

TERMS OF REFERENCE

Consultancy Services for the Structural Retrofit of the Galera Point Lighthouse and the Design of a Public Restroom Facility Volume II.

PROJECT SCOPE: Evaluate, Analyze, provide a Scope of Works and a Detailed Design and Construction Supervision Services for the Structural Retrofit of the Galera Point Lighthouse and the Design of a Public Restroom Facility.

PROJECT LOCATION: Galera Point Lighthouse, Galera Road, Toco.

April 2024

TABLE OF CONTENTS

ITEM	DESCRIPTION	PAGE
1.0	INTRODUCTION	3
2.0	SCOPE OF SERVICES	5
3.0	DETAILED DESIGN STUDIES	6
4.0	MEETINGS, REPORTS AND DOCUMENTATION REQUIREMENTS	9
5.0	BID SOLICITATION PROCESS AND REVIEW	10
6.0	CONSTRUCTION SUPERVISION	10
7.0	REPORTS	16
8.0	CONSULTANCY STAFF	17
9.0	INSURANCE	20
10.0	PAYMENT	20
11.0	CONTINGENCY ALLOWANCE	21
12.0	VALUE ADDED TAX	21
13.0	LIQUIDATED DAMAGES (DESIGN PHASE ONLY)	21
14.0	EVALUATION CRITERIA (TECHNICAL)	22
15.0	SUBMISSION OF TENDERS	22
16.0	DEADLINE FOR SUBMISSION OF TENDERS	23
17.0	MODIFICATION AND WITHDRAWAL OF TENDERS	23
18.0	TENDER OPENING	24
19.0	PROCESS TO BE CONFIDENTIAL	24
20.0	EVALUATION AND COMPARISON OF TENDERS	24
21.0	EVALUATION CRITERIA	25
22.0	CORRECTION OF ERRORS	25
23.0	ACCEPTANCE OR REJECTION OF TENDERS	25
24.0	AWARD CRITERIA	26
25.0	CANCELLATION OF TENDERS	26
26.0	NOTIFICATION OF AWARD	26
27.0	EXECUTION OF AGREEMENT	27
28.0	COMMENCEMENT OF WORK	27
29.0	COMPLIANCE WITH THE LAW	27
30.0	ACCESS TO SITE	27
31.0	FORM OF TENDER	28
32.0	BILL OF QUANTITIES	31
	Appendix 1 - Photographs of Galera Point Lighthouse	
	Appendix 2 - Table of Contents for Consultant's Submission/Deliverables	
	Appendix 3 - Delivery Schedule of Tender Deliverables	
	Appendix 4 - Technical Forms	

1.0	INTRODUCTION
1.1	<p>The Maritime Services Division of the Ministry of Works and Transport (MoWT) is desirous of obtaining Consultancy Services for the Detailed Design and Construction Supervision for Structural Retrofit to the Galera Point Lighthouse, Toco and the Design of a Public Restroom Facility which is to be located on the same compound. The MoWT represented by the Permanent Secretary will procure the services required for the structural retrofit design, construction, repairs as well as for project management services.</p> <p>It is important to note that the Galera Point Lighthouse was constructed in 1897 and commemorated the Diamond Jubilee of Queen Victoria. Since its construction, the lighthouse has become a cultural heritage site and tourist attraction overlooking the meeting point of the Atlantic Ocean and the Caribbean Sea. The lighthouse is a structure (tower) with a unique shape (circular frustum) and is still in use by the Maritime Services Division as a Category 1 Aids to Navigation Lights.</p>
	Project Summary
1.2	<p>The Galera Point Lighthouse can be described as a tapered cylinder (circular frustum) and is approximately 15 meters tall, approximately 6 meters in diameter at its base (ground level) and approximately 4 meters in diameter at its apex with an approximately 600 mm thick concrete external load bearing wall which supports the internal floors. (Appendix 1 – Pic 2 refers).</p> <p>The structure is comprised of three (3) floors (ground, first and second) and the roof where the beacon is located. All floors are accessed by a steel ladder which is helical in shape and is supported off the walls (Refer to Appendix 1 Pics 7-9).</p> <p>Below is a list of some of the defects that were observed:</p> <ul style="list-style-type: none"> a) Small trees growing on the cantilever slab (Refer to Appendix 1 – Pic 11). b) The door to access the cantilever is corroded, open and cannot be closed. c) Corrosion of the metal hand rails of the cantilever. (Refer to Appendix 1 – Pic 12). d) Crack in the cantilever slab. (Refer to Appendix 1 – Pic 13). e) Minor and major corrosion of the treads and stringer of the steel ladder at all floor levels. f) Crack in the external protective paint at the eastern face of the lighthouse. One of these cracks appears to start at the base of the structure and propagates vertical to the top of the wall (Refer to Appendix 1 – Pics 17-18). g) There is a crack at all levels originating at the centre of each floor (opening for the 350 mm pipe). These cracks propagate to the edge of the slab and in some cases, the crack appears to continue vertical in the internal face of the wall (Refer to Appendix 1 – Pic 19). h) Cracks in the external wall on the western face of the lighthouse. This crack starts at the middle of the lintel of the doorway at the ground level and the crack propagates vertical to the first window. <p>At the first and second floor levels this crack appears to have fully penetrated the wall as similar cracks were observed on the inside of the lighthouse in the vicinity of the first and second floor windows. Cracks measured approximately 3mm in some instances (Refer to Appendix 1 – Pics 20-23).</p>

There are some secondary cracks (external) at the first-floor window starting at the sides of the window opening and propagating diagonally downwards. However, these cracks do not appear to have penetrated through, to the internal face of the wall.

