**TERMS OF REFERENCE FOR THE PROVISION OF CONSULTANCY SERVICES**

**FOR the SUPERVISION OF WORKS FOR THE CONSTRUCITON OF UL FISHERIES AND THE CENTER OF EXCELLENCE INFRASTRUCTURE**

## BACKGROUND

The Government of Liberia through the National Fisheries and Aquaculture Authority (NaFAA) has secured funding from the World Bank Group to help develop the Liberia fisheries and aquaculture sector with the overall Project Development Objective (PDO) to improve fisheries management and enhance livelihood and income for government and targeted beneficiaries. To achieve this objective the project has been divided into 5 components, as follows:

## Component 1: Improving Management and Governance of Fisheries

Under this component the project will focus on improving governance and management reforms; developing human and institutional capacity; improving policies, strategies, and institutional and legal frameworks to make them climate smart; and other relevant activities that are aimed at improving fisheries management and marine environmental health and resilience to climate change.

**Component 2: Improving Value-Addition of Fish and Fish Products**

Under this component, the project will support major civil works aimed at strengthening national post-harvest value systems. This will include the construction of an industrial fishing port and artisanal fish landing site to be equipped with post-harvest processing facilities (such as chill rooms, ice making centers, and so on); fish market facilities; store facilities for the sale of vessel engines and nets; engine repair shops; toilets; and water facilities to improve quality of landings and the fish supply at the Mesurado Pier in Monrovia.

**Component 3:** **Support to Aquaculture Development**

Under this component the project will finance the development and rehabilitation of the Klay hatchery, one of the government-run hatcheries, as a suitable fish hatchery model and aquaculture research center equipped with a standard laboratory for conducting research on fish feed, fingerling production, testing water quality, fish disease, etc.

**Component 4: Project Management**

This component will support the implementation, management, coordination, and oversight of the proposed project, including establishing and implementing a simple and smart monitoring and evaluation (M&E) system where a climate risk screen tool will be integrated throughout project implementation to identify risks, communication, awareness, and training of the implementing entities on applying the World Bank’s Environmental and Social Framework (ESF)/Environmental and Social Standards (ESS), World Bank Group ESHS[[1]](#footnote-1) Guidelines and Good International Industry Practice

**Component 5: Contingent Emergency Response Component (CERC)**

The objective of this component is to provide immediate response to an eligible crisis or emergency, as may be presented in the future.

Subcomponent 1.1 supports Institutional strengthening and capacity building. The subcomponent will support four key intervention areas: (a) creating the enabling environment for the development of the fisheries sector, (b) strengthening NaFAA’s human resource capacity in fisheries management through short- to medium-term trainings, (c) strengthening NaFAA’s administrative functions through the construction of a headquarter building, and (d) ***supporting the establishment of a Fisheries Program at the University of Liberia (UoL).***

The support to the UL will comprise activities toward supporting the establishment of a Fisheries Program at the UoL (a four-year Bachelors’ degree program in fisheries science) as a sustainable way of catering to the future capacity needs of the fisheries sector and also facilitate the establishment of a Regional Center of Excellence. It is envisaged that the establishment of the program will provide both short-term and long-term specialized training tailored to the needs of the fisheries and aquaculture industry.

To achieve the aforementioned, the project has set aside part of the proceeds to finance Consultancy Services for the supervision of works associated with the works contracts for the construction of (a) a 2-storey building hosting 19 classrooms and offices and (b) a 28-bedroom hostel.

***2.* OBJECTIVE(S) OF THE ASSIGNMENT**

The objective of the assignment is to contract a consultant to supervise the construction of the works executed by Contractors in the construction of the classrooms and offices and the hostel and, in addition, provide the associated services during the Defects Liability Period (DLP) hereafter termed as **“*Supervision Services”.***

**3. SCOPE OF SERVICES AND TASKS**

**3.1 Location**

The construction of the infrastructures is to be located on the Main Campus of the University of Liberia, Fendall, Montserrado County, Liberia.

