



**PROJECT MANAGEMENT UNIT
DOMINICA WATER SECTOR STRATEGIC DEVELOPMENT PROJECT**

**DRAFT TERMS OF REFERENCE
CONSTRUCTION SUPERVISORY CONSULTANT
ENGINEERING AND CONSTRUCTION-RELATED SERVICES**

1. BACKGROUND

1.01 The Government of Dominica (GoCD) has received financing from the Caribbean Development Bank (CDB) – United Kingdom Caribbean Infrastructure Partnership Fund (UKCIF) towards the cost of the **WATER SECTOR STRATEGIC DEVELOPMENT PROJECT FOR DOMINICA (WSSDP)**.

1.02 The Government of the Commonwealth of Dominica (GOCD) wishes to engage the Construction Supervisory Consultants (CSC) to complete Engineering and Construction-related Services of the Programme at caption within the Project Management Unit (PMU) of the Dominica Water and Sewerage Company Limited (DOWASCO). DOWASCO, through the PMU, will be responsible for the management and implementation of the Dominica Water Sector Strategic Development Programme in accordance with the *Procurement Procedures for Projects financed by CDB January 2021*.

1.03 The captioned programme’s impact is to improve universal access to reliable and affordable water and sanitation services with emphasis on vulnerable communities in Dominica. This objective is expected to yield the following outcomes:

- (a) efficient, climate resilient, reliable and sustainable supply of potable water and sanitation systems to all consumers within targeted networks of Dominica; and
- (b) enhanced operational capacity of DOWASCO to deliver better service to customers.

1.04 The CSC shall report directly to the Project Coordinator (PC), of the Project Management Unit (PMU) or his/her designate.

2. OBJECTIVES

2.01 The objectives of the assignment are as follows:

- (a) ensure that high-quality construction is achieved and that all work is carried out in full compliance with the contract documents, including the Environmental and Social Management Plan (ESMP) and technical specifications; and
- (b) provide support to the PMU in the execution of its project management functions, including its monitoring and evaluation functions.



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3. SCOPE OF SERVICES

3.01 DOWASCO will undertake the construction works using a phased approach in stages based on the reconfiguration of lots and sub-lots. The scope of works of each stage will be determined by DOWASCO.

3.02 Under the selection method established in the CDB's Procurement Procedures January 2021 Paragraph 7.11, DOWASCO will undertake the construction works and related activities of several sub-lots via the Force Account (FA) procurement method. No contract will be required for those components to be undertaken by DOWASCO. Therefore, the sub-lots implemented through FA methodology will not be subject to tender process and the CSC will provide support to DOWASCO with the following tasks and documents:

- (a) DOWASCO will request for the CDB's no-objection based on the **Justification Statement** prepared by the CSC for the different components of the project (Sub-Lots) to be implemented via Force Account. CDB will provide additional guidance during the approval process.

CDB has confirmed that the following would be required as part of the overall Force Account Documentation:

- i. The **Justification Statement** (JS) must include the following documents:
 - 1. The list of materials that would be separately procured for the works, including supply cost estimate.
 - 2. Schedule of Dayworks, for pipe installation and related works, with rates for items expected to be provided as part of the Force Account activities.
- ii. The bid documents prepared by the consultant, including Technical/Works Specifications and the Environment and Social Management Plan (ESMP) for the construction works,
- iii. Health and Safety Plan, prepared by DOWASCO,
- iv. Project/Works specific insurances, prepared by DOWASCO,
- v. Resource Allocation (including rate sheets with standard and overtime rates for inputs as applicable) and Construction Schedule, prepared by DOWASCO,
- vi. Anticipated production rate as applicable, prepared by DOWASCO,



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- vii. Payment Application and Payment Certificate templates with supporting summary of inputs (materials, labour and equipment) and work measurement sheet, prepared by DOWASCO,
 - viii. Payment for Force Account activities would be based on input costs of materials, labour and equipment.
 - ix. The efficiency of the Force Account activities would be assessed by comparing the planned resource allocation and schedule (anticipated production rate) with the actual in achieving the output.
- (b) To resolve the possibility of any likely conflict of interest during the execution of these force account works, the CDB has confirmed that DOWASCO will be the Contractor, and the Project Management Unit will be the Client (Employer). DOWASCO will be compliant with the established structure of the Force Account, ESMP requirements, and the technical specifications established for the execution of works. Therefore, the works executed by the DOWASCO Force Account will be supervised by the CSC, monitoring quality control, schedule control, and budget control.