The lighthouse is part of the National Trust and is also still in use by the Maritime Services Division as a Category 1 Aids to Navigation Lights which is vital for seafarers traversing our waters. As such, it is necessary that a detailed structural condition assessment be performed in accordance with ASCE 31-03; "Seismic Evaluation of existing buildings". The seismic retrofit should be done in accordance with ASCE 41-06; "Seismic rehabilitation of existing buildings" by an engineer suitably qualified in retrofit design. The use of ASCE 41-13 may be permitted if the retrofit design meets or exceeds a comparative design using ASCE 41-06 in terms of capacity.

In addition, it is also necessary that the chosen consultant propose rehabilitation alternatives for the client to consider in terms of technical and financial feasibility.

It is anticipated that the following works can be implemented to address the ongoing corrosion of the steel components of the structure:

- a) The growing trees in the cantilever slab should be carefully removed.
- b) The metal door accessing the cantilever should be repaired or replaced, so that it can be closed.
- c) The heavily corroded treads of the steel ladder should be replaced, so that it can be closed.
- d) All other steel members exhibiting minor corrosion are to be wire brushed to grey metal, treated with an anticorrosive product and painted
- e) If more than 10% of the section has been corroded, they member should be replaced.

It is important to note that the stair stringer and other members attached to the external wall of the lighthouse are not removed.

Further, also required is a design which will be used for the construction of a public restroom facility which must be wheelchair accessible and inclusive of the following:

- a) Two (2) restroom stalls for males (one must be wheelchair accessible).
- b) Two (2) restroom stalls for females (one must be wheelchair accessible).

Notwithstanding the above mentioned, it is necessary that a comprehensive scope of works be prepared to execute the project.

Bidders are advised to budget for a design period of **60 calendar days (2 months)** and construction duration of **90 calendar days (3 months)** for their Services.

	Project Objectives
1.3	<p>The primary objectives established are to undertake an Evaluation and Design for the Structural Retrofit of the Galera Point Lighthouse (tower) and the Design of a public restroom facility, inclusive of all associated works within the approved budget, the agreed schedule and quality requirements.</p> <p>All work and documentation produced by the successful Consultant must meet international best standards/practice for services/works of a similar nature.</p>
	Procurement of Contractors
1.4	<p>The Design-Bid-Build model of procurement is to be utilized for building the works. Consultants shall therefore produce 100% designs, drawings, specifications and suitable contract documents for this project. The standard condition of contract shall be the FIDIC 1999 Red Book which will be used for the issuance of tenders.</p>
2.0	SCOPE OF SERVICES
	General
2.1	<p>The Consultant shall perform all technical studies, field investigations and related work herein described as required to attain the objectives given in Sub-Section 1.3. In the conduct of this work, the Consultant shall cooperate fully with the MOWT. The Consultant shall be solely responsible for the analysis and interpretation of all data and for their findings, conclusions, and recommendations.</p> <p>The Consultant shall be responsible for the design standards of all the works. Recommendation for their acceptance shall be supported by studies and calculations.</p> <p>The Consultant’s attention is drawn to the fact that the services mentioned herein must be performed by them but are not necessarily limited to those services. The Consultant is expected to perform all services for works of this nature to ensure that the works are consistent with international standards and best practices.</p>
2.2	<p>In summary, the scope of works to be undertaken includes provision of detailed designs (100%) and construction supervision for the structural retrofit of (a) Galera Lighthouse, (b) design of a public restroom facility, inclusive of the following:</p> <ul style="list-style-type: none"> • Desk study inclusive of data collection and review of existing information; drawings, structural reports, assessments etc. • Site reconnaissance, inclusive of collection of anecdotal data, interview with residents, collection of site data, etc.; • Geotechnical Investigations; • Destructive and non-destructive testing particularly if a Tier 3 evaluation is required as per ASCE 31-03 AND ASCE 41-06

	<ul style="list-style-type: none"> • Prepare Conceptual Design options; • Prepare as-built drawings of the existing structure • Prepare a detailed structural condition assessment report and detailed structural retrofit design report clearly indicating assumptions made • Approval of structural retrofit design and drawings from Chief Designs Engineer MoWT • Produce detailed bidding documents (including detailed design drawings, contract conditions and detailed bills of quantities); • Produce particular technical specifications and particular environmental guidelines where required. It is to be noted that the MoWT shall supply the overall Technical Specifications and Environmental Guidelines for the works; • Prepare priced bills of quantities for the works to be tendered. The estimated budget figure should be within 10% of the actual billed cost; • Prepare detailed Construction Methodology and Construction Schedule for this project to determine a realistic project duration; • Assist MOWT in the evaluation process, if required; • Provide the final ‘For Construction Drawings’, Specifications and Bills of Quantities incorporating any changes, clarifications which may arise during the Tender Stage, for the execution of the works by the selected and awarded Contractor; • Supervision of construction inclusive of the submission of a Final Report and ‘As-Built’ ACAD drawing; and • Preparation of status reports, project schedule updates and project reports on a monthly basis or as directed by the engineer • Carrying out the function of the FIDIC Engineer.
3.0	DETAILED DESIGN STUDIES
	Collection and Evaluation of Existing Information
3.1	<p>The Consultant shall perform all work necessary to complete the detailed engineering design and preparation of bidding document. This work shall include, but not necessarily be limited to the following:</p> <ul style="list-style-type: none"> • Procurement of any drawings that may be available for the structure; • Procurement of any structural assessment reports that may be available for the structure whether they may be from MOWT or private firms; • Procurement of any geotechnical information that may be available for the site; • Determine material strengths of primary and secondary components via assumptions or testing. Note that Destructive and non-destructive testing are required if a Tier 3 evaluation is required as per ASCE 31-03 AND ASCE 41-06;

