFrame.aspx?sourcedoc=/UNDP POPP</u> <u>DOCUMENT LIBRARY/Public/PSU Solicitation Performance%20Guarantee%20</u> <u>Form.docx&amp;action=default</u> 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=de fault
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 affected 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	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.
	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.
	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

# **SECTION 3. BID DATA SHEET**

The following data for the civil works 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	EnglishEnglish Please note that Turkish translations used in this ITB and in its Annexes are given only for information purposes. In case of an inconsistency between Turkish and English texts, the English version shall prevail.
2		Submitting Bids for Parts or sub- parts of the Schedule of Requirements (partial bids)	Shall not be considered
3	20	Alternative Bids	Shall not be considered
4	21	Pre-Bid conference, e-tendering guiding session and Site Visit	
5	16	Bid Validity Period	90 days starting from the bid submission deadline
6	12	Bid Security	<ul> <li>Required in the amount of TRY 360,000.00</li> <li>Acceptable Forms of Bid Security:</li> <li>Bank Guarantee (See Section 6; Form G for template)</li> <li>Bid Securities will be returned to all bidders upon signature of contract with the successful Bidder. Bid Security shall be valid up to 30 days after the final date of validity of bids. (i.e. 120 days after bid submission deadline)</li> <li>Bid Security shall be in English as per the template</li> <li>Currency of the Bid Security shall be in TRY as per the amount indicated above. For bidders who are registered in a country other than Turkey, the Bid Security may be submitted in USD or EUR. The Bid Security amount must at least be the equivalent of the TRY amount defined above, as per the United Nations Operational Rate of Exchange applicable on the bid submission deadline.</li> <li>No change shall be made to the template except for fields indicated in the template</li> </ul>
			tendering submission. Additionally, original Bid Security shall be delivered to the below address within 7 days after bid submission deadline.

			Focal Point: Ömer Tugrul Zor, Procurement Specialist Oran Mahallesi, Mustafa Fehmi Gerçeker Sokak, No:12 06450 Çankaya/Ankara, Turkey	
7	42	Advanced Payment upon signing of contract	Allowed up to a maximum of 20 % of contract value The Contractor will be requested to submit addition performance guarantee for the amount of advance payment amount in order to claim for the advance payment. https://popp.undp.org/ layouts/15/WopiFrame.aspx?source doc=/UNDP POPP DOCUMENT LIBRARY/Public/PSU Contract%20Management%20Payment%20and%20Taxes Advance ed%20Payment%20Guarantee%20Form.docx&action=defailt	
8	43	Liquidated Damages	<ul> <li>Will be imposed as follows:</li> <li>Percentage of contract price per week (7 calendar days) of delay beyond 150 days after site delivery by UNDP: 2%</li> <li>Max. number of weeks (7 calendar days) of delay is 5, after which UNDP may terminate the contract.</li> </ul>	
9	41	Performance Security	<ul> <li>Required in the amount of 10% of the total contract amount</li> <li>Note: Performance Security will be a condition for signing the contract. Contract will be signed after receipt of performance security from the successful bidder.</li> <li>Performance security must be provided no later than 15 days after the bidder receives the award letter from UNDP. If the selected bidder fails to provide the security within this period, UNDP reserves the right to sign the contract with "Second lowest priced technically compliant bidder".</li> <li>The Performance Security must be issued by an accredited bank, in the format included in Appendix I to UNDP General Conditions of Contract for Civil Works and must be valid up to twenty-eight days after issuance of the Certificate of Final Completion. The Performance Security will only be released upon the issuance of Certificate of Final Completion in accordance with the Clause 10 of the UNDP General Conditions of Contract for Civil Works.</li> </ul>	
10	13	Currency of Bid	United States DollarUnited States Dollar	
11	32	Deadline for submitting requests for clarifications/ questions	5 days before the submission deadline	
12	32	Contact Details for submitting clarifications/questions	Focal Person in UNDP: Ömer Tugrul Zor Address: Oran Mahallesi, Mustafa Fehmi Gerçeker Sokak, No:12 06450 Çankaya/Ankara, Turkey E-mail address: <u>tr.procurement@undp.org</u>	
13	18, 19 and 21	Manner of Disseminating Supplemental Information to the ITB and responses/clarifications to queries	Posted directly to eTenderingPosted directly to eTendering and published on the following websites: <a href="https://www.undp.org">www.undp.org</a> <a href="https://www.ungm.org">www.ungm.org</a>	

			www.devbusiness.com https://www.tr.undp.org
14	23	Deadline for Submission of Bids	August 26, 2022, 10:00 A.M. (EST/EDT New York Time) as indicated in the e-tendering System.
			Note that system time zone is in EST/EDT (New York) time zone
15	22	Allowable Manner of Submitting Bids	E-Tendering only
			Any submission by other means such as e-mail or hard copy will be rejected.
			EVENT ID: ITB-22-94
			This procurement process is being conducted through the online tendering system of UNDP. Bidders who wish to submit an offer must be registered in the system.
			Visit this page for system user guides and videos in different languages:
			http://www.undp.org/content/undp/en/home/operations/procur ement/business/procurement-notices/resources/
			If already registered, go to <u>https://etendering.partneragencies.org</u> and sign in using your username and password.
			Use "Forgotten password" link if you do not remember your password. Do not create a new profile.
			If you have never registered in the system before, you can register by visiting the link below and follow the instructions in the user guide (attached):
			https://etendering.partneragencies.org •Username: event.guest •Password: why2change
			It is strongly recommended to create a username with two parts: your first name and last name separated by a ".", (similar to the one shown above). Once registered you will receive a valid password to the registered email address which you can use for signing in and changing your password.
			<ul> <li>Please note that your new password should meet the following criteria:</li> <li>Minimum 8 characters</li> <li>At least one UPPERCASE LETTER</li> <li>At least one lowercase letter</li> <li>At least one number</li> </ul>
			You can view and download tender documents with the guest account as per the above username and password, However, if you are interested to participate, you must register in the system and subscribe to this tender to be notified when amendments are made.

16	22	Bid Submission Address	<ul> <li>Bids shall be submitted through e-tendering. However, documents which are required in original bid security shall be delivered to the below address within 7 days after bid submission deadline indicated in e-tendering system with a PDF copy submitted as part of the electronic submission.</li> <li><i>Focal Point: Ömer Tugrul Zor</i> <i>Oran Mahallesi, Mustafa Fehmi Gerçeker Sokak, No:12 06450</i> <i>Çankaya/Ankara, Turkey</i></li> <li>Although bids shall be submitted through e-tendering, UNDP reserves the right to request original copies of the documents submitted as part of the bids during evaluation period, if required.</li> <li>Link to e-tendering System: https://etendering.partneragencies.org</li> <li>EVENT ID: ITB-22-94</li> </ul>
17	22	Electronic submission (eTendering) requirements	<ul> <li>File names must be maximum 60 characters long and must not contain any letter or special/Turkish character other than from Latin alphabet/keyboard.</li> <li>All files must be free of viruses and not corrupted.</li> <li>Max. File Size per transmission: 45MB</li> </ul>
18	25	Date, time and venue for the opening of bid	No Public Opening will be conducted. Bidders will receive notification through e-tendering when bids are opened.
19	27 - 36	Evaluation Method for the Award of Contract	Lowest priced technically responsive, eligible and qualified bid.
20		Expected date for commencement of Contract	September 2022
21		Maximum expected duration of contract	<ul><li>150 calendar days, starting from the date on which the Contractor is given access to the Site and receive a notice from the UNDP Engineer to commence the Works and ending on the date of substantial completion of Works stated in the Certificate of Substantial Completion.</li><li>As stated in the General Conditions of Contract for Civil Works, clause 47.1; "Defects Liability Period" is 12 months calculated from the date of completion of the Works stated in the Certificate of Substantial Completion of the Works stated in the Certificate from the date of completion issued by the UNDP Engineer.</li></ul>
22	35	UNDP will award the contract to:	One Bidder Only
23	40	Type of Contract	Contract for Civil WorkContract for Civil Work http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
24	40	UNDP Contract Terms and Conditions that will apply	UNDP General Terms and Conditions for WorksUNDP General Terms and Conditions for Works <u>http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</u>

25	44	Payment Provisions	<ul> <li>Pricing Structure;</li> <li>The contract is based on unit price, and the final price of the Contract will be determined on the basis of actual quantities of work and materials utilized in the complete and satisfactory performance of the Works as certified by the Engineer and the unit prices contained in the Contractor's financial proposal. Such unit prices are fixed and are not subject to any variation whatsoever.</li> <li>Unless the technical specifications or the Bill of Quantities specifically and expressly state otherwise, only permanent works are to be measured and paid for by UNDP.</li> <li>Advance payment of up to a maximum of 20 % of contract value is allowed following contract signature. However, the Contractor will be requested to submit additional performance guarantee for the amount of advance payment amount in order to claim for the advance payment.</li> <li>Payment Terms;</li> <li>The Contractor shall submit monthly invoices (reflecting the monthly work performed and materials utilized every month as accepted by UNDP through the "Monthly Progress Reports") and a final invoice within 30 days from the issuance of the Certificate of Substantial Completion by the Engineer.</li> <li>UNDP shall affect payment of the invoices after receipt of the certificate of payment issued by the Engineer may make corrections to that amount, in which case UNDP may affect payment for the corrected amount. The Engineer may also withhold invoices if the work is not performed at any time in accordance with the terms of the Contract or if the necessary insurance policies or performance security are not valid and/or in order. The Engineer shall process the invoices submitted by the Engineer within 15 days of their receipt.</li> </ul>
26		Currency of Payment	If the Contractor is registered and operating in Turkey, the payment shall be realized in Turkish Liras (TRY). Payment amount will be converted from United States Dollar (USD) to Turkish Liras (TRY) by the UN operational rate of exchange valid on the date of money transfer. Otherwise, the payments shall be affected in United States Dollar. UN Operational Exchange rates can be accessed through https://treasury.un.org/operationalrates/OperationalRates.php

27		Taxation	UN and its subsidiary organs are exempt from all taxes. Therefore, bidders shall prepare their Bids excluding Value Added Tax (VAT). It is the Bidder's responsibility to learn from relevant authorities (Ministry of Finance) and/or to review/confirm publish.ed procedures and to consult with a certified financial consultant as needed to confirm the scope and procedures of VAT exemption application as per VAT Law, Ministry of Finance's General Communiqués. The Contractor to be selected shall not be entitled to receive any amount over its Bid price in relation to VAT, Special Consumption Tax and any other applicable taxes.
28	14	Joint Venture, Consortium or Association	Not Allowed
29		Covid-19 Specific Measures	The Bidders shall review all local regulations, as well as that of UN and UNDP concerning the measures, they must take during performance of the contract in the context of COVID-19, before they submit their bids and factor relevant costs, if any, to their bids.
			The Contractor shall take all measures against COVID-19 imposed by local regulations as well as by UN and UNDP during performance of the contract to protect health and social rights of its own personnel, as well as UNDP personnel, Project Stakeholders and third parties.
			Pursuant to "Clause 12- Indemnification" of UNDP General Terms and Conditions for Contracts (given in Clause Number 24 of Bid Data Sheet), the Contractor shall indemnify, defend, and hold and save harmless, UNDP, and its officials, agents and employees, from and against all suits, proceedings, claims, demands, losses and liability of any kind or nature brought by any third party against UNDP, including, but not limited to, all litigation costs and expenses, attorney's fees, settlement payments and damages, based on, arising from, or relating to COVID-19 measures that must be taken by the Contractor in the context of the contract. UNDP shall not be held accountable for any Covid-19 related health risks or events that are caused by negligence of the Contractor and/or any other third party.
30		Contingency and variations	The contingency allowance to manage variations for the unforeseen and unknown additional components of Works within the overall general scope is maximum 15% of the contract price. However, it shall only be accessed by the Contractor upon the approval by the UNDP Engineer, who will obtain prior approval from UNDP as the Employer.
			The project engineer (employer's representative) may use this contingency with no additional procurement process to manage variations with the approval of UNDP. Any variation that utilizes the contingency but is not covered by rates in the BOQ or schedule of rates shall be subject to a value for money analysis by the Engineer and UNDP.
			The contingency allowance shall not be used to compensate the Contractor for its fault to include required items in the Bill of

		Quantities as per Schedule of Requirements/Technical Specifications or unreasonably low unit prices of one or more of the items included in the submitted Bill of Quantities.
31	Other Information	<ol> <li>Women owned, and managed businesses are especially encouraged to apply to this ITB.</li> <li>The documents that will be attached to Form B: Bidder Information Form (such as Certificate of Incorporation/Business Registration and Power of Attorney) can be submitted in local languages in the case that they are provided only in the local language by issuing authorities. In that case, the English translations of these documents shall be submitted by Bidders along with original documents in the local language. UNDP reserves the right to request notarized versions of these translations any time during the evaluation.</li> </ol>

## **SECTION 4. EVALUATION CRITERIA**

#### **Preliminary Examination Criteria**

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

- Appropriate signatures
- Power of Attorney
- Minimum Bid documents provided
- Bid Validity
- Bid Security 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.

Subject	Criteria	Document Submission requirement
ELIGIBILITY		
Legal Status	Vendor is a legally registered entity established in or before August 2019.	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> <li>Official appointment as local representative, if Bidder is submitting a Bid on behalf of an entity located outside the country</li> <li>Certificate of Incorporation/ Business Registration</li> <li>Trade name registration papers, if applicable</li> <li>Signature Circular/Power of Attorney demonstrating authorization of the individual signing the Bid documents.</li> </ul>	Form B: Bidder Information Form
QUALIFICATION		
History of Non- Performing Contracts <sup>1</sup>	Non-performance of a contract did not occur as a result of contractor default for the last 3 years.	Form D: Qualification Form

<sup>&</sup>lt;sup>1</sup> 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.

Litigation History	No consistent history of court/arbitral award decisions against the Bidder for the last 3 years.	Form D: Qualification Form
Previous Experience	Minimum 3 (three) years of experience in the construction field.	Form D: Qualification Form
	The Bidder must have successfully completed, <b>as the prime contractor</b> , minimum one contract for construction of any kind of building and/or Steel superstructure, at a minimum value of USD 500,000, over the last five years*.	Form D: Qualification Form
	<b>Note:</b> <u>Renovation</u> , <u>rehabilitation</u> and <u>restoration works</u> will not be considered as similar experience. Graduation Diploma will not be exepted as Previous Experience.	
	* The reference period which will be taken into account will be the last 5 years from submission deadline. The start and end/completion dates of the references should be specified as day/month/year.	
	Bidders shall submit Statements of Satisfactory Performance officially issued by their previous employers (i.e. Reference Letters, Work Completion Certificates) along with their bids.	
	For bidders submitting previous experience certificates in currencies other than USD, the value will be calculated by considering the UNORE applicable on 31 December of the respective year.	
Financial Standing	Minimum average annual turnover of USD 500,000 for the last 3 years. (2019, 2020, 2021)	Form D: Qualification Form
	For bidders with financial statements in currencies other than USD, the value will be calculated by considering the UNORE applicable on 31 December of the respective year.	
	Bidder must demonstrate the current soundness of its financial standing and indicate its prospective long-term profitability by submitting its "audited financial statement" and "declaration of its financial status" along with the bid.	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
	Price comparison shall be based on the total estimated price for all the quantities set out in the Bill of Quantities.	

# SECTION 5A: SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS

Please be informed that that Turkish version of the specifications is given for reference purpose only. In case of an inconsistency between Turkish and English versions, English version shall prevail.

#### TECHNICAL SPECIFICATIONS FOR THE CONSTRUCTION OF MARKETPLACE FOR VILLAGERS IN BAHÇE DISTRICT OSMANİYE PROVINCE

#### **1. EXPLANATION OF THE WORK**

#### 1.1. BACKGROUND

Uplands Rural Development Project has been implemented by the Republic of Turkey Ministry of Agriculture and Forestry since 2018 with the technical support of the United Nations Development Program. It is carried out with the financial agreement signed between the International Fund for Agricultural Development (IFAD) and the Republic of Turkey.

In the first phase, the Program will be implemented in six provinces and two regions, namely Eastern Mediterranean (Adana, Mersin, Osmaniye) and Western Black Sea (Bartın, Kastamonu, and Sinop), covering 35 districts and targeting 30,000 households. In the second phase, the program will assess the feasibility of including two more provinces: Kahramanmaraş (Eastern Mediterranean) and Çankırı (Western Black Sea), reaching a total of 30,000 more households. The program is implemented by the General Directorate of Agricultural Reform (GDAR) under the Republic of Turkey - Ministry of Agriculture and Forestry and the Central Program Management Unit is settled within this unit and the regional program coordination units (RPMUs) are located in Adana and Kastamonu and there is a provincial support team in each of the initial six provinces, all of which are under the Provincial Directorates of Agriculture and Forestry.

Within the scope of the Public Economic Infrastructure Investment activities of the project, the construction of the covered village market, which is planned to be established in the Bahçe district of Osmaniye province, will be carried out.

#### 1.2. ABBREVIATIONS

URDP	: Uplands Rural Development Project,
ADMINISTRATION-	: United Nations Development Program (UNDP),
IFAD	: International Fund for Agriculture Development,
ENGINEER	: Technical personnel representing the Administration,
CONTRACTOR	: The tenderer on whom the contract has been signed.

#### **1.3. DESCRIPTION OF WORK**

It is the construction work of the Covered Village Market Place to be built in Osmaniye province, Bahçe district, Karşıyaka Neighbourhood, block 322, parcels 40-42-44 and 48, within the scope of URDP.

#### 1.4. SCOPE OF THE WORK

- Excavation and filling works of all structures designed according to the excavation plan,
- Construction of the Marketplace, which includes structural, architectural, mechanical and electrical works detailed with drawings and technical specifications,
- Preparation of As-Built drawings at the end of the work, submission of material test reports,
- Completion of temporary acceptance deficiencies, completion of all repair, correction and reconstruction works that arise after the provisional acceptance until the final acceptance date and deemed necessary by the Engineer.
- Obtaining the necessary permits, documents and licenses for construction work.

#### 1.5. GENERAL PRINCIPLES

It shall be deemed that the Contractor, prior to submitting the bid and signing the contract, has visited the site and its surroundings, have knowledge of the land and sub-soil structure, the form and nature of the site, the details and levels of existing pipelines and other existing structures, the quantities and types of work and materials required to complete the work, access roads to the site and all aspects of shelter that may be required, that also he/she has obtained all necessary information on other circumstances that may affect its offer, and he/she shall not make any claims against the Administration regarding these matters.

The contractor will carry out studies related to level controls, road-structure level status, building settlements, site slopes, infrastructure connection levels within 7 working days from the site delivery, and in case of any discrepancy between the project and the site, it will share it with the Administration during this period.

During the execution of the relevant stages of the works, the Contractor shall prepare the shop drawings and the finished manufacturing drawings (As-Built) for the approval of the Engineer. The Engineer may request revisions and/or additional works to be designed by the Contractor, changes or new design studies shall be carried out in accordance with the provisions of the Technical Specification and subject to the approval of the Engineer.

The Contractor shall be responsible for the actual and proper commencement of the Works with regard to the original points, lines and reference levels given in writing by the Engineer, and for the correctness of the location, levels, dimensions and alignment of all parts of the Works and the provision of all necessary instruments, assemblies and manpower thereon. In the event that any error with respect to the location, levels, dimensions and alignment of any part of the Works occurs at any time during the performance of the Works, the Contractor shall, upon request by the Employer, correct such defect to the Engineer's satisfaction, at its own cost.

The Contractor shall be obliged to take all necessary health and safety measures in accordance with the relevant legislation until the works are taken over by the Employer.

The Contractor shall carry out all the productions to be implemented under the Contract as detailed in the Technical Specifications and drawings.

The Contractor shall check all the dimensions given in the drawings on site, prepare the manufacturing projects accordingly, and obtain the Engineer's approval before installation/assembly for all materials/manufacturing before starting the construction.

The Engineer reserves the right to object to any person assigned by the Contractor who is incompetent, negligent in the performance of his/her duties, or whose employment is found reasonably inappropriate by the Engineer, and to request that such person be removed from work under the Contract. Any person dismissed from the works in this way shall not be re-employed at the site without the written consent of the Engineer. All costs and expenses related to the withdrawal of personnel shall be under the responsibility of the Contractor.

The Engineer has the right to give instructions to the Contractor through "Change Orders" to make changes in the quantity and quality of all or part of the works, when necessary during the continuation of the work.

Within the scope of the Agreement, Change Orders may involve;

- Exclusion of a job out of scope,
- Changing the nature or quality or type of work,
- Changing the levels, lines, positions and dimensions of any part of the works,
- Performing any type of additional work necessary to complete the work.

Such changes shall not break or invalidate the Agreement. The cost comparison to occur due to the change orders shall be prepared by the Contractor immediately and shared with the Engineer, and the transactions shall be started after the approval.

Transportation costs are included in the offered unit prices. No additional payment shall be made for transportation costs (transports to be made for material supply and horizontal or vertical transportation within the facility) and transportation difficulties for any manufacturing within the scope of the contract.

The amounts specified in the Contract regarding the works to be performed are estimates. Quantities may vary due to the nature of the business. The amounts subject to payment shall be determined by measuring the actual amounts of the works carried out.

The unit prices to be offered shall include any temporary work or facility that may be required for the construction of the works specified in the item descriptions as well as transportation, costs and expenses, risks, insurances, liabilities, material workmanship and equipment costs. It shall be assumed that all expenses are equally distributed in the unit prices offered by the contractor.

#### 1.6. STANDARDS

In the design, implementation, testing, acceptance and operation of all works within the scope of the tender, the Contractor shall comply with the latest updated versions of the following standards in order of priority. In cases where there is no definition in the following standards, the latest updated editions of other national and international standards shall be allowed to be used, provided that the Engineer agrees.

- Turkish Standards (TS),
- European Norm (EN),
- International Standards Organization (ISO).

The Contractor shall carry out and complete the construction works covered by the Contract in full compliance with the latest relevant versions of the below mentioned specifications;

- Republic of Turkey Ministry of Environment and Urbanization "General Technical Specifications for Civil Works, Construction Works, Mechanical Works and Electrical Works".
- Republic of Turkey General Directorate of Highways "Highways Technical Specifications".
- The Bank of Provinces Technical Specifications,
- Technical Specifications of the Ministry of National Defence,
- TEDAŞ Technical Specifications,
- DSI Technical Specifications etc.

#### **1.7. ARRANGEMENT OF THE SITE**

The ground levels of the construction site shall not be altered without the Engineer's permission and no infrastructure, structures or trees shall be removed or permanent structures constructed without the Engineer's prior approval.

With the Engineer's approval, the Contractor may construct temporary parking areas, loading and unloading areas, open storage areas, approach and interior roads, temporary facilities to facilitate the construction layout and methodology of the Works.

It shall be under the Contractor's responsibility to provide all usage needs on site such as electricity, water, internet etc. required during the execution of the works.

Subscription application to the relevant authorities for the provision of facility connections shall be under the responsibility of the Contractor. All costs of consumption on site shall be borne by the Contractor.

Any temporary fence used by the contractor to protect works shall be fit for its duty to keep the public out of danger and protect workers.

As soon as the Contractor owns the relevant part of the Site, he/she shall install the said fences and take the relevant security measures.

The Contractor shall regularly inspect and maintain all such fences and any defects shall be corrected without delay.

Access to temporary site fences shall be provided as needed for use by residents of adjacent properties.

The Contractor shall provide offices, dining halls and accommodation for its own personnel, subcontractors, and furnish and maintain these places.

The contractor shall supply water for the construction work. It is the Contractor's responsibility to provide all necessary backup, maintenance and repair works for the uninterrupted supply of water sufficient for the construction of the works.

The Contractor shall clean the construction site in a way that maintains it in a hygienic condition when necessary and shall comply with the relevant law and the instructions of the Engineer.

The Contractor shall set up a temporary WC at the construction site to meet the needs of the working personnel. Sewerage outlets shall be connected to the sewerage network to the extent possible. If this is not possible, connection shall be made to septic tanks built in accordance with national specifications. Septic tanks shall be emptied at appropriate intervals.

The Contractor, at his/her own cost, shall erect and maintain 2 signboards (1.25 m x 2.25 m), the location and content information of which shall be communicated by the Engineer. The design of the sign shall be made in accordance with the approval of the Engineer.

Ownership of all structures, materials, tools, equipment and tools supplied and installed by the Contractor for the performance of the Work belongs to the Contractor.

Temporary facilities shall be removed, and their places shall be cleaned in a time and method to be determined by the Engineer after temporary acceptance. Temporarily removed fences, billboards, etc. if any, shall be reinstated.

#### 1.8. PROTECTION OF EXISTING FACILITIES AND BUILDINGS

The contractor shall be fully responsible for the protection of all public or private buildings, structures and roads in the construction site, whether shown in the drawings or not. Any damage caused by the contractor's activities shall be repaired at his/her own expense.

The Contractor shall take all necessary measures to avoid damage to roads, lands, properties, trees and other structures, and shall promptly deal with complaints from owners during the Contract.

If any damage is found, the Contractor shall promptly notify the Employer and the Legal Contractor, the Municipality or the relevant owner of the situation and the Contractor shall provide every means for repair or replacement of the affected part.

The Contractor shall adequately protect the buildings affected by the works from damage and theft.

All electrical installations shall comply with relevant national regulations and be safe for the Contractor and the public. In cases where daylight is insufficient, the site shall be illuminated.

Before starting the works, pre-construction photographs shall be taken near the existing structures.

#### 1.9. KEY TECHNICAL STAFF

In accordance with the Work Program, the Contractor shall employ the following key personnel with the following qualifications at the site.

**Project Manager:** Civil engineer who has at least 10 years of experience in the construction of superstructures/buildings. The Project Manager/Construction Manager shall be on site full time from the date the Engineer gives Site Access to the Contractor until the provisional acceptance date.

**Electrical Engineer:** Electrical engineer with at least 3 years of experience in the construction of superstructures/buildings.

**Mechanical Engineer:** Mechanical engineer with at least 3 years of experience in the construction of superstructures/buildings.

**Survey Engineer / Surveyor:** A Survey Engineer (or equivalent) with at least 3 years of experience in the construction of superstructures/buildings or a Survey Technician with at least 5 years of experience in the construction of superstructures/buildings

#### 1.10. MACHINE- EQUIPMENT

The Contractor shall keep at least following machinery-equipment in the site in accordance with the Work Program. The engineer reserves the right to increase the specified amounts for the timely completion of the works.

Machinery - Equipment	Minimum Specifications	Minimum Quantity
Excavator	90 hp	1
Truck	15 tons	2
Compressor	180 hp	1
Generator	250 kVA	1
Crane	40 tons	1
Cylinder	n/a	1
Loader	n/a	1
Grader	n/a	1
Concrete Vibrator	n/a	4
Mould	Plywood	500 m <sup>2</sup>
Scaffolding	Steel	250 m3
Water tank	10 tons	1
Lighting	n/a	4
Topographical Instrument-Equipment	-	2

The materials and equipment within the scope of the work shall comply with the conditions specified in the Technical Specification. Materials and equipment that are recommended for use by the Contractor but not specified shall only be included in the works after their equivalence with the

Technical Specification is verified and approved by the Engineer. In case of any material or equipment that is planned to be replaced by the Contractor in place of those specified in the technical conditions, the Engineer's approval shall be obtained.

The Contractor shall, at his/her own expense, establish suitable and sufficient open and closed storage areas for the storage of materials and equipment at the construction site. The contractor is obliged to take all necessary protective measures against damage, pollution, weather conditions and theft.

All materials and equipment shall be packed in such a way that they are protected against damage during entry and exit from the warehouse and transportation to the workplace.

Materials and equipment shall be loaded into vehicles in accordance with international transportation rules. During transportation, all necessary additional precautions shall be taken and adequate transportation insurance shall be provided at the Contractor's sole responsibility and expense.

All applications, measurement processes and equipment required for the construction of the works, protection of the site environment, are under the responsibility of the Contractor at his/her own expense.

#### 1.11. APPLICATION WORKS

The Contractor shall prepare the application drawings showing the layout of the structures at the construction site based on the reference points and levels given in the drawings and submit them to the Engineer's approval. The correctness of the arrangement shall be the sole responsibility of the Contractor.

For application and measurement processes; the contractor:

- Shall employ qualified and experienced land surveyors,
- Shall use modern type and quality topography devices suitable for the job.

#### **1.12. ENGINEER'S OFFICE**

Before starting the contract, the Contractor shall procure and install a room of at least 10 m2 on site for the exclusive use of the Engineer at a location agreed with the Engineer. This office shall be provided during the entire construction period.

The toiletry shall have hot and coldwater system and a WC with a siphon connected to the existing sewer. The Contractor shall be responsible for the safety of all equipment inside the Engineer's office during the contract period.

The Contractor shall maintain, illuminate, heat/cool and clean the office for the duration of the contract. The contractor shall be responsible for the insurance of the workplace for the duration of the contract. The Contractor shall insure the office and the content provided by it against fire, theft and other risks for the duration of the Contract.

	Material	Quantity
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Work desk	1
Executive Chair	2
Guest Chair	5
Whiteboard	1

Electricity, water supply and maintenance expenses of this office shall be borne by the Contractor until the Works are complete.

The Contractor shall ensure that all equipment is kept in good condition and shall repair or replace any equipment that has become out of service, as directed by the Engineer.

#### 1.13. COORDINATION

The Contractor is responsible for providing all necessary coordination for the execution of the work in accordance with the quality, cost and timing targets set by the Employer at the beginning of the work.

The Contractor shall prepare a Critical Path Method (CPM) worksheet, review the worksheet against the project timeframe, check the integrity of the worksheets between infrastructure, superstructure construction, electrical and mechanical works, combine the worksheets and submit to the Engineer for approval.

The contractor is obliged to provide administrative and technical coordination with the employer, Engineer and other parties that may directly affect the works and the following parties that may have an indirect effect:

- Relevant official institutions and organizations,
- Other authorized persons, institutions and organizations.

# 1.14. MATERIAL AND EQUIPMENT INSPECTION AND INSPECTION, CERTIFICATION AND APPROVAL

In case the engineer requests, it reserves the right to visit the contractor's project offices, factories and subcontractors' factories in order to observe the project design and production works for the technical control and inspection of materials and equipment.

As a result of the control and counting of the material, the materials that are found not to comply with the quality specified in the specification, to be defective, missing or incorrectly sent, shall be exchanged and delivered within 14 days at the Contractor's expense (this period is mutually determined when special manufacturing is required). Otherwise, the Employer shall procure them on behalf of the Contractor and collect all expenses from the receivables from the Employer or the performance bond.

The Contractor shall obtain all relevant approvals and certificates from the local Authorities regarding the construction and operation of the Facilities on site.

It is the Contractor's responsibility to pay the permit, license (including construction license) and approval fees required by Turkish laws/regulations and determined by the relevant local authorities.

#### 1.15. AS-BUILT DRAWINGS, USER AND MAINTENANCE MANUALS

The "As-Built" project to be prepared by the contractor shall also include the operation and maintenance manuals of the facility.

5 (five) complete draft print sets of "As-Built" drawings showing all the works as they are done shall be submitted to the Engineer for approval within one month following the provisional acceptance of the work.

