
**TERMS OF REFERENCE
(Individual Contractor Agreement)**

Title: Civil Engineer
Duty station: Multiple Duty Station
Section/Unit: LCR, PAMCO Costa Rica
Contract/Level: ICA **LICA 9 / IICA 1**
Supervisor: Project Manager

1. General Background

UNOPS in Panama, Costa Rica and the English and Dutch-speaking Caribbean develops initiatives in strategic sectors such as road infrastructure, water and sanitation infrastructure projects, vertical infrastructure, procurement projects, among others, providing its capabilities in the management of complex projects, technical advice and procurement, with a focus on sustainability and resilience; in all cases, applying a human rights and gender perspective.

2. Purpose and Scope of Assignment

The Civil Engineer provides assistance and technical expertise in terms of design adjustments, construction, supervision and coordination in the field, ensuring high quality and consistency of work.

In the project team, the Civil Engineer may supervise a diverse results-oriented technical team, including quality laboratory, surveying, and field inspectors. He/she could also provide guidance to other team members ensuring knowledge transfer for capacity building. The Civil Engineer will perform his/her duties at the construction site and will be supervised by the Project Manager.

Duties and responsibilities:

1. Management of design adjustments.
2. General construction
3. Construction supervision
4. Contract management
5. Knowledge management

a) Design Adjustment Management

- Support the Project Manager in the identification of omissions, defects and/or possibilities for optimization of the design of the works.
 - Support the Project Manager in the elaboration of proposals for design adjustments, based on what is indicated in the first point of this section.
 - Support the Project Manager in the coordination with resources (e.g.: topography, specialist consultants) for the elaboration of proposals for design adjustments, as indicated in the first point of this section.
 - Support the Project Manager in the review of design adjustment proposals submitted by the Contractor, as indicated in the first point of this section.
 - Any other activity relevant to this phase.
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b) General construction

- Support the Project Manager in the control, management and monitoring of the approved contract with the construction company.
- Ensure a permanent UNOPS presence on site throughout the construction phase.
- Plan and coordinate construction activities with the Project Manager.
- Monitor the progress and quality of work for the timely implementation of the project.
- Keep the Project Manager informed on the progress of the contractor's planning and coordination of site activities.
- Recommend and inform the Project Manager on relevant corrective actions related to possible delays and/or cost overruns to the Project Manager.
- Monitor the contractor's presence at the works site, including the quantities of works (BoQ) in accordance with the approved contract and report irregularities to the Project Manager.
- Prepare project related documentation such as periodic progress reports, site assessment reports, stakeholder meeting minutes, engineer's instructions and change orders, contractor's invoice review reports, certifications, documents for handover to partner and contract settlement reports.
- Support the Project Manager in the management of the final handover and acceptance report based on technical specifications in respect of the approved project.
- Provide data and information on project work to the Project Manager for reporting.
- Work closely with engineering staff to ensure technical accuracy of construction activities.
- Identify and resolve construction related issues in a timely manner by keeping the Project Manager informed.
- Collaborate with and provide support to other country offices as required.
- Ensure, at his/her level of action, adequate interaction, coordination and exchange of information with affected authorities and agencies.
- Accompany all authorities or donor representatives visiting the sites.
- Provide reports as agreed with the Project Manager indicating all project incidents, including financial, quality, health, safety and environmental issues, as well as any other problems related to possible delays, cost overruns, modifications and any other issues as agreed with the Project Manager.
- Any other activities relevant to this phase.

