INVITATION TO BID

RESTORATION WORKS OF YAVUZ AKINCI AND AKCURUN HISTORICAL BUILDINGS IN KİLİS PROVINCE

UNDP-TUR-ITB-PROJ(SR)2017/11

Strengthening Social Stability in Southeast Turkey Project

TURKEY

United Nations Development Programme
AUGUST 2017

Section 1: Letter of Invitation

Ankara, 30.08.2017

Invitation to Bid for Restoration Works of Yavuz Akıncı and Akcurun Historical Buildings in Kilis Province, within the scope of Strengthening Social Stability in Southeast Turkey Project (99640)

Dear Madam/Sir,

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:

Section 1 – This Letter of Invitation
Section 2 – Instructions to Bidders (including Data Sheet)
Section 3 – Schedule of Requirements and Technical Specifications
Section 4 – Bid Submission Form
Section 5 – Documents Establishing the Eligibility and Qualifications of the Bidder
Section 6 – Technical Bid Form
Section 7 – Price Schedule Form for PART 1 and PART 2
Section 8 – Form for Bid Security
Section 9 – Form for Performance Security
Section 10 – Technical Drawings
Section 11 – Contract to be Signed, including General Terms and Conditions
Annex 1 – Submission Templates and Forms

Your offer, comprising of a Technical Bid and Price Schedule, in sealed envelope, should be submitted in accordance with Section 2.

You are kindly requested to submit your bid to UNDP to the following address:

United Nations Development Programme
Yıldız Kule, Floor 16, Yukarı Dikmen Mahallesi, Turan Güneş Bulvarı, No:106, 06550, Çankaya, Ankara/Turkey http://www.tr.undp.org

Attention: *Bahadir Murat Akin, Procurement Officer*

Please confirm your interest to participate in this tender by sending an email with the reference "Invitation to Bid No: UNDP-TUR-ITB-PROJ(SR)2017/11" to sr.procurement.tr@undp.org , preferably no later than Monday, 07 September 2017, 16:00, Ankara Time. The same e-mail should advise whether your company intends to submit a Bid. If that is not the case, UNDP would appreciate your indicating the reason, for our records.

The bid should be received by UNDP no later than 19 September 2017, 16:00hrs, Ankara Time.

Should you require any clarification, kindly communicate with the contact person identified in the attached Data Sheet as the focal point for queries on this ITB.

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

Yours sincerely,

Claudio Tomasi
Country Director

Section 2: Instruction to Bidders

Definitions

a) *"Bid"* refers to the Bidder's response to the Invitation to Bid, including the Bid Submission Form, Technical Bid and Price Schedule and all other documentation attached thereto as required by the ITB.
b) *"Bidder"* refers to any legal entity that may submit, or has submitted, a Bid for the supply of goods and provision of related services and civil works requested by UNDP.
c) *"Contract"* refers to the legal instrument that will be signed by and between the UNDP and the successful Bidder, all the attached documents thereto, including the General Terms and Conditions (GTC) and the Appendices.
d) "*Country"* refers to the country indicated in the Data Sheet.
e) *"Data Sheet"* refers to such part of the Instructions to Bidders used to reflect conditions of the tendering process that are specific for the requirements of the ITB.
f) *"Day"* refers to calendar day.
g) *"Goods"* refer to any tangible product, commodity, article, material, wares, equipment, assets or merchandise that UNDP requires under this ITB.
h) *"Government"* refers to the Government of the country where the goods and related services provided/rendered specified under the Contract will be delivered or undertaken.
i) *"Instructions to Bidders"* refers to the complete set of documents which provides Bidders with all information needed and procedures to be followed in the course of preparing their Bid.
j) *"ITB"* refers to the Invitation to Bid consisting of instructions and references prepared by UNDP for purposes of selecting the best supplier or service provider to fulfil the requirement indicated in the Schedule of Requirements and Technical Specifications.
k) *"LOI"* (Section 1 of the ITB) refers to the Letter of Invitation sent by UNDP to Bidders.
l) *"Material Deviation"* refers to any contents or characteristics of the bid that is significantly different from an essential aspect or requirement of the ITB, and (i) substantially alters the scope and quality of the requirements; (ii) limits the rights of UNDP and/or the obligations of the Bidder; and (iii) adversely impacts the fairness and principles of the procurement process, such as those that compromise the competitive position of other Bidders.
m) *"Schedule of Requirements and Technical Specifications"* refers to the document included in this ITB as Section 3 which lists the goods required by UNDP, their specifications, the related services, activities, tasks to be performed, and other information pertinent to UNDP's receipt and acceptance of the goods.
n) *"Services"* refers to the entire scope of tasks related or ancillary to the completion or delivery of the goods required by UNDP under the ITB.
o) "*Supplemental Information to the ITB"* refers to a written communication issued by UNDP to prospective Bidders containing clarifications, responses to queries received from prospective Bidders, or changes to be made in the ITB, at any time after the release of the ITB but before the deadline for the submission of Bid.

A. GENERAL

1. UNDP hereby solicits Bids as a response to this Invitation to Bid (ITB). Bidders must strictly adhere to all the requirements of this ITB. No changes, substitutions or other alterations to the rules and provisions stipulated in this ITB may be made or assumed unless it is instructed or approved in writing by UNDP in the form of Supplemental Information to the ITB.

2. Submission of a Bid shall be deemed as an acknowledgement by the Bidder that all obligations stipulated by this ITB will be met and, unless specified otherwise, the Bidder has read, understood and agreed to all the instructions in this ITB.

3. Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of any Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this ITB.

4. UNDP implements a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical practices, and obstruction. UNDP is committed to preventing, identifying and addressing all acts of fraud and corrupt practices against UNDP as well as third parties involved in UNDP activities. (See http://www.undp.org/about/transparencydocs/UNDP_Anti_Fraud_Policy_English_FINAL_june_2011.pdf and http://www.undp.org/content/undp/en/home/operations/procurement/procurement_protest/ for full description of the policies)

5. In responding to this ITB, UNDP requires all Bidders to conduct themselves in a professional, objective and impartial manner, and they must at all times hold UNDP's interests paramount. Bidders must strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. All 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:

   5.1 Are, or have been associated in the past, with a firm or any of its affiliates which have been engaged UNDP to provide services for the preparation of the design, Schedule of Requirements and Technical Specifications, cost analysis/estimation, and other documents to be used for the procurement of the goods and related services in this selection process;
   5.2 Were involved in the preparation and/or design of the programme/project related to the goods and related services requested under this ITB; or
   5.3 Are found to be in conflict for any other reason, as may be established by, or at the discretion of, UNDP.

   In the event of any uncertainty in the interpretation of what is potentially a conflict of interest, Bidders must disclose the condition to UNDP and seek UNDP's confirmation on whether or not such conflict exists.

6. Similarly, the following must be disclosed in the Bid :

   6.1 Bidders who are owners, part-owners, officers, directors, controlling shareholders, or key personnel who are family of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving the goods and related services under this ITB; and
   6.4 Others that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices.

   Failure of such disclosure may result in the rejection of the Bid.

7. 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 as an independent entity, the extent of Government ownership/share, receipt of subsidies, mandate, access to information in relation to this ITB, and others that may lead to undue advantage against other Bidders, and the eventual rejection of the Bid.

8. All Bidders must adhere to the UNDP Supplier Code of Conduct, which may be found at this link: http://web.ng.undp.org/procurement/undp-supplier-code-of-conduct.pdf

B. CONTENTS OF BID

9. Sections of Bid

Bidders are required to complete, sign and submit the following documents:

9.1 Bid Submission Form (see ITB Section 4);
9.2 Documents Establishing the Eligibility and Qualifications of the Bidder (see ITB Section 5);
9.3 Technical Bid (see prescribed form in ITB Section 6);
9.4 Price Schedule (see prescribed form in ITB Section 7);
9.5 Bid Security, - (as stated in the DS nos. 9-11, see prescribed Form in ITB Section 8);
9.6 Any attachments and/or appendices to the Bid (including all those specified under the **Data Sheet**)

10. Clarification of Bid

10.1 Bidders may request clarification of any of the ITB documents no later than the number of days indicated in the **Data Sheet** (DS no. 16) prior to the Bid submission date. Any request for clarification must be sent in writing via courier or through electronic means to the UNDP address indicated in the **Data Sheet** (DS no. 17). UNDP will respond in writing, transmitted by electronic means and will transmit copies of the response (including an explanation of the query but without identifying the source of inquiry) to all Bidders who have provided confirmation of their intention to submit a Bid.

10.2 UNDP shall endeavor to provide such 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 Bid, unless UNDP deems that such an extension is justified and necessary.

11. Amendment of Bid

11.1 At any time prior to the deadline for submission of Bid, UNDP may for any reason, such as in response to a clarification requested by a Bidder, modify the ITB in the form of a Supplemental Information to the ITB. All prospective Bidders will be notified in writing of all changes/amendments and additional instructions through Supplemental Information to the ITB and through the method specified in the **Data Sheet** (DS No. 18).

11.2 In order to afford prospective Bidders reasonable time to consider the amendments in preparing their Bid, UNDP may, at its discretion, extend the deadline for submission of Bid, if the nature of the amendment to the ITB justifies such an extension.

C. PREPARATION OF BID

12. Cost

The Bidder shall bear any and all costs related to the preparation and/or submission of the Bid, regardless of whether its Bid was selected or not. UNDP shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the procurement process.

13. Language

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 **Data Sheet** (DS No. 4). Any printed literature furnished by the Bidder written in a language other than the language indicated in the **Data Sheet**, must be accompanied by a translation in the preferred language indicated in the **Data Sheet**. For purposes of interpretation of the Bid, and in the event of discrepancy or inconsistency in meaning, the version translated into the preferred language shall govern. Upon conclusion of a contract, the language of the contract shall govern the relationship between the contractor and UNDP.

14. Bid Submission Form

The Bidder shall submit the Bid Submission Form using the form provided in Section 4 of this ITB.

15. Technical Bid Format and Content

Unless otherwise stated in the **Data Sheet** (DS no. 28), the Bidder shall structure the Technical Bid as follows:

15.1 Expertise of Firm/Organization – this section should provide details regarding management structure of the organization, organizational capability/resources, and experience of organization/firm, the list of projects/contracts (both completed and on-going, both domestic and international) which are related or similar in nature to the requirements of the ITB, manufacturing capacity of plant if Bidder is a manufacturer, authorization from the manufacturer of the goods if Bidder is not a manufacturer, and proof of financial stability and adequacy of resources to complete the delivery of goods and provision of related services required by the ITB (see ITB Clause 18 and DS No. 26 for further details). The same shall apply to any other entity participating in the ITB as a Joint Venture or Consortium.

15.2 Technical Specifications and Implementation Plan – this section should demonstrate the Bidder's response to the Schedule of Requirements and Technical Specifications by identifying the specific components proposed; how each of the requirements shall be met point by point; providing a detailed specification and description of the goods required, plans and drawings where needed; the essential performance characteristics, identifying the works/portions of the work that will be subcontracted; a list of the major subcontractors, and demonstrating how the bid meets or exceeds the requirements, while ensuring appropriateness of the bid to the local conditions and the rest of the project operating environment during the entire life of the goods provided. Details of technical bid must be laid out and supported by an Implementation Timetable, including Transportation and Delivery Schedule where needed, that is within the duration of the contract as specified in the **Data Sheet** (DS noS. 29 and 30).

Bidders must be fully aware that the goods and related services that UNDP require may be transferred, immediately or eventually, by UNDP to the Government partners, or to an entity nominated by the latter, in accordance with UNDP's policies and procedures. All bidders are therefore required to submit the following in their bids :

a) A statement of whether any import or export licences are required in respect of the goods to be purchased or services to be rendered, including any restrictions in the country of origin, use or dual use nature of the goods or services, including any disposition to end users;
b) Confirmation that the Bidder has obtained license of this nature in the past, and have an expectation of obtaining all the necessary licenses, should their bid be rendered the most responsive; and
c) Complete documentation, information and declaration of any goods classified or may be classified as "Dangerous Goods".

15.3 Management Structure and Key Personnel – This section should include the comprehensive curriculum vitae (CVs) of key personnel that will be assigned to support the implementation of the technical bid, clearly defining their roles and responsibilities. CVs should establish competence and demonstrate qualifications in areas relevant to the requirements of this ITB.

In complying with this section, the Bidder assures and confirms to UNDP that the personnel being nominated are available to fulfil the demands of the Contract during its stated full term. If any of the key personnel later becomes unavailable, except for unavoidable reasons such as death or medical incapacity, among other possibilities, UNDP reserves the right to render the Bid non-responsive. Any deliberate substitution of personnel arising from unavoidable reasons, including delay in the implementation of the project of programme through no fault of the Bidder, shall be made only with UNDP's acceptance of the justification for substitution, and UNDP's approval of the qualification of the replacement who shall be either of equal or superior credentials as the one being replaced.

15.4 Where the **Data Sheet** requires the submission of the Bid Security, the Bid Security shall be

included along with the Technical Bid. The Bid Security may be forfeited by UNDP, and reject the Bid, in the event of any or any combination of the following conditions:

a) If the Bidder withdraws its offer during the period of the Bid Validity specified in the **Data Sheet** (DS no. 11), or;
b) If the Bid Security amount is found to be less than what is required by UNDP as indicated in the **Data Sheet** (DS no. 9), or;
c) In the case the successful Bidder fails:

i. to sign the Contract after UNDP has awarded it;
ii. to comply with UNDP's variation of requirement, as per ITB Clause 35; or
iii. to furnish Performance Security, insurances, or other documents that UNDP may require as a condition to rendering effective the contract that may be awarded to the Bidder.

16. Price Schedule

The Price Schedule shall be prepared using the attached standard form (Section 7). It shall list all major cost components associated with the goods and related services, and the detailed breakdown of such costs. All goods and services described in the Technical Bid must be priced separately on a one-to-one correspondence. Any output and activities described in the Technical Bid but not priced in the Price Schedule, shall be assumed to be included in the prices of the items or activities, as well as in the final total price of the bid.

17. Currencies

All prices shall be quoted in the currency indicated in the **Data Sheet** (DS no. 15). However, where Bids are quoted in different currencies, for the purposes of comparison of all Bid:

17.1 UNDP will convert the currency quoted in the Bid into the UNDP preferred currency, in accordance with the prevailing UN operational rate of exchange on the last day of submission of Bid; and

17.2 In the event that the Bid found to be the most responsive to the ITB requirement is quoted in another currency different from the preferred currency as per **Data Sheet** (DS no. 15), then UNDP shall reserve the right to award the contract in the currency of UNDP's preference, using the conversion method specified above.

18. Documents Establishing the Eligibility and Qualifications of the Bidder

18.1 The Bidder shall furnish documentary evidence of its status as an eligible and qualified vendor, using the forms provided under Section 5, Bidder Information Forms. In order to award a contract to a Bidder, its qualifications must be documented to UNDP's satisfactions. These include, but are not limited to the following:

a) That, in the case of a Bidder offering to supply goods under the Contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the goods' manufacturer or producer to supply the goods in the country of final destination;
b) That the Bidder has the financial, technical, and production capability necessary to perform the Contract; and
c) That, to the best of the Bidder's knowledge, it is not included in the UN 1267 List or the UN Ineligibility List, nor in any and all of UNDP's list of suspended and removed vendors.

18.2 Bids submitted by two (2) or more Bidders shall all be rejected by UNDP if they are found to have <u>any</u> of the following :

a) they have at least one controlling partner, director or shareholder in common; or
b) any one of them receive or have received any direct or indirect subsidy from the other/s; or

c) they have the same legal representative for purposes of this ITB; or
d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Bid of, another Bidder regarding this ITB process;
e) they are subcontractors to each other's bid, or a subcontractor to one bid also submits another Bid under its name as lead Bidder; or
f) an expert proposed to be in the bid of one Bidder participates in more than one Bid received for this ITB process. This condition does not apply to subcontractors being included in more than one Bid.

19. Joint Venture, Consortium or Association

If the Bidder is a group of legal entities that will form or have formed a joint venture, consortium or association at the time of the submission of the Bid, they shall confirm in their Bid that : (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the joint venture jointly and severally, and this shall be duly evidenced by a duly notarized Agreement among the legal entities, which shall be submitted along 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 entities that comprise the joint venture.

After the bid has been submitted to UNDP, the lead entity identified to represent the joint venture shall not be altered without the prior written consent of UNDP. Furthermore, neither the lead entity nor the member entities of the joint venture can:

a) submit another Bid, either in its own capacity; nor
b) as a lead entity or a member entity for another joint venture submitting another Bid.

The description of the organization of the joint venture/consortium/association must clearly define the expected role of each of the entity in the joint venture in delivering the requirements of the ITB, both in the bid and in the Joint Venture Agreement. All entities that comprise the joint venture shall be subject to the eligibility and qualification assessment by UNDP.

Where a joint venture is presenting its track record and experience in a similar undertaking as those required in the ITB, it should present such information in the following manner:

a) Those that were undertaken together by the joint venture; and
b) Those that were undertaken by the individual entities of the joint venture expected to be involved in the performance of the services defined in the ITB.

Previous contracts completed by individual experts working privately but who are permanently or were temporarily associated with any of the member firms cannot be claimed as the experience of the joint venture or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials.

If the Bid of a joint venture is determined by UNDP as the most responsive Bid that offers the best value for money, UNDP shall award the contract to the joint venture, in the name of its designated lead entity, who shall sign the contract for and on behalf of all the member entities.

20. Alternative Bid

Unless otherwise specified in the **Data Sheet** (DS nos. 5 and 6), alternative bid shall not be considered. 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.

21. Validity Period

21.1 Bid shall remain valid for the period specified in the **Data Sheet** (DS no. 8), commencing on

the submission deadline date also indicated in the **Data Sheet** (DS no. 21). A Bid valid for a shorter period shall be immediately rejected by UNDP and rendered non-responsive.

21.2 In exceptional circumstances, prior to the expiration of the Bid validity period, UNDP may request Bidders to extend the period of validity of their Bid. The request and the responses shall be made in writing, and shall be considered integral to the Bid.

22. Bidder's Conference

When appropriate, a Bidder's conference will be conducted at the date, time and location specified in the **Data Sheet** (DS no. 7). 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 either posted on the UNDP website, or disseminated to the individual firms who have registered or expressed interest with the contract, whether or not they attended the conference. No verbal statement made during the conference shall modify the terms and conditions of the ITB unless such statement is specifically written in the Minutes of the Conference, or issued/posted as an amendment in the form of a Supplemental Information to the ITB.

D. SUBMISSION AND OPENING OF BID

23. Submission

23.1 The Technical Bid and the Price Schedule **must** be submitted together and sealed together in one and the same envelope, delivered either personally, by courier, the Technical Bid and Price Schedule must be sealed together in an envelope whose external side must :

a) Bear the name of the Bidder;
b) Be addressed to UNDP as specified in the **Data Sheet** (DS no.20); and
c) Bear a warning not to open before the time and date for Bid opening as specified in the **Data Sheet** (DS no. 24)**.**

If the envelope is not sealed nor labeled as required, the Bidder shall assume the responsibility for the misplacement or premature opening of Bid due to improper sealing and labeling by the Bidder.

23.2 Bidders must submit their Bid in the manner specified in the **Data Sheet** (DS nos. 22 and 23). When the Bid is expected to be in transit for more than 24 hours, the Bidder must ensure that sufficient lead time has been provided in order to comply with UNDP's deadline for submission. UNDP shall indicate for its record that the official date and time of receiving the Bid is the actual date and time when the said Bid has physically arrived at the UNDP premises indicated in the **Data Sheet** (DS no. 20).

23.3 Bidders submitting Bid by mail or by hand shall enclose the original and each copy of the Bid, in separate sealed envelopes, duly marking each of the envelopes as "Original Bid" and the others as "Copy of Bid". The two envelopes, consisting of original and copies, shall then be sealed in an outer envelope. The number of copies required shall be as specified in the **Data Sheet** (DS no. 19)**.** In the event of any discrepancy between the contents of the "Original Bid" and the "Copy of Bid", the contents of the original shall govern. The original version of the Bid shall be signed or initialed by the Bidder or person(s) duly authorized to commit the Bidder on every page. The authorization shall be communicated through a document evidencing such authorization issued by the highest official of the firm, or a Power of Attorney, accompanying the Bid.

23.4 Bidders must be aware that the mere act of submission of a Bid, in and of itself, implies that the Bidder accepts the General Contract Terms and Conditions of UNDP as attached hereto as Section 11.

24. Deadline for Submission of Bid and Late Bids

Bid must be received by UNDP at the address and no later than the date and time specified in the **Data Sheet** (DS no. 20 and 21).

UNDP shall not consider any Bid that arrives after the deadline for submission of Bid. Any Bid received by UNDP after the deadline for submission of Bid shall be declared late, rejected, and returned unopened to the Bidder.

25. Withdrawal, Substitution, and Modification of Bid

25.1 Bidders are expected to have sole responsibility for taking steps to carefully examine in detail the full consistency of its Bid to the requirements of the ITB, keeping in mind that material deficiencies in providing information requested by UNDP, or lack clarity in the description of goods and related services to be provided, may result in the rejection of the Bid. The Bidder shall assume any responsibility regarding erroneous interpretations or conclusions made by the Bidder in the course of understanding the ITB out of the set of information furnished by UNDP.

25.2 A Bidder may withdraw, substitute or modify its Bid after it has been submitted by sending a written notice in accordance with ITB Clause 23, 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 must accompany the respective written notice. All notices must be received by UNDP prior to the deadline for submission and submitted in accordance with ITB Clause 23 (except that withdrawal notices do not require copies). The respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," or MODIFICATION".

25.3 Bid requested to be withdrawn shall be returned unopened to the Bidders.

25.4 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bid and the expiration of the period of Bid validity specified by the Bidder on the Bid Submission Form or any extension thereof.

26. Bid Opening

UNDP will open the Bid in the presence of an ad-hoc committee formed by UNDP of at least two (2) members. If electronic submission is permitted, any specific electronic Bid opening procedures shall be as specified in the **Data Sheet** (DS no. 23).-

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 submission, for which the Bid shall be returned unopened to the Bidder.

27. Confidentiality

Information relating to the examination, evaluation, and comparison of Bid, 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.

Any effort by a Bidder to influence UNDP in the examination, evaluation and comparison of the Bid or contract award decisions may, at UNDP's decision, result in the rejection of its Bid.

In the event that a Bidder is unsuccessful, the Bidder may seek a meeting with UNDP for a debriefing. The purpose of the debriefing is discussing the strengths and weaknesses of the Bidder's

submission, in order to assist the Bidder in improving the bid presented to UNDP. The content of other bid and how they compare to the Bidder's submission shall not be discussed.

E. EVALUATION OF BID

28. Preliminary Examination of Bid

UNDP shall examine the Bid to determine whether they are complete with respect to minimum documentary requirements, whether the documents have been properly signed, whether or not the Bidder is in the UN Security Council 1267/1989 Committee's list of terrorists and terrorist financiers, and in UNDP's list of suspended and removed vendors, and whether the Bid are generally in order, among other indicators that may be used at this stage. UNDP may reject any Bid at this stage.

29. Evaluation of Bid

29.1 UNDP shall examine the Bid to confirm that all terms and conditions under the UNDP General Terms and Conditions and Special Conditions have been accepted by the Bidder without any deviation or reservation.

29.2 The evaluation team shall review and evaluate the 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 **Data Sheet** (DS No. 25). Absolutely no changes may be made by UNDP in the criteria after all Bids have been received.

29.3 UNDP reserves the right to undertake a post-qualification exercise, aimed at determining, to its satisfaction the validity of the information provided by the Bidder. Such post-qualification shall be fully documented and, among those that may be listed in the **Data Sheet** (DS No.33), may include, but need not be limited to, all or any combination of the following :

a) Verification of accuracy, correctness and authenticity of the information provided by the bidder on the legal, technical and financial documents submitted;
b) Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team;
c) Inquiry and reference checking with Government entities with jurisdiction on the bidder, or any other entity that may have done business with the bidder;
d) Inquiry and reference checking with other previous clients on the quality of performance on ongoing or previous contracts completed;
e) Physical inspection of the bidder's plant, factory, branches or other places where business transpires, with or without notice to the bidder;
f) Testing and sampling of completed goods similar to the requirements of UNDP, where available; and
g) Other means that UNDP may deem appropriate, at any stage within the selection process, prior to awarding the contract.

30. Clarification of Bid

To assist in the examination, evaluation and comparison of bids, UNDP may, at its discretion, ask any Bidder to clarify its Bid.
UNDP's request for clarification and the Bidder's response shall be in writing. Notwithstanding the written communication, no change in the prices or substance of the Bid shall be sought, offered, or permitted, except to provide clarification, and confirm the correction of any arithmetic errors discovered by UNDP in the evaluation of the Bid, in accordance with ITB Clause 32.

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 Bid.

31. Responsiveness of Bid

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, and specifications of the ITB without material deviation, reservation, or omission.

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.

32. Nonconformities, Reparable Errors and Omissions

32.3 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.

32.4 Provided that a Bid is substantially responsive, UNDP may request the Bidder to submit the necessary information or documentation, within a reasonable period of time, 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.

32.5 Provided that the Bid is substantially responsive, UNDP shall 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 subject to the above.

32.6 If the Bidder does not accept the correction of errors made by UNDP, its Bid shall be rejected.

F. AWARD OF CONTRACT

33. Right to Accept, Reject, or Render Non-Responsive Any or All Bid

33.1 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. Furthermore, UNDP is not obligated to award the contract to the lowest price offer.

33.2 UNDP shall also verify, and immediately reject their respective Bid, if the Bidders are found to appear in the UN's Consolidated List of Individuals and Entities with Association to Terrorist Organizations, in the List of Vendors Suspended or Removed from the UN Secretariat Procurement Division Vendor Roster, the UN Ineligibility List, and other such lists that as may be established or recognized by UNDP policy on Vendor Sanctions. (See http://www.undp.org/content/undp/en/home/operations/procurement/procurement_protest/

34. Award Criteria

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 (See DS No. 32).

35. Right to Vary Requirements at the Time of Award

At the time of award of Contract, UNDP reserves the right to vary the quantity of the goods and/or related 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.

36. Contract Signature

Within fifteen (15) days from the date of receipt of the Contract, the successful Bidder shall sign and date the Contract and return it to UNDP.

Failure of the successful Bidder to comply with the requirement of ITB Section F.3 and this provision shall 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 Bidder with the second highest rated Bid, or call for new Bid.

37. Performance Security

A performance security, if required, shall be provided in the amount and form provided in Section 9 and by the deadline indicated in the **Data Sheet** (DS no. 14), as applicable. Where a Performance Security will be required, the submission of the said document, and the confirmation of its acceptance by UNDP, shall be a condition for the effectivity of the Contract that will be signed by and between the successful Bidder and UNDP.

38. Bank Guarantee for Advanced Payment

Except when the interests of UNDP so require, it is the UNDP's preference to make no advanced payment(s) on contracts (i.e., payments without having received any outputs). In the event that the Bidder requires an advanced payment upon contract signature, and if such request is duly accepted by UNDP, and the said advanced payment exceeds 20% of the total Bid price, or exceed the amount of USD 30,000, UNDP shall require the Bidder to submit a Bank Guarantee in the same amount as the advanced payment. (See DS No. 12)

39. Vendor Protest

UNDP's vendor protest procedure provides an opportunity for appeal to those persons or firms not awarded a purchase order or 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/procurement/protest.shtml

Instructions to Bidders

DATA SHEET

The following data for the Civil Works shall complement / supplement the provisions in the Instruction to Bidders. In the case of a conflict between the Instruction to Bidders and the Data Sheet, the provisions in the Data Sheet shall prevail**.**

DS No.	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
1		Project Title :	Strengthening Social Stability in Southeast Turkey Project
2		Title of Goods/Services/Work Required:	Restoration Works of Yavuz Akinci and Akcurun Historical Buildings in Kilis Province
3		Country:	Turkey
4a	C.13	Language of the Bid:	English
4b		**Minimum Qualifying (Pass/Fail) Criteria** (Non-Discretionary "Pass/Fail" Qualifying Criteria)	All criteria listed herein collectively serve as a non-discretionary **"Pass/Fail"** qualifying criterion that needs to be fully met by the bidders. **Failure to meet any one of the below documents constitutes a basis for disqualification of the bidder for further evaluation.** ☒ Bid Security as per Item 9 of the Data Sheet and Section 8 of the ITB ☒ Bid Submission Form as per Section 4 of the ITB ☒ Price Schedule Form as per Section 7a and 7b of the ITB
5	C.20	Conditions for Submitting Bid for Parts or sub-parts of the Total Requirements	☒ Not Allowed The Bidders shall submit bids for the whole requirement stipulated in the ITB far Part 1 and Part 2
6	C.20	Conditions for Submitting Alternative Bid	Shall not be considered.
7	C.22	A pre-Bid conference will be held on:	N/A
8	C.21.1	Period of Bid Validity commencing on the deadline of bid submission	**90 days**
9	B.9.5 C.15.4 b)	Bid Security	Required · Amount: 9.000 USD · Section 8: Form For Bid Security Bid security must be submitted according to the Form specified in Section 8 Form for Bid Security. ☒ **Required:** PLEASE NOTE THAT THIS IS A MANDATORY REQUIREMENT. AT THE BID OPENING, IF THE BID SECURITY IS NOT FOUND

			OR THE DATE, VALIDITY AND/OR AMOUNT ARE INAPPROPRATE TO THE BID SECURITY FORM GIVEN IN SECTION 8, SHALL BE REJECTED WITHOUT FURTHER CONSIDERATION OR EVALUATION.
10	B.9.5	Acceptable forms of Bid Security	Bank Guarantee (See Section 8 for template)
11	B.9.5 C.15.4 a)	Validity of Bid Security	**120 days** from the deadline of Bid submission. Bid Security of unsuccessful Bidders shall be returned after the contract is signed with the successful Bidder.
12		Advanced Payment upon signing of contract	Not allowed
13		Liquidated Damages	To be imposed under the following conditions : · In case of the Contractor's non-performance or delay in completing the civil works as required by the Schedule of Requirements and Technical Specifications by the deadline set at ITB, **0.5% (half percent) of the total contract amount per day of delay** shall be paid by the Contractor to UNDP, as liquidated damages. · The Contractor will also ensure presence of its Engineers (Site Manager i.e.) on site at all times, in line with conditions of the contract. UNDP shall deduct **US$ 500 per day for any absences** of its key personnel on site. · Once a deduction of 10% (ten percent) (equivalent to 20 days delay) of the total contract amount has been reached, UNDP may consider termination of the contract.
14	F.37	Performance Security	Required · Amount: **10%** of the total contract price. · Section 9: Form for Performance Security
15	C.17 C.17.2	Preferred Currency of Bid and Method for Currency conversion	United States Dollars (US$)
16	B.10.1	Deadline for submitting requests for clarifications/ questions	7 days before the deadline for submission of bids. ***(12.09.2017, 16.00 hrs.)***
17	B.10.1	Contact Details for submitting clarifications/questions	**Focal Person in UNDP:** *Bahadir Murat Akin, Procurement Officer* **Email:** sr.procurement.tr@undp.org UNDP shall respond only to inquiries sent to the attention of focal person through above email, referencing the tender number **(UNDP-TUR-ITB-PROJ(SR)2017/11)**. In case

			requests for clarification/questions are sent to UNDP through other means without the name of the focal person, UNDP shall not be responsible.
18	B.11.1	Manner of Disseminating Supplemental Information to the ITB and responses/clarifications to queries	Announcement in the following web sites: www.undp.org www.ungm.org www.un.org.tr www.tr.undp.org https://www.devbusiness.com/
19	D.23.3	No. of copies of Bid that must be submitted	**Original: [1]** **Copies: [1]** **CD Copies [2]** (copies of bid documents including Excel and word documents (Price Schedule, i.e.)
20	D.23.1 b) D.23.2 D.24	Bid submission address	UNDP Yıldız Kule, Floor: 16 Yukarı Dikmen Mahallesi, Turan Güneş Bulvarı, No:106, 06550, Çankaya, Ankara/Turkey
21	C.21.1 D.24	Deadline for Physical Delivery of the Bid to UNDP Premises in Yıldız Kule in Ankara	**Date : 19.09.2017** **Time: 16:00 hrs, local time**
22	D.23.2	Manner of Submitting Bid	Courier/Hand Delivery to UN House, address of which is given above.
23	D.23.2 D.26	Conditions and Procedures for electronic submission and opening, if allowed	N/A
24	D.23.1 c)	Date, time and venue for opening of Bid	N/A
25		Evaluation method to be used in selecting the most responsive Bid	Lowest price offer of technically qualified/responsive Bid (One Bidder only)
26	C.15.1	Required Documents that **shall** be Submitted to Establish Qualification of Bidders (In "Certified True Copy" form only)	· Trade name registration papers i.e. Trade Registration Gazette or equivalent · Official Letter of Appointment as local representative, if Bidder is submitting a Bid on behalf of an entity located outside the country · Latest Audited Financial Statement, preferably in English (Income Statement and Balance Sheet) including Auditor's Report for the past 3 years [2014, 2015, 2016] · A decleration including all information regarding any past [last five (5) years] and current (2017) litigation, in which the bidder is involved, indicating the parties concerned, the subject of the litigation, the amounts involved, and the final resolution if already concluded. · A decleration stating that the Bidder has no performance issues in relation to a contract within the last 5 years

			(2012 and onwards) prior to the deadline for submission of bid, based on all information on fully settled disputes or litigation. A fully settled dispute or litigation is one 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. · Be established as single legal entity (real persons, JVs, consortia are **not** eligible) in 2012 or before. · A declaration stating that the Bidder is not in the circumstances of disqualification or restriction set forth in the Laws (or as per the relevant laws of the country in which we operate) and we are not in the circumstances of those that cannot participate in the procurement as per the same Laws (or as per the relevant laws of the country in which we operate). · A declaration stating that the Bidder is not associated, or have not been associated in the past, directly or indirectly, with entities or any of their affiliates, which have been engaged by the Employer to provide consulting services for the preparation of the design specifications, other documents and/or the present ITB. · Have participated as contractor or subcontractor, in at least 1 single contract, since 2012, with a value of at least ***the offered price***, carried out by the Bidder, that has been successfully and substantially completed, and work completion certificates that concerns of "***I. And II. Group Restored Immovable Cultural Existence Structures (except landscaping, street health works)"*** *(I. Ve II. Grup Tescilli Taşınmaz Kültür Varlığı Yapıların Esaslı Onarımları" (çevre düzenlemesi, sokak sağlıklaştırma işleri hariç))* will be considered as similar works. In the process of evaluation, if required by the UNDP, the bidder shall submit any further supporting documentation (the work committee decisions and progress reports) to clarify the basis of the work completion letter. A diploma or graduation certificate will not be accepted instead of the Work Completion Letter. · Have an average annual turnover equal to or higher than US$300.000 (three-hundred-thousand US$) for 2014, 2015 and 2016 or an annual turnover equal to or higher than US$300.000 (three-hundred-thousand US$) in 2016. · An average current ratio (current assets/current liabilities) equal to or higher than 1 (one) in the period of review (i.e. 2014, 2015 and 2016) or current ratio (current assets/current liabilities) equal to or higher than 1 (one) in 2016. · Minimum average construction turnover of US300.000 (three-hundred-thousand US$), over the last five years (2012 onwards), calculated as total certified payments

			received for contracts in progress or completed, and demonstrating construction activity or turnover each and every year within the same period (2012 onwards). · The Bidder shall demonstrate, by a bank statement(s) from its bank(s), that the Bidder has available or has access to liquid assets, lines of credit or other financial means sufficient to meet the construction cash flow for an amount not less than US$1.000.000 (One-million US$) as demonstrated by the sum of available cash, unused cash credit and unused credit letter as per Form 1.3.1: Financial Resources.
27		Other documents that may be Submitted to Establish Eligibility	· Quality Certificate (e.g., ISO, etc.) and/or other similar certificates, accreditations, awards and citations received by the Bidder, if any.
28	C.15	Structure of the Technical Bid and List of Documents to be Submitted	· Bid Submission Form · Bidder Information Form · Documents Establishing the Eligibility and Qualifications of the Bidder (DS 26) · Technical Bid Form · Form 1.1: Statement of Declaration · Form 1.1.4: History Of Non-Performance and Litigation · Form 1.2.1: Single Similar Work Experience · Form 1.2.2: Total Similar Work Experience · Form 1.3.1: Financial Resources · Form 1.3.2: Financial Strength · Form 1.3.3: Annual Construction Turnover · Form 2.2.3: Time Plan · Form 3.1: List of Proposed Key Personnel · Form 3.1.1 CV Templates · Power of Attorney, Circular of Signature / Signature Specimen
29	C.15.2	Expected date for commencement of Contract	October 2017
30	C.15.2	Maximum Expected duration of contract	· 5 months following site delivery by UNDP · As the construction works for both works must be completed within 5 months following site delivery; · ***1- Propose unique set of 'Key Personnel', (without any repetition) for each Part (i.e: (i) YAVUZ AKINCI AND (ii) AKCURUN HISTORICAL BUILDINGS IN KİLİS PROVINCE)*** · The bids shall be prepared with due consideration to above listed issues.
31		UNDP will award the contract to:	***One Bidder only***,
32	F.34	Criteria for the Award and Evaluation of Bid	**Award Criteria** · 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 Specifications as per the Bid Evaluation Criteria listed below, and has offered the lowest for "TOTAL BID PRICE" in the Price Schedule in Section 7. **<u>Bid Evaluation Criteria</u>** · Having satisfied all eligibility requirements listed in Section DS26 · Full compliance of Bid to the Technical Requirements; · Appropriateness of the Implementation Timetable to Project Schedule; · Qualification of all other personnel to be assigned to the Contract
33	E.29	Post qualification Actions	☒ Verification of accuracy, correctness and authenticity of the information provided by the bidder on the legal, technical and financial documents submitted; ☒ Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team; ☒ Inquiry and reference checking with Government entities with jurisdiction on the bidder, or any other entity that may have done business with the bidder; ☒ Inquiry and reference checking with other previous clients on the quality of performance on ongoing or previous contracts completed;
34		Conditions for Determining Contract Effectivity	Upon satisfaction of conditions below: 1. UNDP's receipt of Performance Security 2. Signature of Contract by both parties 3. UNDP's approval of plans, drawings, samples, etc.
35		Site visit	The bidders are advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the bidder's own expense.
36		Engineer	The UNDP's contracted Engineer(s) with delegated authority shall serve for the "Engineer" role as defined in "General Conditions of Contract for Civil Works"
37		Valued Added Tax (VAT)	Bidders shall take into account the following issues, while preparing their bids; UN and its subsidiary organs are exempt from 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 published 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 and all other related legislation.
38		Payment	1) All payments shall be effected to the Contractor **in Turkish Liras through conversion of the USD amounts to Turkish Liras by the official UN** Exchange rate valid on the date of money transfer, in case the Contractor is established and operating in Turkey. Otherwise, the payments shall be effected in USD. 2) UNDP shall effect payments to the Contractor in the form of "**monthly progress payments**" based on the completion of items in Bill of Quantities at the end of each month after acceptance by UNDP of the invoices submitted by the contractor. 3) The Contractor shall submit, after completion of each month, a monthly progress payment certificate, which shall contain the actual quantities completed / constructed within the reporting period. This monthly progress payment certificate shall be certified and approved by the Engineer. **UNDP shall effect the payment to the Contractor after certification/approval of UNDP Turkey, in other words, the "Engineer" is received**.
39		Contract Duration	The Contractor shall commence and complete construction works, required through this ITB, latest by 5 (five) months following site delivery through the "Notification for Commencement to Proceed" as explained below, in line with the work plan to be submitted by the Contractor and approved by Employer. Having secured the permissions and written commitments from third parties UNDP shall notify the Contractor in written form that the site is ready for commencement of construction works. This notification will serve as "Notification for Commencement to Proceed" and the contract duration will start as of the date this notification to the Contractor. As stated in the General Conditions of Contract for Civil Works, clause 47.1 defects liability period is 12 months calculated from the issuance of "Substantial Completion Certificate" for whole works.

Section 3: Schedule of Requirements and Technical Specifications

General Notes:

The contractor will be required, at the minimum, to mobilize the key personnel, listed below, that carry the qualifications. The bidders shall furnish Key Personnel Commitment Form, supplemented with CVs of the key personnel (by using the CV template provided in these solicitation documents) and copies of the diplomas, certificates, memberships to occupational organizations etc. of the proposed key personnel.

Form	Subject	Requirement	Documentation to be submitted
3.1 3.1.1 3.1.2	Personnel	The Bidder must demonstrate an exclusive team ***for each Part*** that it will have the personnel for the key positions that meet the following requirements: ***Project Coordinator:*** • University degree in civil engineering/architecture, • Fluency in Turkish, • Knowledge in English • At least 10 years of similar work experience ***2 (Two) Survey or Civil Technician:*** • University degree in survey technician or civil technician. • Fluency in Turkish • Experienced on supervision and measurement, • At least 5 years of similar work experience.	Form: 3.1: List of Proposed Key Personnel Form 3.1.1, to be replicated for each key expert position (the CVs should substantiate that the proposed personnel meet the requirements)

The Contractor is expected to mobilize sufficient resources to complete the construction works within 5 months following the site delivery through the "Notification for Commencement to Proceed", as explained in ITB with due consideration to weather, geographical and other risks associated with the construction itself. In this regard, Bidders are expected to present a realistic work plan. This duration shall not exceed five (5) months

Employer's Requirements

Rules and Regulations

- The Contractor shall provide a billboard (on free of charge basis) mentioning the project and partners to ensure visibility of the project. The billboard shall be constructed in accordance with these specifications and as shown on the detail drawings.
- Unless otherwise is confirmed by the engineer, ready-mixed concrete shall be used.
- The fact that any construction works carried out under the supervision and approval of the engineer does not relieve the contractor from the responsibility of completing the work in full compliance with the project, contract, statement of works and general rules for construction works.
- All construction works should be done in accordance with the approved projects, Technical Specifications and all laws and regulations in effect.
- The costs of building the service roads from the quarry of materials to the workplace and the transportation of materials are included in the offer made by the bidder.

- All the temporary roads in the construction site will be built by the contractor. No additional payments will be made.
- All the materials have to be examined and approved by the UNDP. The samples and materials will be in accordance with the specifications.
- The minimum amount of machinery and equipment that should be present in the work place is stated in the administrative specifications.
- The amount of ready-mixed concrete that is specified in technical drawings will be used. If not specified in the drawings for reinforced concrete C25 class concrete shall be used.
- During the excavation, the contractor is responsible for securing and supporting the excavation area, keeping the excavation site dry, transportation of materials excavated, storage and safety of materials excavated with any kind of safety precautions approved by UNDP.
- The sites that are specified in the project will be cleaned of plants and roots. The excavation will start after the completion of the cleaning process (e.g. uprooting the trees).
- The irregularities and problems that may occur because of cleaning procedures (e.g. uprooting a tree) will be fixed by the contractor
- The ground that the construction will be built on has to be safe and suitable. The unsuitable ground should be excavated for a depth that will be decided, no less than 30 cm, by the administration.
- Before the concrete is poured, the inspection engineer will examine and approve the reinforcement that is placed and anchored. The Engineer can ask to remove the concrete if not examined and approved.
- The contractor has to make available enough number of vibrators in the construction site, to be able to immediately compression and the vibration of the concrete that is poured.
- The experiments on the concrete will be made on a calendar depending on the classifications and amount of concrete. If the experiments do not satisfy necessary specifications, the contactor will, by consulting the administration, take the immediate actions to adjust the concrete mix, improve the quality control and make a study of relevant methods in order to guarantee the necessary level of quality. The daily concrete amounts and samples, specimens and other samples will be kept by the contractor.
- The concrete can only be poured with the presence of the Engineer.
- The Bill of Quantities is the document containing an itemized breakdown of the works to be carried out in a unit price contract, indicating a quantity for each item and the corresponding unit price. The quantities set out in the 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.
- Save where the technical specifications or the Bill of Quantities specifically and expressly state otherwise, only permanent works are to be measured.
- No allowance will be made for loss of materials or volume thereof during transport or compaction.

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

- *Profit*
- *Head Office charges*
- *Site Supervision and Site Staff costs and expenses*
- *Transport of labour and travelling allowances*
- *Use of protective clothing or equipment*
- *Any statutory or incidental charges levied on the employment of labour*
- *Overtime, unless specifically ordered or subsequently sanctioned in writing by the Engineer*
- *Time lost due to inclement weather*
- *Insurances of whatsoever nature*
- *Holiday and sickness pay or benefits*
- *Use, repair and sharpening of small tools*
- *All non-mechanically operated equipment, erected scaffolding, staging and trestles, protective clothing, artificial lighting, storage facilities and the like that may be in general use on the site*
- *All other liabilities and obligations whatsoever*

The units of measurement used in the annexed technical documentation 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 in the bill of quantities are to be interpreted as follows:

- *mm means millimetre*
- *m means metre*
- *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*
- *l means litre*
- *% means per cent*
- *N.d means nominal diameter*
- *da means decar*

1. *General Project Information*

1.1. Project Background

The Strengthening Social stability in Southeast Turkey Project aims at contributing to the strengthening of social stability in the Southeast Anatolia Region through two main components. Component 1 on strengthening livelihood opportunities for Syrian population and host communities through skills and competency development services as well as improved local value chains and local production ecosystems and infrastructures, will mainly target Şanlıurfa province and its economic geography (i.e. sectoral value chain-based linkages to other provinces mainly Gaziantep). The second Component aims at a broader geographical area through small-scale investments and technical assistance aimed to strengthen the municipal capacities on public services and creating public areas/social zones. The project is implemented by GAP Regional Development Agency with the technical support of UNDP and funded by Government of Japan.
The project is developed to respond to the increasingly reported facts and observation that the capacities of local service providers are overstretched, reducing their capability to deliver services to their constituents and that the labour market cannot meet the demand for jobs as a result of the increased number of inhabitants and influx of Syrians living in the Southeast Anatolia Region, which is already a disadvantaged region in terms of labor market indicators.

1.2. Description of the Project

These technical specifications are prepared as a part of the contract documents for the improvement of the Yavuz Akıncı And Akcurun Historical Buildings of which was developed in accordance with the Protective Development Plan (Koruma İmar Planı) and have been approved by the Supreme Board of Protection of Cultural and Historical Assets.

The project comprises:

- Renovation and Rehabilitation works of the Yavuz Akıncı Historical Building located on the Cüneyne Camii Street Meşetlik reagon of Kilis Center. The buildings are positioned in 790 Blocks and 24-25 Lots (Parcels)

İLİ	İLÇESİ	MAHALLESİ	SOKAĞI	PAFTA	ADA	PARSEL
KİLİS	**MERKEZ**	**MEŞETLİK**	**CÜNEYNE CAMİİ**	**111**	**790**	**24-25**

- Renovation and Rehabilitation works of the Akcurun Historical Building (also know as Şükran Develi) located on the Hacı Hafız Street Hakverdi reagon of Kilis Center. The buildings are positioned in 323 Blocks and 68 Lots (Parcels)

İli : Kilis	Pafta :27
İlçe : Merkez	Ada :323
Mahallesi: Hakverdi	Parsel : 68
Sokak : Hacı hafız	T. Alan :

1.3. Site

The project sites are in Kilis, in the city centre, which are one of the main touristic attractions within the city.

İLİ	İLÇESİ	MAHALLESİ	SOKAĞI	PAFTA	ADA	PARSEL
KİLİS	MERKEZ	MEŞETLİK	CÜNEYNE CAMİİ	111	790	24-25

Registered buildings are accepted as civil cultural heritage due to the regulations of the Council of Monuments. The rehabilitation works shall be applied according to the Rehabilitation and Renovation Project.

1.4. Scope of Works

The works shall comprise the following:

- Renovation and rehabilitation of the buildings

These items are going to be constructed by the Contractor according to the technical specifications.

1.5. Examination of the Structure of the Buildings

Before starting any work the Contractor shall examine the site and make a site survey by observing the structure of the buildings where the renovation and rehabilitation works going to be applied in order not to cause any damage regarding the structural system of the buildings. The Contractor shall take all the necessary precautions to avoid causing any structural problems.

2. General Requirements

2.1. Permits and Approvals

The approval of the Supreme Board of Protection of Cultural and Historical Assets for the projects has already been granted. Besides, the projects of the nonregistered structures have also been approved by the Monuments Board.

The responsibility of permits and relevant fees, taxes and other expenses related to these permits to start the construction works shall be as listed below;

- The approval of the Supreme Board of Protection of Cultural and Historical Assets shall be the responsibility of Municipality (which has been granted).

- The approval of the Kilis has been granted.

- All the other permits, relevant fees and other expenses shall be the responsibility of the Contractor.

2.2. Test requirements

The following scientific analysis and tests shall be obtained by the Contractor before or during the execution of the works as requested by the Engineer:

Survey of structures by drilling the walls and foundation to extract carrots from masonry, both horizontally and in inclination. Carrot samples shall be extracted with a special drill, equipped with a double carrot extractor to extract carrots both dry and humid, and the extractor shall be endowed with diamond drilling crowns of an external diameter of 70-100 mm.

Masonry tension test, with a flat semicircular martinet, measuring about 400x250x8 mm. It shall be inserted

in joint between two stones, having previously removed the mortar, with a maximum pressure of 1 bar. Exact measurement of the distance between to reference points with special equipment having a field of measurement of 2,5 mm and resolution on the entire measure field of 0.001 mm.

Masonry deformation test with flat double semicircular martinet, measuring approximately 400x250x8 mm. to be inserted in a joint between two stones having previously removed the mortar. Exact measurement of the distance between to reference points with special equipment having a field of measurement of 2,5 mm and resolution on the entire measure field of 0.001 mm.

Laboratory test for humidity, to measure the amount of water in the walls and the capillary raise, to be carried out with the gravimetric method, following the recommendations "NORMAL".

Tests on site to measure the content of water in the stone walls, integrating the previous gravimetric tests, to be carried out with thermo - hydrometric tests of the Vaisala type, reading temperature and relative humidity in the holes, immediately after the extraction of the carrots.

Supply and installation of thermo-hygrometer endowed with a linear thermistor to measure the temperature (precision 0.2° centigrade); hygroscopic polymer to measure relative humidity (precision 1.5% at 25°).

Supply and installation of temperature sensor, including cables.

Endoscopic analysis for the definition of walls and vaults typology, individuating cracks, cavities, discontinuity and other heterogeneous factors in the structures, up to a maximum length of 100 cm. Including the photographic restitution of the survey where the results of the test are plastered.

Preparation of horizontal or vertical holes for endoscopic surveys made with a drill at low speed, including air cleaning and washing of the hole, to a maximum depth of 100 cm and a maximum diameter of 28 mm, all expenses included.

Sonic test in stone masonry and vaults, for the control of voids, with multi-channel machinery, including the checking on site of obtained data with a calculation programme evaluating the speed of the waves.

Ultrasonic test for the individuation of voids in stone masonry walls and in wooden carpentry, with a machine transmitting and receiving the waves, having a frequency from 40 to 200 KHz, including the checking on site of obtained data with a calculation programme evaluating the speed of the waves.

Magnetometric survey of metal elements hidden in the walls, including the final interpreting report with drawings.

Survey of the mechanic characters of the soil through geological tests with static penetro-meter of the "Gouda" type (20 tons). Reading of the point resistance (Bergmann type) and side resistance, including the drawing documentation for each test, the vertical stratagraphic profile, the evaluation of the friction angle of aggregated soils and the resistance to cut.

Survey of the mechanic and typological characters of the soil with the collection of samples of soils both loose and undisturbed, to be placed in boxes or containers. Collection of two undisturbed samples up to a depth of 15 metres, using a "Ostemberg" type sampler. Test for the evaluation of mechanic characters of soils, determining the simple compression, with S.T.P. standard penetration test, and test of resistance to cut. Including the monographic drawing documentation for each test, and the photographs of the soil samples in the containers.

Lab tests on undisturbed samples taken during the geological tests to determine the principal parameters, as specific weight, volume weight, water content, Attemberg’s limits, including diagrams and analysis of the results by a geo-technician.

Lab tests on undisturbed samples taken during the geological tests to determine the principal mechanical parameters, by simple compression test, edometric test, consolidation test, including diagrams and analysis

of the results by a geo-technician.

No payment shall be made to the Contractor for any reason for mock-ups, sampling and obtaining the test results.

2.3. Project Monitoring

2.3.1. Contractor's Administrative Arrangements

The Contractor shall set-up an efficient and well-qualified project management team for proper execution and timely completion of the Works. The Contractor should obtain the Engineer's approval for its key personnel before commencing any works at site. All advanced project management techniques shall be utilized for the completion of the Works within the strictly limited period. Necessary components of the Project Management Team shall be located at the Site.