	Structural Studies and Designs
3.2	The purpose of these studies is to determine the optimum structural solution to retrofit the Galera Point Lighthouse and design of a public restroom facility.
3.3	The Consultant will conduct such research as may be necessary for structural assessment, modelling and proposing structural retrofit solutions.
3.4	The final structural project will include: (i) reports on assessment and structural retrofit design ; (ii) design calculations; (iii) as-built drawings, design drawings and construction drawings; (iv) priced and unpriced Bills of Quantity and work to be executed; (v) recommendations and specifications for construction; and (vi) any additional information needed so that the project may be used to build the works with the requisite stability, strength, functionality and durability.
3.5	The plans accompanying the structural retrofit design will show the placement, setting-out information, in ground plan and elevation of the structures, the longitudinal and transverse sections required, the dimensions and reinforcements, notes on standards, quality of materials and construction procedures, as well as general and specific details, such as to provide a complete picture of the structural project. The consultant must prepare three (3) sets of as-built drawings, design drawings and construction drawings. These drawings must be approved by the chief designs engineer prior to construction
	Construction Plans
3.6	<p>The Consultant will prepare particular specifications and recommendations for the entire project and sequencing of works. These will be included with the MOWT’s general construction specifications to comprise one Specification. The Consultants will also:</p> <ol style="list-style-type: none"> a. Include environmental criteria with an indication of measures to correct environmental impacts, and criteria for acceptance/rejection/fines. b. Prepare an account of the calculations for each of the studies listed in these Terms of Reference to determine all the items comprised in the work. c. Prepare plans and details for the execution of the work, bidding conditions, and bidding documents. d. Provide a detailed description of the procedures and schedules for the execution of the works. e. The Consultant shall be responsible for the preparation and incorporation into the works of adequate construction signs. f. Produce construction drawings in accordance with ISO standards or any other standard approved by the Employer.

	Quantity of Work, Construction Specifications and Budget
3.7	The quantities of work for this site must be calculated on the basis of the construction plans supplemented by construction specifications and standards.
3.8	The Consultant will draw up detailed specifications for the works, which must include standard construction specifications with relevant modifications where the particular characteristics of the project warrant such modification. These particular specifications must include environmental criteria.
3.9	The Consultant will prepare the project budget based on the respective quantities of work and appropriate unit prices for each expenditure item. Given the objective to minimize cost overruns, the Consultant should aim to provide budget estimates within ten percent (10 %) of the actual billed cost. To ensure that the estimated budget of the project lies within 10 % of the actual cost of execution, the Consultant will provide the documents and design elements containing all data needed to avoid redesign and/or additional design work on the part of the MoWT.
3.10	The Consultant will provide a schedule of works, work plan and safety program, which seeks to minimize impediments to worker safety, cost overruns and delays. These should include recommendations on the required pace of construction.
	Prepare Calculations, Design Drawings and Technical Specifications
3.11	<p>The Consultant shall prepare tender documentation, detailed design calculations with key assumptions, design drawings, technical specifications and cost estimates at the completion of the design phase for this project or as MoWT may direct. Where calculations are undertaken by computer, the program used must be clearly referenced and a thorough description of the input file, analysis, results obtained and their interpretation must be provided.</p> <p>The Consultant shall allow for a two-week review time by MoWT for each submittal. The Consultant shall respond in writing to and address all comments made by MoWT at each submittal.</p> <p>The Consultant shall stamp and sign each submittal. MoWT will use the bid packages to solicit public bids. Detailed calculations with key assumptions supporting the final design shall be signed and stamped by a Registered Engineer. All calculations shall be organized and indexed with pages numbered and shall be presented in such a manner that they can be easily understood by MoWT's engineering review personnel.</p>