**3.2 Scope of Services and Tasks**

The tasks to be provided under the Supervision Service Contract, specifically, construction works supervision will include, but will not be limited to the following, i.e. the Consultant shall:

1. Represent the interest of the client in any matter related to the construction contract and the proper execution thereof;
2. Furnish all necessary geodetic survey data for the use of the contractor as required for setting out of all permanent and temporary works;
3. Review and approve the contractor’s work schedule or revision thereto and any such plans or programs which the contractor is obliged to furnish for the engineer’s approval;
4. Assess the adequacy of all inputs, such as materials and labor provided by the contractors and their methods of work in relation to the required rate of progress and when required, take appropriate action in other to expedite progress.Keep and regularly update a list of the contractors’ equipment (and their conditions) to ensure compliance with the contractors’ commitments in their bids including environmental requirements;
5. Inspect and evaluate all of the contractors’ installations, housing, shops and warehouses and other accommodation facilities to ensure compliance with the terms and conditions of the contract;
6. Examine and make recommendations to the Client on all requests /claims from the contractors for extension of time, extra compensation, work or expenses or other similar matters;
7. Undertake all measurements of completed or partial works where required, determine quantities of approved works and materials, and check, certify and make recommendations to the Client in collaboration with the representatives of the Ministry of Public Works, and the Client, on the contractors’ periodic and final payment certificates;
8. Prepare and submit all necessary reports required by the Client on the progress of works, the Contractors’ performance and quality of works;
9. Propose and present for the approval of the Client any changes in the contract documents deemed necessary providing information on any effects the change may have on the contract sum, and the time of completion of the project, and prepare all necessary change/variation orders including alteration of plans, specifications and other details for the approval of the Client;
10. Inform the client on potential problems which may arise with construction contracts and make recommendations for possible solutions;
11. Maintain representatives at the sites in such a manner that adequate supervision of construction works is ascertained at all times and to ensure that all works are executed in accordance with the drawings and specifications;
12. Furnish timely assistance and direction to contractor in all matters related to the interpretation of the contract documents, ground survey controls, quality control testing and other matters related to contract compliance and progress of the project;
13. Organize the supervision of the works with proper allocations of responsibilities to the individual inspectors and supervise their work to ensure effective execution;
14. Prepare and maintain inspection and engineering reports and record to adequately document the progress and performance of the works;
15. Review and approve all of the contractor’s working drawings, shop drawings and drawings for temporary works;
16. Arrange and preside over periodic coordination and progress meetings on site;
17. Ensure the receipts of, and maintain as permanent records, all warrants required under the terms of the contract documents for materials and equipment accepted and incorporated in the project. All local materials incorporated in the project and their source is also to be approved;
18. Where provided for in the contract, organize and operate a materials laboratory on the basis of the provisions in the construction contract and, (ailing which the Consultant shall perform all laboratory and field testing of materials and products needed to assure the quality as specified in the contract document is achieved;
19. Inspect the security and safety aspect of construction works to ensure that every reasonable measure has been taken to protect life and property;
20. The Consultant shall propose to the Client a date for a joint inspection prior to the issuance of the taking over certificate. During the inspection, the consultant shall present to the Client a list of all outstanding activities and remedial works to be undertaken by the Contractor during the Defect Liability Period. The taking over certificate shall be issued based on the consensus arrived at after the inspection;
21. Redesign portions of the works when it becomes necessary;
22. Make public presentations of the work done to date at the request of the Client;
23. Supervise, it becomes necessary and relevant, the relocation of utility services lines to be carried out by the Contractor or his Sub-Contractor with the assistance of relevant agencies during the contract period;
24. Perform all other tasks not specifically mentioned above, but which are necessary and essential to successfully supervise and control all construction activities in accordance with the terms of the construction contract; and
25. Not taking any action under a civil works contract designating the Consultant as “Engineer”, for which action, pursuant to such civil works contract, the written approval of the Client as “Employer” is required*.”*

***3.2.1 Defect Liability Period***

The scope of services for this stage includes, but is not limited to the following:

