
TERMS OF REFERENCE

Consultancy Services for Construction Supervision of Kastamonu (Central) Drinking Water Distribution Network and Sewerage Network Projects

1. Introduction and Background:

ILBANK has received financing in the amount of US\$ 449.25 Million (EUR 420.00 million equivalent) from the World Bank toward the cost of the Türkiye Earthquake, Floods and Wildfires Emergency Reconstruction (TEFWER) Project, and it intends to apply part of the proceeds to payments for goods, works, non-consulting services and consulting services to be procured under this project.

More information on the Project can be obtained through the following link:

[https://documents.worldbank.org/en/publication/documents-reports/documentdetail/416471656371823533/t%
c3%bcrkiye-t%
c3%bcrkiye-earthquake-floods-and-wildfires-reconstruction-project](https://documents.worldbank.org/en/publication/documents-reports/documentdetail/416471656371823533/t%c3%bcrkiye-t%c3%bcrkiye-earthquake-floods-and-wildfires-reconstruction-project)

1.1. Sub-Project Description

Türkiye Earthquake, Floods and Wildfires Emergency Reconstruction Project will be financing the following Sub-Project in Kastamonu Municipality, which the Consultant shall be responsible for:

Construction Supervision of Kastamonu (Central) Drinking Water Distribution Network and Sewerage Network Projects

The general objective of the sub-project is to provide a continuous water supply up to the year 2058 and the proper collection and transport of wastewater in the Central District of Kastamonu.

The specific objectives of Drinking Water Network Project are;

- To increase the quality of operation for water-stressed residential areas by renewing the network lines and structures that have reached the end of their economic life and/or hydraulically inadequate.
- To minimize the amount of water loss by properly renewing the network and other water structures and to ensure suitability of “Water Loss Control Regulation in Water Supply and Distribution Systems” which was published in Official Gazette No 28994 dated 8 May, 2014.

The specific objectives of Sewerage Network Project are;

- To minimize the risks to public health which is caused by discharge of wastewater through the stream or canal and increasing the living conditions of people living in the area,
 - The prevention of pollution in the receiving environment and the protection of environment and natural resources.
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The existing water supply system has been expanded in the last 65 years in parallel with the urban development of Kastamonu, and almost all the population has been connected to the drinking water system. The sub-project does not envisage the renewal of the entire city network. Within the scope of finance, the parts that need to be renewed by the municipality have been determined by taking into account the needs of the city.

The Quantities of drinking water lines to be constructed under this financing are summarized in Table-1.

Table-1 Bill of Quantities for Drinking Water Network

NO	Description	Unit	Quantity
1	Ø 110 mm PE Pipe	m	10.985
2	Ø 140 mm PE Pipe	m	52.255
3	Ø 160 mm PE Pipe	m	8.864
4	Ø 180 mm PE Pipe	m	4.524
5	Ø 200 mm PE Pipe	m	6.609
6	Ø 225 mm PE Pipe	m	2.224
7	Ø 250 mm PE Pipe	m	3.207
8	Ø 315 mm PE Pipe	m	1.683
9	Ø 355 mm PE Pipe	m	4.386
10	Ø 500 mm PE Pipe	m	353
11	House Connection	piece	4.755
12	Air Release Structure	piece	13
13	Pressure Reducing Structure	piece	3
14	Flow meter Structure	piece	13
15	Residual Chlorine Measurement Structure	piece	6
16	Air Release Valves	piece	13

17	Drainage Valves	piece	17
18	Highway crossing with micro tunneling	m	80

The existing wastewater system has developed over time in parallel with the development of the city. Two main collectors were built by DSI in 1980 along both banks of the stream to transfer all wastewater flow to the north of the city. In 1993, ILBANK had wastewater application projects prepared for all planned urban development areas, including the complete replacement of the stone channels in the old settlement. In this context, the construction of wastewater collector lines has been completed from the current discharge point to the selected location for the WWTP site. Although wastewater and stormwater networks are generally designed as separate systems, many unauthorized storm water connections are made to the wastewater pipes in practice. Therefore, the wastewater system partially serves as a combined system.

The sub-project aims the renewal of the wastewater lines of the city center. In the Kastamonu (Central) Wastewater Project, steam cured concrete and corrugated pipes will be used, with a pipe diameter of 300 mm, 400 mm, 500 mm 600 mm 800 mm and 1000 mm.

The Quantities of sewerage lines to be constructed under this financing are summarized in Table-2.

Table-2 Bill of Quantities for Sewerage Network

No	Description	Unit	Quantity
1	Ø 300 mm Concrete Pipes	m	12.394
2	Ø 400 mm Concrete Pipes	m	4.506
3	Ø 500 mm Concrete Pipes	m	940
4	Ø 600 mm Reinforced Concrete Pipes	m	866
5	Ø 800 mm Reinforced Concrete Pipes	m	107
6	Ø 1000 mm Reinforced Concrete Pipes	m	1585
7	Manholes for Ø 300 mm Concrete Pipes	Nos	357
8	Manholes for Ø 400 mm Concrete Pipes	Nos	108
9	Manholes for Ø 500 mm Concrete Pipes	Nos	21
10	Manholes for Ø 600 mm Reinforced Concrete Pipes	Nos	27

11	Manholes for Ø 800 mm Reinforced Concrete Pipes	Nos	8
12	Manholes for Ø Reinforced 1000 mm Concrete Pipes	Nos	32
13	House Connections	m	11.268
14	House Connection Manholes (Type: KNL-TP-23/A) 80x60	Nos	208
15	House Connection Manholes (Type: KNL-TP-23/B) 60X60	Nos	417
16	House Connection Manholes (Type: KNL-TP-23/C) Ø0,62 m	Nos	417
17	Highway crossing with micro tunnelling	m	249
18	Stream crossing with micro tunnelling	m	34

With the implementation of the sub-project, the municipality's infrastructures will become more resilient to disasters.

1.2. Institutional Roles:

The main borrower of the Project is ILBANK which acts as the Financial Intermediary (FI) to allocate a part of the Loan to Kastamonu Municipality for financing environmental infrastructure investments (Sub-Project).