4.0	MEETINGS, REPORTS AND DOCUMENTATION REQUIREMENTS
	Meetings/Public Consultations
4.1	The Consultants shall be required to organize, attend and participate in meetings with MoWT and other agencies. At a minimum, meetings shall be held fortnightly or at other times as required by MoWT or requested by the Consultant.
4.2	The Consultant shall report as required to fulfil the Terms of Reference. Reports should include those listed below and as stated elsewhere in the Terms of Reference and any other reports that the Consultant deems necessary.
	Final Engineering Reports
4.3	This is a summary of the general and particular characteristics of the site & the structural assessment/evaluation and retrofit design conducted. It must be complimented by results of testing, geotechnical investigations and computer modelling. Tables, charts and formulas used must have code-based references. Data must be provided for verification of assumptions made & design parameters utilized. The consultant must submit a list of quantities of work, unit prices and total budget in addition to the conclusions and recommendations for construction of the works.
	Contract Deliverables
4.4	<p>In addition to the information on bidding conditions, the Consultant will present to MoWT within the time provided for performance of the project studies and designs, the following documents:</p> <p>a. Reports:</p> <ul style="list-style-type: none"> • Structural assessment report inclusive of results of visual inspections, destructive and non-destructive testing • A Geotechnical report to determine geotechnical parameters utilized to assess the strength and stiffness of the existing foundation • Structural design/retrofit report inclusive of retrofit solutions proposed for the super-structure and the sub-structure • Risk Management report (<i>including risk management and mitigation procedures</i>); • Conceptual Design and Preliminary Cost Estimates; • Construction Execution Report; <i>Inclusive of a project schedule submitted using Microsoft Project</i> • Engineer's Cost Estimate; • Draft Final Report • Final Report; • Consultant's Monthly Progress Report – Design Phase; • Consultant's Monthly Progress Report – Supervision and Construction Phase; • Other reports as may be necessary.

All calculations as well as latest research papers on the subject to be incorporated as an appendix to the several reports.

Each individual report, at a minimum, shall contain an Executive Summary detailing its salient features as well as a layout as detailed in *Appendix 2*, where applicable, or as otherwise agreed to with the MoWT.

b. Complete bidding documents, including:

- Volume I – Invitation to Tender, Instructions to Tenderers, Conditions of Contract - General and Particular Conditions;
- Volume II – Technical Specifications;
- Volume III – Technical Proposal;
- Volume IV – Financial Proposal; and
- Volume V – Tender Drawings.

c. Supporting documents, including:

- Construction Methodology inclusive of a project schedule for the execution of the works;
- Procedures for Traffic Control during execution of the works;
- Health and Safety Plan
- Quality Control Plan
- Environmental Mitigation Plan
- Audited Financial statements for the past 3 years
- Engineer’s Estimate within 10 % of the estimated cost.

d. All reports/documents shall be submitted in electronic form in addition to hard copies.

e. Application and submission of forms to statutory bodies.

4.5 At the design review stage, the Consultant’s design submittals shall include three (3) half-size plan sets (A3 size) and two (2) copies of the reports, technical specifications and cost estimate for MoWT’s review.

At the tender stage, the design submittals shall consist of two (2) half-sized plan sets (A3 size), technical specifications and cost estimate.

ALL submittals from the Consultant shall bear the signature and professional stamp of the Consultant’s key designer/drafter and approver of the submittal in question. Electronic files of the structural model shall be in ETABS or SAP (2016 or higher). Electronic files of the plans/drawings shall be in AutoCAD (version 2010 or latest) and the documents in Microsoft Word/Excel. The soft copies shall be submitted both in native form as well as PDF.

	Reporting Requirements
4.6	The Consultant will submit all reports as specified in the contract. The Final Report is to be submitted within thirty (30) calendar days of receipt of comments on the Draft Final Report from MoWT.
4.7	The Consultant shall present two (2) copies of all reports to MoWT unless otherwise specified. Monthly reports shall be submitted by the 7 th day of the month following the month covered by each report.
4.8	The Consultant shall specify the names of all software programs used for analyses.
4.9	The Consultant will provide all reports and associated documents in English. Where excerpts are taken from references in other languages, they shall be accompanied by a certified English translation.
	Time Schedule
4.10	<p>The MoWT is desirous of completing the entire detailed design services for this project in a maximum period of sixty (60) calendar days (2 months) with staged delivery of Tender Deliverables for this project as detailed in <i>Appendix 3</i>. Accordingly, the Consultant must be prepared to submit Complete Designs and Tender Documents to enable start of implementation of this project early in the design study period.</p> <p>The Consultant may propose other time schedules for consideration that may result in an earlier completion date to the MoWT.</p> <p>The Consultant is further advised that an iterative process would exist between submission of their conceptual design through to approved concept design and initiation of detailed designs. It is expected that this iterative process can include but not be limited to the following steps:</p> <ol style="list-style-type: none"> 1. Submission of feasible Concept Options, inclusive of preliminary construction methodology for each option; 2. Review of Concept Options by MoWT; 3. Presentation to Internal Stakeholder Groups; 4. Presentation to External Stakeholders if required; 5. Submission of amended Concept Options considering feedback; and 6. Confirmation of Approved Concept. <p>Upon successful completion of these steps, the Consultant shall be advised of the approved concept for final designs. The Consultant is to cater for this process within the specified project duration.</p>
	Work Plan
4.11	On the basis of the proposed time schedule outlined in this Terms of Reference, the Consultant shall prepare a work plan / project specific management plan and manpower schedule and include this in