1. Inspect and supervise any remedial works undertaken by the Contractor;
2. Inspect the works prior to the expiry of the contractor’s Defects Liability Period, prepare a final deficiency list, supervise remedial works and recommend to the client the date of the final inspection report of the completed works;
3. Carry out final inspection of Works together with representatives of the Client and the Contractor;
4. Prepare quarterly reports on the state of the works;
5. Prepare and issue the Final Acceptance Certificate;
6. Prepare and issue the final Payment Certificate;
7. Prepare as-built drawings in digital format acceptable to the Client;
8. Make recommendations to the Client for the return of any outstanding bonds, guarantees, etc., provided earlier by the contractor under the terms of the contract, e.g. Advance Payment Guarantees, Performance Bonds, or Performance Guarantees and Retention Guarantees;
9. Prepare a Project Completion Report (PCR) in accordance with a format to be agreed with the Client.
10. **TEAM COMPOSITION & QUALIFICATION REQUIREMENTS FOR KEY EXPERTS**

For the coverage of the assignment the Key Staff expected for the service includes a Project Manager /Senior Design Engineer, a Quality Control Engineer, two Civil Engineers/ Clerk of Works one Environmental Safeguard Specialist and the other non-key staff. All Staff members must be proficient in the English language and computer literate in applications related to reporting as per their areas of specializations.

The distribution of the other key staff and their person months are detailed in the table below. It is estimated that a total of **42** person-months of key professional time will be required during this period.

**Table 1: Deployment of Key Staff for the Execution of the Supervision Services**

|  |  |  |
| --- | --- | --- |
| **No** | **Key Staff** | **Supervision Services** |
| ***Staff Required***  | ***Person-months*** | **Total Person months** |
| 1 | Project Manager / Sen. Design Engineer | **1** | **15** | **15** |
| 2 | Environmental Safeguard Specialist | **1** | **3** | **3** |
| 3 | Quality Control Engineer | **1** | **12** | **12** |
| 4 | Civil Engineer / Clerk of Works | **1** | **12** | **12** |
|  | Total | **4** |  | **42** |

For the purposes of submitting competitive proposals, a twelve (12) month construction period is assumed, followed by a 3-month Defect Liability Period spread staggered over 6 months

The Key Staff required for this phase includes:

***Project Manager / Senior Design Engineer:*** The Project Manager / Senior Design Engineer must have a Master Degree in Design or Structural Engineering or other relevant field with a minimum post qualification experience of ten (10) years and demonstrable experience in the designing infrastructure industry and project management. He must belong to a recognizable professional institution in a class that allows him to do independent work. Proficiency in English and experience in sub Sahara Africa will be an added advantage. He will be responsible for the management of the works supervision aspects though still in charge of the overall coordination and management of the consultant’s services to ensure the satisfactory fulfillment of the requirements of the Terms of Reference. He shall perform all the functions of the Engineer as defined in the Conditions of Contract.

***Quality Control Engineer:*** The Quality Control Engineer must have a Bachelor Degree in Civil Engineering or other relevant field with a minimum post qualification experience of seven (7) years and demonstrable experience of having worked as a Quality Control Engineer on projects of similar nature. He must belong to a recognizable professional institution in a class that allows him to do independent work.

He shall be responsible for all matters relating to field and laboratory testing, quality assurance and definition of design parameters of all construction materials. Tests associated with Civil Engineering certification activities (e.g. slump tests, cube tests, etc).

***Civil Engineers /Clerk of Works:*** The clerk of Works must have Bachelor Degree in Civil Engineering/ construction or other relevant field with a minimum post qualification experience of five (5) years and demonstrable experience of having worked as a Civil Engineer/Clerk of Works on projects of similar nature. S/He must belong to a recognizable professional institution in a class that allows him to do independent work.

They shall be responsible for ensuring that value for money for the client, rather than the contractor, is achieved through rigorous and detailed inspection of materials and workmanship throughout the construction process.