Kastamonu Municipality is responsible for the construction and maintenance of water/wastewater treatment plants and water and sewerage networks of all settlements in its service area. Construction of Kastamonu (Central) Drinking Water Distribution Network and Sewerage Network Projects are in the scope of Kastamonu Municipality, who will be the Client for these sub-projects that the Consultant will be carrying out.

Kastamonu Municipality, Department of Water & Sewerage will be responsible for sub-project investment implementation and will set up a municipal project implementation unit (PIU) at local level to ensure effective sub-project implementation.

Kastamonu Municipality is responsible for the water/wastewater treatment plants and water and sewerage networks of all settlements in its service area.

The procurement processes for the works and consultancy services within the scope of the Sub-Project will be under the responsibility of Kastamonu Municipality and under the coordination and monitoring of the ILBANK.

1.3. Sub-Project Area:

The scope of this Contract covers certain investments in Kastamonu Province as detailed in the further Sections of this Terms of Reference. The following figure shows the selected Kastamonu Province as the subject of this Terms of Reference.

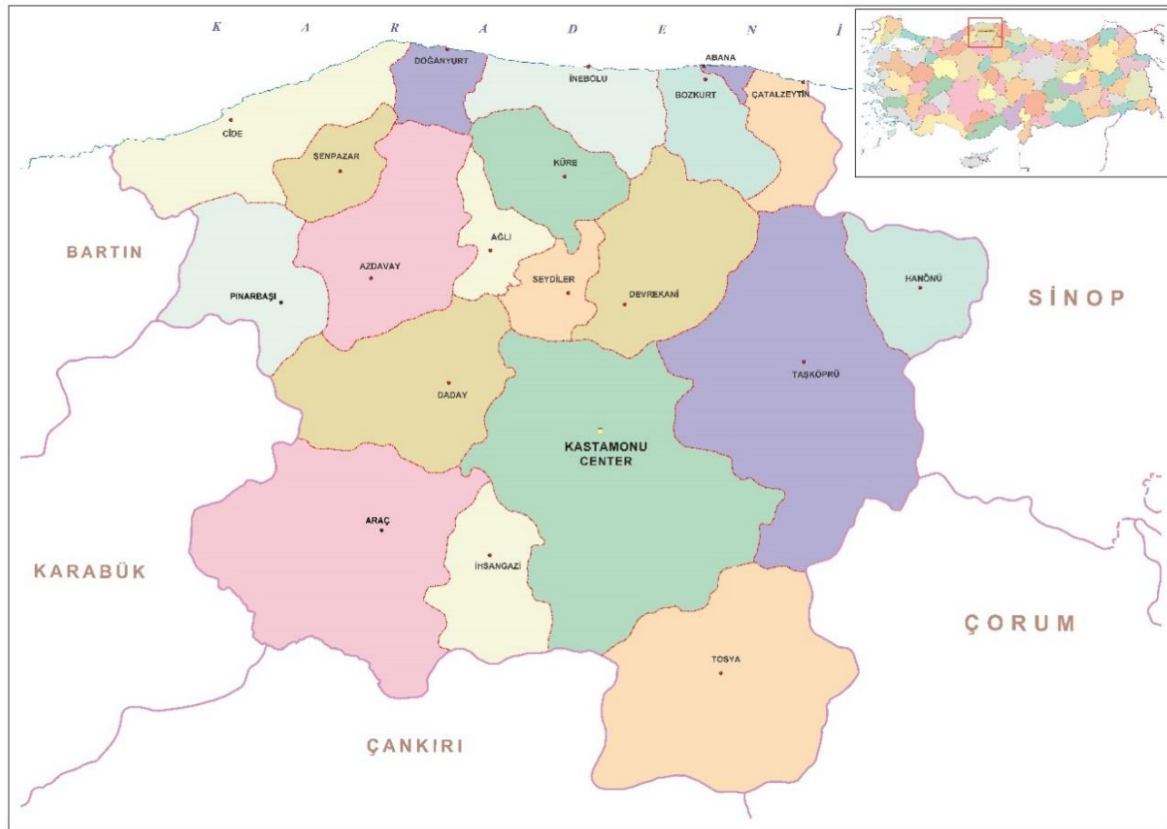


Figure-1: Kastamonu City

Kastamonu is in the Western Black Sea Region of Türkiye. Kastamonu is bordered by Sinop in the east, Bartın and Karabük in the west, Çankırı in the south and Çorum in the southeast. It is surrounded by the Black Sea in the north. Kastamonu province, with a surface area of 13,064 km², constitutes 1.7% of Türkiye's territory. The territory of the province opens to the Black Sea with a 170 km coastline. There are 20 districts in province including the Central District and the average altitude of the province is 799 meters from the sea, and the altitude of the Central District is 780 meters from the sea.

Two types of climates prevail in Kastamonu. Black Sea climate is seen in the north and continental climate of Central Anatolia in the south. The İsfendiyar Mountains extending parallel to the coast prevent the Black Sea climate from entering the interior. Rainfall is more on the coasts. The monthly average, maximum and minimum temperature and average precipitation values are given in Table-3

Table -3 Temperature and Precipitation Values in Kastamonu

Kastamonu	January	February	March	April	May	June	July	August	September	October	November	December	Annual
	Measurement Period (1930-2020)												
Average Temperature (°C)	-1.0	0.8	4.4	9.5	14.1	17.5	20.1	19.9	15.8	10.9	5.2	0.9	9.8
Average Maximum Temperature (°C)	3.2	6.1	10.9	16.6	21.2	24.7	27.8	28.1	24.0	18.2	11.0	4.9	16.4
Average Lowest Temperature (°C)	-4.6	-3.5	-0.8	3.3	7.6	10.5	12.3	12.2	8.9	5.2	0.9	-2.4	4.1
Average Sunbathing Time (hours)	2.3	3.6	4.5	5.7	7.1	8.5	9.8	9.4	7.3	5.5	3.8	2.0	5.8
Average Number of Rainy Days	13.9	13.1	13.9	15.4	17.1	13.3	7.7	7.3	8.3	11.0	11.5	14.0	146.5
Average Monthly Total Rainfall (mm)	29.7	27.4	35.0	51.1	75.3	73.1	32.3	31.3	30.1	34.9	28.6	33.5	482.3
	Measurement Period (1930-2020)												
Highest Temperature (°C)	17.3	21.1	27.8	31.4	35.1	37.5	42.2	40.2	39.3	32.5	24.7	21.1	42.2
Lowest Temperature (°C)	-26.9	-22.3	-19.7	-8.5	-3.6	0.2	3.8	0.9	-1.5	-7.5	-19.3	-23.7	-26.9

2. Objectives of the Assignment

Consultancy services for supervision of construction works for the below infrastructure investments constitute the scope of Services of this Contract in general:

- KAST-W1 Construction of Kastamonu (Central) Drinking Water Distribution Network and Sewerage Network Projects

Further details of the Scope of Services shall be outlined in the proceeding Sections of this Terms of Reference.

