

Government of the People's Republic of Bangladesh

Bangladesh Forest Department
Office of the Project Director
Elephant Conservation Project
Mohakhali, Dhaka, Bangladesh

Memo No. 22.02.0000.601.29.113.26.1729

Date: 12/07/2026

TERMS OF REFERENCE (TOR)

Consultancy Services for Planning, Design, Estimate Preparation and Construction Supervision of Elephant Conservation Infrastructure - Including Elephant Rescue Centers, Elephant Sanctuary Facilities, Staff Barracks, Temporary Treatment Sheds, Solar Power Fencing, Tree Towers, Water Reservoirs, Drainage Systems, Electrical Supply Systems and Associated Site Development Works under the Elephant Conservation Project.

Key Information

Name of Project	Elephant Conservation Project
Name of Assignment	Consultancy Services for Planning, Design, Estimate Preparation and Construction Supervision of Elephant Conservation Infrastructure
Package No.	BFD-GD-ELE:03
Implementing Agency	Bangladesh Forest Department
Ministry	Ministry of Environment, Forest and Climate Change
Selection Method	Quality and Cost Based Selection (QCS) Selection Based on Consultants Qualification (SBCQ)
Tender Inviting Authority	Project Director, Elephant Conservation Project
Market Approach	National - Open
Source of Fund	Government of Bangladesh (GoB)
Project Implementation Period	July 2025 to June 2028
Consultancy Duration	Within the Project Implementation Period
Project Locations	Chattogram, Cox's Bazar, Bandarban, Rangamati, Khagrachari, Sylhet, Sherpur and other project areas

1. Background of the Project

Under the Elephant Conservation Project, a wide range of conservation, infrastructure development, habitat restoration, research, monitoring, and capacity-building activities will be implemented across various elephant habitats and human-elephant conflict-prone areas in Bangladesh.

The major activities of the project include the conservation and restoration of natural elephant habitats and elephant movement corridors; plantation of elephant food species and establishment of bamboo groves; conservation of natural food sources; and the development of water reservoirs and water holes to ensure a sustainable supply of food and water for elephants.

Under the project, a range of interventions will be implemented to mitigate human-elephant conflict. These include the installation of ecological bio-fencing and solar-powered electric fencing; establishment of alarm systems and monitoring facilities; monitoring of elephant movement; construction of tree towers to prevent crop damage; and implementation of area-specific Human-Elephant Conflict (HEC) mitigation plans.

In addition, to safeguard human lives and property and to facilitate emergency elephant response and rescue operations, Anti-Depredation Squads (ADS), Elephant Response Teams (ERT), and Elephant Rescue Teams (ERT) will be established, trained, and provided with the necessary operational support.

Under the project, various conservation-related infrastructure facilities will be constructed, including an Elephant Rescue Center, an Elephant Sanctuary, temporary treatment sheds for injured elephants, staff barracks, drainage systems, water supply systems, electrical installations, boundary walls, and other associated site development works.

The project will also support the procurement of essential operational equipment required for conservation and monitoring activities, including communication equipment, searchlights, sensor-based trip alarm systems, wildlife tranquilizing equipment, and patrol vehicles.

To strengthen institutional capacity and promote long-term, sustainable elephant conservation initiatives in Bangladesh, the project will organize workshops, meetings, seminars, awareness programs, and training activities for officials of the Bangladesh Forest Department, local stakeholders, community members, and youth groups.

To support the implementation of the proposed construction works under the project, the Bangladesh Forest Department intends to engage an experienced Engineering Consulting Firm to undertake survey coordination, planning, preparation of detailed engineering designs and cost estimates, preparation of bidding documents, and construction supervision..



2. Objective of the Assignment

The main objective of the assignment is to:

- i. Conduct/review survey and investigation work and prepare design, working drawings, estimates, technical specifications;
- ii. Bills of Quantities (BOQ) and bid documents of the physical works under the Project;
- iii. Assist the Project Director and concerned Divisional Forest Officers (DFOs) during procurement process and implementation of the Project;
- iv. Ensure high standards of quality assurance in execution and completion of works within stipulated time;
- v. Provide comprehensive supervision of project implementation activities carried out by the contractor(s);
- vi. Prepare and submit regular progress reports and the project completion report;

3. Scope of Services

- Review and approve all drawings, method statements, and construction programmes submitted by the Contractor.
- Conduct site visits to the project areas and undertake preliminary surveys and baseline data collection.
- Verify site surveys, geotechnical investigations (soil testing), and environmental mitigation measures prior to the commencement of construction works.
- Review and approve the Contractor's site mobilization plan.
- Assess infrastructure requirements and prepare the master plan.
- Assist in finalizing the Bill of Quantities (BOQ) for measurement and cost estimation purposes.
- Conduct regular (daily/weekly) site inspections to monitor the progress and quality of construction works.
- Verify the quality of construction materials through material testing, including soil, concrete, bricks, reinforcing steel, and other construction materials.
- Inspect and approve construction works at various stages by completing the required inspection checklists.