	<p>their offer. The work plan shall set out in detail the Consultant's approach for undertaking the design services. The Consultant is advised that he will be required to submit the detailed construction methodology/work phases of his detailed design.</p>
5.0	BID SOLICITATION PROCESS AND BID REVIEW
5.1	<p>The Consultant shall be required to assist with the provision of responses to queries and Requests for Information and to prepare technical Addenda or design updates as necessary during tender for Construction.</p> <p>The Consultant may be requested to assist the review of information submitted during the evaluation process of the tender for Construction.</p>
6.0	CONSTRUCTION SUPERVISION
	General
6.1	The Consultant shall be required to perform generally all construction supervision of the works as detailed in the contract documents prepared for the project. These include, but not necessarily limited to the Drawings, Contract, Specifications and Bills of Quantities.
6.2	The Consultant shall provide supervision services including site visits, preparation and issue of construction drawings, inspection, quality assurance, quality control, keeping daily records, reporting, etc. Additional details are provided below.
6.3	The specific responsibilities under the Consultancy Services shall be carried out in a manner compatible with the best technical standards and practices in projects of this nature. Services shall also be provided in accordance with, but not necessarily confined to, the following activities and such other instructions as maybe given from time to time by MoWT.
	Scope of Services
6.4	The Consultant will function as the FIDIC Engineer on the construction contract.
6.5	The Consultant shall perform services principally of a technical, administrative and supervisory nature that are necessary to ensure that the Contractor effectively fulfils all obligations, as set forth in the construction contract and in the designs and technical specifications for the project.
6.6	The Consultant shall establish for the Contractor(s) the control points (3 Nr.) for setting out the works at the project site. The Contractors shall perform the detailed layout survey, which shall be checked and accepted by the Engineer.
6.7	The Consultant shall be responsible for proper execution of the construction project and will ensure that the works are carried out according to the required standards of quality, accurate and timely expenditure control, the best engineering practices, in observance of the protective measures and

	recommendations aimed at eliminating and/or minimizing possible adverse environmental, health and safety impacts.
6.8	<p>Assist in the Conduct of the Pre-Construction Meeting.</p> <ol style="list-style-type: none"> 1. Schedule and prepare an agenda/issue notice for the pre-construction meeting. 2. Attend and participate in the Meeting. 3. Prepare Pre-Construction Meeting Minutes.
6.9	Check, evaluate and approve all the required submissions from the Contractor, inclusive but not limited to the project schedule, quality assurance/ quality control plan and HSE Policy. Assist the MoWT in the evaluation of insurances and bonds for the contract.
6.10	Ensure Contractor's compliance to all relevant laws of Trinidad and Tobago, inclusive of but not limited to the OSH Act during construction.
6.11	Issue all necessary instruction to the Contractor on behalf of MoWT and continuously check and control the works to completion to ensure that it is carried out in full accordance with the contract documents.
6.12	Ensure that the works are carried out by the Contractor in an expeditious manner according to schedules, target dates and within the terms of the construction contracts.
6.13	Carry out during the executing of the works, supervision and inspection to ensure conformance to agreed specifications and drawings to the satisfaction of MoWT.
6.14	Supervise the quality of construction of all elements of the works to ensure conformity with the Contract Documents. The Consultant shall provide records of his quality assurance checks on materials and construction of all elements of the works. This information should also be included on the monthly progress reports.
6.15	Check and approve all shop and working drawings as may be prepared by the Contractor including calculations of supporting systems (such as shoring, scaffolding/falsework etc., but the responsibility will remain with the Contractors provided that it is part of their scope) as may be required or prepared by the Contractor.
6.16	Verify Contractor's maintenance of the marked-up/annotated construction drawings at the site (weekly by site representative). Incorporate Contractor marked-up/annotated construction drawings into AutoCAD construction as-built drawings, to be supplied to MoWT upon completion of construction.
6.17	Check and maintain quality control of the works including concrete, pre-stressing, etc., to ensure specification requirements are met at all times.
6.18	Inspect at the site(s) or elsewhere, and check, record and approve all construction materials based upon on/off site tests performed by the Engineer, and laboratory tests as necessary or upon receipt of manufacturers' certification.

6.19	Recommend acceptance or rejection of equivalent materials proposed by the Contractor or suppliers.
6.20	Check and approve all blending of aggregates and materials to ensure specifications are met.
6.21	Check and approve all job mix formulae, concrete design, or any others that may have been included in the specifications or proposed thereafter.
6.22	Detailed inspection, testing and measurement of all phases of construction to ensure that the work is in accordance with the contract documents, and to carry out any further tests as the need arise.
6.23	Check, measure and evaluate with the Contractor their measurements and payment claims and certify these to MoWT as being correct and within the terms of their contracts. Prepare the Engineer's payment certificate and provide all supporting documentation for valuation.
6.24	Schedule, prepare agenda, conduct and prepare meeting minutes for bi-weekly project meetings (or as required) with Construction Contractor.
6.25	Advise/Alert MoWT on potential hindrances to progress, which arise or may arise in connection with the management of the contract, and make recommendations for resolutions throughout the entire construction period including the indication of escalation of costs, which may affect the project budget and increase the construction duration.
6.26	Keep records of daily site activities inclusive of the Contractor's work force, equipment and materials, delays and any other special occurrences. The Engineer would be required to maintain a copy of his daily log on site as well as include a copy in his monthly progress report.
6.27	Evaluate all claims for additional payments or extension of time submitted by the Contractor and make appropriate recommendations to MoWT.
6.28	<p>Study, prepare and submit/recommend to MoWT for approval prior to construction any contract change order related to specifications and drawings which is likely to:</p> <ul style="list-style-type: none"> (i) Increase the cost of the Project's contract sum; (ii) Change the scope and/or objectives of the Project; (iii) Conflict with the obligations under this Contract; and (iv) Result in utilization of the contingencies. <p>The Consultant shall make recommendations on these as may be necessary. MoWT's prior approval is necessary in all such cases.</p> <p>No changes shall be ordered by the Engineer which involves additional costs without MoWT's prior approval.</p>
6.29	Advise and assist MoWT in any dispute that may arise with the Contractor and give a firm opinion on any claims the Contractor may put forward, presenting a report giving all the elements on which such advice is based.