2.1. Sub-Project Description:

The Consultant shall be responsible for the following subproject:

Kastamonu (Central) Drinking Water Distribution Network and Sewerage Network Projects

2.2. Information/Data to be provided to the Consultant:

Above mentioned sub-project has own Project Information Document (PID) and have full set of drawings. The designs had been prepared and reviewed by local consultant firms under the administration of Kastamonu Municipality. PID and drawings will be provided to the Consultant as part of this Terms of Reference in electronic format.

As a part of the Environmental and Social Assessment, the Environmental and Social Impact Assessment (ESIA) and/or Environmental and Social Management Plan (ESMP), Stakeholder Engagement Plan (SEP), Resettlement Plans (RP) (if any) and Ex-post Social Audit (EPSA) (if any) of these sub-projects are being prepared according to project specifications in full compliance with the World Bank's Environmental and Social Framework and its standards. If

any land acquisition related issues and needs emerge within the scope of the subproject during implementation, the Client and the Supervision Consultant are responsible for informing ILBANK immediately. The Supervision Consultant will clearly identify these and will provide support to the Client for the preparation of a RP/EPISA (if/where relevant). The Supervision Consultant should ensure that the Client take necessary actions such as preparation or updating of RP or EPISA. Moreover, Labor Management Procedures (LMP) (including Code of Conduct) for the project is prepared by ILBANK to be adopted by the awarded contractors/their subcontractors.

3. Scope of the Services:

Following is the brief outline of the scope of services, expected tasks and key deliverables under Supervision of construction works, which should be carried out by the consultant:

The Consultant shall be responsible to carry out all the duties and responsibilities attributed to the “Project Manager” or “Engineer” in the General Conditions of Contract (GCC), Particular Conditions of Contract and Part 2 – Work’s Requirements Sections of the World Bank’s Standard Procurement Document - **Request for Bids Small Works (One-Envelope Bidding Process)**. The Supervision responsibility of the Contractor shall be for the Works Contracts referred to under this Terms of Reference, namely Kastamonu (Central) Drinking Water Distribution Network and Sewerage Network Projects, and shall continue until the expiration of the Defects Liability Period/Warranty Period. Significant issues shall be subject to approval of the Client as indicated in the terms and conditions of the GCC and PCC.

As an addition to these tasks as the Project Manager, the Consultant shall:

- (a) Inform the Client about progress of the work and activities, attend any meetings reasonably convened by the Client and provide any information or evidence reasonably required by the Client at any public meetings or inquiries that might be held in connection with the Project.
 - (b) Inform the Client about the cost and time impact and any other consequences of any sort of his proposals (such as revisions, recommendations, etc.) The Client shall not be responsible from the consequences of the fact of which the Client is not informed in advance. In case of an arbitration in the Works Contract named under this ToR, to assist the Client in the preparation of the documents needed by the Client.
 - (c) As in compliance with the format and ingredients determined by the Client, prepare monthly and quarterly progress reports in comparative with contractor’s original (initial) work schedules and inform the client in written for delays.
 - (d) Based on the approved work schedule and cash flows of the Contractor; monitor the progress compared to the initially envisaged plan/s and inform the Client about the failures.
 - (e) During all kinds of material approval process; establishment and acceptance of factory and material acceptances, determination and approval of the institutions or organizations (laboratories, universities, etc.) where the tests are to be conducted, approval or rejection of the materials, manage the use of approved materials at site and removal of unauthorized materials from the site and follow.
 - (f) Randomly collect material samples and perform relevant tests and analyses at specified intervals without waiting the written mandate of the Client.
 - (g) To keep accurate and detailed site records.
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- (h) For construction works, conduct conformity monitoring of environmental and social liabilities including Occupational Health and Safety (OHS) issues mentioned in the Environmental and Social Impact Assessment (ESIA) and/or Environmental and Social Management Plan (ESMP). All regular reporting obligations mentioned in these documents shall be followed for the construction activities.
- (i) If any land acquisition related issues and needs emerge within the scope of the subproject during implementation, the Client and the Supervision Consultant are responsible for informing ILBANK immediately. The Supervision Consultant will clearly identify these and will provide support to the Client for the preparation of a RP/EPSA (if/where relevant).
- (j) To observe that the employees working in the sub-project area act in accordance with the laws, regulations and instructions related to OHS and to ensure that non-conformities and deficiencies are remedied. Follow up on OHS near misses incidents (ESIRT reporting, discussion, agreement on and supervision of implementation of corrective action plan.)
- (k) Ensure implementation of ESIA and/or ESMP, LMP, RP (if any), EPSA (if any) and SEP as required, in a manner acceptable to the Bank and make sure that no construction activity shall commence before the land acquisition process completed for the privately-owned land and permits/licenses received to use/transfer rights of public lands.
- (l) Resettlement Framework (RF) and Resettlement Plan (RP) (if any) in addition to supporting preparation of the biannual Resettlement Plan Progress Report (if needed) and following up the grievance mechanism for Kastamonu Municipality. These mentioned reports and responsibilities will be submitted by Client to the ILBANK/World Bank. Reporting format is given in Resettlement Framework (RF) document.
- (m) Follow up the grievance mechanism mentioned in TEFWER Environmental and Social Management Framework (ESMF) and Stakeholder Engagement Plan (SEP) and also these issues should be included in the prepared progress reports.