The safety rules of the Turkish Ministry of Labour and Social Security and rules of the Ministry of Health shall be used as general reference during the Works.

The obligations arising from "TS 8983-Obligatory General Safety Measures to be used during Construction of Buildings" shall be carried out by the Contractor.

The Contractor shall have on his staff at the site an Officer dealing only with the tasks regarding the safety and protection against accidents of all staff and labour as well as the staff, equipment, offices and other facilities of the Engineer and the Employer on the Site. This Officer shall be qualified for this work and shall have the authority to issue instructions and shall take protective measures to prevent accidents.
At locations where construction machines operate such as cranes, etc., necessary and proper warning signs and lights shall be provided and maintained for the duration of construction.
Security of the Works, all his staff and labour and the staff equipment shall be provided and maintained by the Contractor.

2.3.2. Work Schedules

The Contractor shall prepare and submit the Work Schedule under the following principles and in CPM (Critical Path Method) format showing all the works to be carried out within the context of the project, within the 21 days following the date of signing the Contract agreement, and shall obtain the consent of the Engineer. No payment shall be made to the Contractor until the Work Schedule is approved by the Engineer. The Contractor, during the course of the construction shall implement the approved work schedule, again according to the principles stated below, shall follow the implementation of the Works and shall update the said schedule at each month interval from the Date of Commencement and resubmit it for the consent of the Engineer.

The CPM work schedule regarding the Works which are within the terms of the Contract and which shall be prepared by the Contractor to the detail requested by the Engineer, shall consist of the following diagrams and reports:

A. Network and GANNT diagram
B. Bar chart
C. Activity reports (according to earliest and latest work starting dates and so as to indicate the activities themselves)
D. Materials report
E. Machinery / equipment report
F. Labour / personnel report
G. Payment diagram

The activities shall be arranged so as to correspond to the number of items included in the Bill of Quantities. Thus, the program shall directly provide the basis for the interim progress payments and cash flow indicators. However, progress payments shall be prepared in spreadsheet format to conform to the

Employer's requirements.

The Works within the terms of the Contract shall be shown individually in the work program according to the names and production numbers used in the project and the work program shall further include the mobilization, the establishment of the site facilities, the surveys, setting-out of the Works and the production/approval of the manufactured items, material samples and approvals, as separate activities.

Following the Engineer's consent to the work schedule, which shall be prepared by the Contractor according to the conditions mentioned above, the work schedule shall be diligently monitored by the Contractor and the progress of the activities shall be entered into the work program and into the work monitoring reports taken from the computer on a monthly basis and shall be submitted to the Engineer together with the monthly work progress reports.

The said monthly work progress/monitoring reports will show the delays on an activity basis, on the critical path and the measures taken by the Contractor in relation to such delays, the material delivered to the site during that month and the machinery/equipment and labour used by the Contractor.

2.3.3. Works Register

The Contractor shall, during the implementation of the works, register the following information on a daily basis and shall submit the information to the Engineer:

- Workshop drawings progress
- Site Journal
- Manpower information
- Equipment information
- Information of Materials on Site
- Progress of construction works
- Site events
- Materials Samples including Technical Data
- Tests performed on Site
- A record of Modifications
- Meteorological data (temperature, humidity) measured on site

2.3.4. Work Progress Reports

The Contractor shall submit a monthly work progress report in form of CD format to the Engineer within the first ten (10) days of the month following the month during which the works are carried out.

The Contractor shall clearly indicate but shall not be limited to include in the Monthly Work Progress Report the procured materials, used machinery/equipment and labour, problems faced at the site, divergences from the approved work schedule and other facts as deemed necessary. If there are any divergences in the Work Schedule, the causes shall be clearly indicated and whether or not such divergences cause any delays shall be stated. If there are delays according to the approved Work Schedule, then the causes of these delays shall be indicated and documented. Furthermore, if there are any delays, the Contractor shall provide information in his report on the measures he intends to take in order to compensate for the said delays.

Each work progress report shall include:

- A list which shows the numbers and actual starting and completion dates
- Activity numbers of the completed activities,
- A list showing the work still in progress with their starting dates
- The number of days required for their completion
- A list of the activities which shall have started within that month according to their work start dates but which have not started
- A materials approval table showing the materials submitted for approval during that month and those, which have been approved.

The necessary CPM outputs where the actual status of the activities is superimposed on their planned status shall be appended to the (Monthly) Work Progress Report in order to show the current status of the project.

The Contractor shall submit his progress payment statement for the month to the Engineer, after submitting the (Monthly) Work Progress Report.

2.3.5.Construction Photographs

The Contractor shall be responsible for the supply of the necessary construction photographs.

The digital photographs of the whole buildings affected by the works shall be taken before the commencement of Works and immediately submitted to the Engineer in CD formats. During the progress of the work, the Contractor shall ensure that the necessary number of pictures are taken which shall give a sufficient record of the activities undertaken on the site and shall submit them together with the Monthly Work Progress Reports. Once all construction work is completed, the same sites shall be photographed again and shall be submitted together with the Contractors' Final Statement of Account.

Submissions shall be made in JPEG format with an explanation about the view shown in the picture including location and the date the picture was taken.

2.3.6.Shop - Working Drawings and Quantity Survey

The contractor shall prepare shop and/or working (execution) drawings and quantity surveys for each lot before the works for each specific lot (parcel) commence (both for temporary and permanent works based on the technical specifications and existing typical designs) for review and comment of the Engineer.

The Engineer shall forward the reviewed documentation (shop drawings and quantity surveys) to the relevant parties for their approval.

The Contractor shall not start works until the approval of the relevant parties has been obtained for each lot (parcel).

The shop and/or working drawings shall be executed in such detail that not only the Works can be executed on site, but also later maintenance and fault findings.

A program for the preparation of the materials and equipment shop drawings shall be submitted together with the first Work Schedule. The dates of the shop drawings to be submitted for the Engineer's review and the dates the drawings are to be returned in order to ensure that a particular work segment does not start later than the programmed work start date, shall also be indicated for each item. Sufficient time shall be allowed for the first review, revision, re-submittal and final examination of each shop drawing.

Software compatible with AutoCAD’s latest version shall be used for the shop and/or working drawings and submitted in CD support in addition to the hard copies.

Approval by the Engineer of shop and/or working drawings shall neither relieve the Contractor of any of his obligations under the Contract, nor relieve him of correcting any errors found subsequently in the approved drawings and in the Works on the Site or elsewhere associated therewith.

The drawings shall be prepared according to the materials approved by the Engineer, based on the documents, samples and models as submitted by the Contractor and as approved by the Engineer.

The Contractor shall start to prepare other shop and/or working drawings, related with the production details of the Works within the terms of the Contract as soon as reasonably possible time. The Contractor shall coordinate with the Engineer for such commencement.

No payment shall be made for shop drawings since these are deemed to be included in the overheads of the

Contractor.

2.3.7.As-Built Drawings

During the execution of the Works on the site, the Contractor shall record all information necessary for preparing as-built drawings. Neatly marked-up drawings and other documents covering the Permanent Works as completed shall be made available to the Engineer at any time during construction.

Marked-up drawings shall be kept up to date and submitted monthly to the Engineer for approval, as the Works are completed, together with final quantities thereof. Submission shall be in hard copies and in CD and software compatible with AutoCAD's latest version shall be used.

The as-built documentation shall be provided within one month after issuing the Taking-Over Certificate. They shall incorporate the Engineers' comments and all the modifications/revisions affected during construction.

All material to be submitted shall be A4 or A3 size and shall be marked as "AS-BUILT".

No payment shall be made for as-built drawings, operation and maintenance manuals and other documentation required since they are deemed to be included in the overheads of the Contractor.

2.3.8.Preliminary Evaluation and Inspection Findings Report

Prior to the commencement of the works on site an evaluation and inspection findings report shall be prepared to determine the existing situation of each structure.

Before any work affecting properties, lands or the like is commenced, the Contractor shall confirm in writing to the Employer that the relevant survey is a true and accurate record of their condition.

2.3.9.Documentation at Completion of Works

Before taking-over of the Works, the Contractor shall submit the photographs, as-built drawings and workshop drawings in addition to the maintenance manuals to enable the Employer to operate, maintain, and repair all parts of the work.

2.4. General Technical Specifications

2.4.1.Standards and Codes

Works and plant supplied under this contract shall be in accordance with the latest edition of the appropriate standards. Turkish standards must be used if they exist for the item in question. If there are no applicable Turkish standards, then the requirements of the Contract may be in accordance with any equivalent national or international standard such as EU, BSI, ISO, DIN, etc. and their application approved by the Engineer.

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

These Technical Specifications shall be read and interpreted in conjunction with the graphic documents

which are part of this Tender Dossier (drawings, sketches, photographs, surveys, schedules, etc.)

2.4.2.Method of Construction

Works shall be carried out by means of the rapid construction system in full accordance with the designs and technical requirements. The Contractor shall use all possible rapid construction techniques in the site development works. The rapid construction system, work plan and methodology (Method Statement) and equipment shall be as proposed in the Technical Proposal of the Contractor and by the Engineer during the construction. Such approvals shall not relieve the Contractor of his contractual obligations for proper execution and timely completion of the Works to the satisfaction of the Engineer.

The Contractor shall envisage and prepare the related workshop drawings ensuring the rapid construction system in full accordance with the designs and technical requirements.

2.4.3.Survey and works setting out

Setting out of new openings and elements shall be based on the dimensions given on elevations. Position of such elements shall be finalised on shop drawings and applied in accordance with the approval of the Engineer.

Before any work commence, the Contractor shall confirm in writing to the Employer that the relevant survey is a true and accurate record of their condition.

2.5. Materials

2.5.1.General

As soon as possible after the Contract has been awarded, the Contractor shall submit to the Employer for his approval a list of his proposed suppliers and sources of materials required for the execution of the Works complying with the regulations about origin.

Samples shall be taken in accordance with an appropriate standard where applicable or requested by the Engineer.

The materials subsequently supplied shall conform to the quality of samples which have been approved by the Engineer.

Names of additional suppliers and sources may be submitted by the Contractor during the execution of the Contract, but no source of supply shall be changed without the Employer's approval.

In general, only new materials and equipment shall be incorporated in the permanent works

Where specified in the bill of quantities, materials such as reusable stone and tiles shall be retained and reused. In some cases it may be necessary to utilise reused materials in order to match existing work. In these instances, reclaimed materials may be used with the approval of the Engineer.

Materials and components shall be handled, stored and used in accordance with the manufacturer recommendations.

The quantity of materials and components stored on the site shall be consistent with efficient working.

The materials to be used in the works are described below in the Special Technical Specifications.

The materials used in this Project should be in the similar appearance with the original materials. The Contractor should make demonstrations (e.g. test panel of 5m2) for cleaning, plaster, walls and wall cladding first. Upon Engineer's approval on the demonstrations, the Contractor shall continue with the Works. For works items that will be supplied/erected/constructed more than once (e.g. urban furniture, automatic shutter,

Windows, doors, iron balcony handrail, letters, automatic shading element, name boards, etc.), the Contractor should build one sample and secured the Engineer's approval on the sample before continuing with such work items.

The contractor should propose different alternates of urban furniture and erect one sample of each selected furniture. The contractor should secure Engineer's approval before proceeding with supplying/erecting rest of urban furniture.

2.6. General Workmanship

The Contractor shall make all necessary allowances throughout the tendering process to allow for the high standard of workmanship and the range of specialist conservation skills required.

2.7. Concrete Works

Concrete Works as specified hereunder shall include the supply of materials, mixing of concrete, formwork, reinforcement, placing, compaction and curing of concrete and site clearance after completion of works. In general, TS 1247 or DIN 1045 shall be respected when mixing, placing and curing concrete.

The prices entered in the price proposal shall fully include the value of works described shall cover the cost of all labour, subsidence, traveling, materials, admixtures, temporary works, yards and stockpiles, sampling and testing and any other expenses whatsoever together with all risks, liabilities and obligations set forth or implied in the Contract Documents.

The Contractor shall keep accurate and up to date records of concreting showing for each day when sections of the works were concreted:

Date, time, weather and temperature;

Results of all concrete tests including identification for which part of works the sampled material is representative;

Number of batches produced, weight and kind of cement used, volume of concrete placed, number of batches wasted or rejected;

Class of concrete, volume of concrete placed and number of batches used for each location.

The laboratory where concrete test have to be carried out shall be approved by the Engineer and be accessible for him at any time.

At the commencement of the Contract the Contractor shall submit for the approval of the Engineer a Method Statement detailing his proposals for the organization of concreting activities at the site.

The type of cement used in each of the various works shall be standard brand Portland cement from a single approved source conforming to the requirements of TS 19 Type I or II or approved equal, or Portland cement class PZ 25-NW or class PZ 35-L in accordance to DIN 1164.

Cement shall be delivered in quantities sufficient to ensure the proper progress of the Works and the quantities held in stock on site shall be to the approval of the Engineer. Such approval shall not in any way relieve the Contractor of his responsibilities for providing cement. Cement from abroad, shall be packed in sealed plastic bags and placed inside paper bags.

The water used for all purposes throughout the Works shall be potable, clean, fresh and free from objectionable quantities of silt, organic matters, alkali, salt or other impurities, and shall comply with the requirements of TS 1247 or DIN 1045 and DIN 4030.

The Contractor shall deliver to the Engineer, free of charge, samples of the water proposed for use on the

Works for the Engineer to carry out such tests he may require to confirm its suitability.

Fine and coarse aggregates for concrete shall be obtained from sources approved by the Engineer. Fine aggregates shall consist of natural sand unless otherwise approved. Aggregates for all types of concrete shall be from natural sources. They shall be hard, strong and durable and shall not contain harmful material of sufficient quantity to affect adversely the strength or durability of the concrete or, in the case of reinforced concrete, to attack the reinforcement.

Samples of cement, water and fine and coarse aggregates shall be delivered to the Engineer for testing by the Contractor before concreting. Specimen tests shall be completed before work is due to start.

No concrete shall be placed in the Works until the relevant mix has been approved by the Engineer. Approval shall not be given to any concrete mix until it has been successfully subjected to Preliminary Mix Tests.

The Contractor shall carry out Preliminary Mix Tests as specified hereinafter in order to determine for each class of concrete the minimum practicable water/cement ratio and the required mix proportions of the fine and coarse aggregate the necessary allowance being made for the moisture content of the aggregate.

Further tests shall be carried out if any feature of materials or mixes is changed during the course of the work.

For the concrete all common site tests shall be carried out especially slump tests of the concrete shall be taken. If the specimens fail to attain the required compressive strength as specified the concrete which they represent shall be cut out, removed and replaced with concrete complying with the Technical Specifications to the satisfaction of the Engineer.

The Engineer's approval in writing shall always be obtained before any concrete is placed in the Works. All constructional plant and materials required, or which may be required during the concreting work and for curing shall be on site and the Contractor shall be fully prepared for the work. The Engineer's approval to place concrete shall only be given after such preparations and other relevant requirements of the Technical Specifications have been carried out and complied with.

If necessary and/or directed by the Engineer, the Contractor shall cool any shuttering that has become overheated or exceptionally dry through prolonged exposure to the sun. The Contractor shall ensure that all shuttering retains a sufficient amount of humidity and has not become shrunk or warped. All soaking or spraying of shuttering shall be done with potable water.

Concrete shall be placed directly in the Works as soon as possible without the need for re-handling and not more than 45 minutes after mixing and in any case, before the initial setting has taken place. If any delay has occurred after mixing and the concrete has begun to set, it shall not be used in the Works and shall be removed from the site. Unless otherwise agreed by the Engineer on the basis of satisfactory site trials concrete shall not be dropped into place from a height exceeding 1,5 meters.

Concreting of any section or unit shall be carried out in one continuous operation up to the construction joints. No interruption of the concreting shall be allowed without the approval of the Engineer. Where deposition of concrete has to be interrupted, precautions shall be taken to ensure satisfactory adhesion of later batches of concrete to that previously placed.

Concreting shall not be permitted during heavy rain or snowfall, or when the air temperature falls below 2°C, or when the concrete temperature rises above 32°C. When the air temperature exceeds 25°C, concreting shall only be permitted after special precautions, approved by the Engineer, have been taken to prevent early setting of the concrete, such as lowering the temperature of the water to be used in the mix or by means of a cooling-system, keeping the aggregates and shutters continuously sprayed with water and erection of temporary sun shades over the working area. During concreting operations the temperature of the placed concrete shall be recorded.

Concrete shall be thoroughly compacted during the operation of placing and shall be thoroughly worked around the reinforcement and embedded fixtures and into corners of the formwork and moulds.

Concrete shall not be disturbed after compaction and placing in its final position. Concrete that has partially set before final placing shall not be used and shall be removed from the site.

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

The maximum and minimum ambient temperatures and humidity shall be measured and recorded each day by the Contractor. The records shall be made available for the Engineer's inspection.

All exposed surfaces shall as finishing proceed be covered with a wet hessian sheet followed by a reflective polythene sheet. These shall be securely fastened around the edges and supported in order not to damage the finished concrete surface. As soon as practicable the hessian and polythene shall be lowered into close contact with the concrete and securely weighted or fastened down to prevent wind blowing underneath. The hessian sheet shall be maintained in a moist condition at all times and shall be inspected at intervals not exceeding 6 hours. Concrete shall be kept moist on exposed surfaces for a period of not less than 72 hours or as approved by the Engineer.

Any portion of the work which is honeycombed or otherwise inferior shall on the written instruction of the Engineer, be immediately cut out and reconstructed in an approved manner without extra charge. Plastering of defective work shall not be permitted. Any leaks or cracks shall be sealed by injection with a synthetic resin or other appropriate methods approved by the Engineer.

2.8. Special Technical Specifications

2.8.1. General

These technical specifications shall be read and interpreted in conjunction with the relevant work descriptions specified in the unit price definitions section as well as the drawings, photographs, surveys, schedules, etc.

2.8.2. Scaffolding

The scaffolding works include, but not necessarily limited to, the following:

- Erecting scaffolding to provide proper access to all work areas on all facades of buildings where works are specified.
- Taking all protective measures to protect scaffolding, work performed on it and persons from weather and damage.
- Maintenance and storage of scaffolding through the duration of works.
- Removal of scaffolding upon completion of works by the approval of the Engineer.

Submittals

- A time-schedule for the scaffolding sequence throughout working period indicating the periods and amounts of use on individual buildings.
- Schematic drawings showing the layout of scaffolding, indicating position of levels on facades of buildings.
- Scaffolding fabricators specifications, installation instructions and general recommendations for applications. Include certification or other data substantiating that materials comply with specified requirements.
- A sample of each element and all necessary accessories of scaffolding for the approval of the Engineer.

Scaffolding shall be installed to one building as a mock-up. The Contractor shall not forward installation without the approval of the Engineer. Approved work shall be considered as part of completed works.

Accepted mock-ups shall represent minimum standards scaffolding. Subsequent scaffolding work that does not meet standards of accepted mock-ups shall be rejected.

Legal permits necessary to erect scaffolding shall be obtained to comply with Governing Laws and presented for the approval of the Engineer.

All necessary permits to install scaffolding shall be obtained by the Contractor.

The ground and base for scaffolding work and the conditions under which the work is to be installed shall be inspected and the Engineer shall be notified of conditions detrimental to the proper installation of scaffolding. Installation shall not start until unsatisfactory conditions have been corrected.

The Contractor shall be responsible for obtaining and allowing for the scaffolding requirements of any Sub-contractor.

Prior to works, areas in which work will be performed shall be inspected. The deficiencies on ground and base shall be relieved as necessary to set the scaffolding level and stable by reviewing the existing conditions together with the Engineer.

All necessary precautions shall be taken to avoid differential settlement and excess movement of scaffolding during repairs.

If required, tarpaulin covers shall be installed over the work area to allow working freely underneath. Temporary rainwater disposal shall be provided during the works.

Access to the interior of buildings via the scaffolding shall be avoided; possible entry points shall be blocked.

At the end of each working day, all scaffolding, ladders, etc, shall be secured or plastered inaccessible as far as possible, in order to minimise the risk of theft or vandalism.

On all independent units of scaffolding at ground floor level secure aluminium hoarding on box steel frame with an operating entrance door complete with secure locks shall be provided. Scaffolding shall be set so as not to block the residents' access to the buildings at all times. On shop fronts scaffolding and hoarding shall be arranged so as not to obstruct the operation of shop activities.

All persons, whether or not involved in the work shall be protected from harm caused by or resulting from works.

Building elements and finishes shall be protected from damage or deterioration caused by works. Damage to materials or finishes shall be repaired to satisfaction of Engineer at no additional cost to Employer.

Protections shall be removed after completion of work.

Provision and installation of scaffolding system shall be in a systematic manner and using methods as required completing the work in accordance with the requirements of governing regulations.

Vertical, horizontal bars, internal and external diagonal bracings, vertical and horizontal connections, boards, ladders, handrails, console elements, sockets, footings and wheels shall be provided as required for the safe execution of the works.

All scaffolding shall be free from defects and conform to standards. Scaffolding shall be free-standing, no putlogs or other members shall be inserted or fixed into the original fabric without prior approval of the

Engineer. Putlog-ends shall be protected by plastic caps when in close proximity with the structure.

Scaffolding shall be fixed and maintained throughout the duration of works.

For all buildings within the scope of works, full-height fixed scaffolding shall be provided. All scaffolding shall be firmly fixed and levelled. On special cases mobile scaffolding may be allowed for buildings of no more than 2 storey height by the approval of the Engineer. Mobile scaffolding shall have locking wheels and lateral support footing to provide extra stability.

Scaffold boards shall be provided for every 2.5 m height, all boards shall be securely restrained. The levels shall be arranged for best access to the working area. The levels serving the ongoing works shall be fully boarded until the works at that level are complete. Handrails shall be provided at all levels and ladders.

Ladders shall be provided to each level of scaffolding. Easy access to all areas and levels of work shall be provided.

The scaffolding shall not be more than 30 cm away from the work surface.

All scaffolding shall be covered by translucent jute sheeting and by water resistant tarp when required to protect from rain and wind. Scaffolding need not be airtight unless required for specific works.

Scaffolding shall not be removed from any location without approval of the Engineer.

2.8.3.Removals

The removal works include, but not necessarily limited to, the removal and demolition of selected items from selected areas of the building as indicated on the drawings, including the removal of rubbish and debris from this work.

Submittals

- A schedule indicating proposed methods and sequence of operations for selective removals and demolition work prior to commencement of operations, including the details for dust and noise control operation.

Employer, thereby the Engineer assumes no responsibility for actual condition of items of structure(s) to be demolished or space(s) in which removals and demolition work is performed.

Items to be removed but of value to Contractor may be removed as work progresses with the written prior permission of the owner. Salvaged items shall be transported from site as they are removed. Storage or sale of removed items on site shall not be permitted.

If utilities are operating in the building area services shall be terminated and properly shut off. Details for dust and noise control shall be submitted for approval prior to commencing work.

The use of explosives is prohibited.

Prior to removals, areas in which work will be performed shall be inspected. Existing conditions which could be misconstrued as damage resulting from removals and demolition work shall be photographed; these photographs shall be filed with the Engineer prior to starting the work.

The existing conditions of area surfaces and equipment shall be determined and listed. After the work in each respective area is completed, it shall be determined if adjacent surfaces or equipment have been damaged as a result of the work; if so, the damage shall be corrected at the Contractor’s expense.

Shoring, bracing, or support shall be provided to prevent movement settlement or collapse of structures or elements to be removed or demolished, and adjacent facilities or work to remain.

Condition(s) of existing structure at contracted work areas requiring removal and selective demolition shall be verified.

The operations shall be ceased and the Engineer shall be notified immediately if safety of structure appears to be endangered. Precautions shall be taken to support structure until determination of safety is made.

Protections shall be removed after completion of work.

Temporary barricades and other forms of protection required to protect property, residents and general public from injury due to selective removals and demolition work shall be provided.

Protective measures as required to provide free and safe passage of the general public shall be provided.

Existing finish work that is to remain in place and which becomes exposed during operations shall be protected from damage by suitable coverings when necessary.

Protections shall be removed after completion of work.

The removal work shall be performed in a systematic manner using methods as required to complete the work indicated on the drawings in accordance with the requirements of the Technical Specifications, unit price definitions and the governing regulations.

When walls, partitions, floors, and ceilings (or portions thereof) are indicated to be removed; unless indicated otherwise:

- All items attached to the surfaces of the construction to be removed shall be removed and reinstalled or maintained in an undisturbed condition.
- All plumbing piping, fixtures, accessories and rough-in occurring on or in the construction to be removed shall be removed and reinstalled or maintained in an undisturbed condition.
- All connectors, piping, ductwork and other HVAC items and accessories occurring on or in the construction to be removed shall be removed and reinstalled or maintained in an undisturbed condition; piping and ductwork shall be capped and/or re-routed.

Unless otherwise noted, all electrical wiring, to include, but not limited to conduits, devices, fixtures, and other electrical items and accessories occurring on or in the construction to be removed shall be removed and reinstalled or maintained in an undisturbed condition; disconnection of power and removing the wiring and conduit back to source.

Where specified, removal of the roof covering materials and structural elements shall be carried out by a steady crew of skilled team who are thoroughly experienced with materials and methods in roof works.

Debris, rubbish and other materials resulting from the removals and demolition work from the building site shall be removed immediately, transported and materials legally disposed off-site.

Burning of removed materials shall not be permitted on the job site.

Upon completion of removal work, tools, equipment and demolished materials that is not to be re-used shall be removed from site. Protection shall be removed and removal areas shall be left broom clean.

Demolition performed shall be repaired in excess of requirements. Structures and surfaces to remain shall be returned to condition prior to commencement of selective demolition and removal work. Adjacent construction or surfaces soiled or damaged by selective demolition shall be repaired.

Any and all damages to all property and finishes caused by the removals and demolition work shall be promptly repaired to the Engineer’s satisfaction and at no extra cost.

Selective demolition operations and debris removal shall be conducted in a manner to ensure minimum interference with streets, walks and traffic.

All equipment, materials, and items removed shall remain the property of the owner of the specific building from which they were removed. The Engineer and the owner of the building shall be given 7 days notice before removing material from site. Equipment, material and items not desired to be reused or retained by the Engineer and owner shall be removed from the site by the Contractor. The Engineer shall designate which equipment, materials and items will be retained.

2.8.4. Plastering

The plastering works include, but not necessarily limited to, the cement plastering of surfaces at the selected areas of the building as indicated on the drawings, in accordance with the relevant unit price definitions.

Plaster works shall be directly supervised by a full-time foreman who has successfully completed at least three projects similar in scope and type to required work. Foreman shall be on site daily for duration of work of this Section.

Plaster works shall be carried out by a steady crew of skilled mechanics who are thoroughly experienced with materials and methods specified and have a minimum of three years experience with work on historic buildings similar to that required by this Section. In acceptance or rejection of work of this Section, no allowance shall be made for workers' incompetence or lack of skill.

Contractor shall provide Engineer access for observation and inspection of mock-ups and ongoing work and for inspection for acceptance of completed work. Engineer shall be provided with access to within 1m of each and every area of work applied. No approval shall be given before the Engineer is provided with access to work surfaces.

If Contractor moves scaffolding or staging before providing Engineer with access to within 1m of each and every surface, Contractor shall reinstall scaffolding and/or rigging to provide for close-up inspection by Engineer at no additional cost.

Contractor shall keep on-site and available for inspection a daily log describing plaster operations. Log shall record temperature at beginning and ending of work, weather conditions, whether surface was wet or dry prior to beginning work, personnel on site, areas painted and procedures used, areas inspected and accepted, replacement of tools.

Accurate instruments shall be maintained for measuring temperature at project site to allow assessment of conditions at various locations on building during plastering.

Temperature shall be measured before beginning and during progress of work as required ensuring compliance with all specified conditions for plastering.

Submittals

- Qualification data for personnel specified in "Quality Assurance" Article that demonstrates that personnel have capabilities and experience complying with requirements specified.

- Manufacturer's published technical data for each product to be used in work of this

Section including recommendations for application and use. Test reports and certificates verifying that product complies with specified requirements.

- Prior to commencing plastering operations, a complete detailed schedule for mock-ups and for completion of plastering. After painting operations commence, updated schedule on a weekly basis.

- Copy of daily log to Engineer each week.

- Manufacturers' specifications and application instructions for each type of material specified

- Samples of the materials, prior to installation, in clearly labelled containers, as required by the Engineer.

Before beginning the plastering, mock-ups shall be prepared to provide standards for the works. Plastering shall not be proceeded with until Engineer has accepted mock-ups. Mock-ups shall be located as directed by Engineer.

48 hours notice shall be provided to Engineer prior to start of each mock-up. Mock-ups shall be performed using crew that will be executing the work and other requirements.

Mock-ups shall be allowed using mortar to dry for seven days to allow mortar to reach final colour as well as the potential problems to appear. Engineer shall be notified when mock-up it is ready for review.

Mock-ups shall be repeated as necessary to obtain Engineer's acceptance.

Accepted mock-ups in undamaged condition may be incorporated into the Work.

Accepted mock-ups shall represent minimum standards for brick renovation and rehabilitation.

Subsequent brick renovation and rehabilitation work that does not meet standards of accepted mock-ups shall be rejected.

100 x 100 cm minimum size mock-ups shall be prepared for each different plaster specified on specified locations on buildings.

Manufactured materials shall be delivered in original sealed container, with manufacturer's label intact and legible.

All cement and sand shall be stored off ground, under cover and in a dry area.

Contagious work shall be protected from soiling, spattering, moisture, deterioration and other harmful effects which might result from plastering.

All persons, whether or not involved in the works shall be protected from harm caused by or resulting from work.

Building elements and finishes shall be protected from damage or deterioration caused by works. Damage to materials or finishes shall be repaired to satisfaction of Engineer at no additional cost to Employer.

Open joints and areas from which units have been removed during periods when work is suspended shall be covered to ensure materials or finishes are not damaged by water penetration.

Grout, mortar, and patching materials shall be prevented from staining exposed faces of masonry.

Membranes, insulation blankets, and other materials used to cover works shall be flame retardant and fire resistant.

Drawings are two-dimensional representations of three-dimensional objects and do not show all surfaces. Work shall be performed on all surfaces of projections, reveals, ornament, and other elements associated with areas on which work is indicated.

Engineer shall be provided with access on a regular basis to allocations on which mock-ups are being carried out, on which work is ongoing, and where work has been completed to allow for inspections and approvals.

Means of access and safety precautions required to facilitate inspections and approvals shall be provided.

Frozen materials shall not be used in plaster mixes.

Plaster shall not be applied to surfaces that are frozen or contain frost, or when temperature of air or masonry is expected to drop below +5 degrees Centigrade within 72 hours, as predicted for Mardin City area, by State Institute of Meteorology.

Work shall not begin when any part of wall or materials in use are frozen or subject to freezing.

Plaster shall not be applied when ambient temperature is less than +5 Centigrade.

Required temperatures shall be maintained for a minimum of 24 hours prior to application, during application and until plaster has cured.

In very hot weather, the newly plastered wall shall be protected from direct sunlight to prevent premature drying out. In very hot dry weather it may be necessary to retard rapid drying out by spraying the surface of plaster with a fine mist of spray from an ordinary hand held spray 0.5-1 meter away from the surface of wall.

Plaster installation shall be coordinated with all other work by other trades supported by or penetrating walls including windows, doors, rainwater goods, cables and fittings.

Aggregates shall be sand aggregate, river sand free of soluble salts and other substances affecting plaster and substrate.

Mixes shall be tested and may be changed in accordance with Engineer's instructions without additional cost to the Employer.

Mortar Mixing:

A. Cementations and aggregate materials for plasters shall be mechanically mixed to comply with applicable reference standard and with recommendations of plaster manufacturers.

B. Hand mix lime and aggregate materials, mortar mills shall be preferred. Machine mixing shall be allowed only for coarse mortar to be followed by hand work before application.

C. All mixes shall be made by "volume" measure. The accuracy of mixes is of great importance and it shall not be allowed to judge the proportions of a mix by the shovel-full. Any workmen found judging the proportion of a mix by the shovel-full shall be sent off site and forbidden to work on contract works.

Plastering work shall be performed in a systematic manner with using methods as required to complete the work as indicated on the drawings in accordance with the requirements of the relevant unit price definitions.

All masonry surfaces shall be cleaned from dust and debris and obsolete fixtures etc., rake loose mortar from joints. Decayed plaster shall be removed until a sound surface is reached. Patch and fill large holes and minor cracks with mortar same as base coat mix.

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Common Technical Specifications for Restoration Works of Yavuz Akinci And Akcurun Historical Buildings In Kilis Province

1. CONSTRUCTION WORKS-YAVUZ AKINCI BUILDING

01-GROUND FLOOR

Work Item No.	04.644/02B		**Line No:** 1
Item Title	4+4 mm in thickness non-color transparent 0.76 PVB-coated laminated glass	**Unit**	m2
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description			

Work Item No.	14.015/2		**Line No:** 2
Item Title	Narrow, deep excavation in soft rock of any depth manually or using compressors and explosives	**Unit**	m3
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The price for 1 m3 of excavation for making the excavation, removing off the excavation pit, filling in the remaining excavation gaps after productions or construction are completed, removing the excess part up to 4 m or loading onto vehicles, unloading at landfill, explosion or bank site, spreading, roughly fixing the base and side walls of the excavation site; including all types of materials and waste, workmanship, costs of machinery and equipment, contractor's profit and overhead costs. Measurement: Excavation volume shall be calculated over the application drawings of the excavation. NOTE: 1) This price does not include the costs of water surcharge, shoring, transport, watering, compacting. 2) Where it is not possible to excavate by machine (e.g. when the machine cannot enter, or is not allowed to enter or cannot travel to the work site), or if irreparable damage is to occur when the excavation is made by machine (protection or preservation site etc.), the unit price for manual excavation shall be applied after the construction inspection staff surveys the site and gives technical justifications, and the administration approves. 3) For excavation with depth greater than 2.00 m, the depth surcharge at Work Item No. 14.040 shall additionally apply. 4) Where explosives are not allowed for use in the construction site; it shall be applied with the written permission of the administration.		

Work Item No.	18.194/IB		**Line No:** 3
Item Title	Removal of all types of wooden door wings, door frames and windows	**Unit**	m2
Book	Iller Bank (Bank of Provinces) 2006 and after (ILC)		
Technical Description	The price for 1 m2 of removal of all types of wooden door wings, door frames and windows for carefully removing the wooden door wings, door frames and windows as requested by the administration, transport to the designated location, stacking and delivery to the administration; including all types of workmanship, transport, loading and unloading costs, costs of machinery and equipment and contractor's profit and overhead costs.		

Work Item No.	3162		**Line No:** 4
Item Title	Replacing the degraded parts of conventional base profiled door wings and door frames with 1st class pine timber	**Unit**	m2
Book	Ministry of Culture (KUB)		
Technical Description	The price for 1 m2 of removing the degraded, broken parts of conventional base profiled door wings and door frames and repairing with pine timber to the original, making the inoperational parts operational, attuning the wing and frame for operation; including all types of workmanship, materials, horizontal and vertical transport at work site, contractor's profit and overhead costs. Measurement: Doors, wings and frames which are repaired and attuned shall be calculated as m2.		

Work Item No.	B.04		**Line No:** 5
Item Title	Installing the latch (espagnolette handle and lock catch) yellow brass monobloc screw-mounted	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description			

Work Item No.	B.16		**Line No:** 6
Item Title	Installing the hinge	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description			

Work Item No.	KGM/18.185		**Line No:** 7
Item Title	Demolishing the concrete construction with & without iron without using explosives	**Unit**	m3
Book	General Directorate of Highways post-2012 (KGM)		
Technical Description	Demolishing the concrete construction with & without iron without using explosives Costs Included in the Unit Price: Demolishing or dismantling the concrete construction with & without iron without using explosives according to the designated demolition method; loading the materials from the demolition and dismantling onto vehicles, transporting to a distance of 100 m in the ultimate average, unloading, spreading over in the form of layers and grading, or landfilling at a site to be designated by the administration; including all types of workmanship, materials, costs of machinery and equipment and contractor's profit and overhead costs necessary for the execution of all works excluding those listed under "Costs Not Included in the Unit Price" below. Costs Not Included in the Unit Price: Transporting the materials from the demolition and dismantling to a distance longer than 100 m in the ultimate average, sorting out the irons coming out of the demolished concrete construction with iron, sorting out usable stones and bricks out of the demolition, watering and compacting works done during the landfilling of the materials. Measurement: Volume in cubic meters of the concrete construction with & without iron measured before demolition without space. Payment: To be made over the unit price for m3 in the Unit Price Bid Chart at Work Item No. KGM/18.185 "Demolishing the concrete construction with & without iron without using explosives".		

Work Item No.	SPECIFIC-1		**Line No:** 8
Item Title	Making color or non-color grid floor coating with traditional cement finish	**Unit**	m2
Book	Project-specific (PRJ)		
Technical Description			

Work Item No.	SPECIFIC-2		**Line No:** 9
Item Title	Repairing the color or non-color grid floor coating with traditional cement finish	**Unit**	m2
Book	Project-specific (PRJ)		
Technical Description			

Work Item No.	V.0201		**Line No:** 10
Item Title	Price for bottoming stone (with quarry stone)	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of bottoming stone; for extracting the stones from quarry as necessary and at required dimension depending on the place of use, sifting out degraded ones, crushing big ones; including materials and workmanship and horizontal and vertical transport at construction site, unloading. Measurement: The price shall be paid for the volume in m3 as found by multiplying the bottomed area and the average stone thickness.		

Work Item No.	V.0204		**Line No:** 11
Item Title	Price for timber for front work scaffold of any height	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for timber used in the space per m2 of work scaffold; for making the work scaffold (including suspension work scaffold) to be used as surface area at external covering, jointing, plastering in the construction provided that the timber comply with the requirements in the Works General Technical Specifications of the Ministry of Environment and Urbanization; including all materials, waste, workmanship, loading at work site, horizontal and vertical transport, unloading, contractor's profit and overhead costs. Measurement: Where it is used for wall, wall covering, plastering, jointing and similar works; the distance between the surface on which the feet of the scaffold rest and the lower surface of the eaves shall be taken as the height; and the length at ground of the building where the scaffold is erected shall be taken as the width. The multiplication of the width and height shall be taken as the surface area of the work scaffold. NOTE: 1-Once a work scaffold is erected, it shall be assumed that all works that require scaffolding at thin position have been done. And the price for timber for the work scaffold shall be paid only once. However, where the work scaffold is left idle for reasons unavoidable, and in a situation that may cause danger; the work scaffold shall be dismantled with written permission from the administration; and when it is re-erected, the price for workmanship shall be paid for a second and last time, no price for timber shall be paid. The width of work scaffold may not be greater than 1.50 m on the fronts from strut to strut. 2-Where 2 years pass from the date of erecting the work scaffold; the payment shall be made by multiplying the measured amount by 1.25 unless the work is prolonged for reasons attributable to the contractor.		

Work Item No.	V.0208/A		**Line No:** 12
Item Title	Price for timber for all types of woodwork production with 1st quality pine timber	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of timber; for all types of woodwork production with 1st quality pine timber under the specifications of Work Item No. V.0208; including all materials and workmanship. Measurement: The price shall be paid for the volume of the used timber as measured on the application drawings or in position; waste shall not be considered. NOTE: The price in this Work Item shall apply when the sash bars of such productions as windows, doors, cabinets, window walls, frames which must be changed from the norm or round timber.		

Work Item No.	V.0209		**Line No:** 13
Item Title	Price for stone in the rubble wall	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of rubble stone in the rubble wall; for extracting the rubble stone from quarry, crushing, selecting, sizing according to the samples, sifting out degraded ones; including all materials, workmanship, waste, unloading construction site, horizontal and vertical transport, contractor's profit and overhead costs. Measurement: The price shall be paid for the volume of the wall built by measuring on the application drawings if any, otherwise of the production in m3. The space for mortar and individual spaces smaller than 0.25 m3 shall not be deducted. NOTE: This price includes the front surcharge.		

Work Item No.	V.0227/6		**Line No:** 14
Item Title	Price for freestone on flat surface of limestone, lymra stone, chalk etc. (no price for dressability and face-making to be paid)	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of stone in the flat surface productions; which stone is finished, raw, unpolished, complies with the requirements in the Works General Technical Specifications of the Ministry of Environment and Urbanization, is well-formed, without layers, veinless, without cracks, similar to the original sample in the construction or in the quality as required by the administration; for extracting the limestone, lymra stone, chalk etc. stones from quarry, shaped geometrically and made into blocks in the factory; including transport to production site, waste during transport and all types of materials and workmanship, unloading construction site, horizontal and vertical transport, contractor's profit and overhead costs. Measurement: The price shall be paid for the volume in m3 of freestone in the finished production by measuring the lines passing the outermost points. Carving, profiles and spaces smaller than 0.05 m3 shall not be deducted; waste shall not be paid. NOTE: 1-The price for stone (V.0227/5) does not include dressability surcharge and face-making. If chiseling and bush hammering are done, they shall be paid at their respective Work Item 2-The workmanship for production of such materials shall be paid dressability surcharge depending on the hardness degree of the stone.		

Work Item No.	V.0316		Line No: 15
Item Title	Removing freestone on the floor or marble flooring	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of removal of freestone or marble flooring; for removing the freestone or marble flooring stones carefully and without damaging others around as in the application drawings approved by the Board or as required by the engineering supervisor, stacking the usable ones at a location in the construction site, storing the rubbles at a location designated by the engineering supervisor; including all materials and workmanship, waste, horizontal and vertical transport at work site, contractor's profit and overhead costs. Measurement: The area from which flooring stones are removed shall be measured in m2.		

Work Item No.	V.0337		Line No: 16
Item Title	Removing cement finish	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of removing the degraded and swelled cement finish in the parts as designated by the engineering supervisor and cleaning the location; including all types of materials and workmanship. Measurement: The area of the removed cement finish shall be measured in m2.		

Work Item No.	V.0338		Line No: 17
Item Title	Dismantling wooden slabs and ceiling beaming and wooden carcass	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of dismantling wooden slabs and ceiling beaming and wooden carcass; for, according to the direction by the engineering supervisor, dismantling, removing the nails in the dismantled woodwork, transporting to and storing at the designated location at the construction site; including all types of materials and workmanship. Measurement: The price shall be paid for the surface area in m2 of the beaming or carcass which is dismantled, cleaned and stacked.		

Work Item No.	V.0346/01		Line No: 18
Item Title	Replacing freestone everywhere except minarets	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of replacing freestone; for replacing the freestone production at places where it is not possible to remove or demolish without damaging those around at the depth required by the engineering supervisor, cleaning and washing the spot, stacking the removed rubble at a location in the construction site; including loading at construction site, horizontal and vertical transport, unloading, all types of workmanship, costs of machinery and equipment, contractor's profit and overhead costs. Measurement: The volume of the replaced stone shall be calculated in m3.		

Work Item No.	V.0402/07		**Line No:** 19
Item Title	Rasping with care the layer (5-10 cm) made of imitated concrete, mosaic and imitated stone which is adhered to the original structural surface on the freestone or rubble stone surfaces	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of rasping; for the work of rasping the layer (5-10 cm, 10 included) made of imitated concrete, mosaic and imitated stone on the freestone or rubble stone surfaces without damaging the wall surfaces, cleaning the residual cement; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the rasped surface, measured without taking into account profiles and similar indents or bumps. NOTE: Where joints are opened, they shall be paid at the respective Work Item. The depth shall be documented on the surface rasped.		

Work Item No.	V.0406		**Line No:** 20
Item Title	Whitewash rasping with wire brush on all types of conventional brick, marble and freestone surfaces excluding carved surfaces	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of whitewash rasping with wire brush on all types of conventional brick, marble and freestone surfaces excluding carved surfaces according to the direction by the engineering supervisor, without making scratches on the surface, scraping the whitewash that has penetrated the pores in the surface and profile bottoms; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the rasped surface, measured without taking into account profiles and similar indents or bumps. Where joints are opened, they shall be paid at the respective Work Item.		

Work Item No.	V.0501		**Line No:** 21
Item Title	Workmanship for bottoming work	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of bottoming work; for, according to the direction by the engineering supervisor, compacting by pounder the surface to be bottomed, laying the bottoming surface broken in pyramid shape in 15 x 15 cm of bottom area on average and 15 cm in height by compacting side by side, and compacting the laid bottom; including all types of materials and workmanship. Measurement: The workmanship price shall be paid for the volume in m3 found by multiplying the bottoming area by average thickness.		

Work Item No.	V.0502/A		**Line No:** 22
Item Title	Excavation of demolition rubble mixed with soil at historical works	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of excavation; for excavating the mix of demolition rubble, soil, bricks, rubble stone in the previously demolished places at the designated sections by the direction by the engineering supervisor of the work to be repaired, sorting out usable bricks and stones, moving the remaining rubble and soil to the designated location in the construction site; including all materials and workmanship. Measurement: 1-The price shall be paid for the volume in m3 of the excavated place found by multiplying the surface area by average depth. The volume of usable stones and bricks that are taken out shall not be deducted. 2-If the transport is not included in the approximate cost, the soil and rubble piled in the construction site shall be transported to the site designated by the local municipality. Transport analysis shall be made according to the transport formula and the transport price shall be additionally paid.		

Work Item No.	V.0702/01		**Line No:** 23
Item Title	Making and installing in position the conventional small bit iron fence (bits made of iron) without frame and bits made of hardened lead	**Unit**	KG
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 kg of iron fence; for, according to the instruction or shape given by the administration, making small bit iron fence made of processed iron, bit size of 2.5 x 2.5 x 2.5 cm, cold forging (if requested) before the iron fence is installed in position, inserting in the slots of at least 8 cm in depth to be opened in jambs without leaving gap; including loading at construction site, horizontal and vertical transport, unloading, all types of materials, workmanship, waste, contractor's profit and overhead costs (excluding the cost of drilling holes). Measurement: The finished product shall be weighed before installation. The weight shall be captured in a written report. When it is installed in position and confirmed as operational, action shall be taken according the kg value in the report. NOTE: When a frame of all types of solid or box shape iron is placed around the fence; the price for the iron used for the frame shall not be paid at this Work Item; it shall be paid at its respective Work Item.		

Work Item No.	V.0705		**Line No:** 24
Item Title	Workmanship for dismantling the existing iron fence carefully, numbering and installing in position	**Unit**	KG
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 kg of dismantling the existing iron fence; for, according to the direction by the engineering supervisor, numbering and labeling the existing iron fence prior to dismantling, entering in the relief drawings, dismantling carefully after entering in the relief drawings, carefully clearing the residues such as concrete, mortar etc. on the surface of the parts inserted in the coping or stone wall, transporting to the place of repair, re-installing in position; including all types of materials and waste, workmanship, loading at construction site, transport, unloading, contractor's profit and overhead costs. Measurement: The finished product shall be weighed before installation. The weight shall be captured in a written report. When it is installed in position and confirmed as operational, action shall be taken according the kg value in the report.		

Work Item No.	V.0815/A		**Line No:** 25
Item Title	Workmanship for making flat and curved tiling using the existing tiling freestone and lime mortar with pozzolanic admixture	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of tiling; for, according to the direction by the engineering supervisor or the detailed drawing to be provided by the administration, making flat and curved tiling using the existing tiling freestone, placing the stones in position using the lime mortar with pozzolanic admixture given at Work Item No. V.0104C and giving the necessary flow slope, sawing the vertical joints to bring them together with no jointing gap, and filling in the gap in-between and underneath with the slacked lime grouting to leave no gap, cleaning the mortar leftovers on stone surfaces by fine fine-toothed hand comb; including all types of materials and workmanship. Measurement: The price shall be paid for the surface area in m2 of the top surface in the drawing or production of the finished freestone tiling.		

Work Item No.	V.0817/A1B		**Line No:** 26
Item Title	Workmanship for making flat or curved tiling of 1-2 cm in width using the existing freestone of 9-12 cm in thickness and lime mortar with pozzolanic admixture (stone hardness 1.5 or greater)	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making flat or curved tiling of 1-2 cm in width using the existing freestone of 9-12 cm (12 included) in thickness and lime mortar with pozzolanic admixture according to the direction by the engineering supervisor and specifications of Work Item No. V.0817/01C and the detailed drawing to be provided by the administration; including all types of materials and workmanship. Measurement: The price shall be paid for the surface area in m2 of the top surface in the drawing or production of the finished freestone tiling.		

Work Item No.	V.1104/A		**Line No:** 27
Item Title	Workmanship for making flat covering of 15-25 cm average in depth using freestone and Khorasan mortar with pozzolanic admixture	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of workmanship; for, according to the specifications of Work Item No. V.0227/1-.....-V.0227/6 and the direction by the engineering supervisor or the application drawing to be provided by the administration, making flat covering of 25 cm average in thickness (depth), opening grouting grooves on stone edges, chiseling the back surfaces of the stone to ensure adhesion of mortar to the stone, placing the stones on single file at horizontal alignment to leave no gap as a coin cannot pass through horizontal or vertical joints and pouring the dosage 400 cement indicated in Work Item No. V.0130A in thin form in the back in each row, and filling to leave no gap in the joints or backs, sealing the joint surfaces with a non-staining material (mud or paste) to prevent the flow of cement grout out of the joints, clearing the possibly remaining stone particles and mortar stains on the surface of freestone upon finishing the production by chiseling for stones with hardness less than 1.5, and by bush hammering for stones with hardness greater than 1.5 without degrading the stone surface, cleaning the surface of the stone and restoring to the original; including all types of materials and workmanship (excluding the cost of stones). Measurement: The price shall be paid for the outer surface area in m2 of the covering made. The spaces for doors and windows shall be deducted; the corners of turning covering and the interior surfaces of doors and windows covered shall be included in the surface area. NOTE: The price for stone shall be paid at Work Item No. V.0227/1-.....-V.0227/6 etc. as appropriate depending on the contract. Workmanship for chiseling and bush hammering is included.		

Work Item No.	V.1131		**Line No:** 28
Item Title	Workmanship for making flat freestone covering of 25 cm average in thickness at replaced locations	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of replacement; for, according to the direction by the engineering supervisor or the existing original sample or the application drawing to be provided by the administration, replacing with freestone of 25 cm average in thickness, making covering as indicated in the specifications, dressing the corners and edges of stone surfaces in own alignment by fine-toothed hand comb, dressing at least 5 cm wide sections of the lower and upper bed surfaces and vertical joint surfaces by fine-toothed hand comb, and the remaining parts by coarse-toothed hand comb with a 10 degree of slope backwards, placing the covering stone in alignment and in position to leave no gap by sawing the joints of stones, filling the dosage 400 cement mortar and grout in side joints and in the backs of stones to leave no gap, clearing mortar leftovers on joint surfaces, loading at construction site, horizontal and vertical transport, unloading; including all materials and waste, workmanship costs, contractor's profit and overhead costs, (excluding the cost of stones). Measurement: The price shall be paid for the outer surface area in m2 of the covered freestone. NOTE: The price for stone shall be paid at Work Item No. V.0227/1-.....-V.0227/6 etc. as appropriate depending on the contract. Workmanship for chiseling and bush hammering is included.		

Work Item No.	V.1660/F03		**Line No:** 29
Item Title	Making polished flat plaster with Khorasan mortar using plastering float or steel trowel	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	[The price for 1 m2 of] making polished flat plaster using plastering float or steel trowel; for cleaning and washing the surface to be plastered, plastering the lower layer with Work Item No. V.0118/A Khorasan mortar (for laying and roughcast) (lime:aggregate=1:2) in 4 cm of thickness on average, and the top layer with Work Item No. V.0118/C Khorasan mortar (for finishing coat) in 1.2 cm of thickness, making the surfaces smooth; including all types of materials and workmanship. Measurement: The price shall be paid for the surface area in m2 of the plastered surfaces. The area of all gaps shall be deducted. (Gaps shall be deducted).		

Work Item No.	V.1751/A		**Line No:** 30
Item Title	Making joints in rubble walls using Khorasan mortar with pozzolanic admixture	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making joints; for opening the joints according to Work Item No. V.0413 or V.0416 as appropriate in the stone wall where joints are to be made, clearing any plant roots, washing the surface, then jointing the wall surface with Work Item No. V.0131B mortar, preventing any mortar on wall surface, press finishing the joint surface by the tip of steel trowel without touching the joint surface by brush, watering the joints at 8-hour intervals until the completion of the mortar hardening; including horizontal and vertical transport, unloading, all materials and waste, workmanship costs, contractor's profit and overhead costs (excluding the cost of opening joints). Measurement: The price shall be paid for the area in m2 of the jointed area. All gaps shall be deducted.		

Work Item No.	V.1997		**Line No:** 31
Item Title	Making columns, cushions (/echinus) and structural beams of 1st quality pitch pine in square, rectangular, multi-cornered or round section	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of making columns, cushions (/echinus) and structural beams of 1st quality pitch pine in any size with more than four corners and round section according to the direction by the engineering supervisor or the existing original sample or the detailed application drawing to be provided by the administration, finishing the surfaces, installing in position; including all types of materials and workmanship. Measurement: The price shall be paid for the volume in m3 of woodwork production installed in position.		