6.30	Provide additional services as required by MoWT for the satisfactory execution of the Project.
6.31	Review all subcontracts proposed by the Contractor and make recommendations for any changes or amendments that would guarantee proper execution of the subcontracted work.
6.32	Evaluate all claims for additional payments and/or extension of time submitted by the Contractor and make appropriate recommendations to MoWT.
6.33	Prepare cost estimates as and when required.
6.34	During the Defects Liability Period, the Engineer shall make at least two (2) visits of inspections of the Works. The Engineer also agrees to make more frequent visits of the Works if serious defects occur, and to report to MoWT and issue instructions to the Contractors for any repair work required, providing supervision of these works.
6.35	Notwithstanding the powers granted to the consultancy firm as the “Engineer” on the project, as detailed in the General Conditions of the Construction Contracts (FIDIC1999 Edition), the approval of MoWT shall be necessary for all technical and contractual matters (including but not limited to variation orders, increase in costs, design changes, recommendation of evaluation of claims, specification changes and material substitution) prior to instruction being given to the Contractor.
6.36	The Engineer shall immediately provide to MoWT copies of all correspondence and documents between Contractors or others and the Engineer
	On and Off Site Testing
6.37	Laboratory equipment for field and laboratory on-site testing of construction and materials shall be furnished by the Engineer or Contractor, as required. The operation of the laboratory shall be the responsibility of the Engineer. The Engineer shall be reimbursed by MoWT for on-site testing in accordance with the proposal.
6.38	The Engineer will be responsible for off-site material testing as required for certifying that the materials to be incorporated in the works is in accordance with the specifications. The Engineer shall be reimbursed by MoWT for all reasonable costs of this off-site laboratory testing in accordance with the proposal.
	Design Services and Extra Work During the Construction Period
6.39	Services under this heading will include but will not necessarily be limited to: Study, development and recommendation on changes required by MoWT or on changes suggested by the Engineer or the Contractors due to unforeseen conditions at the site and preparation of Variation (change) Orders to authorize agreed changes, estimates and construction time. No changes shall be ordered by the Engineer, which involve additional costs and time, without prior approval by MoWT. Foreseeable re-design services that may have to be performed by the Engineer shall be at no

extra costs to MoWT, if the design Consultants are awarded the corresponding supervision phase services.

Should the designs Consultants not be awarded the corresponding supervision phase services, then MoWT shall issue the necessary instructions to the appropriate designs Consultants to undertake these services and to deliver them on time at no extra cost to MoWT. In the event that the designs Consultants being unable to undertake these services, then MoWT shall issue the necessary instructions to the Engineer to undertake the re-design services and shall endeavor to be reimbursed of all costs by the designs Consultants. Non-foreseeable design or re-design services shall be undertaken by the Engineer. The Engineer further agrees not to involve MoWT in additional costs unless all such costs have been first approved by MOWT.

7.0 REPORTS

7.1 The Consultant, during the construction phase, shall provide a monthly progress report on the services within seven (7) days after the end of each month. This report will treat with the activities of the Consultants and with the various construction contracts. In addition, the Consultant will submit approved project completion (final) reports within sixty (60) calendar days after issue of performance certificate, or other such period as agreed with MoWT.

Further, the Consultants shall be required to submit to MoWT any additional reports that may be reasonably requested in connection with the progress of the services and/or on special problems.

The Consultant shall present two (2) copies of all reports to MoWT unless otherwise specified. Monthly reports shall be submitted by the 7th day of the month following the month covered by each report.

Title	Date Required	No. of Hardcopies	Remarks
Monthly Progress Reports	Within 7 calendar days after end of previous month	2	
Project Completion Reports	Within 90 calendar days after issue of performance certificate	2	Where project completion reports cannot be submitted within stipulated time, then interim report will be submitted within 90 days after issue of performance certificate.
Ad Hoc Reports	As required	2	

NB. Electronic copies of each report are also required.

7.2 Upon completion of the work, carry out final inspections with the Contractor and MoWT, prepare/distribute the list of outstanding works and defects (if any) for corrections, verify that all items on this list have been corrected, certificates of conformance have been received, that the overall project is recommended for acceptance and issue the necessary certificates of completion. Also, make recommendations on the dates of commencement of the defects liability period(s) as maybe appropriate.