- Review contractors' interim payment applications and assist in the preparation of Interim Payment Certificates (IPCs).
- Review and assess variations, claims, and requests for Extension of Time (EOT) submitted by the Contractor.
- Monitor compliance with Health, Safety, and Environment (HSE) requirements throughout the construction period.
- Monitor the implementation of the Environmental and Social Management Plan (ESMP).
- Ensure that construction activities do not adversely affect elephant movement corridors, habitats, or other ecologically sensitive areas.
- Conduct regular site meetings and prepare and maintain minutes of meetings.
- Inception Report.
- Monthly Progress Reports (MPRs).
- Survey Report.
- Design and Cost Estimate Report.
- Quality Assurance Report.
- Interim Reports and Final Completion Report.
- Review and approval of As-Built Drawings.

4. List of Major Civil Works

Sl No.	Description of Works	Unit	Quantity
1	Drainage Structures (Construction of side drains for water supply and sewerage/drainage disposal within office areas, elephant rescue centers and other facilities)	R.M.	100
2	Line and Electrical Supply Works (Electrical supply and accessories including 20 poles, cables, insulators and transformers, etc.)	No.	20
3	Minor Capital Works (Solar Power Fencing)	Km	15
4	Minor Capital Works (Construction of Tree Towers on large trees for monitoring elephant movement and preventing crop damage)	No.	16
5	Minor Capital Works (Excavation of water reservoirs (Water Hole) in low-lying areas suitable for elephant use; each measuring $20 \times 10 \times 3 = 600$ cu.m.) (40 Nos. $\times$ 600 cu.m. = 24,000 cu.m.)	Cu.m.	24000
6	Minor Capital Works (Establishment of elephant-useable Saltlick areas)	No.	30
7	Minor Capital Works (Construction of temporary sheds for treatment of injured elephants in Sylhet, Chattogram, Rangamati and Sherpur regions)	No.	4
8	Non-residential Buildings and Structures (Construction of two-storied barracks for employees and mahouts at the Elephant Sanctuary), consisting of 4 units each having 60 sq.m. area.	Sq.m.	240
9	Non-residential Buildings and Structures (Establishment of Elephant Rescue Centers over 1.5 acres of land at	No.	2

	Gazipur Safari Park and Dulahazara Safari Park, Cox's Bazar)		
10	Non-residential Buildings and Structures (Establishment of Sanctuary (Shelter) for captive elephants over 10.0 acres of land at Chunati, Chattogram), including the following components: (a) Construction of boundary wall (2.5 m height) – 1,200 R.M. (b) Construction of hospital building – 200 sq.m. (c) Construction of mini enclosure – 200 R.M. (d) Excavation of water reservoir [80 m × 40 m × 5 m] – 32,000 cu.m. (e) Construction of elephant shed [25 m × 20 m] – 500 sq.m. (f) Construction of entrance gate – 1 No. (g) Brick soling works at elephant holding area – 300 sq.m. (h) Installation of deep tube wells with motor and overhead tank – 2 Nos. (i) Construction of food storage building [15 m × 10 m] – 300 sq.m.}	No.	1

5. services to be provided by the consultant be shall include

for the construction mentioned above :

- i. Preparation of layout plans, designs and drawings, and submission of all drawings in printed and soft copy formats;
- ii. Preparation of estimates, Bills of Quantities (BOQ) and technical specifications;
- iii. Assistance in preparation of tender documents for each package;
- iv. Supervision and coordination of survey, investigation and testing works;
- v. Review and verification of survey and investigation reports;
- vi. Supervision of construction works and submission of interim progress reports;
- vii. Verification of contractor's bills and measurements;

- viii. Ensure quality control and compliance with specifications and contract documents; and
- ix. Preparation of completion reports and providing assistance in review and verification of as-built drawings prepared by the contractor(s).

6. Review of Contractor(s) Implementation Schedule

The consulting firm shall thoroughly review the implementation schedule submitted by the contractor(s),

- including work program,
- resource allocation,
- commencement and completion schedule and
- construction methodology.