3.03 The CSC will undertake redesign activities of those components included in the list of selected capital works of the phased approach in accordance with the requirements and standards established for Phase 2 of the Technical Assistance prepared by another consultant. The consultant must perform these activities and submit deliverables in accordance with the following schedule:

- (a) **Redesigns for Castle Bruce Supply System:** 8 weeks after the award of contract for Engineering and Construction-related Services is received from CDB.
- (b) **Redesigns for Grand Fond Supply System:** 10 weeks after the award of contract for Engineering and Construction-related Services is received from CDB.
- (c) **Redesigns for West Coast Coulibistrie Supply System:** 10 months after the award of contract for Engineering and Construction-related Services is received from CDB.

3.04 The CSC will assist DOWASCO with the preparation of the required bidding documents for the construction works to be tendered and the construction works to be undertaken by DOWASCO Force Account. The consultant shall perform these activities and submit deliverables in accordance with the following schedule:

- (a) **DOWASCO Force Account Documentation:** 10 weeks after the award of contract for Engineering and Construction-related Services is received from CDB.
- (b) **Tender Documents to tender the construction works:** 12 weeks after the award of contract for Engineering and Construction-related Services is received from



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CDB. Three (3) weeks after the submission of bids, the consultant(s) shall submit the draft report of bid evaluations.

3.05 The CSC will undertake the following tasks:

- (a) **Construction Supervision:** Technical support providing supervision of the FA and the Contractor(s) activities on behalf of PMU. This includes carrying-out all the duties of the Engineer as specified in the FA documents and the Construction Contracts, within the limitations specified therein, which corresponds to the following non-exhaustive activities:

Quality Control Supervision

- (i) Approve Contractor's key personnel including any substitutions during implementation.
- (ii) Approve materials and source of materials.
- (iii) Inspect the Works throughout the construction period.
- (iv) Supervise compliance with design standards.
- (v) Liaise with the Project Engineer of the PMU: ensure the works are executed as per the contract specifications, detailed design drawings and the bill of quantities.
- (vi) Ensure that inspection, approval and testing, when necessary, of all materials and workmanship is conducted.
- (vii) Supervise Tests on Completion.
- (viii) Order special tests of materials or completed works and/or removal and substitution of improper materials and/or work, as required.
- (ix) Ensure follow up of all modifications and control of the changes.
- (x) Coordinate required activities during the Defects Liability Period.

Schedule Control

- (i) Review and comment on the FA and the contractor's work programme.
- (ii) Work proactively with the FA and the contractors in order to plan activities on a short, medium and long term.
- (iii) Define key milestones.
- (iv) Control and appraise the progress of the Works and report any significant delays.



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- (v) Order suspension of the Works, if necessary, and authorise, with the employer's approval, extensions of the period for completion of the Works.
- (vi) Ensure contingency plan in case of delays.

Budget Control

- (i) Examine and confirm documentation to support milestone payment requests.
- (ii) Check all quantity measurements and calculations required for payment purposes and ensure that all measurements and calculations are carried out in a manner and at the frequencies specified in the FA and Contract Documents.
- (iii) Issue recommendations for payment of the FA, Contractors and Suppliers according to progress of works and status of Supplies, based on Contract conditions.
- (iv) Follow up of payments (Information of payments actually processed shall be provided by DOWASCO).

Health, Safety and Environment Control

- (i) Monitor, ensure, and report on adherence to the Health and Safety Plan.
- (ii) Monitor, ensure, and report on adherence to the Contractor Environmental, Social, Health and Safety Management Plan (C-ESHSMMP).
- (iii) Supervise the Contractor in all matters concerning public safety and care of the works and, if required, request the FA and the Contractors to provide any necessary lights, guards, fencing, and watchmen.
- (iv) Take actions to ensure that any issues of non-compliance with environmental, social and health and safety requirements are addressed in a timely manner by the Contractor; and bring to the attention of the Client any major accidents, grievances or challenges with Contractor compliance.
- (v) Supply the Client with any related documentation related to environmental, social and health and safety requirements for their review, including C-ESHSMMPs and associated Management Strategies and Implementation Plans (MSIPs), and grievance redress procedure at the contractor level (including procedure to address Sexual and Gender-based Violence)

Risk Management



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- (i) Preparation and monitoring of a risk management plan.
- (ii) Continuous assessment of the impacts of risks on the project, ensuring that updates to management plans are made as necessary by the Contractor.
- (iii) Definition of mitigation measures for each risk.