The Contractor shall record all necessary information to prepare "As-Built" drawings during the execution of the Works at the site. Properly specified drawings and other documents covering permanent works completed shall be submitted to the Engineer prior to progress payment during construction.

These drawings covering permanent works shall be kept up to date and submitted to the Engineer's approval after the works are completed.

The Contractor shall submit the "As-Built Drawings" together with the complete set of instructions and manuals of the installed plant to the Engineer for approval to facilitate operation and maintenance. Documentation shall include, but is not limited to:

- Layout drawings,
- Schematic wiring diagrams,
- Special operating instructions
- Special maintenance instructions,
- Detailed record of all kinds of tests,
- Delivery of all materials finished drawings, all warranties and certificates used in the contract, depending on the contract, by the Contractor before final progress payment is made.

All information in these manuals shall apply specifically to the equipment supplied and shall be free from irrelevant matters that may appear in the manufacturer's general literature.

As-Built documents shall include all architectural and engineering disciplines, including architectural/structural, electrical and mechanical drawings, and operation and maintenance manuals. Except for the As-Built drawings, the final version of each document in two hard copy and one electronic (Microsoft Word, Excel, etc.) copy, including the Engineer's comments and information including all changes/revisions made during construction, shall be submitted. Usage and maintenance manuals shall be presented in Turkish.

All documents except drawings shall be in A4 size. Drawings shall be on international A-size pages and shall be marked "AS-BUILT".

#### 1.16. FINAL BENEFICIARY

The Contractor shall coordinate with the District Municipality, which is the final beneficiary. If deemed necessary by the employer, representatives of the final beneficiary may attend the meetings, material tests, acceptance and inspection of materials and equipment, etc.

The representatives of the final beneficiary have the right to access the site to monitor the progress of the work, the compliance of the work with the contractual requirements. The Contractor shall provide representatives with access to the site at any time requested. However, representatives have no legal authority in terms of contract terms and conditions.

#### 2. PROJECT DOCUMENTS

#### 2.1. PROJECT MANAGEMENT

#### 2.1.1. Project Management Responsibility

The Contractor shall be responsible for the management, execution, monitoring and coordination of the entire project to meet all the requirements set out in the Contract and Technical Specification.

The Contractor shall carry out the planning in collaboration with the Employer's designated representatives to ensure the visibility of the progress of the project and the timely completion of the works.

#### 2.1.2. General Conditions

The Contractor shall establish a project organization with the necessary resources, qualifications and experience to fulfil all its obligations, in accordance with the requirements contained herein.

The contractor shall clearly define the duties, responsibilities and authorities of each role within the organization, at least at the management level.

The contractor shall define the organizational interfaces for any subcontractors and suppliers to be found within or outside the project organization. Such interfaces shall provide a clear reference between the level of project management within the Contractor and subcontractor/Supplier organizations.

The Contractor shall appoint key staff members and they shall remain unchanged by the Contractor for the entire project for the longest period of time possible.

Any subsequent changes in such assignments shall be notified to the Engineer and approved by the Engineer and shall be consulted with the Contractor for the Engineer to evaluate the reasons and possible impact of such change.

Unless within the Contractor's mandate, the Contractor shall ensure that existing personnel remain until suitable and acceptable substitutes are found.

#### 2.1.3. Work Schedule

The work program to be submitted within 1 week following the signing of the contract shall include at least the following:

- Suggested office location on site, stations (steel/concrete structures), warehouses, accommodation etc. (sketches shall be added as needed).
- A brief outline of the construction method of how things will be run so that the work can be completed in the relevant time,
- A critical milestone bar chart (Gantt chart) representing the construction schedule and detailing related activities, dates, allocation of workforce and facility resources, etc.

If the bidder plans to subcontract some of the works, he/she must provide the following details:

- Details of the work to be assigned to the subcontractor,
- Name and details of subcontractors,
- Personnel lists of subcontractors,
- Subcontracting value,
- Similar work experience documents of the subcontractor.

#### 2.1.4. Project Manager's Responsibilities

The contractor shall define a project management team and appoint a Project Manager responsible for the entire project.

The Contractor shall empower the Project Manager to make decisions regarding all aspects of the day-to-day management of the project.

Any restrictions on the Project Manager's rights in this regard must be clearly identified and defined. Possible restrictions must not impose management difficulties on the project.

All formal communication between the Engineer/Employer and the Contractor shall be through the Contractor's Project Manager.

#### 2.1.5. Engineer's Involvement

For the execution of this project, the Engineer reserves the right to receive assistance from other institutions in technical, operational and contractual matters.

The Contractor shall establish a close coordination with the Engineer for the development of the planning activities of all applications related to the project, and submit the documents such as the relevant plans, procedures, etc., for review and approval before putting this plan or procedures into effect.

The duties and responsibilities of the engineer are defined in the UNDP Civil Works Contract General Conditions.

#### 2.1.6. Project Plans

The Contractor shall prepare the following Project plans which will be reviewed and approved by the Engineer:

- Quality Control and Quality Assurance Plan,
- Safety Management Plan,
- Method Statement,

The Contractor shall prepare method statements (Method Statements) for each activity, and shall start the approved field activities (excavation, filling etc.) after the method statements are approved by the Engineer. Quality Control and Quality Assurance Plan and Safety Management Plan shall be prepared before the first progress payment and submitted to the Engineer for approval.

# 2.1.7. Reports and Reporting

The Contractor shall ensure that the Engineer and the Employer are aware of the status of all areas within the project and that the Engineer has complete and detailed information about the project as a whole.

Daily site reports shall be prepared and shared daily in the format to be shared by the Engineer, including photographs showing the productions made during the day.

The contractor shall provide the Engineer with progress reports describing, but not limited to, achievements, problems, risks and including updated schedules, cost/program control reports, status of contract change proposals, and other data necessary for efficient management.

Contractor shall accept Employer's due dates for submission of Monthly Progress Reports. These reports shall normally be submitted no later than 7 business days after the completion of each month.

These reports shall provide information on the steps recommended by the Contractor to address such issues on any matter that may prevent the timely performance of any part and/or the entire Agreement. The progress report shall have the following content as a minimum:

- Project progress,
- Project management overview: Explains the significant results achieved, the problems that occurred and the corrective actions taken or planned to solve the problems.
- Technical condition: Describes the detailed status, including requirements definition status, design and development progress, issues encountered, corrective actions taken, and a summary of pending and approved change items over the period.
- Quality tracking: Explain the activities of the quality assurance program.
- Project calendars: It shows completed activities (e.g. milestones and deliveries), status of ongoing activities, program changes (if any). This section also defines planning for the next month with an assessment of key activity completion dates.
- Action status: Explains the pending action items and action items that were settled during the reporting period.

 Risk assessment: The assessment presents current critical paths, critical activities, and technical risk, including impact and containment plans.

# 2.1.8. Meetings

# 2.1.8.1. Progress Meetings

Progress meetings shall be held at the times specified in the progress schedule (at least once a month unless otherwise agreed) and shall be held at a location proposed by the Contractor and approved by the Engineer.

The following people shall be present at the progress meetings:

- Contractor's representative (project manager)
- Representatives of the Employer, the Engineer and, if applicable, the Implementing Partner.
- Other persons considered by the above representatives must be present as assistants/advisors.

The main topics to be discussed at the progress meetings are those determined for the progress reports and other items deemed necessary by the Engineer or the Contractor.

The Contractor shall prepare an agenda and forward it to the Engineer for review and approval at least 1 week before each meeting.

The Contractor shall prepare and submit the minutes. Draft minutes shall be ready at the end of the meetings and reviews. The minutes signed by the Engineer and the Contractor shall be attached to the contract file and shall be binding on both parties. All these processes regarding progress meetings shall be carried out by the Contractor under the direction of the Engineer.

# 2.1.8.2. Weekly Construction Site Meetings

Site Meetings (SMs) shall be convened by the Contractor to enable discussion on specific aspects of the execution, orientation, future arrangement and coordination of the works during the project as mutually agreed between the Contractor and the Engineer.

In general, SMs can be held to formalize important technical issues prior to Progress Meetings and to record the information and suggestions arising from these meetings. The decision shall normally be taken at the Progress Meeting.

The SMs shall be made in places mutually agreed between the Contractor and the Engineer. The Contractor shall provide the SMs with documents documenting the technical elements for discussion and advice.

The agenda of the SMs shall be determined jointly by the Engineer and the Contractor.

In addition to Engineers, Employers and Contractors, suppliers, manufacturers, subcontractors and other institutions and organizations related to the works can join the STs when necessary.

Meeting minutes shall be recorded by the Contractor, carefully kept and distributed to the Employer and the Engineer, the participants and other persons, institutions and organizations deemed

necessary by the Engineer as STs. The minutes signed by the Engineer and the Contractor shall be attached to the contract file and shall be binding on both parties. The minutes shall be forwarded to the Employer for consideration at the next Progress Meeting.

All these transactions regarding the STs shall be carried out by the Contractor under the direction of the Engineer.

The Contractor is also responsible for organizing additional meetings at the instruction of the Employer or the Engineer.

# 2.1.9. Subcontractor's Participation

Subcontractors are required to follow the same standards applied by the Contractor as they are subject to the same Project Management procedures as the Contractor. It is the Contractor's responsibility for the subcontractors to perform the work in accordance with the rules specified in the contract between the Employer and the Contractor.

The Engineer has the same rights against the Contractor as against any subcontractor, but this does not relieve the Contractor from its responsibility for the work performed by the subcontractors.

In order to complete the approval procedure for the sub-contractors involved by the Contractor within the scope of the Project, the Contractor shall provide the Engineer with the specified documents for each sub-contractor (meaning the sub-contractor and sub-designer) as specified below.

- Registration with the chamber of commerce,
- Trade registry gazette,
- Criminal records of subcontractors,
- Delivery statement of the previous project completed by the subcontractor,
- Authorized signature list,
- "No bankruptcy" declaration issued by the commercial registry authorities,
- A summary of the subcontractor's status with monthly vesting payments that must be rolled over to maintain the overview. (This is a prerequisite for payment for work done by subcontractors)

The Engineer reserves the right not to approve a proposed subcontractor if there is objective evidence that the subcontractor has not complied with the terms of this contract regarding the delivery of works or Project Management and Quality Assurance.

The Contractor shall keep a list of all subcontractors and suppliers used or planned to be used in the project and forward this list to the Engineer whenever it is updated.

The list shall contain a precise description of what parts or components that subcontractor or supplier shall deliver to the Contractor.

The Contractor shall be fully responsible for work performed by any subcontractor, as well as for work performed by the Contractor himself.

# 2.2. SPECIAL ON-SITE WORKS

# 2.2.1. Management and Planning

The Contractor shall have full responsibility for the construction, erection and installation of the Works.

Planning of the construction, installation and erection of the Works shall be made in close cooperation with the Engineer.

The contractor shall be responsible for the maintenance and operation of the system during installation and installation.

# 2.2.2. Installation Plan

At each site where installation shall take place, the Contractor shall prepare an installation plan that includes:

- Engineer's activities,
- Relevant subcontractors,
- Tasks to be performed and who is responsible for each task,
- Timing of tasks,
- Installation documentation (instructions, specifications, and drawings) and other information important to final installation.

The installation plan shall be approved by the Engineer in time before the final installation.

# 2.2.3. Installation

At an appropriate time prior to installation, the contractor shall provide instructions and specifications with detailed information on:

- Interior space,
- Installation,
- Wiring, routing, grounding, power, communication,
- Other issues that are important for the installation of works.

As an example, the installation shall consider local laws, rules and procedures regarding wiring, power connection and operating conditions.

The Contractor shall supply and have others supplied installation and all consumables and nonconsumables required for installation.

# 2.2.4. Commissioning

Commissioning covers the activities such as adjusting and adapting system parameters, fine tuning, etc. to make the system 100% operational after physical installation.

The Contractor shall determine what procedures shall be used to commission the Works.

# 2.3. SECURITY

The contractor is responsible for taking all necessary safety measures regarding the works, materials, equipment, tools and existing facilities, people in the site and the neighbouring environment. All expenses, including compensations that may occur due to security weakness, shall be under the responsibility of the Contractor.

#### **2.3.1.** Construction Site and Environmental Safety

#### 2.3.1.1. Security Fence

The Contractor shall determine the extent of the construction site boundary fences necessary to protect the site, works, materials, equipment and facilities from unauthorized access and to ensure public safety, control entrances and exits and prevent unauthorized entry.

A sufficient number of security guards shall be provided by the Contractor at the entrance-exit gates and where deemed necessary. Along the fence, there shall be sufficient night lighting to provide surveillance by security guards.

#### 2.3.1.2. Fire Protection

The Contractor is obliged to take the necessary measures for the protection of the Works, temporary Works and all kinds of goods and persons during the performance. All measures, including raising awareness of personnel, and actions to be taken in case of fire shall be determined in close cooperation with the Fire Brigade.

During the study, special additional measures that may be needed in the following situations shall be taken and applied:

- Storage of easily flammable materials,
- Collection, storage and disposal of combustible waste,
- Operations with electric arc welding and oxy-acetylene cutting machines,
- In case of fire, the Contractor shall provide and prepare the following equipment:
- Dry chemical powder type fire extinguishers that can be mounted on the walls and carried by hand, with nitrogen pressure in certain places,
- Special extinguishing systems in sections where the fire brigade cannot enter or enter easily.

#### 2.3.1.3. Warning Signs and Lighting

All open excavations, material piles, structures, facilities and equipment that may pose a hazard shall be barricaded with appropriate signs to protect workers and other persons.

Likewise, roads and crossings closed to traffic due to the works shall be protected by barricades.

Such areas shall be marked with warning signs placed at appropriate distances and shall attract people's attention. All barricades, obstacles and signs shall be illuminated from dusk until sunrise.

# 2.3.2. Occupational Safety

It is the Contractor's responsibility to take the necessary measures to prevent accidents that may cause damage to persons, materials, equipment and facilities during the work.

The Contractor shall assign a Security Team under the leadership of an experienced Security Manager for all kinds of work related to occupational safety. The main tasks of this team shall include, but are not limited to:

- Training the employees on actions and practices that may cause accidents or damage, taking measures to ensure at least the conditions in "TS 8983 General Safety Precautions to be Taken During Construction in Buildings" at the construction site, monitoring whether the precautions are taken, whether the warnings are complied with,
- Taking additional precautions, giving verbal warnings, applying penalties in case of malfunction,
- To intervene in the event of a harmful event and to implement the relevant procedures.

The Contractor shall perform the work and operations in accordance with the applicable Occupational Health and Safety law.

# 2.3.2.1. First aid

It shall be carried out in accordance with the applicable Occupational Health and Safety law.

# 2.3.2.2. Hazardous Substances

Works are stopped in the section where the event occurred when the following situations are encountered:

- Known or unknown toxic substances embedded,
- Unnaturally colored groundwater or soil,
- Asbestos,
- Volatile organic compounds measured by photoionization detector,
- Chemicals or petroleum products or similar spills and spreads on the site.

Cleaning the area in a way that will not harm the employees and removing the dangerous substance shall be done by a trained and equipped expert team for this type of work.

# 2.4. QUALITY CONTROL AND QUALITY ASSURANCE

# 2.4.1. Quality Responsibility

All Work shall be performed in accordance with the most appropriate engineering practices and standards in terms of construction, materials, equipment and workmanship.

It is the Contractor's responsibility, at his/her own expense, to control the quality of the work, take samples and perform the necessary tests to ensure compliance with specifications and approved materials. A Quality Control and Quality Assurance Manager to be appointed by the Contractor shall be responsible for all stages of quality control and shall maintain an effective communication with the Engineer.

# 2.4.2. Material Quality and Equivalent Materials

All materials and equipment provided for permanent use within the scope of the works shall comply with the current standards and specifications. Instead of the specified materials and equipment, other Manufacturers' products shall be accepted, provided that their equivalence is approved by the Engineer. In such cases, the Contractor shall submit to the Engineer all evidence of equivalence of the new product.

# 2.4.3. Quality Control and Quality Assurance Plan

After signing the contract, the Contractor shall submit a detailed Quality Control and Quality Assurance Plan to the Engineer within 14 days for approval. The plan shall cover quality control and assurance of all phases of work on site.

The Plan shall cover the quality assurance of all aspects of the Works, include as a minimum the following items and be supplemented with additional information as may be required by the Engineer:

- Organization chart for quality control and quality assurance,
- List of Contractor personnel who will perform quality control and material testing, with details of their relevant experience,
- The list of facilities to be inspected and tested at stages during the execution of the Works as part of the quality control by the Contractor, together with the inspection procedures and types of tests;
- Material certificates,
- Equipment and job characteristics,
- Tests,
- Certificates related to the supplied materials,
- Detailed checklist for all installations. The checklist shall be for the Contractor's own use, documenting the Contractor's own quality control of the installation.

The Plan may be supplemented from time to time with additional items as requested by the Engineer.

The approved Quality Plan shall be followed throughout the performance of the Contract unless the Engineer provides specific approvals or instructions unless otherwise specified. Any approval by the Engineer does not relieve the Contractor of its obligation to ensure that the Works conform to the requirements of the Contract.

During the works, quality assurance records, test certificates, reports and log records of on-site testing and inspection shall be kept in place and the results shall be approved by the responsible member of the Contractor's staff.

The Quality Control and Assurance Plan shall come into effect after the Engineer's approval.

# 2.4.4. Test Specimens, Materials and Equipment

The Contractor shall provide all samples related to quality control and testing, including storage, packaging and transportation. The materials represented by these samples shall not be produced, carried out or used in any work without the approval of the Engineer.

Approved samples of materials and equipment to be used on site shall be carefully stored within the scope of those allowed to be used by the Engineer.

# 2.4.5. Test Laboratory Services

Quality Control tests shall be carried out in a laboratory accredited by the Ministry of Environment and Urbanization of the Republic of Turkey and the costs shall be borne by the Contractor.

The Contractor shall ensure that the laboratory performs and finalizes the requested material inspection, sampling and testing processes as quickly as possible.

The test results shall be immediately available to the Engineer. In case of detection of defects or deficiencies that may affect the work, the Contractor shall immediately take any corrective action.

The laboratory is not authorized to change, expand or override the terms of the Agreement.

# 2.4.6. Inspections and Manufacturer Tests

The contractor is obliged to ensure that quality control and all related inspections and tests are duly performed, regardless of whether it is on site or elsewhere, and to take corrective measures when necessary.

The engineer may also supervise the works performed at the manufacturer's facilities and the tests related to these works. The Contractor shall timely inform the Engineer so that this can be done as requested.

The products and materials delivered to the construction site shall be inspected by the Contractor upon their arrival at the site and any malfunctions shall be reported to the Engineer. Products with significant defects shall be returned to the manufacturer to be corrected or replaced.

Inspections and tests performed by or on behalf of the Engineer do not exempt the Contractor from its obligations regarding quality control.

# 2.4.7. Construction Site Records and Tests Certificates

Quality Control records, test certificates, daily reports, site tests and inspection records shall be kept in forms approved by the Engineer.

All test certificates and inspection records, including those in the manufacturer and other test institutions, shall be kept in their respective sections. The processes shall be under the responsibility

of the Contractor's qualified personnel, and the Contractor shall also establish a comprehensive archive and library on quality control.

The contractor shall prepare detailed lists containing tests, approvals, orders and delivery information for other materials and products, subject to quality control and approval. These lists shall be made available to the Engineer as they are updated, on a monthly basis under any circumstances.

The test results shall be sent to the Engineer at the end of the test in order to determine the necessary precautions, if any.

- In any case, at the latest 7 days before the production starts, for those products which need to be used at work,
- In order not to interrupt the productions after the test, if it is necessary to start and continue the work with the approval of the Engineer, within 7 days at the latest following the test.

#### 3. ENVIRONMENTAL MANAGEMENT

The Contractor shall comply with the provisions of the Turkish legislation (Environmental Obligations) in force regarding the protection of the environment in cases that may affect the project. This shall be carried out in particular on the basis of the most up-to-date version of the following laws and regulations.

- Environmental law,
- Occupational Health and Safety Law,
- Air Pollution Evaluation and Control Regulation,
- Regulation on Assessment and Management of Environmental Noise,
- Regulation on Preventing Water Pollution,
- Solid Waste Control Regulation,
- Hazardous Waste Control Regulation,
- Law on the Protection of Cultural and Natural Assets,
- Waste Oil Management Regulation,
- Regulation on Preventing the Excavation Earth Construction and Demolition Waste,
- Regulation on Preventing Soil Pollution.

The Contractor shall take all measures and measures to prevent any environmental problem or disturbance arising from the execution of the Project Activities. Wherever possible, this shall ensure that discomfort is resolved at the source, rather than reduced discomfort once created. The contractor shall also be required to compensate for any damage, loss, deterioration or inconvenience to the property and health of the persons affected by the project during construction. In accordance with the Contract specifications of which these environmental obligations are a part,

the Employer reserves the right to withhold payments and/or stop construction in case of serious or repeated violations of the conditions specified herein.

The Contractor shall obtain, at its own expense, keep in force and renew as necessary all Permits required in terms of environmental obligations in order to fulfil its obligations to implement the project and construct the facility.

# 4. SPECIAL TECHNICAL SPECIFICATION

Unless otherwise specified in the technical specifications, the Contractor shall carry out and complete the productions of the item numbers specified in the contract regarding the Works in accordance with the latest updated versions of the specifications stated below;

- Republic of Turkey Ministry of Environment and Urbanization "General Technical Specifications for Construction Works, Mechanical Works and Electrical Works".
- Republic of Turkey General Directorate of Highways "Highways Technical Specifications",
- The Bank of Provinces Technical Specifications,
- Technical Specifications of the Ministry of National Defence,
- TEDAŞ Technical Specifications,
- DSI Technical Specifications etc.

Whether or not in the survey chart; it is the Contractor's responsibility to complete the works specified in the project, detail and site list in accordance with the rules of science and art.

# 4.1. CIVIL WORKS SPECIAL TECHNICAL SPECIFICATIONS

# 4.1.1. EXCAVATION AND FILLING WORKS

#### General

This specification covers excavation for all structures described in the excavation plans; backfill, compaction of backfill and transportation of excavation material under the conditions written in this document and according to the drawings or according to the Engineer's instructions.

All excavation, fill and earth embankment works must comply with the instructions specified in the drawings, slopes and elevations or Engineer's directives.

In case the amount of excavation exceeds the amount calculated in the excavation plan approved by the Engineer, the Contractor is financially responsible. In addition, the excess excavation sites shall be filled by the Contractor with compressed earth, crushed stone or concrete according to the needs of the Engineer, without any additional payment.

Before starting the earthworks, the Contractor must examine the site plan, elevation plan and topographic map of the area given by the Employer and make all the controls. The Contractor must prepare excavation plans, sections and calculations for all structures to be checked and investigated by the Engineer.

Shrubs and other plants to be removed from the construction site shall be cut at or below ground level. This process shall be done with the Engineer's directives and the plants shall be cut carefully.

Removal involves trees larger than 7.5 cm in diameter and whose roots are interconnected and wirelike. All wastes, organic and non-organic wastes shall be removed from the site by the Contractor.

The contractor shall clear the area and ground surface, trees and roots before beginning earthworks. Cleaning up includes all organic waste and other debris to be removed from the site. No additional payment shall be made to the Contractor for dismantling, cleaning and removal from the site.

#### Definitions

- Proper Materials; are the materials classified in TS 1500 as GW, GP, SW, GM, GC, SP, SM and SC.
- Improper Materials are the materials classified in TS 1500 as PT, OH, ML, MH and OL. In case such materials are discovered during the excavation, removal of the materials shall be under the responsibility of the Contractor.
- Cohesionless materials: are the materials classified as GW, GP, SW and SP in TS 1500.
   Cohesive materials are the materials classified as GC, SC, ML, CL, MH and CH. The materials classified as GM and SM shall be defined as cohesionless material only if the fine grains are not plastic.
- Degree of compression shall be expressed as the desired Modified Proctor Test compaction degree; a percentage of maximum dry density. (TS 1900)
- Suspended water level; is the groundwater that is temporarily or permanently retained above the groundwater level and separated from the existing water table by a waterproof layer.
- Backwater; is an underground water pond in the granular fill between the foundation walls, in the fine-grained soil with relatively less water permeability, showing the character of suspended water.

#### Materials

- Selected filling material: Selected filling material shall consist of suitable material that does not contain roots and similar organic matter, garbage, rubble and stones larger than 7.5 cm, to be used around foundations and under structures, except for the bottom of the structural foundations. The material must be compressible and qualified to pass less than 10% of No.200 mesh (0.075 mm) and have a plastic index of 12 or less.
- The capillary water barrier shall be used under the floors resting on the ground and shall consist of crushed stone and crushed or natural gravel. Maximum grain size shall be 4 cm and not more than 2% by weight of No 4 sieve.
- In case there are soft soil pockets under the foundations, 200 doses of lean concrete or compressed stabilized filling material shall be used as filling material in these areas with the instruction of the Engineer.

#### Excavation

The Contractor is required to have the Engineer survey the site before revealing the excavation base for the foundations and covering it with the first layer of concrete. If the ground is determined to be insufficient to adequately support the foundation without unexpected settlement, the Engineer shall instruct the Contractor to dig up to a firmer layer and backfill with bulk concrete or take other measures necessary to provide adequate bearing strength.

Areas outside each building/structure shall be sloped to provide drainage from the building/structure and shall be free of garbage and debris until the temporary acceptance is completed and final acceptance is made. In addition, topsoil contaminated with substances such as cement, lime, etc., and which are negatively affected and compressed by the activities of construction machinery, shall also be plowed, cleaned and levelled. The stocked topsoil shall be spread evenly over the plowed, cleared and levelled surface.

If pockets of soft material or loose stones or cracks are found at the bottom of the excavations, they shall be manually removed and the gaps filled with suitable material.

Class determination shall not be made for the excavation area. For excavations to be made on all types of soils and depths, the only pose specified in the contract shall be valid.

#### **Starting the Foundation Excavation**

The contractor shall make the application of the structures according to the plans and projects given to him and check the accuracy.

Following the approval of the excavation plan by the Engineer, the topsoil shall first be removed according to the excavation plan and stored in a suitable place within the site. Later, this stored material shall be used by the Contractor for landscaping purposes. Foundation excavation shall be carried out in accordance with the Engineer's directives and the relevant excavation plans.

#### **Foundation Opening Method**

Excavation work shall be carried out in accordance with the dimensions and elevations specified in the drawings for the structures. The excavation area shall contain sufficient distance from the walls and foundation piers to allow the placement and removal of formwork, the establishment of services and inspection without incurring a cost to the Administration. The only exception to this condition is the share of lean concrete and gravel-sand filling material poured directly adjacent to the excavation surfaces. No excavation shall be carried out below the determined levels. In excavations made without the instruction of the Engineer, the additional cost shall not be charged to the Employer and the selected filling material shall be used for recompression and filled. Areas outside each building shall be sloped to divert water away from the building and shall be free of trash and debris until the work is accepted. In addition, topsoil contaminated with substances such as cement, lime, etc., and which are negatively affected and compressed by the activities of construction machinery, shall also be plowed, cleaned and levelled.

Excavation slopes shall be protected against slope disturbances (e.g. with plastic covers during rainy periods) in accordance with the Engineer's instructions.

#### **Suitable Excavation Material**

The appropriate material removed during the excavation shall be stored on site regularly and shall be used for backfilling in the project after obtaining the opinion of the Engineer. In the event that suitable material is removed to exceed the need for backfill material, this excess shall be transferred by the Contractor to a place in the Construction Site to be used in field works, in accordance with the instruction of the Engineer, without reflecting the financial burden on the Administration. In case the amount of material exceeds the need, the surplus shall be removed from the site as unsuitable material.

#### Final Levelling of the Floor for Concrete and Protection of the Base

Large-scale excavation for the foundation shall only be allowed up to 20-30 cm above the specified base elevations. The last 20-30 cm of the natural ground shall be excavated in accordance with the Engineer's instructions and special care shall be taken not to disturb the ground. The floor surface shall be protected from wetting and drying. All completed and compacted surfaces falling under the foundation piers shall be approved by the Engineer before concrete is poured. When the required level for the building foundations is reached, a layer of lean concrete of 10 cm to cover the foundation shall be poured immediately, covering the surface under the foundation base and overflowing the base of the foundations by 15 cm from the outer edges to both sides.

#### Preparation of the Foundation Ground

The foundation ground shall be prepared by water levelling and if necessary, the soft ground parts shall be excavated and filled with suitable material.

The difference in height between two points on the Foundation Ground shall not exceed 1.5 cm when measured with a 5 m horizontal gauge and the foundation elevations shall not deviate more than 2 cm from those specified in the drawings.

The bottom of the excavation area shall be carefully levelled within the tolerances specified in this section. Areas where the level difference is more than 2 cm shall be excavated or filled by compaction as specified in the Filling and Compaction paragraph. All such work shall be part of the Contractor's responsibility at no additional cost.

After the excavation is completed to the final levels, before starting any foundation work, the Engineer shall be informed to check and approve the works and to record the data for measurement if necessary. Except from this case, the Engineer shall have the authority to control the works at any time.

# **Removing Soft Parts**

Although the procedures are followed, if there are still soft parts or cracks in the excavation floor, these parts shall be manually excavated and filled with suitable material by the Contractor.

#### Removing Soft Parts under Foundations:

150 kg/m3 lean concrete or compressed stabilized filling material shall be used as suitable material for filling the soft parts under the foundations. The engineer must approve the selected material.

The preparation, pouring, compaction, curing and testing of the concrete fill shall be done according to the concrete specification and Engineer's instructions.

# Removal of Soft Parts under Non-Structural Sections:

The selected fill material shall be used as suitable fill material for excavated soft parts under nonstructural sections. The arrangement, position, compression and test procedure must be done as described below.

#### Filling and Compression

The filling material shall be placed in horizontal layers and in a loose state, with a thickness not exceeding 20 cm, and then compacted. No material shall be placed on muddy surfaces. In order to prevent shear forces adjacent to the structures or eccentric loading on the structures, the fill shall be smooth and evenly compacted. Sloping surfaces shall be set or terraced to prevent the filling from slipping. During the backfilling operations and in the formation of the embankments, the machines that will put too much load on the structure shall not be used during the compression of these fillings.

Subject to the approval of the Consultant Officer, compaction shall be carried out with vibratory rollers, rubber tire rollers, steel wheel rollers or other machinery suitable and approved for soil compaction. If necessary, the material shall be moistened or aerated to create the humidity that will provide the desired degree of compaction. Each layer shall be compressed in such a way that it does not fall below the maximum density ratio percentage specified below.

Layer to be Compressed

% of maximum dry density according to Modified Proctor Test

	Cohesive Materials	Cohesionless Materials
Filling and backfilling under building floors under buildings	90	95
Filling under footpaths and open spaces	85	90
Under the pavements, for the top 30 m	90	95

#### Support

No additional payment shall be made to the contractor for support work items.

Whenever necessary; shoring shall be made for the safety of workers and for the protection of adjacent embankments and structures, installations and the like. Retaining curtains, supports and slabs shall be removed as the excavations are refilled so as not to cause dents.