The Services will be carried out under the following Tasks:

3.1. Task 1: Tasks prior to start of construction works will include but not be limited to:

- a) Review the qualifications of the proposed key management personnel of the Contractor and make appropriate recommendations to the Client;
 - b) Receive from the Contractor, check for compliance with contract requirements and advise the Client on all performance securities, insurance certificates or policies and guarantees relating to the contract before submitting to the Client for acceptance;
 - c) Before the start of the works and during the works, facilitate any communication and attend any meeting between contractors and the owners of facilities (water, telephone, electricity, gas) sharing the road right-of-way; in particular, give advice on proposed modifications by the owners of facilities;
 - d) Before the start of works review and approval of mobilization plan including OHS Risk Assessment and Emergency management Plan for the mobilization construction works,
 - e) Before the start of works review and approval of construction methodology and material procurement schedule,
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Ensure that RP implementation (if relevant) is completed prior to commencement of any civil works on site,

- f) Ensure that Environmental and Social (ES) provisions set out in the contract documents are respected;
- g) Ensure that traffic operational safety is met before commencing the works and issue any work plan or drawing in that respect;
- h) Check correctness of co-ordinates and levels of all survey reference markers and require the Contractor to make an independent check;
- i) Check the Contractor's setting out and levels of the designed works;
- j) Verify estimated quantities in the Bills of Quantities and promptly advise the Client of any prospective Time and Cost effects and make appropriate recommendations;
- k) Ensure measures for the proper implementation of ESMP and/or ESIA, LMP, RP (if any), EPSA (if any) and SEP including the grievance mechanism are in place,
- l) If any land acquisition issues and needs emerge within the scope of the sub-project during implementation, the Supervision Consultant will identify these and will provide support to the Client for the preparation of a RP/EPSA (if/where relevant). The Client and the Supervision Consultant are responsible for informing ILBANK immediately if such a case emerges.
- m) Supervision Consultant may be requested to support the municipalities for the preparation of the RP/EPSA monitoring/progress reports, if there a sub-project specific RP/EPSA is in place.

3.2. Task 2: Tasks during construction will include but not be limited to:

3.2.1. Supervision tasks

- (a) Approve and monitor the contractor's work program and the source of materials;
 - (b) Approve and monitor the implementation of the Contractor's Site Specific OHS and Quality Assurance (QA) Plan;
 - (c) Explain and/or adjust ambiguities and/or discrepancies in the Contract Documents;
 - (d) Inspect for approval all working drawings and as-built drawings prepared by the Contractor;
 - (e) Inspect and test materials and works to ensure compliance with specifications, and/or removal and substitution of improper materials and/or work as required;
 - (f) Ensure the Contractor's compliance with the agreed Environmental and Social Impact Assessment (ESIA) and/or Environmental and Social Management Plan (ESMP); to control and appraise the progress of the works, to order suspension of works if identified OHS deficiencies are not remedied and to authorize, with the Client's approval, extensions of the period for completion of the works; The Consultant shall take necessary measures for environmental, social, and occupational health and safety aspects. In this context the most recent Turkish environmental and safety regulations as well as the Client and EU/WB Environmental and Social Standards and WBG's General and Sector Specific Environmental, Social, Health and Safety Guidelines (ESHS) are required to be taken into consideration particularly during the supervision of the construction works. Within this
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scope, Consultant shall also be responsible for the supervision of the Contractors' environmental and social management practices/plans (waste management, noise, resettlement plan, stakeholder engagement plan etc.) and ESHS obligations and report to the Client in his monthly and quarterly progress reports. The details of the Environmental, Social, Health and Safety (ESHS) Management and the responsibilities of the "Consultant" shall also be detailed in the Contractor's contract. The Consultant shall have the responsibility for relevant supervision, oversight and instruction of the applications to the Contractor.

- (g) Make sure the following flow: ,n case of a significant work accident, loss of life, loss of limb, or injury requiring more that 3 days absence from work, the Contractor will immediately inform the Consultant and the Municipality about the accident. The Municipality will be responsible for notifying this accident to İLBANK within 24 hours and İLBANK will be responsible for informing World Bank about the accident within 48 hours after the accident occurred. Jointly, the Contractor, the consultant, the municipality and İLBANK will be responsible for complying with the World Bank requirements as shown in ESIRT, and undertake necessary actions including developing and implementing the Corrective Action Plan and reporting.
 - (h) If any land acquisition related issues and needs emerge within the scope of the sub-project during implementation, the Client and the Supervision Consultant are responsible for informing İLBANK immediately and the construction works will be stopped in areas requiring land acquisition. The Supervision Consultant will clearly identify these and will provide support to the Client for the preparation of a RP/EPsA (if/where relevant). The Supervision Consultant should ensure that the Client take necessary actions such as preparation or updating of RP or EPsA.
 - (i) Provide assistance in administering and resolving grievances, in addition ensuring that grievances are recorded on the grievance forms and grievance close-out forms;
 - (j) Issue interim certificates for payment to the Contractor on the basis of measured work items or to certify the completion of the works or parts thereof;
 - (k) Carry out generally all the duties of the Project Manager as specified in the Contract, within the limitations specified therein;
 - (l) Advise the Client on all matters relating to compensation events and claims reported by the Contractors and make recommendations thereon;
 - (m) Attend to the work inspections carried out by the State Authorities in accordance with the Turkish Law;
 - (n) Prepare the variation order documents with own comments and advise the Client on all matters relating to additional works, scope change, variations and claims reported by the Contractor/s and make recommendations thereon. Project manager to give the approval for request officially,
 - (o) Organize provisional and temporary technical acceptance of works and submit all supervision documents to the taking-over committee according to the Applicable Law;
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- (p) Issue the Certificates of Completion of the Works and Defects Liability Certificates;
- (q) Assist the Client in taking over the site of the works.