(c) Construction Supervision

- Review the UNOPS Construction Stage Quality Management Plan. He/she shall propose appropriate adjustments to the Project Manager if omissions, shortcomings and/or opportunities for optimization of the UNOPS Quality Management Plan are identified,
 - Develop the necessary templates and procedures to ensure the proper implementation of the UNOPS Construction Stage Quality Management Plan.
 - Budget the costs related to the implementation of the UNOPS Construction Stage Quality Management Plan. Where necessary, optimize the UNOPS Construction Stage Quality Management Plan to fit within the budget available for construction supervision.
 - Strictly implement the UNOPS Construction Stage Quality Management Plan to ensure the quality of the works executed by the Contractor. This includes scheduling and coordination - daily, weekly and monthly - with supervision support resources (materials laboratory, topography, field inspectors, specialist consultants).
 - Manage contracts for supervision support resources. This includes reviewing the proposed invoicing for each of the supervision support resources, and recommending to the PM approval or rejection of the proposed invoicing.
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- Review the Quality Control Plan proposed by the Contractor, based on the drawings and technical specifications applicable to the project. Identify omissions, defects and/or possibilities for optimisation of the Contractor's proposed Quality Control Plan. Recommend to the Project Manager the approval or rejection of the Contractor's proposed Quality Control Plan.
 - Ensure strict implementation of the Contractor's Quality Control Plan - approved by UNOPS - throughout the construction phase. Verify that the quality control results submitted by the Contractor conform to the minimum requirements defined in the Contractor's Quality Control Plan. Identify any deviations in the implementation and/or quality control results submitted by the Contractor, and notify the Project Manager.
 - Carry out daily construction inspections of the works.
 - Prepare and submit to the Contractor supervision memoranda, in case omissions or defects are identified during the construction of the works. In general, the Works Supervisor must maintain a flexible communication with the Contractor, which allows the solution of any problem during the construction stage, in the shortest possible time.
 - To elaborate Monthly Supervision Reports, which consolidate the results of all the agencies and support resources for the supervision of the works. Conclude on the acceptability - or not - of each of the work elements constructed by the Contractor.
 - Review the monthly progress reports submitted by the contractor. Analyse whether the quality support documents submitted by the Contractor comply with the minimum requirements defined in the Contractor's Quality Control Plan - approved by UNOPS. Identify any deviations in the quality control results submitted by the Contractor, and notify the Project Manager.
 - Manage differences between the Contractor's quality control results and UNOPS quality assurance as defined in the contract documentation.
 - Review the Contractor's proposed monthly invoicing against the Contractor's quality supports, and assess whether it corresponds with the quality control supports submitted by the Contractor, and with UNOPS quality verification results.
 - Support UNOPS Occupational Health, Safety and Environment Officers in the supervision of the Contractor's implementation of the OHS Plan and Environmental Management Plan.
 - Support the Project Manager in the control, management and monitoring of the approved contract with the oversight support agencies;
 - Control and monitor the work of the supervision support agencies to ensure that good supervision practices are carried out:
 - Supervise construction works and manage the execution of construction works in accordance with contractual provisions and design specifications.
 - Ensure quantity/quality control and consistency of the planned schedule.
 - Verify that the works are consistent with the technical specifications of the project and report any deviations in advance.
 - Ensure that construction works are completed on time and within budget and stipulated quality standards.
 - Regularly monitor the progress and quality of work for on-time execution of the project.
 - Document, analyse and inform the Project Manager of any negotiation and/or conflict situations between supervision and the contractor.
 - Support the Project Manager in the management of claims submitted by the Contractor.
 - Support the Project Manager in the notification and application of sanctions on the Contractor, as defined in the contractual documentation.
 - Any other activity relevant to this phase.
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(d) Contract Management

- Ensure that UNOPS contracts based on those of the International Federation of Consulting Engineers (FIDIC) are properly managed.
- Under the supervision of the Project Manager act as a negotiator between stakeholders to manage and propose solutions within the contractual framework to operational and non-performance issues.
- Develop and implement a contract management plan to track contract performance, payment certifications, variations, etc. in compliance with contractual requirements, in line with the Project Manager's request.
- Notifying and coordinating to the Project Manager potential conflicts and risks, proposing actions for their resolution and mitigation.
- Any other activity relevant to this phase.

e) Knowledge management

- Contribute to the project evaluation process, highlight project related challenges and provide constructive feedback in a continuous cycle of improvement.
- Provide training and transfer of technological know-how to national and contractor staff, advice on good construction and environmental management practices, and appropriate health and safety standards during construction.
- Contribute to the dissemination and sharing of best practices and lessons learned for development planning and knowledge acquisition.

3. Monitoring and Progress Controls

The monitoring and control of progress will be done through the different reports to be prepared by the project. The Civil Engineer will be directly involved in the preparation of these reports.

4. Qualifications and Experience

a. Education

- An advanced university degree (equivalent to a Master's degree) is required, preferably in one of the following disciplines: Civil Engineering, Construction Engineering and/or related areas.
- A university degree (equivalent to a Bachelor's degree) will be accepted, preferably in one of the following disciplines: Civil Engineering, Construction Engineering and/or related areas, provided that a minimum of 4 years of relevant experience is accredited.

b. Work Experience

- Minimum 2 years of experience (or more depending on academic credentials) fulfilling supervisory and/or contractual management and/or design review roles as a Civil Engineer in infrastructure projects.
- Knowledge in quality control of materials is required.
- Experience in elaboration and implementation of quality control plans is desirable .
- Experience in FIDIC contract management is desirable.

c. Language Requirements

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- Fluency in English is required
 - Fluency in Spanish is desirable
 - Fluency in another UN official language is desirable.

d. Key Competencies

(Technical knowledge, skills, managerial competencies or other personal competencies relevant to the performance of the assignment. Clearly distinguish between required and desired competencies)

Project Authority (Name/Title):		Contract holder (Name/Title):	
Signature	Date	Signature	Date