The Contractor shall be responsible for all kinds of accidents that may happen to the workers and damage to the works as a result of the formation of dents on the edges of the excavation made for foundation or other reasons. In order to prevent such dents, the Contractor shall either make appropriate slopes to the edges of the excavation area or strengthen the edges by supporting them. Shoring and supporting operations shall be made in accordance with the condition of the ground.

The method of reinforcing the edges of the excavation area must be approved by the Engineer. However, this approval does not relieve the Contractor from liability. If the Engineer requests the bearings to be left in place for safety reasons during the refilling phase after the foundation excavation or piping works, the Contractor shall implement these instructions without any charge.

Reorganizations or any changes in the support system made by the Contractor directly or with the Engineer's directives shall not have any cost impact for the Employer.

#### Drainage

Since these works are included in the excavation item, no additional payment shall be made for drainage.

Excavation works shall be continued with effective and continuous drainage. No water shall be allowed to accumulate on the site for any reason. Until the concrete and filling works are completed, the water and runoff accumulating in the foundation or plumbing holes shall be temporarily discharged by pumping, drainage or other approved methods.

Drainage in earthworks shall be done by the Contractor within the scope of the Contract. Excavations shall be carried out in such a way as to ensure continuous and effective drainage of the area immediately surrounding the site, which may affect the area of the site and the work on the site. No water shall be allowed to accumulate in the excavation area.

Foundations of structures and auxiliary trenches shall be kept stable and free of surface water at all times by pumping, dumping or other approved means until concreting and backfilling is complete. Where pumping is used, a backup excavation, site drainage and subsoil protection plan shall be approved by the Engineer prior to commencing construction. The plan shall include recommended measures to keep concrete curing water out of the fill and subfloor areas.

# **Removal of Excavation Material**

Excess excavation material, which the Engineer decides to transport from the construction site, shall be transported to an adequate area agreed by the Contractor, the Engineer and the local administration. It is the Contractor's responsibility to allow materials to be transported from the construction site to the selected area. It is the Contractor's responsibility to obtain the necessary permission from the local authorities for the dumping area of the excess excavation and the dumping fees. Since it is assumed that the contractor has explored the possible dumping sites during the tender preparation period, no additional cost shall be paid due to any distance change, including the change in the transfer site.

After all excavations are completed, all temporary storage and stowage areas must be cleared, drainage slopes must be determined and the site must be left in good condition according to local government rules.

Transportation and unloading shall be done without harming the environment. Trucks shall be prepared as covered to prevent debris from spilling in accordance with traffic rules.

Some trees may not be suitable for transportation in the site. In this case, they shall be stacked in a suitable place to be indicated by the Engineer.

#### Imported Compressed Stabilized Fill

Compacted stabilized fill shall be used between the foundations. The filling materials shall be as defined in the Capillary Water Barrier paragraph.

The creation of the stabilized fill shall be carried out in accordance with the drawings.

Stabilized backfill material shall be placed directly on the foundation ground that has taken its final shape as described in the Foundation Ground Preparation paragraph above or corrected as specified in the Foundation Bases and Levelling Reorganization paragraph, in order to provide levelling between foundations and to create a capillary water barrier as stated above. Capillary water barrier shall be compacted until the Engineer's approval is obtained by passing over each layer of the with a hand-operated compression vibrator several times, and a solid ground shall be prepared for the floor to be dumped on it.

Loan materials shall be selected to meet the rules and conditions applicable to the stabilized filling material to be used, with or without a capillary water barrier. The loan material shall be procured from private sources outside the construction site, shall be selected by the Contractor, but shall be subject to the approval of the Engineer. No additional cost shall be paid for the supply, transportation and similar costs of the stabilized filling material.

#### Sieve analysis of compressed stabilized filler:

Size of Grains Passing the Sieve (% Percenta		rcentage)
	Type-1	Type-2
50 mm	100	100
37.5 mm	85-100	85-100
10 mm	40-70	40-100
5 mm	25-45	25-85
600 microns	8-22	8-40
75 microns	0-10	0-10

The stabilized material shall be natural sand, gravel, crushed stone, crushed slag and crushed concrete or uniform grade well-burned non-plastic shale. The material may be compacted to

produce a well-laid dense layer and shall remain within the above rating limits unless specified elsewhere in the Contract. Rocks larger than 100 mm shall be removed.

Natural sand and gravel shall only be allowed in Type 2 material.

The sub-base material shall be spread evenly in layers with a compacted thickness of not more than 200 mm and compacted to obtain a smooth surface finish.

#### Backfill

Backfilling shall not begin before construction below the final level has been approved, underground plumbing systems have been checked and tested, formwork has been removed, and the excavation site cleared of rubbish and debris.

The construction below the final level mentioned above shall include, but shall not be limited to, the waterproofing and protection wall to be applied to the outer surfaces of the basement perimeter walls.

Backfill shall not be placed on wet floors. The backfill material shall be placed and compacted as described in the Fill and Foundation Ground Preparation paragraph.

Filling and compaction shall not be made on the foundation or retaining walls by heavy-duty machinery at distances smaller than the height between the upper level of the foundation structure and the filling level; the compaction process in this region shall be carried out in layers whose compacted thickness cannot exceed 20 cm and with motorized hand compactors suitable for the quality of the compressed material. The filling material shall be placed carefully around the pipes in a way that will not damage the coatings and windings. It shall be expected that 7 days have passed since the completion of the curtains in order to place the filling material around the foundation curtains. To the extent possible, the backfill shall be made at equal levels on both sides of the bulkheads and shall be raised and a surface slope shall be given to ensure that the waters are removed from the wall.

Maximum attention shall be paid to the compaction of the filling that corresponds to the building entrance floor and under the pavement. Compression tests shall be carried out according to the Tests paragraph.

# **Rock Excavation**

If a rock is encountered during excavation, no additional payment shall be made and the current excavation pose shall be valid.

Appropriate machinery shall be used for rock excavations, but explosives shall not be allowed.

#### **Preservation of Existing Service Lines and Structures**

The Contractor shall be responsible for protecting the existing service lines and structures within the construction site against damage and restoring them if they are damaged during construction. Like the existing installation lines and cables, the lines manufactured under this Contract shall also be protected and if damaged, they shall be repaired within the scope of the Contractor's financial responsibility. In the event that the Contractor damages any existing plumbing lines or cables, the incident shall be reported to the Engineer immediately.

#### Levelling

The areas outside the building shall be levelled in accordance with the project elevations, shall be removed from the building with a smooth slope to provide drainage and shall be kept clean until the final inspection is completed and the work is accepted.

In addition to these, the top layer of the ground which is contaminated by the materials such as cement, lime, etc., which is stuck and affected due to the operation of construction equipment shall be ventilated, cleaned and re-levelled.

The stored topsoil shall be placed in equal layers in a ventilated, cleaned and levelled manner.

#### **Earthworks Transportation**

No additional or direct payment shall be made for transportation on any part of the work, transportation shall be included in the bid.

#### 4.1.2. CONCRETE WORKS

#### Concrete

Concrete Works specified herein shall include material procurement, mixing of concrete, formwork, reinforcement, placing, compaction and curing of concrete, and cleaning of the site after completion of works. In general, TS 1247 or DIN 1045 must be followed when mixing, placing and curing concrete.

The prices entered in the quotation shall fully cover all labour, collapse, travelling, materials, additives, temporary works, on-site stocking, sampling and testing and all other costs, all risks, and work described in the obligations and obligations set out or implied in the Contract Documents.

#### **Concrete Casting Record**

The contractor shall keep accurate and up-to-date concrete records for each day that parts of the works are concreted:

- Date, time, weather and temperature;
- The results of all concrete tests, including determining which part of the works the sampled material represents;
- Concrete class, volume of concrete placed and number of batches used for each location.

The laboratory where the concrete test must be performed shall be approved by the Engineer and shall be accessible to him/her at any time.

#### **Concrete Production Organization at the Construction Site**

At the beginning of the contract, the Contractor shall submit to the Engineer a Method Statement detailing his/her proposals for the organization of the concreting activities at the site. The concrete to be used in the works must be ready.

The Method Statement shall contain the following items:

- The proposed plant, including the plant capacity and the capacity to continuously supply concrete.
- Quality control procedures for concrete pouring by the contractor.
- Transport and placing of concrete.
- Formwork details, including the times and procedure for installing/removing formwork to temporarily support beams and slabs.
- Protection and curing.

#### **Ready-mixed concrete**

Concrete supplied from the ready mixed concrete supplier can be used in the Works subject to the written approval of the Engineer. It may allow the use of ready mixed concrete, provided that the mixing ratios and full details of workability are submitted for preliminary approval.

This approval shall not be granted until the Engineer is satisfied that the organization and control of the manufacture and delivery of all ready mixed concrete is satisfactory. Ready mixed concrete shall comply with TS EN 206+A2.

The engineer shall request a slump (conical collapse) test before the concrete pouring works and may request a test cylinder be taken from each truck. Performing the slump test is under the responsibility of the Contractor, no additional payment shall be made for this.

Each shipment shall be accompanied by a transportation compass showing the mixing time, the destination and the water additive and concrete class of each material.

# **Placing and Compacting Concrete**

# Preparation Studies:

Written approval of the Engineer shall always be obtained before the concrete is placed in any part of the work. All construction tools required or may be required during concrete works and for curing shall be in place and the Contractor shall be fully prepared for the work. The Engineer's approval for concrete placement shall be granted only after such preparations and other relevant requirements of the Technical Specification have been carried out and adhered to.

If necessary and/or directed by the Engineer, the Contractor shall cool any mould that has overheated or exceptionally dried out due to prolonged exposure to the sun. The contractor shall ensure that all moulds retain sufficient moisture and do not shrink or warp. Wetting or spraying of all moulds shall be done with potable water. While pouring concrete in hot weather, the conditions specified under the title of "Concrete Casting in Hot Weather" shall be complied with. The Engineer may outright prohibit the placing of concrete in any formwork that he/she believes has become excessive and/or dry and whose condition may damage the quality and strength of the concrete. No additional payment shall be made for cooling or soaking the mould. All formwork, pavement, reinforcement and exposed surfaces of the adjacent concrete surface shall be thoroughly cleaned and free of dust, debris, oil that may be harmful to the fresh concrete.

#### Pouring Concrete:

Concrete transportation and pouring methods shall be such as to prevent segregation and shall be approved by the Engineer before concreting begins. The placing and compaction of concrete shall be carried out under the direct supervision of a competent member of the Contractor's staff.

The concrete shall be poured directly into the mould as soon as possible without the need for rework and after mixing, and in any case not more than 45 minutes before it sets for the first time. If there is any delay after mixing and the concrete has started to set, it shall not be used in the works and shall be removed from the site. Concrete shall not be dropped from a height exceeding 1.5 metres, unless otherwise agreed by the Engineer on the basis of satisfactory on-site trials.

Concreting of any section or unit shall be done in a continuous process up to the construction joints. Concreting shall not be interrupted without the approval of the engineer. Where concrete deposition needs to be interrupted, measures shall be taken to ensure that subsequent sections of concrete adhere satisfactorily to that previously placed.

When delays of more than one hour occur between concreting operations on a workpiece or work unit, concreting shall, in the Engineer's view, be resumed when sufficient time remains for the previously placed concrete to cure and the resulting joint filled. Any time the concrete is placed, a competent steel anchor shall always be available to adjust and correct the position of any reinforcements that may be displaced.

Transport of concrete directly over the fixed rebar steel during concreting shall not be permitted unless appropriate measures are taken to prevent displacement or damage to the reinforcement.

#### Casting as a Layer:

Concrete shall be poured in approved quantities and in horizontal layers at a depth to allow it to fully coalesce with the following layers by vibration, bottling, compaction and ramming. If for unforeseen reasons, concreting must be stopped before the completion of a section, construction joints shall be created as specified and further concreting shall be stopped for at least 24 hours.

#### Pouring Concrete in Hot Weather:

The Contractor shall carry out "Concrete Casting in Hot Weather" operations in accordance with TS 1248 or ACI 305. The contractor's methods shall comply with the recommendations in this document as amended and added below.

The contractor shall take great care to prevent cracking of concrete or surface cracks in hot weather. The Contractor shall ensure that the concrete is placed early in the morning or late in the evening, according to the Engineer's instruction.

The Contractor shall pay particular attention to the conditions specified here for curing. The formwork shall be shaded so that it is not exposed to direct sun both before the concrete is placed and during its setting. The Contractor shall take appropriate measures to ensure that the reinforcement in the section to be concreted is kept at the lowest possible temperature.

The concrete at the time of placement shall have a temperature of not more than 32°C. If necessary, the Contractor shall cool the aggregates and mixing water by methods approved by the Engineer.

When required, the Contractor shall design, install and operate a cooling system in which cooling water is pumped through a piping system to reduce the heat of hydration during concrete pouring. The proposal for such a cooling system shall be submitted to the Engineer's approval long before the concreting works.

The ambient air, concrete at various levels and intervals not exceeding 5 meters, and the temperatures of the cooling water, if any, shall be measured and recorded by means of thermocouples.

#### Concrete Casting in Cold Weather:

Cold weather is defined as the condition present in Works where one or both of the following conditions are present:

- The air temperature being below 2°C at the time in question;
- Average daily air temperature below 5°C for three or more consecutive days.

Under no circumstances must concrete be placed in contact with frozen ground or formwork, or in contact with ice, snow or frost on the ground or on formwork or reinforcement. Concrete shall not be made with frozen materials.

Concrete pouring can continue in cold weather, provided that special precautions are taken to ensure that the surface temperature of the concrete during placement is not less than 5°C for at least the following period:

4 days when the cement used in concrete is ordinary Portland cement;

2 days when fast-setting Portland cement.

Such measures may include:

- Heating of aggregates and water, provided that the temperature of each does not exceed 60°C. The water and aggregates shall be mixed long enough to achieve a uniform temperature before the cement is added.
- Heating the indoor air that needs to be kept moist by completely surrounding the freshly poured concrete with a blanket. Hot or dry air currents must not be directed to surfaces.

- Sealing formwork and finished concrete surfaces.
- Providing curtains to protect concrete from air currents.

The Contractor shall provide the Engineer with details of the measures he/she proposes to take to protect the concrete from the effects of low temperatures and the methods he/she proposes to use to evaluate the correct timing at which this protection can be removed. Concreting shall not be made in cold weather without the approval of the Engineer for the suggested measures.

#### Concreting in Adverse Weather:

Concrete pouring shall not be allowed during heavy rain or snowfall or when the air temperature drops below 2°C or when the concrete temperature rises above 32°C.

When the air temperature exceeds 25°C, concrete pouring shall be allowed to be undertaken only after special measures approved by the Engineer are taken, such as cooling the aggregates and moulds with a cooling system that provides continuous spraying of water to reduce the temperature of the water to be used in the mixture or to prevent premature setting of the concrete, and installing temporary awnings on the work area. During the concreting processes, the temperature of the placed concrete shall be recorded.

#### Compaction of Concrete:

The Contractor shall attach utmost importance to the compaction of concrete for the structures to be produced. At the end of compaction, a waterproof concrete with maximum density and strength must be obtained.

The concrete shall be well compacted during the placing process and thoroughly machined around the reinforcement and embedded fixtures, into the insides and corners of the formwork.

Mechanical vibrators shall be of the immersion type with a frequency of not less than 8000 vibrations per minute approved by the Engineer. A sufficient number of vibrators shall be used to process the maximum concrete pouring rate with 50% share for spare units at any period of concreting. All operators using vibrators shall be trained in their use.

Vibrators shall be placed vertically and at regular intervals into the uncompacted concrete. In case the uncompacted concrete is in one layer above the freshly compacted concrete, the vibrator must be allowed to penetrate the previous layer approximately 100 mm vertically. Vibrators shall be pulled slowly from the concrete mass so that there are no voids. Internal type vibrators shall not be placed in the concrete randomly or by rote, and concrete shall not be transported from one part of the work to another by means of vibrators. Vibration must not be applied directly or through reinforcement to sections or layers of hardened concrete at distances large enough to cause segregation of the concrete in the formwork.

Care shall be taken not to damage the reinforcement and fasteners attached to the formwork with immersion vibrators, and not to cause any damage to the set concrete or the inner surface of the formwork. In congested reinforcement areas, it may be necessary to use small diameter vibrators and the Contractor shall supply vibrators of appropriate sizes for each part of the work. Vibration of concrete by beating with hand tools is not allowed.

When placing concrete on the horizontal or inclined members of the waterstop, they shall be lifted and placed and compacted slightly higher than the bottom of the waterstop before releasing the waterstop to allow the concrete to be fully compacted around the waterstop.

Vibration time shall be limited to the time required to achieve satisfactory compression without causing segregation. Vibration shall not be continued after water or excess sherbet appears on the surface.

Concrete shall not deteriorate after compaction and placing in its final position. Partially cured concrete shall not be used and shall be removed from the site prior to final placement.

#### Placing Concrete on the Previous Work:

If concrete is to be poured next to or over previously completed work, the surface of the old concrete shall be completely wire brushed, the weak parts shall be broken off, and it must be cleaned under pressure with water and air to reveal the surface of the aggregate and remove all weaknesses. Special care must be taken to ensure that the new concrete is fully compacted and adhered to the old concrete.

#### Protection and Curing of Concrete:

The water used for curing shall comply with the conditions in TS 1247 and TS 1248. Concrete shall be protected from climatic conditions (direct sunlight, rain, snow or frost), running water or mechanical damage during curing. All methods to be used for the curing and preservation of freshly poured concrete shall be subject to the prior approval of the Engineer.

Maximum and minimum ambient temperatures and humidity shall be measured and recorded daily by the Contractor. The records shall be processed into daily reports and made available for the Engineer's review.

All exposed surfaces shall be covered with a wet burlap as finishing followed by a reflective polyethylene sheet. These shall be securely fixed and supported from the edges to avoid damaging the finished concrete surface. As soon as possible, the hemp and polyethylene shall be lowered in close contact with the concrete and securely weighted or fixed to prevent wind blowing from below. The hemp sheet shall be kept moist at all times and checked at intervals not exceeding 6 hours. Concrete shall be kept moist on exposed surfaces for not less than 72 hours or as approved by the Engineer.

Alternative concrete protection and curing methods such as ponding where water shall be kept at a depth of at least 50 mm can be approved by the Engineer. In any event, liquid curing membranes shall not be used on exposed surfaces or where the screed will be removed and aggregate exposed to provide a satisfactory bond to accommodate more concrete or mortar screeds. Liquid-cured membranes shall not be used in areas where mortar, resin mortar or joint filling shall be made.

Adequate methods shall be available at the workplace to provide full protection to a concrete pour before concreting begins.

In very hot weather, the Contractor may be requested to cool the mould containing concrete by spraying water. This shall be done when instructed, regardless of any other measures the Contractor

may have taken to cure the concrete. All material spraying equipment and sufficient water for curing shall be available on site before any concrete casting begins.

# Faulty Working:

Segregated or poor-quality concrete shall be broken down immediately upon Engineer's written instruction and reconstructed in an approved manner at no extra cost. Imperfect works shall not be allowed to be plastered. Any leaks or cracks shall be sealed by injection with synthetic resin or other suitable methods approved by the Engineer.

#### Gro Concrete (Sub-base):

A blanking layer consisting of at least 100 mm lean concrete shall be placed under the foundations that are shown in the drawings or are requested by the Engineer. The blanking layer shall be allowed to cure prior to placing the structural concrete for the flooring.

Blinding smoothed surfaces in excavations and trenches includes placing, compacting and scanning the surfaces specified in the Technical Specification.

Blanking shall be measured in square metres, net based on the minimum trench width specified for earthworks and the size of structures shown in the approved Drawings.

#### Loads on Concrete Structures:

No external load of any kind shall be applied to any part of the concrete structure before the 7-day sample strengths are finalized and approved by the Engineer.

# Field Concrete

#### Joint Fillers and Fills

Unless otherwise specified in the plans, the Contractor shall use Class 5 or Class 8 grouting materials and sealant or approved and other fillers of the size, shape and type shown on the plans in accordance with DMS-6310 "Joint Sealant and Sealants" (or equivalent).

#### Sawing Equipment

The contractor shall provide power driven concrete saws for cutting the joints shown in the plans. Concrete saws with backup power shall be used during concrete cutting operations. Adequate lighting shall be provided for cutting at night.

#### Grinding Equipment

When necessary, specially designed, self-propelled electric grinding equipment shall be used to level and texturize the concrete pavement using circular diamond blades. Automatic levelling controlled equipment that can grind at least 90 cm wide and longitudinally without damaging the concrete shall be used in each pass.

#### <u>Joints</u>

The contractor shall apply the following method;

- Shall install the joints as shown in the plans,
- Shall clean and seal the joints,
- Repair excessive swelling of the joint saw groove with an approved method prior to installing the sealant.
- Before putting the platform into use, shall close all joints,
- When the concrete is stopped placing, it shall install a rigid transverse bulkhead for the reinforcing steel that is accurately notched and shaped to the cross section of the pavement.

#### Laying and Finishing

The contractor shall apply the following method;

- Shall process the entire concrete pavement with approved self-propelled equipment,
- Shall use powered vibrators, powered levelling and screed or approved alternative equipment.
- Shall level the concrete without surface voids, using the transverse finishing equipment to compact and hammer the concrete to the required cross-section,
- Shall use concrete with a consistency that will ensure that all finishing processes are completed without adding water to the surface,
- Shall use the minimum amount of water vapour needed to maintain a moist surface,
- In line with the engineer's request, the concrete shall be vacuumed and finished.

#### 4.1.3. MOULD AND CONCRETE FINISHES

Formwork works shall include all temporary forms to form the concrete and any necessary temporary structures to support these forms.

Formworks shall be of suitable design and of sufficient construction to carry loads without excessive bulging, distortion or deflection. The formwork shall be constructed in such a way as to prevent the loss of water or grout from the concrete. Particular attention must be paid to the formwork where joint or external vibrators are used to compact the concrete.

#### **Materials for Mould**

The mouldings shall be made of quality plywood free of loose knots, ripples and warped surfaces. The thickness of the formwork plywood shall not be less than 17.5 mm, the plywood shall be resistant to deterioration by water, fixed and joined to give a perfectly smooth and uniform finish to the concrete. Alternatively, with the Engineer's approval, the shutter can be made from:

- Metal mould with correctly aligned and tight-fitting connections,
- Wooden formwork of plywood or chipboard with a thickness of 5 mm.

#### **Fixing the Moulds**

Formwork shall be fixed to a perfect line and flatness, perfectly flat with no cracks in the joints, and securely supported and fixed in such a way that it holds its position without displacement or deflection during placing and compaction of the concrete. All joints shall be horizontal or vertical in the same way.

#### **Coating to Prevent Sticking**

All formwork to be done under the contract shall be treated with an approved formwork oil or solution prior to use to prevent concrete from sticking. This oil or solution shall be carefully applied so that the reinforcement or pre-placed concrete is not contaminated by the oil or solution. No material shall be used that will stick to the concrete or discolour it.

#### **Cleaning and Reusing Moulds**

Before any concrete is poured, the moulds must be properly cleaned and flushed with water and compressed air to remove sawdust and all other foreign matter. Then all the water shall be drained and wiped from the moulds. Residues from the previous concrete shall be carefully cleaned with a scraper and a smooth surface shall be formed.

Under no circumstances shall concrete be poured into the formwork before the formwork has been approved by the Engineer. If the moulds are to be reused, all surfaces shall be cleaned and completely free of any concrete or mortar residue. If, in the Engineer's opinion, the moulds are not acceptable for reuse, they shall either be properly repaired or replaced with suitable new moulds.

#### **Removing Moulds**

The formwork shall be designed to allow easy removal without hammering or the application of leverage against the surface.

The time elapsed between placing the concrete and removing the formwork shall be as approved by the Engineer and in any case shall not be less than the time specified in TS 500 or DIN 1045, and the slab edge formwork times shall be at least 3 days.

The Contractor has the right at any time to delay the removal of the formwork if, in the Engineer's opinion, the contained concrete has not reached sufficient hardness.

In cases where the average temperatures are below 4°C, the removal period is extended by the number of days the temperature drops below 4°C. The times given as days are 24 hour days.

Alternatively, the removal of formwork shall be determined by the demanded compressive strength of the concrete. In case of a negative situation in the concrete productions related to the moulds that are dismantled prematurely, the Contractor shall re-make the relevant production without demanding any additional cost.

#### Finishing Concrete Surfaces

There shall be no cracks, sand flows, segregation, porosity and mortar/mould loss on all surfaces.

# In-situ Concrete Dimensions and Surfaces

Formwork and concreting work shall be such that the concrete normally does not require trimming, the surfaces are perfectly compacted, smooth and uneven. Concrete surfaces for various finishes may in no case exceed ±12 mm tolerance in terms of size and level.

#### **Healing Treatments on Concrete Surfaces**

Any improvement to concrete surfaces shall be agreed with the Engineer and carried out without delay, following the inspection to be made immediately after the formwork has been dismantled.

Any concrete surface found to have been treated prior to inspection by the Engineer shall be rejected.

Any minor surface defects shall be repaired to the Engineer's satisfaction immediately upon completion of curing. Remedial measures may include, but are not limited to:

- The holes left for the formwork supports shall be thoroughly cleaned to remove all loose material and the edges shall be roughened if necessary to ensure a satisfactory joint. It shall then be filled with dry mortar.
- Pinhole bubbles, surface discoloration and minor imperfections can be rubbed with bagging and cement immediately after the mould is removed.
- Sudden and gradual irregularities can be rubbed with carborundum and water after the concrete has completely cured, and curing is applied according to the principles specified in the "Concrete Protection and Curing" section.
- Minor imperfections and minor segregations shall be chipped to a depth of at least 25 mm perpendicular to the concrete surface and filled with dry mortar.
- Cracks shall be repaired using epoxy-based materials or materials approved by the Engineer.

All other defects shall be deemed too extensive to allow for satisfactory repair and the concrete containing the defect shall be broken and replaced.

# 4.1.4. STEEL WORKS

# Reinforcement Types, Quality and Storage

Steel reinforcement for concrete shall consist of ribbed steel bars or steel mesh. Steel bars shall consist of deformable bars suitable for ST III type (S420a (with characteristic tensile strength of 420 MPa)) as specified in TS 500 and TS 708. Wire mesh reinforcement shall comply with TS 4559 or DIN 488.

If deemed necessary by the Engineer, the Contractor shall submit the detailed drawings and calculations of the reinforcement to the approval of the Engineer. Paint colour of steel, various iron works and sheet metal fabrications shall be determined by the Engineer.

The Contractor shall prepare the steel reinforcement test samples to be used in the Works. Test specimens shall be randomly taken from each lot shipment in the presence of the Engineer and shall be of sufficient size to perform the tests described below. The samples shall be tested in an approved laboratory and certified copies of the results of the tests shall be submitted to the

Engineer. The samples shall be tested for bending and tensile properties and the wire mesh is also to be tested for weld shear strength. No additional payment shall be made to the Contractor for these tests, they are included in the offered unit price.

Test methods and requirements shall be made according to TS 4559, or DIN 488 T3, 488 T5 and 488 T6. No steel reinforcement shall be used in the Works until the test results are approved by the Engineer. If ordered by the Engineer, the testing procedures shall be repeated at the Contractor's expense for the supply of any new equipment during the Works.

Storage of reinforcement shall be on racks or supports away from the floor. Reinforcements of different types and sizes shall be kept separate.

The Contractor shall fix the reinforcement according to the Drawings and/or the issues specified in TS 500.

Transports for steel reinforcement, structural steel and various iron works shall be included in the offered unit price.

# **Protection and Cleaning**

The reinforcement shall at all times be protected from damage and be free of dirt, loose mill scale, rust deposits, paint, oil or other foreign matter when placed in the structure. All reinforcing steel shall be carefully cleaned of any frozen or partially set concrete, form oil or paint that may have accumulated during the construction of adjacent works.

# **Bending Rods**

Steel reinforcement shall be cut from flat bars free from crushing, bending or other damage and shall be cold bent by experienced, competent workers. Bars with a diameter greater than 16 mm shall be bent on a bending machine designed for this purpose and approved by the Engineer. Any reinforcing bar that has already been bent shall not be re-bent at the location of the previous bend.

# **Cutting of Steel Mesh**

Wire mesh reinforcements shall be cut straight from mesh plates. The use of wicker plates and small pieces that are not cut properly shall not be allowed.

# **Overlap of Ribbed Bars and Wire Mesh**

Lapping operation on ribbed bars and steel mesh is permitted by the Engineer, provided that it is in accordance with the technique. Reinforcement welding shall not be performed unless authorized by the engineer, welding and tests for reinforcement shall be in accordance with the definitions specified in TS 500.

Unless otherwise specified, the overlap length of the rebars shall be at least forty (40) times the diameter of the larger bar and laps shall be applied in stages.

The overlapping length of the steel mesh shall be applied as specified in TS 500, with at least 3 meshes in the running direction and at least 1 mesh in the distribution direction.

#### **Fixing the Rebar**

All reinforcing steels shall be correctly placed and fixed during the placing of the concrete, and shall be held in a fixed position during the concrete pouring.

To protect the reinforcement from contact with moulds or adjacent reinforcement, the spacers shall be of dense precast concrete blocks or rigid plastic material in shapes and sizes approved by the Engineer. The use of pebbles, broken stone chips or bricks or other materials shall not be permitted. The reinforcements shall be tied and fixed in the correct position using steel binding wire. Except for any other requirement, the reinforcement shall be fixed in such a way that the reinforcing steel supports its own weight and any load that may come upon it during construction, without any displacement, bending or movement.

In floors with two or more layers of reinforcement, parallel steel rebars shall be supported in situ using steel stands. To support the lean concrete or formwork reinforcement layers, a spacer shall be placed on each stand.

The distance between any two parallel steel bars, excluding laps, shall not be less than the nominal aggregate size of 5 mm.

All reinforcements exposed to weather conditions for a long time before starting concrete shall be covered with polyethylene holding tape, cement grout or other materials to the surrounding concrete. If rust stains occur on permanently visible surfaces despite these precautions, it shall be removed immediately upon the Engineer's directive.

#### **Spacer Distances**

The spacer distance shall be 50 mm for reinforced concrete foundations and 25 mm for beams and columns.

#### Tolerances

Reinforcement placement tolerances shall be +/- 10 mm.

#### **Pre-Concrete Approval**

After all the reinforcement is fixed in place, it shall be checked and approved by the Engineer before any concrete is poured. Any concrete placed in violation of this requirement shall be removed together with the reinforcement and remanufactured by the Contractor at his/her own expense, if instructed by the Engineer.

# 4.2. SPECIAL TECHNICAL SPECIFICATIONS FOR ARCHITECTURAL WORKS

All goods and materials used in the works shall have a TSE certificate with the criteria established for their own manufacturing standards. All goods and materials to be supplied by the Contractor and included in the Works shall be new, unused and of the most up-to-date design.

The Contractor shall submit to the Engineer the list of material proposals required for the execution of the Works. Samples shall also be made available at the Engineer's request. The Contractor shall obtain the Engineer's written approval before using the materials.

Materials supplied thereafter shall be in accordance with the quality of the samples examined by the Engineer.

Names of additional suppliers and sources may be provided by the Contractor during execution of the Contract, but no source of supply or material may be changed without the Engineer's approval.