3.2.2. Administration of the Civil Works Contract

The responsibility of the Consultant shall include, but not limited to, the following tasks:

- a) Financial management of the Civil Works Contract. Based on (i) contractor's programme of works and cash-flow predictions which should be revised at required time intervals and, (ii) upon own judgement, the Project Manager shall prepare monthly, as part of monthly reports, disbursement tables showing the status of previous disbursements and a tentative prediction of future disbursements on a monthly basis;
- b) Monitor validity of Contractor's insurance policies and guarantees and timely advice the Client on their expiry dates, necessity to request the extensions of the validity and where necessary change the amount of the insurance policies and guarantees;
- c) Provision and administration of the Project Management Information System (PMIS) for management of project correspondence and documents in accordance with the approved PMIS plan and procedures, and timely updates of the records and reports thereof;
- d) Continuous follow-up of the Contractor work programmes and monitoring cash-flow in relation to the planned schedules and alert immediately the Client if any change occurs in the progress of disbursements;
- e) Day-to-day measurement and recording of quantities of works carried out by the Contractor;
- f) Daily recording of work site events in a work site logbook;
- g) Recapitulation of quantities of work carried out monthly for each contractual item of work;
- h) Monthly comparison of actual progress against progress as scheduled;
- i) Review Contractor's Monthly Statements and issue the corresponding Payment Certificates as appropriate;
- j) Attendance at periodic site meetings and monthly progress and OHS board meetings and ensuring minutes signed by all parties are recorded.
- k) The required procedures to carry out the site supervision and contract administration tasks shall be prepared by the Consultant and submitted for the approval of the Client in a Consultant's Site Supervision Procedures Manual.

3.2.3. Administration of Environmental, Social, Health and Safety (ESHS)

The Consultant shall ensure that the Contractor's Environmental and Social (ES) performance is in accordance with good international industry practice and delivers the Contractor's ES obligations.

The ES related services include those of the Project Manager's as referred in the World Bank's Standard Procurement Document - Request for Bids Small Works (One-Envelope Bidding Process) (If needed as a result of the cost estimates, the Standard Procurement Document could change) plus the following:

1. Review of the Contractor's Environmental and Social Management Plan (C-ESMP) including all updates and revisions as well as sub-management plans (if any) (not less than once every 6 months),
 2. Review and approve ESHS provisions of method statements, implementation plans, drawings, proposals, schedules and all relevant Contractor's documents;
 3. Review and approve ESHG provisions of any design change proposals and the implications for compliance with subproject specific ESIA and/or ESMP, RP (if any)/EPSA (if any), SEP, LMP and GM, consent/permits and other relevant project requirements;
 4. undertake audits, supervisions and/or inspections of any sites where the Contractor is undertaking activities related to the Works, to ensure and verify the Contractor's compliance with ES requirements, OHS requirements with and without contractor and/or client relevant representatives, as necessary,
 5. undertake audits and inspections of Contractor's accident logs, stakeholder engagement activities carried, community liaison records including all grievances received, managed and resolved, monitoring findings and other ESHS related documentation, as necessary, to confirm the Contractor's compliance with ESHS requirements;
 6. agree remedial action/s and their timeframe for implementation in the event of a noncompliance with the Contractor's ES obligations;
 7. attend meetings including site meetings, consultation meetings, progress meetings to discuss and agree appropriate actions to ensure compliance with ES obligations;
 8. check that the Contractor's work permits, actual daily site progress, daily OHS reports (content and timeliness) is in accordance with the Contractor's contractual obligations;
 9. review and critique, in a timely manner, the Contractor's ES documentation (including regular reports and incident reports) submitted to Project Manager and to provide advice to ensure the accuracy and efficacy of the documentation;
 10. Ensure the follow-up of the activities specified in the Stakeholder Engagement Plan (SEP) and Resettlement Plan (RP) (if land acquisition required) documents and the regular follow-up of the grievance mechanism through grievance registers, providing support to the Kastamonu Municipality for resolving grievances,
 11. If any land acquisition issues and needs emerge within the scope of the sub-project during implementation, the Supervision Consultant will identify these and will provide support to the Client for the preparation of a RP/EPSA (if/where relevant). The Client and the Supervision Consultant are responsible for informing ILBANK immediately if such a case emerges. undertake liaison, from time to time and as necessary, with project stakeholders to identify and discuss any actual or potential ES issues, and report to the Client;
 12. ensure no construction activity is initiated before the implementation of the Resettlement Plans (land acquisition process, compensation/supports, permits/licenses for use/transfer rights of public lands, etc) to be prepared in accordance with the Resettlement Framework (ILBANK, 2023) is completed in case of legal or illegal users are identified on private and/or public lands; and,
 13. prepare a monthly and quarterly E&S&OHS monitoring report that describes the work that the Project Manager's ES Key Expert/s have undertaken, the issues (including any
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Contractor's E&S&OHS noncompliance) identified and the actions taken to address the issues

3.2.4. Limitations of the Consultant's Authority

- A. The Consultant shall have no authority to relieve the Contractor of any of their duties and obligations under the Works Contract.
- B. The Consultant shall note that the Client is under obligation to seek the ILBANK's concurrence before agreeing to or implementing any modification or waiver of the terms and conditions of the Contract including granting an extension of the stipulated time for performance.
- C. The Consultant will seek prior written approval of the Client for the following:
 - (a) issuing / approving any Payment Certificates (PC) for the Contractor's Advance Payment;
 - (b) agreeing / instructing any changes in the project design;
 - (c) approving or issuing of any Contract Variation, except in an emergency situation as determined by "Project Manager" in accordance with the Conditions of Contract;
 - (d) in the event of additional work, the Consultant shall report on the relative merits of tendering vis-a-vis issuing a variation for such additional works;
 - (e) approving a proposal for Variation submitted by the Contractors;
 - (f) making variations in work quantities which bring the total cost in excess of the value of the Contract Price specified in the relevant contract provisions;
 - (g) determining any new rate or price with respect to any Variation;
 - (h) approving any extension of the Intended Completion Date;
 - (i) approving any compensation event for any additional cost including any cost associated with extension of the Intended Completion Date;
 - (j) suspending the Works in accordance with the Conditions of Contract;
 - (k) approval of the subletting of any part of the works;

Any response by the Project Manager which requires Client's approval, except as otherwise expressly specified, shall be notified in writing to the Contractor within 28 days of receipt. (14 days for the Project Manager, 7 days for the Client, then 7 days for the Project Manager to consider Client's comments).