Contract Administration

- (i) Ensure contractual obligations are respected.
 - (ii) Explain and/or adjust ambiguities and/or discrepancies in the Contract Documents.
 - (iii) Issue variation orders, evaluate variations, fix rates for unpriced work, all after obtaining prior approval of the employer, and/or to make recommendations to the employer regarding alternatives.
 - (iv) Ensure amendments are in place and formalised when applicable.
 - (v) Management of claims, notices, non-conformances, request for information, etc.
 - (vi) Issue of Taking Over Certificates.
 - (vii) Issue Certificates of Final Completion after the rectification by the Contractor of possible defects at end of Defects Liability Period, and recommendation for payment of retention money.
- (b) **Document Management:** Project Management Information System: Proposing and setting up a computer-based Project Management Information System (PMIS) which will keep an up-to-date record of signed contracts, Bill of Quantity, Quality Control Management System, ESHS Management System, progress reports, minutes of the meetings, certification of contractor's invoices, completion reports and any other project related information and communications on a web-based SharePoint type information system which can be used by all the three parties - Consultants, Employer and the funding agencies. The PMU will determine the list of authorized users to whom a password would be given for making use of the PMIS.
- (c) **Stakeholder Management:** Ensure the best interest of all the relevant stakeholders is taken into account when decisions are made, ensure their active participation in the decision-making process and ensure close coordination and the appropriate flow of information. Ensures coordination of the stakeholders within the Organisational Structure of the Project.



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- (d) **Community Awareness/Social Management Plan:** Coordination of community awareness activities in collaboration with respective Community Coordination Committees, Community Liaison Officer (CLO) and the PC, to inform the community about project activities and benefits, as well as to conduct other sensitisation activities to be defined with DOWASCO/PMU. These activities shall also be done in consultation with the Gender-responsive and Socially Inclusive Communication Plan Consultant, and the implementation of the plan. This will include the following non-exhaustive activities:
- (i) Participate in community meetings throughout project implementation to ascertain and inform, among other things, the communities' views on the Project, as well as the implementation progress and impacts.
 - (ii) Production and Monitoring of a Social Management Plan, inclusive of critical aspects for mainstreaming of gender equality, sexual and gender-based violence (SGBV) and universal design environmental access requirements/standards for persons with disabilities.
 - (iii) Monitoring of Contractor's awareness raising activities / outreach activities with communities, e.g. on Workers' Code of Conduct, SGBV, and contractors' workers training plans in that regard



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4. DURATION OF THE CONSULTANCY

4.01 The CSC is expected to be conducted over a period of approximately 18 months. The Consultant will ensure additional support if necessary, during the Defect Liability Period after the Taking Over Certificate has been issued. This support will be finalised by the issue of the Final Payment Certificate.

5. REPORTING REQUIREMENTS

5.01 The CSC will present the Reports in “pdf” format, as complete documents, as well as in Microsoft Word and Excel and/or other formats used in their creation. A copy of all data used in the preparation of the Reports shall also be submitted to CDB. These reports are as follows:

- (a) Inception Report: The Inception Report will be presented within 28 days after the signing of the Contract, and it will include: Consultant’s detailed work schedule and methodology, including proposed resources and proposed payment schedule.
- (b) Monthly Reports: The Consultant(s) will, no later than the specified date of each month, prepare a Progress Report summarising the work accomplished for the preceding period. The Reports will outline any problems encountered (administrative, technical, or financial) and give recommendations on how these problems may be overcome. The Reports will detail progress of ongoing works, include analysis and summaries of all test results, and shall record the status of payment of all Contractors’ and Suppliers’ certificates, of all claims for cost or time extensions, and of actions required of PMU, other GOCD agencies, utility companies or other stakeholders to permit unconstrained works implementation. Information of payments actually processed should be provided by DOWASCO. The Reports shall all include for the monitoring of the requisite indicators of the Results Monitoring Framework.

The monthly reports shall incorporate specific environmental, social and gender monitoring and capacity building activities undertaken to ensure compliance with the ESMP. Each report should include a section or sections that speak(s) to the level of compliance of the Contractor with environmental, social and health and safety requirements stipulated in the contract documents, identifying any instances of non-compliance; corrective actions taken or to be taken, inclusive of responsibilities and timeframes; and grievances received for the reporting period.



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- (c) Contract Completion Report: The CSC will prepare a comprehensive Contract Completion Report. This Report, which will be issued within 3 months after the issue of taking over certificate of the Design-Build contractor works, will include As-Built drawings and shall summarise the method of construction, the construction supervision performed, actual implementation progress and costs compared to planned progress and costs, quality assurance and quality control results, Operational Guidelines, Standards and Procedures for the Materials Laboratory, technical issues addressed.
- (d) As-Built Drawings: The Consultant will be responsible for verifying the accuracy of the “As Built Drawings” prepared by the contractor and these drawings shall be submitted in file formats appropriate for use in AutoCAD v2018 software.