	Time Schedule																			
7.3	<p>The MoWT is desirous of completing the construction services for Structural Retrofit to the Galera Point Lighthouse, Toco and the Design of a public restroom in not more than ninety (90) calendar days. The exact duration of this project will be determined upon completion of final designs. It is not expected that the construction duration should exceed ninety (90) calendar days</p> <p>The Consultant may propose other time schedules for consideration that result in optimal economic benefit to the MoWT.</p>																			
7.4	<p>The Consultant shall take into account that the construction period for this project may vary and cater for this condition in their manpower loading for the supervision services. Mobilization of staff shall be discussed and agreed with MoWT. Prior written agreement of the MoWT shall be required before mobilizing each staff member. A minimum of seven (7) days' notice will be required by the MoWT.</p>																			
8.0	CONSULTANCY STAFF																			
	Design Services																			
8.1	<p>The Consultant shall appoint a fully qualified Project Manager/Team Leader, who should be an experienced Design Engineer familiar with all aspects of structural retrofit design and construction works and with experience in similar geographic conditions and circumstances. The key professional staff shall be highly experienced and must have worked under conditions similar to those in Trinidad. The approximate number of years of required pertinent experience will be 15 years for the team leader, 10 years for the other specialists and 5 years for engineers and technicians. Curriculum Vitae Forms are to be submitted and signed by each of the key staff members for the project (Refer to Appendix IV)</p>																			
	Key Staff																			
8.2	<table border="1"> <thead> <tr> <th>Key Staff (where applicable)</th> <th>Minimum Relevant Experience</th> </tr> </thead> <tbody> <tr> <td>Project Manager (Team Leader)</td> <td>15 years</td> </tr> <tr> <td>Senior Structural Engineer</td> <td>15 years</td> </tr> <tr> <td>Senior Civil Engineer</td> <td>10 years</td> </tr> <tr> <td>Senior Geotechnical Engineer</td> <td>15 years</td> </tr> <tr> <td>Senior Cost Estimator</td> <td>10 years</td> </tr> <tr> <td>Engineering Surveyor</td> <td>10 years</td> </tr> <tr> <td>HSE/Quality control officer</td> <td>10 years</td> </tr> <tr> <td>AutoCAD Specialist</td> <td>10 years</td> </tr> </tbody> </table>		Key Staff (where applicable)	Minimum Relevant Experience	Project Manager (Team Leader)	15 years	Senior Structural Engineer	15 years	Senior Civil Engineer	10 years	Senior Geotechnical Engineer	15 years	Senior Cost Estimator	10 years	Engineering Surveyor	10 years	HSE/Quality control officer	10 years	AutoCAD Specialist	10 years
Key Staff (where applicable)	Minimum Relevant Experience																			
Project Manager (Team Leader)	15 years																			
Senior Structural Engineer	15 years																			
Senior Civil Engineer	10 years																			
Senior Geotechnical Engineer	15 years																			
Senior Cost Estimator	10 years																			
Engineering Surveyor	10 years																			
HSE/Quality control officer	10 years																			
AutoCAD Specialist	10 years																			

8.3	The Consultant shall be fully qualified to cover the following fields of expertise:	
	◆ Project Management	◆ Engineering and Design
	<ul style="list-style-type: none"> ◆ Geotechnical Engineering ◆ Engineering Surveying Services 	<ul style="list-style-type: none"> ◆ Performance Based Assessment And Structural Retrofit Design
	<ul style="list-style-type: none"> ◆ Cost Estimating ◆ Health, Safety and Environment (HSE) ◆ Risk Management ◆ Construction and Supervision 	<ul style="list-style-type: none"> ◆ (Construction) Materials ◆ Technical Specifications ◆ Preparation of structural drawings ◆ Preparation of Bid Documents
	Supervision Services	
8.4	The Consultant shall appoint a fully qualified Project Manager/Team Leader/Engineer, who should be an experienced Project Manager familiar with all aspects of structural engineering, project management, contract administration utilizing FIDIC red 1999, construction and supervision, and with experience in similar geographic conditions and circumstances. The key professional staff shall be highly experienced and must have worked under conditions similar to those in Trinidad and Tobago. The approximate number of years of required pertinent experience will be as indicated in section 9.5 below.	

Key Staff		
8.5	Key Staff (where applicable)	Minimum Relevant Experience
	Project Manager/Team Leader/Engineer/ Construction Manager	15 years
	Resident Engineer	15 years
	Site Engineers	10 years
	Materials Specialist/Engineer (QA/QC)	10 years
	Engineering Surveyor	10 years
	AutoCAD Technician	10 years
	HSSE Officer	10 years
	Construction Technicians	5 years
8.6	<p>The Engineer is required to have experience in the following:</p> <ul style="list-style-type: none"> ➤ Structural Engineering ➤ Project Management <ul style="list-style-type: none"> i) Scope Management ii) Time Management iii) Cost Management iv) Quality Management v) Resource Management vi) Communication Management vii) Risk Management viii) Procurement Management ix) Stakeholder Management ➤ Contract administration, documentation and contract law ➤ Health, Safety and the Environment (HSE) ➤ FIDIC (1st Edition 1999) - Conditions of Contract for Construction (Red Book). ➤ Management of claims <p>The requirements of the Engineer in this project are defined in Clause three (3) of the FIDIC Conditions of Contract for Construction (Red Book)</p>	
	<u>Other Requirements</u>	
8.7	<p>The professional / technical staff must be assigned to work exclusively on the project or as approved for the period necessary to fully carry out the duties assigned to them, in accordance with the nature of the project. The individuals proposed for this consultancy must be to the satisfaction of MoWT. The duration of services of consultancy staff should be clearly defined in the Consultant's proposal and methodology.</p>	