3.3. Task-3: Supervision during the Commissioning, Defects Liability and Maintenance Period:

- (a) The Consultant shall continue to be responsible for the supervision and inspection of the construction and completion of the Works during the Defects Liability Period as defined in the construction contracts. The level of supervision shall be appropriate to the scale of the works being carried out. These inspections and supervision are to ensure that works, agreed to be carried out during the Defects Liability Period, are properly carried out and have been completed and that any failure of any part of the Works has been rectified. If any defect is discovered, during this period, the Consultant shall promptly investigate the reason for it, report to the Client and take required actions to rectify the defect.
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- (b) A report of these inspections shall be submitted to the Client, which shall include all details of any defects, faults, accidents or breakdowns, which have occurred together with the estimated costs of repair and the time scales within which they will be completed. Moreover, the Consultant shall submit quarterly report summarizing all the activities during subject quarter of Defects Liability. A final report shall be submitted at the end of the Defects Liability Period giving full details of all works carried out during that period. This report shall be submitted by the Consultant to the Client at least 30 days prior to the Consultant's issuing Defects Liability Certificate for the completed Works. The Consultant will provide minimum number of technical staff acceptable to the Client during the Defects Liability Period. Defects are expected to be minimum for a competent Consultant Firm during defects liability period.
- (c) The Consultant is required to provide perfect supervision/inspection services during the period, to preparation of defect lists and monitor correction of defects. If required, Consultant will instruct the contractor and closely inspect the repair of works in the Defects Liability Period. Until finishing of Defects Liability Period, the Consultant shall execute all interim controls, inspections. In demand of Client, the Consultant shall deal with determined defect or failure. The Consultant will inform the Client and Contractor in case of finding defects in interim audit/controls.
- (d) The Consultant should prepare and submit to the Client's approval a report providing all information about the "as-built-conditions" including calculations, drawings, specifications, final cost analysis etc.
- (e) The Consultant should prepare demobilization of the contractor should be as per the mobilization plan and this process should be supervised and monitored.

4. General Obligations and Tasks of the Consultant:

General

- (a) To carry out its duties and responsibilities by suitably qualified engineers and other professionals (experience of staff has been stated at Section-8 Key Expert Section) who are competent to carry out the duties described within this document.
- (b) To co-operate with the other consultants and join the meetings whenever required by the Client.
- (c) To carry out all the Services with all due diligence, care and in timely manner so as not to cause any delay. It is deemed that the Consultant familiarized himself with the nature of Project and is expected to take all sorts of precautions during the performance of Services to fulfil his tasks in a timely manner and to get the works completed by the Contractor on time.
- (d) Updating the procurement plan of TEFWER Project as per the approved/revised work schedules of the Contractor and his Contract.

5. Time Schedule:

Time schedule for the completion of the consultants' services for the various parts of the work as mentioned below shall be submitted to the Client.

All activities under the Scope of Services shall be completed within 33 (thirty-three months) (including the Defects Liability Period) from the signature date of the works contract within the scope of consultancy services.

Project Completion Schedule is drafted in the following table.

6. Timetable

No	Year	2024			2025												2026												2027								
	Item / Month	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
W1	Contract Signing and Construction																																				
	DLP																																				

- Supervision of Construction and Engineering Services and Defects Liability

Under normal conditions, the scheduled construction period is 21 (twenty-one) months and the defects liability period is 12 (twelve) months.

Contract Type

The contract shall be time-based for the activities under this ToR.

7. Change in The Scope of Consultant's Services:

The Construction commencement dates of Works may vary due to the unexpected reasons. The Consultant shall wait for the finalization of the respective tender evaluation and commencement of the Construction Works and shall not request any payment or compensation for the tender in question. In any case, The Consultant Services Contract shall be commenced and become effective concurrently upon the signature of the Works Contract.

At every 6 months from the effectiveness of the Contract the Client and the Consultant shall review the staff input for the next 6 months and based on the agreed staff plan the consultant shall mobilize its personnel.

8. Team Composition & Qualification Requirements for the Key Experts:

The Consultant shall typically comprise a firm with experience in carrying out similar tasks, specifically to include the following minimum qualifications;

- Experience as Consultancy company in the last 10 years in the projects financed by international financing institutions,
- Experience in the design and construction supervision services that are similar infrastructure (Preferably sewerage, stormwater, drinking water and WWTP projects) to the required services in size, similarity and complexity in the last 10 years.

The consultant's team shall include at least the following suitably qualified engineers and other professionals who are competent to carry out the duties described within this document.

The minimum required number and experience of proposed professional staff is:

KEY STAFF MAIN CONSULTANT SITE OFFICE	Professional Experience (Years)	Specific Experience on the Related Assignment (Years)
Project Manager (Civil Engineer)	>15	>8
Payment Certification Control, Quality and Cost Engineer (preferably Civil Engineer)	>10	>5
Planning & Technical Office Engineer (Civil Engineer)	>10	>5
Site Engineer -I (Civil Engineer)	>8	>3
Site Engineer -II (Civil Engineer)	>8	>3
Survey Engineer	>8	>3
Mechanical Engineer	>10	>5
Electrical/Electronic Engineer (having SCADA experience)	>10	>5

KEY STAFF MAIN CONSULTANT SITE OFFICE	Professional Experience (Years)	Specific Experience on the Related Assignment (Years)
Social Expert	>5	>3
Environmental Expert	>5	>3
OHS Expert -I (A class OHS certificate)	>8	>5
OHS Expert -II (B class OHS certificate)	>5	>2
For Construction Supervision of Defects Liability Period(*)		
Minimum Non-Key Staff Requirement:		
In addition to the key staff, in order to ensure proper supervision, the non-key experts are:		
<ul style="list-style-type: none"> Two Technicians / Junior Engineers for Civil Works and Two Survey Technicians / Junior Survey Engineers shall be assigned during the construction period. Technicians/Junior Engineers will not be evaluated as key expert. The CVs of these staff will be submitted to the Client for approval after contract award. Following the contract award, the Technicians experienced for at least 6 (six) years or the Junior Engineers experienced for at least 3 (three) years in their respective fields shall be proposed. 		
Defects Liability Period Staff Requirement:		
(*) Staff-months for DLP shall be proposed as well and demonstrated in the Staffing Schedule.		
Foresight:		
Project Manager		
Mechanical Engineer		
Electrical Engineer		
Payment Certification Control, Quality and Cost Engineer		
Site Engineer		
Environmental Expert		
Social Expert		

Project Manager (Civil Engineer), in addition to defining and supervising the activities of other members of the consultancy team and liaising with the PIU, this key expert is expected to provide key technical inputs, conduct quality assurance, ascertain consistency of results across individual tasks, and be the day-to-day single point of contact and party ultimately responsible to the Employer for the Tasks as defined in this ToR. Supervision Project Manager will be Civil Engineer holding a suitable undergraduate degree (BS or above) and have at least 15 years professional experience. S/he shall have minimum 8 years of specific experience in Supervision stage and 5 years' experience as Supervision Project Manager and/or equivalent position especially in the infrastructure projects, preferably in sewerage,

stormwater and drinking water sector. The Supervision Project Manager shall be preferably fluent in written and spoken English.