5.02 The delivery and acceptance of the reports will be aligned with the invoicing schedule of the consultant and shall form (one of the pre-requisites) the basis upon which such invoices will be actioned by the client.

6. CONSULTING TEAM STRUCTURE

6.01 The proposed modality of work is based on the assignment by a project team of professionals which will undertake the tasks listed above in order to achieve a successful completion of this infrastructure project while assuring the compliance with international procedures and regulations. The team will be constituted of the following key experts:

- (a) **Key Expert No.1: Supervision Team Leader/ Engineer (2 person-months):**
 - (i) Education: BSc. in Civil Engineering or other equivalent professional qualifications.
 - (ii) Experience: At least 15 years international experience as Team Leader in the supervision, planning and design of potable water supply and sewer and treatment (water and wastewater) systems for urban and rural communities. Experience should include supervision of similar international projects, the assessment of surface and rainwater resources, the hydraulic analysis of water transmission and distribution systems, and in the preparation of procurement documents, experience as team leader in contract management and administration.
- (b) **Key Expert No.2: Resident Engineer (18 person-months):**
 - (i) Education: BSc. in Civil Engineering.
 - (ii) Experience: At least fifteen (15) years of regional/international professional experience including at least 10 years of relevant experience in similar



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projects including contract management.

- (c) **Specialist No. 1: Water Supply and Sanitation Engineer Specialist (2 person-months)**
 - (i) Education: BSc. in Civil Engineering, Specialist on Water Supply and Sanitation or related areas.
 - (ii) Experience: Professional experience of 10 years, with a minimum of 7 years consulting on the analysis and design of water supply and sanitation system
- (d) **Specialist No. 2: Environmental Management Specialist (12 person-months)**
 - (i) Education: BSc. in Civil or Environmental Engineering, A post-graduate degree or equivalent qualification in Ecology; Natural Resource/ Environmental Management; Environmental Science or Environmental Engineering from a recognised university.
 - (ii) Experience: At least 7 years' relevant work experience in the areas of environmental assessment, preparation of environmental impact studies, environmental management plans and monitoring of environmental safeguards. Experience with ESIA procedures is a requirement. Health and safety qualifications (certification and/or experience) are an asset.
- (e) **Specialist No. 4: Social and Gender Management Specialist (12 person-months)**
 - (i) Education: Preferably a Master's Degree in Social Policy, Gender and Development Studies or related discipline.
 - (ii) Experience: The candidate should preferably have 10 years' experience in development projects using participatory qualitative and quantitative research methods in accordance with the policy, guidelines and requirements of major International Financial Institutions. Knowledge of vulnerable groups of youth, elderly, children, PWDs, indigenous peoples, and gender issues affecting men and women, respectively is critical for this assignment. Experience with sexual and gender-based violence management is required. Experience with infrastructure, transportation and/or climate resilient projects will be distinct assets.

6.02 Also, Supervisors (4), a Surveyor team (2 months), an engineer support team and an Administrative Assistant will be required in Dominica. In addition to key and specialist personnel, technical support staff such as inspectors or supervisors and surveyors should also be considered.



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7. MANPOWER, SCHEDULING AND COSTS

7.01 In estimating man-month requirements and costs of the services, the Consultant(s) should ensure that the proposal takes full account of all of the above requirements and the following items:

- (a) consultant(s) fees;
- (b) consultant(s) out-of-pocket expenses;
- (c) support staff services;
- (d) Local cost of office accommodation (in Dominica), local transport and communication. The Consultant shall include for all other costs including overheads and back-stop support.
- (e) Cost of reports production (including printing) and delivering to the Bank and Client.

8. COMMENTS BY THE CONSULTANTS

8.01 The Consultants are required to make any comments on, and suggestions for, improvements to these Terms of Reference. The financial implications, if any, of these recommendations should be indicated in the Financial Proposal.

9. COORDINATION AND FACILITIES

9.01 The PMU is the Executing Agency for the Consultancy. The Consultant(s) shall report to the Project Coordinator located within PMU. PMU will facilitate the issuance of any permits required for the Consultant(s) to carry out their duties and make available all relevant reports, documents, maps, and data. The Consultant(s) team members are expected to bring their own computers. PMU shall designate counterpart personnel whom the Consultant(s) shall mentor in all aspects of the assignment.