Work Item No.	V.1997/B		**Line No:** 32
Item Title	Workmanship for making conventional profiles at top ends of beams made of hard timber up to 15 x 15 cm section	**Unit**	pcs
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 piece of making conventional profiles at top ends of beams made of hard timber up to 15 x 15 cm section in the specifications of Work Item No. V.1997/A according to the direction by the engineering supervisor or the existing original sample or the application drawing to be provided by the administration; including all types of materials and workmanship. Measurement: If conventional profiles are made on the tops of installed beams, the price per piece shall be paid.		

Work Item No.	V.2041/B		**Line No:** 33
Item Title	Making and installing in position wooden windows of single plane, arched, concave or convex surface, made of 1st quality pitch pine	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making and installing in position the conventional wooden windows of arched, concave or convex surface, made of 1st quality pitch pine in the specifications of Work Item No. V.2040/A according to the direction by the engineering supervisor or the existing original sample or the application drawing to be provided by the administration. Measurement: The price shall be paid for the area in m2 as a single surface for the curved face areas (including the frame) of concave and convex windows, found by multiplying the width of windows and the height passing at the top point. If windowsills are made, they shall be paid out of the respective Work Item.		

Work Item No.	V.2105		**Line No:** 34
Item Title	Applying synthetic varnish wood preservative on the wood	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of sanding the wood, cleaning the sanding dust and applying 2 coats of synthetic varnish wood preservative on the wood surfaces, protecting against dust and humidity until the varnish dries, all according to the direction by the engineering supervisor; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the varnished surfaces. Indents and bumps on the profiles or bases shall not be taken into account.		

Work Item No.	V.2105/A		**Line No:** 35
Item Title	Applying two coats of wood preservative on the wood	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of applying two coats of wood preservative on the wood; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the varnished surfaces. Indents and bumps on the profiles or bases shall not be taken into account. Both faces of the door wings, and one face of the windows shall be taken into account. The glass spaces shall not be deducted from the glass walls and windows, but shall be from the doors.		

Work Item No.	V.2109		**Line No:** 36
Item Title	Dip-treating wood with preservative	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of wood used in the production; where the pieces of sawn wood to be used in the production shall be dipped in the preservative treatment pool, and held dipped for such time that will allow 1 m3 of wood to absorb 14 lt of preserving substance; materials taken out of the dipping pool shall be kept until drying, without touching one another; after a drying period of 48 hours, the wood shall be taken to production; where in production the wood is to be cut, the sawn parts shall be treated with preservative by applying the preserving substance by brush. Measurement: 1 m3 of sawn wood.		

02-ELECTRICAL WORKS-YAVUZ AKINCI HOUSE

Work Item No.	19.3.1/003		**Line No:** 37
Item Title	25 A 00 size LV bladed NH fuse plug	**Unit**	pcs
Book	Turkish Electricity Distribution Corp. (3rd Region) (TE3)		
Technical Description	a) Materials: NH LV fuse with body and bladed plug, compliant with the specifications and standard. b) Installation: As specified in Work Item No. 19.2.b.		

Work Item No.	19.3.1/004		**Line No:** 38
Item Title	32 A 00 size LV bladed NH fuse plug	**Unit**	pcs
Book	Turkish Electricity Distribution Corp. (3rd Region) (TE3)		
Technical Description	a) Materials: NH LV fuse with body and bladed plug, compliant with the specifications and standard. b) Installation: As specified in Work Item No. 19.2.b.		

Work Item No.	25.17.1/001		**Line No:** 39
Item Title	3×80 A, Icn=8 kA, 1.7×Icn, Power Factor: 0.5 compact type automatic circuit-breakers	**Unit**	pcs
Book	Turkish Electricity Distribution Corp. (2nd Region) (TE2)		
Technical Description	a) Materials: As specified in Work Item No. 25.a. b) Installation: As specified in Work Item No. 25.b.		

Work Item No.	30.1/001		**Line No:** 40
Item Title	Galvanized earthing line and burying	**Unit**	m
Book	Turkish Electricity Distribution Corp. (3rd Region) (TE3)		
Technical Description	a) Materials: Earthing line as specified in Work Item No. 30. b) Installation: If excess galvanized earthing line is used when necessary, each excess meter of line shall be installed to the ground, duct, wall or pole. Including the cost of all types of materials for installation and the cost of installation.		

Work Item No.	30.3/001		**Line No:** 41
Item Title	2 m, galvanized 65×65×7 angle, 5 m line and burying	**Unit**	pcs
Book	Turkish Electricity Distribution Corp. (2nd Region) (TE2)		
Technical Description	a) Materials: Galvanized earthing rod of 2 m in length and galvanized earthing line of 5 m in length or 70 mm2 galvanized stranded steel wire as specified in Work Item No. 30. b) Installation: As specified in Work Item No. 30.1.b. (Where it is necessary to use an earthing line longer than 5 m, the unit price for materials and installation in Work Item No. 30.1.1 shall additionally be paid.)		

Work Item No.	31.1.B.b/060		**Line No:** 42
Item Title	75/5-5 A 17.5 kV MV current transformers (primary single winding, secondary double winding)	**Unit**	pcs
Book	Turkish Electricity Distribution Corp. (3rd Region) (TE3)		
Technical Description	a) Materials: Instrument, protection or instrument and protection current transformers manufactured as dry type (with epoxy resin as insulation material) in mono-phase units, to be used indoors, conforming to its specifications and standard. Current transformers which are designed with short time thermal current in 1 second (100 to 1000) In, and dynamic current as 2.5 times the short time thermal current, and meet the following specifications for all conversion ratios; with instrument current transformers with nominal voltages 1-7.2-12-17.5-36 kV; nominal frequency 50 Hz, nominal power 5-15 VA at LV, 30 VA at MV; single or double winding with primary current 5A to 3000A; single, double or triple windings with secondary currents 1A (Tank protection), 5A, 5-5A, 5-5-5A; protection current transformers with saturation factor n<5 at accuracy class 0.5-1; current transformers with saturation factor n>10 at accuracy class 2-3; saturation factor n>10 at accuracy class 1 in differential protection. Since the unit prices for current transformers are calculated on the basis of 100 In short time thermal current and written in the unit price schedule; the unit prices for current transformers other than 100 In to be manufactured shall be calculated using the coefficients in Work Item No. 31.1. b) Installation: Transporting to work site, including insurance costs for transport, and installing the current transformers in accordance with the application drawings and specifications. The material and installation cost of detail materials such as bolts, nuts, connectors etc. shall be included in the installation price. The price for profile irons needed for the installation of MV current transformers shall be additionally paid according to Work Item No. 5.4.1. or 5.5.2, and wires according to Work Item No. 32 (the material and installation cost of the connection wires needed for the installation of LV current transformers are included in the installation unit price).		

Work Item No.	702.102		**Line No:** 43
Item Title	Additional sheet metal panel 900 mm	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Additional sheet metal panels shall be manufactured in the same specifications as Work Item No. 701-100 with the following differences: These panels shall have sheet metal only on the front. They shall be manufactured with the 1st panel, and the wire-mesh box by the panelboard shall be present only in the last panel. The connection of adjacent panels shall be made by bolting the shells.		

Work Item No.	704.101		**Line No:** 44
Item Title	Over-plaster sheet metal panelboard 0.05-0.10 m2 (TS EN 61439-1/2)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Over-plaster panelboards made of DKP sheet metal of at least 1 mm in thickness shall be built at places where it is not needed to install panels. The panelboard shall consist of three parts. It shall have a lockable cover, sheet metal box of angle or profile structure, lock that can be opened by a locksmith-made key, an internal cover with necessary holes to command the devices on the panelboard on the chassis that carry the devices on the panelboard, the sheet metal box shall be welded, and have connection means that allow easy mounting and dismounting of the chassis. There shall be clearance on the side where conductors will enter depending on the application drawing of the box, and this clearance shall be closed by a sheet metal lid fixed by screw on the box. Holes for the wire entries shall be opened on the cover and hole nozzles shall be fitted with bakelite or plastic sleeves to avoid the degradation of conductor's insulation. The chassis shall be made of DKP sheet metal angled or profiled; and the panelboard made of sheet metal shall be placed on. It shall be possible to fix all devices, connectors etc. materials on it. The internal cover which has holes for controlling the devices on the panelboard shall be easily mountable on the chassis. When the internal cover is removed, all connections and devices in the panelboard shall be out in the open, and this cover shall have labels for each device. The three parts named above shall be separable without the panelboard dismounted from its position. The application drawings for the installation of devices on the panelboard shall be prepared according to the type application drawings, and approved by the administration for approval, then manufactured. For the phase lines on the panelboard, there shall be an adequate number of grey, black and brown colored non-flammable type connectors or busbars, light blue colored neuter and green/yellow colored earthing busbars conforming to TS 6429; all iron parts shall be applied one coat of read lead and two coats of matte gun paint; and the panelboard cover shall be connected to the main body and earthed by flexible conductors. Supplying, transporting to work site and installing the panelboard. Delivering in working condition including all types of materials, connectors and workmanship Measurement: After comparing the surface area of the internal to the value in the approved application drawing, the payment shall be made according to the measure in m2 of this area. This price shall include all types of small materials, paint, connection, installation. The price for fuses, circuit-breakers etc. and earthing system on the panelboard shall additionally be paid.		

Work Item No.	715.308		**Line No:** 45
Item Title	Thermal-magnetic circuit-breaker 3 x 63 A (behind panelboard (TS EN 60947-2)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing the compact circuit-breaker; compact type, fiberglass polyester, body with higher electrical and mechanical strength and conforming to Vo fire resistance rating according to UL-94, made of material resisting constantly at least 150°C, breaking in air-filled medium, starting mechanism independent of hand movement, thermal overcurrent and magnetic short-circuit protective relays (triple protective relays for tri-phase ones), current limiting function, operational short-circuit breaking capacity minimum 50% Icu. Where the breaking capacity is higher than the value indicated below, the prices in Work Item No. 715-300 shall be increased by 20%, the installation prices shall be applied without increase. (I1: Adjusted nominal current, In: Nominal current, Icu: Short-circuit breaking capacity, type tested.)		

Work Item No.	716.301		**Line No:** 46
Item Title	Electric motor protection device 3 x 12 A	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing in position the device; for over-panelboard installation, to be used with tri-phase motors, consisting of electrical circuits, to protect the motor where current is interrupted, voltage goes below or above a certain level, or frequency changes or motor draws 25% more than the nominal current and this goes on for 4 seconds, any of the motor supply lines is interrupted, lamp showing phases onboard, with current setting button, on/off button, stop lamp; including all types of materials and workmanship. NOTE: Where a current transformer is used, the price shall be paid at Work Item No. 725-400.		

Work Item No.	718.101		**Line No:** 47
Item Title	Dry-type non-protective contactor 3 x 10 A	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing the dry-type three-phase contactor; class AC3, for frequent on/off, which can be installed behind the panelboard, without protective relays, with separate control buttons to be installed on the front of the panelboard; including auxiliary contacts, all types of materials and workmanship. Measurement: The number of installed contactors shall be counted.		

Work Item No.	718.102		**Line No:** 48
Item Title	Dry-type non-protective contactor 3 x 16 A	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing the dry-type three-phase contactor; class AC3, for frequent on/off, which can be installed behind the panelboard, without protective relays, with separate control buttons to be installed on the front of the panelboard; including auxiliary contacts, all types of materials and workmanship. Measurement: The number of installed contactors shall be counted.		

Work Item No.	718.103		**Line No:** 49
Item Title	Dry-type non-protective contactor 3 x 25 A	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing the dry-type three-phase contactor; class AC3, for frequent on/off, which can be installed behind the panelboard, without protective relays, with separate control buttons to be installed on the front of the panelboard; including auxiliary contacts, all types of materials and workmanship. Measurement: The number of installed contactors shall be counted.		

Work Item No.	718.201		**Line No:** 50
Item Title	Dry-type thermal protective contactor 3 x 10 A	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing the contactor; same as Work Item No. 718-100 but with a thermal protective relay.		

Work Item No.	718.310		**Line No:** 51
Item Title	Time relay used for lighting control	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site, testing and delivering in working condition the time relay; designed for use in specific voltage limits, with type test reports and CE marking according to Low Voltage Directive 2006/95/EC, Electromagnetic Compatibility Directive 2004/108/EC and TS EN 60730-2-7 standards and directives; providing lighting control according to the time setting, equipped with output contacts, battery, user manual; including all types of small materials.		

Work Item No.	718.521		**Line No:** 52
Item Title	Residual current circuit breaker up to 4 x 40 A (300 mA)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, installing and delivering in working condition the residual current circuit breaker; which is manufactured in compliance with the Regulation on Indoor Electrical Installations, specifications and standards; ensures safety of life and property by breaking the circuit within a duration of 10-30 ms by detecting the fault current occurring on the phases and neutral line when there is a leak current in the electrical installations; operates at 220V at mono-phasic circuits and at 380V at tri-phasic circuits; has a differential coil and a test button to check whether the system is operating; can be installed on carrying rails inside the panel; is protected against external impact; complies with CEE 27 and other international standards, is capable of operating even when the neutral line disrupted at 30 mA life protection and 300 mA for fire protection; including all materials and workmanship.		

Work Item No.	723.401		**Line No:** 53
Item Title	Automatic control central compensation batteries	**Unit**	kVAR
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, installing after being tested by the engineering supervisor for operation with 40 W serial lamps, and delivering in working condition the capacitors or capacitor batteries; needed to ensure energy economy by adjusting the power factor (Cos ø), and avoid over-use of motor excitation currents, with capacitor terminals protected against contact and resistant to discharge, complete with the automatic control reactive current relay, other specifications as in Work Item No. BFT 723-300 (Cos ø m), capacitors, contactors which shall be turned on and off and fuses associated with these circuits, current transformer necessary for Cos ø m and relay, control circuit fuses, pacco switches and thermal-magnetic circuit-breakers included in the price; including all types of materials and workmanship. It shall comply with the Regulation on Amending Energy Market Customer Services published in the Official Gazette of 20 June 2007 issue 26558		

Work Item No.	724.402		**Line No:** 54
Item Title	Automatic fuse switch (3 kA) up to 25 A	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing the automatic fuse; serving also as switch, with 3 kA breaking capacity, 2-and 4-pole types capable of breaking neuter and phase, B and C curve; including all materials and workmanship.		

Work Item No.	724.407		**Line No:** 55
Item Title	Tri-phase automatic fuse switch (3 kA) up to 40 A	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing the automatic fuse; serving also as switch, with 3 kA breaking capacity, 2-and 4-pole types capable of breaking neuter and phase, B and C curve; including all materials and workmanship.		

Work Item No.	724.707		**Line No:** 56
Item Title	Tri-phase automatic fuse switch 40 A (10 kA) (TS 5018-1 EN 60898-1)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing the automatic fuse; serving also as switch, with 3 kA breaking capacity, 2-and 4-pole types capable of breaking neuter and phase, B and C curve; including all materials and workmanship.		

Work Item No.	725.311		**Line No:** 57
Item Title	Multimeter (TS 4417)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	(IEC 6100-6-2, IEC 61000-6-4, IEC 61010-1, TS 4417) Supplying at work site, installing according to the application drawing and delivering in working condition the electronic device connected to electrical panels, capable of measuring more than one parameter, in size appropriate for the panel installation; including all types of materials and workmanship. It shall comply with the Regulation on Electric Meters no. 24314 of 15.02.2001 issued by the Ministry of Industry and Trade. Measuring instruments shall be mountable on the panelboard and built-in type; alternative current measuring instruments be manufactured for 50 Hz frequency. The error class shall be (1.5) according to Turkish Standards. It shall be rectangular, at least 72 x 72 mm, measuring instruments of the same form and size be used on the same panel. It shall be manufactured to prevent ingress of gas, dust and humidity. Glasses shall be non-color and smooth; figures bold and black lined; pointer's electricity fully insulated off the circuit; light, rigid and shaped to allow precision reading; delivering in working condition, including all types of materials and workmanship. For 144 x 144 mm, unit prices shall be increased by 20%, the installation prices shall be applied without increase. Supplying at work site, installing according to the application drawing and delivering in working condition the multimeter which measures 3 phase currents (A) and 3 phase voltages (V); including all types of materials and workmanship.		

Work Item No.	725.722		**Line No:** 58
Item Title	Tri-phase time tariff electronic electric meters 3 x 230/400V, 3 x 20 (120) A	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site, installing and making connections of, delivering in working condition the tri-phase four-wire time tariff electronic type active meter and mount; conforming to IEC 1036-96, TS EN 62053-21, TS 62052-11 standards, brand registered with the Ministry of Science, Industry and Technology and having a Registration Certificate, capable of making measurements within the current and voltage ranges with at most Class 2 error, operating frequency 50 Hz, data interaction with optical port conforming to TS EN 62056-21 standard, the meter capable of dividing the day into 8 parts at minute precision conforming to the on the Regulation on Electric Meters and Regulation on Electricity Market Tariffs, IP 51 protection class (TS EN 60529), manufactured to avoid ingress of dust and water, digital display of 6 integer and 2 decimal digits with lit background on the meter, meter's own circuit having 100 years of real-time clock, conforming to Measuring Instruments Directive and Regulation on Electric Meters (76/891/EC), approved by TEDAŞ.		

Work Item No.	725.904		**Line No:** 59
Item Title	Indication lamp up to 250 VA	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, installing and delivering in working condition the complete indication lamp; recess type, of requested color, lit indication lamp; including the making of connections to fuse and circuit-breaker contacts.		

Work Item No.	727.524		**Line No:** 60
Item Title	1 kV underground wire column and supply line 4 x 16 mm2 nyy (TS IEC 60502-1)	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the underground wire; to be laid, for indoors, over-plaster, on walls, ceiling or ducts by way of brackets or crochets, for outdoors, in ducts; including crossing and safety tubes, all types of materials, crochets, and workmanship. Installing the column or supply line; with phase and neutral conductors with plastic insulation according to the lists in the Regulation on Indoor Electrical Installations; including tubes, crochets, junction boxes, joints, elbows, connectors, iron brackets, paint, all types of materials and workmanship.		

Work Item No.	730.102		**Line No:** 61
Item Title	Underground wire terminal cap 3 x 35+16 mm2	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing the terminal caps for underground wire; including special insulating material, oiled tape, crochets, all types of materials and workmanship.		

Work Item No.	742.113		**Line No:** 62
Item Title	Type J4 built-in point light armature (mirror bulb)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Same as type J3, but with mirror bulb.		

Work Item No.	742.452		Line No: 63
Item Title	LED floodlight up to 40 Watts (220 V AC)	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and delivering in working condition the floodlight; housing and front glass frame made of cast aluminum, coated with oven-dried paint, tempered front glass, resistant to temperatures up to 250°C and impacts, protection class IP 20, coated with silicon seal between the glass and housing, with connection box behind or under the housing, consisting of high-power LEDs with special lenses of minimum 100 lumen per watt, equipped with constant current LED driver and cooler, minimum 30,000 hours of luminous service life, minimum 90% efficiency, operating temperature-20°C to +85°C, with necessary mounting apparatus for surface, wall or ground mounting, manufactured in conformity to TS EN 60598-1, TS 8702 EN 60598-2-5, TS EN 61347-2-13 standards and the Low Voltage Directive 2006/95/EC, placed in the market with CE marking; including all types of materials and workmanship.		

Work Item No.	780.129		Line No: 64
Item Title	Waterproof junction box	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site and installing in position the waterproof junction box; which is in principle the same as Work Item No. 780-127, but differing in the manner of manufacturing and used materials resistant to humidity and weather, conforming to at least TS-3112, wire inlets rubber sealed; including all types of materials and workmanship.		

Work Item No.	782.100		Line No: 65
Item Title	Cable tray systems	Unit	KG
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and delivering in working condition the cable trays; in order to safely carry electrical wires, conforming to TS EN 61537 standard, the dimensions in the approved electrical application drawing and the General Technical Specifications for Electrical Installation; drilling holes on the sheet metal in width and height to carry the wire weight, bending the sheet, opening grooves on the sheet metal longitudinally and traversally by beading to increase the strength and prevent flexing of the sheet; making chemical bathing to remove oil and corrosion; flax coating; preliminary drying; galvanizing by hot dipping in conformity to TS EN ISO 1461 standard; installing on ceiling or walls by hangers or brackets; including all types of materials and workmanship. NOTE: 1-Only the tray weight shall be taken as the basis of measurement. 2-Cover sheet metal, horizontal, vertical jointing pieces and those to be used and direction changing locations, brackets to serve as reduction, carrying, hangers, fixing crochets, bolts, nuts, washers, pins etc. shall be hot dip galvanized. Their prices are included in the unit price; no additional price shall be paid. 3. A certificate of compliance with TS EN ISO 1461 shall be required of the hot dip galvanizing manufacturer.		

Work Item No.	782.204		**Line No:** 66
Item Title	Underfloor triple wire duct, 200 mm in width	**Unit**	KG
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and delivering in working condition the cable trays; in order to safely carry electrical wires through the flooring, conforming to TS EN 50085-1 and TS EN 50085-2-2 standards, the dimensions in the approved electrical application drawing and the General Technical Specifications for Electrical Installation; cutting and bending the sheet metal of at least 1.5 mm and making into sealed ducts in the following dimension, giving shape to make intermediate compartments, making chemical bathing to remove oil and corrosion; flax coating; preliminary drying; galvanizing by hot dipping in conformity to TS EN ISO 1461 standard; transporting to the work site; installing under the floor by adjusting the duct and junction box heights by height adjusting screws; placing junction boxes at necessary places; laying guide wire in the duct (where the floor thickness is low, using “Rabitz wire mesh” on the duct); including all types of materials and workmanship. NOTE: 1-Horizontal, vertical jointing pieces and those to be used and direction changing locations, quadruple connection piece, level adjusting unit, duct junction box with outlets on four sides, duct termination unit, duct outlet boxes, dowels, bolts, nuts, washers etc. shall be hot dip galvanized. The prices for duct junction boxes and multiple outlet boxes shall be paid out of the respective Work Items. 2-Where Rabitz wire mesh is used on the duct, the price for Rabitz wire mesh shall be paid out of the respective Work Item.		

Work Item No.	782.501		**Line No:** 67
Item Title	Wire carrying systems up to 21 x 12 mm	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site, installing in position, making the connections of, delivering in working condition the PVC ducts; to be used indoors to safely carry the strong and weak current conductors; certified to ISO 9001-2000; conforming to TS IEC 60695-1-2, TS EN 50085-1, TS EN 50085-2-1, TS EN 50085-2-3 standards; flame retardant; made of halogen-free materials; resistant to mechanical impact; self-extinguishing PVC (UL 94 V0 M1); resistant to atmospheric conditions and UV light; protection class IP 40; CE marking; conforming to EEE Regulation; operating at ambient temperatures of-25°C to +60°C; resistant to dielectric current 260 kW/cm; RAL 9010 white color; (for dimensions 101 mm and above, ducts internal locked and foil covered); accessories at inside and outside corners hinged type and movable; with templated vertical and horizontal installation holes on the bottom for ease of installation; including all types of connection pieces such as inside corner, outside corner, elbow, termination, T elbow, and frames.		

Work Item No.	791.311		**Line No:** 68
Item Title	3 x 2.5 mm2 unleaded PVC insulated wire supply line (nh x mh)	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing the column or supply line; conforming to TS EN 50525-3-31 Standard and Regulation on Indoor Electrical Installations; phase and neutral conductors conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; plastic insulated (HO7Z, O7Z1, at least 300/500 V); including the supply of tubes, crochets, junction boxes, joints, elbows, connectors, iron brackets, paint, all types of materials and workmanship.		

Work Item No.	791.312		Line No: 69
Item Title	3 x 1.5 mm2 unleaded PVC insulated wire supply line (nh x mh)	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing the column or supply line; conforming to TS EN 50525-3-31 Standard and Regulation on Indoor Electrical Installations; phase and neutral conductors conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; plastic insulated (HO7Z, O7Z1, at least 300/500 V); including the supply of tubes, crochets, junction boxes, joints, elbows, connectors, iron brackets, paint, all types of materials and workmanship.		

Work Item No.	791.315		Line No: 70
Item Title	4 x 6 mm2 unleaded PVC insulated wire supply line (nh x mh)	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing the column or supply line; conforming to TS EN 50525-3-31 Standard and Regulation on Indoor Electrical Installations; phase and neutral conductors conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; plastic insulated (HO7Z, O7Z1, at least 300/500 V); including the supply of tubes, crochets, junction boxes, joints, elbows, connectors, iron brackets, paint, all types of materials and workmanship.		

Work Item No.	791.426		Line No: 71
Item Title	4 x 6 mm2 1 kV underground wire supply line (n2 x h)	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the underground wire; to be laid, for indoors, over-plaster, on walls, ceiling or ducts by way of brackets or crochets, for outdoors, in ducts; including crossing and safety tubes, all types of materials, crochets, and workmanship. Installing the column or supply line; conforming to TS EN 50525-3-31 Standard and Regulation on Indoor Electrical Installations; phase and neutral conductors conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; plastic insulated (HO7Z, O7Z1, at least 300/500 V); including the supply of tubes, crochets, junction boxes, joints, elbows, connectors, iron brackets, paint, all types of materials and workmanship.		

Work Item No.	791.439		Line No: 72
Item Title	1 x 6 mm2 1 kV underground wire supply line (n2 x h)	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the underground wire; to be laid, for indoors, over-plaster, on walls, ceiling or ducts by way of brackets or crochets, for outdoors, in ducts; including crossing and safety tubes, all types of materials, crochets, and workmanship. Installing the column or supply line; conforming to TS EN 50525-3-31 Standard and Regulation on Indoor Electrical Installations; phase and neutral conductors conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; plastic insulated (HO7Z, O7Z1, at least 300/500 V); including the supply of tubes, crochets, junction boxes, joints, elbows, connectors, iron brackets, paint, all types of materials and workmanship.		

Work Item No.	791.441		Line No: 73
Item Title	1 x 16 mm2 1 kV underground wire supply line (n2 x h)	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the underground wire; to be laid, for indoors, over-plaster, on walls, ceiling or ducts by way of brackets or crochets, for outdoors, in ducts; including crossing and safety tubes, all types of materials, crochets, and workmanship. Installing the column or supply line; conforming to TS EN 50525-3-31 Standard and Regulation on Indoor Electrical Installations; phase and neutral conductors conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; plastic insulated (HO7Z, O7Z1, at least 300/500 V); including the supply of tubes, crochets, junction boxes, joints, elbows, connectors, iron brackets, paint, all types of materials and workmanship.		

Work Item No.	792.201		Line No: 74
Item Title	Safety line normal sortie with Halogen-free wire	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	(Safety line conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms, plastic insulated (HO7Z, O7Z1) type). (No price differential shall be paid in case of using Halogen-free tubes conforming to EN 50086, IEC 60754 standards, having UL tests, VDE or valid international certifications, with CE marking).		

Work Item No.	792.202		Line No: 75
Item Title	Safety line commutator sortie with Halogen-free wire	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	(Safety line conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms, plastic insulated (HO7Z, O7Z1) type). (No price differential shall be paid in case of using Halogen-free tubes conforming to EN 50086, IEC 60754 standards, having UL tests, VDE or valid international certifications, with CE marking).		

Work Item No.	792.204		Line No: 76
Item Title	Safety line parallel sortie with Halogen-free wire	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	(Safety line conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms, plastic insulated (HO7Z, O7Z1) type). (No price differential shall be paid in case of using Halogen-free tubes conforming to EN 50086, IEC 60754 standards, having UL tests, VDE or valid international certifications, with CE marking).		

Work Item No.	792.205		Line No: 77
Item Title	Safety line luminaire sortie with Halogen-free wire	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	(Safety line conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms, plastic insulated (HO7Z, O7Z1) type). (No price differential shall be paid in case of using Halogen-free tubes conforming to EN 50086, IEC 60754 standards, having UL tests, VDE or valid international certifications, with CE marking).		

Work Item No.	793.102		**Line No:** 78
Item Title	Safety line outlet sortie with Halogen-free wire	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site and making complete outlet sorties; of direct and supplement lines for outlets containing phase, neutral and safety lines of at least 2.5 mm2 in section inside Peschel, Bergman or PVC tubes; conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; phase, neutral and safety conductors colored according to TS-6429, plastic insulated (HO7Z, O7Z1); including junction boxes, connectors, outlet boxes, all types of materials and workmanship. No price differential shall be paid in case of using Halogen-free tubes conforming to EN 50086, IEC 60754 standards, having UL tests, VDE or valid international certifications, with CE marking. Measurement: Where the direct line is longer than 35 m; the price for supply line shall be paid at Work Item No. 791-000.		

Work Item No.	815.101		**Line No:** 79
Item Title	Telephone sortie	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Making over-or under-plaster telephone sortie; of plastic sheathed telephone cable (TS3 EN 60708) with plastic insulated conductor of 0.50 mm in diameter inside Peschel, Bergman or PVC tubes; including junction boxes, special telephone outlet plug and frame, all types of small materials and workmanship. (Excluding the main line and machine, including the earthing line; a stand-alone line shall be laid for each telephone from the floor distribution box). Measurement: No additional price shall be paid unless the sortie line length exceeds 20 m. For the length of sortie line beyond 20 m, the payment shall be made at Work Item No. BFT 818-000.		

Work Item No.	818.107		**Line No:** 80
Item Title	Indoor main line installation up to 30 pairs p.26	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Making main line installation indoors; inside Peschel, Bergman or PVC tubes with PVC insulated and PVC sheathed telephone cables containing conductors in 0.5 mm in diameter, colored according to the standards and placed to prevent crosstalk; including all types of small materials and workmanship.		

Work Item No.	818.205		**Line No:** 81
Item Title	Outdoor main line installation 0.5 mm 30 pairs	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Making outdoor or indoor main installation; with outdoor type, polyethylene insulated, polyethylene inner sheathed, aluminum screened and polyethylene outer sheathed telephone cables containing tempered electrolytic copper conductors of 0.5 mm in diameter, manufactured and certified to TS EN 60708 standard, colored according to the standards and placed to prevent crosstalk, resistant to humidity and water; inside concrete pipes, concrete ducts, PVC tubes or directly inside soil outdoors; and inside Peschel, Bergman or PVC tubes or at crochets indoors; including all types of small materials and workmanship (in case of outdoors, the prices for PVC tubes, concrete pipes, construction of ducts, laying bricks, briquettes and sand shall be additionally paid out of the respective Work Items).		

Work Item No.	819.204		**Line No:** 82
Item Title	Non-flammable plastic telephone distribution box 100 pairs	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Preparations: 60%) (TSE quality certified) non-flammable (self-extinguishing) plastic telephone distribution box; without screws or soldering, removing cable insulation, cable connection termination module connected by a connection device, (non-cut), framework made of stainless steel; connecting the cables according to color codes coming to the over-or under-plaster box; other specifications the same as Work Item No. 819-100.		

Work Item No.	833.301		**Line No:** 83
Item Title	Intelligent analog addressable fire alarm panel with 1 loop, 12 zones, 127 address capacity, 12 fire zone displays	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The panel which is suitable for connecting intelligent analog addressable smoke, heat, gas and temperature detectors; addressable indoor and outdoor type fire warning buttons, input-output interface units, short-circuit insulators and addressable sound and light alarm devices; in modular structure, with microprocessor, up to 16 loops according to its application drawing (the panel frame to be determined according to the need), each loop connectible with at least 127 addressable devices; capable of connecting to a network of at least 64 intelligent analog addressable fire alarm panels; having Modbus, Bacnet or other accepted communication module to interact with other building control and automation systems; various user definable event types (fire, fault, safety, alarm, info etc.); capable of full harmonization between the installation site and fire scenarios; capable of adding detectors or buttons to the system not disrupting the existing local addressing system; panel software in Turkish and English; panel display menus in Turkish. It shall have at least 4 programmable audible alarm outputs and special, controlled alarm and fault outputs for signalization to the fire brigade or remote firefighting center or watch center; be capable of using at least 3 different methods for remote access; have TCP/IP (IPv4 and IPv6 compatible) communication module over LAN, WAN and Internet, RS communication module if it is to be used with wire connection; use GPRS communication module of remote access over Internet using GPRS infrastructure with mobile communication protocol; by the GPRS communication module, send the memory-recorded “date, time, event type, location info etc.” event records to predesignated mobile telephone number by SMS; be used to back up one anther; apply different working programs for day and night; have pre-alarm function to allow intervention from the fire panel without sounding the fire alarm in case of very low density smoke; make live announcements to any desired part of the building over the existing announcement system by connecting to the alarm/announcement module; further, using the alarm/announcement control module, it shall be possible to automatically activate the audio evacuation records of the existing announcement system and in the context of closed circuit television (CCTV) system integration, it shall give a programmable alarm relay output to DVR device, and thereby automatically select the camera at the fire location. To communicate between the security center, other fire alarm panels and field telephones, it shall be possible to use fire alarm telephones on the panel which operate by connecting to the fire telephone control module and have concurrent conference calls. The panel shall continuously check the detectors for fouling level, and whenever fouling is detected, it shall give “servicing required” warning; it shall be possible to connect repetitors and mimic panels to the panel; all cables and connections be under constant surveillance for disconnection, short-circuiting or earth fault; store the last 1,000 events in the non-erasable memory; have general fire alarm and fault lamps, separate alarm and fault lights for each fire zone; illuminated alphanumerical display of at least 300 characters and local audio alert device.		

Work Item No.	833.500		**Line No:** 84
Item Title	Analog addressable optical smoke detector	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site and delivering in working condition the detector; including all types of small materials. The microprocessor controlled intelligent detector shall be sensitive to smoke particles of 0.5 to 10 microns. It shall respond very rapidly to the fumes moving slowly. The detector shall have a photoelectric smoke cell that operates according to the principles of irradiation. The detector shall send the analog smoke levels it has measured to the control panel as analog data, while it tests the operational performance of the electronic circuit, sensitivity and calibration and communicates to the control panel over the loop cable. There shall be at least one LED light on the detector to allow visual check, and be suitable for parallel warning lamp connection. The detector shall be capable of mounting and dismounting by a special socket. The addressing of detectors can be made by a positional switch or manual detector programming device. The detector shall be manufactured by a company that possesses certifications of TS EN 54-7 Quality and ISO 9001 Quality Management System.		

Work Item No.	833.555		**Line No:** 85
Item Title	Analog addressable fire warning button	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site, testing and delivering in working condition the button; including all types of small materials. The intelligent analog addressable resettable fire alarm button shall be microprocessor controlled. The LED on the fire alarm button shall flash during the query by the panel over the loop; and in case of alarm continuously flash. The button shall be certified to TS EN 54-7 Quality and ISO 9001 Quality Management System.		

Work Item No.	833.592		**Line No:** 86
Item Title	Indoor type electronic fire warning siren with flasher	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site, testing and delivering in working condition the siren flasher; including all types of small materials. The indoor siren flasher's body shall be rugged and resistant to heat. The siren flasher shall have a minimum sound intensity of 100 dB/1m. The flashing energy shall be 2.5 Joules, and flashing frequency 1 Hz. The siren flasher shall have a Xenon lamp, and be visible at remote point. Its protection class shall be at least IP 21. The siren flasher shall comply with TS EN 54-3 standard, Construction Products Regulation 305/2011/EU and be placed in the market with CE marking; and have the performance statement by the manufacturer.		

Work Item No.	833.594		**Line No:** 87
Item Title	Outdoor type electronic fire warning siren with flasher	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site, testing and delivering in working condition the siren flasher; including all types of small materials. The indoor siren flasher's body shall be rugged and resistant to heat. The siren flasher shall have a minimum sound intensity of 100 dB/1m. The flashing energy shall be 2.5 Joules, and flashing frequency 1 Hz. The siren flasher shall have a Xenon lamp, and be visible at remote point. Its protection class shall be at least IP 65. The siren flasher shall comply with TS EN 54-3 standard, Construction Products Regulation 305/2011/EU and be placed in the market with CE marking; and have the performance statement by the manufacturer.		

Work Item No.	839.101		Line No: 88
Item Title	Indoor type line transformer and installation	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing and delivering in working condition the line transformer with appropriate impedance at locations indicated in the application drawing to reduce losses on the main lines of systems such as speakers, telephones, diaphones and similar; including all types of small materials and workmanship.		

Work Item No.	844.126		Line No: 89
Item Title	Projection device, 2000 ANSI lumens, 1024 x 768 resolution	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Delivering the projection device; in ANSI lumens light intensity, compatible with video and computer, along with suspending apparatus, with the remote distance lenses, for use in the operator's room; including all types of small materials and workmanship.		

Work Item No.	844.141		Line No: 90
Item Title	Motor-driven screen 200 x 150	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Delivering in working condition the motor-driven screen; in 4:3 format, front projection type; video gain at least 1.2; screen viewing angle at least 150°; motor-driven and remotely controlled; certified to M1 7201-96 fire protection; screen and motor case made of aluminum material; including all types of small materials and workmanship. Intermediate values shall be found by interpolation.		

Work Item No.	880.1272		Line No: 91
Item Title	Fixed accessory rack 600 mm, specific to product	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	(Conforming to TS EN 61439-1 standard)		

Work Item No.	880.2002		Line No: 92
Item Title	JH (ST) halogen-free fire alarm cable 2 x 2 x 0.8+0.8 mm2	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying the fire alarm cable; used in security systems, communications, dry and wet spaces; solid electrolytic tempered copper conductor conforming to DIN VDE 0815; operating temperature at required standard values; solid PE compound core insulated; twisted pairs; aluminum foil wrapped along with the earth line; outer sheath RAL 7032 gray flame retardant special PVC compound insulated; certified to IEC-332-1, IEC-332-3, IEC-60754, IEC-60332; including crossing and safety tubes, all types of materials and workmanship. NOTE: For indoor installation; Peschel, Bergman or PVC included.		

Work Item No.	880.3161		**Line No:** 93
Item Title	4 x 0.75 mm2 lıh (st) h halogen-free signaling and command cable	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying the signaling and command cable in flexible structure; multiple twisted tempered copper conductors insulated with halogen-free flame retardant materials in colors conforming to DIN 47100 standard and twisted in the form of layers (operating temperature at required standard values); screened with AL-PES wrapping tape long with the earth line; outer sheath flame retardant HFFR compound RAL 7001 grey. NOTE: For indoor installation; Peschel, Bergman or PVC included.		

Work Item No.	880.505		**Line No:** 94
Item Title	Splitters, distributing type 1/8 max dB loss 12.0 (TS EN 60728-6)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying the splitters; compatible with the impedance of coaxial cables used in radio, TV, radar, fire control, many types of transmitters, security, satellite antenna, CCTV antenna and measurement systems; with 1 main input and secondary outputs, operating at frequency range of 40-862 MHz; resistances, capacitors, coils and as many connectors as the number of inputs and outputs; including all types of materials and workmanship. Distributing type Max dB loss.		

Work Item No.	880.563		**Line No:** 95
Item Title	UTP CAT 6 cable	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site, installing and testing the cable; used in data communications at 250 MHz bandwidth and 250 Mbps rate between computers for horizontal setups in the local area networks (LAN); with 4 pairs, 4 color-coded (blue-blue white, orange-orange white, green-green white, brown-brown white), PVC outer sheath covering all unshielded twisted pairs around a star-shaped separator; 4 pairs of cable to Cat 6 standard, 23 AWG (American Wire Gauge), 0.57 mm bare copper coating criterion; conforming to ANSI/TIA/EIA-568, TS EN 50288-3, ISO 11801 standards; ISO certified; including all types of small materials and workmanship. (If passed through tube, the price for the tube shall be paid out of the respective Work Item for tube; and if through cable trays, then the respective for cable trays).		

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Work Item No.	880.573		**Line No:** 96
Item Title	UTP CAT 6 over-plaster single plug socket	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site, installing and testing the plug socket; to CAT 6 standards used in data communications at 250 MHz bandwidth and 250 Mbps rate between computers for horizontal setups in the local area networks (LAN); 8 RJ-45 contact cores; jack contact point covered with a material of high conductivity; not screened; conforming to ANSI/TIA/EIA-568B.2, ISO/ IEC-11801 standards; ISO certified; over-plaster, single-port, PVC box frame; plug box; cover with spring, labels; including workmanship.		

Work Item No.	983.102		**Line No:** 97
Item Title	Earthing rod, electrolytic copper	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the electrolytic copper of ø 20 mm in diameter and at least 3.5 m in length; screwing a cone had at tip for insertion in soil; if the bar consists of 2 pieces, the connection being provided with 4 cm of threading; inserting the bar at least 60 cm into the soil from ground level; connecting to the down conductors and building wall conductors with silver welding or a special red clamping ring; including all types of small materials and workmanship. NOTE: Where the ground is rocky, look for suitable soil around.		

Work Item No.	985.101		**Line No:** 98
Item Title	Thermo-welding jointing up to 32 gr welding powder	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Jointing the conductors of any section with exothermal reaction of aluminum-copper oxide powder; including pot, pot pliers, scraper, brush, lighter, and all types of materials and workmanship.		

Work Item No.	988.100		**Line No:** 99
Item Title	Chemical substance reducing soil resistance	**Unit**	KG
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site and laying around the conductors the chemical substance; of aluminum silicate and carbon basis, to be used to reduce the soil resistance below the values in the specifications where the measured soil resistance is high in the earthing installation made according to the application drawings.		

Work Item No.	ELK-00		**Line No:** 100
Item Title	Copper tube for accommodating installation cables	**Unit**	M
Book	Project-specific (PRJ)		
Technical Description	Copper tube for accommodating installation cables		

Work Item No.	ELK-01		**Line No:** 101
Item Title	Type N3 luminaire armature (4-5 arms)	**Unit**	pcs
Book	Project-specific (PRJ)		
Technical Description	Type N3 luminaire armature (4-5 arms)		

Work Item No.	ELK-02		**Line No:** 102
Item Title	Under-floor sheet metal duct-120 mm	**Unit**	M
Book	Project-specific (PRJ)		
Technical Description	Under-floor sheet metal duct-120 mm		

Work Item No.	ELK-03		**Line No:** 103
Item Title	Under-floor junction box	**Unit**	pcs
Book	Project-specific (PRJ)		
Technical Description	Under-floor junction box		

ork Item No.	KTB-ELK.001		**Line No:** 104
Item Title	Dome (HD-720P) IP camera, indoor/outdoor, Day/Night functions	**Unit**	pcs
Book	Ministry of Culture (KUB)		
Technical Description	IP camera of High Definition HD / 720P, color, B/W, Day/Night functions, working automatically in color mode during day and B/W at night. This switch can be made automatically as well as by an external entry. 1) Light sensors of cameras shall be most advanced, at least 1/3", CCD, XMOR CMOS or MOS type visual sensor and progressive scan. 2) Camera shall have at least 3-9/10 mm varifocal IR adjustable type lenses. 3) The video capturing device shall be at least 1/3" color picture format, pixels minimum 1280 (horizontal) x 720 (vertical). 4) Minimum light sensitivity sensed by the camera shall be 0.25 lux or lower in F 1.4 max in color mode, 30 IRE video quality standard when producing 720P/30 pictures per second (at most 33 ms pause time). In Black/White mode, it shall not exceed minimum 0.05 lux. 5) The camera shall have IR cut filter, real Day/Night feature. (No electronic Day/Night shall be accepted.) 6) The horizontal resolution value shall give 25 fps video stream per second at color and Black/White mode, at least HD quality 1280 x 720 pixels. 7) Signal to noise ratio shall be 50 dB or higher or have noise suppressing circuit. 8) It shall have automatic electronic shutter (AES) feature, have values in the range of 1/50-1/10.000 sec. It shall be on/off selectable or manually set. 9) The camera shall have the following tampering detection functions. a. Sensing the change of viewing angle or direction, b. Sensing the blockage of camera, c. Sensing the bright light directed at camera or distorting its clarity (focus), d. Advance motion sensing based on pixels. 10) In the context of background light compensation, it shall have background light suppression (BLC) feature. It shall be on/off selectable. 11) The camera shall be capable of operating at temperature range of -20°C to +50°C. 12) The camera shall be made of polycarbon and aluminum cast, impact-resistant camera dome case IK (vandal proof) certified and for outdoors, it shall have dome type case conforming to IP 66 Nema 4X standard, this certification shall be submitted within the bid documents. 13) It shall have Power over Ethernet (PoE) IEEE 802, 3at support and also 12-24 Volt DC/AC external supply input. 14) The camera shall have one 1V pp, 75 Ohm analog video output for servicing purposes. 15) The camera shall have minimum 70 dB Wide Dynamic Light Range (WDR). 16) The camera shall have Automatic Black Balance feature that ensures capturing picture details in high and low light conditions, foggy and misty conditions. 17) The camera shall have feed at least 2 dual stream video independently adjustable, to IP network in at least HD 720P (1280 horizontal x 720 vertical) resolution, minimum 25 picture per second, in H264 compression format. In addition, it shall be capable of giving a total of 3 video streams with concurrent video stream in MJPEG compression formats additionally. 18) The camera shall feed concurrently at least 5 clients; limit the bandwidth that can be used. It shall also ensure unlimited access in multicast mode. 19) It shall support TCP/IP, HTTP, FTP, SmP, DHCP, SNMP, DNS, ISCSI and NTP protocols. It shall provide access in UDP (unicast) and MDP (multicast). 20) Date and time shall be added to video. 21) The camera shall give at least 2 H264 or H263 video streams independently adjustable, İt shall have Multicast "Dual Stream" feature which can feed videos in HD (1280 x 720 pixel) to one client over the network, while feeding CIF video to another. 22) It shall be capable of recording images in the backed local storage and this recording can be automatically backed up in the center, when problems arise in the network communications, records shall be communicated on SDHC/SDXC card up to minimum 64 Gb, whenever the network is back, the camera shall automatically make up the blanks in the		

	central storage, thereby avoiding any blanks on account of network problems. Where memory cards are used, their price shall be additionally paid. 23) It shall have dual direction sound support, the cameral shall have at least 1 sound input and output. 24) Auto-iris and vari-focal aspherical lenses shall be used in the cameras, which have adjustable angles, and better capability of adjusting narrow or wide angle as to be determined by the engineering supervisor along with museum officials. 25) Proposed lenses shall be own standard models compatible with and manufactured for the camera at hand by the manufacturer. 26) Lenses shall be selected as a model that can operate at minimum 3 megapixel resolution for HD cameras. 27) The focal distance for the lenses shall be in the range of at least 3.5-12 mm or 4-8 mm and adjustable. 28) Lenses shall be 1/3" C-mount and CS-mount depending on the camera model. 29) The camera shall meet and document the following international CCTV product standards: Immunity Requirements for Electromagnetic Compatibility: EN 50130-4 (PoE, +12 VDC, 24 VAC)*, EN 50121-4; Electromagnetic Disturbance by Electronic Devices: EN 55022 Class B, FCC Part 15 Class B, ONVIF Compatibility; EN 50132-5-2; IEC 62676-2-3, Safety Standard: EN 60950-1

Work Item No.	KTB-ELK.002		**Line No:** 105
Item Title	IP box camera (HD-720P), indoor/outdoor, Day/Night functions (including lenses and installation pods)	**Unit**	pcs
Book	Ministry of Culture (KUB)		
Technical Description	1) IP camera of High Definition HD / 720P, color, B/W, Day/Night functions, working automatically in color mode during day and B/W at night. This switch can be made automatically as well as by an external entry. 2) Light sensors of cameras shall be most advanced, at least 1/3", CCD, XMOR CMOS or MOS type visual sensor and progressive scan. 3) The video capturing device shall be at least 1/3" color picture format, pixels minimum 1280 (horizontal) x 720 (vertical). 4) Minimum light sensitivity sensed by the camera shall be 0.25 lux or lower in F 1.4 max in color mode, 30 IRE video quality standard when producing 720P/30 pictures per second (at most 33 ms pause time). In Black/White mode, it shall not exceed minimum 0.05 lux. 5) The camera shall have IR cut filter, real Day/Night feature. (No electronic Day/Night shall be accepted) 6) The horizontal resolution value shall give 25 fps video stream per second at color and Black/White mode, at least HD quality 1280 x 720 pixels. 7) Signal to noise ratio shall be 50 dB or higher or have noise suppressing circuit. 8) It shall have automatic electronic shutter (AES) feature, have values in the range of 1/50-1/10.000 sec. It shall be on/off selectable or manually set. 9) The camera shall have the following tampering detection functions. a) Sensing the change of viewing angle or direction, b) Sensing the blockage of camera, c) Sensing the bright light directed at camera or distorting its clarity (focus), d) Advance motion sensing based on pixels. 10) All these shall be separately explained in the bid and included in the proposed unit price for the camera. No further price shall be requested nor paid by the administration for any name, software, license etc. other than the Work Item price for the camera. 11) In the context of background light compensation, it shall have background light suppression (BLC) feature. It shall be on/off selectable. 12) The camera shall be capable of operating at temperature range of -10°C to +50°C. 13) It shall have Power over Ethernet (PoE) IEEE 802, 3at support and also 12-24 Volt DC/AC external supply input. 14) The camera shall have one 1V pp, 75 Ohm analog video output for servicing purposes. 15) The camera shall have minimum 70 dB Wide Dynamic Light Range (WDR), 16) The camera shall have feed at least 2 dual stream video independently adjustable, to IP network in at least HD 720P (1280 horizontal x 720 vertical) resolution, minimum 25 picture per second, in H264 compression format. In addition, it shall be capable of giving a total of 3 video streams with concurrent video stream in MJPEG compression formats additionally. 17) The camera shall feed concurrently at least 5 clients; limit the bandwidth that can be used. It shall also ensure unlimited access in multicast mode. 18) It shall support TCP/IP, HTTP, FTP, SmP, DHCP, SNMP, DNS, ISCSI and NTP protocols. It shall provide access in UDP (unicast) and MDP (multicast). 19) Date and time shall be added to video. 20) It shall be capable of recording images in the backed local storage and this recording can be automatically backed up in the center, when problems arise in the network communications, records shall be communicated on SDHC/SDXC card up to minimum 64 Gb, whenever the network is back, the camera shall automatically make up the blanks in the central storage, thereby avoiding any blanks on account of network problems. Where memory cards are used, their price shall be additionally paid. 21) It shall have dual direction sound support, the cameral shall have at least 1 sound input and output. 22) Auto-iris and vari-focal aspherical lenses shall be used in the cameras, which have adjustable angles, and better capability of adjusting narrow or wide angle as to be determined by the		

	engineering supervisor along with museum officials. 23) Proposed lenses shall be own standard models compatible with and manufactured for the camera at hand by the manufacturer. 24) Lenses shall be selected as a model that can operate at minimum 3 megapixel resolution for HD cameras. 25) The focal distance for the lenses shall be in the range of at least 3.5-12 mm or 4-8 mm and adjustable. 26) Lenses shall be 1/3" /1/2.7",1/2.4", C-mount and CS-mount depending on the camera model. 27) For indoor type cameras; camera pods and lenses shall be included in the price for camera. No price shall be paid additionally for camera installation. 28) The camera shall meet and document the following international CCTV product standards: Immunity Requirements for Electromagnetic Compatibility: EN 50130-4 (PoE, +12 VDC, 24 VAC)* EN 50121-4; Electromagnetic Disturbance by Electronic Devices: EN 55022 Class B, FCC Part 15 Class B, ONVIF Compatibility; EN 50132-5-2; IEC 62676-2-3

Work Item No.	KTB-ELK.007		**Line No:** 106
Item Title	Network IP video recording unit (NVR), RAID 5/ recording protection class, 32 channels, professional type	**Unit**	pcs
Book	Ministry of Culture (KUB)		
Technical Description	1) It is the unit through which connects to the IP network and makes camera recording. The number of the devices, and hard disk capacity shall be proposed to allow 60-day uninterrupted day/night recording by each camera in the system, at maximum resolution (720P/1080P) and 30 pictures/sec recording rate. 2) The device shall be a current, off-the-shelf device, which is a standard model production of the manufacturer and featured in the website of the company; those devices produced by uploading software onto computers or servers afterwards shall not be accepted. 3) The IP recording device shall operate on the logic of cameras writing directly to HDD sequences, not by software operating on the server. Thereby, it shall record safely, independently of the operating system or recording software bugs. 4) The management software or the camera shall program which camera will record at what rate and record into which recording unit. 5) IP cameras shall be capable of directly recording to the recording unit. The recording unit shall have accommodation capacity to receive recording from 32 cameras. It can record all channels concurrently. 6) The recording unit shall be rack-type; have at least two gigabite Ethernet interfaces backing up one another, and also two power units and fan units operating in back up. 7) The recording unit shall have at least 8 HDD compartments which can be swapped in operation (hot swap) and the HDDs in these compartments shall at least be 4 TB or provide storage capacity of 32 TB. 8) The recording unit shall support RAID5 or RAID 6 recording protection format. The recording unit shall support the RAID5/6 in hardware terms; no devices handling in software terms shall be accepted. 9) One of the HDDs used in RAID5/6 recording mode shall be used as backup; where one of the HDDs fails, the system shall have no loss of record. 10) The supply input of the device shall be 240 V AC, 50 Hz. 11) The network based recorder shall record H264 video streams. 12) It shall have the capacity to record from 32 HD 720P/FULL HD 1080P or 5 M pixel video resolution IP cameras simultaneously at 25 pictures/sec. 13) The recorder shall have a bandwidth of at least 200 Mbits. 14) The recording unit shall have one DVI and one VGA output, at which at least 30 cameras may be monitored. 15) Thereby, at least 2 monitors may be connected to the recording unit for video viewing purposes.		