Site Engineer I & II Civil Engineer holding a suitable undergraduate degree (BS or above) and have at least 8 years professional experience. S/he shall have minimum 3 years of specific experience in Supervision stage as Site Engineer or equivalent position in the supervision stage of projects, preferably in sewerage, stormwater and drinking sector. The Site Engineer shall be preferably fluent in written and spoken English

Payment Certification Control, Quality and Cost Engineer holding a suitable undergraduate degree (BS or above preferably Civil Engineer) and have at least 10 years professional experience. S/he shall have minimum 5 years of specific experience in Supervision stage as Payment Certification Control, Quality and Cost Engineer or equivalent position in the supervision stage of projects, preferably in sewerage, stormwater and drinking water sector. The Payment Certification Control, Quality and Cost Engineer shall be preferably fluent in written and spoken English.

Planning & Technical Office Engineer (Civil Engineer) holding a suitable undergraduate degree (BS or above preferably Civil Engineer) and have at least 10 years professional experience. S/he shall have minimum 5 years of specific experience in Supervision stage as planning & progress control, review and organize documentation (work plan, actual progress, as built drawings, regular reports) preparation of reports to be submitted by Engineer.

Survey Engineer holding a suitable undergraduate degree (BS or above) and have at least 8 years professional experience. S/he shall have minimum 3 years of specific experience in Supervision stage as Survey Engineer or equivalent position in the Supervision stage of projects, preferably in sewerage, stormwater and drinking water sector. The Survey Engineer shall be preferably fluent in written and spoken English.

Mechanical Engineer holding a suitable undergraduate degree (BS or above) and have at least 10 years professional experience. S/he shall have minimum 5 years of specific experience in Supervision stage as Mechanical Engineer or equivalent position in the Supervision stage of projects, preferably in sewerage, stormwater and drinking water sector. The Mechanical Engineer shall be preferably fluent in written and spoken English.

Electrical/Electrical Engineer holding a suitable undergraduate degree (BS or above) and have at least 10 years professional experience. S/he shall have minimum 5 years of specific experience in Supervision stage as Electrical / Electrical Engineer or equivalent position in the Supervision stage of projects, preferably in sewerage, stormwater and drinking water sector. The Electrical / Electrical Engineer shall be preferably fluent in written and spoken English.

Environmental Expert holding a suitable undergraduate degree (BS or above / preferably Environmental Engineer) and have at least 5 years professional experience. S/he shall have minimum 3 years of specific experience in Supervision stage as Environmental Expert or equivalent position in the Supervision stage of projects, preferably in sewerage, stormwater

and drinking water sector. The Environmental Expert shall be preferably fluent in written and spoken English.

Social Expert holding a suitable undergraduate degree (BS or above) in social sciences such as sociology, social development etc. and have at least 5 years professional experience. S/he shall have minimum 3 years of specific experience in as Social Expert in the Supervision stage of projects, preferably in sewerage, stormwater and drinking water sector. The Social Expert shall be preferably fluent in written and spoken English.

OHS Expert I (A class OHS certificate) holding a suitable undergraduate degree (BS or above / preferably Engineer) and have at least 8 years professional experience. S/he shall have minimum 5 years of specific experience in Supervision stage as OHS Expert or equivalent position in the Supervision stage of projects, preferably in sewerage, stormwater and drinking water sector. The OHS Expert shall be preferably fluent in written and spoken English.

OHS Expert II (B class OHS certificate) holding a suitable undergraduate degree (BS or above / preferably Engineer) and have at least 5 years professional experience. S/he shall have minimum 2 years of specific experience in Supervision stage as OHS Expert or equivalent position in the Supervision stage of projects, preferably in sewerage, stormwater and drinking water sector. The OHS Expert shall be preferably fluent in written and spoken English.

9. Reporting Requirements and Time Schedule for Deliverables:

Monthly Reports

The Consultant shall prepare and submit to the Client each calendar month a report satisfactory to the Client, including progress charts and photographs in color giving all information regarding the progress of the Works, actual extent and nature of the Works completed as well as details of any delay in the works, reason and remedial of the delay, any other problems relating to the Works and substantiating documentation if required. The Consultants shall also clearly indicate in the report whether the delay (if any) of any part of the Works will cause any delay in the completion of the whole Works. Consultant should prepare an Inception Report within 3 weeks at the start of the project.

The report shall include the percentages of the Work items completed and planned, and also the actual and planned cash-flows for each work item as of the reporting period prepared in the project planning tools (such as MS Project, Primavera, etc.) accepted by the Client.

The report shall also include records of materials, equipment and plant tested with copies of the test results and, statistical evaluation of the test results in table or graphical form. Action taken with regard to poor results shall be stated.

The report shall give a detailed review of the Works to be performed during the following month and a general listing of the works to be performed during the following two months.

The report shall also give information about personnel employment status of the Consultants.

The report will also include the environmental and social (including grievance redress mechanism) and OHS management and ESMP compliance/non-compliances followed to mitigate the environmental and social impacts of construction works, and appropriate deadlines for the completion of such nonconformities and information on closing non-compliances from previous periods. The report shall be submitted to the Client by the tenth day of following month. Any comment by the Client on the report shall be reviewed and the report shall be modified and re-submitted to the Client within a week.