***Environmental and Safeguard Specialist*:** The Environmental Safeguard Specialist shall have a Master’s Degree in Environmental Sciences, Environmental Engineering, Environmental Studies or related field with a minimum post qualification experience of at least seven (7) years and demonstrable experience of having worked as an Environmental Safeguard Specialist on projects of similar nature. S/He must be proficient in the English language and belong to a recognizable professional institution in a class that allows him to do independent work. Experience in sub-Sahara Africa will be an added advantage

1. **REPORTING REQUIREMENTS AND TIME SCHEDULES FOR DELIVERABLES**

The reporting timelines for the supervision phase include the following:

1. *Inception Report*:

 The consultant shall submit this report within three weeks after the commencement date of the works contract. This report shall include

The consultant’s impression of the project

Recommendations on any major changes in the original designs and scope proposed by the contractors.

 Construction Program of the Contractors and the state of mobilization

 The consultant’s program and strategy for the supervision services and state of mobilization and,

Structure of Monthly Progress Reports and schedule of monthly progress meetings

1. *Monthly Progress Report:*

The consultant shall submit Monthly Progress Reports. The Monthly Progress Reports shall be prepared and submitted within two (2) weeks after the end of the month and shall include:

Description of the consultant’s and contractors’ activities

Construction progress charts showing planned and actual progress.

 List of important instructions and variation orders issued to date,

Contractors’ and Consultant’s staffing during the period,

Consultant and Contractors’ equipment in use during the period,

 Permanent materials delivered during the period,

Pending issues and problems,

Any unusual or special circumstances occurring during the reporting period.

 Whether conditions and their effect on progress

Progress photographs

Minutes of all meetings that took place with the contractor during the reporting period

Any issue considered important by the consultant or the client.

1. *Draft Construction Report*:

The consultant shall present to the client a draft completion report, within four (4) weeks of the completion date for the works and after the Taking-Over Inspection. The report shall highlight the following:

The state of completion of the works

Pre-opening safety audit report and action plan,

List of all outstanding works

List of all outstanding issues on the contract

Recommendation for addressing all outstanding issues,

Program of the contractor for undertaking outstanding works

Demobilization of both contractor and consultant

Program and extent of mobilization for maintenance of the works, preparation of the Final Accountant and Final Project Report

Draft As-Built drawings

1. *Final Account Report:*

After substantial completion of the works, the contractor shall start with the preparation of the Final Accounts to be presented to the Consultant. The Consultant shall review such accounts and discuss major issues with the Client, and assist the Client to negotiate the final Account after the Defects Liability Period. After agreement on the Final Account the Consultant shall prepare the Final account and the Final Certificate for the Works and submit it to the Client for settlement.

1. *Final Construction Report:*

The Consultant shall present to the client one month after the approval of the client of the Final Account Report, the Final Construction Report. This Report shall include the following:

Engineering Report

Post opening Safety Audit Report

As-Built Drawings

All records including field books, etc, property indexed and presented as annexes to the main report

Relevant comments on the project that may help in the future implementation of similar projects.

Picture album and video documentary on the project.

1. *Records:*

The consultant shall maintain the following records:

Up-to-date records of all works performed by the contractor and a master set of contract plans incorporating all changes ordered.

The consultant will certify receipt of and maintain records and a summary log of all certifications and test results required under the terms of the construction contract for materials accepted and incorporated in the permanent works.

Project Diary- the consultant will maintain a Daily Diary (Clerk of Works Diary) which will include a thorough coverage of the contractors’ operations and activities. Comments covering specific problems, equipment, and or materials involved and the work schedules maintained by the contractor will be included in the diary.

Minutes of Meetings- The consultant will prepare the minutes of all projected meetings in which he participates and maintain such records endorsed by key participants.

1. *Special Reports:*

The consultant will promptly advise the client in writing of any factors that may significantly affect the estimated budgets, schedule, quality or safety of the works. Such reports shall be voluntary or at the request of the client.

**6. CLIENT’S INPUT AND COUNTERPART PERSONNEL**

The Client shall make available the following reports, i.e.

1. All relevant and available data and reports.
2. Design Standards of the Republic of Liberia
3. Environmental Policies of Government of Liberia
1. ESHS = Environmental, Social, Health, and Safety. [↑](#footnote-ref-1)