Work Item No.	V.2200/1		**Line No:** 107
Item Title	Making and installing in position single arm wall appliques by brass tube	**Unit**	pcs
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for each applique; for making the applique consisting of brass applique and applique installation table and installing onto the wall; yellow coating or ageing on the surface, applying metal preserving varnish; transporting, installing in position; including all materials and workmanship. NOTE: 1- The weight of the steel ceiling hub for a brass applique may be inquired from the company to conduct similar analyses. 2- Where the plate used for the ring is in different dimensions; the weight for 1 kg may be found from the table on brass. 3- The weight for the applique is the weight without receptacle, glass bel and bulb.		

02-UPPER FLOOR-YAVUZ AKINCI HOUSE

Work Item No.	04.644/02B		**Line No:** 108
Item Title	4+4 mm in thickness non-color transparent 0.76 PVB-coated laminated glass	**Unit**	m2
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description			

Work Item No.	14.015/2		**Line No:** 109
Item Title	Narrow, deep excavation in soft rock of any depth by hand or using compressors and explosives	**Unit**	m3
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The price for 1 m3 of excavation for making the excavation, removing off the excavation pit, filling in the remaining excavation gaps after productions or construction are completed, removing the excess part up to 4 m or loading onto vehicles, unloading at landfill, disposal or bank site, spreading, roughly fixing the base and side walls of the excavation site; including all types of materials and waste, workmanship, costs of machinery and equipment, contractor's profit and overhead costs. Measurement: Excavation volume shall be calculated over the application drawings of the excavation. NOTE: 1) This price does not include the costs of water surcharge, shoring, transport, watering, compacting. 2) Where it is not possible to excavate by machine (e.g. when the machine cannot enter, or is not allowed to enter or cannot travel to the work site), or if irreparable damage is to occur when the excavation is made by machine (protection or preservation site etc.), the unit price for manual excavation shall be applied after the construction inspection staff surveys the site and gives technical justifications, and the administration approves. 3) For excavation with depth greater than 2.00 m, the depth surcharge at Work Item No. 14.040 shall additionally apply. 4) Where explosives are not allowed for use in the construction site; it shall be applied with the written permission of the administration.		

Work Item No.	18.194/IB		**Line No:** 110
Item Title	Removal of all types of wooden door wings, door frames and windows	**Unit**	m2
Book	Iller Bank (Bank of Provinces) 2006 and after (ILC)		
Technical Description	The price for 1 m2 of removal of all types of wooden door wings, door frames and windows for carefully removing the wooden door wings, door frames and windows as requested by the administration, transport to the designated location, stacking and delivery to the administration; including all types of workmanship, transport, loading and unloading costs, costs of machinery and equipment and contractor's profit and overhead costs.		

Work Item No.	3162		**Line No:** 111
Item Title	Replacing the degraded parts of conventional base profiled door wings and door frames with 1st class pine timber	**Unit**	m2
Book	Ministry of Culture (KUB)		
Technical Description	The price for 1 m2 of removing the degraded, broken parts of conventional base profiled door wings and door frames and repairing with pine timber to the original, making the inoperational parts operational, attuning the wing and frame for operation; including all types of workmanship, materials, horizontal and vertical transport at work site, contractor's profit and overhead costs. Measurement: Doors, wings and frames which are repaired and attuned shall be calculated as m2.		

Work Item No.	B.16		**Line No:** 112
Item Title	Installing the hinge	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description			

Work Item No.	KGM/18.185		**Line No:** 113
Item Title	Demolishing the concrete construction with & without iron without using explosives	**Unit**	m3
Book	General Directorate of Highways post-2012 (KGM)		
Technical Description	Demolishing the concrete construction with & without iron without using explosives Costs Included in the Unit Price: Demolishing or dismantling the concrete construction with & without iron without using explosives according to the designated demolition method; loading the materials from the demolition and dismantling onto vehicles, transporting to a distance of 100 m in the ultimate average, unloading, spreading over in the form of layers and grading, or landfilling at a site to be designated by the administration; including all types of workmanship, materials, costs of machinery and equipment and contractor's profit and overhead costs necessary for the execution of all works excluding those listed under "Costs Not Included in the Unit Price" below. Costs Not Included in the Unit Price: Transporting the materials from the demolition and dismantling to a distance longer than 100 m in the ultimate average, sorting out the irons coming out of the demolished concrete construction with iron, sorting out usable stones and bricks out of the demolition, watering and compacting works done during the landfilling of the materials. Measurement: Volume in cubic meters of the concrete construction with & without iron measured before demolition without space. Payment: To be made over the unit price for m3 in the Unit Price Bid Chart at Work Item No. KGM/18.185 "Demolishing the concrete construction with & without iron without using explosives".		

Work Item No.	SPECIFIC-1		**Line No:** 114
Item Title	Making color or non-color grid floor coating with traditional cement finish	**Unit**	m2
Book	Project-specific (PRJ)		
Technical Description			

Work Item No.	SPECIFIC-2		**Line No:** 115
Item Title	Repairing the color or non-color grid floor coating with traditional cement finish	**Unit**	m2
Book	Project-specific (PRJ)		
Technical Description			

Work Item No.	V.0201		**Line No:** 116
Item Title	Price for bottoming stone (with quarry stone)	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of bottoming stone; for extracting the stones from quarry as necessary and at required dimension depending on the place of use, sifting out degraded ones, crushing big ones; including materials and workmanship and horizontal and vertical transport at construction site, unloading. Measurement: The price shall be paid for the volume in m3 as found by multiplying the bottomed area and the average stone thickness.		

Work Item No.	V.0204		Line No: 117
Item Title	Price for timber for front work scaffold of any height	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for timber used in the space per m2 of work scaffold; for making the work scaffold (including suspension work scaffold) to be used as surface area at external covering, jointing, plastering in the construction provided that the timber comply with the specifications in the Works General Technical Specifications of the Ministry of Environment and Urbanization; including all materials, waste, workmanship, loading at work site, horizontal and vertical transport, unloading, contractor's profit and overhead costs. Measurement: Where it is used for wall, wall covering, plastering, jointing and similar works; the distance between the surface on which the feet of the scaffold rest and the lower surface of the eaves shall be taken as the height; and the length at ground of the building where the scaffold is erected shall be taken as the width. The multiplication of the width and height shall be taken as the surface area of the work scaffold. NOTE: 1-Once a work scaffold is erected, it shall be assumed that all works that require scaffolding at thin position have been done. And the price for timber for the work scaffold shall be paid only once. However, where the work scaffold is left idle for reasons unavoidable, and in a situation that may cause danger; the work scaffold shall be dismantled with written permission from the administration; and when it is re-erected, the price for workmanship shall be paid for a second and last time, no price for timber shall be paid. The width of work scaffold may not be greater than 1.50 m on the fronts from strut to strut. 2-Where 2 years pass from the date of erecting the work scaffold; the payment shall be made by multiplying the measured amount by 1.25 unless the work is prolonged for reasons attributable to the contractor.		

Work Item No.	V.0208/A		Line No: 118
Item Title	Price for timber for all types of woodwork production with 1st quality pine timber	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of timber; for all types of woodwork production with 1st quality pine timber under the specifications of Work Item No. V.0208; including all materials and workmanship. Measurement: The price shall be paid for the volume of the used timber as measured on the application drawings or in position; waste shall not be considered. NOTE: The price in this Work Item shall apply when the records of such productions as windows, doors, cabinets, window walls, frames which must be change from the norm or round timber.		

Work Item No.	V.0209		Line No: 119
Item Title	Price for stone in the rubble wall	Unit	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of rubble stone in the rubble wall; for extracting the rubble stone from quarry, crushing, selecting, sizing according to the samples, sifting out degraded ones; including all materials, workmanship, waste, unloading construction site, horizontal and vertical transport, contractor's profit and overhead costs. Measurement: The price shall be paid for the volume of the wall built by measuring on the application drawings if any, otherwise of the production in m3. The space for mortar and individual spaces smaller than 0.25 m3 shall not be deducted. NOTE: This price includes the front surcharge.		

Work Item No.	V.0227/6		Line No: 120
Item Title	Price for freestone on flat surface of limestone, lymra stone, chalk etc. (no price for dressability and face-making to be paid)	Unit	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of stone in the flat surface productions; which stone is finished, raw, unpolished, complies with the requirements in the Works General Technical Specifications of the Ministry of Environment and Urbanization, is well-formed, without layers, veinless, without cracks, similar to the original sample in the construction or in the quality as required by the administration; for extracting the limestone, lymra stone, chalk etc. stones from quarry, shaped geometrically and made into blocks in the factory; including transport to production site, waste during transport and all types of materials and workmanship, unloading construction site, horizontal and vertical transport, contractor's profit and overhead costs. Measurement: The price shall be paid for the volume in m3 of freestone in the finished production by measuring the lines passing the outermost points. Carving, profiles and spaces smaller than 0.05 m3 shall not be deducted; waste shall not be paid. NOTE: 1-The price for stone (V.0227/5) does not include dressability surcharge and face-making. If chiseling and bush hammering are done, they shall be paid at their respective Work Item 2-The workmanship for production of such materials shall be paid dressability surcharge depending on the hardness degree of the stone.		

Work Item No.	V.0316		Line No: 121
Item Title	Removing freestone on the floor or marble flooring	Unit	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of removal of freestone or marble flooring; for removing the freestone or marble flooring stones carefully and without damaging others around as in the application drawings approved by the Board or as required by the engineering supervisor, stacking the usable ones at a location in the construction site, storing the rubbles at a location designated by the engineering supervisor; including all materials and workmanship, waste, horizontal and vertical transport at work site, contractor's profit and overhead costs. Measurement: The area from which flooring stones are removed shall be measured in m2.		

Work Item No.	V.0337		Line No: 122
Item Title	Removing cement finish	Unit	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of removing the degraded and swelled cement finish in the parts as designated by the engineering supervisor and cleaning the location; including all types of materials and workmanship. Measurement: The area of the removed cement finish shall be measured in m2.		

Work Item No.	V.0338		Line No: 123
Item Title	Dismantling wooden slabs and ceiling beaming and wooden carcass	Unit	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of dismantling wooden slabs and ceiling beaming and wooden carcass; for, according to the direction by the engineering supervisor, dismantling, removing the nails in the dismantled woodwork, transporting to and storing at the designated location at the construction site; including all types of materials and workmanship. Measurement: The price shall be paid for the surface area in m2 of the beaming or carcass which is dismantled, cleaned and stacked.		

Work Item No.	V.0346/01		Line No: 124
Item Title	Replacing freestone everywhere except minarets	Unit	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of replacing freestone; for replacing the freestone production at places where it is not possible to remove or demolish without damaging those around at the depth required by the engineering supervisor, cleaning and washing the spot, stacking the removed rubble at a location in the construction site; including loading at construction site, horizontal and vertical transport, unloading, all types of workmanship, costs of machinery and equipment, contractor's profit and overhead costs. Measurement: The volume of the replaced stone shall be calculated in m3.		

Work Item No.	V.0402/07		Line No: 125
Item Title	Rasping with care the layer (5-10 cm) made of imitated concrete, mosaic and imitated stone which is adhered to the original structural surface on the freestone or rubble stone surfaces	Unit	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of rasping; for the work of rasping the layer (5-10 cm, 10 included) made of imitated concrete, mosaic and imitated stone on the freestone or rubble stone surfaces without damaging the wall surfaces, cleaning the residual cement; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the rasped surface, measured without taking into account profiles and similar indents or bumps. NOTE: Where joints are opened, they shall be paid out of the respective Work Item. The depth shall be documented on the surface rasped.		

Work Item No.	V.0406		**Line No:** 126
Item Title	Whitewash rasping with wire brush on all types of conventional brick, marble and freestone surfaces excluding carved surfaces	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of whitewash rasping with wire brush on all types of conventional brick, marble and freestone surfaces excluding carved surfaces according to the direction by the engineering supervisor, without making scratches on the surface, scraping the whitewash that has penetrated the pores in the surface and profile bottoms; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the rasped surface, measured without taking into account profiles and similar indents or bumps. Where joints are opened, they shall be paid out of the respective Work Item.		

Work Item No.	V.0501		**Line No:** 127
Item Title	Workmanship for bottoming work	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of bottoming work; for, according to the direction by the engineering supervisor, compacting by pounder the surface to be bottomed, laying the bottoming surface broken in pyramid shape in 15 x 15 cm of bottom area on average and 15 cm in height by compacting side by side, and compacting the laid bottom; including all types of materials and workmanship. Measurement: The workmanship price shall be paid for the volume in m3 found by multiplying the bottoming area by average thickness.		

Work Item No.	V.0502/A		**Line No:** 128
Item Title	Excavation of demolition rubble mixed with soil at historical works	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of excavation; for excavating the mix of demolition rubble, soil, bricks, rubble stone in the previously demolished places at the designated sections by the direction by the engineering supervisor of the work to be repaired, sorting out usable bricks and stones, moving the remaining rubble and soil to the designated location in the construction site; including all materials and workmanship. Measurement: 1-The price shall be paid for the volume in m3 of the excavated place found by multiplying the surface area by average depth. The volume of usable stones and bricks that are taken out shall not be deducted. 2-If the transport is not included in the approximate cost, the soil and rubble piled in the construction site shall be transported to the site designated by the local municipality. Transport analysis shall be made according to the transport formula and the transport price shall be additionally paid.		

Work Item No.	V.0702/01		**Line No:** 129
Item Title	Making and installing in position the conventional small bit iron fence (bits made of iron) without frame and bits made of hardened lead	**Unit**	KG
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 kg of iron fence; for, according to the instruction or shape given by the administration, making small bit iron fence made of processed iron, bit size of 2.5 x 2.5 x 2.5 cm, cold forging (if requested) before the iron fence is installed in position, inserting in the slots of at least 8 cm in depth to be opened in jambs without leaving gap; including loading at construction site, horizontal and vertical transport, unloading, all types of materials, workmanship, waste, contractor's profit and overhead costs (excluding the cost of drilling holes). Measurement: The finished product shall be weighed before installation. The weight shall be captured in a written report. When it is installed in position and confirmed as operational, action shall be taken according the kg value in the report. NOTE: When a frame of all types of solid or box shape iron is placed around the fence; the price for the iron used for the frame shall not be paid out of this Work Item; it shall be paid out of its respective Work Item.		

Work Item No.	V.0705		**Line No:** 130
Item Title	Workmanship for dismantling the existing iron fence carefully, numbering and installing in position	**Unit**	KG
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 kg of dismantling the existing iron fence; for, according to the direction by the engineering supervisor, numbering and labeling the existing iron fence prior to dismantling, entering in the relief drawings, dismantling carefully after entering in the relief drawings, carefully clearing the residues such as concrete, mortar etc. on the surface of the parts inserted in the coping or stone wall, transporting to the place of repair, re-installing in position; including all types of materials and waste, workmanship, loading at construction site, transport, unloading, contractor's profit and overhead costs. Measurement: The finished product shall be weighed before installation. The weight shall be captured in a written report. When it is installed in position and confirmed as operational, action shall be taken according the kg value in the report.		

Work Item No.	V.0815/A		**Line No:** 131
Item Title	Workmanship for making flat and curved tiling using the existing tiling freestone and lime mortar with pozzolanic admixture	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of tiling; for, according to the direction by the engineering supervisor or the detailed drawing to be provided by the administration, making flat and curved tiling using the existing tiling freestone, placing the stones in position using the lime mortar with pozzolanic admixture given at Work Item No. V.0104C and giving the necessary flow slope, sawing the vertical joints to bring them together with no jointing gap, and filling in the gap in-between and underneath with the slacked lime grouting to leave no gap, cleaning the mortar leftovers on stone surfaces by fine fine-toothed hand comb; including all types of materials and workmanship. Measurement: The price shall be paid for the surface area in m2 of the top surface in the drawing or production of the finished freestone tiling.		

Work Item No.	V.0817/A1B		**Line No:** 132
Item Title	Workmanship for making flat or curved tiling of 1-2 cm in width using the existing freestone of 9-12 cm in thickness and lime mortar with pozzolanic admixture (stone hardness 1.5 or greater)	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making flat or curved tiling of 1-2 cm in width using the existing freestone of 9-12 cm (12 included) in thickness and lime mortar with pozzolanic admixture according to the direction by the engineering supervisor and specifications of Work Item No. V.0817/01C and the detailed drawing to be provided by the administration; including all types of materials and workmanship. Measurement: The price shall be paid for the surface area in m2 of the top surface in the drawing or production of the finished freestone tiling.		

Work Item No.	V.1104/A		**Line No:** 133
Item Title	Workmanship for making flat covering of 15-25 cm average in depth using freestone and Khorasan mortar with pozzolanic admixture	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of workmanship; for, according to the specifications of Work Item No. V.0227/1-.....-V.0227/6 and the direction by the engineering supervisor or the application drawing to be provided by the administration, making flat covering of 25 cm average in thickness (depth), opening grouting grooves on stone edges, chiseling the back surfaces of the stone to ensure adhesion of mortar to the stone, placing the stones on single file at horizontal alignment to leave no gap as a coin cannot pass through horizontal or vertical joints and pouring the dosage 400 cement indicated in Work Item No. V.0130A in thin form in the back in each row, and filling to leave no gap in the joints or backs, sealing the joint surfaces with a non-staining material (mud or paste) to prevent the flow of cement grout out of the joints, clearing the possibly remaining stone particles and mortar stains on the surface of freestone upon finishing the production by chiseling for stones with hardness less than 1.5, and by bush hammering for stones with hardness greater than 1.5 without degrading the stone surface, cleaning the surface of the stone and restoring to the original; including all types of materials and workmanship (excluding the cost of stones). Measurement: The price shall be paid for the outer surface area in m2 of the covering made. The spaces for doors and windows shall be deducted; the corners of turning covering and the interior surfaces of doors and windows covered shall be included in the surface area. NOTE: The price for stone shall be paid at Work Item No. V.0227/1-.....-V.0227/6 etc. as appropriate depending on the contract. Workmanship for chiseling and bush hammering is included.		

Work Item No.	V.1131		**Line No:** 134
Item Title	Workmanship for making flat freestone covering of 25 cm average in thickness at replaced locations	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of replacement; for, according to the direction by the engineering supervisor or the existing original sample or the application drawing to be provided by the administration, replacing with freestone of 25 cm average in thickness, making covering as indicated in the specifications, dressing the corners and edges of stone surfaces in own alignment by fine-toothed hand comb, dressing at least 5 cm wide sections of the lower and upper bed surfaces and vertical joint surfaces by fine-toothed hand comb, and the remaining parts by coarse-toothed hand comb with a 10 degree of slope backwards, placing the covering stone in alignment and in position to leave no gap by sawing the joints of stones, filling the dosage 400 cement mortar and grout in side joints and in the backs of stones to leave no gap, clearing mortar leftovers on joint surfaces, loading at construction site, horizontal and vertical transport, unloading; including all materials and waste, workmanship costs, contractor's profit and overhead costs, (excluding the cost of stones). Measurement: The price shall be paid for the outer surface area in m2 of the covered freestone. NOTE: The price for stone shall be paid at Work Item No. V.0227/1-.....-V.0227/6 etc. as appropriate depending on the contract. Workmanship for chiseling and bush hammering is included.		

Work Item No.	V.1660/F03		**Line No:** 135
Item Title	Making polished flat plaster with Khorasan mortar using plastering float or steel trowel	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	[The price for 1 m2 of] making polished flat plaster using plastering float or steel trowel; for cleaning and washing the surface to be plastered, plastering the lower layer with Work Item No. V.0118/A Khorasan mortar (for laying and roughcast) (lime:aggregate=1:2) in 4 cm of thickness on average, and the top layer with Work Item No. V.0118/C Khorasan mortar (for finishing coat) in 1.2 cm of thickness, making the surfaces smooth; including all types of materials and workmanship. Measurement: The price shall be paid for the surface area in m2 of the plastered surfaces. The area of all gaps shall be deducted. (Gaps shall be deducted).		

Work Item No.	V.1751/A		**Line No:** 136
Item Title	Making joints in rubble walls using Khorasan mortar with pozzolanic admixture	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making joints; for opening the joints according to Work Item No. V.0413 or V.0416 as appropriate in the stone wall where joints are to be made, clearing any plant roots, washing the surface, then jointing the wall surface with Work Item No. V.0131B mortar, preventing any mortar on wall surface, press finishing the joint surface by the tip of steel trowel without touching the joint surface by brush, watering the joints at 8-hour intervals until the completion of the mortar hardening; including horizontal and vertical transport, unloading, all materials and waste, workmanship costs and contractor's profit and overhead costs (excluding the cost of opening joints). Measurement: The price shall be paid for the area in m2 of the jointed area. All gaps shall be deducted.		

Work Item No.	V.1997		**Line No:** 137
Item Title	Making columns, cushions (/echinus) and structural beams of 1st quality pitch pine in square, rectangular, multi-cornered or round section	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of making columns, cushions (/echinus) and structural beams of 1st quality pitch pine in any size with more than four corners and round section according to the direction by the engineering supervisor or the existing original sample or the detailed application drawing to be provided by the administration, finishing the surfaces, installing in position; including all types of materials and workmanship. Measurement: The price shall be paid for the volume in m3 of woodwork production installed in position.		

Work Item No.	V.1997/B		**Line No:** 138
Item Title	Workmanship for making conventional profiles at top ends of beams made of hard timber up to 15 x 15 cm section	**Unit**	pcs
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 piece of making conventional profiles at top ends of beams made of hard timber up to 15 x 15 cm section in the specifications of Work Item No. V.1997/A according to the direction by the engineering supervisor or the existing original sample or the application drawing to be provided by the administration; including all types of materials and workmanship. Measurement: If conventional profiles are made on the tops of installed beams, the price per piece shall be paid.		

Work Item No.	V.2041/B		Line No: 139
Item Title	Making and installing in position wooden windows of single plane, arched, concave or convex surface, made of 1st quality pitch pine	Unit	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making and installing in position the conventional wooden windows of arched, concave or convex surface, made of 1st quality pitch pine in the specifications of Work Item No. V.2040/A according to the direction by the engineering supervisor or the existing original sample or the application drawing to be provided by the administration. Measurement: The price shall be paid for the area in m2 as a single surface for the curved face areas (including the frame) of concave and convex windows, found by multiplying the width of windows and the height passing at the top point. If windowsills are made, they shall be paid out of the respective Work Item.		

Work Item No.	V.2105		Line No: 140
Item Title	Applying synthetic varnish wood preservative on the wood	Unit	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of sanding the wood, cleaning the sanding dust and applying 2 coats of synthetic varnish wood preservative on the wood surfaces, protecting against dust and humidity until the varnish dries, all according to the direction by the engineering supervisor; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the varnished surfaces. Indents and bumps on the profiles or bases shall not be taken into account.		

Work Item No.	V.2105/A		Line No: 141
Item Title	Applying two coats of wood preservative on the wood	Unit	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of applying two coats of wood preservative on the wood; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the varnished surfaces. Indents and bumps on the profiles or bases shall not be taken into account. Both faces of the door wings, and one face of the windows shall be taken into account. The glass spaces shall not be deducted from the glass walls and windows, but shall be from the doors.		

Work Item No.	V.2109		Line No: 142
Item Title	Dip-treating wood with preservative	Unit	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of wood used in the production; where the pieces of sawn wood to be used in the production shall be dipped in the preservative treatment pool, and held dipped for such time that will allow 1 m3 of wood to absorb 14 lt of preserving substance; materials taken out of the dipping pool shall be kept until drying, without touching one another; after a drying period of 48 hours, the wood shall be taken to production; where in production the wood is to be cut, the sawn parts shall be treated with preservative by applying the preserving substance by brush. Measurement: 1 m3 of sawn wood.		

03-MECHANICAL WORKS-YAVUZ AKINCI HOUSE

Work Item No.	071.108		**Line No:** 143
Item Title	Oval lavatory-sink, under-and over-counter, approximately 40 x 50 cm	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the lavatory-sink in the following types and measures with fixed soap holder, self-flooding, white color; including installation dowels and screws. NOTE: Where color enameled ceramics is used, the installed prices shall be increased by 15%, the installation prices shall be applied without increase. Lavatory-sinks shall comply with the Construction Products Regulation 305/2011/EU and be placed in the market with CE marking.		

Work Item No.	071.114		**Line No:** 144
Item Title	Lavatory-sinks, 50 x 60 cm, half-stand set, enameled ceramics, extra class	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the lavatory-sink in the following types and measures with fixed soap holder, self-flooding, white color; including installation dowels and screws. NOTE: Where color enameled ceramics is used, the installed prices shall be increased by 15%, the installation prices shall be applied without increase. Lavatory-sinks shall comply with the Construction Products Regulation 305/2011/EU and be placed in the market with CE marking.		

Work Item No.	072.601		**Line No:** 145
Item Title	Lavatory materials recessed battery type 1st class (special rubber piece, uncontrolled siphon)	**Unit**	set
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site, installing in position and delivering in working condition the materials; including 15 mm faucet, made of chrome plated brass or plastics based (acetal copolymer), quality certified; and rosette or battery certified to TS EN 274-1-2-3, which can be disassembled and cleaned, with 6 cm odor sealer, with at least 16 cm of extension piece and rosette, made of chrome plated brass or hard plastics based, certified to TS EN 274-1-2-3, in appropriate size, which can be disassembled and cleaned, resistant to at least 80°C of temperature and acids, with 32 mm depressible sink siphon and with connection adaptor to the waste water drain pipe, all to be used along with the lavatory-sinks described at Work Item No. BFT 071-000. (Waste water drain pipe not included in the price).		

Work Item No.	073.201		**Line No:** 146
Item Title	Mirror, approximately 40 x 50 cm	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing in position on the wall with wall hangers, screws and dowels of the mirror; which shall have glass thickness 5 mm, glass edges ground; when the mirror is on straps, they shall be beveled. Wall fastening screws shall be made of brass material and coated with at least 5-micron nickel or be made of stainless steel. NOTE: Mirrors shall comply with the Construction Products Regulation 305/2011/EU and be placed in the market with CE marking.		

Work Item No.	074.101		**Line No:** 147
Item Title	Etagere, enameled ceramics, approximately 50 x 10 cm extra class	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the etagere, in the following types and measures, self-consoled, white color, with special batten or dowels and brass fixing screws. NOTE: Where color vitrified ceramics is used, the installed prices shall be increased by 15%, the installation prices shall be applied without increase.		

Work Item No.	075.103		**Line No:** 148
Item Title	Toilet seat a la Turc, enameled ceramics, approximately 50 x 60 cm, extra class, with plastic siphon	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the toilet seat; white color, 4-cornered, conforming to TS EN 274-1-2-3, with 6 cm odor sealer, ø 100 mm cast iron siphon and siphon bowl or a la Turc toilet siphon made of 100 mm PVC monobloc, resistant to at least 80°C of temperature and acids with 6 cm odor sealer; conforming and certified to TS 799. NOTE: Where color vitrified ceramics is used, the installed prices shall be increased by 15%, the installation prices shall be applied without increase.		

Work Item No.	076.500		**Line No:** 149
Item Title	Materials for a la Turc toilet, with pressure washer (with fluzometer)	**Unit**	set
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing in position the pressure toilet washer; conforming to TS-366, made of chrome plated brass ø 20 mm, quality certified, diecast iron, with pressure toilet washer, connected to the clean water piping and used to wash the toilet etc., to be used with the toilet seats indicated in Work Item No. BFT 075-000.		

Work Item No.	079.100		**Line No:** 150
Item Title	Toilet seat a la Franc with self-flush tank, 35 x 55 cm, and materials	**Unit**	set
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site, installing in position and delivering in working condition the seat; with flush tank installable on the unit, intermittent white color (enameled ceramics), quality certified, complete flush tank set made of ceramics with at least 13 lt capacity, seat and cover made of hard plastics, flush tank intermediate and cleaning faucet copper tubes made of chrome plated brass 15 lt, quality certified, rosettes and chrome plated fixing screws and battens. NOTE: Where color enameled ceramics is used, the installed prices shall be increased by 15%, the installation prices shall be applied without increase.		

Work Item No.	079.200		**Line No:** 151
Item Title	Toilet seat a la Franc with self-flush tank, 35 x 70 cm, and materials, for persons with physical disability	**Unit**	set
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site, installing in position and delivering in working condition the seat; with flush tank installable on the unit, intermittent white color (enameled ceramics), quality certified, complete flush tank set made of ceramics with at least 13 lt capacity, seat and cover made of hard plastics, flush tank intermediate and cleaning faucet copper tubes made of chrome plated brass 15 lt, quality certified, rosettes and chrome plated fixing screws and battens. NOTE: Where color enameled ceramics is used, the installed prices shall be increased by 15%, the installation prices shall be applied without increase.		

Work Item No.	083.401		**Line No:** 152
Item Title	Double sink with drip cap (stainless steel) 60 x 140 cm	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Sinks shall comply with the Construction Products Regulation 305/2011/EU and be placed in the market with CE marking.		

Work Item No.	084.101		**Line No:** 153
Item Title	Single sink materials with battery, brass siphon, 1st class	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site, installing in position and delivering in working condition the 15 mm sink battery, quality certified, with rotary or fixed piping, made of chrome plated brass or plastics based (acetal copolymer) conforming to TS EN 200 or TS EN 817; the sink trap with 6 cm odor sealer which can be disassembled and cleaned, with extension piece to wall and rosette, 32 mm filter, made of chrome plated brass or plastics based conforming to TS EN 274-1-2-3, in appropriate size, which can be disassembled and cleaned, resistant to at least 80°C of temperature; with bakelite plug, chrome plated chain and mini-anchor, all to be used along with the single sinks described at Work Item No. B.F. 083-100; 083-200; the waste water drain pipe not included in the price; the battery and siphon shall be TS certified.		

Work Item No.	087.501		**Line No:** 154
Item Title	Shower materials (complete bath battery with shower piping and shower head) 1st quality	**Unit**	set
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	To be used in the shower trays described in Work Item No. BFT 087.000; other properties as in Work Item No. BFT 086-300. Supplying at work site and installing in position the items with white color tray recessed in floor, quality certified, with filter, 32 mm made of chrome plated brass, discharge orifice, special siphon. NOTE: Where color vitrified ceramics is used, the installed prices shall be increased by 15%, the installation prices shall be applied without increase.		

Work Item No.	089.105		**Line No:** 155
Item Title	Long faucet 1/2" (including filtered rosette)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the armatures with the following quality certification.		

Work Item No.	089.1105		**Line No:** 156
Item Title	Basin faucet 3/4" including rosette	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The brass parts including body must be manufactured by machining the cast, hot forged or rolled bar; products made of raw materials conforming to TS EN 1980, TS EN 12164, TS EN 12165 standards; conforming to TS EN 248 surface standard requirements; produced by function and dimension in conformity to TS EN 200, TS EN 274, TS EN 817, TS 3143 standards; single control armatures manufactured in conformity to TS ISO 7005; double control batteries manufactured in conformity to TS 200; parts such as shaft, body of the standard sealing group with rubber valve used in the double control products must be manufactured by machining of raw material conforming to TS EN 12164 standard; components such as seal rings, o-rings etc. used in all products made of EPDM, NBR materials; components such as lubricants, seal rings, o-rings used in all products must have one of the following certifications: KTW (Kalt Trinken Wasser, drinking water standard), WRC (Water Bye Laws Scheme, measure of toxic substances passing to the drinking water in contact with non-metal parts), DVGW (Deutsche Vereiningung des Gas-und Wasserfaches); perlators must conform to EN 246 and have KIWA (mechanical tests, acoustic tests, measure of change of color and taste in water) or DVGW certification and marked on, aerator bodies made of plastics, outer surfaces of flexible hose made of stainless steel mesh, inner hose conforming to EPDM, flexible hose having one of the following certifications: DVGW, KIWA, SWGW (mechanical tests, acoustic tests, measure of change of color and taste in water), this marked on the flexible hose; arms and wheels in all products must be metal; cartridges used in single control non-acrylic or non-plastic batteries must be certified to NSF (The Public Health and Safety Company) or WRAS (Water Regulations Advisory Scheme); products with photocells must have CE certification. The manufacturing company must have current and valid certificate of manufacturing competence, certificate of service competence, certificate of post-sales service competence, ISO 9000, ISO 14000, TSE conformity certifications. NOTE: Where armatures are Physical Vapor Deposition (PVD) treated, the installed prices shall be increased by 25%, the installation prices shall be applied without increase.		

Work Item No.	091.900		Line No: 157
Item Title	Toilet seat handle bar for persons with disabilities	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Stainless steel, chrome plated, approximately 700 x 740 mm, min Ø 30 mm (where it is blow painted instead of chrome plating, the installed prices shall be reduced by 10%, the installation prices shall be applied without reduction).		

Work Item No.	094.100		Line No: 158
Item Title	Paper holder, ceramics	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the paper holder; which is extra quality, made of white ceramics, half recessed in the wall or on the wall tiles; including all installation materials. 16 x 16 cm		

Work Item No.	097.401		Line No: 159
Item Title	Floor drain filter, h = 22 cm Ø 100 mm discharge and bucket 25 x 33.5 cm	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the floor drain filter; made of cast iron, with self-odor sealer, grill and cleaning plug. h = 13.5 cm Ø 50 mm		

Work Item No.	097.702		Line No: 160
Item Title	Terrace drain filter, PVC 10 x 10 cm h=7 cm	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the terrace drain filter; made of hard plastics, strong, with 6 cm odor sealer, grill, resistant to at least 80°C of temperature, vertical discharge. 10 x 10 cm h=7 cm		

Work Item No.	103.103		Line No: 161
Item Title	Cold water meter 1" screw-mounted 25Ø mm	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	It shall have CE marking pursuant to the Measuring Instruments Directive 2004/22/EC.		

Work Item No.	105.601		Line No: 162
Item Title	Prismatic modular stainless steel water tank, 1.25 m3	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site, installing in position and connecting to the piping system of the modular water tank; which is wholly made of AISI 304 stainless steel; all internal and external materials, strain bars, bolts, legs, manhole, air vent, connection openings made of stainless materials, on-board fixtures made of stainless or brass materials; resistance calculations and application drawings approved by the administration; all parts produced in the factory by cold moulding, bending or twisting method; no welding required in its manufacture or installation, can be assembled using silicone or epidiem rubber washers; with a PVC or polyethylene at the bottom of the tank to isolate the flooring material; certified to Turkish Standards. NOTE: -The prices include fixtures made of stainless or chrome plated brass material, stainless tank legs level float, in-out ball valves, blow-off ball valve, air vent apparatus, tank surge relief and pipe, level indicator, valves and discharge tap, upper and lower manhole cover, tank ladder. -The prices for intermediate values shall be determined by interpolation. -The table for the sheet metal thicknesses of the tank are provided in the general explanation section for plumbing.		

Work Item No.	107.624		Line No: 163
Item Title	Package hydropump, fully automatic, single pump, vertical shaft, centrifugal (flow rate: 5-15 m³/h, pressure: 20-40 mss)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site, installing in position and delivering in working condition the single pump, vertical shaft, centrifugal fully automatic package hydropump in the following capacity and specifications; with dirt trap, checkvalve, global control valve, automatic pressure switch (as many as number of pumps) with lower and upper limits adjustable to the required pressure, manometer indicating water pressure, thermal protection float against overloading, safety against dry working by water level switch or electrode level control, with switches and indicators onboard. Centrifugal pump: TSE conformity certified, with vertical or horizontal shaft with varying stages by capacity, water sealing provided by mechanical sealing for the close coupled motor directly coupled or through a special coupling to the pump with connection flanges, with a pump motor of mono-phase or tri-phase, 3,000 rpm which alone or jointly starts depending on the water demand. Pressurized tank: Made of St. 37-2 steel conforming to TS EN ISO 11124-1, 2, 3, 4, replaceable membrane, fully enclosed, with adequate volume and number of surge tanks; pump and motor mounted on the same chassis or connected with a connection hose, protected against corrosion; all pipes, collectors and wire connections made; TSE quality certified. NOTE: Number of maximum pump switches shall be 180 times/hr for pump power up to 1.1 kW; and 40 times/hr beyond 1.1 kW. Flow rate: m3/h Pressure: Mss		

Work Item No.	126.102		**Line No:** 164
Item Title	Socket collar ø 40 mm 1 1/2" and above	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in the necessary size to obtain water from the mains.		

Work Item No.	201.1003		**Line No:** 165
Item Title	Steel pipe outer diameter 33.4/3.4 mm	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the steel natural gas pipes; conforming to TS EN ISO 3183; 2012; 2013; produced in conformity to Pressure Equipment Directive 97/23/EC, placed in the market with CE marking, pipes under ø114.3/6.0 mm made of Gr-A, pipes ø 114.3/6.0 mm and above made of Gr-B material; including all types of materials and workmanship for laying the pipes in accordance with the relevant specifications and drawings and making connections; excluding fittings, fixing materials, read lead and painting; (the prices for pipe installation materials shall be paid at Work Item No. 201-400 and 201-500).		

Work Item No.	201.203		**Line No:** 166
Item Title	Seam welded galvanized steel pipe 1/2" ø15 average outer diameter 21.3/2.65 mm	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the steel pipes; conforming to Construction Products Regulation 305/2011/EU and Pressure Equipment Directive 97/23/EC, having CE marking; cutting the same according to the drawings; including workmanship and materials such as red lead, graphite applied on the screws for connecting, excluding fittings and fixing materials (exclusive to the works within the boundaries of the landlot where the units will be installed); excluding the cost of red lead and painting for pipes. Nominal measure average outer diameter/ Wall thickness Inch Ø mm / mm		

Work Item No.	201.204		**Line No:** 167
Item Title	Seam welded galvanized steel pipe 3/4" ø20 average outer diameter 26.9/2.65 mm	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the steel pipes; conforming to Construction Products Regulation 305/2011/EU and Pressure Equipment Directive 97/23/EC, having CE marking; cutting the same according to the drawings; including workmanship and materials such as red lead, graphite applied on the screws for connecting, excluding fittings and fixing materials (exclusive to the works within the boundaries of the landlot where the units will be installed); excluding the cost of red lead and painting for pipes. Nominal measure average outer diameter/ Wall thickness Inch Ø mm / mm		

Work Item No.	201.205		**Line No:** 168
Item Title	Seam welded galvanized steel pipe 1" ø25 average outer diameter 33.7/3.25 mm	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the steel pipes; conforming to Construction Products Regulation 305/2011/EU and Pressure Equipment Directive 97/23/EC, having CE marking; cutting the same according to the drawings; including workmanship and materials such as red lead, graphite applied on the screws for connecting, excluding fittings and fixing materials (exclusive to the works within the boundaries of the landlot where the units will be installed); excluding the cost of red lead and painting for pipes. Nominal measure average outer diameter/ Wall thickness Inch Ø mm / mm		

Work Item No.	204.1003		**Line No:** 169
Item Title	Hard PVC 100 plastic waste water pipe with fixed sealing, outer diameter Ø100 mm, wall thickness 3.0 mm, used at B-BD.	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the waste water pipes; pipe and jointing pieces being hard PVC 100 plastic conforming to TS-275-1 EN 1329-1, simple manufacture, U positioned; washer and PVC snap ring certified to TS EN 681-1, with cover lid.		

Work Item No.	204.402		**Line No:** 170
Item Title	Hard PVC plastic waste water pipe, outer diameter ø 75-70/3.0 mm (Bell-and-spigot jointed)	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the waste water pipes; hard PVC plastic conforming to TS-275-1 EN 1329-1/T1, and installing in position as bell-and-spigot jointed.		

Work Item No.	210.724		**Line No:** 171
Item Title	PN 25-40 Cast steel body, ball made of stainless steel, spring backed Belleville washer made of steel or Teflon; screw-mounted, ø 20 mm, 3/4"	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Where nodular GGG 40 is used, the installed prices shall be reduced by 5%.		

Work Item No.	210.728		**Line No:** 172
Item Title	PN 25-40 Cast steel body, ball made of stainless steel, spring backed Belleville washer made of steel or Teflon; screw-mounted, ø 50 mm, 2"	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Where nodular GGG 40 is used, the installed prices shall be reduced by 5%.		

Work Item No.	221.205		**Line No:** 173
Item Title	Dirt trap, PN 16, (for steam + water, cast iron) ø 40 mm, screw-or flange-mounted	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the dirt trap; to be installed on the fluid, steam and gas equipment, having TSE quality certification, body made of brass, bronze, cast iron or steel depending on the fluid pressure and temperature, internal filter made of brass or stainless steel, filter easily disassembled and cleaned, screw-or flange-mounted, its catalogue to be approved and selected by the administration. NOTE: Filter sensitivity shall be as follows: Up to DN 20, 500 µm (0.5 mm) and above Up to DN 50, 700 µm (0.7 mm) and above Up to DN 150, 1200 µm (1.2 mm) and above.		

Work Item No.	227.203		**Line No:** 174
Item Title	Holding valve, brass, diecast iron, screw-mounted, ø 25 mm, 1"	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the leak-proof holding valve; to be used in hot or cold water piping installation, certified to TS-549; small diameter ones screw-mounted, made of brass or bronze; larger diameter ones screw-mounted, made of brass or bronze; still larger diameter ones flange-mounted and made of cast iron; with hinge or seated stopvalve or ball-bearing, operating in vertical or horizontal positions.		

Work Item No.	280.1106		**Line No:** 175
Item Title	External unit or external unit group with 50 kW cooling capacity (nominal), 56 kW heating capacity (nominal)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, installing in position and delivering in working condition the external unit; with air cooled condenser, frequency controlled DC inverter compressor, possible to connect internal units of various capacities and types with branching pieces on the single line including one for fluid and one for gas line; EER (Energy Efficiency Ratio) at least 3.2 and COP (Coefficient of Performance) at least 3.4; with all piping and electrical connections made, pressurized with nitrogen, coolant filled in the entire system. -Nominal capacity and efficiency values are the figures at for cooling: indoor 27 C KT/19 C YT, outdoor 35 CKT/24 CYT; for heating: indoor 20 C KT/15 C YT, outdoor 7 CKT/6 C YT; pipe length 7.5 and elevation difference 0 m. -After the installation of external units, the system shall be progressively pressurized to 25 bars with N2 (nitrogen) gas, and tested for at least 24 hours under this pressure.		

Work Item No.	280.2106		**Line No:** 176
Item Title	Wall-type internal unit with 7 kW cooling capacity (nominal), 7.5 kW heating capacity (nominal)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing in position the internal unit; which can be used as wall-mounted, air guide vanes directing air up/down, left/right.		

Work Item No.	280.2204		**Line No:** 177
Item Title	Box-type internal unit with 4 kW cooling capacity (nominal), 4.5 kW heating capacity (nominal)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing in position and delivering in working condition the box-type internal unit; which can be used by hanging at places with suspended ceiling space, air guide vanes directing air up/down, left/right, according to the type in the drawing, blowing in two or four directions. -The unit shall have, as standard, a drain pump with a minimum head of 50 cm (from the lowermost level of the device).		

Work Item No.	280.2205		**Line No:** 178
Item Title	Box-type internal unit with 5.5 kW cooling capacity (nominal), 6 kW heating capacity (nominal)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing in position and delivering in working condition the box-type internal unit; which can be used by hanging at places with suspended ceiling space, air guide vanes directing air up/down, left/right, according to the type in the drawing, blowing in two or four directions. -The unit shall have, as standard, a drain pump with a minimum head of 50 cm (from the lowermost level of the device).		

Work Item No.	281.302		**Line No:** 179
Item Title	Wireless remote control and sensor	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, installing and delivering in working condition the control device including sensor which can control all functions of the internal unit with no wire connection.		

Work Item No.	281.504		**Line No:** 180
Item Title	Copper piping group 5/8" 1.0 mm (13 mm izo) copper piping installation	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing, testing and commissioning the copper piping; where copper tubes manufactured in conformity to TS EN 12449 shall have ends protected against humidity and dust; welding shall be made by N2 (nitrogen) gas metal arc welding with silver-copper alloy to prevent oxidation; 1 bearing clamp shall be used at least every meter in the copper piping; upon the completion and before commissioning of the system, inside tubes shall be wiped by N2 (nitrogen) gas; after completing the copper piping installation, it shall be progressively pressurized to 41.5 bars with N2 (nitrogen) gas, and tested for at least 24 hours under this pressure; to be used with multiple-internal unit air-conditioning system with variable coolant flow; including installation pieces; insulated by wrapping around with rubber or elastomeric rubber foam in the following thicknesses.		

Work Item No.	281.506		**Line No:** 181
Item Title	Copper piping group 7/8" 1.0 mm (13 mm izo) copper piping installation	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing, testing and commissioning the copper piping; where copper tubes manufactured in conformity to TS EN 12449 shall have ends protected against humidity and dust; welding shall be made by N2 (nitrogen) gas metal arc welding with silver-copper alloy to prevent oxidation; 1 bearing clamp shall be used at least every meter in the copper piping; upon the completion and before commissioning of the system, inside tubes shall be wiped by N2 (nitrogen) gas; after completing the copper piping installation, it shall be progressively pressurized to 41.5 bars with N2 (nitrogen) gas, and tested for at least 24 hours under this pressure; to be used with multiple-internal unit air-conditioning system with variable coolant flow; including installation pieces; insulated by wrapping around with rubber or elastomeric rubber foam in the following thicknesses.		

Work Item No.	281.508		**Line No:** 182
Item Title	Copper piping group 1 1/8" 1.2 mm (19 mm izo) copper piping installation	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing, testing and commissioning the copper piping; where copper tubes manufactured in conformity to TS EN 12449 shall have ends protected against humidity and dust; welding shall be made by N2 (nitrogen) gas metal arc welding with silver-copper alloy to prevent oxidation; 1 bearing clamp shall be used at least every meter in the copper piping; upon the completion and before commissioning of the system, inside tubes shall be wiped by N2 (nitrogen) gas; after completing the copper piping installation, it shall be progressively pressurized to 41.5 bars with N2 (nitrogen) gas, and tested for at least 24 hours under this pressure; to be used with multiple-internal unit air-conditioning system with variable coolant flow; including installation pieces; insulated by wrapping around with rubber or elastomeric rubber foam in the following thicknesses.		

Work Item No.	281.602		**Line No:** 183
Item Title	Jointing pieces for 25-50 kW	**Unit**	set
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing the jointing pieces (dual) in the installation to be used in fluid and gas lines, based on the line load.		

Work Item No.	281.700		**Line No:** 184
Item Title	Distribution (header) pieces	**Unit**	set
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing the distribution (header) pieces (dual) in the installation to be used in fluid and gas lines.		

Work Item No.	451.411		**Line No:** 185
Item Title	Work bench, with sink, press formed, 600 mm in width	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing the bench; entirely made of 18/8 Cr-Ni stainless steel; upper table 1.2 mm thick, monobloc reduced, press formed to prevent water overflow, and the drip form and slope entirely press formed to guide water flow into tubs; press formed sinks of at least 1.0 mm in thickness seam welded to the upper table and welding spots cleared to give a monobloc appearance with the upper table; the backside shall have adjustable plastic ball-joint feet of 60 mm back, 4 pieces up to 190 cm, 6 pieces up to 240 cm, made of 40 x 40 x 1.2 mm 18/8 box profile; with a screen of 1 mm stainless sheet preventing the visibility of sinks from sides or front (sink not included in the unit price).		

03-ROOF & ATTIC-YAVUZ AKINCI HOUSE

Work Item No.	24.017		**Line No:** 186
Item Title	Making and installing in position valley gutters in duct form of sheet zinc no 14	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The price for 1 m of valley gutter; for making valley gutters in duct form of sheet zinc no 14, coupling collars of 25 cm each to the bank and placing under the roofing cover, giving regular slope to the duct, placing bituminous cardboard under the sheet zinc according to the proper technique, soldering at gutter joints, making surge joints according to the application drawing, connecting to the chamber, placing galvanized filters; including types of materials and waste, workmanship, loading at construction site, horizontal and vertical transport, unloading, contractor's profit and overhead costs. Measurement: It shall be calculated with inclination on its application drawing.		

Work Item No.	V.0502/A		**Line No:** 187
Item Title	Excavation of demolition rubble mixed with soil at historical works	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of excavation; for excavating the mix of demolition rubble, soil, bricks, rubble stone in the previously demolished places at the designated sections by the direction of the engineering supervisor of the work to be repaired, sorting out usable bricks and stones, moving the remaining rubble and soil to the designated location in the construction site; including all materials and workmanship. Measurement: 1-The price shall be paid for the volume in m3 of the excavated place found by multiplying the surface area by average depth. The volume of usable stones and bricks that are taken out shall not be deducted. 2-If the transport is not included in the approximate cost, the soil and rubble piled in the construction site shall be transported to the site designated by the local municipality. Transport analysis shall be made according to the transport formula and the transport price shall be additionally paid.		

Work Item No.	V.1864/A		**Line No:** 188
Item Title	Workmanship for laying Marseilles roof tiles with cement dosage 225 reinforced mortar	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of laying tiles; for laying Marseilles roof tiles in the specifications of Work Item No. V.1863 and with cement dosage 225 reinforced mortar, spreading the mortar of 3 cm average in thickness, pressing the tiles against the mortar to avoid mortar ingress in ducting and coupling points, filling underneath to leave no gaps; including all types of materials and workmanship (excluding the cost of tiles). Measurement: The price shall be paid for the length in m of ridges and ribs at horizontal projection.		

Work Item No.	Y.16.050/04		**Line No:** 189
Item Title	Pouring concrete of C 20/25 class compressive strength, produced at concrete plant or purchased and pumped by concrete pump (including transport of concrete)	**Unit**	m3
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The price for 1 m3 of concrete of C 20/25 class compressive strength poured in position; which ready-mix concrete is produced in C 20/25 class according to the standard and design, using washed, screened granulometric sand-gravel and/or crushed stone, cement, water and admixture as necessary in a concrete plant which is a full-fledged concrete plant suitable or concrete production (a concrete production plant with minimum 60 m3/h capacity, four-compartment aggregate bunker, computer-controlled with compressor and command cabinet, conveyor band system with a cement silo of minimum 50 tons capacity, recovery unit, laboratory that can conduct aggregate and concrete tests, generator, adequate number of transmixers and mobile concrete pumps, at least one loader, admixture tank and admixture weighing bunker, hygrometer and similar types of all necessary equipment, and periodically calibrated) or purchased from a plant of such caliber, checking concrete quality, loading on transmixers, transport to work site, pumping by the concrete pump to the pouring point, placing, compacting by vibrator, watering, protecting against cold, hot and other external effect and maintaining, taking samples of adequate number for tests and making necessary tests; including all types of workmanship, materials and waste, costs of machinery and equipment and laboratory costs, all types of horizontal and vertical transport at work site, loading and unloading, loading onto vehicles the granulometric sand, gravel or crushed stone and cement included in the concrete from the place where obtained, produced or purchased, transport to the concrete plant, unloading from vehicles, stacking, placing in the concrete plant, supply and transport of water used in the concrete and watering, procurement of the concrete plant and all other equipment, depreciation costs, all types of other costs and contractor’s profit and overhead costs Measurement: It shall be calculated on the dimensions in the application drawing. NOTE: 1) It is mandatory that the plant where the concrete is produced or purchased from must have the certifications of TSE and others as required by the legislation, and submit such certificates to the administration before the start of production. It shall possible to use in productions the certified concrete which is produced at or purchased from this plant and complies with the requirements for placement in the market under the legislation in effect only if the submitted documentation is appropriate and the cement is authorized. 2) Where the concrete is purchased, it is mandatory to attach the invoices clearly indicating the job title to the payment documents. 3) The price for admixtures added to the concrete shall be additionally paid.		