Materials and components shall be stored in such a way as to maintain their quality and condition to the standards required by the Contract.

Materials and components shall be handled in such a way as to avoid any damage or contamination and in accordance with all applicable recommendations from the manufacturers.

Unless otherwise specified in the contract, the use, installation, application or fixation of materials and components shall comply with all applicable recommendations from the manufacturers. Where appropriate, the Contractor shall make use of the technical advisory services offered by the manufacturers.

#### 4.3. SPECIAL TECHNICAL SPECIFICATIONS FOR ELECTRICAL AND MECHANICAL WORKS

The contractor is responsible for the materials and installations within the work until the final acceptance of the work. The Contractor is also obliged to install all systems in the building and other structures in a complete and working condition and to promptly repair any faults, excluding usage faults, free of charge, during the 12-month defect liability period between temporary acceptance and final acceptance. In case the necessary repair works cannot be completed within one month, the parts not repaired within this period shall be repaired by the Employer on behalf of the Contractor and shall be deducted from the Contractor's Performance Guarantee.

#### **Visual Inspection**

All materials to be used in mechanical installations shall be subjected to a visual examination by the Engineer to verify that the materials are not broken, rusty, cracked or old.

#### **Functioning Inspection**

All materials to be used in mechanical installations shall be subjected to functional examination with tests without any cost impact to the Employer.

#### Warranty Period

All materials to be used in mechanical installations shall have a commercial warranty of two (2) years from the manufacturers as of the temporary acceptance of the work.

# SECTION 5A.2 SPECIFICATIONS FOR ITEMS/POSE DEFINITIONS

The works described in this section include all the necessary materials and losses, loading, horizontal and vertical transportation, unloading, workmanship, **transportation of material to the site**, contractor's profit and general expenses for the successful completion of the specified items.

Whenever item/pose is related to an item/pose number from the official books<sup>2</sup> published by Turkish public institutes, the definition in this specification shall prevail for any inconsistency. In case of vagueness/absence of an issue in the item definition in this specification, the official definition shall prevail for only the vagueness/absence.

The units of measurement used in the items/pose definitions are those of the International System of Units (SI). No other units may be used for measurements, pricing, detail drawings etc. (Any units not mentioned in the technical documentation must also be expressed in terms of the SI.) Abbreviations used are to be interpreted as follows:

mm	means	millimetre
m	means	metre
da	means	decare
mm²	means	square millimetre
m²	means	square metre
m³	means	cubic metre
kg	means	kilogram
ton	means	tonne (1000 kg)
pcs	means	pieces
h	means	hour
L.s.	means	Lump sum
km	means	kilometre
I	means	litre
kVAR	means	kilovolt ampere reactive
%	means	per cent

 $<sup>^2</sup>$  Official books valid for those specifications are published by;

<sup>•</sup> Republic of Turkey Ministry of Environment and Urbanization

<sup>•</sup> Republic of Turkey General Directorate of Highways

<sup>•</sup> Iller Bank, Turkey

<sup>•</sup> Republic of Turkey General Directorate of State Hydraulic Works

Republic of Turkey General Directorate of Railways, Harbors, Airports

# **Civil and Architectural Works**

Pose No	Pose	Unit
Civ01	Excavation Works	m³
Description /Specification	The amount measured per 1 m3 of excavation for the successful completion of work, calculated according to the dimensions in the drawings, for the excavation kinds of soil and rock (soft, hard, very hard, all kinds of rock) at any depth and w (free, wide, deep and narrow excavation and trench excavation, scraping excavation clay excavation at all depths (for infrastructure) in accordance with its provincluding machine-assisted or manual excavation, including soil mixed with roc similar hard material of any size, above or below the groundwater level or flood and the like, supporting the excavation area with all kinds of planks and buttress any way and the materials necessary to purify it from underground or surface w flowing in any way at any depth and width, including losses, transportation relevant materials to and/or transportation from the construction site, loa unloading, horizontal and vertical transport, workmanship, contractor's profit overheads.	of all width vation ject), ks or level ses in water of all ading,
Related reference	15.120.1001, 15.120.1002, 15.120.1003, 15.120.1005, 15.120.1007, 15.120.1009, 15.120.1101, 15.120.1102, 15.120.1103, 15.120.1105, 15.120.1107, 15.120.1109	
pose number, book	Ministry of Environment and Urbanisation	1

Pose No	Pose	Unit
Civ02	Making a plant-mix sub-base (with crushed quarry stone)	ton
Civ02 Description /Specification	<ul> <li>Making a plant-mix sub-base (with crushed quarry stone)</li> <li>Making a plant-mix sub-base by laying it with a paver with crushed and sieved of stone in accordance with the principles and conditions in the relevant part of the Costs Included in Unit Price:</li> <li>On site supply, assembly and disassembly of the necessary machinery and equiping removing the stone from the quarry, breaking it to the size to be given to the crubating on vehicles, transporting between the quarry and the crusher, discha transferring to the crusher, crushing and sieving with a crusher to obtain granulometry specified in the specification or requested by the Administry performing additional screenings and granulometry adjustment works, discharging crusher bottom, crushing and sifting aggregate; loading into vehicles, unloadin storage at the plant site, loading from the warehouse to transport trucks, unload transporting to the plant silo, if necessary, the aggregate in the silos shou skewered by hand in order to flow well, giving the mixture from the silos to the preparing water with a motorized pump and filling the water tanks, giving them imixer in a certain amount, mixing the aggregate and water in the mixer, loading material coming out of the mixer to the transport trucks, keeping it in the plant at the scale, conducting research and technical supervision, weighing the mixture we automatic card-printing scale at the capacity requested by the Administration, we the transport trucks to the paver, laying with a paver in accordance with benchmark, axis, cross-section and elevations given by the administration, macriection of errors, making, cleaning, straightening, watering, laying and compo of transverse and longitudinal joints, regulating and water in the works, an contractor's profit and general expenses.</li> <li>Note:</li> <li>No additional payment shall be made for the transportation of the aggregate to plant area, for the transportation of the water to the workplace and to the plant transportation</li></ul>	uarry uarry e KTŞ. ment, usher, rging, n the ation, ng the g and ing by ld be plant, to the and in ith an g the and in ith an raiting ixture the the acting, , with erials, d the co the ery are ing to

	Measurement: It is the weight, in tons, of the mixture used in the prepared, laid and compacted plant-mix sub-base layer.
Related reference pose number, book	KGM/6100/3-1 / General Directorate of Highways

Pose No	Pose	Unit
Civ03	Making the Foundation [with Broken and Sifted Hearthstone (1 inch)]	m³
Description /Specification	Construction of foundation with quarry stone, crushed and sieved 25 mm (1") mater in accordance with the principles and conditions in the relevant part of k Costs Included in Unit Price: Removing the rocks from the quarry, breaking it to the size to be given to the crush loading it into vehicles, transporting it between the quarry and the crusher, unload giving it to the crusher, making granulometry and quality research, breaking it wit crusher to obtain the granulometry specified in KTŞ, sifting, loading on vehic unloading and figuring, preparing water with motorized pump, watering, laying a compacting the basic material by providing optimum water content, including all ki	
	No additional payment shall be made for the transportation of the material from crusher to the workplace, the transportation of water and other transportations included in the unit price. Measurement: It is the volume, in cubic meters, of the laid and compacted foundation material calculated from the figure size, without considering swelling and collapse before la	s, it is terial,
Related reference pose number, book	KGM/6040 / General Directorate of Highways	aying.

Pose No	Pose	Unit
Civ04	Making fill with all-in sand, gravel or stabilizer	m³
Description /Specification	Price per m <sup>3</sup> for removing the all-in sand and gravel or stabilizer from the quarry loading and unloading them on/off vehicles, levelling at the filling site including all kinds of materials, tools and equipments, contractor's profit and general expenses and workmanship: MEASUREMENT: It is measured over the m <sup>3</sup> of filling made according to the project. Stinging and jamming are not accepted. Transportation from the quarry to the construction site at any distance is included in the price.	
Related reference pose number, book	74.013.0032 / Ministry of Transport and Infrastructure	

Pose No	Pose	Unit
Civ05	Providing gravel and making drainage	m³
Description /Specification	Price of 1 m3 for the supply of gravel for drainage in accordance with the approved project and its details, manually throwing into the ditch to be drained and laying layer by layer, including all kinds of workmanship, material and loss, loading, horizontal and vertical transportation, unloading, contractor general expenses and profit: MEASUREMENT: Its volume is calculated according to the dimensions in the project. Transportation to the construction site from any distance is included in the price.	
Related reference pose number, book	15.125.1006 / Ministry of Environment and Urbanisation	
Pose No	Pose	Unit

Pose No	Pose	Unit

Civ06	Pouring normal ready-mixed concrete in C 16/20 pressure strength class, grey colour, produced or purchased at the concrete plant and pressed with a concrete pump (including concrete transport)	m³
Description /Specification	The price of 1 m <sup>3</sup> of normal ready mixed concrete in grey colour with a compressive strength of C 16/20 and poured in situ: where such ready mixed concrete mortar have been produced in a complete concrete facility suitable for concrete produc (with a minimum 60m <sup>3</sup> /h capacity, with four-eyed aggregate hopper, compresso control cabinet, computer controlled, having a cement silo with a min. capacity tons, with conveyor belt system, recovery unit, laboratory capable of perfor aggregate and concrete tests, generator, enough truck mixers and mobile con pumps, at least one loader, additive tank and additive weighing bunker, moisture r and all kinds of similar teams and equipment, periodically calibrated con production facility) in accordance with the standard and project, after being was sieved granulometric sand-gravel and/or crushed stone, cement, water ar necessary, additives and ready mixed concrete mortar produced in C 16/20 clap urchased from a concrete facility with these qualities; concrete quality con loading into truck mixers, transporting to the workplace, pressing with a concrete to the pouring location, placing, compaction with vibrator, irrigation, protectior maintenance from cold, heat and other external influences, taking samples fon necessary and sufficient number of tests, and carrying out the necessary tests labour material and loss required, machinery, equipment and laboratory expenses kinds of horizontal and vertical transports in the workplace, loading and unloa loading the granulometric sand, gravel or crushed stone into the concrete body an cement from the place where it is procured, produced or purchased, transportati the concrete plant, unloading from vehicles, stacking, placing in the concrete plant, unloading from vehicles, stacking, placing in the concrete plant, and all other equipment, with depreciation expenses including any other produced or purchased and profits.	shall iction r and of 50 rming crete shed, if ass or trols, bump a and r the s, any es, all ading, id the on to blant, crete other oject. other to the ts are es the d ation. h the hents.
Related reference pose number, book	15.150.1003 / Ministry of Environment and Urbanisation	

Pose No	Pose	Unit
Civ07	Pouring normal ready-mixed concrete in C 30/37 pressure strength class, grey colour, produced or purchased at the concrete plant and pressed with a concrete pump (including concrete transport)	m³

Description /Specification	The price of 1 m <sup>3</sup> of normal ready mixed concrete in grey colour with a compressive strength of C 30/37 and poured in situ: where such ready mixed concrete mortar shall have been produced in a complete concrete facility suitable for concrete production (with a minimum 60m <sup>3</sup> /h capacity, with four-eyed aggregate hopper, compressor and control cabinet, computer controlled, having a cement silo with a min. capacity of 50 tons, with conveyor belt system, recovery unit, laboratory capable of performing aggregate and concrete tests, generator, enough truck mixers and mobile concrete pumps, at least one loader, additive tank and additive weighing bunker, moisture meter and all kinds of similar teams and equipment, periodically calibrated concrete production facility) in accordance with the standard and project, after being washed, sieved granulometric sand-gravel and/or crushed stone, cement, water and, if necessary, additives and ready mixed concrete mortar produced in C 30/37 class or purchased from a concrete facility with these qualities; concrete quality controls, loading into truck mixers, transporting to the workplace, pressing with a concrete pump to the pouring location, placing, compaction with vibrator, irrigation, protection and maintenance from cold, heat and other external influences, taking samples for the necessary and sufficient number of tests, and carrying out the necessary tests, any labour material and loss required, machinery, equipment and laboratory expenses, all kinds of horizontal and vertical transports in the workplace, loading and unloading, loading the granulometric sand, gravel or crushed stone into the concrete body and the cement from the place where it is procured, produced or purchased, transportation to the concrete plant, unloading from vehicles, stacking, placing in the concrete plant, supply and transport of water used in concrete and for irrigation, supply of concrete plant and all other equipment, with depreciation expenses including any other expenses and contractor overheads
	NOTE: 1) The facility where the produced or purchased concrete is produced must have other documents required by the TSE and its legislation and submit these documents to the administration before starting production. Provided that the submitted documents are determined to be appropriate and it is allowed to be used, it will be possible to use the concrete with a certificate of conformity produced or purchased in this facility and which also meets the market supply conditions according to the current legislation. 2) In case the concrete is procured by purchasing, a copy of the invoices on which the name of the work is stated must be attached to the payment documents. 3) The cost of the additive material to be added to the concrete body shall be paid separately. 4) If the pump is not used, the pump cost is deducted from the analysis.
Related reference pose number, book	15.150.1006 / Ministry of Environment and Urbanisation

Pose No	Pose	Unit		
Civ08	Making a flat surface reinforced concrete formwork with plywood	m²		
Description /Specification	MEASUREMENT:         Mould faces shall be calculated based on the project or by measuring in situ. Perin         moulds of manufacturing holes for which the void volume is not subtracted ar         included in the measurement. The hole gap is not removed from the face of the         on       the         NOTE:         1)       Formwork         scaffolding       is         paid	(film- d the erials place, profit: meter e not		
	2) The material coming out of the mould belongs to the contractor.			

 Related reference
 15.180.1003 / Ministry of Environment and Urbanisation

 pose number, book
 15.180.1003 / Ministry of Environment and Urbanisation

Pose No	Pose	Unit
Civ09	Ø 8- Ø 12 mm ribbed concrete steel bar, cutting, bending and repositioning of bars	ton
Description /Specification	MEASUREMENT: 1) According to the reinforced concrete detail drawings, the length of the ir measured with the c	nds of n site, ading, profit: on is lasps. elow. ount. ent is ss are
Related reference pose number, book	15.160.1003 / Ministry of Environment and Urbanisation	

Pose No	Pose	Unit
Civ10	Ø 14- Ø 28 mm ribbed concrete steel bar, cutting, bending and repositioning of bars	ton
Description /Specification	MEASUREMENT: 1) According to the reinforced concrete project reinforcement details, the length iron is measured with the c	nds of site, eneral profit: of the lasps. elow. ount. ent is ss are

Related reference	15.160.1004 / Ministry of Environment and Urbanisation
pose number, book	

Pose No	Pose	Unit
Civ11	Replacing ribbed wire mesh 3,001-10,000 kg/m <sup>2</sup> (including 10,000 kg/m <sup>2</sup> )	ton
Description /Specification	The price of 1 ton of mesh steel, including assembling the wire mesh formed into mesh by spot welding from 4.00 mm and larger St IVb bars in accordance wit project, adding it by overlapping according to the specifications and details and for the support, loading at the construction site, horizontal and vertical trans unloading, including all kinds of materials and losses, workmanship, tools, equip expenses, contractor general expenses and p MEASUREMENT: 1) According to the reinforced concrete project, the calculated square meter of steel mesh is multiplied by the weights shown in the table below, and it is calculate tons. 2) Steel and attachments not shown in the project are not taken into accord 3) Tie wire, kg/m weight differences (relative to the scale) are not taken into accord as the support bar is included in the loss in the analysis. 4) No additional payment shall be made for transportation, it is included in the unprice.	h the rming sport, ment profit: of the ced as count. count
Related reference pose number, book	15.160.1002 / Ministry of Environment and Urbanisation	

Pose No	Pose	Unit
Civ12	Carcass, (frame) construction with all kinds of profiles, steel bars and steel sheets, fixing in place (structure frame, beams from profile iron in bridges, caps, connections and similar manufactures)	ton
Description /Specification	<ul> <li>1 ton price for carcass construction with all kinds of profiles, steel bars, steel s according to the project, at every height and opening, adding the parts with rivets, and welding, assembling all the parts in place, all kinds of materials and losses, lo at the construction site, horizontal and vertical transport, carrier scaffolding or device, unloading, workmanship, contractor general expenses and profit (excl paint MEASUREMENT:</li> <li>1) Weighing is essential in the measurement, the profile iron rivets, bolts, addi plates and similar fasteners used are weighed and attached to the attachment b</li> </ul>	bolts ading lifting uding cost): tional before bled. ght of eights veight d bolt s scale at the ation.
Related reference pose number, book	price. 15.165.1003 / Ministry of Environment and Urbanisation	

Pose No	Pose	Unit
Civ13	Building and installing various iron works from flat and profile irons	kg
Description /Specification	1 kg price for all kinds of stairs, balcony bridge railings, window and garden ra stairs made to the roof, cesspool and similar places, iron rivets, bolts, welding a kinds of materials and losses for the construction of grates and similar works ma various steel bars, flat bars and profile irons, including loading, horizontal and ve transportation, unloading, workmanship, contractor overheads and profit a workplace (excluding paint Measurement: It is weighed before painting and mounting together	nd all ade of ertical

	manufacturing	and	fixing	material,	if	any.
	Note: However, if th	e administra	tions deem it ne	cessary, it can insp	pect the scale	e weight
	of all profiles and	hub point p	lates over the	project dimensior	is compared	to the
	weights on the table	e. As a result o	of this weighing,	7% of the weight i	more than th	ne tables
	shall be paid, more	than 7% of th	e weight shall n	ot be taken into a	ccount. If the	e weight
	found as a result of	this scale is l	ess than the on	e in the table, the	scale is take	n as the
	basis, provided that	t the product	tion is accepted	by the administration	ation. No ac	ditional
	payment shall be m	ade for trans	portation, it is in	ncluded in the unit	: price.	
Related reference	15 550 1202 / Minic	try of Enviro	nmont and links	nization		
pose number, book	15.550.1202 / Minis	ary of Enviro	nment and Urba			

Pose No	Pose	Unit
Civ14	Concrete Coating (Using C30/37 Ready-Mixed Concrete)	m³
Description	In accordance with the principles in its specification and in accordance with	n the
/Specification		
Related reference pose number, book		

Pose No	Pose	Unit
Civ15	Painted Trapezoidal Section Sheet Roof Covering	m²
Description	It is the price per 1 m2 of making painted trapezoidal section sheet metal roof cover	ering,
/Specification	Is the price per 1 m2 of making painted trapezoidal section sheet metal roof covering, acluding overlapping 0.50mm thick galvanized painted trapezoidal section sheet, ainted with fabrication roller painting system (outside surface min. 5 micron, inwarc acing surface min. 7 micron epoxy primer and tops min. 20 micron polyester topcoat aint) sheets, fixing them to the purlins, replacing the accessories (such as ridge, under the eaves, under the wall, edge coating, etc.), applying silicon to the holes under the riphone washer, loading at the construction site, horizontal and vertical transport, nloading, on-site assembly, material, transportation, workmanship, assembly, losses, quipment expenses, contractor's profit and general expenses work. Neasurement: Covered roof surfaces are calculated in terms of area. o additional payment shall be made for transportation, it is included in the unit rice.	
Related reference pose number, book	48.325.2001 / Ministry of National Defence	

Pose No	Pose	Unit
Civ16	Making formwork scaffolding from steel pipe (between 4.01- 6,00 m)	m³
	When deemed necessary by the administration, the erection and dismantling of	
Description	steel pipe carrier scaffolding for the building and industrial production, the heigh	
/Specification	which falls within the scope of this pose, according to its standard and approved	
	project, by taking the necessary safety precautions, all kinds of materials and lo	osses,

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	loading at the construction site, horizontal and vertical transportation, unloading,
	workmanship, tool and equipment costs, contractor overheads and profit included, 1
	m <sup>3</sup> price: Measurement: 1) The gap between the formwork face of the building and
	industrial production within the scope of this measure and the ground to which the
	scaffold is attached is calculated. If the roof is inclined, the average altitude is taken as
	a basis. 2) When this pose is applied to tunnels or galleries, the gap between the lower
	surface of the gallery or tunnel arch and the ground to which the scaffold is attached is
	calculated. 3) This pose is applied for the water tank construction scaffolds within the
	scope of this measure. In this case, the gap between the ceiling of the concrete water
	tank and the floor to which the scaffold is attached is calculated. 4) The required width
	of the carrier scaffolding for the frame, beam and columns that are not built with the
	flooring is determined by the administration. Note: 1) The volumes of steel pipes and
	timber used in scaffolding and formwork and the volumes of construction elements
	(gussets, beams, columns, curtains, water tanks and similar construction elements.) in
	the cavity are not deducted from the pier cavity volume. 2) In buildings, the triangular
	shaped scaffolding gap volumes are calculated to hold and carry the moulds of
	reinforced concrete eaves, balconies, concrete, reinforced concrete retaining walls,
	curtains and similar productions. Triangle horizontal length cannot be more than half
	of the mould height. 3) Scaffolding fee is not paid for concrete walls less than one-meter
	high, reverse beams, portafoils and eaves with a width of less than 0.50 m, and door-
	window lintels with a span of less than 1.50 m. 4) Since formwork scaffolding shall be
	established for reinforced concrete slabs, no additional formwork fee shall be charged
	for concrete and reinforced concrete curtains, detached columns and similar
	productions inside the building. 5) This price is not applicable for the formwork
	scaffolding of the construction or production to be made with special sliding formwork.
	6) The material coming out of the scaffolding belongs to the contractor. 7) No additional
	payment shall be made for transportation; it is included in the unit price.
Related reference	15.185.1006 / Ministry of Environment and Urbanization
pose number, book	

Pose No	Pose	Unit
Civ17	Construction of a fully secure, exterior scaffolding consisting of pre-built components. (between 0,00- 51,50 m)	m²
Description /Specification	The price per 1 m <sup>2</sup> of installation and dismantling of the full-security ex scaffolding, which will be used as a fixed item for the productions to be made of exterior of the buildings, in accordance with the legislation, (all legislation incl occupational health and safety law, occupational health and safety regulati construction works, health and safety regulations in the use of work equip communiqué on the exterior scaffolding consisting of wood and pre-built steer aluminium alloy components) material and design standards, in accordance with project, consisting of pre-built components, whose load class is min. 4, by takin necessary safety precautions, all kinds of materials and losses, loading a construction site, horizontal and vertical transportation, unloading, workmanship and equipment expenses, contractor general expenses and profit incl MEASUREMENT: The upper level of the scaffolding is taken as the height and the l at the base is taken as the width, and the multiplication of the width and heic calculated as the scaffolding area. NOTE: 1) If there is a production that will require a work scaffolding on the ceiling the area surrounding a space; scaffolding fee is additionally paid for the ceiling the astaffolding established in a location is considered to be established for the construction of all the productions to be made at that location and requiring the establishment of a scaffolding, and the scaffolding fee is paid once for this locatio 3) This pose applies to the construction of walls higher than 3.00 meters and to individual constructions of this nature. 4) Constructions with a height of 3,00 metre or less than 3.00 meters will not be charged a scaffolding fee.	on the uding on in ment, el and th the og the t the o, tool uded: ength ght is g in out en.

	<ul> <li>is paid.</li> <li>6) The fact that the scaffolding was built in accordance with the standards, legislat and project will be recorded in a report together with the building inspection office and the contractor and this report will be submitted to the administration for approval. In addition, the scaffolding will be transferred to CD in a way to show the general and detailed status and this CD will be attached to the minutes. This report and CD must be attached to the payment documents, and the scaffolding fee is not paid until these issues are fulfilled.</li> <li>7) No additional payment shall be made for transportation, it is included in the unprice.</li> </ul>	cer ie rt ot
Related reference pose number, book	15.185.1013 / Ministry of Environment and Urbanization	

CivitscomparisonThe privinceThe privincewhichbuildinebuildinehealthhealthhealthexterinecomparisonof preprecaseand viccontrase1.50 mheightthe scNOTE:the arrscaffo2) Theconstrscaffo2) The3) Thisindivide4) Corrcharge5) WhSi Wh	nstruction of a fully secure, ceiling scaffolding consisting of pre-built	
Description /Specification Description /Specification Description /Specification Compo of precation Description /Specification Compo of precation Description () Specification Compo of precation Description () Specification Compo of precation Description () Specification Compo		m³
Description /Specification Description /Specification Description /Specification Description /Specification Description /Specification Description Specification Description Description Specification Description Specification Description Specification Description Specification Description Specification Description Specification Description Specification Description Specification Description Specification Description Specification Description Description Specification Specificati	mponents. (between 0,00- 21,50 m)	
6) The and pu and th appro genera and Cu paid u 7) The	e price per 1 m <sup>3</sup> of installation and dismantling of the full-security ceiling scaffolich will be used as a fixed item for the productions to be made on the ceilings of ildings, in accordance with the legislation, (all legislation including occupatalth and safety law, occupational health and safety regulation in construction walth and safety regulations in the use of work equipment, communiqué o terior scaffolding consisting of wood and pre-built steel and aluminium mponents) material and design standards, in accordance with the project, cons pre-built components, whose load class is min. 4, by taking the necessary secutions, all kinds of materials and losses, loading at the construction site, horiz d vertical transportation, unloading, workmanship, tool and equipment expentractor general expenses and profit included: MEASUREMENT: The height and the surface on which the scaffold sits and the ceiling is accepted a gight of the scaffolding, and the product of this height and the surface area on we caffold sits is calculated as the volume of the scaffolding on the ceiling baffolding fee is not paid for the walls. The scaffolding and productions to be made at that location and requiring the tablishment of a scaffolding, and the scaffolding fee is paid once for this location for this pose applies to the construction of ceilings higher than 3.00 meters and to dividual constructions of this nature. Constructions with a height of 3,00 metre or less than 3.00 meters will not be arged a scaffolding fee. When necessary, security measures are taken with net, tarpaulin etc No extracted as the scaffolding was built in accordance with the standards, legislat d project will be recorded in a report together with the building inspection offit dthe contractor and this report will be submitted to the administration for proval. In addition, the scaffolding will be transferred to CD in a way to show the neral accember do the scaffolding fee is not addition for proval. In addition, the scaffolding belongs to the contractor. No ext	of the tional vorks, n the alloy isting afety contal enses, minus as the which g in ut on. o a fee ation cer ne ort ot
Related reference	.185.1014 / Ministry of Environment and Urbanization	

Pose No Pose Uni
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Civ19	Quartz aggregate (grey) surface hardener and curing application (in fresh concrete)	m²
Description /Specification	On the concrete poured in accordance with the project, in the first stage, the q aggregate grey surface hardener is sprinkled with a consumption of approximate kg / m <sup>2</sup> , homogeneously dispersed, the tray levelling is made with a trowel, in second stage, the quartz aggregate grey surface hardener is applied with a consum of approximately 1.5 kg / m <sup>2</sup> , sprinkling homogeneously and polishing the tray w trowel until the concrete is set, then blade-polishing with a trowel until the desine is achieved, after obtaining the desired gloss, applying to the surface an ac based liquid curing material with a brush roller or spraying with a consumption of (kg/m <sup>2</sup> , including all kinds of material and loss, workmanship, loading at the workp horizontal and vertical transportation, unloading, contractor's profit and ge expenses, the price of this work for 1 MEASUREMENT: The area applied over the project is calcul NOTE: In surface hardener applications, approximately 2/3 of the total material to be must be applied in the first stage, and approximately 1/3 of the total material used in the second stage.	ly 3.5 n the ption vith a esired crylic- 0,200 blace, neral m <sup>2</sup> : ated. used
Related reference pose number, book	15.190.1002 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit			
Civ20	Supply and installation of PVC-based corrugated drainage pipe with Ø 200 mm nominal diameter				
Description /Specification					
Related reference pose number, book	15.205.1004 / Ministry of Environment and Urbanization				

Pose No	Pose	
Civ21	Building a wall with 190 mm thick horizontally perforated brick (190x190x135 mm)	
Description /Specification	m <sup>2</sup> price for sizing the aluminium composite panels according to the project to ven by the Administration and mounting them on the scales at the specified place icluding all materials and losses, loading, vertical and horizontal transportation at t postruction site, unloading, workmanship expenses and contractor's profit a verhead expense IEASUREMENT: It is calculated over the dimensions in its project. Spaces smaller th .10 m <sup>2</sup> are not deducted.	
Related reference pose number, book	15.220.1005 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Civ22	Plastering with 250/350 kg cement dosed coarse and thin mortar (exterior	m²
	plaster)	

Description /Specification	1 m2 price or making rough plaster with an average thickness of 2 cm with a mortal prepared by adding 250 kg of cement to 1 m3 of toothed sand, on that, making a average of 0.8 cm thick thin plaster with a mortar prepared by adding 350 kg of cemer to 1 m3 of alluviums sand, cleaning the wall surface, watering when necessary including all kinds of material and loss, workmanship, work benches, loading at th construction site, horizontal and vertical transportation, unloading, contractor generates and profim MEASUREMENT: All plastered surfaces are calculated over the project.	nt y, ie al
Related reference pose number, book	15.275.1101 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit		
Civ23	Plastering with 200/250 kg lime/cement mixture coarse and thin mortar (interior plaster)			
Description /Specification	1 m2 price for making rough plaster with an average thickness of 2 cm with a m prepared by adding 200 kg of cement to 1 m3 of toothed sand and 0.128 tons of bas slaked lime, on that, making an average of 0.8 cm thick thin plaster with a m prepared by adding 250 kg of cement to 1 m3 of alluviums sand and watering necessary, cleaning the wall surface, including all kinds of material and workmanship, work benches, loading at the construction site, horizontal and ve transportation, unloading, contractor general expenses and p MEASUREMENT: All plastered surfaces are calculated over the project.	agged Iortar when Ioss,		
Related reference pose number, book	15.275.1102 / Ministry of Environment and Urbanization			

Pose No	Pose	Unit		
Civ24	Applying two coats of water-based semi-gloss paint by applying a primer to new plaster surfaces (interior)			
Description /Specification	After sanding, grinding and cleaning on the surface to be painted, 0.150 kg water- primer is applied, on top of which 0.100 kg 1 <sup>st</sup> layer, 0,100 kg 2 <sup>nd</sup> layer water- semi-matte paint is applied, including all kinds of materials and losses, workma contractor general expenses and profit. 1 m2 price for this MEASUREMENT: The surfaces painted over the project are measured. All space deducted. NOTE: For walls and ceilings higher than 3 m, additional scaffolding is provided. If is a scaffolding for plaster, it is not given separately for the painting work.	based nship, work: es are		
Related reference pose number, book	15.540.1261 / Ministry of Environment and Urbanization			

Pose No	Pose	Unit		
Civ25	Applying pure acrylic-based water-based paint to exposed concrete, plastered or old painted surfaces by applying a primer (exterior)			
Description /Specification	After the surfaces to be painted are scraped, 1 m <sup>2</sup> price for removing the burre excess grainy parts, applying an average of 0.070 l of primer in a single layer applying an average of 0.216 l acrylic-based water-based paint in the desired color the surface with a brush or roller in 2 coats, all kinds of materials and losses req for them, including workmanship, contractor overheads and p Measurement: The surfaces painted over the project are measured. All space deducted. Note: For walls and ceilings higher than 3 m, additional scaffolding is provided. If is a scaffolding for plaster, it is not given separately for the painting work.	r and our to uired orofit: s are		
Related reference pose number, book	15.540.1323 / Ministry of Environment and Urbanization			