The consulting firm shall recommend modifications where necessary and ensure that the implementation schedule is realistic, technically appropriate and achievable within the stipulated contract period.

The approved implementation schedule shall be used for monitoring progress of the Project.

7. Supervision of Construction Works

The consulting firm shall provide necessary supervisory staff during the implementation period for supervision and monitoring of all construction works under the Project.

The consulting firm shall supervise all construction works on behalf of the Client and ensure that the works are executed in accordance with approved drawings, technical specifications, BOQ and contract documents.

The consulting firm shall:

- i. Supervise all construction activities;
- ii. Review contractor(s)' methodology and work program;
- iii. Ensure quality control of materials and workmanship;
- iv. Review material test reports and field test results;
- v. Carry out regular site inspections;
- vi. Ensure compliance with environmental safeguard measures;
- vii. Verify measurements and certify contractor(s)' bills;

- viii. Maintain records of inspections, instructions and measurements;
- ix. Monitor physical and financial progress of works;
- x. Review and approve shop drawings and material submissions;
- xi. Conduct inspections during completion and defect liability period; and
- xii. Prepare supervision reports and completion recommendations.

8. Issue of Instructions to the Contractor(s)

The consulting firm shall issue necessary field instructions and technical directions to the contractor(s) regarding quality of materials, workmanship, construction methodology, safety measures, environmental protection and compliance with specifications and drawings.

The consulting firm shall maintain written records of all important site instructions.

The consulting firm shall not issue any instruction involving major financial implication or variation without prior approval of the Client.

9. Inspection and Testing of Works

At all stages of implementation, the consulting firm shall carry out regular inspection of construction materials, workmanship and acceptance tests to ensure compliance with approved drawings, technical specifications and contract requirements.

Where any work, material or workmanship does not conform to the specifications or approved standards during implementation, the consulting firm shall instruct the contractor(s) to remove, replace or rectify such defective works at the contractor(s)' own cost.

The consulting firm shall:

- i. Conduct regular inspection of all ongoing construction works;
- ii. Verify quality control procedures, laboratory tests and field test results;
- iii. Ensure compliance with approved specifications, standards and accepted engineering practices;
- iv. Inspect construction materials, equipment and workmanship prior to incorporation into the works;
- v. Maintain records of inspections, testing results and quality control activities;

- vi. Carry out inspection during substantial completion of the works and recommend issuance of the Initial Hand-Over Certificate in coordination with the Client;
- vii. Undertake periodic inspections during the Defects Liability Period (DLP);
- viii. Notify the Client and contractor(s) regarding defects identified during the Defects Liability Period and supervise rectification of such defects; and
- ix. Recommend issuance of the Final Hand-Over Certificate upon satisfactory completion of defect rectification works and expiry of the Defects Liability Period.

10. Approval of Payment Certificates

The consulting firm shall jointly carry out field measurements with the contractor(s) for all completed works required for checking, verification and certification of contractor(s)' invoices and payment claims. The consulting firm shall:

- i. Verify measurements and quantities of completed works;
- ii. Check contractor(s) interim payment statements and final statements;
- iii. Certify contractor(s) monthly bills and final bills within the time specified in the contract;
- iv. Forward certified payment certificates to the Client for processing and payment;
- v. Maintain accurate records of measurements, quantities and payment certificates;
- vi. Maintain records of all works executed, payments made, materials supplied and equipment mobilized to the site;
- vii. Review variation claims, additional works and extension of time claims where required; and
- viii. Monitor contract cost and financial progress in relation to the approved budget provisions of the Project.

11. Reporting / Meeting

The consulting firm shall keep the Client regularly informed regarding the progress of the works, implementation status, budgetary and financial matters related to the Project through submission of periodic reports and meetings.

The consulting firm shall submit Monthly Progress Reports including, but not limited to, the following information:

- i. Measurements and quantities of works executed;

- ii. Equipment and construction materials supplied to site, used and/or stored;
- iii. Results of quality tests on earthworks, concrete works, construction materials and equipment;
- iv. Status of labor force and construction resources;
- v. Variation orders and additional works, if any;
- vi. Payments made to the contractor(s);
- vii. Inspection and acceptance tests of structures and completed works;
- viii. Problems encountered during implementation and recommendations provided by the consulting firm;
- ix. Environmental, safety and quality control compliance status; and
- x. Photographs showing progress of the works.

The consulting firm shall prepare and submit Final Report upon completion of the works and/or completion of the consulting firm's assignment. The consulting firm shall also prepare and provide recommendations regarding issuance of Initial Hand-Over Certificate and Final Hand-Over Certificate.