Work Item No.	Y.18.461/010		**Line No:** 190
Item Title	Making water insulation of two layers with polymer bituminous covers with plastomer-based fiberglass carrier of 3 mm in thickness (flexural strength of-5 degrees) and one-face-mineral-coated plastomer-based polyester felt carrier of 3.3 mm in thickness (flexural strength of-5 degrees)	**Unit**	m2
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The price for 1 m2 of insulation; for, according to the approved detailed application drawings, cleaning the surfaces to be insulated, applying bituminous emulsion of minimum 0.400 kg per m2 as primer when in dry state, after the primer is dried and by welding flame without inflaming the polymer bituminous, adhering the polymer bituminous covers with plastomer-based fiberglass carrier of 3 mm in thickness in strips as the first layer, using the full adhesion method with at least 10 cm overlaps at joints, then adhering the one-face-mineral-coated plastomer-based polyester felt carrier of 3.3 mm in thickness in strips as the second layer in the same direction with the first layer, using the full adhesion method cover with at least 10 cm overlaps at joints; including loading at construction site, horizontal and vertical transport and unloading, all types of materials and waste, workmanship, costs of machinery and equipment, assembling and disassembling the work platforms as necessary, and contractor's profit and overhead costs. Measurement: All the surfaces insulated shall be calculated according to the measures in the application drawings. NOTE: Necessary protective measures must be taken for the insulation covers, and the price must be paid out of the respective Work Item.		

Work Item No.	Y.19.060/055		**Line No:** 191
Item Title	Making heat and sound insulation between two walls (sandwich system) with glasswool panels of 8 cm in thickness (glasswool panel, 20-22 kg/m3 density, non-charging, silicone)	**Unit**	m2
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The price for 1 m2 of insulation; for, according to the application drawings and details approved by the administration, placing the glasswool panels of 8 cm in thickness between two walls leaving no gaps; including loading at construction site, horizontal and vertical transport, unloading, all types of materials and waste, workmanship, costs of machinery and equipment, contractor's profit and overhead costs. Measurement: All the surfaces insulated shall be calculated according to the measures in the application drawings. NOTE: The thickness of the glasswool panel shall be determined according to the heat calculation.		

04-FRONT-YAVUZ AKINCI HOUSE

Work Item No.	3012		**Line No:** 192
Item Title	Making heavy-duty work scaffold up to 10 m in height	**Unit**	m3
Book	Ministry of Culture (KUB)		
Technical Description	The price for 1 m3 of making heavy-duty work scaffold up to 10 m in height with struts (10 x 10 cm) at 270 cm intervals on both sides, horizontal belt (5 x 10 cm) at every two meters along the height of the scaffold on both sides and double beams (5 x 10 cm) between struts, wind connections (5 x 10 cm) at every three intervals, adequate number of railing (5 x 10 cm) and work plank, ground stanchions and building fixation cords for the scaffold not to roll over; including all types of workmanship, materials, horizontal and vertical transport at work site, contractor's profit and overhead costs. NOTE: 1-Heavy-duty work scaffold shall be used in heavy work such as block stone, block marble etc. other than the light productions such as paint, whitewash, brick wall, jointing etc. 2-The contractor shall prepare the drawing for the heavy-duty work scaffold and deliver to the administration. After the drawings are approved by the administration, it may be implemented. 3-The height surcharge shall apply for the scaffold higher than 10 m and built according to the requirements above along with the new price report according to the following formula. Height surcharge formula: 1/1.5 x M (H-10) x (K1+K2) M=0.10 H= Height of the scaffold from the base K1= Hourly wage for the regular worker K2= Hourly wage for the carpenter The height surcharge shall be paid for m3 of the entire heavy-duty work scaffold higher than 10 m as calculated according to the formula above.		

Work Item No.	3159		**Line No:** 193
Item Title	Repairing shutters with 1st class pine timber	**Unit**	m2
Book	Ministry of Culture (KUB)		
Technical Description	The price for 1 m2 of repair; for renewing the degraded parts of the existing conventional wood shutters with pine timber, making the wood bar that moves the shutter fins, installing the hooks onto the bar, installing the wings in position; including all types of workmanship, materials, horizontal and vertical transport at work site, contractor's profit and overhead costs. Measurement: The outer surface areas of the shutter wing repaired and installed in position shall be calculated in m2.		

Work Item No.	V.0227/6		**Line No:** 194
Item Title	Price for freestone on flat surface of limestone, lymra stone, chalk etc. (no price for dressability and face-making to be paid)	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of stone in the flat surface productions; which stone is finished, raw, unpolished, complies with the requirements in the Works General Technical Specifications of the Ministry of Environment and Urbanization, is well-formed, without layers, veinless, without cracks, similar to the original sample in the construction or in the quality as required by the administration; for extracting the limestone, lymra stone, chalk etc. stones from quarry, shaped geometrically and made into blocks in the factory; including transport to production site, waste during transport and all types of materials and workmanship, unloading construction site, horizontal and vertical transport, contractor's profit and overhead costs. Measurement: The price shall be paid for the volume in m3 of freestone in the finished production by measuring the lines passing the outermost points. Carving, profiles and spaces smaller than 0.05 m3 shall not be deducted; waste shall not be paid. NOTE: 1-The price for stone (V.0227/5) does not include dressability surcharge and face-making. If chiseling and bush hammering are done, they shall be paid at their respective Work Item 2-The workmanship for production of such materials shall be paid dressability surcharge depending on the hardness degree of the stone.		

Work Item No.	V.0228/6		**Line No:** 195
Item Title	Price for freestone on curved surface of limestone, lymra stone, chalk etc. (no price for dressability and face-making to be paid)	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of stone in the curved surface productions; which stone is finished, raw, unpolished, complies with the requirements in the Works General Technical Specifications of the Ministry of Environment and Urbanization, is well-formed, without layers, veinless, without cracks, similar to the original sample in the construction or in the quality as required by the administration; for extracting the stone from quarry, shaped geometrically and made into blocks in the factory; including transport to production site, waste during transport and all types of materials and workmanship, unloading construction site, horizontal and vertical transport, contractor's profit and overhead costs. Measurement: The price shall be paid for the volume in m3 of freestone in the finished production by measuring the lines passing the outermost points. Carving, profiles and spaces smaller than 0.05 m3 shall not be deducted; waste shall not be paid. NOTE: 1-The price for stone (V.0228/5) does not include dressability surcharge and face-making. If chiseling and bush hammering are done, they shall be paid at their respective Work Items. 2-The workmanship for production of such materials shall be paid dressability surcharge depending on the hardness degree of the stone.		

Work Item No.	V.0346/01		**Line No:** 196
Item Title	Replacing freestone everywhere except minarets	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of replacing freestone; for replacing the freestone production at places where it is not possible to remove or demolish without damaging those around at the depth required by the engineering supervisor, cleaning and washing the spot, stacking the removed rubble at a location in the construction site; including loading at construction site, horizontal and vertical transport, unloading, all types of workmanship, costs of machinery and equipment, contractor's profit and overhead costs. Measurement: The volume of the replaced stone shall be calculated in m3.		

Work Item No.	V.0401/2D		**Line No:** 197
Item Title	Plaster rasping with care the face stone surfaces without degrading the surface (5-10 cm)	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of rasping; for, according to the direction by the engineering supervisor, plaster rasping on the surface to be plastered 5-10 cm (10 included), washing the surfaces, making ready for plastering; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the rasped surface, measured without taking into account profiles and similar indents or bumps. Where joints are opened, they shall be paid out of the respective Work Items. NOTE: The depth shall be documented on the surface rasped.		

Work Item No.	V.0413		**Line No:** 198
Item Title	Opening joints on the wall surfaces of old freestone (face stone) or hammer-dressed freestone	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of opening joints up to 5 cm average in depth on the faces of stone walls to be re-jointed in the specifications of Work Item No. V.0411; including all materials and workmanship. Measurement: The price shall be paid for the area in m2 of the surface on which the old joints are removed and which is made ready for re-jointing.		

Work Item No.	V.0415		**Line No:** 199
Item Title	Opening joints on the front of mixed stone or brick with cement or lime mortar which is to be re-jointed	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of opening joints up to 5 cm average in depth on the front of mixed stone or brick with cement or lime mortar which is to be re-jointed in the specifications of Work Item No. V.0411; including all materials and workmanship. Measurement: The price shall be paid for the area in m2 of the surface on which the old joints are removed and which is made ready for re-jointing.		

Work Item No.	V.0416		**Line No:** 200
Item Title	Opening joints on the stone or brick wall with cement or lime mortar	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of opening joints up to 3 cm average in depth if to be plastered, or up to 5 cm average in depth if to be re-jointed, on the stone or brick wall with cement or lime mortar in the specifications of Work Item No. V.0411; including all materials and workmanship. Measurement: The price shall be paid for the area in m2 of the surface on which the old joints are removed and which is made ready for re-jointing.		

Work Item No.	V.0603/1		**Line No:** 201
Item Title	Workmanship for erecting work scaffold (up to 13.50 m of height)	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of work scaffold; for, according to the direction by the engineering supervisor, erecting the work scaffold where it needs to be used as surface area (including suspension work scaffold), safely dismantling without damaging the structure and environment upon completion of work; including all types of materials except timber, and workmanship. Measurement: Where it is used for wall, wall covering, plastering, jointing and similar works; the distance between the surface on which the feet of the scaffold rest and the lower surface of the eaves shall be taken as the height; and the length at ground of the building where the scaffold is erected shall be taken as the width. The multiplication of the width and height shall be taken as the surface area of the work scaffold.		

Work Item No.	V.1104/A		**Line No:** 202
Item Title	Workmanship for making flat covering of 15-25 cm average in depth using freestone and Khorasan mortar with pozzolanic admixture	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of workmanship; for, according to the specifications of Work Item No. V.0227/1-.....-V.0227/6 and the direction by the engineering supervisor or the application drawing to be provided by the administration, making flat covering of 25 cm average in thickness (depth), opening grouting grooves on stone edges, chiseling the back surfaces of the stone to ensure adhesion of mortar to the stone, placing the stones on single file at horizontal alignment to leave no gap as a coin cannot pass through horizontal or vertical joints and pouring the dosage 400 cement indicated in Work Item No. V.0130A in thin form in the back in each row, and filling to leave no gap in the joints or backs, sealing the joint surfaces with a non-staining material (mud or paste) to prevent the flow of cement grout out of the joints, clearing the possibly remaining stone particles and mortar stains on the surface of freestone upon finishing the production by chiseling for stones with hardness less than 1.5, and by bush hammering for stones with hardness greater than 1.5 without degrading the stone surface, cleaning the surface of the stone and restoring to the original; including all types of materials and workmanship (excluding the cost of stones). Measurement: The price shall be paid for the outer surface area in m2 of the covering made. The spaces for doors and windows shall be deducted; the corners of turning covering and the interior surfaces of doors and windows covered shall be included in the surface area. NOTE: The price for stone shall be paid at Work Item No. V.0227/1-.....-V.0227/6 etc. as appropriate depending on the contract. Workmanship for chiseling and bush hammering is included.		

Work Item No.	V.1111		**Line No:** 203
Item Title	Workmanship for making Persianate covering of freestone of 25 cm average in thickness and 36-50 cm in width	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of workmanship; for making Persianate covering of freestone of 25 cm average in thickness and 36-50 cm in width in the specifications of Work Item No. V.1109; including ll types of materials and workmanship (excluding the cost of stones). Measurement: The price shall be paid for the outer surface area in m2 of the Persianate covering constructed without taking profiles and carving if any into account. The surfaces in excess of 50 cm of the Persianate covering shall be considered flat covering. NOTE: The price for stone shall be paid at Work Item No. V.0228/1-.....-V.0228/6 etc. as appropriate depending on the contract. Workmanship for chiseling and bush hammering is included.		

Work Item No.	V.1131/A		**Line No:** 204
Item Title	Workmanship for making flat freestone covering of 25 cm average in thickness at replaced locations with Khorasan mortar with pozzolanic admixture	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of replacement; for according to the direction by the engineering supervisor or the existing original sample or the application drawing to be provided by the administration, replacing with freestone of 25 cm average in thickness, making covering as indicated in the specifications, dressing the corners and edges of stone surfaces in own alignment by fine-toothed hand comb, dressing at least 5 cm wide sections of the lower and upper bed surfaces and vertical joint surfaces by fine-toothed hand comb, and the remaining parts by coarse-toothed hand comb with a 10 degree of slope backwards, placing the covering stone in alignment and in position to leave no gap by sawing the joints of stones, filling the mortar described in Work Item No. V.0130/A inside joints and in the backs of stones to leave no gap, clearing mortar leftovers on joint surfaces, loading at construction site, horizontal and vertical transport, unloading; including all materials and waste, workmanship costs, contractor’s profit and overhead costs (excluding the cost of stones). Measurement: The price shall be paid for the outer surface area in m2 of the covered freestone. NOTE: The price for stone shall be paid at Work Item No. V.0227/1-.....-V.0227/6 etc. as appropriate depending on the contract. Workmanship for chiseling and bush hammering is included.		

Work Item No.	V.1230		**Line No:** 205
Item Title	Workmanship for making and installing in position gargoyles of freestone in any section and size, with simple profiles and patterns	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of workmanship; for making and installing in position gargoyles of freestone in any section and size, with simple profiles and patterns in the specifications of Work Item No. V.1229; including all types of materials and workmanship (excluding the cost of stones). Measurement: The price shall be paid for the areas in m2 of the made and installed gargoyles at lower and side faces from the tip. NOTE: The price for stone shall be paid at Work Item No. V.0228/1-.....-V.0228/6 etc. as appropriate depending on the contract.		

Work Item No.	V.1660/F04		**Line No:** 206
Item Title	Making roughcast of curved plaster with Khorasan mortar using plastering float or steel trowel	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making plaster work; for cleaning and washing the surface to be curve plastered, making roughcast of 3 cm in thickness with Work Item No. V.0118/A Khorasan mortar (for laying and roughcast) (lime:aggregate=1:2), finishing with steel trowel, watering until the completion of hardening; including all types of materials and workmanship. Measurement: The price shall be paid for the surface area in m2 of the plastered surfaces. The area of all gaps shall be deducted. (Gaps shall be deducted).		

Work Item No.	V.1660/F05		**Line No:** 207
Item Title	Making finishing coat of curved plaster with Khorasan mortar using plastering float or steel trowel	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making plaster work; for cleaning and washing the surface to be curve plastered, making finishing coat of 1.2 cm in thickness with Work Item No. V.0118/C Khorasan mortar (for finishing coats), finishing with plastering float or steel trowel, making the surfaces smooth; including all types of materials and workmanship. Measurement: The price shall be paid for the surface area in m2 of the plastered surfaces. The area of all gaps shall be deducted.		

Work Item No.	V.1775		**Line No:** 208
Item Title	Making joints in rubble walls using Khorasan mortar flush and/or almost zero difference with stone faces (with stone dust mortar for joints)	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making joints; for making a sample joint according to the original sample and/or the direction by the engineering supervisor on the rubble wall which has been cleaned and made ready for jointing according to Work Item No. V.0413 and, upon approval by the engineering supervisor, making the joints using V.0127 joint mortar flush and/or almost zero difference with stone faces, cleaning the mortar residues on stone faces, watering the joints at 8-hour intervals until the completion of the mortar hardening; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the jointed area. All gaps shall be deducted.		

CONSTRUCTION/MECHANICAL WORKS-AKCURUN HOUSE

Work Item No.	071.113		**Line No:** 1
Item Title	Lavatory-sinks, approximately 45 x 60 cm, half-stand set, extra class	**Unit**	Pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the lavatory-sink in the following types and measures with fixed soap holder, self-flooding, white color; including installation dowels and screws. NOTE: Where color enameled ceramics is used, the installed prices shall be increased by 15%, the installation prices shall be applied without increase. Lavatory-sinks shall comply with the Construction Products Regulation 305/2011/EU and be placed in the market with CE marking.		

Work Item No.	072.601		**Line No:** 2
Item Title	Lavatory materials recessed battery type 1st class (special rubber piece, uncontrolled siphon)	**Unit**	Set
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site, installing in position and delivering in working condition of the materials; including 15 mm faucet, made of chrome plated brass or plastics based (acetal copolymer), quality certified; and rosette or battery certified to TS EN 274-1-2-3, which can be disassembled and cleaned, with 6 cm odor sealer, with at least 16 cm of extension piece and rosette, made of chrome plated brass or hard plastics based, certified to TS EN 274-1-2-3, in appropriate size, which can be disassembled and cleaned, resistant to at least 80°C of temperature and acids, with 32 mm depressible sink siphon and with connection adaptor to the waste water drain pipe, all to be used along with the lavatory-sinks described at Work Item No. BFT 071-000. (Waste water drain pipe not included in the price).		

Work Item No.	073.202		**Line No:** 3
Item Title	Mirror, approximately 40 x 60 cm	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing in position on the wall with wall hanger, screws and dowels of the mirror; which shall have glass thickness 5 mm, glass edges ground; when the mirror is on straps, they shall be beveled. Wall fastening screws shall be made of brass material and coated with at least 5-micron nickel or be made of stainless steel. NOTE: Mirrors shall comply with the Construction Products Regulation 305/2011/EU and be placed in the market with CE marking.		

Work Item No.	074.101		**Line No:** 4
Item Title	Etagere, approximately 50 x 10 cm extra class	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position of the etagere, in the following types and measures, self-consoled, white color, with special batten or dowels and brass fixing screws. NOTE: Where color tile vitrified ceramics is used, the installed prices shall be increased by 15%, the installation prices shall be applied without increase.		

Work Item No.	075.103		**Line No:** 5
Item Title	Toilet seat a la Turc, enameled ceramics, approximately 50 x 60 cm, extra class, with plastic siphon	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the toilet seat; white color, 4-cornered, conforming to TS EN 274-1-2-3, with 6 cm odor sealer, ø 100 mm cast iron siphon and siphon bowl or a la Turc toilet siphon made of 100 mm PVC monobloc, resistant to at least 80°C of temperature and acids with 6 cm odor sealer; conforming and certified to TS 799. NOTE: Where color vitrified ceramics is used, the installed prices shall be increased by 15%, the installation prices shall be applied without increase.		

Work Item No.	076.500		**Line No:** 6
Item Title	Materials for a la Turc toilet, with pressure washer (with fluzometer)	**Unit**	set
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing in position the pressure toilet washer; conforming to TS-366, made of chrome plated brass ø 20 mm, quality certified, diecast iron, with pressure toilet washer, connected to the clean water piping and used to wash the toilet etc., to be used with the toilet seats indicated in Work Item No. BFT 075-000.		

Work Item No.	079.100		**Line No:** 7
Item Title	Toilet seat a la Franc with self-flush tank, 35 x 55 cm, and materials	**Unit**	set
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site, installing in position and delivering in working condition the seat; with flush tank installable on the unit, intermittent white color (enameled ceramics), quality certified, complete flush tank set made of ceramics with at least 13 lt capacity, seat and cover made of hard plastics, flush tank intermediate and cleaning faucet copper tubes made of chrome plated brass 15 lt, quality certified, rosettes and chrome plated fixing screws and battens. NOTE: Where color enameled ceramics is used, the installed prices shall be increased by 15%, the installation prices shall be applied without increase.		

Work Item No.	083.104		**Line No:** 8
Item Title	Single sink wo/drip cap, stainless steel 50 x 60 x 22	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Sinks shall comply with the Construction Products Regulation 305/2011/EU and be placed in the market with CE marking		

Work Item No.	084.102		**Line No:** 9
Item Title	Single sink materials with battery, special plastic block siphon, 1st class	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site, installing in position and delivering in working condition the 15 mm sink battery, quality certified, with rotary or fixed piping, made of chrome plated brass or plastics based (acetal copolymer) conforming to TS EN 200 or TS EN 817; the sink trap with 6 cm odor sealer which can be disassembled and cleaned, with extension piece to wall and rosette, 32 mm filter, made of chrome plated brass or plastics based conforming to TS EN 274-1-2-3, in appropriate size, which can be disassembled and cleaned, resistant to at least 80°C of temperature; with bakelite plug, chrome plated chain and mini-anchor, all to be used along with the single sinks described at Work Item No. B.F. 083-100; 083-200; the waste water drain pipe not included in the price; the battery and siphon shall be TS certified.		

Work Item No.	087.501		**Line No:** 10
Item Title	Shower materials (complete bath battery with shower piping and shower head) 1st quality	**Unit**	set
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	To be used in the shower trays described in Work Item No. BFT 087.000; other properties as in Work Item No. BFT 086-300. Supplying at work site and installing in position the items with white color tray recessed in floor, quality certified, with filter, 32 mm made of chrome plated brass, discharge orifice, special siphon. NOTE: Where color vitrified ceramics is used, the installed prices shall be increased by 15%, the installation prices shall be applied without increase.		

Work Item No.	097.303		**Line No:** 11
Item Title	Floor drain filter, hard plastic 15 x 15 cm	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the floor drain filter; made of cast iron, with self-odor sealer, grill and cleaning plug. h = 13.5 cm Ø 50 mm		

Work Item No.	103.102		**Line No:** 12
Item Title	Cold water meter, 3/4" screw-mounted 20Ø mm	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	It shall have CE marking pursuant to the Measuring Instruments Directive 2004/22/EC.		

Work Item No.	14.016/1		**Line No:** 13
Item Title	Narrow, deep excavation in soft rock of any depth manually or using compressors and explosives	**Unit**	m3
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The price for 1 m3 of excavation for making the excavation, removing off the excavation pit, filling in the remaining excavation gaps after productions or construction are completed, removing the excess part up to 4 m or loading onto vehicles, unloading at landfill, disposal or bank site, spreading, roughly fixing the base and side walls of the excavation site; including all types of materials and waste, workmanship, costs of machinery and equipment, contractor's profit and overhead costs. Measurement: Excavation volume shall be calculated over the application drawings of the excavation. NOTE: 1) This price does not include the costs of water surcharge, shoring, transport, watering, compacting. 2) Where it is not possible to excavate by machine (e.g. when the machine cannot enter, or is not allowed to enter or cannot travel to the work site), or if irreparable damage is to occur when the excavation is made by machine (protection or preservation site etc.), the unit price for manual excavation shall be applied after the construction inspection staff surveys the site and gives technical justifications, and the administration approves. 3) For excavation with depth greater than 2.00 m, the depth surcharge at Work Item No. 14.040 shall additionally apply. 4) Where explosives are not allowed for use in the construction site; it shall be applied with the written permission of the administration.		

Work Item No.	165.708		Line No: 14
Item Title	Panel radiator (type 22) 600	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing the radiators; conforming by construction to TS EN 442-1 standard; proven for thermal power by the laboratory report of an accredited body; water passing surfaces made of cold rolled sheet metal of Fe P01 quality and at least 1.11 mm in thickness according to TS EN 10130 standard; tested to at least 1.3 of the maximum operating pressure (at least 520 kPa) according to TS EN 442/1 standard; thermal power tested and measured according to TS EN 442/2 standard; primer applied and electrostatic powder coating made as a finishing coat on zinc or iron phosphate; in packaging; including installation pieces and purger. (Type XY, X number of panels, Y convector).		

Work Item No.	165.916		Line No: 15
Item Title	Aluminum radiators, bath type, towel-warmer, H=1000 mm t=500-600 mm	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Towel-warmer radiators, bath type, plain painted, conforming by construction to TS 442-1 standard, tested to at least 1.3 of the maximum operating pressure. NOTE: Where they are manufactured of DKP sheet metal, the installed prices shall be reduced by 50%, the installation prices shall be applied without reduction. Distance between axes (mm) Height (mm)		

Work Item No.	169.200		Line No: 16
Item Title	Radiator highboy	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing in position the highboy; which is made by moon shaping a T iron of 25 x 25 x 2.5 mm, welding to the pipe of 15 mm with bracket ends, and after installation, applying 1 coat of read lead and 2 coats of oil paint.		

Work Item No.	169.300		Line No: 17
Item Title	Radiator clamp	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the clamp; in appropriate size and quality; fastenable with screw with screwdriver wedge; the part inserted in the wall being fork clamp; including, after installation, applying 1 coat of read lead and 2 coats of oil paint.		

Work Item No.	170.301		Line No: 18
Item Title	Radiator valves, plain type, with thermostat, ø15 mm (1/2")	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the radiator valve; conforming to TS EN 215 or TS 579, in the quality deemed appropriate by the administration and connection sleeve (for those with thermostat, along with the thermostat head and adapting connection sleeve).		

Work Item No.	172.102		**Line No:** 19
Item Title	Automatic purger for radiator, hard PVC, with dummy plug and float	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing in position the automatic purger for radiator; in the type and quality approved by the administration, quality certified, with built-in switch, bakelite hand wheel or hard PVC dummy plug, and float.		

Work Item No.	18.194/IB		**Line No:** 20
Item Title	Removal of all types of wooden door wings, door frames and windows	**Unit**	m2
Book	Iller Bank (Bank of Provinces) 2006 and after (ILC)		
Technical Description	The price for 1 m2 of removal of all types of wooden door wings, door frames and windows for carefully removing the wooden door wings, door frames and windows as requested by the administration, transport to the designated location, stacking and delivery to the administration; including all types of workmanship, transport, loading and unloading costs, costs of machinery and equipment and contractor's profit and overhead costs.		

Work Item No.	192.253		**Line No:** 21
Item Title	Condensing boilers, 30,000 kcal/h, wall-mountable, gas fired, natural gas or LPG fueled, programmable	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site, installing and delivering in working condition the wall-mountable boiler; conforming to TS EN 677, TS EN 483 standards for capacities 20,000 to 60,000 kcal/h and to TstPr / TS EN 15420, TS EN 15417 standard for capacities greater than 60,000 kcal/h or certified to TSEK; equipped per CE directives; the parts exposed to condensing of the exchanger suitable for cascaded coupling made of materials resistant to corrosion; having gas burner of full premix type, modulated fan; controlled by the electronic card that controls the high and/or low temperature heating circuit and boiler circuit; setting the firing, gas and air by modulation; having safety equipment compatible with the command system; connectible to any of B23, B23p, B33, C13, C33, C43, C53, C83 stack types suitable for hermetical stack structure and having a discharge connection for condensate; for condensing boilers with rated thermal power of 200 kW (172,000 kcal/h), condensate being neutralized in the neutralization unit and discharged into the wastewater network; in addition, where necessary, capable of external and internal air control, boiler temperature control, weekly programming etc. through internal or external control units. NOTE: 1- For device capacity, the basis shall be what it can reach at 50°/30°C supply/return water. 2- The set of hermetical stack shall not be included in the price. 3- Unit prices for intermediate capacities shall be found by interpolation.		

Work Item No.	193.251		Line No: 22
Item Title	Ø140 insulated stainless steel stack	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Making stainless steel covering instead of aluminum sheet metal covering. Goffered aluminum sheet metal shall be covered over the rockwool insulation of 5 cm in thickness on the single walled stack. Where the insulation material is rockwool of 3 cm in thickness, the installed prices in Work Item No. BFT 193-200 shall be paid by 10% reduction, the installation prices shall be applied without reduction. For metal stacks: Supplying at work site and installing the stack; manufactured to TS EN 1856-1, TS EN 1856-2 standards; stack shaft pipe, T pieces, elbows, condensate collecting piece, carrying mount, adaptor, stack cleaning lid, second cleaning lid on the horizontal as necessary, clamp jointing, bracket to carry horizontal and vertical loads; shoring and supporting pieces, stack system all earthed; markings of the materials, label descriptions for the product in the manufacturer's CE certification matching with the marking on the stack being installed; the stack plate manufactured of materials conforming to the standards of the system stack installed at a visible location in the boiler room; stack section and draft calculations made in conformity to TS EN 13384-1+A2 or TS EN 13384-2+A1 standard and reported; by a MYK Level 3 [i.e., Turkish Vocational Proficiency Agency, Level 3] certified Manufacturer or Distributor Authorized Service, and the inspection and compliance approval given by a MYK Level 4 certified personnel. (Unit prices for intermediate values shall be found by interpolation.) NOTE: The following shall be added to the stack length in m: stack lid 1 m, stack cap 1 m, expansion piece 1 m, boiler fume discharge adaptor 1 m, elbows 1 m, condensate collecting piece 1 m, bell-and-spigot joint 5 cm for each m, wall clamps and connection clamps 1 m for every 5 clamps, T module 2 m, cleaning lid 2 m, expansion piece 1 m. The carrying mount, carrying brackets, steel wire, ladder and steel construction, lightning rod and holders shall be paid at Work Item No BF Y. 23.176. It shall be manufactured in conformity to the Construction Products Regulation 305/2011/EU and be placed in the market with CE marking.		

Work Item No.	201.307		Line No: 23
Item Title	Seamless steel pipe outer diameter 25.0/2.0 mm	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the steel pipes; conforming to Construction Products Regulation 305/2011/EU and Pressure Equipment Directive 97/23/EC, placed in the market with CE marking; cutting the same according to the drawings; including workmanship and materials such as red lead, graphite applied on the screws for connecting, excluding fittings and fixing materials (exclusive to the works within the boundaries of the landlot where the units will be installed); excluding the cost of red lead and painting for pipes.		

Work Item No.	201.309		Line No: 24
Item Title	Seamless steel pipe outer diameter 30.0/2.6 mm	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the steel pipes; conforming to Construction Products Regulation 305/2011/EU and Pressure Equipment Directive 97/23/EC, placed in the market with CE marking; cutting the same according to the drawings; including workmanship and materials such as red lead, graphite applied on the screws for connecting, excluding fittings and fixing materials (exclusive to the works within the boundaries of the landlot where the units will be installed); excluding the cost of red lead and painting for pipes.		

Work Item No.	204.3102		Line No: 25
Item Title	Pn 20 polypropylene 1/2" ø16/3.4 mm clean water pipes	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	TS EN ISO 15874-1, 2, 3, 5, 7 Supplying at work site the pipes; manufactured of polypropylene (PPR-C), Type 3 conforming to DIN 8077-8078; certified by the Ministry of Health for use as potable water pipes; cutting the same according to the drawings; press-welding the connection pieces to pipe ends at 260°C with the physiotherm welding machine; including all types of materials for welding and workmanship. The prices for installation materials shall additionally be paid.		

Work Item No.	204.3103		Line No: 26
Item Title	Pn 20 polypropylene 3/4" ø25/4.2 mm clean water pipes	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the pipes; manufactured of polypropylene (PPR-C), Type 3 conforming to DIN 8077-8078; certified by the Ministry of Health for use as potable water pipes; cutting the same according to the drawings; press-welding the connection pieces to pipe ends at 260°C with the physiotherm welding machine; including all types of materials for welding and workmanship. The prices for installation materials shall additionally be paid.		

Work Item No.	204.3104		Line No: 27
Item Title	Pn 20 polypropylene 1" ø32/5.4 mm clean water pipes	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the pipes; manufactured of polypropylene (PPR-C), Type 3 conforming to DIN 8077-8078; certified by the Ministry of Health for use as potable water pipes; cutting the same according to the drawings; press-welding the connection pieces to pipe ends at 260°C with the physiotherm welding machine; including all types of materials for welding and workmanship. The prices for installation materials shall additionally be paid.		

Work Item No.	204.401		Line No: 28
Item Title	Hard PVC plastic waste water pipe, outer diameter ø 50-40/3.0 mm (Bell-and-spigot jointed)	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the waste water pipes; hard PVC plastic conforming to TS-275-1 EN 1329-1/T1, and installing in position as bell-and-spigot jointed.		

Work Item No.	204.402		Line No: 29
Item Title	Hard PVC plastic waste water pipe, outer diameter ø 75-70/3.0 mm (Bell-and-spigot jointed)	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the waste water pipes; hard PVC plastic conforming to TS-275-1 EN 1329-1/T1, and installing in position as bell-and-spigot jointed.		

Work Item No.	204.403		Line No: 30
Item Title	Hard PVC plastic waste water pipe, outer diameter ø 100-110/3.0 mm (Bell-and-spigot jointed)	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the waste water pipes; hard PVC plastic conforming to TS-275-1 EN 1329-1/T1, and installing in position as bell-and-spigot jointed.		

Work Item No.	204.920/2-1		Line No: 31
Item Title	PE-Xa oxygen barrier pipe 16 x 2.2 mm, peroxide added, produced by cross-bonding method, at least 70% cross-bonded, polyethylene (PE-Xa) pipes	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing according to the application drawing the polyethylene (PE-Xa) pipes; for ISO A Seri 2 application class 1, 2, 4 and 5; operating at maximum temperature 95°C and 10 bar pressure; at least 70% cross-bonded; peroxide added; oxygen barrier (EVOH) quality pursuant to DIN 4726; tested as necessary.		

Work Item No.	204.975		Line No: 32
Item Title	Supplying at work site and installing the spiral protective sheath used for PE-Xa and PE-Xb pipes of Ø16-Ø17 diameter	Unit	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description			

Work Item No.	204.983		Line No: 33
Item Title	Collector 1”, 4-outlet, with mini ball valve	Unit	set
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing the collector (1 count), made of brass material, used to distribute or collect the fluid in heating systems. NOTE: The collector shall be supplied with outlet connection Ø16 x 2 mm and valves.		

Work Item No.	204.984		Line No: 34
Item Title	Collector 1”, 4-outlet, with mini ball valve	Unit	set
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing the collector (1 count), made of brass material, used to distribute or collect the fluid in heating systems. NOTE: The collector shall be supplied with outlet connection Ø16 x 2 mm and valves.		

Work Item No.	210.625		**Line No:** 35
Item Title	[Ball valve] press manufactured Teflon (PTFE), brass, with washer, 25 Ø mm, 1"	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site and installing the ball valves; in water, air and steam piping, with stopping unit; quality certified to TSE; of carbon steel or stainless steel, screw- or flange-mounted, pass controlled by a ball, manual on/off.		

Work Item No.	210.705		**Line No:** 36
Item Title	PN 10-16 Cast iron body, ball made of stainless steel, spring backed Belleville washer made of steel or Teflon; flange-mounted, ø 32 mm	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description			

Work Item No.	216.904		**Line No:** 37
Item Title	Wet rotor circulation pump of variable rotating speed (with frequency convertor) (3-6) m3/h (3-5) mss	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site, installing in position and delivering in working condition the wet rotor circulation pump; having the energy efficiency index EEI 0.27 prior to 01.08.2015 and EEI 0.23 after that date pursuant to the “Communique on environmentally responsive design concerning canned circulation pumps that are stand-alone or integrated to products; in the pressure class PN10; motor self-protected against blocking, overloading and heating; with frequency convertor; pump head appropriate for ?p-c and ?p-V control modes; instant power consumption and fault signal information viewable on device with no extra equipment necessary; operating in automatic regulation that enables adjustment of head at maximum 0.5 m increments on the built-in display; body material conforming to at least TS 552 EN 1561/ENGJL 200 (GG20); bearings made of metal cemented carbon; impeller made of stainless steel or fiberglass reinforced polypropylene; pump shaft made of a material conforming to TS EN 10088-3 standard; pump insulation class at least IP 43; motor protection at least F class; operating temperature range -10°C/+120°C according to hot water circulation pumps class TF95. NOTE: 1- Point values indicated in the approved application drawing shall be taken into account when choosing and procuring pumps. 2- Ranges in the work items denote pump operating areas to serve as the basis for approximate cost. Flow rate Pressure m3/h Mss		

Work Item No.	22.078		**Line No:** 38
Item Title	Making fixed-fin shutters of 1st class pine timber for doors, windows	**Unit**	m2
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The price for 1 m2 of making fixed-fin shutters, according to the application drawing, of 1st class pine timber, outer surface finished; smooth parts of at least 45 mm in thickness placed on frames; smooth parts of at least 45 mm in thickness on moving frame wings; smooth parts of at least 15 mm in thickness on fixed-fins; including all types of materials and waste, workmanship, loading at work site, horizontal and vertical transport, unloading, contractor's profit and overhead costs (excluding the price for paint, varnish and metal parts). Measurement: The area of shutters from jamb to jamb shall be measured. NOTE: The metal parts to be used in window woodworking in general and insect screen, pull-down shutters, shutters and vents shall, provided that the administration approve, consist of: 1) All types of espagnolettes and handles (handle iron and details), mirrors, transom windows (simple truss, steel truss, chrome plating and handle), hooks, rubber stops, all types of simple spring catches (espagnolette handles and lock catches), appropriate special window fixing screws, latch counterweight sets, and hinges. 2) Installation of metal parts in position shall be included in woodworking prices.		

Work Item No.	24.003		**Line No:** 39
Item Title	Making vertical rainwater down-pipes ø 100 mm of zinc no 12	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The price for 1 m of vertical rainwater down-pipe: for cutting the zinc no 12 sheets to have 100 mm of internal diameter and 1.5 cm of overlap, soldering at the overlap area, single or double beading on both sides of the pipe at 10 cm apart, fixing the pipe to the wall by clamps of galvanized iron at 3 x 20 mm section at 1 m intervals holding underneath the upper bead, placing the pipe parts inserting into one another, fastening the clamps by galvanized bolts and nuts, and completing the installation of pipes on the wall; including all types of materials and waste, workmanship, loading at construction site, horizontal and vertical transport, unloading, contractor's profit and overhead costs. Measurement: The length of the axis of the installed pipe shall be measured; and curved parts shall be given surcharge of 100%.		

Work Item No.	24.011		**Line No:** 40
Item Title	Making rain gutters ø 185 mm of zinc no 12	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The price for 1 m of rain gutter: for making hanging gutters and skirting of zinc no 12 sheet in round or rectangular shape according to the skirting diameter or the application drawing, making reed on the free side, soldering strongly inside and outside, placing one layer of bituminous cardboard under the skirting, placing a filter of galvanized wire or zinc, placing in position with galvanized iron hooks of 5 x 30 mm in size by 2 at every meter; including all types of materials and waste, workmanship, loading at construction site, horizontal and vertical transport and unloading, contractor's profit and overhead costs. Measurement: The length of the axis of the installed pipe shall be measured; and curved parts shall be given surcharge of 100%. NOTE: Where an iron bar is placed in the reed made in the free side, the price for the bar iron shall be paid at its respective Work Item.		

Work Item No.	28.096		**Line No:** 41
Item Title	3+3 mm double glass window unit (with metal lath)	**Unit**	m2
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The price for 1 m2 of double glass window unit; for applying a thin layer high quality paste in the glass slot; placing the battens for double glass window unit at necessary locations; placing in position the double glass window unit manufactured to its measures in 3+3 mm thickness and 12 mm spacing; applying the high quality paste in the remaining gaps and along the side and wedging; fixing the profile or metal laths in position with screws; scraping and cleaning the excess paste; including all types of materials and waste, loading at work site, horizontal and vertical transport, unloading, workmanship, contractor's profit and overhead costs. Measurement: The surface area of the installed glass shall be measured.		

Work Item No.	30.3/001		**Line No:** 42
Item Title	2 m, galvanized 65×65×7 angle, 5 m line and burying	**Unit**	pcs
Book	Turkish Electricity Distribution Corp. (1st Region) (TE1)		
Technical Description	a) Materials: Galvanized earthing rod of 2 m in length and galvanized earthing line of 5 m in length or 70 mm2 galvanized stranded steel wire as specified in Work Item No. 30. b) Installation: As specified in Work Item No. 30.1.b. (Where it is necessary to use an earthing line longer than 5 m, the unit price for materials and installation in Work Item No. 30.1.1 shall additionally be paid.)		

Work Item No.	3106		**Line No:** 43
Item Title	Removal of thin wooden covering	**Unit**	m2
Book	Ministry of Culture (KUB)		
Technical Description	The price for 1 m2 of the wooden covering; for removing the wooden covering of special importance without damaging the other wooden material; removing nails, numbering and entering on the relief, transporting to the storage and keeping, and delivery to the administration by a written report; including all types of workmanship, materials, horizontal and vertical transport at work site, contractor's profit and overhead costs. Measurement: The removed thin wooden covering shall be calculated as m2.		

Work Item No.	3108		**Line No:** 44
Item Title	Making thin wooden covering with 1st class pine timber	**Unit**	m2
Book	Ministry of Culture (KUB)		
Technical Description	The price for 1 m2 of the thin wooden covering; for making the covering from knot-free, crack-free, oven-dried 1st class pine timber according to the original sample (lap siding or tongue-and-groove joints); planning, sanding, attuning and nailing; including all types of workmanship, materials, horizontal and vertical transport at work site, contractor's profit and overhead costs. Measurement: The surfaces covered shall be calculated as m2.		

Work Item No.	701.102		**Line No:** 45
Item Title	Sheet metal panel 900 mm (TS EN 61439-1/2)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	NOTE: “Type tests” shall be commissioned and the test results be delivered to the administration. Manufacturing, transporting to work site, installing and delivering in working condition the first sheet metal panel; for manufacturing an enclosed sheet metal panel of 2100 mm in height, at least 500 mm in depth and 800 or 900 mm in width depending on the need, as an upward structure made of 40 x 40 x 4 mm angle or similar profile iron, sheets at least 2 mm with edges bent and fixed, made of DKP sheet and top closed with the same type of sheet; making a concrete base of 10 cm in height for the panel which shall be anchored at four corners with galvanized bolts; making a wire-mesh case behind the panelboard, on both sides of the passage of 75 cm in width, one to be an open/close locking door, made of sheet metal up to 1 m in height from the bottom, the upper part made of ø 3 mm steel wire meshed at 30 mm interval; the panel’s interior, exterior and structure applied on coat of red lead, two coats of matte gun paint and oven-dried, the servicing passage behind the panelboard made of woodwork slabs and covered with PVC or linoleum; in case of working with additional sheet metal panels, the fixed wire-mesh case being placed in the additional section of the first panel and the sheet metal section on the combining face of the panel being placed at the end of additional sheet metal panels, and the covering for the servicing passage being extended along the additional panels; where deemed necessary by the engineering supervisor, a wooden railing being manufactured in 5 x 10 cm in size, painted in the same color as the panel, 80-100 cm in height from the servicing passage behind the sheet metal panels, and the top of the passage behind panelboard being covered by ø 3 mm steel wire meshed at 30 mm interval; the panel having phases painted grey, black and brown and neutral in light blue conforming to TS 6429, with busbars and insulators installed, with all holes, frames, mounts necessary for the devices to be placed in the panel according to the application drawings, and where necessary, a LV surge protector placed for phases on the panel and earthing installed in green/yellow color; including paint, insulator connection conductors, all types of small materials and workmanship and installation, labels needed for each device, connectors (excluding the price for copper busbar, locked wire-mesh door and wire-meshed surge protector). NOTE: When a wooden railing is made, its price shall be paid at construction unit prices.		

Work Item No.	715.308		**Line No:** 46
Item Title	Thermal-magnetic circuit-breaker 3 x 63 A behind panelboard (TS EN 60947-2)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing the compact circuit-breaker; compact type, fiberglass polyester, body with higher electrical and mechanical strength and conforming to Vo fire resistance rating according to UL-94, made of material resisting constantly at least 150°C, breaking in air-filled medium, starting mechanism independent of hand movement, thermal overcurrent and magnetic short-circuit protective relays (triple protective relays for tri-phase ones), current limiting function, operational short-circuit breaking capacity minimum % 50 Icu. Where the breaking capacity is higher than the value indicated below, the prices in Work Item No. 715-300 shall be increased by 20%, the installation prices shall be applied without increase. (I1: Adjusted nominal current, In: Nominal current, Icu: Short-circuit breaking capacity, type tested.)		

Work Item No.	718.509		**Line No:** 47
Item Title	Residual current circuit breaker up to 4 x 63 A (300 mA)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, installing and delivering in working condition the residual current circuit breaker; which is manufactured in compliance with the Regulation on Indoor Electrical Installations, specifications and standards; ensures safety of life and property by breaking the circuit within a duration of 10-30 ms by detecting the fault current occurring on the phases and neutral line when there is a leak current in the electrical installations; operates at 220 V at mono-phasic circuits and at 380 V at tri-phasic circuits; has a differential coil and a test button to check whether the system is operating; can be installed on carrying rails inside the panel; is protected against external impact; complies with CEE 27 and other international standards, is capable of operating even when the neutral line disrupted at 30 mA life protection and 300 mA for fire protection; including all materials and workmanship.		

Work Item No.	724.401		**Line No:** 48
Item Title	Automatic fuse switch (3 ka) up to 16 A	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing the automatic fuse; serving also as switch, with 3 kA breaking capacity, 2-and 4-pole types capable of breaking neuter and phase, B and C curve; including all materials and workmanship.		

Work Item No.	724.404		**Line No:** 49
Item Title	Automatic fuse switch (3 kA) up to 40 A	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing the automatic fuse; serving also as switch, with 3 kA breaking capacity, 2-and 4-pole types capable of breaking neuter and phase, B and C curve; including all materials and workmanship.		

Work Item No.	725.722		**Line No:** 50
Item Title	Tri-phase time tariff electronic electric meters 3 x 230/400 V 3 x 20 (120) A	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site, installing and making connections of, delivering in working condition the tri-phase four-wire time tariff electronic type active meter and mount; conforming to IEC 1036-96, TS EN 62053-21, TS 62052-11 standards, brand registered with the Ministry of Science, Industry and Technology and having a Registration Certificate, capable of making measurements within the current and voltage ranges with at most Class 2 error, operating frequency 50 Hz, data interaction with optical port conforming to TS EN 62056-21 standard, the meter capable of dividing the day into 8 parts at minute precision conforming to the on the Regulation on Electric Meters and Regulation on Electricity Market Tariffs, IP 51 protection class (TS EN 60529), manufactured to avoid ingress of dust and water, digital display of 6 integer and 2 decimal digits with lit background on the meter, meter’s own circuit having 100 years of real-time clock, conforming to Measuring Instruments Directive and Regulation on Electric Meters (76/891/EC), approved by TEDAŞ.		

Work Item No.	791.426		**Line No:** 51
Item Title	4 x 6 mm2 1 kV underground wire supply line (n2 x h)	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the underground wire; to be laid, for indoors, over-plaster, on walls, ceiling or ducts by way of brackets or crochets, for outdoors, in ducts; including crossing and safety tubes, all types of materials, crochets, and workmanship. Installing the column or supply line; conforming to TS EN 50525-3-31 Standard and Regulation on Indoor Electrical Installations; phase and neutral conductors conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; plastic insulated (HO7Z, O7Z1, at least 300/500 V); including the supply of tubes, crochets, junction boxes, joints, elbows, connectors, iron brackets, paint, all types of materials and workmanship.		

Work Item No.	791.427		**Line No:** 52
Item Title	4 x 4 mm2 1 kV underground wire supply line (n2 x h)	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying at work site the underground wire; to be laid, for indoors, over-plaster, on walls, ceiling or ducts by way of brackets or crochets, for outdoors, in ducts; including crossing and safety tubes, all types of materials, crochets, and workmanship. Installing the column or supply line; conforming to TS EN 50525-3-31 Standard and Regulation on Indoor Electrical Installations; phase and neutral conductors conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; plastic insulated (HO7Z, O7Z1, at least 300/500 V); including the supply of tubes, crochets, junction boxes, joints, elbows, connectors, iron brackets, paint, all types of materials and workmanship.		

Work Item No.	791.504		**Line No:** 53
Item Title	1 x 6 mm2 plastic insulated conductor (HO7Z, O7Z1)	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing the column or supply line; conforming to TS EN 50525-3-31 Standard and Regulation on Indoor Electrical Installations; phase and neutral conductors conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; plastic insulated (HO7Z, O7Z1, at least 300/500 V); including the supply of tubes, crochets, junction boxes, joints, elbows, connectors, iron brackets, paint, all types of materials and workmanship. Supplying, transporting to work site and installing the conductor; including all types of small materials and workmanship.		

Work Item No.	792.101		Line No: 54
Item Title	Normal sortie with Halogen-free wire	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site and making complete over-or under-plaster lighting sorties; of at least 2.5 mm2 for direct lines and at least 1.5 mm2 for supplement lines inside Peschel, Bergman or PVC tubes; conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; phase and neutral conductors colored according to TS-6429, plastic insulated (HO7Z, O7Z1); including junction boxes, connectors, switches, armatures, fixing battens, all types of materials and workmanship (excluding armatures). No price differential shall be paid if the wall thicknesses are greater than normal. (No price differential shall be paid in case of using Halogen-free tubes conforming to EN 50086, IEC 60754 standards, having UL tests, VDE or valid international certifications, with CE marking.)		

Work Item No.	792.102		Line No: 55
Item Title	Commutator sortie with Halogen-free wire	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site and making complete over-or under-plaster lighting sorties; of at least 2.5 mm2 for direct lines and at least 1.5 mm2 for supplement lines inside Peschel, Bergman or PVC tubes; conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; phase and neutral conductors colored according to TS-6429, plastic insulated (HO7Z, O7Z1); including junction boxes, connectors, switches, armatures, fixing battens, all types of materials and workmanship (excluding armatures). No price differential shall be paid if the wall thicknesses are greater than normal. (No price differential shall be paid in case of using Halogen-free tubes conforming to EN 50086, IEC 60754 standards, having UL tests, VDE or valid international certifications, with CE marking.)		

Work Item No.	792.104		Line No: 56
Item Title	Parallel sortie with Halogen-free wire	Unit	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site and making complete over-or under-plaster lighting sorties; of at least 2.5 mm2 for direct lines and at least 1.5 mm2 for supplement lines inside Peschel, Bergman or PVC tubes; conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; phase and neutral conductors colored according to TS-6429, plastic insulated (HO7Z, O7Z1); including junction boxes, connectors, switches, armatures, fixing battens, all types of materials and workmanship (excluding armatures). No price differential shall be paid if the wall thicknesses are greater than normal. (No price differential shall be paid in case of using Halogen-free tubes conforming to EN 50086, IEC 60754 standards, having UL tests, VDE or valid international certifications, with CE marking.)		

Work Item No.	792.105		**Line No:** 57
Item Title	Luminaire sortie with Halogen-free wire	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site and making complete over-or under-plaster lighting sorties; of at least 2.5 mm2 for direct lines and at least 1.5 mm2 for supplement lines inside Peschel, Bergman or PVC tubes; conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; phase and neutral conductors colored according to TS-6429, plastic insulated (HO7Z, O7Z1); including junction boxes, connectors, switches, armatures, fixing battens, all types of materials and workmanship (excluding armatures). No price differential shall be paid if the wall thicknesses are greater than normal. (No price differential shall be paid in case of using Halogen-free tubes conforming to EN 50086, IEC 60754 standards, having UL tests, VDE or valid international certifications, with CE marking.)		

Work Item No.	793.102		**Line No:** 58
Item Title	Safety line outlet sortie with Halogen-free wire	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site and making complete outlet sorties; of direct and supplement lines for outlets containing phase, neutral and safety lines of at least 2.5 mm2 in section inside Peschel, Bergman or PVC tubes; conforming to IEC 60332 Part 3.1 Category C, IEC 60754 norms; phase, neutral and safety conductors colored according to TS-6429, plastic insulated (HO7Z, O7Z1); including junction boxes, connectors, outlet boxes, all types of materials and workmanship. No price differential shall be paid in case of using Halogen-free tubes conforming to EN 50086, IEC 60754 standards, having UL tests, VDE or valid international certifications, with CE marking. Measurement: Where the direct line is longer than 35 m; the price for supply line shall be paid at Work Item No. 791-000.		

Work Item No.	815.101		**Line No:** 59
Item Title	Telephone sortie	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Making over-or under-plaster telephone sortie; of plastic sheathed telephone cable (TS 3 EN 60708) with plastic insulated conductor of 0.50 mm in diameter inside Peschel, Bergman or PVC tubes; including junction boxes, special telephone outlet plug and frame, all types of small materials and workmanship. (Excluding the main line and machine, including the earthing line; a stand-alone line shall be laid for each telephone from the floor distribution box). Measurement: No additional price shall be paid unless the sortie line length exceeds 20 m. For the length of sortie line beyond 20 m, the payment shall be made at Work Item No. BFT No. 818-000.		

Work Item No.	845.103		**Line No:** 60
Item Title	Television sortie	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Installing in position and delivering in working condition the antenna down-line; of coaxial cable inside PVC tube conforming to the technical specifications (shielded microphone cable not to be used), special plug distributing connector; including all types of small materials and workmanship. Measurement: No additional price shall be paid unless the sortie line length exceeds 20 m. For the length of sortie line beyond 20 m, the payment shall be made at Work Item No. 880-400.		

Work Item No.	845.104		**Line No:** 61
Item Title	4-piece television antenna	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing in position the television antenna; conforming to TS 489 standard and technical specifications (galvanized pipe of 25 mm at least 3 m high; the price for pipe to be paid additionally at respective unit prices, with no payment for installation); including types of materials and workmanship. 4-piece antenna.		

Work Item No.	845.202		**Line No:** 62
Item Title	Common television antenna panel 21-40 dB	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying and installing in a suitable location, delivering in working the common television antenna panel; 220 Volt supply line, down connection line between the antenna and the panel, distribution box; including types of materials and workmanship.		