Due to the urgent nature of the project and short construction time, the Consultants shall also prepare a report in table form showing summary of cumulative progress in main work activities on weekly basis. The report shall be submitted to the Client in an acceptable format on Monday of each week via electronic mail and as hard copy.

In addition, the Consultants shall record views from at least 5 different points for the construction site, on weekly base, showing the progress on the site with dates and record them with acceptable format on CD and submit to the Client.

The requirements for the submission of reports, drawings and other documentation are given below. Reports shall be prepared in both the Turkish and English languages. The metric system of weights and measures shall be used.

Submission shall be as follows:

Format of Reports : A4 or A3, including where appropriate drawings reduced to A3 size.

Format of Drawings : A1 and/or A0 size.

A draft copy (Turkish 3, English 1) of all reports shall firstly be submitted to the Client for discussion purposes following which the Consultants shall be required to prepare the final copy, incorporating any amendments arising from such discussions.

Construction Supervision & Completion and Defects Liability Stages Reporting Requirements

1-The Consultant shall prepare minutes of meetings, reports, documents, and several documents for the activities of the project. Aim of these documents is to record important milestones and activities of the project. These documents will be used to support reports for Municipality and the Client.

2-Below documents shall be prepared:

2.1-Weekly minutes of meetings for the construction contract.

2.2-Monthly report (contains summaries for the activities of construction site, supply contracts, Consultant's Kastamonu office activities).

2.3-Quarterly reports for summarizing previous three-month activities, project plan, cash flow information, and environmental and social aspects covering the previous three months period. In terms of environmental and social aspects, the monthly and quarterly reports should cover the status of Environmental and Social performance in compliance with the

ESMF, SEP and RF for TEFWER (including the subproject-specific ESIA's, ESMPs, RPs, SEPs, and grievance mechanism).

2.4-Semi-annually progress reports to summarize previous six months covering the status of ESCP and compliance with ESMF, RF (including the performance related to subproject-specific ESIA's, ESMPs and RPs), LMP, SEP, performance of grievance mechanism.

2.5. If any land acquisition issues and needs emerge within the scope of the sub-project during implementation, the Supervision Consultant will identify these and will provide support to the Client for the preparation a RP/EPsA (if/where relevant). The Client and the Supervision Consultant are responsible for informing ILBANK immediately if such a case emerges. Semi-annually progress reports to include brief information regarding RP implementation (if/where relevant) (for the subproject including land acquisition and having a RP).

2.6-Support the preparation of the quarterly progress reports by Municipality's' Project Implementation Unit (PIU) for the sub-project site and monitor quality of reporting throughout the duration of works.

2.7-Construction Completion Reports.

2.8-Final Completion of Contract Report that combines sections of contract completion report in a single report also including additional information for completion of construction works.

Consultant shall submit their reports in compliance with the below table;

No	Report	Last Submittal Date	English	Turkish
1	Monthly Progress Reports	In the first week of current month (for the past month activities) after signing of construction contract	1	3
2	Quarterly Reports	Second week of the month after each quarter period	1	3
3	Construction Completion Report	Four weeks upon the issue of a Certificate of Completion (Taking Over Certificate).	1	3
4	Interim Inspection Reports	Two weeks following up of each interim audit in Defects Liability Period	1	3
5	Contract (Final) Completion Report	4 (four) weeks upon the issue of a Final Acceptance (Performance) Certificate	1	3

Consultant will also submit soft copies of all reports, projects and tender documents following up approval.

Those of the documents and reports not mentioned above but either specified or implied in the contract related to the Construction Supervision Stage and Completion and Defects Liability Period shall be submitted in 3 copies in Turkish and English languages each.

In relation to the ongoing stages of the Consultants Services, the submission requirements given above should be allowed by the Consultants as a guideline for the extent and type of documentation that will be required by the Client during the performance of the Services. However, the Consultants shall allow in its fee for the submission of all reports, drawings, documents, etc. either specifically requested in these Terms of Reference or those that may be implied there from and the Contractor's contract. The Client may however vary such requirements during the course of the Services to be performed.

Should additional copies be required extra over to those stated above or to be implied from these Terms of Reference, these shall be supplied by the Consultant(s) at the cost of reproduction of such documents, reports or drawing. Additionally, after finalizing the reports and "as built" drawings, these shall be submitted to the Client on one (1) set of CD and in the software format acceptable by the Client. Each copy shall be durably bound in a volume or volumes depending on bulk, and the transparent copies shall have a suitable protective cover/box. All copies shall be labelled in accordance with the needs of the Client.

Upon the completion of Works, the Consultants shall submit all the original copies of correspondences, documents, test results, drawings etc., relating to the Services and Works, to the Client together with indices in acceptable files and forms by the Client.

10. Client's Input and Counterpart Personnel:

The Client will timely provide to the Consultant the inputs and facilities, assist the firm in obtaining licenses and permits needed to carry out the services, and make available relevant project data and reports.

The following items shall be provided free of charge by the Client to the Consultant: The existing designs, maps, topographic plans, analysis results, relevant documents and reports of the design drawings etc. Consultant shall return all such drawings and documents received to the Client upon the completion of services.

In addition, the Client shall, where possible, assist the Consultant in obtaining approvals, permissions from the Municipalities and other State Authorities in respect of the Services to be performed.

The Civil Works Contractor's bidding documents shall be arranged to incorporate clauses to provide temporary office area to the Consultants at the construction site depending on the size and location of the construction site, the size and number of rooms shall be jointly determined by the Client and the Consultant considering the needs of the Client as well (at least basically one room for project manager, one room for site managers & engineers, one room for electric and mechanical engineers and technical office, one room for technicians and junior engineers and one meeting room should be organized). However, these will be

constructed by the Contractor and will take some time. The Consultant will be fully responsible for providing their central office in Kastamonu until the Contractor is in place to make these site offices available. The central office shall be furnished and equipped by the Consultant, whereas the site offices shall be furnished by the Contractor. All sort of running expenses except water and electricity (to be provided by the contractor) shall be under the Consultant's responsibility. The Consultant shall not be required to deliver any equipment and materials provided by the reimbursable expenses and which have been used for the Services to the Client.

All local transport for the Consultants staff including the site supervisory staff shall be provided by the Consultant and shall be included in the proposal submitted.