Pose No	Pose	Unit
Civ26	Making a 200 kg cement dose levelling layer	m²
/Specification	According to the project and detail project, 1 m <sup>2</sup> price for cleaning and washin place where the levelling layer shall be made, making a levelling layer by adding 2 of cement to 1 m <sup>3</sup> of toothed sand and compressing it in an average 3 cm thick g	00 kg

	watering it when necessary, cleaning it from mortar and similar residues, including all kinds of materials and losses, workmanship, transportation to the construction site, loading at the construction site, horizontal and vertical transportation, unloading,			
	contractoroverheadsandprofit:MEASUREMENT: The area of the levelled place is calculated over the project.			
Related reference pose number, book	15.250.1001 / Ministry of Environment and Urbanization			

Pose No	Pose	Unit			
Civ27	Making 2 layers of waterproofing with a total thickness of 1.5 mm with a cement-based polymer modified two-component ready-to-use insulation mortar.				
Description /Specification					
Related reference pose number, book	5.270.1005 / Ministry of Environment and Urbanization				

Pose No	Pose	Unit
Civ28	Supply and fixation of $ otin 100$ mm diameter rigid PVC rain pipe with a bell	m
Description /Specification	1 m price for supplying Ø100 mm diameter pipe made of PVC, fixing the clamps t wall, mounting the pipes from the gutter, including the elbows, completing connection of the rain pipes to the wall by tightening the clamps with galvanize screw, including all kinds of connections, elbows and miscellaneous parts, material losses, labour, loading, horizontal and vertical transportation, unloading at construction site , contractor overheads and p MEASUREMENT: It is measured over the length of the axis of the installed pipe, an curved parts are given a double raise.	g the d nut ls and t the profit:
Related reference pose number, book	15.315.1002 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Civ29	Supply and fixation of Ø 100 mm hard PVC rain gutter	m
Description /Specification	1 m price for supplying a rain gutter with Ø100 mm diameter in round or rectar cross-section made of PVC, building hanging gutters and skirts according to diameter or project, putting a layer of bitumen cardboard under the skirt, putt strainer, putting into its place with two galvanized 5x30 mm iron hooks per m including all kinds of materials and losses, labour, loading at the construction horizontal and vertical transportation and unloading, contractor's general exp and MEASUREMENT: It is measured over the length of the axis of the installed pipe, ar curved parts are given a double raise.	skirt ting a neter, n site, enses profit:
Related reference pose number, book	15.315.1004 / Ministry of Environment and Urbanization	

	Pose No	Pose	Unit
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Civ30	Making floor covering with 3 mm joint gaps with first quality, white ceramic floor tiles of (42.5x42.5 cm) or (45x45 cm) nominal sizes, with all kinds of patterns and surface features (with tile adhesive)	m²
Description /Specification	The price per 1 m <sup>2</sup> of cleaning and moistening the smooth surface in accordance the approved detail project from dirt, dust, burrs and similar residues that pre- adhesion, applying cement-based, high-performance, slip-reduced, extended time tile adhesive on the surface and grooving with a special comb, with (42,5 x cm) or (45 x 45 cm) nominal size, 1 <sup>st</sup> quality, white ceramic floor tiles with all kin pattern and surface properties, in accordance with the gauge and levelling, leav mm joint gaps, filling the joints with cement-based, standard performance joint fill the desired colour, cleaning of the coated surface, all kinds of materials and low workmanship tool and equipment expenses, loading at the workplace, horizonta vertical transportation, unloading, contractor general expenses and profit inclu- Measurement: It is calculated according to the dimensions on the coated surface the skirting project, if any.	event open a 42,5 ids of ing 3 ller in osses, l and uded:
Related reference pose number, book	15.315.1004 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Civ31	External windowledge with 3 cm thick white marble slabs (3cmx30-40-50 cmxfree length) (honed or polished))	m²
Description /Specification	1 m2 price for cleaning and wetting the existing surfaces made in accordance wit specifications, making a base with 400 kg cement dosed mortar, covering coat place and cleaning the outer windowsill made of 3 cm thick honed or polished m slabs, prepared in one piece with a slope and dropper, wiping, and all kin workmanship, material and losses, loading-unloading at the workplace, horize vertical transportation as needed by this work, contractor's general expenses and : MEASUREMENT: Coated surfaces are calculated over the project.	ing in harble ds of ontal-
Related reference pose number, book	15.410.1401 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Civ32	Manufacturing and replacing plastic joinery (all kinds of doors, windows, cladding and similar manufacturing from rigid PVC joinery profiles)	kg
Description /Specification	Plastic joinery and accessories and glass laths made of rigid PVC profiles, whice made according to the project and details approved by the administration, muresistant to all weather conditions and their surfaces must be smooth. The main produce of PVC (according to the standard, the wall thickness must be class "A" and wall thickness must be 2.8 mm on visible surfaces and 2.5 mm on invisible surfaces shall have a front chamber system designed to accelerate water discharg to ensure both heat and sound insulation. The required strength of the reinforcement profiles and the main profiles (case, wing, middle register) shap provided. Metal reinforcement profiles are U or box profiles made of hot-dip galva steel and protected against rust. In both cases, the sheet thickness will not be than 1.5 mm in the case and wings and 2 mm in the middle. (However, if the mo- of inertia is higher than the above-mentioned sheet thicknesses as a result of calculation made on very wide registers and wings, sheet metal with a thic compatible with the result must be used). Metal-reinforced PVC profiles shall combined with plastic corner welding, screws, sash fastening and other means, a kinds of window joinery, doors, windows and similar productions shall be insulated wit rows of EPDM rubber, neoprene or tpe gaskets. The installation of glass of all type thicknesses is done with the help of glass laths. Glass fixation shall be provid gasket, mastic and other methods in accordance with the system recommended by the help of glass laths. Glass fixation shall be provid gasket, mastic and other methods in accordance with the system recommended b manufacturer. Each window sash frames and at least 3 (three) hinges for the door frame. The hinges shall be of the strength and design that will allow the wing to	ist be profile d the aces.) e and metal all be mized more ment of the kness all be nd all e with th the h two es and ed by by the frame r sash

	<ul> <li>in an adjusted manner. Plastic joinery frame and wing combinations shall be cut at 45 degrees and fixed to masonry parts or iron construction (blind frame) of the plastic joinery produced by welding with machines developed for this work.</li> <li>NOTE: <ol> <li>The cost of installing the metal parts is included in the joinery prices.</li> <li>Plastic joinery accessories (espagnolette, hinges, locks and additions, transom scissors and strikers, pivot hinges, bolts, brushes under the door, all kinds of door handles, hydraulic mechanisms such as opening, closing, locking mechanisms, etc.) are not included in the weighing, its price is included in the joinery prices.</li> </ol> </li> </ul>
Related reference pose number, book	15.455.1001 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Civ33	Installing a double-glazed window unit of 4+4 mm thickness with 12 mm gaps to PVC and aluminium joinery with a profile	m²
Description /Specification	1 m <sup>2</sup> price for preparing the double-glazed window unit with 4+4 mm thickness, 1. gap, according to the size of the place where it will be installed, placing wedges i glass slot and placing the glass in the slot, placing the profile and its wick, balancin unit with glazing wedges, applying neutral (acid-free) silicone to the joints o profiles in the form of punctuation including, loading at the construction site, horiz vertical transportation and unloading, all kinds of materials and losses, workman tool and equipment expenses, contractor general expenses and p Glass-installed areas are calculated according to the dimensions in the project. price is included in the price.	n the ng the of the contal nship, profit:
Related reference pose number, book	15.470.1010 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Civ34	Applying two layers of antirust and two layers of synthetic paint on iron surfaces	m²
Description /Specification	Cleaning iron surfaces with carborundum and wire brush, applying the anticorr substances 0,100 kg (1 <sup>st</sup> layer), 0,100 kg (2 <sup>nd</sup> layer) (each layer in different cold painting with synthetic paint in any desired colour with 0,100 kg (1 <sup>st</sup> layer), 0,1 82 <sup>nd</sup> layer), the price for 1 m2 price, including all kinds of material and low workmanship, contractor's overhead and profit: MEASUREMENT: a) Painted sur are measured. b) The projection area of a face in the vertical plane is measur railings and banisters. Space is not subtracted. c) The painted faces in column, truss, beam, English yard and similar iron production are measured.	ours), 00 kg osses, faces ed in
Related reference pose number, book	15.540.1112 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Civ35	Applying two coats of solvent-based epoxy paint to iron surfaces	m²
Description /Specification	1 m <sup>2</sup> price for completely removing rust on iron production surfaces by mech and/or sand/grid blasting, applying 0,092 l as 1 <sup>st</sup> layer, and 0,092 l as 2 <sup>nd</sup> layer, o component solvent-based epoxy primer, painting with 0,098 l as 1 <sup>st</sup> layer and 0,0 2 <sup>nd</sup> layer of solvent-based epoxy paint in desired colour including all kinds of mar and losses, workmanship, contractor overheads and profit: Measurement: a) Pa surfaces are measured on furniture. b) In doors and compartments; 1) For those of casing (without ribs); the frame areas are included in the measure of the two fact the vertical plane from frame to frame. 3) In the ones with frames and ribs, the is included in the size of the two faces from the rib to rib. 4) In all sizes, rec protrusions and glass spaces are not included in the measure. If there is a lath of windowsill, the measure is started here. c) On windows and display windows; the in the vertical plane shall be measured 1) until the out of the rib in windowsil	f two- 98 I as terials ainted with a with a ces in frame esses, on the e area

	framed windows, and from the plaster face to the plaster face in non-ribbed windows. Only one surface is taken into account, two surfaces are painted. Glass blank is not subtracted, windowsills, safe and edges are also measured, if available, are added to the area. 2) In double windows, it is measured exactly, the wooden frame between the two windows is measured separately and added to the area. Two sides of both windows are painted and only one side is calculated. Glass gap is not subtracted. d) The projection area of a face in the vertical plane is measured in railings and banisters. Space is not subtracted. e) The painted faces in column, roof truss, beam, English yard and similar iron production are measured.
Related reference pose number, book	15.540.1113 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Civ36	Traffic Sign Board	pcs
Description /Specification	Traffic signs shall be in accordance with the "Highway Technical Specification". Tr sign with reflector application shall be made to protect pedestrians and drivers. S clearance, parking lot and speed limit signs shall be produced from 1.5 mm galva sheet, 60 cm in diameter, with reflector, resistant to UV rays and suitable for ome pole connection. Connecting apparatus are included in the price.	itop, nized
Related reference pose number, book	n/a	

Pose No	Pose	Unit
Civ37	Digital Electronic Balance	pcs
Description /Specification	40 Kg Digital Electronic Balance (2 G - 40 Kg) Capacity: 40 Kg Accuracy: 2 G Pan Size: 33/28 Cm Up to 120 Hours of Cordless Use Price Calculation Product Memory Display Illumination Tareing with External Pan Waterproof Screen And Keypad Cordless and Electric Usage / Charge Indicator Double Sided Front And Rear Display Stainless Pan	
	Sleep Mode	
Related reference pose number, book	n/a	

## **Mechanical Works**

Pose No	Pose	Unit
Mec01	50x60 cm Half Leg Set	pcs
Description /Specification	Supply of washbasin with the type and dimensions in the project, with fixe dispenser, self-overflowing, with white colour, and its installation in the wortogether with the mounting anchor and screw. Note: In case of use of colored ceramics, the assembled prices shall be increased by 15% and the installation cost be applied without increasing. Sinks shall have been placed on the market with CE marking, in accordance 305/2011/EC Building Materials Regulations.	kplace glazed ts shall
Related reference	25.100.1020 / Ministry of Environment and Urbanisation	
pose number, book		

Pose No	Pose	Unit
Mec02	First Class: (Battery TS EN 200 or TS EN 817; Siphon TS-EN 274-1-2-3)	sets
Description /Specification	To be used with the washbasins mentioned in BFT 25.100.1000, brass chrome or based (acetal copolymer), quality certified, with 15 mm tap and badge or b certified according to TS-EN 274-1-2-3, easy to disassemble and clean, 6 cm. fra fermented, with at least 16 cm. extension piece and badge made of brass chrochard-plate based in accordance with TS-EN 274-1-2-3, easy to disassemble and resistant to acids and temperatures of at least 80°C, on-site supply of the p together with 32 mm sink siphon with its connection adapter to the waste wate assembly and delivery in working condition, (Sewer drain pipe is not included price.).	pattery grance ome or l clean, product er pipe,
Related reference	25.102.1201 / Ministry of Environment and Urbanisation	
pose number, book		

Pose No	Pose	Unit
Mec03	Approximately 40x60 cm mirror	pcs
Description /Specification	Glass thickness 5 mm, mirror edge grinded, when there are stripes on the mirror, the stripes shall be bevelled. Wall-connection screws shall be made of brass material and minimum 5-micron nickel plated or stainless steel. To be mounted on the wall with mirror wall hanger, screws and dowels. Mirrors shall have been placed on the market with CE marking, in accordance with 305/2011/EC Building Materials Regulations.	
Related reference	25.104.1002 / Ministry of Environment and Urbanisation	
pose number, book		

Pose No	Pose	Unit
Mec04	Concealed Cistern Turkish Style Toilet Set, SELF RESERVOIR AND LESS WATER CONSUMPTION EUROPEAN STYLE TOILET AND INSTALLATION (TS 800 EN 997)	sets
Description /Specification	White, 4-cornered toilet bowl; with 6 cm odour trap in accordance with TS-EN 2 3, Ø 100 mm pig siphon and pig bowl or Turkish style toilet siphon with 6 cm odo made of 100 mm solid PVC, resistant to 80°C temperature and acids, manufa from raw materials in accordance with EN 12164, TS EN 12165 standard conforming to TS EN 248 surface standard requirements and TS EN 200; reserve plastic and stainless steel parts, mounted inside the wall, in accordance with 14055+A1, TS EN 10088-1/2/3; supply and installation at the workplace togeth the assembly elements. The products shall have been supplied to the market w conformity mark in accordance with 305/2011 Construction Materials Regulation	ur trap, actured ds, tap bir with TS EN er with with CE
Related reference	25.112.1260 / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec05	Stainless steel approx. 50x100 cm, One bowl sink with drainer (TSEK), SINKS (TS EN 13310)	pcs
Description	(itchen sinks shall have been placed on the market with CE marking, in accordance with	
/Specification	305/2011/EC Building Materials Regulations.	
Related reference	25.118.1201 / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec06	With battery, with brass siphon in accordance with TS EN 200 or TSEN 817, TS-EN 274-1-2-3 (First class), Sink installation with one chamber, SINK INSTALLATION	pcs
Description /Specification	To be used with one-compartment kitchen sinks mentioned in 083-100; 083-200; 15 mm brass chrome-plated sink with rotary or fixed pipe or plastic-based (made of acetal copolymer), quality certified, in accordance with TS EN 200 or TS EN 817, 15 mm. Kitchen sink mixer, easy to disassemble and clean, 6 cm, with odour preventer, with extension to the wall and with badge, with 32 mm strainer, made of brass chrome	

	or hard plastic,, which can be disassembled and cleaned, in accordance with the dimensions of TS-EN 274-1-2-3, resistant to at least 80oC temperature; kitchen sink siphon, bakelite plug, chrome plated chain and poppet, supplying in the workplace, installation and delivery in working condition (waste water discharge pipe) are not included in the price and the battery and siphon shall be TS conformity certificate.)
Related reference pose number, book	25.120.1101 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Mec07	1/2" Tall faucet, incl. escutcheon with strainer.	pcs
Description	FAUCET (according to TS EN 200)	
/Specification	Installation in place in accordance with TSE EN 200, with closets.	
Related reference	25.130.1102 / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec08	Paper holder (stainless steel)	pcs
Description	On site supply and installation of paper holder made of stainless-steel shee	et with
/Specification	chrome plated fixing screws and special wedges or dowels.	
Related reference	25.135.2002 / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec09	20 Ø mm (3/4") screw Cold water meters, Cold water meters: Supply and installation in the workplace	pcs
Description /Specification	Technical Description: WATER METERS (In Compliance with TS EN ISO 4064-1) (Measurement: Pieces) Supply and on-site installation of meters with CE conformity mark in accordance with the Measuring Instruments Regulation (2004/22/AT).	
Related reference pose number, book	25.142.1101 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Mec10	25 Ø mm (1") screw Cold water meters, Cold water meters: Supply and installation in the workplace	pcs
Description /Specification	Technical Description: WATER METERS (In Compliance with TS EN ISO 4064-1) (Measurement: Pieces) Supply and on-site installation of meters with CE conformity mark in accordance with the Measuring Instruments Regulation (2004/22/AT).	
Related reference pose number, book	25.142.1102 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Mec11	Welded galvanized pipe (1/2") (In-house screwed, 30% added)	m
Description /Specification	Technical Description: STEEL PIPES: Shall be in accordance with 305/2011/EU B Materials Directive and 2014/68/EU Pressure Equipment Regulation, launched market with CE conformity mark, with the steel pipes installed in accordance w relevant specifications and project, including making connections and workma except from blue lead and paint.	on the ith the
Related reference	25.300.1401/A / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec12	Welded galvanized pipe (3/4") (In-house screwed, 30% added)	m
Description /Specification	Technical Description: STEEL PIPES: Shall be in accordance with 305/2011/EU B Materials Directive and 2014/68/EU Pressure Equipment Regulation, launched market with CE conformity mark, with the steel pipes installed in accordance w relevant specifications and project, including making connections and workmatexcept from blue lead and paint.	on the vith the

Related reference	25.300.1402/A / Ministry of Environment and Urbanisation
pose number, book	

Pose No	Pose	Unit
Mec13	Welded galvanized pipe (1") (In-house screwed, 30% added)	m
Description /Specification	Technical Description: STEEL PIPES: Shall be in accordance with 305/2011/EU Building Materials Directive and 2014/68/EU Pressure Equipment Regulation, launched on the market with CE conformity mark, with the steel pipes installed in accordance with the relevant specifications and project, including making connections and workmanship, except from blue lead and paint.	
Related reference	25.300.1403/A / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec14	Pn 20 polypropylene clean water pipe 1/2" 20/3,4 mm Polypropylene clean water pipes (Physiotherm welded and screwed inside the building, 45% added)	m
Description /Specification	Technical Description: Polypropylene Clean Water Pipes (TS EN ISO 15874-1, 2, 3, 5, 7) (Measurement: m) On-site supply of the pipes which are in compliance with TS EN ISO 15874-2, made of polypropylene (PPR-C) Type 3; certified by the Ministry of Health to have no impediment to be used as a drinking water pipe, cutting them in accordance with the project, squeezing and welding the fittings to the pipe terminals at 260 °C with a physiotherm welding machine. (Including all kinds of materials and labour for welding) The costs of assembly materials are included.	
Related reference	25.305.2101/3300 / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec15	Pn 20 polypropylene clean water pipe 3/4" 25/4.2 mm Polypropylene clean water pipes (Physiotherm welded and screwed inside the building, 45% added)	m
Description /Specification	Technical Description: Polypropylene Clean Water Pipes (TS EN ISO 15874-1, 2, 3, 5, 7) (Measurement: m) On-site supply of the pipes which are in compliance with TS EN ISO 15874-2, made of polypropylene (PPR-C) Type 3; certified by the Ministry of Health to have no impediment to be used as a drinking water pipe, cutting them in accordance with the project, squeezing and welding the fittings to the pipe terminals at 260 °C with a physiotherm welding machine. (Including all kinds of materials and labour for welding) The costs of assembly materials are included.	
Related reference pose number, book	25.305.2102/3300 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Mec16	Pn 20 polypropylene clean water pipe 1" 32/5.4 mm Polypropylene clean water pipes (Physiotherm welded and screwed inside the building, 45% added)	m
Description /Specification	Technical Description: Polypropylene Clean Water Pipes (TS EN ISO 15874-1, 2, 3, 5, 7) (Measurement: m) On-site supply of the pipes which are in compliance with TS EN ISO 15874-2, made of polypropylene (PPR-C) Type 3; certified by the Ministry of Health to have no impediment to be used as a drinking water pipe, cutting them in accordance with the project, squeezing and welding the fittings to the pipe terminals at 260 °C with a physiotherm welding machine. (Including all kinds of materials and labour for welding) The costs of assembly materials are included.	
Related reference	25.305.2103/3300 / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec17	Rigid PVC plastic wastewater pipe (plug-in muff, diameter: 50-40 mm, wall thickness 3 mm) (the cost of mounting material, %35 added)	m

	Technical Description: Rigid PVC Plastic Wastewater Pipes (with plug-in or ac	
Description	muff) (TS EN 1329-1) (Measurement: m) Supply of rigid PVC plastic wastewater p	pipes in
/Specification	accordance with TS EN 1329-1 in the workplace, installation in place as plug-in or	
	adhesive muff	
Related reference	25.305.6101/A / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec18	Rigid PVC plastic wastewater pipe (plug-in muff, diameter: 75-70 mm, wall thickness 3 mm) (the cost of mounting material, %35 added)	m
Description /Specification	Technical Description: Rigid PVC Plastic Wastewater Pipes (with plug-in or adhesive muff) (TS EN 1329-1) (Measurement: m) Supply of rigid PVC plastic wastewater pipes in accordance with TS EN 1329-1 in the workplace, installation in place as plug-in or adhesive muff	
Related reference	25.305.6102/A / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec19	Rigid PVC plastic wastewater pipe (plug-in muff, diameter: 100-110 mm, wall thickness 3 mm) (the cost of mounting material, %35 added)	m
Description /Specification	Technical Description: Rigid PVC Plastic Wastewater Pipes (with plug-in or adhesive muff) (TS EN 1329-1) (Measurement: m) Supply of rigid PVC plastic waste water pipes in accordance with TS EN 1329-1 in the workplace, installation in place as plug-in or adhesive muff	
Related reference pose number, book	25.305.6103/A / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Mec20	Flap type, 100 Ø mm, MANHOLE VALVE	pcs
Description /Specification	Technical Description: Manhole Valve (Measurement: Pieces) Supply and installation of a durable waste water check valve to be used in sewage ar installations, manufactured in accordance with the EN 13564-1 standard o prevention devices used in buildings, with flap or lock, inserted into the mar septic tank, inlet pipe, preventing mice, vermin and stench from entering the b installation, preventing rat gnawing, self-closing stainless steel valve, ABS b manually operated locking system used for waste water lines, with a butterfly cleaning cover that can be opened easily without the need for tools.	nd rain f flood nhole / wilding oody, a
Related reference	25.312.11201 / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec21	70 Ø mm, Ventilation pipe and cap	pcs
Description /Specification	Technical Description: Ventilation Pipe and Cap (Measurement: Pcs) Supply and workplace-installation of the ventilation pipe and cap made of plastic, long enough to extend at least 0,50 m of the roof cover, to be connected to sewage pipes extended from roof to the roof cover level at the attic,	
Related reference	25.312.2101 / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec22	15 Ø mm (1/2"), Brass, pressed Teflon (PTFE), gasketed, full bore, screwed, BALL VALVES (TS 3148)	pcs
Description /Specification	Technical Description: BALL VALVES (TS 3148) The supply and workplace-installathe ball valves, in accordance with the 2014/68/EU Pressure Equipment Regulathe brass cutting elements, made of peak carbon steel or stainless steel, with swafers, lugs or flanges, passage controlled by a transition sphere, with mopening and closing system.	ulation, screws,

Related reference	25.320.2101 / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec23	25 Ø mm (1"), Brass, pressed Teflon (PTFE), gasketed, full bore, screwed, BALL VALVES (TS 3148)	pcs
Description /Specification	Technical Description: BALL VALVES (TS 3148) The supply and workplace-installation of the ball valves, in accordance with the 2014/68/EU Pressure Equipment Regulation, with brass cutting elements, made of peak carbon steel or stainless steel, with screws, wafers, lugs or flanges, passage controlled by a transition sphere, with manually opening and closing system.	
Related reference	25.320.2103 / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec24	15 Ø mm (1/2"), Dirt Strainer, PN-16, for steam, with die-cast screw	pcs
Description /Specification	Technical Description: DIRT RETAINERS (TS 11494) (Measurement: Pcs) Support workplace-installation of a flanged or screwed strainer to be mounted on liquid, and gas equipment, with its body made of brass, bronze, ductile iron, cast iron of depending on the pressure and temperature of the fluid, with its internal filter m brass or stainless steel, where its filter can be easily removed and cleaned. Note sensitivity shall be selected in a way that it does not allow in parts larger than 5 (0,5 mm) up to DN 20, parts larger than 700 $\mu$ m (0,7 mm) for up to DN 50, and larger than 1200 $\mu$ m (1, 1.2 mm) up to DN 150.	steam or steel nade of e: Filter 500 μm
Related reference	25.325.1101 / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Mec25	25 Ø mm (1"), Dirt Strainer, PN-16, for steam, with die-cast screw	pcs
Description /Specification	Technical Description: DIRT RETAINERS (TS 11494) (Measurement: Pcs) Supp workplace-installation of a flanged or screwed strainer to be mounted on liquid, and gas equipment, with its body made of brass, bronze, ductile iron, cast iron of depending on the pressure and temperature of the fluid, with its internal filter m brass or stainless steel, where its filter can be easily removed and cleaned. Note sensitivity shall be selected in a way that it does not allow in parts larger than 5 (0,5 mm) up to DN 20, parts larger than 700 $\mu$ m (0,7 mm) for up to DN 50, an larger than 1200 $\mu$ m (1, 1.2 mm) up to DN 150.	steam or steel nade of e: Filter 500 μm
Related reference	25.325.1103 / Ministry of Environment and Urbanization	
pose number, book		

## **Electrical Works**

Pose No	Pose	Unit
Elec01	Galvanized free standing sheet metal board with a width of at least 800 mm, Depth at least 600 mm (1 <sup>st</sup> board)	pcs
Description /Specification	Technical Description: Free standing type galvanized sheet boards (1 <sup>st</sup> Board) (Dim Piece) Board frame, door, covers, body and all internal installation construction ele and base used in it shall be manufactured from ready-made galvanized sheet minimum thickness of 2 mm, and its height shall be at least 2000 mm. All conn shall be made using fasteners such as bolts, nuts and rivets. In addition, the boa shall be at least 100 mm high and shall be fixed to the board with anchors and galv bolts from its four corners. The interior, exterior and frame of the board shall be p with electrostatic powder paint. Aside from all holes, skeleton, support etc. necess all devices to be placed on the board according to the project, the busbars and ins complete with the phases painted in grey, black and brown, neutral painted in lig colours and green/yellow painted grounding shall be made in accordance with 60445 and TS EN 60445. Panels shall be produced in accordance with the 2014	ements with a ections rd base vanized bainted sary for ulators th blue TS EN

	Regulation on Electrical Equipment Designed for Certain Voltage Limits, TS EN 61439-1/2 standards and shall have been placed on the market with the CE conformity mark. In addition, the degree of protection against mechanical impacts according to the TS EN 62262 standard shall be at least IK 10. "Type tests" shall be made according to EN 61439-1/2 standards, and the corresponding test results shall be submitted to the Administration. Paint, insulator connection conductors, construction of the first galvanized sheet board (excluding the cost of copper busbar, surge arrester), transportation to the workplace and installation, delivery in working condition, including the necessary labels for each device, all kinds of materials, terminals and labour.
Related reference pose number, book	35.100.1205 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Elec02	Surface-mounted galvanized sheet-metal boards up to 0.40-0.50 m <sup>2</sup> (0.50 m <sup>2</sup> included),	pcs
Description /Specification	Surface-mounted galvanized sheet-metal boards up to 0.40-0.50 m <sup>2</sup> (0.50 m <sup>2</sup> pcs included), Technical Description: Surface mounted galvanized sheet tables: (Measurement: Pcs) Panel body and covers shall be made of galvanized sheet metal stock with a thickness of at least 1 mm for the tables with an area of up to 0,5 m <sup>2</sup> and at least 1,5 mm for the tables with an area bigger than 0,5 m2. Its depth shall be minimum 200 mm and all connections shall be made using fasteners such as bolts-nuts and rivets. The holes necessary for the cable entries shall be drilled on the cover and bakelite or plastic glands shall be mounted to the hole mouths to prevent the conductor insulation from deteriorating. In addition, there shall be labels for each device in the panel on the inner cover. For the phase lines inside the panel, there shall be non-flammable type terminals or busbars painted in grey, black and brown in accordance with TS EN 60445, light blue painted neutral and green/yellow painted grounding bars. The panel's inside and outside shall be painted with electrostatic powder paint, the panel cover shall be connected to the main body with a flexible conductor and grounded. The supply of the panel, its transfer to the workplace and its assembly, delivery in working condition including all kinds of materials, terminal blocks and workmanship. Measurement: The m <sup>2</sup> values indicated in the lower poses refer to the cover's inner area. The cost of grounding installation as well as the fuse, switch etc. in the panel shall be paid separately. Note: Panels shall be produced in accordance with the 2014/35/EU Regulation on Electrical Equipment Designed for Certain Voltage Limits, TS EN 61439-1/2 standards and shall have been placed on the market with the CE conformity mark. In addition, the degree of protection against mechanical impacts according to the TS EN 62262 standard shall be at least IK 08. "Type tests" shall be made according to EN 61439-1/2 standards, and the corresponding test results shall be submitted to the Adminis	
Related reference pose number, book	35.100.2105 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec03	Surface-mounted galvanized sheet-metal boards up to 0.90-1.00 m <sup>2</sup> (0.10 m <sup>2</sup> included),	pcs
Description /Specification	Technical Description: Surface mounted galvanized sheet tables: (Measuremer Panel body and covers shall be made of galvanized sheet metal stock with a thick at least 1 mm for the tables with an area of up to 0,5 m <sup>2</sup> and at least 1,5 mm for the with an area bigger than 0,5 m <sup>2</sup> . Its depth shall be minimum 200 mm and all conn shall be made using fasteners such as bolts-nuts and rivets. The holes necessary cable entries shall be drilled on the cover and bakelite or plastic glands shall be m to the hole mouths to prevent the conductor insulation from deteriorating. In ac there shall be labels for each device in the panel on the inner cover. For the phase inside the panel, there shall be non-flammable type terminals or busbars painted black and brown in accordance with TS EN 60445, light blue painted neutring reen/yellow painted grounding bars. The panel's inside and outside shall be p with electrostatic powder paint, the panel cover shall be connected to the mai with a flexible conductor and grounded. The supply of the panel, its transfer workplace and its assembly, delivery in working condition including all kinds of ma terminal blocks and workmanship. Measurement: The m <sup>2</sup> values indicated in the	ness of e tables ections for the ounted ddition, se lines in grey, ral and painted n body to the iterials,

	poses refer to the cover's inner area. The cost of grounding installation as well as the fuse, switch etc. in the panel shall be paid separately. Note: Panels shall be produced in accordance with the 2014/35/EU Regulation on Electrical Equipment Designed for Certain Voltage Limits, TS EN 61439-1/2 standards and shall have been placed on the market with the CE conformity mark. In addition, the degree of protection against mechanical impacts according to the TS EN 62262 standard shall be at least IK 08. "Type tests" shall be made according to EN 61439-1/2 standards, and the corresponding test results shall be submitted to the Administration.
Related reference pose number, book	35.100.2110 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Elec04	Recessed type galvanized sheet metal panels up to 0.40-0.50 m <sup>2</sup> (including 0.50 m <sup>2</sup> ),	pcs
Description /Specification	Technical Description: Recessed type galvanized sheet tables: (Measurement: P supply, transportation to the workplace and assembly of the recessed type galvanize for the panel with a depth of at least 150 mm and a fixing frame made of galvanize for the panel to be embedded in the wall, which is the same as BFT No 35.100.2 terms of other features, and its delivery in a functional manner, including all k materials, terminal blocks and workmanship. Measurement: Same as B 35.100.2100. Note: Panels shall be produced in accordance with the 2014 Regulation on Electrical Equipment Designed for Certain Voltage Limits, TS EN 614 standards and shall have been placed on the market with the CE conformity m addition, the degree of protection against mechanical impacts according to the 62262 standard shall be at least IK 08. "Type tests" shall be made according to EN 1/2 standards, and the corresponding test results shall be submitted Administration.	vanized d sheet 2100 in inds of FT No /35/EU i39-1/2 hark. In e TS EN 61439-
Related reference pose number, book	35.100.2205 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec05	Supply and assembly of copper busbars to be placed in cast boxes and panels in accordance with TSE conditions and painting with colours in TS EN 60445	kg
Description /Specification	Technical Description: Supply and assembly of copper busbars to be placed in cast boxes and panels in accordance with TSE conditions and painting with colours in TS EN 60445 (Measurement: kg, Preparation: %60)	
Related reference pose number, book	35.100.7000 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec06	Up to 16 A (6 kA), Switched Automatic Fuses (6 kA breaking capacity)	pcs
Description /Specification	Technical Description: Switched Automatic Fuses (6 kA breaking ca (Measurement: Pcs) Supply and installation of an automatic fuse with a short breaking capacity of only 6 kA with the same features as BFT No 35.105.1100, in all kinds of materials and labour.	
Related reference pose number, book	35.105.1210 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec07	Up to 25 A (10 kA), Switched Automatic Fuses (10 kA breaking capacity)	pcs
Description /Specification	Technical Description: Switched Automatic Fuses (10 kA breaking c (Measurement: Pcs) Supply and installation of an automatic fuse with a shor breaking capacity of only 10 kA with the same features as BFT No 35.105.1100, ir all kinds of materials and labour.	