Work Item No.	880.437		**Line No:** 63
Item Title	Rg 11/u-6, 75 impedance coaxial cables	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying the coaxial cable; in radio, TV, radar, fire control, many types of transmitters, security, satellite antenna, CCTV antenna and measurement systems, in applications where the signal loss must be kept to minimum or external interference must be avoided; manufactured in conformity to TS EN 50117-1 standard and Low Voltage Directive 2006/95/EC, placed in the market with CE marking; including crossing and safety tubes, all types of materials and workmanship. NOTE: For indoor installation; Peschel, Bergman or PVC included. Cable type Impedance (ohm)		

Work Item No.	880.503		**Line No:** 64
Item Title	Splitters, distributing type 1/4 max dB loss 8.0 (TS EN 60728-6)	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying the splitters; compatible with the impedance of coaxial cables used in radio, TV, radar, fire control, many types of transmitters, security, satellite antenna, CCTV antenna and measurement systems; with 1 main input and secondary outputs, operating at frequency range of 40-862 MHz; resistances, capacitors, coils and as many connectors as the number of inputs and outputs; including all types of materials and workmanship. Distributing type Max dB loss.		

Work Item No.	880.563		**Line No:** 65
Item Title	UTP CAT 6 cable	**Unit**	m
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site, installing and testing the cable; used in data communications at 250 MHz bandwidth and 250 Mbps rate between computers for horizontal setups in the local area networks (LAN); with 4 pairs, 4 color-coded (blue-blue white, orange-orange white, green-green white, brown-brown white), PVC outer sheath covering all unshielded twisted pairs around a star-shaped separator; 4 pairs of cable to Cat 6 standard, 23 AWG (American Wire Gauge), 0.57 mm bare copper coating criterion; conforming to ANSI/TIA/EIA-568, TS EN 50288-3, ISO 11801 standards; ISO certified; including all types of small materials and workmanship. (If passed through tube, the price for the tube shall be paid out of the respective Work Item for tube; and if through cable trays, then the respective for cable trays).		

Work Item No.	880.574		**Line No:** 66
Item Title	UTP CAT 6 over-plaster double plug socket	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	Supplying, transporting to work site, installing and testing the plug socket; to CAT 6 standards used in data communications at 250 MHz bandwidth and 250 Mbps rate between computers for horizontal setups in the local area networks (LAN); 8 RJ-45 contact cores; jack contact point covered with a material of high conductivity; not screened; conforming to ANSI/TIA/EIA-568B.2, ISO/ IEC-11801 standards; ISO certified; over-plaster, double-port, PVC box frame; plug box; cover with spring, labels; including workmanship.		

Work Item No.	B.04		**Line No:** 67
Item Title	Installing the latch (espagnolette handle and lock catch) yellow brass monobloc screw-mounted	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description			

Work Item No.	B.16		**Line No:** 68
Item Title	Installing the hinge	**Unit**	pcs
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description			

Work Item No.	ELK-01		Line No: 69
Item Title	5-arm luminaire	Unit	pcs
Book	Project-specific (PRJ)		
Technical Description			

Work Item No.	ELK-02		Line No: 70
Item Title	3-arm luminaire	Unit	pcs
Book	Project-specific (PRJ)		
Technical Description			

Work Item No.	ELK-03		Line No: 71
Item Title	Ceiling globe	Unit	pcs
Book	Project-specific (PRJ)		
Technical Description			

Work Item No.	MSB.660/A1		Line No: 72
Item Title	Making over-counter covering with color marble slabs of 3 cm	Unit	m2
Book	Ministry of National Defense (MoND)		
Technical Description	The price for 1 m2 of covering the counter tops at locations such as kitchens with maximum two pieces of color marble slabs of 3 cm in thickness, placing skirting boards of the same marble along the lines joining the wall, making an opening for the sink, making drip caps, finishing the edges of marble slabs; including workmanship, all types of materials and waste, costs of machinery and equipment, loading at work site, horizontal and vertical transport, unloading, contractor’s profit and overhead costs Measurement: The surface area of the counter covered with marble slabs shall be calculated. Skirting boards shall not be taken into account. NOTES: K=coefficient found, a=width (cm), b=length (cm), h=thickness (cm) K= (k1 x k2)-1, k1=log (a x b)/log (180)-0.22 (size increase coefficient), k2=log (h)/log (6)+0.61 (thickness increase coefficient) For all free lengths, the size increase coefficient is k1=1. For length 3 x 30 x s, k1=1, k2=log (3)/log (6)+0.61=1.22 K= (1 x 1.22)-1= 0.22 For length 2 x 30 x s K=1 04.416/C001_. 1.00 x 0.22+0.16 x 0.22= 0.260 m2		

Work Item No.	SPECIFIC-1		Line No: 73
Item Title	Making non-color grid floor coating	Unit	m2
Book	Project-specific (PRJ)		
Technical Description			

Work Item No.	SPECIFIC-2		Line No: 74
Item Title	Repairing the color or non-color grid floor coating	Unit	m2
Book	Project-specific (PRJ)		
Technical Description			

Work Item No.	V.0201		Line No: 75
Item Title	Price for bottoming stone (with quarry stone)	Unit	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of bottoming stone; for extracting the stones from quarry as necessary and at required dimension depending on the place of use, sifting out degraded ones, crushing big ones; including materials and workmanship and horizontal and vertical transport at construction site, unloading. Measurement: The price shall be paid for the volume in m3 as found by multiplying the bottomed area and the average stone thickness.		

Work Item No.	V.0204		Line No: 76
Item Title	Price for timber for front work scaffold of any height	Unit	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for timber used in the space per m2 of work scaffold; for making the work scaffold (including suspension work scaffold) to be used as surface area at external covering, jointing, plastering in the construction provided that the timber comply with the requirements in the Works General Technical Specifications of the Ministry of Environment and Urbanization; including all materials, waste, workmanship, loading at work site, horizontal and vertical transport, unloading, contractor's profit and overhead costs. Measurement: Where it is used for wall, wall covering, plastering, jointing and similar works; the distance between the surface on which the feet of the scaffold rest and the lower surface of the eaves shall be taken as the height; and the length at ground of the building where the scaffold is erected shall be taken as the width. The multiplication of the width and height shall be taken as the surface area of the work scaffold. NOTE: 1-Once a work scaffold is erected, it shall be assumed that all works that require scaffolding at thin position have been done. And the price for timber for the work scaffold shall be paid only once. However, where the work scaffold is left idle for reasons unavoidable, and in a situation that may cause danger; the work scaffold shall be dismantled with written permission from the administration; and when it is re-erected, the price for workmanship shall be paid for a second and last time, no price for timber shall be paid. The width of work scaffold may not be greater than 1.50 m on the fronts from strut to strut. 2-Where 2 years pass from the date of erecting the work scaffold; the payment shall be made by multiplying the measured amount by 1.25 unless the work is prolonged for reasons attributable to the contractor.		

Work Item No.	V.0205/A		**Line No:** 77
Item Title	Price for timber for work scaffold (up to and including 13.50 m)	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for timber used in the space per m3 of work scaffold; for making the work scaffold where it needs to be used as volume, in accordance with the requirements in the Works General Technical Specifications of the Ministry of Environment and Urbanization; including all materials and workmanship, waste, horizontal and vertical transport at construction site, unloading, contractor's profit and overhead costs. Measurement: The volume shall be found by multiplying the surface on which the feet of the scaffold rest and 1.50 m less of the highest point of the production. The amount found shall be in m3 as the volume applicable to the price for timber. NOTE: 1- The width of work scaffold may not be greater than 1.50 m on the fronts from strut to strut. 2- Where 2 years pass from the date of erecting the work scaffold; the payment shall be made by multiplying the measured amount by 1.25 unless the work is prolonged for reasons attributable to the contractor.		

Work Item No.	V.0209		**Line No:** 78
Item Title	Price for stone in the rubble wall	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of rubble stone in the rubble wall; for extracting the rubble stone from quarry, crushing, selecting, sizing according to the samples, sifting out degraded ones; including all materials, workmanship, waste, unloading construction site, horizontal and vertical transport, contractor's profit and overhead costs. Measurement: The price shall be paid for the volume of the wall built by measuring on the application drawings if any, otherwise of the production in m3. The space for mortar and individual spaces smaller than 0.25 m3 shall not be deducted. NOTE: This price includes the front surcharge.		

Work Item No.	V.0227/3		Line No: 79
Item Title	Price for freestone on flat surface of cubile stone (no price for dressability and face-making to be paid)	Unit	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of stone in the flat surface productions; which stone is finished, raw, unpolished, complies with the requirements in the Works General Technical Specifications of the Ministry of Environment and Urbanization, is well-formed, without layers, veinless, without cracks, similar to the original sample in the construction or in the quality as required by the administration; for extracting the cubile stones from quarry, shaped geometrically and made into blocks in the factory; including transport to production site, waste during transport and all types of materials and workmanship, unloading construction site, horizontal and vertical transport, contractor's profit and overhead costs. Measurement: The price shall be paid for the volume in m3 of freestone in the finished production by measuring the lines passing the outermost points. Carving, profiles and spaces smaller than 0.05 m3 shall not be deducted; waste shall not be paid. NOTE: 1-The price for stone (V.0227/3) does not include dressability surcharge and face-making. If chiseling and bush hammering are done, they shall be paid at their respective Work Item 2-The workmanship for production of such materials shall be paid dressability surcharge depending on the hardness degree of the stone.		

Work Item No.	V.0340/A		Line No: 80
Item Title	Removal of wooden, aluminum, PVC doors and windows	Unit	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of removal of wooden, aluminum, PVC doors or windows of any size, arched or not arched, which need to be removed, according to the direction by the engineering supervisor, without damaging others around; removing the glasses on the partially intact sash bars and frames, stacking at the location designated by the administration; including all types of materials and workmanship. Measurement: The removed doors and windows shall be measured in m2. Gaps and glass areas shall not be deducted.		

Work Item No.	V.0346/01		Line No: 81
Item Title	Replacing freestone everywhere except minarets	Unit	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of replacing freestone; for replacing the freestone production at places where it is not possible to remove or demolish without damaging those around at the depth required by the engineering supervisor, cleaning and washing the spot, stacking the removed rubble at a location in the construction site; including loading at construction site, horizontal and vertical transport, unloading, all types of workmanship, costs of machinery and equipment, contractor's profit and overhead costs. Measurement: The volume of the replaced stone shall be calculated in m3.		

Work Item No.	V.0349/01		**Line No:** 82
Item Title	Replacing conventional brick or rubble wall everywhere	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of replacing conventional brick or rubble wall in places such as domes, vaults, walls etc. in the specifications of Work Item No. V.0346; including all materials and workmanship. Measurement: The volume of the replaced place shall be calculated in m3.		

Work Item No.	V.0402/07		**Line No:** 83
Item Title	Rasping with care the layer (5-10 cm) made of imitated concrete, mosaic and imitated stone which is adhered to the original structural surface on the freestone or rubble stone surfaces	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of rasping; for the work of rasping the layer (5-10 cm, 10 included) made of imitated concrete, mosaic and imitated stone on the freestone or rubble stone surfaces without damaging the wall surfaces, cleaning the residual cement; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the rasped surface, measured without taking into account profiles and similar indents or bumps. NOTE: Where joints are opened, they shall be paid out of the respective Work Item No. The depth shall be documented on the surface rasped.		

Work Item No.	V.0406		**Line No:** 84
Item Title	Whitewash rasping with wire brush on all types of conventional brick, marble and freestone surfaces excluding carved surfaces	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of whitewash rasping with wire brush on all types of conventional brick, marble and freestone surfaces excluding carved surfaces according to the direction by the engineering supervisor, without making scratches on the surface, scraping the whitewash that has penetrated the pores in the surface and profile bottoms; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the rasped surface, measured without taking into account profiles and similar indents or bumps. Where joints are opened, they shall be paid out of the respective Work Item No.		

Work Item No.	V.0415		**Line No:** 85
Item Title	Opening joints on the front of mixed stone or brick with cement or lime mortar which is to be re-jointed	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of opening joints up to 5 cm average in depth on the front of mixed stone or brick with cement or lime mortar which is to be re-jointed in the specifications of Work Item No. V.0411; including all materials and workmanship. Measurement: The price shall be paid for the area in m2 of the surface on which the old joints are removed and which is made ready for re-jointing.		

Work Item No.	V.0501		**Line No:** 86
Item Title	Workmanship for bottoming work	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of bottoming work; for, according to the direction by the engineering supervisor, compacting by pounder the surface to be bottomed, laying the bottoming surface broken in pyramid shape in 15 x 15 cm of bottom area on average and 15 cm in height by compacting side by side, and compacting the laid bottom; including all types of materials and workmanship. Measurement: The workmanship price shall be paid for the volume in m3 found by multiplying the bottoming area by average thickness.		

Work Item No.	V.0502		**Line No:** 87
Item Title	Laying fine aggregate not needing screening	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of laying fine aggregate; for, according to the direction by the engineering supervisor, compacting in advance by pounder the surface to be laid with aggregate, laying the sand or gravel in the thickness according to the application drawings and specified by the engineering supervisor, and grading; including all types of materials and workmanship. Measurement: The workmanship price shall be paid for the volume in m3 found by multiplying the surface area where the sand and gravel in the quality and mix as approved by the engineering supervisor and the thickness.		

Work Item No.	V.0603		**Line No:** 88
Item Title	Workmanship for erecting work scaffold at front (up to 13.50 m of height)	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of work scaffold; for, according to the direction by the engineering supervisor, erecting the work scaffold where it needs to be used as surface area (including suspension work scaffold), safely dismantling without damaging the structure and environment upon completion of work; including all types of materials except timber, and workmanship. Measurement: Where it is used for wall, wall covering, plastering, jointing and similar works; the distance between the surface on which the feet of the scaffold rest and the lower surface of the eaves shall be taken as the height; and the length at ground of the building where the scaffold is erected shall be taken as the width. The multiplication of the width and height shall be taken as the surface area of the work scaffold.		

Work Item No.	V.0603/1		**Line No:** 89
Item Title	Workmanship for erecting work scaffold (up to 13.50 m of height)	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of work scaffold; for, according to the direction by the engineering supervisor, erecting the work scaffold where it needs to be used as surface area (including suspension work scaffold), safely dismantling without damaging the structure and environment upon completion of work; including all types of materials except timber, and workmanship. Measurement: Where it is used for wall, wall covering, plastering, jointing and similar works; the distance between the surface on which the feet of the scaffold rest and the lower surface of the eaves shall be taken as the height; and the length at ground of the building where the scaffold is erected shall be taken as the width. The multiplication of the width and height shall be taken as the surface area of the work scaffold.		

Work Item No.	V.0705		**Line No:** 90
Item Title	Workmanship for dismantling the existing iron fence carefully, numbering and installing in position	**Unit**	KG
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 kg of dismantling the existing iron fence; for, according to the direction by the engineering supervisor, numbering and labeling the existing iron fence prior to dismantling, entering in the relief drawings, dismantling carefully after entering in the relief drawings, carefully clearing the residues such as concrete, mortar etc. on the surface of the parts inserted in the coping or stone wall, transporting to the place of repair, re-installing in position; including all types of materials and waste, workmanship, loading at construction site, transport, unloading, contractor's profit and overhead costs. Measurement: The finished product shall be weighed before installation. The weight shall be captured in a written report. When it is installed in position and confirmed as operational, action shall be taken according the kg value in the report.		

Work Item No.	V.0807/B		**Line No:** 91
Item Title	Workmanship for face making on flat surface on flooring freestone of 5-8 cm in thickness	**Unit**	m2
Book	General Directorate of Foundations 2014 and before (VAK)		
Technical Description	The price for 1 m2 of making face on freestone of 5-8 cm according to the direction by the engineering supervisor or the specifications of Work Item No. V.0807. Measurement: As in Work Item No. V.0807. NOTE: The price for stone shall be paid at Work Item No. V.0227.		

Work Item No.	V.1131		**Line No:** 92
Item Title	Workmanship for making flat freestone covering of 25 cm average in thickness at replaced locations	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of replacement; for, according to the direction by the engineering supervisor or the existing original sample or the application drawing to be provided by the administration, replacing with freestone of 25 cm average in thickness, making covering as indicated in the specifications, dressing the corners and edges of stone surfaces in own alignment by fine-toothed hand comb, dressing at least 5 cm wide sections of the lower and upper bed surfaces and vertical joint surfaces by fine-toothed hand comb, and the remaining parts by coarse-toothed hand comb with a 10 degree of slope backwards, placing the covering stone in alignment and in position to leave no gap by sawing the joints of stones, filling the dosage 400 cement mortar and grout in side joints and in the backs of stones to leave no gap, clearing mortar leftovers on joint surfaces, loading at construction site, horizontal and vertical transport, unloading; including all materials and waste, workmanship, costs, contractor's profit and overhead costs, (excluding the cost of stones). Measurement: The price shall be paid for the outer surface area in m2 of the covered freestone. NOTE: The price for stone shall be paid at Work Item No. V.0227/1-.....-V.0227/6 etc. as appropriate depending on the contract. Workmanship for chiseling and bush hammering is included.		

Work Item No.	V.1660		**Line No:** 93
Item Title	Making polished flat plaster with dosage 225 cement reinforced lime mortar on old wall surfaces using plastering float or steel trowel	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making plaster; for opening joints on the surface to be plastered, washing and cleaning the surface, applying approximately 3 cm as first coat the lime mortar reinforced with 225 dosage cement as in Work Item No. V.109/A, then 1 cm as second coat for a total of 4 cm thick flat surface plastering; floating between the gages and finishing with a float; making the second coat of plaster with fine sand lime mortar reinforced with 225 dosage cement as in Work Item No. V.109 according to the sample of the work under or according to the direction by the engineering supervisor; finishing the surface with plastering float or steel trowel; watering the joints at 8-hour intervals until the completion of the mortar hardening; including all types of materials workmanship. Measurement: The price shall be paid for the plastered surface area in m2. The area of all gaps shall be deducted.		

Work Item No.	V.1667		**Line No:** 94
Item Title	Making plaster on flat surfaces of timberwork (Baghdadi board) or other wooden or stone surfaces using haired or goat-haired lime mortar	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making plaster; on flat surfaces of timberwork (Baghdadi board) or other wooden or stone surfaces, with the lower coat of 3 cm average in thickness using haired or goat-haired lime mortar as in Work Item No. V.0114 in 3 cm average thickness, the finishing coat of 1 cm average in thickness using fine sand fat lime mortar as in Work Item No. V.0108 for a total of 4 cm of plaster with haired or goat-haired lime mortar in the specifications of Work Item No. V.1660; cleaning the gaps of timberwork or similar wooden covering under the surface to allow ingress of mortar, washing the surfaces; wetting and finishing the first coat of plaster with steel trowel to leave no hair or goat-hair outside, curving the sharp corners; finishing the second coat of plaster with steel trowel; including all types of materials and workmanship. Measurement: The price shall be paid for the plastered surface area in m2. The area of all gaps shall be deducted.		

Work Item No.	V.1667/A		**Line No:** 95
Item Title	Making plaster on curved surfaces of timberwork (Baghdadi board) or other wooden or stone surfaces using haired or goat-haired lime mortar	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making plaster on curved surfaces of timberwork (Baghdadi board) or other wooden or stone surfaces using haired or goat-haired lime mortar in the specifications of Work Item No. V.1667; including all types of materials and workmanship. Measurement: The price shall be paid for the plastered surface area in m2. The area of all gaps shall be deducted.		

Work Item No.	V.1753		**Line No:** 96
Item Title	Making joints in rubble walls using lime mortar	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making joints in rubble walls using lime mortar in the specifications of Work Item No. V.1751; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the jointed area. All gaps shall be deducted.		

Work Item No.	V.1794		**Line No:** 97
Item Title	Repairing and fortifying wooden roof with new pitch pine norm timber	**Unit**	m3
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m3 of repair and fortification; for those strainers, king posts, purlins, stanchions, rafters etc. elements in the existing roof that are identified by the engineering supervisor as to be replaced or fortified; repairing and fortifying with new pitch pine norm timber of 2nd quality in the sizes as indicated by the engineering supervisor or in the application drawings given by the administration; placing edgewise the king posts in vertical, strainers and purlins in horizontal, stanchions at 45 or 60 degrees, and rafters perpendicular to the eves (if in the existing roof, the rafter is placed horizontally, rafters may be placed again horizontally upon permission from the engineering supervisor to increase the eaves area), siding the parts at joints plainly or in fish mouth form; making fish mouth groove joints at knotting points, cutting wood ends at alignment, attuning the stanchions to king posts, seating the headers horizontally on king posts without bending, using bolts and plating for fortification as necessary; including all types of materials and workmanship. Measurement: The price shall be paid for the volume in m3 of the timber used as in position. Waste shall not be taken into account. NOTE: Wooden covering under the top cover shall not be considered fortification or reinforcement; bolts and plating shall be additionally paid if used for fortification. Whether the roof is covered or open, the repair and fortification other than the wooden covering under the top cover shall be included in this Work Item.		

Work Item No.	V.1835/A		**Line No:** 98
Item Title	Making sliding cover on roof with galvanized flat sheet metal of 0.5 mm in thickness (including galvanized sheet metal)	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making roof cover with galvanized flat sheet metal of 0.5 mm in thickness in accordance with the specifications and application drawings on the existing wooden and steel roof; making the lockings and fixing in position; including loading at construction site, horizontal and vertical transport, unloading, all types of materials and waste, workmanship, costs of machinery and equipment Measurement: It shall be calculated as area in m2 on the inclined surface.		

Work Item No.	V.1884/03		**Line No:** 99
Item Title	Shower cabin with 4 mm tempered glass for oval shower tray 90 x 90 cm	**Unit**	set
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	Cabins shall be made of using 4 mm tempered glass white profile on the surfaces of shower trays not leaning to walls; profiles electrostatic aluminum white powder coated in conformity to TSE EN 755-1; the height of cabin approximately 1.8 m.		

Work Item No.	V.2005		**Line No:** 100
Item Title	Making and installing in position conventional door wings by driving wrought iron cloutnails into wrought sheet metal of 3 mm in thickness on 1st class pitch pine timber	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making conventional door wings; in accordance with the direction by the engineering supervisor, existing and original sample or the detailed drawing to be provided by the administration, by driving wrought iron cloutnails into wrought sheet metal of 3 mm in thickness on new frames with smooth parts of 85 mm in thickness made of 1st class pitch pine timber; placing the wooden door frames in rabbeted form into pitch pine belts of 10 x 10 in size, belts at least 3 in count depending on the wing size, and placing pitch pine stanchions of the same size between the belts, fixing the belts and stanchions by plating irons and bolts of 50 x 10 mm in size, placing the metal sheets of 3 mm in thickness cut in appropriate width according to the sample on the outer face on the wooden wings by 2 cm overlap and horizontally and nailing with wrought iron cloutnails; bending metal sheets towards wooden surface at door heads, hammering the sheet covered face with a round head hammer; installing the wings in position by inserting pins and cradle slots; making the latches and handle bars of wrought iron and inserting pins and cradle slots in the door wings; making the door wings operational; making door windows on any one of the wings if deemed necessary by the engineering supervisor while not existing in the sample; including outer conventional iron plates, rings and knobs, all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the outer surface of the installed door.		

Work Item No.	V.2006/A		**Line No:** 101
Item Title	Making and installing in position conventional door wing or shutter wing (up to 4 boards per wing) of walnut or hornbeam with simple boards, sash bar and stile thickness with smooth parts up to 5 cm (included)	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making and installing in position the conventional door wing or shutter wing; of walnut or hornbeam in the specifications of Work Item No. V.2006, with simple boards, sash bar and stile thickness with smooth parts up to 5 cm (included); including all types of materials and workmanship, excluding pins or hinges, and conventional finishing varnish. Measurement: The price shall be paid for the area in m2 of the outer surfaces of the installed door wings and shutter wings. NOTE: Where battenboards and jambs are made, their prices shall be paid at the respective Work Items.		

Work Item No.	V.2039		**Line No:** 102
Item Title	Making and installing in position window walls of 1st class oak timber, with fixed lower part having simple board, sash bar and stile thickness with smooth parts up to 5 cm (included), upper part conventional flat or arched	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making window walls; in accordance with the direction by the engineering supervisor, existing and original sample or the detailed drawing to be provided by the administration, of 1st class oak timber, with fixed lower part having simple board, sash bar and stile thickness with smooth parts up to 5 cm (included), upper part conventional flat or arched; joining the sash bars with groove joints, opening the sash bar profiles smoothly, manufacturing the curved lines in multiple pieces if necessary and combining by groove joints to place them according to the sample, driving oak treenails at jointing locations, joining the joints by hot glue, overlapping the wings according to the sample and fixing the wings by brass screws, hinging and installing in position the wings; including all types of materials and workmanship, excluding metal parts and varnish. Measurement: The price shall be paid for the area in m2 of the single surfaces of the installed window walls.		

Work Item No.	V.2041/B		**Line No:** 103
Item Title	Making and installing in position wooden windows of single plane, arched, concave or convex surface, made of 1st quality pitch pine	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of making and installing in position the conventional wooden windows of arched, concave or convex surface, made of 1st quality pitch pine in the specifications of Work Item No. V.2040/A according to the direction by the engineering supervisor or the existing original sample or the application drawing to be provided by the administration. Measurement: The price shall be paid for the area in m2 as a single surface for the curved face areas (including the frame) of concave and convex windows, found by multiplying the width of windows and the height passing at the top point. If windowsills are made, they shall be paid out of the respective Work Item No.		

Work Item No.	V.2105		**Line No:** 104
Item Title	Applying synthetic varnish wood preservative on the wood	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of sanding the wood, cleaning the sanding dust and applying 2 coats of synthetic varnish wood preservative on the wood surfaces, protecting against dust and humidity until the varnish dries, all according to the direction by the engineering supervisor; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the varnished surfaces. Indents and bumps on the profiles or bases shall not be taken into account.		

Work Item No.	V.2105/A		**Line No:** 105
Item Title	Applying two coats of wood preservative on the wood	**Unit**	m2
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	The price for 1 m2 of applying two coats of wood preservative on the wood; including all types of materials and workmanship. Measurement: The price shall be paid for the area in m2 of the varnished surfaces. Indents and bumps on the profiles or bases shall not be taken into account. Both faces of the door wings, and one face of the windows shall be taken into account. The glass spaces shall not be deducted from the glass walls and windows, but shall be from the doors.		

Work Item No.	V.2229		**Line No:** 106
Item Title	Making and installing in position king post lighting armature of one arm, 30-40 cm in width, 50-70 cm in height, electrostatic oven-dry painted (on tops of yard wall and at sides of yard entry gate)	**Unit**	pcs
Book	General Directorate of Foundations post-2015 (VGM)		
Technical Description	Making and installing in position king post lighting armature of one arm, 30-40 cm in width, 50-70 cm in height, electrostatic oven-dry painted (on tops of yard wall and at sides of yard entry gate) Measurement: The number of king post lighting armature installed in position and in working condition.		

Work Item No.	Y.25.002/02		Line No: 107
Item Title	Applying on iron surfaces two coats of anti-rust paint and two coats of synthetic paint	Unit	m2
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The price for 1 m2 of applying paint on iron surfaces; for cleaning the surfaces of iron production by sanding or wire brush, applying anti-trust paint as 0.100 kg first coat, 0.100 kg second coat (each different color), and synthetic paint as 0.100 kg first coat, 0.100 kg second coat of desired color; including all types of materials and waste, workmanship, contractor's profit and overhead costs. Measurement: a) For furniture, the painted surfaces shall be measured. b) For doors and compartments: 1) For those with battenboards, two faces from plaster to plaster shall be measured. 2) For those with frame (without jambs), the area of frames shall be included in the measure of the two faces in the vertical plane from frame to frame. 3) For those with frame and jam, the area of frames shall be included in the measure of the two faces from jamb to jamb. 4) For large sizes, indents, bumps and glass spaces shall not be taken into account. If there are laths on window edges, the measurement shall be made from there. c) For window walls and windows: 1) For window walls and windows with jambs; the area in the vertical plane from plaster surface to plaster surface shall be measured excluding the jambs; for those without jambs, the area from plaster surface to plaster surface. Only one surface shall be taken into account, two surfaces shall be painted. Glass spaces shall not be deducted; sills, frames and edges if any shall be additionally measured and added to the area. 2) Double windows shall be measured as is; the wooden frame between two windows shall be additionally measured and added to the area. For both windows, both faces shall be painted, one face each shall be taken into account. Glass spaces shall not be deducted. d) For fences and railings, the footprint of one face in the vertical plan shall be measured. Gaps shall not be deducted. e) Painted faces shall be measured for iron production parts such as columns, roof trusses, beams, areaways and similar.		

Work Item No.	Y.25.003/15		Line No: 108
Item Title	Applying one coat of primer and two coats of water-based matte paint on newly plastered surfaces (interior front)	Unit	m2
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The price for 1 m2 of applying paint; after sanding, grinding and cleaning the surfaces to be painted; one coat of water-based 0.150 kg primer, and two coats of water-based matte paint as 0.100 kg first coat, 0.100 kg second coat of desired color; including all types of materials and waste, workmanship, contractor's profit and overhead costs. Measurement: The painted surfaces shall be measured on the application drawings. All gaps shall be deducted. NOTE: Work scaffold shall be given to walls and ceilings higher than 3 m. If there is a work scaffold for plastering, none shall be given for the painting.		

Work Item No.	Y.26.006/303		**Line No:** 109
Item Title	Making wall tiling with 1st quality white ceramic wall tiles in (20 x 25 cm) or (20 x 30 cm) nominal dimensions; all types of patters and surface properties, with 3 mm joint spaces (with tile glue)	**Unit**	m2
Book	Ministry of Environment and Urbanization (BAY)		
Technical Description	The price for 1 m2 of tiling; for the removal of any dirt, dust, burr and other residues that prevent adhesion from the smooth surface compliant with the approved application drawings and moistening; applying the cement-based tile glue of standard performance, reduced slipping on the surface and grooving with special chisel; laying the 1st quality white ceramic wall tiles in (20 x 25 cm) or (20 x 30 cm) nominal dimensions; all types of patters and surface properties, with 3 mm joint spaces; filling the joints with a joint filling of cement-based, standard performance; cleaning the covered surface; including all workmanship, material and waste, costs of machinery and equipment and all types of loading, vertical and horizontal transport, unloading, contractor's profit and overhead costs,. Measurement: The area covered according to the application drawings shall be measured.		

Section 4: Bid Submission Form[1]

(This should be written in the Letterhead of the Bidder. Except for indicated fields, no changes may be made in this template.)

[insert: *Location, Date*]

To: United Nations Development Programme

Dear Sir/Madam:

We, the undersigned, hereby offer to supply the goods and related services required for ***Restoration works of Yavuz Akıncı and Akcurun Historical Buildings in Kilis Province*** in accordance with your Invitation to Bid dated [*insert: Date*]. We are hereby submitting our Bid, which includes the Technical Bid and Price Schedule. We hereby declare that:

a) All the information and statements made in this Bid are true and we accept that any misrepresentation contained in it may lead to our disqualification;
b) We are currently not on the removed or suspended vendor list of the UN or other such lists of other UN agencies, nor are we associated with, any company or individual appearing on the 1267/1989 list of the UN Security Council;
c) We have no outstanding bankruptcy or pending litigation or any legal action that could impair our operation as a going concern; and
d) We do not employ, nor anticipate employing, any person who is or was recently employed by the UN or UNDP.

We confirm that we have reviewed and learnt from relevant Turkish Authorities, laws, communiqués, etc. application of VAT exemption to UNDP and quoted our prices excluding VAT accordingly. We understand and accept that we will issue and get paid for the invoices excluding VAT.

We confirm that we have read, understood and hereby fully accept the Schedule of Requirements and Technical Specifications describing the duties and responsibilities required of us in this ITB, and the General Terms and Conditions of UNDP's Standard Contract for this ITB. We agree to abide by this Bid for 90 days as indicated in Data Sheet.

We undertake, if our Bid is accepted, to initiate the supply of goods and provision of related services not later than the date indicated in the Data Sheet. We fully understand and recognize that UNDP is not bound to accept this Bid, that we shall bear all costs associated with its preparation and submission, and that UNDP will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the evaluation.

We remain,

Yours sincerely,

Authorized Signature:
Name and Title of Signatory:
Name of Firm:
Contact Details :

[1] *No deletion or modification may be made in this form. Any such deletion or modification may lead to the rejection of the Bid.*

Section 5: Documents Establishing the Eligibility and Qualifications of the Bidder

Bidder Information Form[2]

Date: *[insert date (as day, month and year) of Bid Submission*]
ITB No.: UNDP-TUR-ITB-PROJ(SR)2017/11
Page _____ of_____ pages

1. Bidder's Legal Name		
2. In case of Joint Venture (JV), legal name of each party: *[insert legal name of each party in JV](not allowed)*		
3. Actual or intended Country/ies of Registration/Operation: *[insert actual or intended Country of Registration]*		
4. Year of Registration in its Location: *[insert Bidder's year of registration]*		
5. Countries of Operation	6. No. of staff in each Country	7.Years of Operation in each Country
8. Legal Address/es in Country/ies of Registration/Operation: *[insert Bidder's legal address in country of registration]*		
9. Value and Description of Top three (3) Biggest Contract for the past five (5) years		
10. Latest Credit Rating (Score and Source, if any)		
11. Brief description of litigation history (disputes, arbitration, claims, etc.), indicating current status and outcomes, if already resolved.		
12. Bidder's Authorized Representative Information Name: *[insert Authorized Representative's name]* Address: *[insert Authorized Representative's Address]* Telephone/Fax numbers: *[insert Authorized Representative's telephone/fax numbers]* Email Address: *[insert Authorized Representative's email address]*		
13. Are you in the UNPD List 1267.1989 or UN Ineligibility List ? (Y / N) Link for checking: http://www.un.org/sc/committees/1267/		
14. Attached are copies of original documents of: • All eligibility document requirements listed in the Data Sheet • The document(s) (e.g. trade registration gazette or equivalent etc.) that prove(s) the constitution of the Company named as the Bidder, above. • The document(s) (e.g. trade registration gazette or equivalent etc.) that demonstrate(s) change(s) (i.e. title, address, shareholding structure) and current status of the Company, named as the Bidder, above. • Signature Circular and/or Power of Attorney, demonstrating authority to sign on behalf of the Bidder, certified by the notary public.		

[2] *The Bidder shall fill in this Form in accordance with the instructions. Apart from providing additional information, no alterations to its format shall be permitted and no substitutions shall be accepted.*

Section 6: Technical Bid Form[3]

Restoration Works of Yavuz Akıncı and Akcurun Historical Buildings in Kilis Province

Name of Bidding Organization / Firm:	
Country of Registration:	
Name of Contact Person for this Bid:	
Address:	
Phone / Fax:	
Email:	

SECTION 1: EXPERTISE OF FIRM / ORGANIZATION

This section should fully explain the Bidder's resources in terms of personnel and facilities necessary for the performance of this requirement. All contents of this section may be modified or expanded depending on the evaluation criteria stated in the ITB.

Section 1 will be composed of three sub-sections, which will collectively demonstrate the management plan of the Bidder, as described below.

Sub-Section 1.1: Organizational Capacity: This section should provide corporate orientation, including but not limited to the year and state/country of incorporation and a brief description of the Bidder's activities. It should focus on services related to the Proposal. Bidder should attach Form 1.1: Statement of Declaration and promotional brochures, if any.

- **Sub-section 1.1.1 General Experience:** A brief description of corporate background and orientation with a focus on relevant experience (e.g. Construction for civil works contracts etc.), and services delivered to multinational and international organizations.
- **Sub-section 1.1.2 Specialization:** This section should focus on the Bidder's scope of specialization with an emphasis on ongoing/present or recently completed activities.
- **Sub-section 1.1.3: General organizational capability:** This section should also describe the organizational unit(s) that will become responsible for the contract, and the general management approach towards a project of this kind, and the quality assurance and/or risk management/mitigation systems and mechanisms in place. (Attach copy of quality

[3] *Technical Bids not submitted in this format may be rejected.*

assurance certificate(s) if any)

- **Sub-section 1.1.4: Litigation and Arbitration History:** This section should elaborate on Bidder's litigation and arbitration history. If the Bidder has no litigation and arbitration history, this section should explain how the Bidder has managed to avoid from potential conflicts that may result in a case of litigation or arbitration. (Attach Form 1.1.4)

Sub-Section 1.2: Similar Work Experience: This section should initially provide a narrative presentation of the Bidder's experience in similar undertakings, preferably focusing on the Bidder's recent activities (2012 and onwards).

The Bidder shall complete and submit Form 1.2.1 (Single Similar Work Experience) and Form 1.2.2 (Total Similar Work Experience). Form 1.2.2 shall be replicated for each of the similar work experience to be referenced by the Bidder. A maximum of 5 (five) similar work experiences shall be submitted. Form 1.2.1 and Form 1.2.2 should be supplemented with documents (e.g. copies of work completion certificates, copies of client letters etc.) substantiating and evidencing the similarity, amount (values of contracts) and substantial or successful completion of the referenced work experiences.

For the purposes of this ITB, in order to be considered "similar",

- A referenced work experience should include construction of civil works.
- Successfully or substantially completed in 2012 or later in the public or private sector.
- If the referenced work experience concerns of "I. And II. Group Restored Immovable Cultural Existence Structures (landscaping, street health) (I. Ve II. Grup Tescilli Taşınmaz Kültür Varlığı Yapıların Esaslı Onarımları" (çevre düzenlemesi, sokak sağlıklaştırma işleri hariç)) will be considered as similar works. In the process of evaluation, if required by the UNDP, the work committee decisions and progress reports that constitute the basis of the work experience document will be requested. A diploma or graduation certificate will not be accepted instead of the Work Experience Certificate

Sub-section 1.3: Financial Resources and Strength: This section should describe Bidder's current financial capabilities. Bidder shall complete Form 1.3.1: Financial Resources and Form 1.3.2: Financial Strength, supplemented with bank reference letters and audited financial statements for years 2014, 2015 and 2016. Bidder shall complete Form 1.3.3: Annual Construction Turnover supplemented by invoices and work completion certificates.

SECTION 2: PROPOSED METHODOLOGY, APPROACH AND IMPLEMENTATION PLAN:

This section should demonstrate the Bidder's responsiveness to the Terms of Reference by identifying the specific components proposed, addressing the requirements, as specified, point by point; providing a detailed description of the essential performance characteristics, proposed warranty; and demonstrating how the proposed methodology meets or exceeds the specifications.

Sub-section 2.1: Responsiveness to the Terms of Reference: This section should focus on the (a) comments on the Terms of Reference; (b) the Technical Approach and Methodology; proposed by the Bidder; (c) Quality Assurance Mechanisms to be deployed; and (d) Risks, identified, along with proposed risk mitigation strategies.

- **Sub-section 2.1.1 Comments on the Terms of Reference:** The Bidder shall initially provide a description of the scope of the work, demonstrating the Bidder's understanding of the Terms of Reference. Additionally, the Bidder shall present and justify here any improvement to the Terms of Reference it is proposing to improve performance in carrying out the assignment. Such suggestions should be concise and to the point, and incorporated in your Proposal.
- **Sub-section 2.2.2 Technical Approach and Methodology:** Here the Bidder shall explain its understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. Bidder should highlight the problems being addressed and their importance, and explain the technical approach it would adopt to address them. Bidder should also explain the methodologies it proposes to adopt and highlight the compatibility of those methodologies with the proposed approach.
- **Sub-section 2.2.3 Quality Assurance**: This sub-section should focus on the quality assurance mechanism to be proposed by the Bidder.
- **Sub-section 2.1.4 Risks:** This sub-section should focus on the risks to be identified by the Bidder, along with proposed risk mitigation strategies and measures.

Sub-section 2.2: Work flow and time plan: In this sub-section the Bidder should propose the main activities of the Assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Employer), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the Terms of Reference and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here.

- **Sub-section 2.2.1 Work Flow**: Here the Bidders are expected to provide a logically sequenced, step-by-step work flow that demonstrates the inter-dependencies between the various steps of the Assignment in line with the ToR.
- **Sub-section 2.2.2 Milestones:** This sub-section should clearly identify and list the critical milestones of the Assignment.
- **Sub-section 2.2.3 Time plan:** The Bidders are expected to present a time plan in the form of Gantt-Chart (Form 2.2.3), consistent with sub-section 2.2.1 and sub-section 2.2.2, and in line with the ToR.
- **Sub-section 2.2.4 Resource Schedule, Equipment and Vehicles:** This sub-section should demonstrate the resources (human resources and capital assets), required to be deployed by the Bidder in order to achieve the contract objectives in a timely manner. Here the Bidders are expected to fully explain their resources in terms of equipment and vehicles to be provided for successful completion of the Contract.

SECTION 3: MANAGEMENT STRUCTURE AND KEY PERSONNEL:

This should fully explain the Bidder's resources in terms of personnel and facilities necessary for the performance of this requirement. It should describe the Bidder's current capabilities/facilities and any plans for their expansion.

Sub-section 3.1 Proposed Team Structure: This sub-section should introduce the team that will fulfill the services within the scope of the Schedule of Requirements and Technical Specifications, and focus on the division of labor among the team members (job descriptions of key and non-key personnel), including management of contractual and technical relations with the Employers, as well as with the Civil Works Contractors. Attach Form 3.1. (Annex 1– Submission Templates and Forms)

Sub-section 3.2 Personnel: Provide CVs of the proposed key personnel, and copies of the diploma(s), documents demonstrating professional experience, and documents demonstrating membership to relevant chambers of the team members. Attach Form 3.1.1 (Annex 1 – Submission Templates and Forms). **Form shall be replicated for each key personnel.**

Section 7: Price Schedule Form[4] for Part 1 and Part 2

The Bidder is required to prepare the Price Schedule as indicated in the Instruction to Bidders.

1) The Price Schedule must provide a detailed cost breakdown for each item. The components comprising the total price must provide sufficient detail to allow UNDP to determine compliance of Offer with requirements as per Statement of Works of this ITB.
2) All prices/rates quoted must be exclusive of taxes, since the UNDP is exempt from taxes as detailed **DATA SHEET DS-37. It is the bidders' responsibility to learn from Ministry of Finance and other relevant authorities, the application of tax exemption through the related laws, decrees, communiqués,etc.**
3) The format shown on the following pages should be used in preparing the price schedule.
4) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the Bidder does not accept the correction of errors, its Bid will be rejected
5) All prices shall be quoted in US Dollars.
6) Price Schedules not submitted in this format may be rejected.
7) Grand Total to be quoted by the Bidders will be the price for the whole project including all different project activities to be completed in ***Restoration Works of Yavuz Akinci and Akcurun Historical Buildings in Kilis Province within the scope of Strengthening Social Stability in Southeast Turkey Project*** in full compliance with the Schedule of Requirements and Technical Specifications. Therefore, this price will include all types of costs, like transportation of the material and equipment to and from the sites, water drainage, variation in soil conditions, direct and indirect nature, associated with the satisfactory completion of each work item in accordance with Statement of Works/Technical Drawings and in overall in accordance with the Conditions of Contract, to be incurred by the Contractor until final delivery to UNDP.
8) The unit prices to be quoted shall be firm and final during the validity of the contract. The Contractor will not be entitled to receive any price difference due to changes in market conditions and/or prices.
9) Costs of all these materials, equipment, consumables, workmanship, transport or any other expenses of the Contractor as well as the costs associated with the design, construction, erection, testing, commissioning and trial operation of all these equipment shall be included in the Contractor's tender price as lump-sum.
10) Construction and electricity connection related costs of permit and licenses will be borne by the Contractor and corresponding costs shall be integrated into the tender price.
11) The Contractor shall provide the Engineer 1 double cabin 4x4 pick-up vehicles and office space, and cover all associated costs thereof, during the supervision of construction.

[4] *No deletion or modification may be made in this form. Any such deletion or modification may lead to the rejection of the Bid.*

Title: PART 1_KİLİS YAVUZ AKINCI HISTORICAL BUILDING

GROUND FLOOR CONSTRUCTION WORKS

NO	POSE NUMBER	UNIT	TYPE OF WORKS	QUANTITY	UNIT PRICE ($)	AMOUNT ($)
1	04.644/02B	m2	4+4 mm in thickness non-color transparent 0.76 PVB-coated laminated glass	22,63		
2	14.015/2	m3	Narrow, deep excavation in soft rock of any depth manually or using compressors and explosives	19,82		
3	18.194/İB	m2	Removal of all types of wooden door wings, door frames and windows	59,83		
4	3162	m2	Replacing the degraded parts of conventional base profiled door wings and door frames with 1st class pine timber	55,25		
5	B.04	pcs	Installing the latch (espagnolette handle and lock catch) yellow brass monobloc screw-mounted	93,75		
6	B.16	pcs	Installing the hinge	93,75		
7	KGM/18.185	m3	Demolishing the concrete construction with & without iron without using explosives	5,78		
8	SPECIFIC-1	m2	Making color or non-color grid floor coating with traditional cement finish	67,06		
9	SPECIFIC-2	m2	Repairing the color or non-color grid floor coating with traditional cement finish	125,93		
10	V.0201	m3	Price for bottoming stone (with quarry stone)	51,84		
11	V.0204	m2	Price for timber for front work scaffold of any height	354,82		
12	V.0208/A	m3	Price for timber for all types of woodwork production with 1st quality pine timber	3,10		
13	V.0209	m3	Price for stone in the rubble wall	51,84		
14	V.0227/6	m3	Price for freestone on flat surface of limestone, lymra stone, chalk etc. (no price for dressability and face-making to be paid)	28,14		
15	V.0316	m2	Removing freestone on the floor or marble flooring	22,31		
16	V.0337	m2	Removing cement finish	30,09		
17	V.0338	m2	Dismantling wooden slabs and ceiling beaming and wooden carcass	45,21		
18	V.0346/01	m3	Replacing freestone everywhere except minarets	52,35		
19	V.0402/07	m2	Rasping with care the layer (5-10 cm) made of imitated concrete, mosaic and imitated stone which is adhered to the original structural surface on the freestone or rubble stone surfaces	57,53		
20	V.0406	m2	Whitewash rasping with wire brush on all types of conventional brick, marble and freestone surfaces excluding carved surfaces	332,29		
21	V.0501	m3	Workmanship for bottoming work	21,30		
22	V.0502/A	m3	Excavation of demolition rubble mixed with soil at historical works	20,75		

Title: PART 1_KİLİS YAVUZ AKINCI HISTORICAL BUILDING						
GROUND FLOOR CONSTRUCTION WORKS						
23	V.0702/01	KG	Making and installing in position the conventional small bit iron fence (bits made of iron) without frame and bits made of hardened lead	25,00		
24	V.0705	KG	Workmanship for dismantling the existing iron fence carefully, numbering and installing in position	31,25		
25	V.0815/A	m2	Workmanship for making flat and curved tiling using the existing tiling freestone and lime mortar with pozzolanic admixture	55,78		
26	V.0817/A1B	m2	Workmanship for making flat or curved tiling of 1-2 cm in width using the existing freestone of 9-12 cm in thickness and lime mortar with pozzolanic admixture (stone hardness 1.5 or greater)	55,78		
27	V.1104/A	m2	Workmanship for making flat covering of 15-25 cm average in depth using freestone and Khorasan mortar with pozzolanic admixture	1,25		
28	V.1131	m2	Workmanship for making flat freestone covering of 25 cm average in thickness at replaced locations	1,25		
29	V.1660/F03	m2	Making polished flat plaster with Khorasan mortar using plastering float or steel trowel	354,82		
30	V.1751/A	m2	Making joints in rubble walls using Khorasan mortar with pozzolanic admixture	12,50		
31	V.1997	m3	Making columns, cushions (/echinus) and structural beams of 1st quality pitch pine in square, rectangular, multi-cornered or round section	6,78		
32	V.1997/B	pcs	Workmanship for making conventional profiles at top ends of beams made of hard timber up to 15 x 15 cm section	6,78		
33	V.2041/B	m2	Making and installing in position wooden windows of single plane, arched, concave or convex surface, made of 1st quality pitch pine	22,63		
34	V.2105	m2	Applying synthetic varnish wood preservative on the wood	77,46		
35	V.2105/A	m2	Applying two coats of wood preservative on the wood	44,58		
36	V.2109	m3	Dip-treating wood with preservative	3,10		
CONSTRUCTION WORKS-GROUND FLOOR SUB-TOTAL						

Title: PART 1_KİLİS YAVUZ AKINCI HISTORICAL BUILDING

UPPER FLOOR CONSTRUCTION WORKS

NO	POSE NUMBER	UNIT	TYPE OF WORKS	QUANTITY	UNIT PRICE ($)	AMOUNT ($)
1	04.644/02B	m2	4+4 mm in thickness non-color transparent 0.76 PVB-coated laminated glass	25,57		
2	14.015/2	m3	Narrow, deep excavation in soft rock of any depth by hand or using compressors and explosives	1,25		
3	18.194/İB	m2	Removal of all types of wooden door wings, door frames and windows	25,57		
4	3162	m2	Replacing the degraded parts of conventional base profiled door wings and door frames with 1st class pine timber	45,91		
5	B.16	pcs	Installing the hinge	62,50		
6	KGM/18.185	m3	Demolishing the concrete construction with & without iron without using explosives	14,68		
7	SPECIFIC-1	m2	Making color or non-color grid floor coating with traditional cement finish	1,25		
8	SPECIFIC-2	m2	Repairing the color or non-color grid floor coating with traditional cement finish	67,06		
9	V.0201	m3	Price for bottoming stone (with quarry stone)	22,98		
10	V.0204	m2	Price for timber for front work scaffold of any height	116,84		
11	V.0208/A	m3	Price for timber for all types of woodwork production with 1st quality pine timber	1,84		
12	V.0209	m3	Price for stone in the rubble wall	22,98		
13	V.0227/6	m3	Price for freestone on flat surface of limestone, lymra stone, chalk etc. (no price for dressability and face-making to be paid)	1,50		
14	V.0316	m2	Removing freestone on the floor or marble flooring	1,25		
15	V.0337	m2	Removing cement finish	6,02		
16	V.0338	m2	Dismantling wooden slabs and ceiling beaming and wooden carcass	1,25		
17	V.0346/01	m3	Replacing freestone everywhere except minarets	22,98		
18	V.0402/07	m2	Rasping with care the layer (5-10 cm) made of imitated concrete, mosaic and imitated stone which is adhered to the original structural surface on the freestone or rubble stone surfaces	1,25		
19	V.0406	m2	Whitewash rasping with wire brush on all types of conventional brick, marble and freestone surfaces excluding carved surfaces	1,25		
20	V.0501	m3	Workmanship for bottoming work	1,25		
21	V.0502/A	m3	Excavation of demolition rubble mixed with soil at historical works	10,05		
22	V.0702/01	KG	Making and installing in position the conventional small bit iron fence (bits made of iron)	13,13		

Title: PART 1_KİLİS YAVUZ AKINCI HISTORICAL BUILDING						
UPPER FLOOR CONSTRUCTION WORKS						
			without frame and bits made of hardened lead			
23	V.0705	KG	Workmanship for dismantling the existing iron fence carefully, numbering and installing in position	12,50		
24	V.0815/A	m2	Workmanship for making flat and curved tiling using the existing tiling freestone and lime mortar with pozzolanic admixture	1,25		
25	V.0817/A1B	m2	Workmanship for making flat or curved tiling of 1-2 cm in width using the existing freestone of 9-12 cm in thickness and lime mortar with pozzolanic admixture (stone hardness 1.5 or greater)	5,00		
26	V.1104/A	m2	Workmanship for making flat covering of 15-25 cm average in depth using freestone and Khorasan mortar with pozzolanic admixture	1,25		
27	V.1131	m2	Workmanship for making flat freestone covering of 25 cm average in thickness at replaced locations	1,25		
28	V.1660/F03	m2	Making polished flat plaster with Khorasan mortar using plastering float or steel trowel	229,74		
29	V.1751/A	m2	Making joints in rubble walls using Khorasan mortar with pozzolanic admixture	229,74		
30	V.1997	m3	Making columns, cushions (/echinus) and structural beams of 1st quality pitch pine in square, rectangular, multi-cornered or round section	0,05		
31	V.1997/B	Pcs	Workmanship for making conventional profiles at top ends of beams made of hard timber up to 15 x 15 cm section	16,25		
32	V.2041/B	m2	Making and installing in position wooden windows of single plane, arched, concave or convex surface, made of 1st quality pitch pine	25,57		
33	V.2105	m2	Applying synthetic varnish wood preservative on the wood	45,91		
34	V.2105/A	m2	Applying two coats of wood preservative on the wood	45,91		
35	V.2109	m3	Dip-treating wood with preservative	45,91		
CONSTRUCTION WORKS-UPPER FLOOR SUB-TOTAL						