The consulting firm shall arrange and attend regular site meetings, coordination meetings and technical discussions with contractor(s) and the Client to review progress, quality of works and implementation issues, and to resolve any problems arising during execution of the Project.

Where necessary and subject to approval of the Client, the consulting firm may recommend variation orders, extension of time claims and changes in works in accordance with contract provisions.

The consulting firm shall also monitor contract costs and financial progress in relation to the approved budgetary provisions of the Project.

12. Deliverables and Reporting Schedule

Document/Reports/Deliverables	Reporting To	Delivery Schedule
Deliverable 1: Inception Report • Review of DPP, TOR and project requirements • Detailed methodology and work plan • Design criteria and applicable standards • Survey and investigation program• Project implementation schedule	Project Director	1st Month
Deliverable 2: Survey, Investigation and Design Basis Report • Topographic survey review and verification • Hydrological assessment and drainage study review • Site suitability assessment • Design parameters and recommendations	Project Director	2nd Month
Deliverable 3: Concept Design Report • Utility and Site Infrastructure Concept Design (Drainage Structures, Electrical Supply Works) • Human-Elephant Conflict Mitigation Infrastructure Concept Design (Solar Power Fencing, Tree Towers, Billboard/Road Signs) • Habitat Improvement Works Concept Design (Water Holes, Saltlick Areas) • Supporting Facilities Concept Design (Temporary Treatment Sheds, Staff Barracks) • Elephant Rescue Center Concept Design • Elephant Sanctuary Concept Design including Boundary Wall, Hospital Building, Mini Enclosure, Water Reservoir, Elephant Shed, Entrance Gate, Brick Soling, Deep Tube Wells and Food Storage Building	Project Director	3rd Month

Deliverable 4: Detailed Design Package – I	Project	4th
• Detailed Design and Drawings for Drainage Structures • Detailed Design and Drawings for Electrical Supply Works • Detailed Design and Drawings for Solar Power Fencing • Detailed Design and Drawings for Tree Towers • Detailed Design and Drawings for Billboard/Road Signs	Director	Month
Deliverable 5: Detailed Design Package – II	Project	5th
• Detailed Design and Drawings for Water Holes • Detailed Design and Drawings for Saltlick Areas • Detailed Design and Drawings for Temporary Treatment Sheds • Detailed Design and Drawings for Staff Barracks	Director	Month
Deliverable 6: Detailed Design Package – III	Project	6th
• Detailed Design and Drawings for Elephant Rescue Centers at Gazipur Safari Park and Dulahazara Safari Park, Cox's Bazar • Detailed Design and Drawings for Elephant Sanctuary at Chunati, Chattogram including all associated structures and utilities	Director	Month
Deliverable 7: Final Design, BOQ	Project	7th
• Consolidated Final Drawings • Engineer's Cost Estimate • Bills of Quantities (BOQ) • Tender Assistance and Bid Package Support	Director	Month
Deliverable 8: Construction Supervision Progress Report – I	Project	After 3
• Physical and financial progress of works • Quality control and testing records • Site inspection reports	Director	Months of construction start

- Measurement verification records
- Interim payment certification status
- Photographic documentation of progress
- Issues encountered and recommendations

Deliverable 9: Construction Supervision Progress Report – II

Project
Director

After 6
Months of
construction
start

- Construction progress review
- Contract administration report
- Variation and claim review, if any
- Quality assurance and compliance report
- Defect identification during construction
- Updated implementation schedule
- Recommendations for completion and handover

Deliverable 10: Draft Report and Completion Assessment

Project
Director

After 12
Months of
construction
start

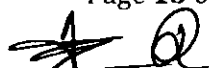
- Final construction progress status
- Final measurement and quantity verification
- Review of contractor's as-built drawings
- Defects and punch-list report
- Recommendation for Initial Hand-Over Certificate
- Operation and Maintenance recommendations

Deliverable 11: Final Report and Project Completion Documentation

Project
Director

Upon
Completion
of
Construction
Works

- Final Report incorporating Client comments
- Verified and endorsed As-Built Drawings prepared by the Contractor
- Final Completion Report
- Final Measurement and Payment Verification Report
- Defects Rectification Status Report
- Recommendation for Final Hand-Over Certificate
- Digital and Hardcopy Submission of all Drawings, BOQs, Design Calculations, Reports and Project Records




13. Duration of the Services

The duration of the assignment shall be within the implementation period of the Project. The consultancy services are expected to commence from July 2026 and continue up to June 2028, or until completion of the Project works, whichever is later.