Related reference	35.105.1311 / Ministry of Environment and Urbanization
pose number, book	

Pose No	Pose	Unit
Elec08	Up to 25 A (10 kA), Switched Automatic Fuses (10 kA breaking capacity)	pcs
Description /Specification	Technical Description: Switched Automatic Fuses (10 kA breaking ca (Measurement: Pcs) Supply and installation of an automatic fuse with a short breaking capacity of only 10 kA with the same features as BFT No 35.105.1100, in all kinds of materials and labour.	t circuit
Related reference pose number, book	35.105.1331 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec09	Up to 40 A (10 kA), Switched Automatic Fuses (10 kA breaking capacity)	pcs
Description /Specification	Technical Description: Switched Automatic Fuses (10 kA breaking c (Measurement: Pcs) Supply and installation of an automatic fuse with a shor breaking capacity of only 10 kA with the same features as BFT No 35.105.1100, in all kinds of materials and labour.	
Related reference pose number, book	35.105.1332 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec10	From 3x10A up to 3x63A, Icu 50 kA, I1 (0,8-1) In, 3 poles, minimum Icu at 400 V AC: 50 kA, Thermic Protection adjustable, Magnetic Protection Fixed, Compact type thermal and magnetic shielded switches	pcs
Description /Specification	Technical Description: Compact type thermal and magnetic protective sw (Measurement: Pcs) Supply and installation of compact switches, which are control type, capable of breaking in air media, has a breaking mechanism independent from movement, has thermal overcurrent and magnetic short circuit protection, has limiting feature, Ics value equal to at least 50% Icu, which are supplied to the mark CE conformity mark in accordance with TS EN 60947-2 standard (I1: Adjustable to protection opening current, I3: Fixed or adjustable magnetic protection opening current, IC: Short-circuit breaking capacity, Ics: Operational short breaking capacity) Note: Type tests shall have been done.	ompact m hand current et with hermal current,
Related reference pose number, book	35.110.1201 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec11	Up to 2x25 A (30 mA), Residual current circuit breakers (TS EN 61008-1/TS EN 61008-2-1)	pcs
Description /Specification	Technical Description: Residual current protection switches: (Measurement: Pcs) and installation of residual current circuit breaker, built in accordance with the El Indoor Installation Regulations, specifications and standards, which provides the of life and property by interrupting the circuit within 1030 ms. by sensing the current occurring on the phases and neutral line when there is any leakage electrical installations, operating at 220 V in single-phase circuits and 380 V in phase circuits, with differential coil, with test button on it to check whether the is working or not, that can be mounted on the in-table transport rails, protected external influences, rated 30 mA for life protection and 300 mA for fire protection to operate even with neutral line disconnection, launched to the market v conformity mark in accordance with TS EN 61008-1, TS EN 61008-2-1 standards, of in working condition, including all kinds of materials and labour.	ectrical e safety e faulty in the three- system against on, able vith CE
Related reference pose number, book	35.115.1001 / Ministry of Environment and Urbanization	
Pose No	Pose	Unit

Pose No	Pose	Unit

Elec12	Up to 4x25 A (30 mA), Residual current circuit breakers (TS EN 61008-1/TS EN 61008-2-1)	pcs
Description /Specification	Technical Description: Residual current protection switches: (Measurement: Pcs) and installation of residual current circuit breaker, built in accordance with the Ele Indoor Installation Regulations, specifications and standards, which provides the of life and property by interrupting the circuit within 1030 ms. by sensing the current occurring on the phases and neutral line when there is any leakage electrical installations, operating at 220 V in single-phase circuits and 380 V in phase circuits, with differential coil, with test button on it to check whether the sis working or not, that can be mounted on the in-table transport rails, protected external influences, rated 30 mA for life protection and 300 mA for fire protectio to operate even with neutral line disconnection, launched to the market w conformity mark in accordance with TS EN 61008-1, TS EN 61008-2-1 standards, d	ectrical safety in the three- system against n, able vith CE
	in working condition, including all kinds of materials and labour.	lenvery
Related reference pose number, book	35.115.1020 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec13	Up to 4x40 A (30 mA), Residual current circuit breakers (TS EN 61008-1/TS EN 61008-2-1)	pcs
Description /Specification	Technical Description: Residual current protection switches: (Measurement: Pcs) and installation of residual current circuit breaker, built in accordance with the El Indoor Installation Regulations, specifications and standards, which provides the of life and property by interrupting the circuit within 1030 ms. by sensing the current occurring on the phases and neutral line when there is any leakage electrical installations, operating at 220 V in single-phase circuits and 380 V in phase circuits, with differential coil, with test button on it to check whether the is working or not, that can be mounted on the in-table transport rails, protected external influences, rated 30 mA for life protection and 300 mA for fire protection to operate even with neutral line disconnection, launched to the market v conformity mark in accordance with TS EN 61008-1, TS EN 61008-2-1 standards, of in working condition, including all kinds of materials and labour.	ectrical e safety e faulty in the three- system against on, able vith CE
Related reference pose number, book	35.115.1021 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec14	Up to 4x63 A (30 mA), Residual current circuit breakers (TS EN 61008-1/TS EN 61008-2-1)	pcs
Description	Technical Description: Residual current protection switches: (Measurement: Pcs)	Supply
/Specification	and installation of residual current circuit breaker, built in accordance with the El Indoor Installation Regulations, specifications and standards, which provides the of life and property by interrupting the circuit within 1030 ms. by sensing the current occurring on the phases and neutral line when there is any leakage electrical installations, operating at 220 V in single-phase circuits and 380 V in phase circuits, with differential coil, with test button on it to check whether the is working or not, that can be mounted on the in-table transport rails, protected external influences, rated 30 mA for life protection and 300 mA for fire protection to operate even with neutral line disconnection, launched to the market w conformity mark in accordance with TS EN 61008-1, TS EN 61008-2-1 standards, o in working condition, including all kinds of materials and labour.	e safety e faulty in the three- system against on, able vith CE
Related reference pose number, book	35.115.1022 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec15	Class B, 230 V AC, 100 kA (I imp, 10/350µs), three phase, neutral-earth, Panel type surge protectors (Low Voltage Surge Arresters)	pcs
Description /Specification	Technical Description: Panel type surge protectors (Low Voltage Surge Ari (Measurement: Pcs) Surge protectors of Type 1 (B class), Type 2 (C class), Type 3 (D	-

	to protect energy supplies against atmospheric discharges (lightning) and transient overvoltage peaks, able to provide one-phase, two-phase, three-phase and neutral protection against overvoltage, with additional contact output for signalling if desired, fully hermetically closed, mounted on the rail without damaging the panel and other materials on the panel, without the need to leave a safety distance with other materials and the panel, in accordance with the TS EN 61643-11 standard and supplied to the market with the CE conformity mark. 1-Surge protectors shall be completely hermetically closed. There must be no arc output gap on the protector. The protector must ensure that the arc exits the arc output range and extinguishes itself, not by air. Thus, the protector must be able to be safely mounted anywhere in the board without any safety distance requirement. 2-Type 2 (C class), Type 3 (D class) protectors must have an indicator showing that the device is working properly or has malfunctioned. (I imp: Maximum impulse current for type 1 surge arresters, I max: Maximum discharge current for Type 2 and Type 3 surge arresters)
Related reference pose number, book	35.115.2101 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Elec16	up to 500 V, MARKER LAMPS	pcs
Description /Specification	Technical Description: MARKER LAMPS: (Measurement: Pcs) The supply of the marker lamp in accordance with the TS 2575 EN 60073 standard, recessed type, in the colours specified in the standard according to the place to be used, its transportation to the workplace, its assembly and connection, delivery in working condition. (Socket and bulb are included in the price.)	
Related reference pose number, book	35.120.1455/Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec17	Time relay used in lighting control	pcs
Description /Specification	Technical Description: Time relay used in lighting control. (Measurement: Preparation %60) Supply of battery powered digital timer with user manual, with contacts, which provides lighting control at desired hours by calculating with the praccording to the set time zone, having type test reports and CE Conformity according to the regulation (2014/35/EU) on electrical equipment designed to b within certain voltage limits, Electromagnetic compatibility regulation (2004/108/ EN 60730-2-7 standards and directives, delivery to the workplace, including all k small materials, testing and delivering in working condition.	output rogram / Mark /e used /AT), TS
Related reference pose number, book	35.125.1760 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec18	Automatic controlled harmonic filter central compensation batteries up to 450 V (up to 30 kVAr)	kVAr
Description /Specification	Technical Description: Automatically controlled harmonic filter central competent batteries (Measurement: kVAR) (up to 30 kVAR) Supply of supply of three compensation battery including harmonic filter reactors, capacitors, contactors switched on and off and fuses for these circuits, control circuit fuses, paco switch control contactors, current transformer required for the relay, according to its and in accordance with TS EN61558-2-20, IEC 61000-2-2 Standards, installation place, delivery in working condition. (Reactive power control relays, therm magnetic shielded switch, panel prices are excluded.) The power value in kVAr selected voltage value, of the capacitor is taken into account as the measurement	-phase to be es that project on its al and at the
Related reference pose number, book	35.130.1201 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec19	Reactive Power Control Relay with at least 12 steps	pcs

Description /Specification	Technical Description: THREE PHASE REACTIVE POWER CONTROL RELAYS: (Measurement: Pcs) Reactive power relays are the devices which try to bring the value of the power coefficient, which is the rate of Active Power (W) to the Apparent Power (VA), to the user-set power coefficient value, by controlling the reactive power of the compensation facility. Reactive power control relay with 3 Current Transformers, 3 x 380 V AC-feed, where at least three electrical values can be seen at the same time on the screen, automatically measures the power of the capacitors in the compensation system to which it is connected. It can protect the system by disabling the system by warning to correct the errors in the current and voltage connections, and selects, activates or deactivates the capacitor taps together as required depending on the load condition. Detects defective capacitors. On-site supply of a device which can give overcompensation, undercompensation, defective capacitor, overshoot alarm warnings in case of compensation malfunctions and which can measure the value of the phase voltage (V) of the system to which it is connected, the RMS value of the phase current to which the current transformer is connected, the power coefficient of the system (VA), Harmonics, Active Energy (kWh), Inductive Reactive - Capacitive Reactive Energy (kVArh) values, with a size that is suitable for panel installation, its installation in accordance with its project, and delivery in working manner including all kinds of materials and workmanship.
Related reference pose number, book	35.130.2201 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Elec20	3x230/400 V3x10 (60) A, Three-phase active, time-scheduled electronic electrical meter	pcs
Description /Specification	ncs	
Related reference pose number, book	35.135.3201 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec21	3x230/400 V,.3x5 (7.5) A, Three-phase active reactive electronic electricity meter	pcs
Description /Specification	Technical Description: Three Phase Time Scheduled Electronic Type (Active-Re Counters: (Measurement: Pcs, Preparation 60%) In accordance with TS EN 62053- TS EN 62052-11 standards, with Ministry of Science, Industry and Technology trac registration and Registration Certificate, by which capacitive and inc measurements can be measured separately while reactive measurement is capable of measuring in maximum Class 2 error class within its specified curre voltage ranges, with minimum 5 (7.5) A input current, 50 Hz operating frequent which information communication with the meter (in accordance with the TS EN 21) can be provided via optical port, (Depending on the standards, EDIS and OBI system will be used in data communication, but there will be easily understandable on the display screen of the meter.) Supply of three phase four wire electron Active-Reactive Meter and base which is in compliance with the Meter Electricity	-21/23, demark ductive made, ant and ncy, by 62056- IS code e terms ic type

	Regulation, having the ability to divide a day into 8 different time zones with minute precision, depending on the program of the counter, manufactured with IP 51 protection class (TS EN 60529) to prevent dust and water penetration, with backlight and 6 full, 2 decimal digits digital display screen on the meter, compliant with 2014/32/EU Measuring Instruments Regulation, TEDAŞ approved, including transportation to the workplace, installation and delivery in working condition. (The current transformer price is not included in the price in the current transformer system.)
Related reference pose number, book	35.135.3301 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Elec22	1x6 mm <sup>2</sup> cross section, Plastic insulated conductor (HO7Z,O7Z1, at least 300/500 V)	m
Description /Specification	Technical Description: HO7Z,O7Z1 type cable (at least 300/500 V) (Measurement: supply of HO7Z, O7Z1 type cable in accordance with TS EN 50525-3-31 stands transportation to the workplace, including its assembly, all kinds of minor materia workmanship.? Note: They shall have been manufactured in accordance with 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulaunched to the market with the CE conformity mark, and shall have the Perfor Declaration of the manufacturer and the Performance Constancy Certificate of from the organizations accredited by the European Union.	ard, its als and TS EN Ilation, mance
Related reference pose number, book	35.150.1404 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec23	Column and supply line installation with 2x6 mm <sup>2</sup> , 1 kV underground cables (N2XH, 0,6/1 kV)	m
Description /Specification	Technical Description: Column and feeder line facility with N2XH type 1KV under cables: (Measurement: m) On-site supply of underground cable in compliance w TS HD 604 S1 Standard, while the N2XH, 0,6 / 1kV cables shall be installed in a s mounted manner indoors, to the walls, ceiling or channels over brackets or hool within the channels outdoors, including passages and safety pipes, all kinds of ma brackets and workmanship. Note: They shall have been manufactured in acco with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Ma Regulation, launched to the market with the CE conformity mark, and shall have Performance Declaration of the manufacturer and the Performance Cor Certificate obtained from the organizations accredited by the European Union.	ith the urface- ks, and terials, rdance aterials ive the
Related reference pose number, book	35.150.2123 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec24	Column and supply line installation with 4x6 mm <sup>2</sup> , 1 kV underground cables (N2XH, 0,6/1 kV)	m
Description /Specification	Technical Description: Column and feeder line facility with N2XH type 1KV under cables: (Measurement: m) On-site supply of underground cable in compliance w TS HD 604 S1 Standard, while the N2XH, 0,6 / 1kV cables shall be installed in a s mounted manner indoors, to the walls, ceiling or channels over brackets or hool within the channels outdoors, including passages and safety pipes, all kinds of ma brackets and workmanship. Note: They shall have been manufactured in acco with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Ma Regulation, launched to the market with the CE conformity mark, and shall have Performance Declaration of the manufacturer and the Performance Cor Certificate obtained from the organizations accredited by the European Union.	rith the urface- ks, and terials, rdance aterials ave the
Related reference pose number, book	35.150.2193 / Ministry of Environment and Urbanization	

Dave No. Dave	
Pose No Pose	Unit

Elec25	Column and supply line installation with 4x16 mm <sup>2</sup> , 1 kV underground cables (N2XH, 0,6/1 kV)	m
Description /Specification	Technical Description: Column and feeder line facility with N2XH type 1KV under cables: (Measurement: m) On-site supply of underground cable in compliance w TS HD 604 S1 Standard, while the N2XH, 0,6 / 1kV cables shall be installed in a s mounted manner indoors, to the walls, ceiling or channels over brackets or hoo within the channels outdoors, including passages and safety pipes, all kinds of ma brackets and workmanship. Note: They shall have been manufactured in acco with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Ma Regulation, launched to the market with the CE conformity mark, and shall have Performance Declaration of the manufacturer and the Performance Cor Certificate obtained from the organizations accredited by the European Union.	vith the urface- ks, and terials, rdance aterials ave the
Related reference pose number, book	35.150.2195 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec26	Normal Outlet, Halogenfree cable lighting Outlet	pcs
Description /Specification	Technical Description: Halogen free wired lighting outlet: (Measurement preparation 60%) Supply of junction boxes, terminal blocks, switches, armatures wedges, with line in halogen-free flameproof pipe of at least 2.5 mm <sup>2</sup> , outlet line least 1.5 mm <sup>2</sup> , in accordance with TS EN 60332-1-2, TS EN 60754-1/2 and TS EN 6 standards, with phase and neutral conductors are colored according to TS 6249, in insulated (HO7Z, O7Z1), including all kinds of materials, transportation to the wor and making a complete surface-mounted or flush-mounted lighting outlet (ex- luminaries). In cases where the wall thickness is more than normal, the price diff is not paid. (Included in the price of halogen-free flame-proof pipe outlet w conformity mark attached in accordance with TS EN 61386-1/21/22 standards They shall have been manufactured in accordance with TS EN 50575 and TS EN 5 A1 standards, 305/2011/EU Construction Materials Regulation, launched to the with the CE conformity mark, and shall have the Performance Declaration manufacturer and the Performance Constancy Certificate obtained from organizations accredited by the European Union.	, fixing es of at 1034-2 plastic rkplace cluding erence vith CE ) Note: 0575 / market of the
Related reference pose number, book	35.160.3101 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec27	Parallel Outlet, Halogenfree cable lighting outlet	pcs
Description /Specification	Technical Description: Halogen free wired lighting outlet: (Measurement preparation 60%) Supply of junction boxes, terminal blocks, switches, armatures wedges, with line in halogen-free flameproof pipe of at least 2.5 mm <sup>2</sup> , outlet line least 1.5 mm <sup>2</sup> , in accordance with TS EN 60332-1-2, TS EN 60754-1/2 and TS EN 6 standards, with phase and neutral conductors are colored according to TS 6249, in insulated (HO7Z, O7Z1), including all kinds of materials, transportation to the wor and making a complete surface-mounted or flush-mounted lighting outlet (excluminaries). In cases where the wall thickness is more than normal, the price diff is not paid. (Included in the price of halogen-free flame-proof pipe outlet w conformity mark attached in accordance with TS EN 61386-1/21/22 standards; They shall have been manufactured in accordance with TS EN 50575 and TS EN 5A1 standards, 305/2011/EU Construction Materials Regulation, launched to the with the CE conformity mark, and shall have the Performance Declaration manufacturer and the Performance Constancy Certificate obtained from organizations accredited by the European Union.	, fixing es of at 1034-2 plastic rkplace cluding erence vith CE ) Note: 50575 / market of the
Related reference pose number, book	35.160.3104 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec28	Security line socket outlet, socket outlet	pcs

Description /Specification	Technical Description: Halogen free cable socket outlet: (Measurement: pieces, preparation: 60%) Halogen Free Line and outlet lines in a flameproof pipe, in accordance with TS EN 60332-1-2, TS EN 60754-1/2 and TS EN 61034-2 standards, with phase, neutral and safety lines with a cross section of at least 2.5 mm <sup>2</sup> , with the phase, neutral and safety conductors of colored plastic insulated (HO7Z, O7Z1) in accordance with TS EN 60445, making a complete socket outlet at the socket, including junction box, terminal block, socket, all kinds of materials, transportation to the workplace and workmanship. (Included in the price of halogen-free flame-proof pipe outlet with CE conformity mark attached in accordance with TS EN 61386-1/21/22 standards) Note: They shall have been manufactured in accordance with TS EN 50575 and TS EN 50575 / A1 standards, 305/2011/EU Construction Materials Regulation, launched to the manufacturer and the Performance Constancy Certificate obtained from the organizations accredited by the European Union. Measurement: When the line is more than 35 m, payment is made from BFT No 35.150.1000 as a supply line.
Related reference pose number, book	35.160.3401 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Elec29	Surface mounted LED ceiling luminary with min. measurement of 60x60 (luminous flux at least 3300 lm, luminary's luminous efficiency at least 100 lm/w).	pcs
Description /Specification	Technical Description: LED Ceiling Lights: (Measurement: Pcs) Supply to the workplace of a luminary with a body of at least 0.5 mm, a frame made of DKP sheet of at least 0.7 mm, with an opal PMMA diffuser of at least 1 mm thickness, with at least IP 40 protection degree, delivery in working condition, including all kinds of materials, workmanship and assembly.	
Related reference pose number, book	35.170.1105 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec30	Surface-mounted, LED circular (downlight) luminary (with a luminous flux of at least 800 lm, luminary's luminous efficiency of at least 100 lm/w).	pcs
Description /Specification	Technical Description: LED Circular (Downlight) Luminary: (Measurement: Pcs) T site supply of luminaries, whose body and cooler part is made of aluminium castin opal PMMA diffuser, which has at least IP 40 protection degree, and its delivery workplace in working condition, including all materials, workmanship and assemb	g, with to the
Related reference pose number, book	35.170.1503 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec31	LED surface-mounted waterproof luminary (aluminium body) (with a luminous flux of at least 3600 lm, luminary's luminous efficiency of at least 100 lm/w).	pcs
Description /Specification	Technical Description: LED Surface Mounted Waterproof Luminary (Aluminium (Measurement: Pcs) The on-site supply of luminaries, whose body is made of alun with opal diffuser, which has at least IP 65 protection degree, and its delivery workplace in working condition, including all materials, workmanship and assemb	ninium, to the
Related reference pose number, book	35.170.1703 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec32	LED globe luminary luminous flux at least 1800 lm, luminary's luminous efficiency of at least 100 lm/w (with at least IP 65 protection degree).	pcs
Description /Specification	Technical Description: LED Globe Luminary: (Measurement: Pcs) On site supply luminary, the body of which is made of aluminium or sheet metal, with a polycarbonate cover, including all kinds of materials, workmanship and assemb delivery in working condition.	n opal

Related reference	35.170.1802 / Ministry of Environment and Urbanization
pose number, book	

Pose No	Pose	Unit
Elec33	Emergency lighting kit price difference for led lighting fixtures	pcs
Description /Specification	Technical Description: Emergency lighting kit price difference for led lighting fi (Measurement: Pcs) On-site supply of kit, which is mounted to the luminaries to their operation also in emergencies, that can provide the emergency value illum light intensity specified in the project up to 3 hours depending on the project, cor of high temperature type Ni-Cd battery, charger unit and status LED, compatible w luminaries drivers, manufactured in compliance with EN 61347-2-7, EN 6059 standards, placed on the market with CE marking, delivery of it in working cor including all kinds of materials and workmanship.	enable inating isisting ith LED 98-2-22
Related reference pose number, book	35.170.3050 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit		
Elec34	Led projector, luminous flux at least 12750 lm, luminary luminous efficiency at least 110 lm/w.			
Description /Specification	Technical Description: Led Projectors (Dimension: Pcs) On-site supply of the prowhose body and the windshield frame are made of injection aluminium casting, provide the vector of the protection and the windshield frame are made of injection aluminium casting, provide the vector of the protection degree and IK 08 protection degree, able to work between and +65C <sup>o</sup> , with the necessary mounting apparatus for mounting (on ceiling, wall, launched to the market with CE conformity mark in accordance with TS EN 605 standards and (2014/35/EU) Regulation on Electrical Equipment Designed for Voltage Limits, delivery in working condition, including all kinds of materials and Note: shall be ENEC-certified or TSE product-licensed or shall have a driver tha product certificate issued by an accredited certification body, and the driver's PF shall be at least 0,95. The LEDs used shall be IESNA LM-80-certified. Its service li be at least 50000 (L70) hours according to the TM-21 calculation table, and its rendering index (CRI) shall be at least 65. The projectors shall have a photom measurement report in accordance with IESNA LM-79 standards obtained fraccredited laboratory, IP protection degree tests shall have been made according 3033 EN 60529 standard, IK protection degree tests shall have been made according TS EN 62262 standard.	oainted ving at (-20 ºC , floor), 598-2-5 Certain labour. t has a C value fe shall colour ometric om an g to TS		
Related reference pose number, book	35.170.4005 / Ministry of Environment and Urbanization			

Pose No	Pose	Unit
Elec35	360 <sup>o</sup> ceiling type surface mounted motion sensor, Motion Sensors	pcs
Description /Specification	Technical Description: Motion Sensors: (Measurement: Pcs) Supply of surface-mo activity sensor which can operate at between -20°C and + 40°C temperature in 22 volts of supply voltage, to which a load of 400 watt can be connected for fluore type lamps and a load of up to 1,000 watts for incandescent lamps, allowing ti remain-active and day light adjustments using the trimpots on the sensor, at leas protection class, which has been produced in compliance with the Regulati Controlling Waste Electrical and Electronic Equipments, (2014/35/EC) Directi Electrical Equipment Designed for Certain Voltage Limits, TS EN 60669-2-1 standar placed on the market with the CE conformity mark, with optical sensor in the digita for wall-mounted type, capable of detecting 180° front area for wall-type, and th 360° around in ceiling-type, its transportation to workplace, making connection settings, delivery of it in working condition, including all kinds of materia workmanship.	0 - 240 escent- me-to- it IP 44 fon on ve for rds and al form ne area ns and
Related reference pose number, book	35.170.5202 / Ministry of Environment and Urbanization	

Pose No Pose

Elec36	6 kVA Uninterruptible Power Supply with at least 10 minutes battery feeding	pcs
Electro	time, One phase input, one phase output	•
Description /Specification	Technical Description: UNINTERRUPTED POWER SUPPLY (UPS): (Measuremen production 60%) Shall be in compliance with 2014/35/EU Regulation on Ele Equipment Designed for Certain Voltage Limits, 2004/108/EC Electroma Compatibility Regulation and Regulation on Making Changes in Energy Market Cus Services published in the Official Gazette dated 20 June 2007 and numbered Supply of on-line static uninterruptible power supply with EMI/RFI filtering, in acco with (TS EN 62040-1/2/3) standards, capable of providing the desired power for 24 without interruption, having input tolerance values of 380 V. AC (3 phase) or 220 V. AC (1 phase) $\pm$ 15% and 50 Hz $\pm$ 5%, able to provide 380 V. AC (3 phase) or 220 V. AC (1 phase) $\pm$ 15% and 50 Hz $\pm$ 5%, able to graving the load while charging the discharged batteries, able to keep full batteries in buffer charge, with < 8% input of harmonic distortion, load crest factor 3: 1, that can create the ideal sine was performing the inversion process with IGBT using PWM (Pulse Width Modulation power factor 0.9 for all devices, input power factor >0.99, in case of overload circuit/ output voltage goes out of limit/ rectifier failure/ over temperature/ a faul inverter, which transfers the load to the grid or auxiliary source, with (semiconductor) bypass switch, (3-phase devices) with internal mechanical switch, having a dry type maintenance-free battery pack that will last for the desire at full load in case of power failure, with LCD or graphic instrument panel, with a can display current/voltage/frequency/load status/battery status on it panel, where remote monitoring panel can be connected and SNMP module connected when necessary, including transportation to the workplace, as: (excluding the cable) and delivery in working condition. NOTE: 1- Power calculatic cell of the batteries of the term of the proposed batteries shall be accepted as 1.70 The result of the calculation and the proposed batteries shall be maintenance-free trans or shall be accepted as 1.70 The result of the calculation	ectrical agnetic stomer 26558. rdance 4 hours 0 V. AC phase) t linear ne fully current ave by n), with / short t in the static bypass ed time n easy- is front can be sembly ion per (VA) x cells (6) DV/cell. calogue
Related reference	35.180.1101 / Ministry of Environment and Urbanization	
pose number, book		

Pose No	Pose	Unit
Elec37	Cable Tray Systems	kg
Description /Specification	Technical Description: Cable Tray Systems: (Measurement: Kg. Preparation: %60) In to provide the transport of electrical cables safely, supply of cable trays which compliance with TS EN 61537 standard, with the measurements specified approved electrical project and with electrical installation general technical specifi in compliance with the TS EN 10130/10131 standard, perforating holes on a sheet with a sufficient width and height to carry the cable load, bending it, opening g with longitudinal and transverse cord pulling method, on the (reinforced) ceiling in to increase the strength of the sheet metal and prevent it from stretching, keeping chemical bath for oil and rust removal, applying flux coating process, subjecting drying process, and then hot dip galvanizing in accordance with TS EN ISO 1461 stat transportation to workplace, making its installation to the ceiling or wall by me suspensions or mounting brackets, delivery of it in working condition, including a of materials and workmanship. NOTE: 1-Only the weight of the tray shall be tak basis for dimensioning. 2- The joint parts to be used in horizontal, vertical and dire points, reduction, console that serves as a carrier, suspension rods, hanging br fastening clasps and screws, nuts, washers, cotter etc. shall also be hot dip galva The costs of these are included in the unit price and shall not be paid separated certificate of conformity shall be requested from the hot dip galvanizing manufa stating that the TS EN ISO 1461 standard conditions are complied with.	are in in the cation, t metal rooves n order g it in a to pre- indard, eans of Il kinds en as a actional ackets, anized. y. 3- A

Related reference	35.190.1100 / Ministry of Environment and Urbanization
pose number, book	