Title: PART 1_KİLİS YAVUZ AKINCI HISTORICAL BUILDING

FRONT CONSTRUCTION WORKS

NO	POSE NUMBER	UNIT	TYPE OF WORKS	QUANTITY	UNIT PRICE ($)	AMOUNT ($)
1	3012	m3	Making heavy-duty work scaffold up to 10 m in height	218,92		
2	3159	m2	Repairing shutters with 1st class pine timber	0,20		
3	V.0227/6	m3	Price for freestone on flat surface of limestone, lymra stone, chalk etc. (no price for dressability and face-making to be paid)	27,37		
4	V.0228/6	m3	Price for freestone on curved surface of limestone, lymra stone, chalk etc. (no price for dressability and face-making to be paid)	13,32		
5	V.0346/01	m3	Replacing freestone everywhere except minarets	18,68		
6	V.0401/2D	m2	Plaster rasping with care the face stone surfaces without degrading the surface (5-10 cm)	273,65		
7	V.0413	m2	Opening joints on the wall surfaces of old freestone (face stone) or hammer-dressed freestone	256,68		
8	V.0415	m2	Opening joints on the front of mixed stone or brick with cement or lime mortar which is to be re-jointed	65,65		
9	V.0416	m2	Opening joints on the stone or brick wall with cement or lime mortar	42,29		
10	V.0603/1	m3	Workmanship for erecting work scaffold (up to 13.50 m of height)	218,92		
11	V.1104/A	m2	Workmanship for making flat covering of 15-25 cm average in depth using freestone and Khorasan mortar with pozzolanic admixture	5,00		
12	V.1111	m2	Workmanship for making Persianate covering of freestone of 25 cm average in thickness and 36-50 cm in width	24,46		
13	V.1131/A	m2	Workmanship for making flat freestone covering of 25 cm average in thickness at replaced locations with Khorasan mortar with pozzolanic admixture	136,82		
14	V.1230	m2	Workmanship for making and installing in position gargoyles of freestone in any section and size, with simple profiles and patterns	0,96		
15	V.1660/F04	m2	Making roughcast of curved plaster with Khorasan mortar using plastering float or steel trowel	6,25		
16	V.1660/F05	m2	Making finishing coat of curved plaster with Khorasan mortar using plastering float or steel trowel	6,25		
17	V.1775	m2	Making joints in rubble walls using Khorasan mortar flush and/or almost zero difference with stone faces (with stone dust mortar for joints)	42,29		
CONSTRUCTION WORKS-FRONT SUB-TOTAL						

Title: PART 1_KİLİS YAVUZ AKINCI HISTORICAL BUILDING ROOF/ATTIC CONSTRUCTION WORKS						
NO	**POSE NUMBER**	**UNIT**	**TYPE OF WORKS**	**QUANTITY**	**UNIT PRICE ($)**	**AMOUNT ($)**
1	24.017	MT	Making and installing in position valley gutters in duct form of sheet zinc no 14	37,50		
2	V.0502/A	m3	Excavation of demolition rubble mixed with soil at historical works	9,38		
3	V.1864/A	m2	Workmanship for laying Marseilles roof tiles with cement dosage 225 reinforced mortar	12,50		
4	Y.16.050/04	m3	Pouring concrete of C 20/25 class compressive strength, produced at concrete plant or purchased and pumped by concrete pump (including transport of concrete)	41,96		
5	Y.18.461/010	m2	Making water insulation of two layers with polymer bituminous covers with plastomer-based fiberglass carrier of 3 mm in thickness (flexural strength of-5 degrees) and one-face-mineral-coated plastomer-based polyester felt carrier of 3.3 mm in thickness (flexural strength of-5 degrees)	149,47		
6	Y.19.060/055	m2	Making heat and sound insulation between two walls (sandwich system) with glasswool panels of 8 cm in thickness (glasswool panel, 20-22 kg/m3 density, non-charging, silicone)	156,00		
CONSTRUCTION WORKS-ROOF/ATTIC SUB-TOTAL						

Title: PART 1_KİLİS YAVUZ AKINCI HISTORICAL BUILDING MECHANICAL WORKS						
NO	**POSE NUMBER**	**UNIT**	**TYPE OF WORKS**	**QUANTITY**	**UNIT PRICE ($)**	**AMOUNT ($)**
1	071.108	pcs	Oval lavatory-sink, under-and over-counter, approximately 40 x 50 cm	2,50		
2	071.114	pcs	Lavatory-sinks, 50 x 60 cm, half-stand set, enameled ceramics, extra class	2,50		
3	072.601	set	Lavatory materials recessed battery type 1st class (special rubber piece, uncontrolled siphon)	2,50		
4	073.201	pcs	Mirror, approximately 40 x 50 cm	2,50		
5	074.101	pcs	Etagere, enameled ceramics, approximately 50 x 10 cm extra class	2,50		
6	075.103	pcs	Toilet seat a la Turc, enameled ceramics, approximately 50 x 60 cm, extra class, with plastic siphon	1,25		
7	076.500	set	Materials for a la Turc toilet, with pressure washer (with fluzometer)	2,50		

Title: PART 1_KİLİS YAVUZ AKINCI HISTORICAL BUILDING						
MECHANICAL WORKS						
8	079.100	set	Toilet seat a la Franc with self-flush tank, 35 x 55 cm, and materials	1,25		
9	079.200	set	Toilet seat a la Franc with self-flush tank, 35 x 70 cm, and materials, for persons with physical disability	1,25		
10	083.401	pcs	Double sink with drip cap (stainless steel) 60 x 140 cm	1,25		
11	084.101	pcs	Single sink materials with battery, brass siphon, 1st class	1,25		
12	087.501	set	Shower materials (complete bath battery with shower piping and shower head) 1st quality	1,25		
13	089.105	pcs	Long faucet 1/2" (including filtered rosette)	2,50		
14	089.1105	pcs	Basin faucet 3/4" including rosette	1,25		
15	091.900	pcs	Toilet seat handle bar for persons with disabilities	1,25		
16	094.100	pcs	Paper holder, ceramics	2,50		
17	097.401	pcs	Floor drain filter, h = 22 cm Ø 100 mm discharge and bucket 25 x 33.5 cm	1,25		
18	097.702	pcs	Terrace drain filter, PVC 10 x 10 cm h=7 cm	7,50		
19	103.103	pcs	Cold water meter 1" screw-mounted 25Ø mm	1,25		
20	105.601	pcs	Prismatic modular stainless steel water tank, 1.25 m3	1,25		
21	107.624	pcs	Package hydropump, fully automatic, single pump, vertical shaft, centrifugal (flow rate: 5-15 m^3/h, pressure: 20-40 mss)	1,25		
22	126.102	pcs	Socket collar ø 40 mm 1 1/2" and above	1,25		
23	201.1003	MT	Steel pipe outer diameter 33.4/3.4 mm (including Price for pipe installation materials 30%)	31,25		
24	201.203	MT	Seam welded galvanized steel pipe 1/2" ø15 average outer diameter 21.3/2.65 mm (including Price for pipe installation materials 30%)	12,50		
25	201.204	MT	Seam welded galvanized steel pipe 3/4" ø20 average outer diameter 26.9/2.65 mm (including Price for pipe installation materials 30%)	87,50		
26	201.205	MT	Seam welded galvanized steel pipe 1" ø25 average outer diameter 33.7/3.25 mm (including Price for pipe installation materials 30%)	43,75		
27	204.1003	MT	Hard PVC 100 plastic waste water pipe with fixed sealing, outer diameter Ø100 mm, wall thickness 3.0 mm, used at B-BD. (including Price for pipe installation materials 35%)	50,00		
28	204.402	MT	Hard PVC plastic waste water pipe, outer diameter ø 75-70/3.0 mm (Bell-and-spigot jointed) (including Price for pipe installation materials 35%)	43,75		
29	210.724	pcs	PN 25-40 Cast steel body, ball made of stainless steel, spring backed Belleville washer made of steel or Teflon; screw-mounted, ø 20 mm, 3/4"	2,50		

Title: PART 1_KİLİS YAVUZ AKINCI HISTORICAL BUILDING

MECHANICAL WORKS

30	210.728	pcs	PN 25-40 Cast steel body, ball made of stainless steel, spring backed Belleville washer made of steel or Teflon; screw-mounted, ø 50 mm, 2"	2,50		
31	221.205	pcs	Dirt trap, PN 16, (for steam + water, cast iron) ø 40 mm, screw-or flange-mounted	2,50		
32	227.203	pcs	Holding valve, brass, diecast iron, screw-mounted, ø 25 mm, 1"	2,50		
33	280.1106	pcs	External unit or external unit group with 50 kW cooling capacity (nominal), 56 kW heating capacity (nominal)	1,25		
34	280.2106	pcs	Wall-type internal unit with 7 kW cooling capacity (nominal), 7.5 kW heating capacity (nominal)	1,25		
35	280.2204	pcs	Box-type internal unit with 4 kW cooling capacity (nominal), 4.5 kW heating capacity (nominal)	2,50		
36	280.2205	pcs	Box-type internal unit with 5.5 kW cooling capacity (nominal), 6 kW heating capacity (nominal)	7,50		
37	281.302	pcs	Wireless remote control and sensor	11,25		
38	281.504	MT	Copper piping group 5/8" 1.0 mm (13 mm izo) copper piping installation	81,25		
39	281.506	MT	Copper piping group 7/8" 1.0 mm (13 mm izo) copper piping installation	43,75		
40	281.508	MT	Copper piping group 1 1/8" 1.2 mm (19 mm izo) copper piping installation	12,50		
41	281.602	SET	Jointing pieces for 25-50 Kw	1,25		
42	281.700	SET	Distribution (header) pieces	1,25		
43	451.411	MT	Work bench, with sink, press formed, 600 mm in width	1,25		

MECHANICAL WORKS SUB-TOTAL

Title: PART 1_KİLİS YAVUZ AKINCI HISTORICAL BUILDING

ELECTRICAL WORKS

NO	POSE NUMBER	UNIT	TYPE OF WORKS	QUANTITY	UNIT PRICE ($)	AMOUNT ($)
1	19.3.1/003	pcs	25 A 00 size LV bladed NH fuse plug	2,50		
2	19.3.1/004	pcs	32 A 00 size LV bladed NH fuse plug	1,25		
3	25.17.1/001	pcs	3×80 A, Icn=8 kA, 1.7×Icn, Power Factor: 0.5 compact type automatic circuit-breakers	2,50		

Title: PART 1_KİLİS YAVUZ AKINCI HISTORICAL BUILDING						
MECHANICAL WORKS						
4	30.1/001	MT	Galvanized earthing line and burying	6,25		
5	30.3/001	pcs	2 m, galvanized 65×65×7 angle, 5 m line and burying	1,25		
6	31.1.B.b/060	pcs	75/5-5 A 17.5 kV MV current transformers (primary single winding, secondary double winding)	7,50		
7	702.102	pcs	Additional sheet metal panel 900 mm	1,25		
8	704.101	pcs	Over-plaster sheet metal panelboard 0.05-0.10 m2 (TS EN 61439-1/2)	3,75		
9	715.308	pcs	Thermal-magnetic circuit-breaker 3 x 63 A (behind panelboard (TS EN 60947-2)	1,25		
10	716.301	pcs	Electric motor protection device 3 x 12 A	1,25		
11	718.101	pcs	Dry-type non-protective contactor 3 x 10 A	3,75		
12	718.102	pcs	Dry-type non-protective contactor 3 x 16 A	3,75		
13	718.103	pcs	Dry-type non-protective contactor 3 x 25 A	1,25		
14	718.201	pcs	Dry-type thermal protective contactor 3 x 10 A	2,50		
15	718.310	pcs	Time relay used for lighting control	7,50		
16	718.521	pcs	Residual current circuit breaker up to 4 x 40 A (300 mA)	2,50		
17	723.401	kVAR	Automatic control central compensation batteries	28,13		
18	724.402	pcs	Automatic fuse switch (3 kA) up to 25 A	25,00		
19	724.407	pcs	Tri-phase automatic fuse switch (3 kA) up to 40 A	5,00		
20	724.707	pcs	Tri-phase automatic fuse switch 40 A (10 kA) (TS 5018-1 EN 60898-1)	2,50		
21	725.311	pcs	Multimeter (TS 4417)	1,25		
22	725.722	pcs	Tri-phase time tariff electronic electric meters 3 x 230/400V, 3 x 20 (120) A	1,25		
23	725.904	pcs	Indication lamp up to 250 VA	3,75		
24	727.524	MT	1 kV underground wire column and supply line 4 x 16 mm2 nyy (TS IEC 60502-1)	22,50		
25	730.102	pcs	Underground wire terminal cap 3 x 35+16 mm2	18,75		
26	742.113	pcs	Type J4 built-in point light armature (mirror bulb)	11,25		
27	742.452	pcs	LED floodlight up to 40 Watts (220 V AC)	3,75		
28	780.129	pcs	Waterproof junction box	62,50		
29	782.100	KG	Cable tray systems	25,00		
30	782.204	KG	Underfloor triple wire duct, 200 mm in width	31,25		

Title: PART 1_KİLİS YAVUZ AKINCI HISTORICAL BUILDING						
MECHANICAL WORKS						
31	782.501	MT	Wire carrying systems up to 21 x 12 mm	31,25		
32	791.311	MT	3 x 2.5 mm2 unleaded PVC insulated wire supply line (nh x mh)	437,50		
33	791.312	MT	3 x 1.5 mm2 unleaded PVC insulated wire supply line (nh x mh)	375,00		
34	791.315	MT	4 x 6 mm2 unleaded PVC insulated wire supply line (nh x mh)	43,75		
35	791.426	MT	4 x 6 mm2 1 kV underground wire supply line (n2 x h)	50,00		
36	791.439	MT	1 x 6 mm2 1 kV underground wire supply line (n2 x h)	50,00		
37	791.441	MT	1 x 16 mm2 1 kV underground wire supply line (n2 x h)	43,75		
38	792.201	pcs	Safety line normal sortie with Halogen-free wire	20,00		
39	792.202	pcs	Safety line commutator sortie with Halogen-free wire	11,25		
40	792.204	pcs	Safety line parallel sortie with Halogen-free wire	31,25		
41	792.205	pcs	Safety line luminaire sortie with Halogen-free wire	10,00		
42	793.102	pcs	Safety line outlet sortie with Halogen-free wire	30,00		
43	815.101	pcs	Telephone sortie	8,75		
44	818.107	MT	Indoor main line installation up to 30 pairs p.26	1,25		
45	818.205	MT	Outdoor main line installation 0.5 mm 30 pairs	1,25		
46	819.204	pcs	Non-flammable plastic telephone distribution box 100 pairs	1,25		
47	833.301	pcs	Intelligent analog addressable fire alarm panel with 1 loop, 12 zones, 127 address capacity, 12 fire zone displays	1,25		
48	833.500	pcs	Analog addressable optical smoke detector	12,50		
49	833.555	pcs	Analog addressable fire warning button	2,50		
50	833.592	pcs	Indoor type electronic fire warning siren with flasher	2,50		
51	833.594	pcs	Outdoor type electronic fire warning siren with flasher	2,50		
52	839.101	pcs	Indoor type line transformer and installation	1,25		
53	844.126	pcs	Projection device, 2000 ANSI lumens, 1024 x 768 resolution	1,25		
54	844.141	pcs	Motor-driven screen 200 x 150	1,25		
55	8.801.272	pcs	Fixed accessory rack 600 mm, specific to product	1,25		
56	8.802.002	MT	JH (ST) halogen-free fire alarm cable 2 x 2 x 0.8+0.8 mm2	250,00		
57	8.803.161	MT	4 x 0.75 mm2 lıh (st) h halogen-free signaling and command cable	125,00		
58	880.505	pcs	Splitters, distributing type 1/8 max dB loss 12.0 (TS EN 60728-6)	1,25		
59	880.563	MT	UTP CAT 6 cable	437,50		

Title: PART 1_KİLİS YAVUZ AKINCI HISTORICAL BUILDING						
MECHANICAL WORKS						
60	880.573	pcs	UTP CAT 6 over-plaster single plug socket	8,75		
61	983.102	pcs	Earthing rod, electrolytic copper	1,25		
62	985.101	pcs	Thermo-welding jointing up to 32 gr welding powder	1,25		
63	988.100	KG	Chemical substance reducing soil resistance	6,25		
64	ELK-00	M	Copper tube for accommodating installation cables	43,75		
65	ELK-01	pcs	Type N3 luminaire armature (4-5 arms)	10,00		
66	ELK-02	M	Under-floor sheet metal duct-120 mm	12,50		
67	ELK-03	pcs	Under-floor junction box	2,50		
68	KTB-ELK.001	pcs	Dome (HD-720P) IP camera, indoor/outdoor, Day/Night functions	2,50		
69	KTB-ELK.002	pcs	IP box camera (HD-720P), indoor/outdoor, Day/Night functions (including lenses and installation pods)	2,50		
70	KTB-ELK.007	pcs	Network IP video recording unit (NVR), RAID 5/ recording protection class, 32 channels, professional type	1,25		
71	V.2200/1	pcs	Making and installing in position single arm wall appliques by brass tube	1,25		
ELECTRICAL WORKS SUB-TOTAL						

Part 1- Restoration Works of Yavuz Akıncı Historical Building in Kilis Province

BILL OF QUANTITIES SUMMARY		
No	**Description**	**Amount ($)**
1	PART 1- Construction Works-Ground Floor	
2	PART 1- Construction Works-Upper Floor	
3	PART 1- Construction Works-Front	
4	PART 1- Construction Works-Roof/Attıc	
5	PART 1- Mechanical Works	
6	PART 1- Electrical Works	
PART 1- GRAND TOTAL ($)		

Above bid prices are based on the Bill of Quantities, and are inclusive of all other costs (that are not costed through BoQ) whether direct or indirect nature, associated with the satisfactory completion of each work item in accordance with Statement of Works/Technical Drawings and in overall in accordance with the Conditions of Contract.

Above prices exclude VAT and shall be the basis of the invoices to be issued to UNDP.

"Duly authorized to sign the Proposal for and on behalf of

_____
(Name of Company)

_____

Signature/Stamp of Entity/Date
Name of representative:
Address:
Telephone/Fax:
Email:

Title: PART 2 - KİLİS AKCURUN HISTORICAL BUILDING CONSTRUCTION WORKS						
NO	**POSE NUMBER**	**UNIT**	**TYPE OF WORKS**	**QUANTITY**	**UNIT PRICE ($)**	**AMOUNT ($)**
1	14.016/1	m3	Narrow, deep excavation in soft rock of any depth manually or using compressors and explosives	13,70		
2	18.194/İB	m2	Removal of all types of wooden door wings, door frames and windows	77,18		
3	22,078	m2	Making fixed-fin shutters of 1st class pine timber for doors, windows	11,75		
4	24,003	MT	Making vertical rainwater down-pipes ø 100 mm of zinc no 12	18,50		
5	24,011	MT	Making rain gutters ø 185 mm of zinc no 12	40,00		
6	28,096	m2	3+3 mm double glass window unit (with metal lath)	20,65		
7	3106	m2	Removal of thin wooden covering	52,00		
8	3108	m2	Making thin wooden covering with 1st class pine timber	52,00		
9	B.04	pcs	Installing the latch (espagnolette handle and lock catch) yellow brass monobloc screw-mounted	31,25		
10	B.16	pcs	Installing the hinge	215,00		
11	MSB.660/A1	m2	Making over-counter covering with color marble slabs of 3 cm	3,68		
12	SPECIFIC-1	m2	Making non-color grid floor coating	43,43		
13	SPECIFIC-2	m2	Repairing the color or non-color grid floor coating	16,59		
14	V.0201	m3	Price for bottoming stone (with quarry stone)	8,23		
15	V.0204	m2	Price for timber for front work scaffold of any height	120,31		
16	V.0205/A	m3	Price for timber for work scaffold (up to and including 13.50 m)	370,53		
17	V.0209	m3	Price for stone in the rubble wall	1,88		
18	V.0227/3	m3	Price for freestone on flat surface of cubile stone (no price for dressability and face-making to be paid)	5,96		
19	V.0340/A	m2	Removal of wooden, aluminum, PVC doors and windows	77,18		
20	V.0346/01	m3	Replacing freestone everywhere except minarets	0,63		
21	V.0349/01	m3	Replacing conventional brick or rubble wall everywhere	1,88		
22	V.0402/07	M2	Rasping with care the layer (5-10 cm) made of imitated concrete, mosaic and imitated stone which is adhered to the original structural surface on the freestone or rubble stone surfaces	98,25		
23	V.0406	M2	Whitewash rasping with wire brush on all types of conventional brick, marble and freestone surfaces excluding carved surfaces	153,33		
24	V.0415	m2	Opening joints on the front of mixed stone or brick with cement or lime mortar which is to be re-jointed	44,63		
25	V.0501	m3	Workmanship for bottoming work	8,23		

Title: PART 2 - KİLİS AKCURUN HISTORICAL BUILDING						
CONSTRUCTION WORKS						
26	V.0502	m3	Laying fine aggregate not needing screening	8,23		
27	V.0603	m2	Workmanship for erecting work scaffold at front (up to 13.50 m of height)	120,31		
28	V.0603/1	m3	Workmanship for erecting work scaffold (up to 13.50 m of height)	370,53		
29	V.0705	KG	Workmanship for dismantling the existing iron fence carefully, numbering and installing in position	235,88		
30	V.0807/B	m2	Workmanship for face making on flat surface on flooring freestone of 5-8 cm in thickness	54,81		
31	V.1131	m2	Workmanship for making flat freestone covering of 25 cm average in thickness at replaced locations	2,50		
32	V.1660	m2	Making polished flat plaster with dosage 225 cement reinforced lime mortar on old wall surfaces using plastering float or steel trowel	278,85		
33	V.1667	m2	Making plaster on flat surfaces of timberwork (Baghdadi board) or other wooden or stone surfaces using haired or goat-haired lime mortar	28,04		
34	V.1667/A	m2	Making plaster on curved surfaces of timberwork (Baghdadi board) or other wooden or stone surfaces using haired or goat-haired lime mortar	70,21		
35	V.1753	m2	Making joints in rubble walls using lime mortar	44,63		
36	V.1794	m3	Repairing and fortifying wooden roof with new pitch pine norm timber	32,50		
37	V.1835/A	m2	Making sliding cover on roof with galvanized flat sheet metal of 0.5 mm in thickness (including galvanized sheet metal)	111,38		
38	V.2005	m2	Making and installing in position conventional door wings by driving wrought iron cloutnails into wrought sheet metal of 3 mm in thickness on 1st class pitch pine timber	3,31		
39	V.2006/A	m2	Making and installing in position conventional door wing or shutter wing (up to 4 boards per wing) of walnut or hornbeam with simple boards, sash bar and stile thickness with smooth parts up to 5 cm (included)	23,69		
40	V.2039	m2	Making and installing in position window walls of 1st class oak timber, with fixed lower part having simple board, sash bar and stile thickness with smooth parts up to 5 cm (included)	10,90		
41	V.2041/B	m2	Making and installing in position wooden windows of single plane, arched, concave or convex surface, made of 1st quality pitch pine	27,54		
42	V.2105	m2	Applying synthetic varnish wood preservative on the wood	203,06		
43	V.2105/A	m2	Applying two coats of wood preservative on the wood	203,06		
44	Y.25.002/02	m2	Applying on iron surfaces two coats of anti-rust paint and two coats of synthetic paint	24,28		
45	Y.25.003/15	m2	Applying one coat of primer and two coats of water-based matte paint on newly plastered surfaces (interior front)	377,10		
46	Y.26.006/303	m2	Making wall tiling with 1st quality white ceramic wall tiles in (20 x 25 cm) or (20 x 30 cm) nominal dimensions; all types of patters and surface properties, with 3 mm joint spaces	14,10		
CONSTRUCTION WORKS SUB-TOTAL						

Title: PART 2 - KİLİS AKCURUN HISTORICAL BUILDING

PLUMBING WORKS

NO	POSE NUMBER	UNIT	TYPE OF WORKS	QUANTITY	UNIT PRICE ($)	AMOUNT ($)
1	71,113	pcs	Lavatory-sinks, approximately 45 x 60 cm, half-stand set, extra class	1,25		
2	72,601	set	Lavatory materials recessed battery type 1st class (special rubber piece, uncontrolled siphon)	1,25		
3	73,202	pcs	Mirror, approximately 40 x 60 cm	1,25		
4	74,101	pcs	Etagere, approximately 50 x 10 cm extra class	1,25		
5	75,103	pcs	Toilet seat a la Turc, enameled ceramics, approximately 50 x 60 cm, extra class, with plastic siphon	1,25		
6	76,5	set	Materials for a la Turc toilet, with pressure washer (with fluzometer)	1,25		
7	79,1	set	Toilet seat a la Franc with self-flush tank, 35 x 55 cm, and materials	1,25		
8	83,104	pcs	Single sink wo/drip cap, stainless steel 50 x 60 x 22	1,25		
9	84,102	pcs	Single sink materials with battery, special plastic block siphon, 1st class	1,25		
10	87,501	set	Shower materials (complete bath battery with shower piping and shower head) 1st quality	1,25		
11	97,303	pcs	Floor drain filter, hard plastic 15 x 15 cm	3,75		
12	103,102	pcs	Cold water meter, 3/4" screw-mounted 20Ø mm	1,25		
13	165,708	MT	Panel radiator (type 22) 600	9,50		
14	165,916	pcs	Aluminum radiators, bath type, towel-warmer, H=1000 mm t=500-600 mm	1,25		
15	169,2	pcs	Radiator highboy	22,50		
16	169,3	pcs	Radiator clamp	22,50		
17	170,301	pcs	Radiator valves, plain type, with thermostat, ø15 mm (1/2")	11,25		
18	172,102	pcs	Automatic purger for radiator, hard PVC, with dummy plug and float	11,25		
19	192,253	pcs	Condensing boilers, 30,000 kcal/h, wall-mountable, gas fired, natural gas or LPG fueled, programmable	1,25		
20	193,251	MT	Ø140 insulated stainless steel stack	2,50		
21	201,307	MT	Seamless steel pipe outer diameter 25.0/2.0 mm (including Price for pipe installation materials 30%)	12,50		
22	201,309	MT	Seamless steel pipe outer diameter 30.0/2.6 mm (including Price for pipe installation materials 30%)	18,75		
23	204,3102	MT	Pn 20 polypropylene 1/2" ø16/3.4 mm clean water pipes (including Price for pipe installation	18,75		

Title: PART 2 - KİLİS AKCURUN HISTORICAL BUILDING						
PLUMBING WORKS						
			materials 45%)			
24	204,3103	MT	Pn 20 polypropylene 3/4" ø25/4.2 mm clean water pipes (including Price for pipe installation materials 45%)	18,75		
25	204,3104	MT	Pn 20 polypropylene 1" ø32/5.4 mm clean water pipes (including Price for pipe installation materials 45%)	62,50		
26	204,401	MT	Hard PVC plastic waste water pipe, outer diameter ø 50-40/3.0 mm (Bell-and-spigot jointed) (including Price for pipe installation materials 35%)	7,50		
27	204,402	MT	Hard PVC plastic waste water pipe, outer diameter ø 75-70/3.0 mm (Bell-and-spigot jointed) (including Price for pipe installation materials 35%)	12,50		
28	204,403	MT	Hard PVC plastic waste water pipe, outer diameter ø 100-110/3.0 mm (Bell-and-spigot jointed) (including Price for pipe installation materials 35%)	37,50		
29	204.920/2-1	MT	PE-Xa oxygen barrier pipe 16 x 2.2 mm, peroxide added, produced by cross-bonding method, at least 70% cross-bonded, polyethylene (PE-Xa) pipes (including Price for pipe installation materials 35%)	300,00		
30	204,975	MT	Supplying at work site and installing the spiral protective sheath used for PE-Xa and PE-Xb pipes of Ø16-Ø17 diameter	300,00		
31	204,983	set	Collector 1”, 4-outlet, with mini ball valve	2,50		
32	204,984	set	Collector 1”, 5-outlet, with mini ball valve	2,50		
33	210,625	pcs	[Ball valve] press manufactured Teflon (PTFE), brass, with washer, 25 Ø mm, 1"	5,00		
34	210,705	pcs	PN 10-16 Cast iron body, ball made of stainless steel, spring backed Belleville washer made of steel or Teflon; flange-mounted, ø 32 mm	2,50		
35	216,904	pcs	Wet rotor circulation pump of variable rotating speed (with frequency convertor) (3-6) m3/h (3-5) mss	1,25		
36	V.1884/03	set	Shower cabin with 4 mm tempered glass for oval shower tray 90 x 90 cm	1,25		
PLUMBING WORKS SUB-TOTAL						

Title: PART 2 - KİLİS AKCURUN HISTORICAL BUILDING						
STRONG CURRENT WORKS						
NO	**POSE NUMBER**	**UNIT**	**TYPE OF WORKS**	**QUANTITY**	**UNIT PRICE ($)**	**AMOUNT ($)**
1	30.3/001	pcs	2 m, galvanized 65×65×7 angle, 5 m line and burying	3,75		
2	701,102	pcs	Sheet metal panel 900 mm (TS EN 61439-1/2)	1,25		
3	715,308	pcs	Thermal-magnetic circuit-breaker 3 x 63 A behind panelboard (TS EN 60947-2)	1,25		
4	718,509	pcs	Residual current circuit breaker up to 4 x 63 A (300 mA)	1,25		
5	724,401	pcs	Automatic fuse switch (3 ka) up to 16 A	13,75		
6	724,404	pcs	Automatic fuse switch (3 kA) up to 40 A	1,25		
7	725,722	pcs	Tri-phase time tariff electronic electric meters 3 x 230/400 V 3 x 20 (120) A	1,25		
8	791,426	MT	4 x 6 mm2 1 kV underground wire supply line (n2 x h)	56,25		
9	791,427	MT	4 x 4 mm2 1 kV underground wire supply line (n2 x h)	37,50		
10	791,504	MT	1 x 6 mm2 plastic insulated conductor (HO7Z, O7Z1)	31,25		
11	792,101	pcs	Normal sortie with Halogen-free wire	2,50		
12	792,102	pcs	Commutator sortie with Halogen-free wire	3,75		
13	792,104	pcs	Parallel sortie with Halogen-free wire	2,50		
14	792,105	pcs	Luminaire sortie with Halogen-free wire	2,50		
15	793,102	pcs	Safety line outlet sortie with Halogen-free wire	33,75		
16	815,101	pcs	Telephone sortie	5,00		
17	845,103	pcs	Television sortie	5,00		
18	845,104	pcs	4-piece television antenna	5,00		
19	845,202	pcs	Common television antenna panel 21-40 dB	1,25		
20	880,437	MT	Rg 11/u-6, 75 impedance coaxial cables	43,75		
21	880,503	pcs	Splitters, distributing type 1/4 max dB loss 8.0 (TS EN 60728-6)	1,25		
22	880,563	MT	UTP CAT 6 cable	375,00		
23	880,574	pcs	UTP CAT 6 over-plaster double plug socket	5,00		
24	ELK-01	pcs	5-arm luminaire	6,25		
25	ELK-02	pcs	3-arm luminaire	1,25		
26	ELK-03	pcs	Ceiling globe	6,25		
27	V.2229	pcs	Making and installing in position king post lighting armature of one arm, 30-40 cm in width, 50-70 cm in height, electrostatic oven-dry painted (on tops of yard wall and at sides of yard entry gate)	2,50		
STRONG CURRENT WORKS SUB-TOTAL						

PART 2 – Kilis Akcurun Historical Building Restoration Works

BILL OF QUANTITIES SUMMARY		
No	**Description**	**Amount ($)**
1	PART 2- Construction Works	
2	PART 2- Plumbing Works	
3	PART 2- Strong Current Works	
	PART 2 - GRAND TOTAL ($)	

RESTORATION WORKS OF YAVUZ AKINCI AND AKCURUN HISTORICAL BUILDINGS IN KİLİS PROVINCE (PART 1 AND PART 2)

TOTAL BID PRICE		
Part	**Description**	**Amount ($)**
1	Kilis Yavuz Akıncı Historical Building Restoration Works	
2	Kilis Akcurun Historical Building Restoration Works	
GRAND TOTAL BID PRICE ($) (PART 1 + PART 2)		

Above bid prices are based on the Bill of Quantities, and are inclusive of all other costs (that are not costed through BoQ) whether direct or indirect nature, associated with the satisfactory completion of each work item in accordance with Statement of Works/Technical Drawings and in overall in accordance with the Conditions of Contract.

Above prices exclude VAT and shall be the basis of the invoices to be issued to UNDP.

"Duly authorized to sign the Proposal for and on behalf of

_____

(Name of Company)

_____

Signature/Stamp of Entity/Date

Name of representative:
Address:
Telephone/Fax:
Email:

Section 8: FORM FOR BID SECURITY

(This must be finalized using the official letterhead of the Issuing Bank. Except for indicated fields, no changes may be made in this template.)

To: UNDP
Yıldız Kule, Yukarı Dikmen Mahallesi, Turan Güneş Bulvarı,
No:106, 06550, Çankaya, Ankara/Turkey

WHEREAS [*name and address of Contractor*] (hereinafter called "the Bidder") has submitted a Bid to UNDP dated ……. , to deliver goods and execute related services for **UNDP-TUR-ITB-PROJ(SR)2017/11** (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 in the event that 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 Bid;
c) Fails to comply with UNDP's variation of requirement, as per ITB Item 33; 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 this 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 until 30 days after the date of validity of the bids.

SIGNATURE AND SEAL OF THE GUARANTOR BANK

Date .....

Name of Bank .....

Address .....

Section 9: FORM FOR PERFORMANCE SECURITY[5]

(This must be finalized using the official letterhead of the Issuing Bank. Except for indicated fields, no changes may be made in this template.)

To: UNDP
Yıldız Kule, Yukarı Dikmen Mahallesi,
Turan Güneş Bulvarı, No:106, 06550, Çankaya, Ankara/Turkey

WHEREAS [*name and address of Contractor*] (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. ……. dated ……. , to deliver the goods and execute related services …….. (hereinafter called "the Contract"):

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

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

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

This guarantee shall be valid until a date 30 days from the date of issue by UNDP of a certificate of satisfactory performance and full completion of services by the Contractor.

SIGNATURE AND SEAL OF THE GUARANTOR BANK

Date .....

Name of Bank .....

Address .....

[5] *If the ITB requires the submission of a Performance Security, which shall be made a condition to the signing and effectivity of the contract, the Performance Security that the Bidder's Bank will issue shall use the contents of this template*

Section 10: Technical Drawings

PART 1-Restoration Works of Kilis Yavuz Akıncı Historical Building

PLEASE REFER TO THE ATTACHED TECHNICAL DRAWINGS

KİLİS YAVUZAKINCI GELENEKSEL KİLİS EVİ/HISTORICAL BUILDING

TABLE OF CONTENTS	
Discipline	***Number of Drawings***
ARCHITECTURAL / MİMARİ	3
MECHANICAL / MEKANİK	1
ELECTRICITY / ELEKTRİK	1

ARCHITECTURAL / MİMARİ		
No	**Design No**	**Design Name/Proje ismi**
1	KİLİS-VYGKE-ARC-RSTO-01	LAYOUT PLAN/ VAZİYET PLANI
2	KİLİS-VYGKE-ARC-RSTO-01	GROUND FLOOR PLAN/ ZEMİN KAT PLANI
3	KİLİS-VYGKE-ARC-RSTO-01	UPPER FLOOR PLAN/ ÜST KAT PLANI
4	KİLİS-VYGKE-ARC-RSTO-01	ATTIC PLAN / ÇATI PLANI
5	KİLİS-VYGKE-ARC-RSTO-01	GROUND FLOOR COVERING PLAN / ZEMİN DÖŞEME KAT PLANI
6	KİLİS-VYGKE-ARC-RSTO-01	UPPER FLOOR COVERING PLAN/ ÜST KAT DÖŞEME PLANI
7	KİLİS-VYGKE-ARC-RSTO-01	GROUND FLOOR CEİLİNG PLAN/ ZEMİN KAT TAVAN PLANI
8	KİLİS-VYGKE-ARC-RSTO-01	UPPER FLOOR CEİLİNG PLAN/ ÜST KAT TAVAN PLANI
9	KİLİS-VYGKE-ARC-RSTO-01	1-1 AND 2-2 SECTİON / 1-1 VE 2-2 KESİTİ
10	KİLİS-VYGKE-ARC-RSTO-01	3-3 AND 4-4 SECTİON / 3-3 VE 4-4 KESİTİ
11	KİLİS-VYGKE-ARC-RSTO-01	/5-5 AND 6-6 SECTİON / 5-5 VE 6-6 KESİTİ
12	KİLİS-VYGKE-ARC-RSTO-01	7-7 AND 8-8 SECTİON/ 7-7 VE 8-8 KESİTİ
13	KİLİS-VYGKE-ARC-RSTO-01	9-9 SECTİON AND WEST FRONTAGE VİEW / 9-9 KESİTİ VE BATI CEPHE GÖRÜNÜŞÜ
14	KİLİS-VYGKE-ARC-RSTO-01	DETAILS / DETAYLAR
1	KİLİS-VYGKE-ARC-RLV-02	LAYOUT PLAN / VAZİYET PLANI

2	KİLİS-VYGKE-ARC-RLV-02	GROUND FLOOR PLAN/ ZEMİN KAT PLANI
3	KİLİS-VYGKE-ARC-RLV-02	UPPER FLOOR PLAN / ÜST KAT PLANI
4	KİLİS-VYGKE-ARC-RLV-02	ATTIC PLAN/ ÇATI PLANI
5	KİLİS-VYGKE-ARC-RLV-02	GROUND FLOOR COVERING PLAN / ZEMİN DÖŞEME KAT PLANI
6	KİLİS-VYGKE-ARC-RLV-02	UPPER FLOOR COVERING PLAN / ÜST KAT DÖŞEME PLANI
7	KİLİS-VYGKE-ARC-RLV-02	GROUND FLOOR CEİLİNG PLAN/ ZEMİN KAT TAVAN PLANI
8	KİLİS-VYGKE-ARC-RLV-02	UPPER FLOOR CEİLİNG PLAN/ ÜST KAT TAVAN PLANI
9	KİLİS-VYGKE-ARC-RLV-02	1-1 AND 2-2 SECTION / 1-1 VE 2-2 KESİTİ
10	KİLİS-VYGKE-ARC-RLV-02	3-3 AND 4-4 SECTION / 3-3 VE 4-4 KESİTİ
11	KİLİS-VYGKE-ARC-RLV-02	5-5 AND 6-6 SECTION/ 5-5 VE 6-6 KESİTİ
12	KİLİS-VYGKE-ARC-RLV-02	7-7 AND 8-8 SECTION/ 7-7 VE 8-8 KESİTİ
13	KİLİS-VYGKE-ARC-RLV-02	9-9 SECTİON AND WEST FRONTAGE VİEW / 9-9 KESİTİ VE BATI CEPHE GÖRÜNÜŞÜ
14	KİLİS-VYGKE-ARC-RLV-02	DETAILS / DETAYLAR
1	KİLİS-VYGKE-ARC-RSTT-03	GROUND FLOOR PLAN/ ZEMİN KAT PLANI
2	KİLİS-VYGKE-ARC-RSTT-03	UPPER FLOOR PLAN/ ÜST KAT PLANI
3	KİLİS-VYGKE-ARC-RSTT-03	ATTIC PLAN / ÇATI PLANI
4	KİLİS-VYGKE-ARC-RSTT-03	GROUND FLOOR CEİLİNG PLAN/ / ZEMİN KAT TAVAN PLANI
5	KİLİS-VYGKE-ARC-RSTT-03	UPPER FLOOR CEİLİNG PLAN/ / ÜST KAT TAVAN PLANI
6	KİLİS-VYGKE-ARC-RSTT-03	1-1 AND 2-2 SECTION / 1-1 VE 2-2 KESİTİ
7	KİLİS-VYGKE-ARC-RSTT-03	3-3 AND 4-4 SECTION / 3-3 VE 4-4 KESİTİ
8	KİLİS-VYGKE-ARC-RSTT-03	5-5 AND 6-6 SECTION / 5-5 VE 6-6 KESİTİ
9	KİLİS-VYGKE-ARC-RSTT-03	7-7 AND 8-8 SECTION / 7-7 VE 8-8 KESİTİ
10	KİLİS-VYGKE-ARC-RSTT-03	9-9 SECTİON AND WEST FRONTAGE VİEW / 9-9 KESİTİ VE BATI CEPHE GÖRÜNÜŞÜ
MECHANICAL / MEKANİK		
No	**Design No**	**Design Name/Proje ismi**
1	KİLİS-VYGKE-MEK-01	LAYOUT PLAN / VAZİYET PLANI
2	KİLİS-VYGKE-MEK-01	GROUND FLOOR PLAN/ ZEMİN KAT PLANI
3	KİLİS-VYGKE-MEK-01	UPPER FLOOR PLAN / ÜST KAT PLANI
4	KİLİS-VYGKE-MEK-01	ROOFTOP PLAN / TERAS KAT PLANI
5	KİLİS-VYGKE-MEK-01	RISER DIAGRAM/ KOLON ŞEMASI
6	KİLİS-VYGKE-MEK-01	SYSTEM DETAILS/ SİSTEM DETAYLARI

ELECTRICAL / ELEKTRİK		
No	**Design No**	**Design Name/Proje ismi**
1	KİLİS-VYGKE-ELK-01	LAYOUT PLAN/ VAZİYET PLANI
2	KİLİS-VYGKE-ELK-01	GROUND FLOOR SOCKET,UPS PLAN/ ZEMİN KAT PRİZ, UPS PLANI
3	KİLİS-VYGKE-ELK-01	UPPER FLOOR SOCKET,UPS PLAN/ ÜST KAT PRİZ, UPS PLANI
4	KİLİS-VYGKE-ELK-01	GROUND FLOOR LIGHTENING PLAN/ ZEMİN KAT AYDINLATMA PLANI
5	KİLİS-VYGKE-ELK-01	UPPER FLOOR LIGHTENING PLAN / ÜST KAT AYDINLATMA PLANI
6	KİLİS-VYGKE-ELK-01	ATTIC LIGHTENING PLAN/ ÇATI KATI AYDINLATMA PLANI
7	KİLİS-VYGKE-ELK-01	GROUND FLOOR Acs PLAN/ ZEMİN KAT KLİMA PLANI
8	KİLİS-VYGKE-ELK-01	UPPER FLOOR Acs PLAN/ ÜST KAT KLİMA PLANI
9	KİLİS-VYGKE-ELK-01	ATTIC Acs PLAN/ ÇATI KATI KLİMA PLANI
10	KİLİS-VYGKE-ELK-01	GROUND FLOOR CCTV/DATA/FIRE PLAN/ ZEMİN KAT CCTV-TLF-DATA-YANGIN PLANI
11	KİLİS-VYGKE-ELK-01	UPPER FLOOR CCTV-DATA-FIRE PLAN/ ÜST KAT CCTV-TLF-DATA-YANGIN PLANI
12	KİLİS-VYGKE-ELK-01	GROUND FLOOR CABLE PLAN / ZEMİN KAT KABLO PLANI
13	KİLİS-VYGKE-ELK-01	SINGLE-LINE DIAGRAM/ TEK HAT ŞEMASI

PART 2 - Restoration Works of Kilis Akcurun Historical Building

KİLİS AKCURUN GELENEKSEL EVİ/HISTORICAL BUILDING

TABLE OF CONTENTS	
Discipline	***Number of Drawings***
ARCHITECTURAL / MİMARİ	3
MECHANICAL / MEKANİK	2
ELECTRICAL / ELEKTRİK	1

ARCHITECTURAL / MİMARİ		
No	**Design No**	**Design Name/Proje ismi**
1	KİLİS-AKCURUN-ARC-RSTO-01	LAYOUT PLAN/ VAZİYET PLANI

2	KİLİS-AKCURUN-ARC-RSTO-01	GROUND FLOOR PLAN/ ZEMİN KAT PLANI
3	KİLİS-AKCURUN-ARC-RSTO-01	GROUND FLOOR CEILING PLAN / ZEMİN KAT TAVAN PLANI
4	KİLİS-AKCURUN-ARC-RSTO-01	FIRST FLOOR PLAN / 1. KAT PLANI
5	KİLİS-AKCURUN-ARC-RSTO-01	FIRST FLOOR CEILING PLAN / 1. KAT TAVAN PLANI
6	KİLİS-AKCURUN-ARC-RSTO-01	SECTION AND VIEWS/ KESİT VE GÖRÜNÜŞLER
1	KİLİS-AKCURUN-ARC-RLV-02	LAYOUT PLAN/ VAZİYET PLANI
2	KİLİS-AKCURUN-ARC-RLV-02	GROUND FLOOR PLAN/ ZEMİN KAT PLANI
3	KİLİS-AKCURUN-ARC-RLV-02	GROUND FLOOR CEILIN PLAN/ ZEMİN KAT TAVAN PLANI
4	KİLİS-AKCURUN-ARC-RLV-02	FIRST FLOOR PLAN / 1. KAT PLANI
5	KİLİS-AKCURUN-ARC-RLV-02	FIRST FLOOR CEILING PLAN / 1. KAT TAVAN PLANI
6	KİLİS-AKCURUN-ARC-RLV-02	SECTION AND VIEWS/ KESİT VE GÖRÜNÜŞLER
7	KİLİS-AKCURUN-ARC-RLV-03	DETAILS/ DETAYLAR
MECHANICAL / MEKANİK		
No	**Design No**	**Design Name/Proje ismi**
1	KİLİS-AKCURUN-MEK-ST-01	GROUND FLOOR PLAN/ ZEMİN KAT PLANI
2	KİLİS-AKCURUN-MEK-ST-01	FIRST FLOOR PLAN / 1. KAT PLANI
1	KİLİS-AKCURUN-MEK-DG-02	GROUND FLOOR NATURAL GAS/ ZEMİN KAT DOĞALGAZ
2	KİLİS-AKCURUN-MEK-DG-02	FIIRST FLOOR NATURAL GAS/ 1. KAT DOĞALGAZ
3	KİLİS-AKCURUN-MEK-DG-02	HEATING SYAYTEM RISER DIAGRAM/ KALORİFER TESİSATI KOLON ŞEMASI
ELECTRICITY / ELEKTRİK		
No	**Design No**	**Design Name/Proje ismi**
1	KİLİS-AKCURUN-ELK-01	GROUND FLOOR HIGH CURRENT PLAN/ ZEMİN KAT KUVVETLİ AKIM PLANI
2	KİLİS-AKCURUN-ELK-01	GROUND FLOOR LOW CURRENT PLAN / ZEMİN KAT ZAYIF AKIM PLANI
3	KİLİS-AKCURUN-ELK-01	FIRST FLOOR HIGH CURRENT PLAN / 1. KAT KUVVETLİ AKIM PLANI
4	KİLİS-AKCURUN-ELK-01	FIRST FLOOR LOW CURRENT PLAN/ 1. KAT ZAYIF AKIM PLANI
5	KİLİS-AKCURUN-ELK-01	FIRST FLOOR LOW CURRENT SINGLE LINE DIAGRAM/ 1. KAT ZAYIF AKIM PLANI TEK HAT ŞEMASI

PLEASE REFER TO THE ATTACHED TECHNICAL DRAWINGS

Section 11: Contract

THIS IS UNDP'S TEMPLATE FOR CONTRACT FOR THE BIDDER'S REFERENCE. ADHERENCE TO ALL TERMS AND CONDITIONS IS MANDATORY.

Model Contract for Works

Date _____
Dear Sir/Madam,

Ref.: _____/ _____/ _____[INSERT PROJECT NUMBER AND TITLE]

The United Nations Development Programme (hereinafter referred to as "UNDP"), wishes to engage your company, duly incorporated under the Laws of _____ [INSERT NAME OF THE COUNTRY] (hereinafter referred to as the "Contractor") in order to perform _____ [INSERT SUMMARY DESCRIPTION OF THE WORKS] (hereinafter referred to as the "Works"), in accordance with the following Contract:

1. Contract Documents

1.1 This Contract is subject to the UNDP General Conditions for Civil Works, [INSERT REVISION NUMBER AND DATE FROM THE CONTRACTS DOCUMENTS LIBRARY], attached hereto as Annex I. The provisions of such Annex shall control the interpretation of this Contract and in no way shall be deemed to have been derogated by the contents of this letter and any other Annexes, unless otherwise expressly stated under section 4 of this letter, entitled "Special Conditions".

1.2 The Contractor and UNDP also agree to be bound by the provisions contained in the following documents, which shall take precedence over one another in case of conflict in the following order:

a) this letter;

b) the Technical Specifications and Drawings [ref. .....dated.....], attached hereto as Annex II;

c) the Contractor's Tender [IF THE CONTRACT IS ON THE BASIS OF UNIT PRICE, INSERT: including the Priced Bill of Quantities] [ref....., dated .....], as clarified by the agreed minutes of the negotiation meeting [dated.....], not attached hereto but known to and in the possession of both parties.

1.3 All the above shall form the Contract between the Contractor and UNDP, superseding the contents of any other negotiations and/or agreements, whether oral or in writing, pertaining to the subject of this Contract.

_____
_____ [INSERT NAME AND ADDRESS OF THE CONTRACTOR]

2. Obligations of the Contractor

2.1 The Contractor shall commence work within [INSERT NUMBER OF DAYS] days

from the date on which he shall have been given access to the Site and received the notice to commence from the Engineer, and shall perform and substantially complete the Works by [INSERT DATE], in accordance with the Contract. The Contractor shall provide all materials, supplies, labour and other services necessary to that end.

2.2 The Contractor shall submit to the Engineer the Programme of Work referred to in Clause 13 of the General Conditions by [INSERT DATE].

2.3 The Contractor represents and warrants the accuracy of any information or data provided to UNDP for the purpose of entering into this Contract, as well as the quality of the Works foreseen under this Contract in accordance with the highest industrial and professional standards.

3. Price and payment

3.1 The total estimated price of the Contract is contained in the Bill of Quantities and amounts to [INSERT CURRENCY & AMOUNT IN FIGURES AND WORDS].

3.2 The final price of the Contract will be determined on the basis of the actual quantities of work and materials utilized in the complete and satisfactory performance of the Works as certified by the Engineer and the unit prices contained in the Contractor's financial proposal. Such unit prices are fixed and are not subject to any variation whatsoever.

3.3 If the Contractor foresees that the final price of the Contract may exceed the total estimated price contained in 3.1 above, he shall so inform the Engineer without delay, in order for UNDP to decide, at its discretion, to increase the estimated price of the Contract as a result of a larger quantity of work/material or to reduce the quantity of work to be performed or materials to be used. UNDP shall not be responsible for payment of any amount in excess of that stipulated in 3.1 above unless this latter amount has been increased by means of a written amendment of this Contract in accordance with its paragraph 7 below.

3.4 The Contractor shall submit an invoice for the work performed and materials utilized every month and a final invoice within 30 days from the issuance of the Certificate of Substantial Completion by the Engineer. All invoices shall be accompanied by the 'Progress Payment Certificates' indicating the percentage of completion of the works by the end of that respective month and corresponding amounts due, in line with the detailed breakdown of the price is given above.

3.5 UNDP shall effect payments to the Contractor in the form of "monthly progress payments" based on the completion of items in Bill of Quantities at the end of each month after acceptance by UNDP of the invoices submitted by the contractor. The Engineer may make corrections to that amount, in which case UNDP may effect payment for the amount so corrected. The Engineer may also withhold invoices if the work is not performed at any time in accordance with the terms of the Contract or if the necessary insurance policies or performance security are not valid and/or in order. The Engineer shall process the invoices submitted by the Contractor within 15 days of their receipt.

3.6 Payments effected by UNDP to the Contractor shall be deemed neither to relieve the Contractor of its obligations under this Contract nor as acceptance by UNDP of the Contractor's performance of the Works.

3.7 Payment of the final invoice shall be effected by UNDP after issuance of the Certificate of Substantial Completion by the Engineer.

4. Special conditions

4.1 The Performance Bond referred to in Clause 10 of the General Conditions shall be

submitted by the Contractor for an amount of 10% (ten per cent) of the final price of the Contract

4.2 The Contractor should provide the following insurances:
a) All Risks for Works in accordance with Clause 21 of General Conditions,
b) Liability (referred to in Clause 23 of the General Conditions) in the amount of 15% (fifteen percent) of the final price of the Contract, per occurrence.

4.3 According to Clause 45 of the General Conditions, the liquidated damages for delay shall be 1% of the price of the Contract per week of delay, up to a maximum of 10% of the final price of the Contract.

4.4 According to Clause 45 of the General Conditions, the liquidated damages for absence of Contractor's key staff/personnel from the construction site without Engineer's approval shall be $200 per day.

5. Submission of invoices

5.1 One original and one copy of every invoice shall be submitted by mail by the Contractor for each payment under the Contract to the Engineer's address specified in clause 8.2.