14. Qualification and Experience of the Firm

15. The interested consulting firm shall meet the following qualifications, experience, and eligibility requirements:

- The firm shall be a registered consulting firm with at least ten (10) years of experience in construction supervision of civil works.
- The firm shall possess the following valid documents:
 - (a) Trade License;
 - (b) VAT Registration Certificate;
 - (c) Tax Identification Number (TIN) Certificate;
 - (d) Bank Solvency Certificate; and
 - (e) Audited Financial Statements for the last three (3) fiscal years.
- The firm shall have successfully completed at least three (3) similar construction supervision assignments for government and/or autonomous organizations within the last seven (7) years.
- Preference will be given to firms with prior experience in construction supervision projects in the environment and forestry sector.
- The firm shall have adequate qualified technical personnel and the necessary equipment and resources to carry out the assignment.

16. Experience and Qualification of the key professionals:

The key experts to be included in the team of the consulting firm are indicated in additional expert may be proposed by the consulting firms depending on the needs.

Sl No.	Position	No.	Qualification	Experience
1	Team Leader (Design & Supervision)	1	B.Sc. Engineer (Civil)	Minimum 15 years
2	Structural Engineer	1	B.Sc. Engineer (Civil), SEng	Minimum 15 years
3	Environmental Safeguard Specialist		B.Sc. in Environmental Science / Engineering	Minimum 7 years
4	Quality Assurance Engineer	1	B.Sc. Engineer (Civil)	Minimum 8 years
5	Cost Estimator/ QS	1	B.Sc. Engineer (Civil)	Minimum 8 years

Sl. No.	Position	No.	Qualification	Experience
6	Site Supervision Engineer	2	Diploma / B.Sc. Engineer (Civil)	Minimum 10 years / Minimum 7 years
7	Electrical Engineer	1	B.Sc. Engineer (Electrical)	Minimum 8 years

17. Payment Schedule

Payments are strictly output-based and will be processed upon the review, verification, and formal acceptance of deliverables by the Bangladesh Forest Department:

Sl. No.	Document/Reports/Deliverables	Payment Percentage
1	Deliverable 1: Inception Report	10%
2	Deliverable 2: Survey, Investigation and Design Basis Report	10%
3	Deliverable 3: Concept Design Report	10%
4	Deliverable 4: Detailed Design Package – I	10%
5	Deliverable 5: Detailed Design Package – II	10%
6	Deliverable 6: Detailed Design Package – III	10%
7	Deliverable 7: Final Design, BOQ	15%
8	Deliverable 8: Construction Supervision Progress Report – I	5%
9	Deliverable 9: Construction Supervision Progress Report – II	5%
10	Deliverable 10: Draft Report and Completion Assessment	5%
11	Deliverable 11: Final Report and Project Completion Documentation	10%

18. Responsibilities of the Client

- Provide the Consultant with all relevant project information, documents, and data required for the assignment.
- Facilitate site visits and ensure access to project sites and other necessary facilities.
- Provide the necessary space and basic facilities for establishing the site office, where applicable.

- Make decisions based on the Consultant's submitted reports, recommendations, and approvals, as appropriate.
- Ensure payment of the Consultant's remuneration within the stipulated time in accordance with the terms of the contract.
- No vehicles, office accommodation, field equipment, or any other logistical support will be provided by the Project Management Unit (PMU). The Consultant shall make all necessary arrangements at its own cost for the successful execution of the assignment.

18. Language and Format of Reports

- All reports shall be prepared and submitted in both **Bangla and English**.
- Digital copies of all reports shall be submitted in **Microsoft Word (MS Word)** and **PDF** formats.
- All photographic documentation shall be captured and maintained in **high-resolution digital format**.

19. General Information

- The successful consulting firm shall complete the consultancy services in accordance with the approved work plan and schedule, and the performance of the consulting firm under each phase of the assignment shall be to the satisfaction of the Client.
- The selected consulting firm shall work in close consultation and coordination with the Project Director (PD), concerned Divisional Forest Officers (DFOs) and other officials of Bangladesh Forest Department for preparation of proposals, plans, drawings, designs, estimates and other related consultancy services.
- The terms and conditions of this consultancy assignment shall be subject to approval of the competent authority. Any additional terms and conditions imposed by the competent authority shall also be treated as part of the terms and conditions of the consultancy services and contract documents.
- The Procuring Entity reserves the right to accept or reject any proposal and to increase or decrease the scope and quantity of works/services without assigning any reason thereof.



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