Pose No	Pose	Unit
Elec38	Grounded socket 16 A-250 V (45x45 mm), Cable Channel Sockets	pcs
Description /Specification	Technical Description: Cable Duct Sockets (Measurement: Pcs) Sup outlets where mains and UPS grounded sockets shall conform to 1+A1+A2 standard, socket holes shall be normal or 45° inclined, protection, IP 20 protection class, allowing busbar connection by co between sockets, with data sockets of RJ-45 type, supporting both T connection types, with spring-loaded dust protection cover, with telep RJ-11 or RJ-12 type, with spring-loaded dust protection cover, hav protective cover for labelling, made of flame retardant (UL94 V0) mat slide-type), its transport to the workplace, assembly, making the ca delivery of it in working condition, including all kinds of materials an (Socket mounting kit and frame rates are included in the unit price.)	o TS IEC 60884- with child-proof nnection busbar 568A and T568B ohone sockets of ving transparent cerial (clawed) or ble connections,
Related reference pose number, book	35.190.1701 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec39	Grounded UPS socket (red colour) 16 A-250 V, (45x45 mm), Cable Tray Sockets	pcs
Description /Specification	Technical Description: Cable Duct Sockets (Measurement: Pcs) Sup outlets where mains and UPS grounded sockets shall conform to 1+A1+A2 standard, socket holes shall be normal or 45° inclined, protection, IP 20 protection class, allowing busbar connection by co between sockets, with data sockets of RJ-45 type, supporting both T connection types, with spring-loaded dust protection cover, with telep RJ-11 or RJ-12 type, with spring-loaded dust protection cover, hav protective cover for labelling, made of flame retardant (UL94 V0) mat slide-type), its transport to the workplace, assembly, making the cal delivery of it in working condition, including all kinds of materials an (Socket mounting kit and frame rates are included in the unit price.)	b TS IEC 60884- with child-proof nnection busbar 568A and T568B shone sockets of ving transparent terial (clawed) or ble connections,
Related reference pose number, book	35.190.1702 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec40	Telephone socket RJ-11 or RJ-12 (6 contacts) (22,5x45 mm), Cable Channel Sockets	pcs
Description /Specification	Technical Description: Cable Duct Sockets (Measurement: Pcs) Sup outlets where mains and UPS grounded sockets shall conform to 1+A1+A2 standard, socket holes shall be normal or 45° inclined, protection, IP 20 protection class, allowing busbar connection by co between sockets, with data sockets of RJ-45 type, supporting both T connection types, with spring-loaded dust protection cover, with telep RJ-11 or RJ-12 type, with spring-loaded dust protection cover, hav protective cover for labelling, made of flame retardant (UL94 V0) mat slide-type), its transport to the workplace, assembly, making the ca delivery of it in working condition, including all kinds of materials an (Socket mounting kit and frame rates are included in the unit price.)	b TS IEC 60884- with child-proof nnection busbar 568A and T568B phone sockets of ving transparent cerial (clawed) or ble connections,
Related reference pose number, book	35.190.1703 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec41	Data socket CAT 5e or CAT 6e RJ-45 (8 contacts) (22,5x45 mm),	
	Cable Channel Sockets	pcs

Description /Specification	Technical Description: Cable Duct Sockets (Measurement: Pcs) Supply of electrical outlets where mains and UPS grounded sockets shall conform to TS IEC 60884- 1+A1+A2 standard, socket holes shall be normal or 45° inclined, with child-proof protection, IP 20 protection class, allowing busbar connection by connection busbar between sockets, with data sockets of RJ-45 type, supporting both T568A and T568B connection types, with spring-loaded dust protection cover, with telephone sockets of RJ-11 or RJ-12 type, with spring-loaded dust protection cover, having transparent protective cover for labelling, made of flame retardant (UL94 V0) material (clawed) or slide-type), its transport to the workplace, assembly, making the cable connections, delivery of it in working condition, including all kinds of materials and workmanship.
	(Socket mounting kit and frame rates are included in the unit price.)
Related reference pose number, book	35.190.1704 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Elec42	Emergency announcement system control unit, with at least 8 zones	pcs
Description /Specification	Technical Description: Digital Emergency Announcement System Co work with digital signal processing technology and must be able to co the network. Systems belonging to different buildings must be able from one centre and operated as a single system. All loudspeake monitored (supervised) for short and open circuit faults by the system system control unit must be able to announce at least 8 zones by itsel suitable for expansion up to at least 200 zones modularly by means of The system control unit must have a memory that can record messag and can be viewed. The priority of the announcements must be dete must be at least 8 contact inputs on the control unit that can be emergency and automatic announcements and sequential mess broadcast with each of them. There must be 1 hand-held microphon unit to be used in emergencies. At least 4 announcement micro connected to the system. The cable distance between the announcement and the centre must be up to 300 meters. The system control unit traceable 24 VDC trigger output for each zone. Using these outputs, ev sound control unit shall be fed from a power supply that complies with standard in accordance with the technical specifications specified in number 35.430.1330, and the power supply price is not included in System control unit equipments shall have been manufactured in acc EN 54-16 standard, 305/2011/EU Construction Materials Regulation, market with the CE conformity mark, and shall have the Performance the manufacturer and the Performance Constancy Certificate obt organizations accredited by the European Union. Digital emergency system control unit, including expansion units for 8 regions, transp workplace, installation, including all kinds of small materials, tested working condition.	mmunicate over to be controlled er lines must be control unit. The lf, and it must be additional units. ges in CD quality erminable. There e monitored for sages must be e on the control ophones can be ent microphones c must have one en if the regional announcement. In the UNIT price. Cordance with TS launched to the e Declaration of tained from the y announcement portation to the
Related reference pose number, book	35.430.1001 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec43	Digital emergency announcement call station with at least 8 zones	pcs
Description /Specification	Technical Description: Digital Emergency Announcement Call Station Emergency announcement Call Station must be desktop type and shall announcements to the desired areas. The priority level of announcement Call Station, pre-announcement and post-announce tones can be adjustable. The emergency announcement call station keypad or a touchscreen. Emergency announcement call station manufactured in accordance with TS EN 54-16 standard, 305/2011/ Materials Regulation, launched to the market with the CE conformity have the Performance Declaration of the manufacturer and the	be used to make the Emergency cement warning shall be either a shall have been 'EU Construction y mark, and shall

	Constancy Certificate obtained from the organizations accredited by the European Union. Supply of the digital emergency announcement call station, transfer to the workplace, installation, including all kinds of small materials, tested and delivered in working condition.
Related reference pose number, book	35.430.1101 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Elec44	Outdoor Bullet Camera Type-1: (Measurement: Pcs)	pcs
Description /Specification	Outdoor Bullet Camera Type-1: (Measurement: Pcs)pcsTechnical Description: Outdoor Bullet Camera Type-1 (Dimensions: Pcs) High Resolution, Colour, Black/White, Day/Night Functionality, at least 2 MP Bullet type IF Camera, with a CMOS image sensor of at least 1/3" and progressive scan. Cameras must have at least 30 meters night vision with mechanical IR cut filter and true 	
Related reference pose number, book	35.445.1100 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec45	32 Channel Network Video Recorder (Dimension: Pcs)	pcs
Description /Specification	<b>32 Channel Network Video Recorder (Dimension: Pcs)</b> pcsTechnical Description: 32 Channel Network Video Recorder (Dimension: Quantity) The device must have the 8MP recording support, must allow live monitoring of at least 16 2 MP cameras at the same time. The recorder must support H.265, H.264 and MJPEG formats. The device must have an input bandwidth of at least 256 Mbps. There must 	
Related reference pose number, book	35.445.1503 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec46	24 Ports Manageable Poe Network Switch (Measurement: Pcs)	pcs

Description /Specification	Technical Description: 24 Ports Manageable Poe Network Switch (Measurement: Pcs) There shall be at least 24 pcs of 10/100/1000 Ethernet PoE ports and at least 2 1000 Base-xSFP ports on the switch. 28 ports on the device must be able to work actively at the same time. The device shall have at least IEEE 802.3af and IEEE 802.3at (PoE, PoE+) features. The device shall be able to provide 30 Watts of power per port. The total POE budget of the device must be at least 360 watts. Placed on the market with the CE conformity mark in accordance with the 2014/35/EU Regulation on Electrical Equipment Designed for Certain Voltage Limits, transport to the workplace, installation, and delivery of the device, including all kinds of small mounting materials.
Related reference pose number, book	35.445.1603 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Elec47	12 Channel Sound Mixer, SOUND CONTROL AND RECORD MIXER	pcs
Description /Specification	Technical Description: SOUND CONTROL AND RECORD MIXER (Me Preparation: 60%) Supply of the audio mixer with a device broadcasting and control, with suitable number of channels with a hig and stereo equalizer, with mono stereo input, Aux output, with fa recording purposes, the feed of the digital effect operator sound cont a feature of automatic voltage selection, including workmanship and materials and delivery in working condition. Intermediate values sh interpolation.	used for sound gh input capacity ader outputs for trol mixer having all kinds of small
Related reference pose number, book	35.450.1001 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec48	10 W single-sided speaker, Speaker and mounting	pcs
Description /Specification	Technical Description: Speaker and its installation (Measurement: Pcs, Preparation: 60%) Procurement of loudspeaker and loudspeaker box in accordance with TS 976 EN 60268-5 standard, as written in the technical specification, installation in place, delivery in working condition, including all kinds of minor materials and workmanship.	
Related reference pose number, book	35.450.1408 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec49	Desk microphone, Microphone	pcs
Description /Specification	Technical Description: Microphone (Measure: Pcs, Preparation: 60%) Crystal or dynamic microphone in accordance with TS 6509 standard, with the features written in the technical specification, microphone cable of at least 10 m length, microphone socket and plug, installation in place, delivery in working condition, including all kinds of minor materials and workmanship.	
Related reference pose number, book	35.450.5001 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec50	2×250 W Power Amplifier	pcs
Description /Specification	Technical Description: POWER AMPLIFIER (Measurement: Pcs, Prepa device shall be professional type and, in a structure, suitable for the the system, and have full protection (overload, short circuit and DC or thermal, ultrasonic, and RF protection). Supply of the power amplifie Wrms output power, 2×280Wrms/8 ohms; 2×450 Wrms/4 ohms; 2×7 output power, with Power, Signal and Clip LED indicators on the fr	e microphones in utput protection, er with IEC 265-8 700 Wrms/2 ohm

	device, including all kinds of minor materials and workmanship. Intermediate value shall be found by interpolation.	
Related reference pose number, book	35.470.4003 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec51	24 Port, Utp Cat6 Patch Panel	pcs
Description /Specification	Technical Description: Utp Cat 6 Patch Panel (Measurement: Pcs, Preshall be in CAT 6 Standards used in data communication at 250 Mhz 1000 Mbps for equipment termination in local area networks (Lermination in horizontal distribution or telecommunication ro terminations at junction points, with a RJ-45 type 8 Contact female cowide, Unshielded, covered with a high quality material in Jack Construction material made of steel, aluminium, aluminium alloy or a material, in compliance with ANSI/TIA/EIA-568 B.2-1, ISO/IEC -12 including labelling, workmanship, assembly, testing	z bandwidth and AN), equipment oms and cable onnector, 19 inch c Contact Point. node aluminium
Related reference pose number, book	35.505.7301 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec52	Up to 10 pairs (with ground line), Main line installation outside the building (TS-3930)	m
Description /Specification	Technical Description: Main line installation outside the building (M (TS-3930) Installation of main line installation outside or inside the build diameter, manufactured with a certificate of conformity according to standard, colored according to the standards and placed in a intercommunication, moisture and water resistant, annealed ele conductor, with polyethylene insulator, polyethylene interior sheat screened and polyethylene outer sheathed external type telephone mainline installation outside the building with shrunken, reinforced co PVC pipe or directly in the ground, inside the building with peschel Building, PVC pipe, concrete pipe, channel construction, brick, brice laying costs shall be paid separately from the relevant poses.)	ilding, 0.5 mm in the TS EN 60708 way to prevent ctrolytic copper thed, aluminium e cables and the oncrete channel, ergman and PVC hip (outside the
Related reference pose number, book	35.510.1203 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec53	Up to 10 Pairs, Telephone distribution boxes	pcs
Description /Specification	Technical Description: Telephone distribution boxes (Measurement: I 60%). gun painted distribution boxes, one on each floor, with hing cover, made of 1 mm thick DKP sheet metal, surface mounted or embe in the desired colour, and their small fixing and connection materials, s terminal, duly opening and shaping the ends of the cables coming i connecting with solder, including all kinds of minor materials and wor	ed and lockable dded in the wall, pecial telephone nto the box and
Related reference pose number, book	35.510.1601 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec54	2X1.5 mm2, LIH(St)CH HALOGEN FREE SIGNAL AND CONTROL CABLE	m

Pose No	Pose	Unit
Elec55	Utp Cat6H HALOGEN FREE 4x2x23 AWG, COPPER DATA CABLES	m
Description /Specification	Technical Description: Utp Cat6H HALOGEN FREE 4X2X23 AWG M Preparation: 60% Supply of cables which are used in data communica bandwidth and 250 Mbps speed between computers for horizontal ins area networks, with 4 pairs, 4 colour codes, unshielded twist pairs (t twist), and flame retardant thanks to its all-encompassing HFFR oute self-extinguishing, which does not emit toxic gas and smoke during con IEC 60332-1 IEC 60754 test conformity certificate; 4 pairs of cable in IS standard, 23 AWG 0.57 mm bare copper plating cable, delivery to including all kinds of minor materials, workmanship, assembly and which condition the cable is installed during the application, the mar material cost of such production shall also be paid based on the (Payment of the pipe cost if it is passed through a pipe, payment of t is passed through the cable tray based on the relevant clause)	ation at 250 Mhz tallations in local unshielded spiral r sheath, usually mbustion, having 60 class D-CAT6e o the workplace, d testing. Under terial cost of the relevant clause
Related reference pose number, book	35.515.7030 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec56	25U 600 mmx600 mm 19" Free Standing cabinet	pcs
Description /Specification	Technical Description: Free Standing cabinets: With the type to corresponding test results were provided to the administration, with and the inner stud (2 at the front 2 at the rear) at least 2 mm thick, the of the cabin walls at least 1.5 mm thick, made of DKP sheet metal, ste wide, lockable, wheeled, with wheels capable of carrying at least 200 bottom chassis of the cabinet having a cables inlet section to prevent capable of fixing the cables, the cabinet's front, rear and side flaps I capable of opening and closing, the front cover of the cabinet shall be static, secure, smoke-colour, grinded, with a thickness of at least 4 m degrees, having a key and capable of opening and closing, uninstallal wide screws that hold the glass around the glass to increase the stre cover, metal plug-in type, with a frame structure, painted with elec coating, having ventilation portholes at the top of the cabinet an surfaces, designed to respond to fan assembly when the upper cov	h the rear cover ne inner surfaces cud openings 19" kg load, with the entrance of dust, having a key and e tempered, anti- mm, at least 135 ole, at least 3 cm ngth of the front trostatic powder d/or in the side

	removed, each side frame of the holes on the cabinet studs $9,5 \pm 0.01$ mm, cabinets studs capable of moving along the depth of the cabinet.
Related reference pose number, book	35.550.2004 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Elec57	Fixed shelf for 600 mm depth, Accessories belonging to the product	pcs
Description /Specification	(In accordance with TS EN 61439-1 standard)	
Related reference pose number, book	35.550.4002 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec58	Wheel group with brake (Front wheels with brake), Accessories belonging to the product	pcs
Description /Specification	(In accordance with TS EN 61439-1 standard	
Related reference pose number, book	35.550.4008 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec59	Fan module with thermostat (4 fans), Accessories belonging to the Product	pcs
Description /Specification	(In accordance with TS EN 61439-1 standard)	
Related reference pose number, book	35.550.4011 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec60	19" rack type 6 group socket with fuse, Accessories belonging to the product	pcs
Description /Specification	(In accordance with TS EN 61439-1 standard)	
Related reference pose number, book	35.550.4017 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec61	19" 1U horizontal cable organizer, Product Accessories	pcs
Description /Specification	(In accordance with TS EN 61439-1 standard)	
Related reference pose number, book	35.550.4019 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec62	25U vertical cable organizer (one side), Product's Accessories	pcs
Description	(In accordance with TS EN 61439-1 standard)	·
/Specification		
Related reference	25 EEO 4027 / Ministry of Environment and Urbanization	
pose number, book	35.550.4027 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Flechs	Average excitation path DL= 60 m, Active catching tip:	pcs
	(Measurement: Piece.)	pes

Description /Specification	Technical Description: Active catching tip (Measurement: Piece) Supply of active lightning rod with at least 15 years working guarantee, having characteristics as written in the specification, having an early flow excited working system, with high corrosion resistance, made of stainless or non-corrosive material (such as chrome-plated copper, chrome-nickel, stainless steel, etc.), resistant to the highest wind speed, can operate within (-40 $^{\circ}$ C to +120 $^{\circ}$ C) without error, with at least IP 65 protection degree, with a AT stimulation time of at least 15 $\mu$ s, resistant to the H class 100 kA lightning test current specified in TS EN 50164-1 / TS EN 62561-1 without causing any visible damage as a result of the test, complying with TS 13709/T1, (NFC17-102) and (UNE 21.186) standards, CE certified, approved by the Ministry of Science, Industry and Technology, as well as its transportation, mounting on the pole, connecting the down conductors, delivery in working condition, including all kinds of minor materials and labour. Note: 1-Active lightning rod type tests shall be carried out in laboratories accredited by TURKAK or an international organization, and their reports shall be submitted to the Administration. 2- The certificate indicating that the IP 65 protection class test has been carried out by TURKAK or an institution accredited by an international organization shall be submitted to the administration.
pose number, book	35.750.1504 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Elec64	Roof pole (For active catching tip) (Measurement: Pcs: Preparation: 60%), LIGHTNING PROTECTION INSTALLATION	pcs
Description /Specification	Technical Description: Roof pole (For active catching tip) (Measurement: Pcs, Preparation: 60%) Supply of a 6 m long pole made of 80 mm galvanized pipe (1 lot) as written in the specification, including the unit down-conductor and all kinds of accessory materials related to the erection of the pole installation in place so as not to damage the roof. If the pole length, including the detection distance, exceeds 6 meters, the excess shall be paid separately from the relevant unit prices.	
Related reference pose number, book	35.750.1600 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec65	Active lightning rod tester: (Measurement: pcs, production: 60%), LIGHTNING PROTECTION INSTALLATION	pcs
Description /Specification	Technical Description: Active lightning rod tester (Measurement: Pcs, Preparation: 60%) A portable device designed to test the operability of the active lightning rod, showing whether it is working or not with the LEDs on it.	
Related reference pose number, book	35.750.1700 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec66	50 mm <sup>2</sup> electrolytic copper conductor, installation of roof up and down conductors	m
Description /Specification	Technical Description: Roof surrounding and down conductors installation (Measurement: m, Preparation: 60%) Installation of roof and conductors with bare electrolytic solid copper conductor as written in the specification, taking the necessary measures to prevent corrosion at the point of point or screwed fork fixing clasps, catching tip or ground electrode connection points made of red casting or similar material, making the splices in the conductor with silver welding when necessary, including inspection terminal and all kinds of minor materials and labour.	
Related reference pose number, book	35.750.2001 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec67	Galvanized steel sheet, 30x3.5 mm in size, coated with min 50µ zinc, in accordance with the specification, Building surrounding conductor installation	m

Description /Specification	Technical Description: Building surrounding conductor installation (Measurement: m, Preparation: 60%) Installation of building surrounding conductor from conductors, opening a channel in all kinds of soil at a depth of at least 60-80 cm around the outside of the building, closing the conductor ferrule and channel, connecting it to the electrodes with rivets or welding, including minor materials and labour.
Related reference pose number, book	35.750.3002 / Ministry of Environment and Urbanization

Pose No	Pose	Unit
Elec68	Earth electrode (rod) electrolytic copper: (Measurement: Pcs: )	pcs
Description /Specification	Technical Description: Earth electrode (rod) electrolytic copper (Me Work place supply of an electrolytic copper bar with a diameter of length of at least 3.5 m in accordance with TS 435/T1 standard, screwir cap on its end so that it can be driven into the ground, if the rod will b parts, the connection must be made by threading 4 cm, burying it at a 60 cm from the ground level, connecting it to the down conductor enclosing conductors with silver welding or a special red clamp, inclu small materials and workmanship. Note: If the ground is rocky, suital around.	Ø 20 mm and a og a cone-shaped e composed of 2 depth of at least prs and building uding all kinds of
Related reference pose number, book	35.750.4002 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec69	Conductor protective duct: (Measurement: Pcs: )	pcs
Description /Specification	Technical Description: Conductive protective duct (Measurement: down conductors into 3 m of 20 mm galvanized iron pipe, 0.5 m of v the soil (if more than 3 m of pipes are used, the cost shall be paid separ the part of the conductor inside the pipe with PVC or a similar insula prevent contact with the pipe, and fixing it as a point-to-pipe conduct from working as a transformer in case of lightning strike, inspection t material that will prevent corrosion, supply and assembly of all workplace, including all kinds of minor materials and labour.	which remains in rately), insulating ating material to ctor to prevent it erminal made of
Related reference pose number, book	35.750.4003 / Ministry of Environment and Urbanization	

Pose No	Pose	Unit
Elec70	24 Port Gbit Switch	pcs
Description /Specification	A structure that can provide unobstructed, wire-speed transfer Has automatic MDI/MDI-X support IEEE 802.3az compliant Fanless Supporting IEEE 802.3x Flow control Supporting IEEE 802.1p CoS Supporting up to 9 KB jumbo frames IEEE 802.3at PoE Plus standard with 30W per port In 1U form, suitable for (19") cabinet mounting, delivery of the sw condition including Label, labor, assembly, testing, shipping	itch in working
Related reference pose number, book	EÖBF1	

Pose No	Pose	Unit
Elec71	21" CCTV MONITOR	pcs
Description /Specification	<ul> <li>1) Monitors, such as LCD TVs, should not be for home use, but must be Video Monitors suitable for 24-hour operation, produced for security systems.</li> <li>2) These are min 21"-max 23" LCD monitors to be mounted on the main monitoring center wall in order to view general images in the Main Control Center.</li> </ul>	

	3) It will be a monitor with high resolution and wide screen (21"- 23").
	4) It will have a lifetime of 40,000 hours.
	,
	5) The brightness value will be min 300 cd/m2 and the contrast ratio will be min 3000:1.
	6) Min FULL HD will support 1920x1080 resolution.
	7) Video input, 1 x HDMI, 1 x VGA
	8) It should have a maximum reaction time of 8 ms.
	9) It will be supplied with the wall mount
Related reference	rönra
pose number, book	EÖBF2

Pose No	Pose	Unit
Elec72	8 TB CCTV HDD	pcs
Description /Specification	Connection type: SATA3 (6Gb/s)	
	Cache memory: 256 MB	
	Disk type : NAS (24/7 working)	
	Rotation speed: 5400 rpm	
	Capacity : 8 TB (3.5 inch)	
	supply to the workplace, all kinds of materials, including assembly an	d labor, delivery
	in working condition.	
Related reference	EÖBF3	
pose number, book	EUDFS	

# **SECTION 5A.3 DESIGN DRAWINGS**

Please be informed that designed drawings can be accessed through seperate attachments to the ITB. **ARCHITECTURAL DRAWINGS** 

No	Drawing No	Drawing Name	Content
1	BCMP-ARC-101	A BLOK MİMARİ PROJE / A BLOCK ARCHITECTURAL PROJECT	VAZİYET PLANI - BOY KESİT - BOY SİLÜET - EN SİLÜET - ZEMİN KAT PLANI - ÇATI PLANI - KESİTLER - GÖRÜNÜŞLER // LAYOUT PLAN - LONGITUDINAL SECTION - SILHOUETTES - GROUND FLOOR PLAN - ROOF PLAN - SECTIONS - VIEWES
2	BCMP-ARC-102	B BLOK MİMARİ PROJE / B BLOCK ARCHITECTURAL PROJECT	VAZİYET PLANI - BOY KESİT - BOY SİLÜET - EN SİLÜET - ZEMİN KAT PLANI - ÇATI PLANI - KESİTLER - GÖRÜNÜŞLER // LAYOUT PLAN - LONGITUDINAL SECTION - SILHOUETTES - GROUND FLOOR PLAN - ROOF PLAN - SECTIONS - VIEWES
3	BCMP-ARC-103	C BLOK MİMARİ PROJE / C BLOCK ARCHITECTURAL PROJECT	VAZİYET PLANI - BOY KESİT - BOY SİLÜET - EN SİLÜET - ZEMİN KAT PLANI - ÇATI PLANI - KESİTLER - GÖRÜNÜŞLER // LAYOUT PLAN - LONGITUDINAL SECTION - SILHOUETTES - GROUND FLOOR PLAN - ROOF PLAN - SECTIONS - VIEWES
4	BCMP-ARC-104	D BLOK MİMARİ PROJE / D BLOCK ARCHITECTURAL PROJECT	VAZİYET PLANI - BOY KESİT - BOY SİLÜET - EN SİLÜET - ZEMİN KAT PLANI - ÇATI PLANI - KESİTLER - GÖRÜNÜŞLER // LAYOUT PLAN - LONGITUDINAL SECTION - SILHOUETTES - GROUND FLOOR PLAN - ROOF PLAN - SECTIONS - VIEWES
5	BCMP-ARC-105	OTOPARK MİMARİ PROJE / PARKING AREA ARCHITECTURAL PROJECT	VAZİYET PLANI - BOY KESİT - BOY SİLÜET - EN SİLÜET - ZEMİN KAT PLANI - KESİTLER - GÖRÜNÜŞLER // LAYOUT PLAN - LONGITUDINAL SECTION - SILHOUETTES - GROUND FLOOR PLAN - SECTIONS - VIEWES
6	BCMP-ARC-106	ZABITA-DÜKKANLAR MİMARİ PROJE / SECURITY ROOM-SHOPS ARCHITECTURAL PROJECTS	VAZİYET PLANI - BOY KESİT - BOY SİLÜET - EN SİLÜET - ZEMİN KAT PLANI - ÇATI PLANI - KESİTLER - GÖRÜNÜŞLER // LAYOUT PLAN - LONGITUDINAL SECTION - SILHOUETTES - GROUND FLOOR PLAN - ROOF PLAN - SECTIONS - VIEWES AND DETAILS
7	BCMP-ARC-107	WC-ATIK TOPLAMA ALANI MİMARİ PROJE / WC-WASTE COLLECTION AREA ARCHITECTURAL PROJECT	VAZİYET PLANI - BOY KESİT - BOY SİLÜET - EN SİLÜET - ZEMİN KAT PLANI - ÇATI PLANI - KESİTLER - GÖRÜNÜŞLER // LAYOUT PLAN - LONGITUDINAL SECTION - SILHOUETTES - GROUND FLOOR PLAN - ROOF PLAN - SECTIONS - VIEWES AND DETAILS
STR	UCTURAL DRAWI	NGS	•
1	BCMP-STR-101	ŞEVLİ KOTLU PLAN / BEVELLED-GRADED PLAN	ŞEVLİ KOTLU PLAN / BEVELLED-GRADED PLAN
2	BCMP-STR-102	GENEL YERLEŞİM PLANI / GENERAL LAYOUT PLAN	GENEL YERLEŞİM PLANI / GENERAL LAYOUT PLAN

3	BCMP-STR-103	APLİKASYON PLANI / APPLICATION PLAN	APLİKASYON PLANI / APPLICATION PLAN
4	BCMP-STR-104	A BLOK BETONARME TEMEL VE ÇELİK KONSTRÜKSİYON TAŞIYICI SİSTEM PROJESİ / A BLOCK REINFORCED CONCRETE FOUNDATION AND STEEL STRUCTURE PROJECT	A BLOK BETONARME TEMEL VE ÇELİK KONSTRÜKSİYON TAŞIYICI SİSTEM PROJESİ / A BLOCK REINFORCED CONCRETE FOUNDATION AND STEEL STRUCTURE PROJECT
5	BCMP-STR-105	B BLOK BETONARME TEMEL VE ÇELİK KONSTRÜKSİYON TAŞIYICI SİSTEM PROJESİ / B BLOCK REINFORCED CONCRETE FOUNDATION AND STEEL STRUCTURE PROJECT	B BLOK BETONARME TEMEL VE ÇELİK KONSTRÜKSİYON TAŞIYICI SİSTEM PROJESİ / B BLOCK REINFORCED CONCRETE FOUNDATION AND STEEL STRUCTURE PROJECT
6	BCMP-STR-106	C BLOK BETONARME TEMEL VE ÇELİK KONSTRÜKSİYON TAŞIYICI SİSTEM PROJESİ / C BLOCK REINFORCED CONCRETE FOUNDATION AND STEEL STRUCTURE PROJECT	C BLOK BETONARME TEMEL VE ÇELİK KONSTRÜKSİYON TAŞIYICI SİSTEM PROJESİ / C BLOCK REINFORCED CONCRETE FOUNDATION AND STEEL STRUCTURE PROJECT
7	BCMP-STR-107	D BLOK BETONARME TEMEL VE ÇELİK KONSTRÜKSİYON TAŞIYICI SİSTEM PROJESİ / D BLOCK REINFORCED CONCRETE FOUNDATION AND STEEL STRUCTURE PROJECT	D BLOK BETONARME TEMEL VE ÇELİK KONSTRÜKSİYON TAŞIYICI SİSTEM PROJESİ / D BLOCK REINFORCED CONCRETE FOUNDATION AND STEEL STRUCTURE PROJECT
8	BCMP-STR-108	OTOPARK BETONARME TEMEL KALIP VE DONATI DETAYI / PARKING AREA REINFORCED CONCRETE FOUNDATION FORMWORK AND REBAR DETAILS	OTOPARK BETONARME TEMEL KALIP VE DONATI DETAYI / PARKING AREA REINFORCED CONCRETE FOUNDATION FORMWORK AND REBAR DETAILS
9	BCMP-STR-109	ZABITA-DÜKKANLAR-BALIKÇI-WC-ÇÖP TOPLAMA ALANI KALIP PLANI VE DONATI DETAYI / SECURITY OFFICE- SHOPS-WC-WASTE COLLECTION AREA FORMWORK AND REBAR DETAIL	ZABITA-DÜKKANLAR-BALIKÇI-WC-ÇÖP TOPLAMA ALANI KALIP PLANI VE DONATI DETAYI / SECURITY OFFICE-SHOPS-WC- WASTE COLLECTION AREA FORMWORK AND REBAR DETAIL
STEI	EL CONSTRUCTIO	N DRAWINGS	
1	BCMP-STL-101	KOLON DETAYLARI / COLUMN DETAILS	KOLON DETAYLARI / COLUMN DETAILS
2	BCMP-STL-102	KİRİŞ DETAYLARI / BEAM DETAILS	KİRİŞ DETAYLARI / BEAM DETAILS
3	BCMP-STL-103	BİRLEŞİM DETAYLARI / ASSEMBLY DETAILS	BİRLEŞİM DETAYLARI / ASSEMBLY DETAILS
MEC	HANICAL DRAWI	NGS	
1	BCMP-MEC-101	SIHHİ TESİSAT UYGULAMA PROJESİ / SANITARY INSTALLATION PROJECT	VAZİYET PLANI - BOY KESİT - BOY SİLÜET - EN SİLÜET - ZEMİN KAT PLANLARI - ÇATI PLANLARI - DETAYLAR // LAYOUT PLAN - LONGITUDINAL SECTION - SILHOUETTES - GROUND FLOOR PLANS - ROOF PLANS - DETAILS
ELEC		GS	
1	BCMP-ELC-101	KUVVETLİ AKIM PROJESİ / HIGH CURRENT PROJECT	KUVVETLİ AKIM PROJESİ / HIGH CURRENT PROJECT
2	BCMP-ELC-102	ZAYIF AKIM PROJESİ / LOW CURRENT PROJECT	ZAYIF AKIM PROJESİ / LOW CURRENT PROJECT

3	BCMP-ELC-103	TOPRAKLAMA VE PARATONER PROJESİ /	TOPRAKLAMA VE PARATONER PROJESİ / EARTHING AND LIGHTNING ROD PROJECT
		EARTHING AND LIGHTNING ROD	
4	BCMP-ELC-104	KUVVETLİ AKIM KOLON ŞEMASI PROJESİ / HIGH CURRENT COLUMN DIAGRAM PROJECT	KUVVETLİ AKIM KOLON ŞEMASI PROJESİ / HIGH CURRENT COLUMN DIAGRAM PROJECT

# SECTION 5B: OTHER RELATED REQUIREMENTS

Further to the SECTION 5A: SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS/BILL OF QUANTITIES, Bidders are requested to take note of the following additional requirements, conditions, and related services pertaining to the fulfilment of the requirements:

Commencement of work	The Contractor shall commence work within 7 days from the date on which it is given access to the Site and it receives the notice to commence from the Engineer
Time limit for submission of Programme of Work (Clause 13 of UNDP General Conditions of Contract for Civil Works)	The Contractor shall submit to the Engineer the Programme of Work in 15 days from the contract signature date.
Price and Payment Terms	The contract is based on unit price, and the final price of the Contract will be determined on the basis of actual quantities of work and materials utilized in the complete and satisfactory performance of the Works as certified by the Engineer and the unit prices contained in the Contractor's financial proposal. Such unit prices are fixed and are not subject to any variation whatsoever.
Interim Payment / Payment Terms	The Contractor shall submit an invoice for the work performed and materials utilized <b>every month</b> . Advance payment of up to a maximum of 20 % of contract value is allowed following contract signature. However, the Contractor will be requested to submit additional performance guarantee for the amount of advance payment amount in order to claim for the advance payment.
Insurance of work	For all risks stipulated by Clause 21 of UNDP General Conditions of Contract for Civil Works for the 110 % of the total estimated price of the Contract.
Minimum amount of liability insurance (Clause 23 of UNDP General Conditions of Contract for Civil Works)	15% of the total estimated price of the Contract

# 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?	
<ul> <li>Form A: Bid Submission Form</li> </ul>	
<ul> <li>Form B: Bidder Information Form</li> </ul>	
<ul> <li>Form D: Qualification Form</li> </ul>	
Form E: Format of Technical Bid/Bill of Quantities	
From G: Form of Bid Security	
Have you provided the required documents to establish compliance with the evaluation criteria in Section 4?	