5.2 Invoices submitted by fax shall not be accepted by UNDP.

6. Time and manner of payment

6.1 Invoices shall be paid within thirty (30) days of the date of their receipt and acceptance by UNDP.

6.2 All payments shall be made by UNDP to the following Bank account of the Contractor:

[NAME OF THE BANK]
[ACCOUNT NUMBER]
[ADDRESS OF THE BANK]

7. Modifications

7.1 Any modification to this Contract shall require an amendment in writing between both parties duly signed by the authorized representatives of the Contractor and UNDP.

8. Notifications

8.1 For the purpose of notifications under the Contract, the addresses of UNDP and the Contractor are as follows:

For the UNDP:
[INSERT NAME OF RR OR DIVISION CHIEF]
United Nations Development Programme
Ref. [INSERT CONTRACT REFERENCE & NUMBER]
Fax:_____

For the Contractor:
_____
[Insert Name, Address and Telex, Fax and Cable Numbers]

8.2 UNDP shall communicate as soon as possible to the Contractor after the signature of the Contract, the address of the Engineer for the purposes of communication with the Engineer under the Contract.

If the above terms and conditions meet with your agreement as typed in this letter and in the Contract Documents, please initial every page of this letter and its attachments and return to this office one original of this Contract, duly signed and dated.

Yours sincerely,

[INSERT NAME OF RR or Bureau/Division Director]

For [Insert name of the company/organization]

Agreed and Accepted:

Signature _____
Name _____
Title _____
Date _____

GENERAL CONDITIONS OF CONTRACT FOR CIVIL WORKS

1. Definitions
2. Singular and Plural
3. Headings or Notes
4. Legal Relationships
5. General Duties/Powers of Engineer
6. Contractor's General Obligations/Responsibilities
7. Assignment and Subcontracting
8. Drawings
9. Work Book
10. Performance Security
11. Inspection of Site
12. Sufficiency of Tender
13. Programme of Work to be Furnished
14. Weekly Site Meeting
15. Change Orders
16. Contractor's Superintendence
17. Contractor's Employees
18. Setting-Out
19. Watching and Lighting
20. Care of Works
21. Insurance of Works, Etc.
22. Damage to Persons and Property
23. Liability Insurance
24. Accident or Injury to Workmen
25. Remedy on Contractor's Failure to Insure
26. Compliance with Statutes, Regulations, Etc.
27. Fossils, Etc.
28. Copyright, Patents and Other Proprietary Rights, and Royalties
29. Interference with Traffic and Adjoining Properties
30. Extraordinary Traffic and Special Loads
31. Opportunities for Other Contractors
32. Contractor to Keep Site Clean
33. Clearance of Site on Substantial Completion
34. Labour
35. Returns of Labour, Plant, Etc.
36. Materials, Workmanship and Testing
37. Access to Site
38. Examination of Work Before Covering Up
39. Removal of Improper Work and Materials
40. Suspension of Work

41. Possession of Site
42. Time for Completion
43. Extension of Time for Completion
44. Rate of Progress
45. Liquidated Damages for Delay
46. Certificate of Substantial Completion
47. Defects Liability
48. Alterations, Additions and Omissions
49. Plant, Temporary Works and Materials
50. Approval of Materials, Etc., Not Implied
51. Measurement of Works
52. Liability of the Parties
53. Authorities
54. Urgent Repairs
55. Increase and Decrease of Costs
56. Taxation
57. Blasting
58. Machinery
59. Temporary Works and Reinstatement
60. Photographs and Advertising
61. Prevention of Corruption
62. Date Falling on Holiday
63. Notices
64. Language, Weights and Measures
65. Records, Accounts, Information and Audit
66. Force Majeure
67. Suspension by the UNDP
68. Termination by the UNDP
69. Termination by the Contractor
70. Rights and Remedies of the UNDP
71. Settlement of Disputes
72. Privileges and Immunities
73. Security
74. Audit and Investigations
75. Anti-terorism

1. DEFINITIONS

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

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

2. SINGULAR AND PLURAL

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

3. HEADINGS OR NOTES

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

4. LEGAL RELATIONSHIPS

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

5. GENERAL DUTIES/POWERS OF ENGINEER

a) The Engineer shall provide administration of Contract as provided in the Contract Documents. In particular, he shall perform the functions hereinafter described.

b) The Engineer shall be the Employer's representative vis-à-vis the Contractor during construction and until final payment is due. The Engineer shall advise and consult with the Employer. The Employer's instructions to the Contractor shall be forwarded through the Engineer. The Engineer shall have authority to act on behalf of the Employer only to the extent provided in the Contract Documents as they may be amended in writing in accordance with the Contract. The duties, responsibilities and limitations of authority of the Engineer as the Employer's representative during construction as set forth in the Contract shall not be modified or extended without the written consent of the Employer, the Contractor and the Engineer.

c) The Engineer shall visit the Site at intervals appropriate to the stage of construction to familiarize himself generally with the progress and quality of the Works and to determine in general if the Works are proceeding in accordance with the Contract Documents. On the basis of his on-site observations as an Engineer, he shall keep the Employer informed of the progress of the Works.

d) The Engineer shall not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Works or the Temporary Works. The Engineer shall not be responsible for or have control or charge over the acts or omissions of the Contractor (including the Contractor's failure to carry out the Works in accordance with the Contract) and of Sub-contractors or any of their agents or employees, or any other persons performing services for the Works, except if such acts or omissions are caused by the Engineer's failure to perform his functions in accordance with the contract between the Employer and the Engineer.

e) The Engineer shall at all times have access to the Works wherever and whether in preparation or progress. The Contractor shall provide facilities for such access so that the Engineer may perform his functions under the Contract.

f) Based on the Engineer's observations and an evaluation of the documentation submitted by the Contractor together with the invoices, the Engineer shall determine the amounts owed to the Contractor and shall issue Certificates for Payment as appropriate.

g) The Engineer shall review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformity with the design concept of the Works and with the provisions of the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay. The Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

h) The Engineer shall interpret the requirements of the Contract Documents and judge the performance thereunder by the Contractor. All interpretations and orders of the Engineer shall be consistent with the intent of and reasonably inferable from the Contract Documents and shall be in writing or in the form of drawings. Either party may make a written request to the Engineer for such interpretation. The Engineer shall render the interpretation necessary for the proper execution of the Works with reasonable

promptness and in accordance with any time limit agreed upon. Any claim or dispute arising from the interpretation of the Contract Documents by the Engineer or relating to the execution or progress of the Works shall be settled as provided in Clause 71 of these General Conditions.

i) Except as otherwise provided in the Contract, the Engineer shall have no authority to relieve the Contractor of any of his obligations under the Contract nor to order any work involving delay in completion of the Works or any extra payment to the Contractor by the Employer, or to make any variations to the Works.

j) In the event of termination of the employment of the Engineer, the Employer shall appoint another suitable professional to perform the Engineer's duties.

k) The Engineer shall have authority to reject work which does not conform to the Contract Documents. Whenever, in his opinion, he considers it necessary or advisable for the implementation of the intent of the Contract Documents, he will have authority to require special inspection or testing of the work whether or not such work be then fabricated, installed or completed. However, neither the Engineer's authority to act nor any reasonable decision made by him in good faith either to exercise or not to exercise such authority shall give rise to any duty or responsibility of the Engineer to the Contractor, any subcontractor, any of their agents or employees, or any other person performing services for the Works.

l) The Engineer shall conduct inspections to determine the dates of Substantial Completion and Final Completion, shall receive and forward to the Employer for the Employer's review written warranties and related documents required by the Contract and assembled by the Contractor, and shall issue a final Certificate for Payment upon compliance with the requirements of Clause 47 hereof and in accordance with the Contract.

m) If the Employer and Engineer so agree, the Engineer shall provide one or more Engineer's Representative(s) to assist the Engineer in carrying out his responsibilities at the site. The Engineer shall notify in writing to the Contractor and the Employer the duties, responsibilities and limitations of authority of any such Engineer's Representative(s).

6. CONTRACTOR'S GENERAL OBLIGATIONS/RESPONSIBILITIES

6.1.Obligation to Perform in Accordance with Contract

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

6.2 Responsibility for Site Operations

The Contractor shall take full responsibility for the adequacy, stability and safety of all

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

6.3.Responsibility for Employees

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

6.4.Source of Instructions

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

6.5.Officials Not to Benefit

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

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

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

6.7.Confidential Nature of Documents

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

7. ASSIGNMENT AND SUBCONTRACTING

7.1.Assignment of Contract

The Contractor shall not, except after obtaining the prior written approval of the Employer, assign, transfer, pledge or make other disposition of the Contract or any part

thereof or of any of the Contractor's rights, claims or obligations under the Contract.

7.2.Subcontracting

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

7.3.Assignment of Subcontractor's Obligations

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

8. DRAWINGS

8.1.Custody of drawings

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

8.2.One copy of Drawings to be kept on Site

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

8.3.Disruption of Progress

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

9. WORK BOOK

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

drawings and instructions.

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

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

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

10. PERFORMANCE SECURITY

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

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

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

11. INSPECTION OF SITE

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

12. SUFFICIENCY OF TENDER

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

13. PROGRAMME OF WORK TO BE FURNISHED

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

14. WEEKLY SITE MEETING

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

15. CHANGE ORDERS

a) The Engineer may instruct the Contractor, with the approval of the Employer and by means of Change Orders, all variations in quantity or quality of the Works, in whole or in part, that are deemed necessary by the Engineer.

b) Processing of change orders shall be governed by clause 48 of these General Conditions.

16. CONTRACTOR'S SUPERINTENDENCE

The Contractor shall provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfillment of the Contractor's obligations under the Contract. The Contractor or a competent and authorized agent or representative of the Contractor approved in writing by the Engineer, which approval may at any time be withdrawn, shall be constantly on the site and shall devote his entire time to the superintendence of the Works. Such authorized agent or representative shall receive on behalf of the Contractor directions and instructions from the Engineer. If the approval of such agent or representative shall be withdrawn by the Engineer, as provided in Clause 17(2) hereinafter, or if the removal of such agent or representative shall be requested by the Employer under Clause 17(3)

hereinafter, the Contractor shall as soon as it is practicable after receiving notice of such withdrawal remove the agent or representative from the Site, and replace him by another agent or representative approved by the Engineer. Notwithstanding the provision of Clause 17(2) hereinafter, the Contractor shall not thereafter employ, in any capacity whatsoever, a removed agent or representative again on the Site.

17. CONTRACTOR'S EMPLOYEES

a) The Contractor shall provide and employ on the Site in connection with the execution and completion of the Works and the remedying of any defects therein:

i. Only such technical assistants as are skilled and experienced in their respective callings and such sub-agent foremen and leading hands as are competent to give proper supervision to the work they are required to supervise, and

ii. Such skilled, semi-skilled, and unskilled labour as is necessary for the proper and timely execution and completion of the Works.

b) The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person employed by the Contractor in or about the execution or completion of the Works, who in the opinion of the Engineer is misconducting himself, or is incompetent or negligent in the proper performance of his duties, or whose employment is otherwise considered reasonably by the Engineer to be undesirable, and such person shall not be again employed on the Site without the written permission of the Engineer. Any person so removed from the Works shall be replaced as soon as reasonably possible by a competent substitute approved by the Engineer.

c) Upon written request by the Employer, the Contractor shall withdraw or replace from the Site any agent, representative or other personnel who does not conform to the standards set forth in paragraph (1) of this Clause. Such request for withdrawal or replacement shall not be considered as termination in part or in whole of this Contract. All costs and additional expenses resulting from any withdrawal or replacement for whatever reason of any of the Contractor's personnel shall be at the Contractor's expense.

18. SETTING-OUT

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

19. WATCHING AND LIGHTING

The Contractor shall in connection with the Works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the Engineer or by any duly constituted authority for the protection of the Works and the

materials and equipment utilized therefor or for the safety and convenience of the public or others.

20. CARE OF WORKS

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

b) The Contractor shall be fully responsible for the review of the Engineering design and details of the Works and shall inform the Employer of any mistakes or incorrectness in such design and details which would affect the Works.

21. INSURANCE OF WORKS, ETC.

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

a) The Works, together with the materials and Plant for incorporation therein, to their full replacement cost, plus an additional sum of ten (10) per cent of such replacement cost, to cover any additional costs of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the Works and of removing debris of whatsoever nature;

b) The Contractor's equipment and other things brought on to the Site by the Contractor to the replacement value of such equipment and other things;

c) An insurance to cover the liabilities and warranties of Section 52(4);

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

22. DAMAGE TO PERSONS AND PROPERTY

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

a) The permanent use or occupation of land by the Works or any part thereof;

b) The right of the Employer to construct the Works or any part thereof on, over, under, or through any land.

c) Interference whether temporary or permanent with any right of light, airway or water or other easement or quasi-easement which is the unavoidable result of the construction of the Works in accordance with the Contract.

d) Death, injuries or damage to persons or property resulting from any act or neglect of the Employer, his agents, servants or other contractors, done or committed during the validity of the Contract.

23. LIABILITY INSURANCE

23.1. Obligation to take out Liability Insurance

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

23.2. Minimum Amount of Liability Insurance

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

23.3. Provision to Indemnify Employer

The insurance policy shall include a provision whereby, in the event of any claim in

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

24. ACCIDENT OR INJURY TO WORKMEN

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

b) Insurance Against Accident, etc., to Workmen

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

25. REMEDY ON CONTRACTOR'S FAILURE TO INSURE

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

26. COMPLIANCE WITH STATUTES, REGULATIONS, ETC.

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

b) The Contractor shall conform in all respects with any such Statutes, Ordinances, Laws, Regulations, By-laws or requirements of any such local or other authority which may be

applicable to the Works and shall keep the Employer indemnified against all penalties and liabilities of every kind for breach of any such Statutes, Ordinances, Laws, Regulations, By-laws or requirements.

27. FOSSILS, ETC.

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

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

a) The Contractor shall hold harmless and fully indemnify the Employer from and against all claims and proceedings for or on account of infringement of any patent rights, design trademark or name or other protected rights in respect of any Plant, equipment, machine, work or material used for or in connection with the Works or Temporary Works and from and against all claims, demands proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, except where such infringement results from compliance with the design or Specification provided by the Engineer.

b) Except where otherwise specified, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the Works or Temporary Works.

29. INTERFERENCE WITH TRAFFIC AND ADJOINING PROPERTIES

All operations necessary for the execution of the Works and for the Construction of any Temporary Works shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with the public convenience, or the access to, use and occupation of, public or private roads and footpaths to or of properties whether in the possession of the Employer or of any other person. The Contractor shall hold harmless and indemnify the Employer in respect of all claims, demands, proceedings, damages, costs, charges and expenses whatsoever arising out of or in relation to any such matters in so far as the Contractor is responsible therefor.

30. EXTRAORDINARY TRAFFIC AND SPECIAL LOADS

a) The Contractor shall use every reasonable means to prevent any of the roads or bridges communicating with or on the routes to the Site from being damaged by any traffic of the Contractor or any of his sub-contractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of plant and material from and to the Site shall be limited as far as reasonably possible and so that no unnecessary damage may be occasioned to such roads and bridges.

b) Should it be found necessary for the Contractor to move any load of Constructional Plant, machinery, preconstructed units or parts of units of work, or other thing, over part of a road or bridge, the moving whereof is likely to damage any such road or bridge unless special protection or strengthening is carried out, then the Contractor shall before moving the load on to such road or bridge, save insofar as the Contract otherwise provide, be responsible for and shall pay for the cost of strengthening any such bridge or altering or improving any such road to avoid such damage, and the Contractor shall indemnify and keep the Employer indemnified against all claims for damage to any such road or bridge caused by such movement, including such claim as may be made directly against the Employer, and shall negotiate and pay all claims arising solely out of such damage.

31. OPPORTUNITIES FOR OTHER CONTRACTORS

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

32. CONTRACTOR TO KEEP SITE CLEAN

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

33. CLEARANCE OF SITE ON SUBSTANTIAL COMPLETION

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

34. LABOUR

34.1 Engagement of Labour

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

34.2 Supply of Water

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

34.3 Alcoholic Drinks or Drugs

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

34.4 Arms and Ammunition

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

34.5 Holiday and Religious Customs

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

34.6 Epidemics

In the event of any outbreak of illness of an epidemic nature the Contractor shall comply with and carry out such regulations, orders, and requirements as may be made by the Government or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.

34.7 Disorderly Conduct, etc.

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

34.8 Observance by Sub-Contractors

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

34.9 Legislation applicable to Labour

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

35. RETURNS OF LABOUR, PLANT, ETC.

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

36. MATERIALS, WORKMANSHIP AND TESTING

36.1 Materials and Workmanship

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

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

36.2 Cost of Samples

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

36.3 Cost of Tests

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

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

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

37. ACCESS TO SITE

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

38. EXAMINATION OF WORK BEFORE COVERING UP

No work shall be covered up or put out of view without the approval of the Engineer and the Contractor shall afford full opportunity for the Engineer to examine and measure any

work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice to the Engineer whenever any such work or foundations is or are ready or about to be ready for examination and the Engineer shall without unreasonable delay unless he considers it unnecessary and advises the Contractor accordingly attend for the purpose of examining and measuring such work or of examining such foundations.

39.REMOVAL OF IMPROPER WORK AND MATERIALS

39.1 Engineer's power to order removal

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

a) The removal from the Site within such time or times as may be specified in the order of any materials which in the opinion of the Engineer are not in accordance with the Contract;

b) The substitution of proper and suitable materials; and

c) The removal and proper re-execution (notwithstanding any previous test thereof or interim payment therefore) of any work which in respect of materials or workmanship is not in the opinion of the Engineer in accordance with the Contract.

39.2 Default of Contractor in carrying out Engineer's Instructions

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

40.SUSPENSION OF WORK

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

41.POSSESSION OF SITE

41.1 Access to Site

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

41.2 Wayleaves, etc.

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

41.3 Limits of the Site

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

42.TIME FOR COMPLETION

a) Subject to any requirement in the Contract as to completion of any section of the Works before completion of the whole, the whole of the Works shall be completed, in accordance with the provisions of Clause 46 and 47 hereof, within the time stated in the Contract.

b) The completion time includes weekly rest days, official holidays, and days of inclement weather.

43.EXTENSION OF TIME FOR COMPLETION

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

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

44.RATE OF PROGRESS

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

45.LIQUIDATED DAMAGES FOR DELAY

a) If the Contractor shall fail to complete the Works within the time for completion prescribed in the Contract, or any extended time for completion in accordance with the Contract, then the Contractor shall pay to the Employer the sum specified in the Contract as liquidated damages, for the delay between the time prescribed in the Contract or the extended time for completion, as the case may be, and the date of substantial completion of the Works as stated in the Certificate of Substantial Completion, subject to the applicable limit stated in the Contract. The said sum shall be payable by the sole fact of the delay without the need for any previous notice or any legal proceedings, or proof of damage, which shall in all cases be considered as ascertained. The Employer may, without prejudice to any other method of recovery, deduct the amount of such liquidated damages from any monies in its hands due or which may become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Works or from any other of his obligations and liabilities under the Contract.

b) If, before the time for completion of the whole of the Works or of a Section of the Works, a Certificate of Substantial Completion has been issued for any part or Section of the Works, the liquidated damages for delay in completion of the remainder of the Works or of that Section may, for any period of delay after the date stated in such Certificate of Substantial Completion, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part or Section so certified bears to the total value of the whole of the Works or Section, as applicable. The provisions of this

Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.

46.CERTIFICATE OF SUBSTANTIAL COMPLETION

46.1 Substantial Completion of the Works

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

46.2 Substantial Completion of Sections or Parts of the Works

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

a) a separate time for completion is provided in the Contract in respect of such Section or part of the Works;

b) such Section or part of the Works has been completed to the satisfaction of the Engineer and is required by the Employer for his occupation or use.

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

47. DEFECTS LIABILITY

47.1 Defects Liability Period

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

47.2 Completion of Outstanding Work and Remedying of Defects

During the Defects Liability Period, the Contractor shall finish the work, if any, outstanding at the date of the Certificate of Substantial Completion, and shall execute all such work of repair, amendment, reconstruction, rectification and making good defects, imperfections, shrinkages or other faults as may be required of the Contractor in writing by the Engineer during the Defects Liability Period and within fourteen (14) days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to expiration of the Defects Liability Period.

47.3 Cost of Execution of Work of Repair, etc.

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

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

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

47.5 Certificate of Final Completion

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

48. ALTERATIONS, ADDITIONS AND OMISSIONS

48.1 Variations

The Engineer may within his powers introduce any variations to the form, type or quality

of the Works or any part thereof which he considers necessary and for that purpose or if for any other reasons it shall, in his opinion be desirable, he shall have power to order the Contractor to do and the Contractor shall do any of the following:

(a) increase or decrease the quantity of any work under the Contract;

(b) omit any such work;

(c) change the character or quality or kind of any such work;

(d) change the levels, lines, positions and dimensions of any part of the Works;

(e) execute additional work of any kind necessary for the completion of the Works, and no such variation shall in any way vitiate or invalidate the Contract.

48.2 Variations Increasing Cost of Contract or altering the Works.

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

48.3 Orders for Variations to be in Writing

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

48.4 Valuation of Variations

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

49.PLANT, TEMPORARY WORKS AND MATERIALS

49.1 Plant, etc., Exclusive Use for the Works

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

49.2 Removal of Plant, etc.

Upon completion of the Works the Contractor shall remove from the Site all the said Constructional Plant and Temporary Works remaining thereon and any unused materials provided by the Contractor.

49.3 Employer not liable for Damage to Plant

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

49.4 Ownership of paid material and work

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

49.5 Equipment and supplies furnished by Employer

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

50.APPROVAL OF MATERIALS ETC., NOT IMPLIED

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

51.MEASUREMENT OF WORKS

The Engineer shall, when he requires any part or parts of the Works to be measured, give notice to the Contractor or the Contractor's authorized agent or representative who shall forthwith attend or send a qualified agent to assist the Engineer in making such measurement and shall furnish all particulars required by either of them. Should the

Contractor not attend or neglect or omit to send such agent, then the measurement made by the Engineer or approved by him shall be taken to be the correct measurement of the work. The purpose of measuring is to ascertain the volume of work executed by the Contractor and therefore determine the amount of the monthly payments.

52.LIABILITY OF THE PARTIES

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

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

52.3 Unfulfilled Obligations

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

52.4 Contractor Responsible

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

53.AUTHORITIES

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

(a) If the Contractor is declared bankrupt or claims bankruptcy or court protection against his creditors or if the Contractor is a company or member of a company which was dissolved by legal action;

(b) If the Contractor makes arrangements with his creditors or agrees to carry out the Contract under an inspection committee of his creditors;

(c) If the Contractor withdraws from the Works or assigns the Contract to others in whole or in part without the Employer's prior written approval;

(d) If the Contractor fails to commence the Works or shows insufficient progress to the extent which in the opinion of the Engineer will not enable him to meet the target completion date of the Works;

(e) If the Contractor suspends the progress of the Works without due cause for fifteen (15) days after receiving from the Engineer written notice to proceed;

(f) If the Contractor fails to comply with any of the Contract conditions or fails to fulfill his obligations and does not remedy the cause of his failure within fifteen (15) days after being notified to do so in writing;

(g) If the Contractor is not executing the work in accordance with standards of workmanship specified in the Contract;

(h) If the Contractor gives or promises to give a present or loan or reward to any employee of the Employer or of the Engineer.

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

53.2 Evaluation after Re-entry

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

53.3 Payment After Re-entry

If the Employer shall enter and expel the Contractor under this Clause he shall not be liable to pay the Contractor any money on account of the Contract until the expiration of the Defects Liability Period, and thereafter until the costs of completion and making good

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

54.URGENT REPAIRS

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

55.INCREASE AND DECREASE OF COSTS

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

56.TAXATION

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

57.BLASTING

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

Contractor.

58.MACHINERY

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

59.TEMPORARY WORKS AND REINSTATEMENT

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

60.PHOTOGRAPHS AND ADVERTISING

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

61.PREVENTION OF CORRUPTION

The Employer shall be entitled to cancel the Contract and to recover from the Contractor the amount of any loss resulting from such cancellation, if the Contractor has offered or given any person any gift or consideration of any kind as an inducement or reward for doing or intending to do any action in relation to the obtaining or the execution of the

Contract or any other contract with the Employer or for showing or intending to show favour or disfavour to any person in relation to the Contract or any other contract with the Employer, if the like acts shall have been done by any persons employed by him or acting on his behalf whether with or without the knowledge of the Contractor in relation to this or any other Contract with the Employer.

62.DATE FALLING ON HOLIDAY

Where under the terms of the Contract any act is to be done or any period is to expire upon a certain day and that day or that period fall on a day of rest or recognized holiday, the Contract shall have effect as if the act were to be done or the period to expire upon the working day following such day.

63.NOTICES

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

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

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

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

64.LANGUAGE, WEIGHTS AND MEASURES

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

65.RECORDS, ACCOUNTS, INFORMATION AND AUDIT

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

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

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

66.FORCE MAJEURE

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

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

(a) The obligations and responsibilities of the Contractor under this Contract shall be suspended to the extent of his inability to perform them and for as long as such inability continues. During such suspension and in respect of work suspended, the Contractor shall be reimbursed by the UNDP substantiated costs of maintenance of the Contractor's equipment and of per diem of the Contractor's permanent personnel rendered idle by such suspension;

(b) The Contractor shall within fifteen (15) days of the notice to the UNDP of the occurrence of the force majeure submit a statement to the UNDP of estimated costs referred to in sub-paragraph (a) above during the period of suspension followed by a complete statement of actual expenditures within thirty (30) days after the end of the suspension;

(c) The term of this Contract shall be extended for a period equal to the period of suspension taking however into account any special condition which may cause the additional time for completion of the Works to be different from the period of suspension;

(d) If the Contractor is rendered permanently unable, wholly or in part, by reason of force majeure, to perform his obligations and meet his responsibilities under the Contract, the UNDP shall have the right to terminate the Contract on the same terms and conditions as provided for in Clause 68 of these General Conditions, except that the period of notice shall be seven (7) days instead of fourteen (14) days, and

(e) For the purpose of the preceding sub-paragraph, the UNDP may consider the Contractor permanently unable to perform in case of any suspension period of more than ninety (90) days.

67.SUSPENSION BY THE UNDP

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

(a) any conditions arise which interfere, or threaten to interfere with the successful execution of the Works or the accomplishment of the purpose thereof, or

(b) the Contractor shall have failed, in whole or in part, to perform any of the terms and conditions of this Contract.

After suspension under sub-paragraph (a) above, the Contractor shall be entitled to reimbursement by the UNDP of such costs as shall have been duly incurred in accordance with this Contract prior to the commencement of the period of such suspension.

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

68 .TERMINATION BY THE UNDP

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

Upon termination of this Contract:

(a) The Contractor shall take immediate steps to terminate his performance of the Contract in a prompt and orderly manner and to reduce losses and to keep further expenditures to a minimum, and

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

69.TERMINATION BY THE CONTRACTOR

In the case of any alleged breach by the UNDP of the Contract or in any other situation which the Contractor reasonably considers to entitle him to terminate his performance of the Contract, the Contractor shall promptly give written notice to the UNDP detailing the nature and the circumstances of the breach or other situation. Upon acknowledgement in writing by the UNDP of the existence of such breach and the UNDP' inability to remedy it, or upon failure of the UNDP to respond to such notice within twenty (20) days of receipt thereof, the Contractor shall be entitled to terminate this Contract by giving 30

days written notice thereof. In the event of disagreement between the Parties as to the existence of such breach or other situation referred to above, the matter shall be resolved in accordance with Clause 71 of these General Conditions.

Upon termination of this Contract under this Clause the provisions of sub-paragraph (b) of Clause 68 hereof shall apply.

70.RIGHTS AND REMEDIES OF THE UNDP

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

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

71.SETTLEMENT OF DISPUTES

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

71.1 Notification

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

71.2 Consultation

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

71.3 Conciliation

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

71.4 Arbitration

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

72. PRIVILEGES AND IMMUNITIES

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

73. SECURITY

The Contractor shall:
(a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the services are being provided;
(b) assume all risks and liabilities related to the Contractor's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this contract. Notwithstanding the foregoing, the Contractor shall remain solely responsible for the security of its personnel and for UNDP's property in its custody as set forth in paragraph 4.1 above.

74. AUDIT AND INVESTIGATIONS

Each invoice paid by UNDP shall be subject to a post-payment audit by auditors, whether internal or external, of UNDP or the authorized agents of the UNDP at any time during the term of the Contract and for a period of three (3) years following the expiration or prior termination of the Contract. The UNDP shall be entitled to a refund from the Contractor for any amounts shown by such audits to have been paid by the UNDP other than in accordance with the terms and conditions of the Contract. Should the audit determine that any funds paid by UNDP have not been used as per contract clauses, the company shall reimburse such funds forthwith. Where the company fails to reimburse such funds, UNDP reserves the right to seek recovery and/or to take any other action as it deems necessary.

The Contractor acknowledges and agrees that, at anytime, UNDP may conduct investigations relating to any aspect of the Contract, the obligations performed under the Contract, and the operations of the Contractor generally. The right of UNDP to conduct an investigation and the Contractor's obligation to comply with such an investigation shall not lapse upon expiration or prior termination of the Contract. The Contractor shall provide its full and timely cooperation with any such inspections, post-payment audits or investigations. Such cooperation shall include, but shall not be limited to, the Contractor's obligation to make available its personnel and any documentation for such purposes and to grant to UNDP access to the Contractor's premises. The Contractor shall require its agents, including, but not limited to, the Contractor's attorneys, accountants or other advisers, to reasonably cooperate with any inspections, post-payment audits or investigations carried out by UNDP hereunder.

75. ANTI-TERRORISM

The Contractor agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received under this Contract are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP

hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Contract.

ANNEX 1. Submission Templates and Forms

The table below is provided to the Bidders for instructive purposes. Offers shall be organized in the order below and in reference to the respective sections.

Bidders are responsible with a detailed examination of all the ITB in order not to overlook any requirement and make sure to submit all required documents that may not be listed in the following table.

Inner Envelope 1: Price Proposal

	Price Proposal	Reference
1	Bid Submission Form	Section 4 of the ITB
2	Price Schedule Form	Section 7a and 7b of the ITB
3	Form for Bid Security	Section 8 of the ITB

Inner Envelope 2: Technical Proposal

	Administrative Compliance Documents	Relevant Submission Forms
1	Notarized copy of the document(s) (e.g. trade registration gazette or equivalent etc.) that prove(s) the constitution of the company	-
2	Notarized copy of the document(s) (e.g. trade registration gazette or equivalent etc.) that demonstrate(s) recent change(s) (i.e. title, address, shareholding structure) and current status of the Company	-
3	Signature Circular and/or Power of Attorney, demonstrating authority to sign on behalf of the Bidder, certified by the notary public.	-
4	Statement of Declaration for • Eligibility in Tendering Process • Address Notification	• Form 1.1: Statement of Declaration
5	All other requested administrative documents as indicated in Data Sheet (No. 28)	-

Technical Proposal					
Section	**Title**	**Content**	**Relevant Submission Forms**	**Mandatory Attachments**	**Optional Attachments**
Section 1:	Expertise of the Firm/Organization	As described in the Instructions to Bidders	• Form 1.1: Statement of Declaration • Form 1.1.4: History Of Non-Performance and (last 5 years) • Form: 1.2.1: Single Similar Work Experience • Form: 1.2.2: Total Similar Work Experience • Form: 1.3.1: Financial Resources • Form: 1.3.2: Financial Strength • Form 1.3.3: Annual Construction Turnover	• Document(s) evidencing financial volume and similarity of the scope of referenced work. • Reference letters from the bidder's bank(s) • Copy of the quality assurance certificate(s), if any • Copies of work completion certificates, copies of client letters etc. • Audited financial statements for years 2014. 2015 and 2016. (Income Statement and Balance Sheet) • Annual Construction Turnover is calculated as total certified payments received for work in progress or completed. Attach copies of progress payments or work completion certificates	Bidders may consider submitting optional attachments that would substantiate their proposals.
Section 2	Proposed Methodology, Approach and Implementation Plan	As described in the Instructions to Bidders	• Form: 2.2.3: Time Plan • Form: 2.2.4: Equipment Commitment Form	None	Bidders may consider submitting optional attachments that would substantiate their proposals.
Section 3:	Management Structure and Key Personnel	As described in the Instructions to Bidders	• Form 3.1: List of Proposed Key Personnel • Form 3.1.1.: Identical CVs of the Assignment Team members Submission form 3.1.1 is to be replicated for all key technical staff, and enumerated accordingly.	• Copies of diplomas, • Certifications, if any, that are indicated as assets for the key personnel in the Terms of Reference	Bidders may consider submitting optional attachments that would substantiate their proposals.

All "submission forms" regardless of whether there is a specific place for signature should be signed by the authorized person(s) of the Bidder, demonstrating correctness and accuracy of the information provided in the submission forms. This does not apply to the notarized documents and to the bid bond.

(To be printed on company letterhead.)

Form 1.1: Statement of Declaration

To:
United Nations Development Programme (UNDP)
Yıldız Kule, Yukarı Dikmen Mahallesi,
Turan Güneş Bulvarı, No:106, 06550, Çankaya, Ankara/Turkey

We, the undersigned, submit our Proposal the referenced ITB and declare that:

We have examined and have no reservations to the ITB including any Addendum (or Addenda to same effect), issued by the procuring UNDP entity in accordance with Instructions to Bidders.

We understand that you may cancel the ITB process at any time and that you are neither bound to accept any proposal that you may receive, without incurring any liability to the Bidders.

We are not associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Employer to provide consulting services for the preparation of the ITB, and/or services for design and construction of the civil works, defined Schedule of Requirements and Technical Specifications in of the ITB,

As of the date of this statement of declaration, we are not in the circumstances of disqualification or restriction set forth in the Laws (or as per the relevant laws of the country in which we operate) and we are not in the circumstances of those that cannot participate in the procurement as per the same Laws (or as per the relevant laws of the country in which we operate). If any change occurs in this case declared, we undertake to notify the UNDP the Contracting Entity promptly.

a) The following information shall be used by UNDP to notify us:

Name of the Company Submitting the Offer	
Country of Registration	
Name of the Authorized Contact Person for this submission	
Notification Address	
Telephone	
Fax	
E-mail	

On this Date: …/…./…..
Signature & Stamp
Name, Last name,
Title,

Form 1.1.4: History Of Non-Performance and Litigation (last 5 years)

ITB No. and title: [UNDP-TUR-ITB-PROJ(SR)2017/11]

To: United Nations Development Programme (UNDP)
Yıldız Kule, Yukarı Dikmen Mahallesi, Turan Güneş Bulvarı,
No:106, 06550, Çankaya, Ankara/Turkey

We, the undersigned, confirm that following information is correct and reflects our company's history of non-performance and litigation in the last five years (2012 - 2017):

Non-performing Contracts:				
☐	Contract non-performance did not occur during the last 5 years			
☐	Contract non-performance occurred during the last 5 years			
	Year	Outcome as % of Total Assets	Contract Identification	Total Contract Value (USD, Equivalent)
			Contract Identification: *Name of Employer:* *Address of Employer:* *Matter in dispute:*	

Litigation History				
☐	No litigation history			
☐	Litigation history			
	Year	Outcome as % of Total Assets	Contract Identification	Total Contract Value (USD, Equivalent)
			Contract Identification: *Name of Employer:* *Address of Employer:* *Matter in dispute:*	

Best regards,

On this Date: …/…./…..
Signature & Stamp
Name, Last name,
Title,

Form: 1.2.1: Single Similar Work Experience						
Ref No: 1	Project title					
Country	Overall project value (USD)*	Proportion carried out by Bidder (%)*	Nº of staff provided*	Name of the Employer	Source of funding*	Dates (start/end)
Detailed description of project*				Type of services provided*		

* The information presented in these sections constitute the eligibility criteria

Please attach documents evidencing financial volume and similarity of the referenced work. If such documents are in a Language other than the English Language, a translation in English Language should also be provided.

In order to arrive to the USD values please use the conversion rates or cross rates of the Central Bank of Republic of Turkey (www.tcmb.gov.tr). The conversion rate (selling prices) or the cross rate to be used is the rate published by the Central Bank of Republic of Turkey for the last day of the year in which the referenced work is completed. The conversion rates (selling prices) and cross rates (EUR/USD) for the years 2012, 2013, 2014, 2015, 2016 and 2017 are provided below for reference purposes.

Year	Reference Institution	Reference Date	1 USD =	1 EUR=
2012	Central Bank of the Republic of Turkey	31.12.2012	1.7862 TRL	1.3193 USD
2013	Central Bank of the Republic of Turkey	31.12.2013	2.1343 TRL	1.3774 USD
2014	Central Bank of the Republic of Turkey	31.12.2014	2.3311TRL	1,2150 USD
2015	Central Bank of the Republic of Turkey	31.12.2015	2.9233 TRL	1.0911 USD
2016	Central Bank of the Republic of Turkey	30.12.2016	3.5255 TRL	1.0542 USD

On this Date: …/…./…..
Signature & Stamp
Name, Last name,
Title,

Form: 1.2.2: Total Similar Work Experience							
Ref No	Title of the Project*	Brief description of project*	Name of the Employer	Country	Proportion carried out by the Bidder (%)*	Dates (start /end)	Overall project value (USD)*
1							
2							
…							
n							
Total							

* The information presented in these sections constitute the eligibility criteria

Please attach documents evidencing financial volume and similarity of the referenced work. If such documents are in a Language other than the English Language, a translation in English Language should also be provided.

In order to arrive to the USD values please use the conversion rates or cross rates of the Central Bank of Republic of Turkey (www.tcmb.gov.tr). The conversion rate (selling prices) or the cross rate to be used is the rate published by the Central Bank of Republic of Turkey for the last day of the year in which the referenced work is completed.

On this Date: …/…./…..
Signature & Stamp
Name, Last name,
Title,

Form 1.3.1: Financial Resources (to be printed on company letterhead, signed, dated and stamped)

ITB No. and title: [UNDP-TUR-ITB-PROJ(SR)2017/11]

To: United Nations Development Programme (UNDP)

Yıldız Kule, Yukarı Dikmen Mahallesi, Turan Güneş Bulvarı,
No:106, 06550, Çankaya, Ankara/Turkey

We, the undersigned, confirm that following information is correct and reflects our company's financial resources.

Cash and Credit position as of submission date				
Bank	Available Cash	Unused		
		Cash Credit	Credit Letter	
Total				
	A	**B**	**C**	**A+B+C**

All Bank reference letters in Local New Turkish Lira should be converted into US$ through using the conversion rate of the Central Bank of Republic of Turkey (www.tcmb.gov.tr) for 28 July 2017. (1 US$ = 3.5356 TRL).

Bidder shall complete Form 1.3.1, supplemented with Bank Reference letters.

On this Date: …/…./…..
Signature & Stamp
Name, Last name,
Title,

Form 1.3.2: Financial Strength

ITB No. and title: [UNDP-TUR-ITB-PROJ(SR)2017/11]

To: United Nations Development Programme (UNDP)

Yıldız Kule, Yukarı Dikmen Mahallesi, Turan Güneş Bulvarı,
No:106, 06550, Çankaya, Ankara/Turkey

We, the undersigned, confirm that following information is correct and reflects our company's financial situation.

	2014	2015	2016	Average
Turnover (USD)*				
Current Assets				
Current Liabilities				
Current Ratio*				

Bidder shall complete Form 1.3.2, supplemented with audited financial statements for years 2014, 2015 and 2016.

*An average current ratio (current assets/current liabilities) equal to or higher than 1 (one) in the period of review (i.e. 2014, 2015 and 2016) or current ratio (current assets/current liabilities) equal to or higher than 1 (one) in 2016.

On this Date: …/…./…..
Signature & Stamp
Name, Last name,
Title,

Form 1.3.3: Annual Construction Turnover

Annual Construction Turnover								
	Ref 1	Ref 2	Ref 3	Ref 4	…	…	Ref *n*	Total
2012								
2013								
2014								
2015								
2016								
Total								
							Average	

The information above complies with the following conditions:

* Annual Construction Turnover is calculated as total certified payments received for work in progress or completed. ***Attach copies of progress payments or work completion certificates***.

** In order to arrive to the USD values, the following conversion rates need to be used. If the subject matter currency (i.e. the currency of the work completion certificate, income statement etc.) is other than Turkish Lira (TRL) or Euro (EUR), the conversion (selling prices) or cross rates for the reference dates given in below table and available at the web page of Central Bank of Republic of Turkey (www.tcmb.gov.tr) are to be used. The following table provides the reference dates for each eligible year. The conversion rates or cross rates to be used by Bidder should be the conversion rates or cross rates stated for the reference dates in the following table.

Year	Reference Institution	Reference Date	1 USD =	1 EUR=
2012	Central Bank of the Republic of Turkey	31.12.2012	1.7862 TRL	1.3193 USD
2013	Central Bank of the Republic of Turkey	31.12.2013	2.1343 TRL	1.3774 USD
2014	Central Bank of the Republic of Turkey	31.12.2014	2.3311TRL	1,2150 USD
2015	Central Bank of the Republic of Turkey	31.12.2015	2.9233 TRL	1.0911 USD
2016	Central Bank of the Republic of Turkey	30.12.2016	3.5255 TRL	1.0542 USD

Name
Title
Date
Signature

FORM 2.2.3: TIME PLAN

	Month 1				**Month 2**				**Month 3**				**Month 4**	**…**	**…**	**…**		
Activities	**W01**	**W02**	**W03**	**W04**	**W05**	**…**	**…**	**W08**	**W09**	**W10**	**W11**	**W12**	**W13**	**W14**	**W15**	**W16**		
1…															*Add months and weeks as necessary*			
1.1…																		
1.2…																		
…																		
…																		
Add lines for activities as necessary																		
…																		
…																		
…																		

1 Indicate all main activities of the assignment, including delivery of reports and other benchmarks such as Client approvals. For phased assignments indicate activities, delivery of reports, and benchmarks separately for each phase.

2 Duration of activities shall be indicated in the form of a bar chart.

Form: 3.1: List of Proposed Key Personnel (i.e. Assignment Team Members)

We the undersigned commit to engaging the key technical staff whose names appear below. We confirm that the key personnel listed below meet the minimum requirements listed in the Terms of Reference

No	Position	Name, Last Name	Degree and Year of Graduation	Years of general professional experience	# of projects involved in the proposed area of expertise	English Language Skills (Yes/No)	Turkish Language Skills (Yes/No)
3.1.1	**Project Coordinator**						
3.1.2	**Survey Technician/ Civil Tecnician No: 1**						
3.1.3	**Survey Technician/ Civil Tecnician No: 2**						

On this Date: …/…./…..
Signature & Stamp
Name, Last name,
Title,

Form: 3.1.1: CV Template [Replicate this form and enumerate accordingly for each key personnel]				
1	**Proposed Position**			
2	**Name and Last Name**			
3	**Nationality**			
4	**Contact Information**	Address: Tel: Email:		
General Qualifications				
5.	**Education** (*start with the highest degree obtained) – attach copy of the diploma*			
	Degree	**University/Faculty/Department**		**Year of Graduation**
5.1				
5.2				
5.3				
6	**Language Qualifications** (*5: excellent, 1: very poor)*			
	Language	**Writing**	**Reading**	**Speaking**
6.1	**Turkish**			
6.2	**English**			
6.3	**Other**			
7	**Computer Skills** (*5: excellent, 1: beginner)*			**Certifications (if any)**
7.1	*[Name the software]*	*[Rate skill level: 5: Excellent, 1: Beginner]*		*[Attach, if yes]*
7.2	*[Name the software]*	*[Rate skill level: 5: Excellent, 1: Beginner]*		*[Attach, if yes]*
7.3	*[Name the software]*	*[Rate skill level: 5: Excellent, 1: Beginner]*		*[Attach, if yes]*
7.4	*[Name the software]*	*[Rate skill level: 5: Excellent, 1: Beginner]*		*[Attach, if yes]*
7.5	*[Name the software]*	*[Rate skill level: 5: Excellent, 1: Beginner]*		*[Attach, if yes]*
8	**Other Skills** (Reporting, writing skills etc., *5: excellent, 1: very poor) – add rows if needed,*			
8.1	*[indicate the skill]*			*[rate]*
8.3	*[indicate the skill]*			*[rate]*
8.4	*[indicate the skill]*			*[rate]*
9	**Membership to relevant professional/occupational bodies** *add/delete rows if needed,*			
	Professional/Occupational Body			**Membership since**
9.1	*[Name the Professional/Occupational Body]*			*[year]*
9.2	*[Name the Professional/Occupational Body]*			*[year]*
10	**Experience with International Organizations** *add/delete rows if needed,*			
	Int'l Organization	**From (mm/yyyy)**	**To (mm/yyyy)**	**Services**
10.1				
10.2				
10.3				

Form: 3.1.1: CV Template [Replicate this form and enumerate accordingly for each key personnel]				
Professional Experience –*add/delete rows if needed*				
11	**General Professional Experience**			**Reference to Similar Work Experience based on the Terms of Reference**
	From/To	**Entity**	**Description of Main Functions**	
11.1	From: *Month/Year* To: *Month/Year*	*Indicate the name of the employer, or self employed*	*Describe your role and main function (civil engineer, survey engineer etc.)*	*Indicate similar work experience*
11.2	From: *Month/Year* To: *Month/Year*	*Indicate the name of the employer, or self employed*	*Describe your role and main function*	*Indicate similar work experience*
11.3	From: *Month/Year* To: *Month/Year*	*Indicate the name of the employer, or self employed*	*Describe your role and main function*	*Indicate similar work experience*
11.4	*Add rows if needed*	*Indicate the name of the employer, or self employed*	*Describe your role and main function*	*Indicate similar work experience*
12	**References**			
	Name of Reference	**Entity and Position**	**Contact Information**	**Project**
12.1				
12.2				
12.3				
13	**Certification**			
13.1	**By the proposed personnel:** I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describes me, my qualifications and my experience. I confirm my intention to serve within the proposed capacity and my availability to perform the duties listed in the ToR.			
	Date and Signature			

Attachments: Copies of diploma(s) and copies of certifications (if any) should be attached.

Guidance Note on Form: 1.2.1: Single Similar Work Experience, Form: 1.2.2: Total Similar Work Experience, Form 1.3.3: Annual Construction Turnover

Not to be submitted

Bidders are expected to fill out Form 1.2.1 and Form 1.2.2, in accordance with the guidance provided below.

1) What is similar work experience?

Similar Work Experience is superstructure related construction works such as reinforced concrete/steel factories and industrial facilities etc. and infrastructure works such as roads etc.

2) What is the time horizon that determines eligibility of a reference?

The similar construction work experience, cited by the bidders should be "ongoing" or "completed" in 2012, 2013, 2014, 2015, 2016 and/or 2017.

3) What are the supporting documents to be attached to Form 1.2.1 and Form 1.2.2?

Supporting to be attached to Form 1.2.1 and Form 1.2.2 are:

a) For completed projects

- Copy of work completion certificates (notarized copies shall be requested)
- Copies of invoices
- Copies of progress payment certificates

b) For ongoing projects

- Notarized copy of the contract (and amendment(s), if any) (notarized copies shall be requested)
- Copies of progress payment certificates
- Copies of invoices

4) What is the basis of calculation of contract amount?

For completed projects the basis of calculation should be the amount indicated in the work completion certificate (i.e. Proportion of the total contract amount carried out by the Bidder)

For ongoing projects the basis of calculation should be the amount indicated in the contract (i.e. Proportion of the total contract amount carried out by the Bidder) as amended by addenda, if any.

5) How the non-USD amounts are converted into USD?

In order to arrive to the USD values, the following conversion rates need to be used. If the subject matter currency (i.e. the currency of the work completion certificate, income statement etc.) is other than Turkish Lira (TRL) or Euro (EUR), the conversion (selling prices) or cross rates for the reference dates given in below table

and available at the web page of Central Bank of Republic of Turkey (www.tcmb.gov.tr) are to be used. The following table provides the reference dates for each eligible year. The conversion rates or cross rates to be used by Bidder should be the conversion rates or cross rates stated for the reference dates in the following table.

Year	Reference Institution	Reference Date	1 USD =	1 EUR=
2012	Central Bank of the Republic of Turkey	31.12.2012	1.7862 TRL	1.3193 USD
2013	Central Bank of the Republic of Turkey	31.12.2013	2.1343 TRL	1.3774 USD
2014	Central Bank of the Republic of Turkey	31.12.2014	2.3311TRL	1,2150 USD
2015	Central Bank of the Republic of Turkey	31.12.2015	2.9233 TRL	1.0911 USD
2016	Central Bank of the Republic of Turkey	30.12.2016	3.5255 TRL	1.0542 USD

Guidance Note on Form: 1.2.1: Single Similar Work Experience, Form: 1.2.2: Total Similar Work Experience, Form 1.3.3: Annual Construction Turnover

Not to be submitted

Bidders are expected to fill out Form 1.3.3, in accordance with the guidance provided below.

What is the time horizon that determines eligibility of a reference?

The construction works experience, cited as references by the bidders should be "ongoing" or "completed" in 2012, 2013, 2014, 2015, 2016 and/or 2017.

2) What are the supporting documents to be attached to Form 1.3.3

Supporting to be attached to Form 1.3.3 are:

a) For completed projects

- Copy of work completion certificates (notarized copies shall be requested)
- Copies of invoices
- Copies of progress payment certificates

b) For ongoing projects

- Copy of the contract (and amendment(s), if any) (notarized copies shall be requested)
- Copies of progress payment certificates
- Copies of invoices

4) What is the basis of calculation of annual turnover?

Payments received within 2012, 2013, 2014, 2015, 2016 or 2017.

5) How the non-USD amounts are converted into USD?

In order to arrive to the USD values, the following conversion rates need to be used. If the subject matter currency (i.e. the currency of the work completion certificate, income statement etc.) is other than Turkish Lira (TRL) or Euro (EUR), the conversion (selling prices) or cross rates for the reference dates given in below table and available at the web page of Central Bank of Republic of Turkey (www.tcmb.gov.tr) are to be used. The following table provides the reference dates for each eligible year. The conversion rates or cross rates to be used by Bidder should be the conversion rates or cross rates stated for the reference dates in the following table.

No escalation (based on formal or informal coefficients) should be applied to the annual turnover figures.

Guidance Note on Form: 1.2.1: Single Similar Work Experience, Form: 1.2.2: Total Similar Work Experience, Form 1.3.3: Annual Construction Turnover

Not to be submitted

Year	Reference Institution	Reference Date	1 USD =	1 EUR=
2012	Central Bank of the Republic of Turkey	31.12.2012	1.7862 TRL	1.3193 USD
2013	Central Bank of the Republic of Turkey	31.12.2013	2.1343 TRL	1.3774 USD
2014	Central Bank of the Republic of Turkey	31.12.2014	2.3311TRL	1,2150 USD
2015	Central Bank of the Republic of Turkey	31.12.2015	2.9233 TRL	1.0911 USD
2016	Central Bank of the Republic of Turkey	30.12.2016	3.5255 TRL	1.0542 USD

	Contract 1	Contract 2	Contract 3	Total
Description:	*Contract 1 started in 2007 and completed in 2014*	*Contract 2 started in 2012 and completed in 2017*	*Contract 3 started in 2017 and is on going*	
2007	1.000 USD			1.000 USD
2008	1.000 USD			1.000 USD
2009	1.000 USD			1.000 USD
2010	1.000 USD			1.000 USD
2011	1.000 USD			1.000 USD
2012	1.000 USD	3.000 USD		4.000 USD
2013	1.000 USD	3.000 USD		4.000 USD
2014	1.000 USD	3.000 USD		4.000 USD
2015		3.000 USD		3.000 USD
2016		3.000 USD	29.945 TRL = 10.000 USD	13.000 USD
2017		3.000 USD	35.810 TRL = 10.000 USD	13.000 USD
Attachments	Copies of Invoices Copies of Progress Payments Notarized Copy of Work Completion Certificate	Copies of Invoices Copies of Progress Payments Notarized Copy of Work Completion Certificate	Copies of Invoices Copies of Progress Payments	
Explanation	Although the total value of the contract is $8.000, only $3.000 is collected as progress/final payments within the eligible years.			

Guidance Note on Form: 1.2.1: Single Similar Work Experience, Form: 1.2.2: Total Similar Work Experience, Form 1.3.3: Annual Construction Turnover

Not to be submitted

Annual Construction Turnover								
	Ref 1	Ref 2	Ref 3	Ref 4	…	…	Ref *n*	Total
2012	1.000	3.000		-	-	-	-	4.000
2013	1.000	3.000		-	-	-	-	4.000
2014	1.000	3.000		-	-	-	-	4.000
2015		3.000		-	-	-	-	3.000
2016		3.000	10.000	-	-	-	-	13.000
2017		3.000	10.000	-	-	-	-	13.000
Total	3.000	18.000	20.000	-	-	-	-	41.000
Years	*(5 years + 1 quarters)*							5,25
							Average	7.810