#### **Price Schedule:**

Form F: Price Schedule Form
-----------------------------

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	UNDP-TUR-ITB(UR)-2022/94		

We, the undersigned, offer to complete Construction of Marketplace for Villagers in Bahçe District Osmaniye Province in accordance with your Invitation to Bid No. UNDP-TUR-ITB(UR)-2022/94 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] for Construction of Marketplace for Villagers in Bahçe District Osmaniye Province

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 complete works 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?	□ Yes □ No If yes, [insert UGNM vendor number]		
Are you a UNDP vendor?	□ Yes □ No If yes, [insert UNDP vendor number]		
Countries of operation	[Complete]		
No. of full-time employees	[Complete]		
Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (If yes, provide a Copy of the valid Certificate):	[Complete]		
Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? (If yes, provide a Copy of the valid Certificate):	[Complete]		
Does your Company have a written Statement of its Environmental Policy? (If yes, provide a Copy)	[Complete]		
Does your organization 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:	<ul> <li>Company Profile, which should <u>not</u> exceed fifteen (15) pages,</li> <li>Certificate of Incorporation/ Business Registration</li> <li>Tax Registration/Payment Certificate issued by the Internal Revenue Authority evidencing that the Bidder is updated</li> </ul>		

with its tax payment obligations, or Certificate of Tax exemption, if any such privilege is enjoyed by the Bidder
<ul> <li>Trade name registration papers, if applicable</li> </ul>
<ul> <li>Signature Circular/Power of Attorney</li> </ul>
Official Letter of Appointment as local representative, if
Bidder is submitting a Bid on behalf of an entity located
outside the country

#### FORM D: ELIGIBILITY AND QUALIFICATION FORM

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	UNDP-TUR-ITB(UR)-2022-94		

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

# **History of Non- Performing Contracts**

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

### Litigation History (including pending litigation)

□ No litigation history for the last 3 years.						
□ Litigation History as indicated below						
Year of Amount in Contract Identification Total Contract Amou						
dispute	dispute (in US\$)		(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 5 years.

List only those assignments for which the Bidder was legally 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 (in USD equivalent*)	Period of activity and status	Types of activities undertaken	

Bidders shall convert the currency quoted in the "Certificate of Completion" into USD, in accordance with the
prevailing UN operational rate of exchange on the contract date stated by "Certificate of Completion". UN
operational rate of exchange are available at the following website:
<a href="https://treasury.un.org/operationalrates/OperationalRates.php#E">https://treasury.un.org/operationalrates/OperationalRates.php#E</a>

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

*Bidders shall submit* Statements of Satisfactory Performance (i.e. Reference Letters, Work Completion Certificates) along with their bids. Reference letters and/or Completion Certificates shall include the information requested in above table at minimum.

Please refer to SECTION 4. EVALUATION CRITERIA of the ITB for minimum qualification requirements and ensure that claimed experiences meet the qualification criteria in terms of nature and value.

### **Financial Standing**

Annual Turnover for the last 3	years (in	Year 2019	USD	
US\$ equivalent <sup>3</sup> )	US\$ equivalent <sup>3</sup> )			
	Year 2021	USD		
Latest Credit Rating (if any), ir source				
Financial information (in US\$ equivalent <sup>4</sup> )		Historic i	nformation for the	last 3 years
	201	19	2020	2021
		Info	rmation from Balance	e Sheet
Total Assets (TA)				
Total Liabilities (TL)				
Current Assets (CA)				
Current Liabilities (CL)				
		Inform	ation from Income S	tatement
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:

- a) Must reflect the financial situation of the Bidder or party to a JV, and not sister or parent companies;
- b) Historic financial statements must be audited by a certified public accountant;
- c) Historic financial statements must correspond to accounting periods already completed and audited. No statements for partial periods shall be accepted.
- d) Declaration of Financial Status, which is certified by the bidders' banks, shall be submitted along with the bids in the below format.

<sup>&</sup>lt;sup>3</sup> Bidders shall convert the currency into USD by using the UN operational rate of exchange which was effective for December of each corresponding year. UN operational rate of exchange are available at the following website: https://treasury.un.org/operationalrates/OperationalRates.php#E

<sup>&</sup>lt;sup>4</sup> Bidders shall convert the currency into USD by using the UN operational rate of exchange which was effective for December of each corresponding year. UN operational rate of exchange are available at the following website: https://treasury.un.org/operationalrates/OperationalRates.php#E

#### FORM E: FORMAT OF TECHNICAL BID

Name of Bidder:	[Insert Name of Bidder]		Select date
ITB reference:	UNDP-TUR-ITB(UR)-2022-94		

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.

#### **SECTION 2: Method Statement**

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 complete civil works, keeping in mind the appropriateness to local conditions and project environment.
- 2.2 Mobilization plan for the equipment and personnel demonstrating how the bidders will meet the requirements of the Statement of Works.
- 2.3 Implementation plan including a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing.

#### SECTION 3: Management Structure and Key Personnel

- 3.1 Provide CVs for key personnel using the format below with the bid. CVs should demonstrate qualifications requested in the following areas. **Minimum key personel requirements are stated below;** 
  - 1. **Project Manager:** Civil engineer who has at least 10 years of experience in the construction of superstructures/buildings. The Project Manager/Construction Manager shall be on site full time from the date the Engineer gives Site Access to the Contractor until the provisional acceptance date.
  - 2. Electrical Engineer: Electrical engineer with at least 3 years of experience in the construction of superstructures/buildings.
  - 3. **Mechanical Engineer:** Mechanical engineer with at least 3 years of experience in the construction of superstructures/buildings.

4. **Survey Engineer / Surveyor:** A Survey Engineer (or equivalent) with at least 3 years of experience in the construction of superstructures/buildings or a Survey Technician with at least 5 years of experience in the construction of superstructures/buildings

Name of Personnel	[Insert]
Position for this assignment	[Insert]
Nationality	[Insert]
Language proficiency	[Insert]
Education/	[Summarize college/university and other specialized education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.]
Qualifications	[Insert]
Professional certifications	<ul> <li>[Provide details of professional certifications relevant to the scope of goods and/or services]</li> <li>Name of institution: [Insert]</li> <li>Date of certification: [Insert]</li> </ul>
Employment Record/ Experience	[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.]
	[Insert]
	[Provide names, addresses, phone and email contact information for two (2) references]
References	Reference 1: [Insert]
	Reference 2: [Insert]

## Format for CV of Proposed Key Personnel

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/BILL OF QUANTITIES

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	UNDP-TUR-ITB(UR)-2022-94		

This Bill of Quantities is an itemized breakdown of the works to be carried out, indicating a quantity for each item and the corresponding unit price. The quantities set out in this Bill of Quantities are estimated quantities.

The amounts due shall be determined through the measurement of the actual quantities of the works executed and by applying the unit rates to the quantities actually executed for the respective items.

The prices inserted in the Bill of Quantities are to be the full inclusive values of the works described under the items, including all costs and expenses which may be required in and for the construction of the works described together with any temporary works and installations which may be necessary, and all general risks, liabilities and obligations set forth or implied in the documents on which the tender is based. It will be assumed that establishment charges, profit and allowances for all obligations are spread evenly over all the unit rates.

#### No specific payment will be made against transportation of materials to the site.

Unless the technical specifications or the Bill of Quantities specifically and expressly state otherwise, only permanent works are to be measured and paid for by UNDP.

No allowance will be made for loss of materials or volume thereof during installation, transport or compaction. UN and its subsidiary organs are exempt from all taxes. Therefore, the prices shall exclude Value Added Tax (VAT). The Contractor to be selected shall not be entitled to receive any amount over the prices in relation to VAT, Special Consumption Tax and any other applicable taxes.

In the bill of quantities, rates and prices shall be entered by the Contractor in the appropriate columns in USD. In the Unit Price column in the Bill of Quantities, Unit Rates shall include the overheads. "Overheads" shall be deemed to cover:

- i. Profit
- ii. Head Office charges
- iii. Site Supervision and Site Staff costs and expenses
- iv. Transport of labour and travelling allowances
- v. Use of protective clothing or equipment
- vi. Any statutory or incidental charges levied on the employment of labour
- vii. Overtime, unless specifically ordered or subsequently sanctioned in writing by the Engineer
- viii. Time lost due to inclement weather
- ix. Insurances of whatsoever nature
- x. Holiday and sickness pay or benefits
- xi. Use, repair and sharpening of small tools
- xii. All non-mechanically operated equipment, staging and trestles, protective clothing, artificial lighting, storage facilities and the like that may be in general use on the site
- xiii. All other liabilities and obligations whatsoever
- xiv. The Contractor shall provide the UNDP Engineer with one (1) vehicle and office space, and cover all associated costs thereof, during the supervision of construction until substantial completion of works. Costs of the gas for the vehicle shall be borne by the Contractor and it shall not exceed 1,500 Liters over the contract period until substantial completion of works. Contractor shall bear all responsibility with regard to insurance and maintenance of the vehicle. UNDP shall bear the responsibility for payment of any traffic fine during the period vehicle is used by UNDP Engineer.

# **Price Schedule**

		1-Civil and Architectura	al W	orks		
S. No	Poz	Description	Unit	Amount A	Unit Price (USD) B	Total Price (USD) AXB
1	Civ01	Excavation Works	m³	12.000,00		
2	Civ02	Making a plant-mix sub-base (with crushed quarry stone)	ton	1.500,00		
3	Civ03	Making the Foundation [with Broken and Sifted Hearthstone (1 inch)]	m³	600,00		
4	Civ04	Making fill with all-in sand, gravel or stabilizer	m³	2.750,00		
5	Civ05	Providing gravel and making drainage	m³	15,00		
6	Civ06	Pouring normal ready-mixed concrete in C 16/20 pressure strength class, grey colour, produced or purchased at the concrete plant and pressed with a concrete pump (including concrete transport)	m³	260,00		
7	Civ07	Pouring normal ready-mixed concrete in C 30/37 pressure strength class, grey colour, produced or purchased at the concrete plant and pressed with a concrete pump (including concrete transport)	m³	900,00		
8	Civ08	Making a flat surface reinforced concrete formwork with plywood	m²	3.400,00		
9	Civ09	Ø 8- Ø 12 mm ribbed concrete steel bar, cutting, bending and repositioning of bars	ton	38,00		
10	Civ10	Ø 14- Ø 28 mm ribbed concrete steel bar, cutting, bending and repositioning of bars	ton	68,00		
11	Civ11	Replacing ribbed wire mesh 3,001-10,000 kg/m <sup>2</sup> (including 10,000 kg/m <sup>2</sup> )	ton	19,00		
12	Civ12	Carcass, (frame) construction with all kinds of profiles, steel bars and steel sheets, fixing in place (structure frame, beams from profile iron in bridges, caps, connections and similar manufactures)	ton	68,00		
13	Civ13	Building and installing various iron works from flat and profile irons	Kg	9.750,00		
14	Civ14	Concrete Coating (Using C30/37 Ready-Mixed Concrete)	m³	500,00		
15	Civ15	Painted Trapezoidal Section Sheet Roof Covering	m²	2.500,00		
16	Civ16	Making formwork scaffolding from steel pipe (between 4.01- 6,00 m)	m³	1.100,00		
17	Civ17	Construction of a fully secure, exterior scaffolding consisting of pre-built components. (between 0,00-51,50 m)	m²	900,00		

	Grand Total for Civil and Architectural Works (USD)						
37	Civ37	Digital Electronic Balance	Pcs	10,00			
36	Civ36	Traffic Sign Board	Pcs	8,00			
35	Civ35	Applying two coats of solvent-based epoxy paint to iron surfaces	m²	2.500,00	-		
34	Civ34	Applying two layers of antirust and two layers of synthetic paint on iron surfaces	m²	2.800,00			
33	Civ33	Installing a double-glazed window unit of 4+4 mm	m²	15,00			
32	Civ32	Manufacturing and replacing plastic joinery (all kinds	kg	550,00			
31	Civ31	External windowledge with 3 cm thick white marble slabs (3cmx30-40-50 cmxfree length) (honed or polished))	m²	15,00			
30	Civ30	Making floor covering with 3 mm joint gaps with first quality, white ceramic floor tiles of (42.5x42.5 cm) or (45x45 cm) nominal sizes, with all kinds of patterns and surface features (with tile adhesive)	m²	60,00			
29	Civ29	Supply and fixation of Ø 100 mm hard PVC rain gutter	m	200,00			
28	Civ28	Supply and fixation of $\emptyset$ 100 mm diameter rigid PVC rain pipe with a bell	m	160,00			
27	Civ27	Making 2 layers of waterproofing with a total thickness of 1.5 mm with a cement-based polymer modified two-component ready-to-use insulation mortar.	m²	70,00			
26	Civ26	5 5 5 5 7	m²	70,00			
25	Civ25	Applying pure acrylic-based water-based paint to exposed concrete, plastered or old painted surfaces by applying a primer (exterior)	m²	250,00			
24	Civ24	Applying two coats of water-based semi-gloss paint by applying a primer to new plaster surfaces (interior)	m²	350,00			
23	Civ23	Plastering with 200/250 kg lime/cement mixture coarse and thin mortar (interior plaster)	m²	350,00			
22	Civ22	Plastering with 250/350 kg cement dosed coarse and thin mortar (exterior plaster)	m²	250,00			
21	Civ21	Building a wall with 190 mm thick horizontally perforated brick ( <b>190x190x135 mm)</b>	m²	280,00			
20	Civ20	Supply and installation of PVC-based corrugated drainage pipe with Ø 200 mm nominal diameter	m	80,00			
19	Civ19	Quartz aggregate (grey) surface hardener and curing application (in fresh concrete)	m²	2.500,00			
18	Civ18	Construction of a fully secure, ceiling scaffolding consisting of pre-built components. (between 0,00-21,50 m)	m³	200,00			

		2- Mechanical Wo	rks			
S. No	Poz	Description	Unit	Amount A	Unit Price (USD) B	Total Price (USD) AXB
1	Mec01	50x60 cm Half Leg Set	Pcs	6,00		
2	Mec02	First Class: (Battery TS EN 200 or TS EN 817; Siphon TS-EN 274-1-2-3)	Set	6,00		
3	Mec03	Approximately 40x60 cm mirror	Pcs	6,00		
4	Mec04	Concealed Cistern Turkish Style Toilet Set, SELF RESERVOIR AND LESS WATER CONSUMPTION EUROPEAN STYLE TOILET AND INSTALLATION (TS 800 EN 997)	Set	6,00		
5	Mec05	Stainless steel approx. 50x100 cm, One bowl sink with drainer (TSEK), SINKS (TS EN 13310)	Pcs	4,00		
6	Mec06	With battery, with brass siphon in accordance with TS EN 200 or TSEN 817, TS-EN 274-1-2-3 (First class), Sink installation with one chamber, SINK INSTALLATION	Pcs	4,00		
7	Mec07	1/2" Tall faucet, incl. escutcheon with strainer.	Pcs	4,00		
8	Mec08	Paper holder (stainless steel)	Pcs	6,00		
9	Mec09	20 Ø mm (3/4") screw Cold water meters, Cold water meters: Supply and installation in the workplace	Pcs	4,00		
10	Mec10	25 Ø mm (1") screw Cold water meters, Cold water meters: Supply and installation in the workplace	Pcs	1,00		
11	Mec11	Welded galvanized pipe (1/2") (In-house screwed, 30% added)	m	40,00		
12	Mec12	Welded galvanized pipe (3/4") (In-house screwed, 30% added)	m	20,00		
13	Mec13	Welded galvanized pipe (1") (In-house screwed, 30% added)	m	15,00		
14	Mec14	Pn 20 polypropylene clean water pipe 1/2" 20/3,4 mm Polypropylene clean water pipes (Physiotherm welded and screwed inside the building, 45% added)	m	30,00		
15	Mec15	Pn 20 polypropylene clean water pipe 3/4" 25/4.2 mm Polypropylene clean water pipes (Physiotherm welded and screwed inside the building, 45% added)	m	40,00		
16	Mec16	Pn 20 polypropylene clean water pipe 1" 32/5.4 mm Polypropylene clean water pipes (Physiotherm welded and screwed inside the building, 45% added)	m	25,00		

		Rigid PVC plastic wastewater pipe (plug-in muff,			
17	Mec17		m	25,00	
		cost of mounting material, %35 added)			
		Rigid PVC plastic wastewater pipe (plug-in muff,			
18	Mec18		m	75,00	
		cost of mounting material, %35 added)			
		Rigid PVC plastic wastewater pipe (plug-in muff,			
19	Mec19		m	250,00	
		cost of mounting material, %35 added)			
20	Mec20	Flap type, 100 Ø mm, MANHOLE VALVE	Pcs	4,00	
				.,	
21	Mec21	70 Ø mm, Ventilation pipe and cap	Pcs	4,00	
21	IVICE2 I		1 05	4,00	
		15 Ø mm (1/2"), Brass, pressed Teflon (PTFE),			
22	Mec22	gasketed, full bore, screwed, BALL VALVES (TS	Pcs	8,00	
		3148)			
		25 Ø mm (1"), Brass, pressed Teflon (PTFE),			
23	Mec23	5	Pcs	2,00	
		3148)			
24	Mec24	15 Ø mm (1/2"), Dirt Strainer, PN-16, for steam,	Pcs	4,00	
27	WICC2+	with die-cast screw	1 05	4,00	
25	N4 25	25 Ø mm (1"), Dirt Strainer, PN-16, for steam, with	Dee	1.00	
25	Mec25	die-cast screw	Pcs	1,00	
		Grand Total for Mechanical Wo	orks (l	JSD)	

	3- Electrical Works								
S. No	Poz	Description	Unit	Amount A	Unit Price (USD) B	Total Price (USD) AXB			
1	Elec01	Galvanized free standing sheet metal board with a width of at least 800 mm, Depth at least 600 mm (1 <sup>st</sup> board)	Pcs	1,00					
2	Elec02	Surface-mounted galvanized sheet-metal boards up to 0.40-0.50 m <sup>2</sup> (0.50 m <sup>2</sup> included),	Pcs	4,00					
3	Elec03	Surface-mounted galvanized sheet-metal boards up to 0.90-1.00 m <sup>2</sup> (0.10 m <sup>2</sup> included),	Pcs	1,00					
4	Elec04	Recessed type galvanized sheet metal panels up to 0.40-0.50 m <sup>2</sup> (including 0.50 m <sup>2</sup> ),	Pcs	7,00					
5	Elec05	Supply and assembly of copper busbars to be placed in cast boxes and panels in accordance with TSE conditions and painting with colours in TS EN 60445	kg	20,00					
6	Elec06	Up to 16 A (6 kA), Switched Automatic Fuses (6 kA breaking capacity)	Pcs	64,00					
7	Elec07	Up to 25 A (10 kA), Switched Automatic Fuses (10 kA breaking capacity)	Pcs	4,00					

8	Elec08	Up to 25 A (10 kA), Switched Automatic Fuses (10	Pcs	14,00	
		kA breaking capacity) Up to 40 A (10 kA), Switched Automatic Fuses (10			
9	Elec09	kA breaking capacity)	Pcs	9,00	
10	Elec10	From 3x10A up to 3x63A, Icu 50 kA, I1 (0,8-1) In, 3 poles, minimum Icu at 400 V AC: 50 kA, Thermic Protection adjustable, Magnetic Protection Fixed, Compact type thermal and magnetic shielded switches	Pcs	1,00	
11	Elec11	Up to 2x25 A (30 mA), Residual current circuit breakers (TS EN 61008-1/TS EN 61008-2-1)	Pcs	2,00	
12	Elec12	Up to 4x25 A (30 mA), Residual current circuit breakers (TS EN 61008-1/TS EN 61008-2-1)	Pcs	9,00	
13	Elec13	Up to 4x40 A (30 mA), Residual current circuit breakers (TS EN 61008-1/TS EN 61008-2-1)	Pcs	1,00	
14	Elec14	Up to 4x63 A (30 mA), Residual current circuit breakers (TS EN 61008-1/TS EN 61008-2-1)	Pcs	1,00	
15	Elec15	Class B, 230 V AC, 100 kA (I imp, 10/350µs), three phase, neutral-earth, Panel type surge protectors (Low Voltage Surge Arresters)	Pcs	1,00	
16	Elec16	up to 500 V, MARKER LAMPS	Pcs	42,00	
17	Elec17	Time relay used in lighting control	Pcs	4,00	
18	Elec18	Automatic controlled harmonic filter central compensation batteries up to 450 V (up to 30 kVAr)	kVAr	15,00	
19	Elec19	Reactive Power Control Relay with at least 12 steps	Pcs	1,00	
20	Elec20	3x230/400 V3x10 (60) A, Three-phase active, time-scheduled electronic electrical meter	Pcs	4,00	
21	Elec21	3x230/400 V,.3x5 (7.5) A, Three-phase active reactive electronic electricity meter	Pcs	1,00	
22	Elec22	1x6 mm <sup>2</sup> cross section, Plastic insulated conductor (HO7Z,O7Z1, at least 300/500 V)	m	450,00	
23	Elec23	Column and supply line installation with 2x6 mm <sup>2</sup> , 1 kV underground cables (N2XH, 0,6/1 kV)	m	80,00	
24	Elec24	Column and supply line installation with 4x6 mm <sup>2</sup> , 1 kV underground cables (N2XH, 0,6/1 kV)	m	380,00	
25	Elec25	Column and supply line installation with 4x16 mm <sup>2</sup> , 1 kV underground cables (N2XH, 0,6/1 kV)	m	40,00	
26	Elec26	Normal Outlet, Halogenfree cable lighting Outlet	Pcs	29,00	
27	Elec27	Parallel Outlet, Halogenfree cable lighting outlet	Pcs	109,00	
28	Elec28	Security line socket outlet, socket outlet	Pcs	33,00	
29	Elec29	Surface mounted LED ceiling luminary with min. measurement of 60x60 (luminous flux at least 3300	Pcs	2,00	

			(	(	
		lm, luminary's luminous efficiency at least 100 lm/w).			
30	Elec30	Surface-mounted, LED circular (downlight) luminary (with a luminous flux of at least 800 lm, luminary's luminous efficiency of at least 100 lm/w).	Pcs	12,00	
31	Elec31	LED surface-mounted waterproof luminary (aluminium body) (with a luminous flux of at least 3600 lm, luminary's luminous efficiency of at least 100 lm/w).	Pcs	4,00	
32	Elec32	LED globe luminary luminous flux at least 1800 lm, luminary's luminous efficiency of at least 100 lm/w (with at least IP 65 protection degree).	Pcs	64,00	
33	Elec33	Emergency lighting kit price difference for led lighting fixtures	Pcs	1,00	
34	Elec34	Led projector, luminous flux at least 12750 lm, luminary luminous efficiency at least 110 lm/w.	Pcs	56,00	
35	Elec35	360° ceiling type surface mounted motion sensor, Motion Sensors	Pcs	8,00	
36	Elec36	6 kVA Uninterruptible Power Supply with at least 10 minutes battery feeding time, One phase input, one phase output	Pcs	1,00	
37	Elec37	Cable Tray Systems	kg	1.000,00	
38	Elec38	Grounded socket 16 A-250 V (45x45 mm), Cable Channel Sockets	Pcs	8,00	
39	Elec39	Grounded UPS socket (red colour) 16 A-250 V, (45x45 mm), Cable Tray Sockets	Pcs	8,00	
40	Elec40	Telephone socket RJ-11 or RJ-12 (6 contacts) (22,5x45 mm), Cable Channel Sockets	Pcs	5,00	
41	Elec41	Data socket CAT 5e or CAT 6e RJ-45 (8 contacts) (22,5x45 mm), Cable Channel Sockets	Pcs	5,00	
42	Elec42	Emergency announcement system control unit, with at least 8 zones	Pcs	1,00	
43	Elec43	Digital emergency announcement call station with at least 8 zones	Pcs	1,00	
44	Elec44	Outdoor Bullet Camera Type-1: (Measurement: Pcs)	Pcs	17,00	
45	Elec45	32 Channel Network Video Recorder (Dimension: Pcs)	Pcs	1,00	
46	Elec46	24 Ports Manageable Poe Network Switch (Measurement: Pcs)	Pcs	1,00	
47	Elec47	12 Channel Sound Mixer, SOUND CONTROL AND RECORD MIXER	Pcs	1,00	
48	Elec48	10 W single-sided speaker, Speaker and mounting	Pcs	24,00	
49	Elec49	Desk microphone, Microphone	Pcs	1,00	
50	Elec50	2×250 W Power Amplifier	Pcs	1,00	

51	Elec51	24 Port, Utp Cat6 Patch Panel	Pcs	3,00	
52	Elec52	Up to 10 pairs (with ground line), Main line installation outside the building (TS-3930)	m	50,00	
53	Elec53	Up to 10 Pairs, Telephone distribution boxes	Pcs	1,00	
54	Elec54	2X1.5 mm2, LIH(St)CH HALOGEN FREE SIGNAL AND CONTROL CABLE	m	600,00	
55	Elec55	Utp Cat6H HALOGEN FREE 4x2x23 AWG, COPPER DATA CABLES	m	2.750,00	
56	Elec56	25U 600 mmx600 mm 19" Free Standing cabinet	Pcs	1,00	
57	Elec57	Fixed shelf for 600 mm depth, Accessories belonging to the product	Pcs	2,00	
58	Elec58	Wheel group with brake (Front wheels with brake), Accessories belonging to the product	Pcs	1,00	
59	Elec59	Fan module with thermostat (4 fans), Accessories belonging to the Product	Pcs	1,00	
60	Elec60	19" rack type 6 group socket with fuse, Accessories belonging to the product	Pcs	2,00	
61	Elec61	19" 1U horizontal cable organizer, Product Accessories	Pcs	3,00	
62	Elec62	25U vertical cable organizer (one side), Product's Accessories	Pcs	1,00	
63	Elec63	Average excitation path DL= 60 m, Active catching tip: (Measurement: Piece.)	Pcs	2,00	
64	Elec64	Roof pole (For active catching tip) (Measurement: Pcs: Preparation: 60%), LIGHTNING PROTECTION INSTALLATION	Pcs	2,00	
65	Elec65	Active lightning rod tester: (Measurement: pcs, production: 60%), LIGHTNING PROTECTION INSTALLATION	Pcs	2,00	
66	Elec66	50 mm <sup>2</sup> electrolytic copper conductor, installation of roof up and down conductors	m	250,00	
67	Elec67	Galvanized steel sheet, 30x3.5 mm in size, coated with min 50µ zinc, in accordance with the specification, Building surrounding conductor installation	m	750,00	
68	Elec68	Earth electrode (rod) electrolytic copper: (Measurement: Pcs: <b>)</b>	Pcs	30,00	
69	Elec69	Conductor protective duct: (Measurement: Pcs: )	Pcs	2,00	
70	Elec70	24 Port Gbit Switch	Pcs	2,00	
71	Elec71	21" CCTV MONITOR	Pcs	1,00	
72	Elec72	8 TB CCTV HDD	Pcs	4,00	
		Grand Total for Electrical Wor	rks (US	SD)	

## Summary Table

Currency of the Bid: USD

ltem #	Description	Total Price (USD)		
1	Civil and Architectural Works			
2	Mechanical Works			
3	Electrical Works			
То	Total estimated price (item 1 + item 2 + item 3) (USD)			

**Important Note:** Bill of Quantities has also been attached as a separate excel document. Bidders shall complete and submit Bill of Quantities in excel format along with this Form F: Price Schedule Form/Bill Of Quantities. In case of any discrepancy between Bill of Quantities and above pricing table, prices given in this Form F: Price Schedule Form/Bill Of Quantities shall prevail.

Name of Bidder:	
Authorised signature:	
Name of authorised signatory:	
Functional Title:	

#### FORM G: FORM OF BID SECURITY

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

#### To: UNDP

[Insert contact information as provided in Data Sheet]

WHEREAS [Name and address of Bidder] (hereinafter called "the Bidder") has submitted a Bid to UNDP dated Click here to enter a date. to complete the works stipulated in the ITB with reference UNDP-TUR-ITB(UR)-2022-94 with the title "Construction of Marketplace for Villagers in Bahçe District Osmaniye Province" (hereinafter called "the Bid"):

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

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

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

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

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

#### SIGNATURE AND SEAL OF THE GUARANTOR BANK

Signature:		 	
Name:		 	
The			
Date:		 	
Name of Ba	ank	 	
Address		 	

[Stamp with official stamp of the Bank]