9.0	INSURANCE
9.1	The Consulting Firm shall have adequate professional insurance to specifically indemnify and provide coverage for MoWT, should any negligent acts or professional malpractice arise in the performance of the professional services. The said insurance shall be maintained in force for a period of at least two (2) years from the effective date of the commencement of the professional services in a value not less than TT \$2,000,000.00. The Insurance company shall be approved by MoWT.
10.0	PAYMENT
	Payments to Consulting Firms
10.1	<ul style="list-style-type: none"> i. All payments shall be made in Trinidad and Tobago currency, TT \$. The Consultant shall make its own arrangements for foreign currency exchange. ii. The Consultant shall indicate his preferred payment schedule. iii. Payment to the Consulting Firm for design services performed shall be based on agreed time basis rate, that is, man months or part thereof linked to specific milestones proposed and accepted by MoWT. <u>Reimbursables under design services shall be paid at cost and upon submission of receipted cheques and invoices/proof of payment. Accepted draft deliverables may be invoiced for up to 40% of the total deliverable cost. The remaining 60% payment shall be invoiced for upon Employer’s acceptance of the final deliverable.</u> iv. Payments for services under supervision of construction will be made on a monthly basis upon presentation of the corresponding invoices detailing the personnel assigned during the period. <u>Reimbursables under supervision services shall be paid at cost and upon submission of receipted cheques and invoices/proof of payment.</u> v. The Consultant shall be permitted to peruse the contract documents at MOWT with a view to satisfying itself that with the information supplied, the Consultant will be able to prepare realistic costs for supervision of the works and at the same time properly supervise the construction works. Also, the Consultant shall have the opportunity to discuss with the design Consultant any or all matters as they relate to the detailed engineering. vi. The Consultant shall ensure that it has adequately staffed the project and have properly budgeted for their costs. It should also be noted that costs for vacation entitlement for Consultant’s personnel are only valid for persons who stayed in Trinidad for 12 months. The Consultant must also ensure that its contract sum is not exceeded. The Consultant is further warned that the prior approval of MoWT must be had in writing before proceeding to incur expenditure above this sum. If such an event is going to occur the Consultant is required to give MoWT at least 2 months’ notice. If the Consultant fails to comply with this requirement, any over expenditure incurred will be held to the Consultant’s account.

	<p>vii. Standard working hours for construction is Monday – Saturday from 7am-5pm, or unless otherwise specified. It is a well-known fact that Contractors may occasionally work outside of normal working hours i.e. Sundays and even on Public Holidays. The Consultants must take this fact into account when preparing their cost proposals so that the Contractors shall be properly supervised at all times. It is to be emphasized however that staff rotation rather than payment for overtime work shall at all times be maintained.</p> <p>vii. An advance payment shall be considered for design service only. The advance payment shall be ten percent (10%) of the design contract amount less VAT, provisional sums and contingencies. It shall be repaid in four equal amounts starting from the second billing or as agreed. No interest charges will be paid by the Employer on account of late advanced payment.</p> <p>viii. The equivalent of ten percent (10%) of the amount of all fees billed (except advance payment) will be withheld from each payment to establish a performance guarantee to ensure proper execution of the services. The final payment for services performed by the Consulting Firm shall be contingent upon prior acceptance by MoWT of the final report of the respective Consulting Firm, in addition to the satisfactory completion of all the Consulting Firm’s obligations under the consultancy contract.</p>
11.0	CONTINGENCY ALLOWANCE
11.1	The Consulting Firm shall include a contingency allowance of five percent (5 %) in the proposal to provide for the cost of unforeseen additional work. The contingency allowance is for use at MoWT’s discretion and can only be drawn upon by the firm with the agreement of MoWT.
12.0	VALUE ADDED TAX
12.1	The Consulting Firm will be required to register with the Value Added Tax Administration Centre, Board of Inland Revenue, on or before award of the contract. Payment for Value Added Tax will be made only on vatable items (12.5%). MoWT reserves the right to request tax invoices for payments made by the Consulting Firm.
13.0	LIQUIDATED DAMAGES (DESIGN PHASE ONLY)
13.1	In case of delay in completion of the design services, liquidated damages equal to 0.05% of the contract price per day subject to a maximum 5% of the contract value (for design) will be imposed and shall be recovered from payments due. However, in case of delay due to reasons beyond the control of the Consultant, suitable extension of time will be granted.

14.0 EVALUATION CRITERIA

14.1 Evaluation Criteria

The evaluation and award will be made considering the tenderer’s capability to undertake the works and the price. The first stage of the evaluation process shall be the “Technical Evaluation” where we shall evaluate the tenderer’s capability to undertake the works. The following marking system will be used:

No.	TECHNICAL EVALUATION CRITERIA	Maximum Score	Qualifying Total
1	Technical Capacity (Company profile, Experience of key personnel)	30	15
2	Consultant’s experience in works of a similar nature	40	20
3	Project Schedule for Design	30	15
	<u>Total</u>	100	50
	<u>Minimum Total Technical Score (TS) required</u>	70	

The tenderer must submit adequate evidence to support each of the criteria listed above. Tenderers are required to obtain at least fifty percent (50%) of the allocated points in each of Categories (1) to (3) and attain at least seventy percent (70%) total overall in the **Technical Evaluation** in order to move on to the next stage which is the financial evaluation. All forms must be completed and submitted as per **Appendix 4**.

MoWT reserves its right to seek clarification from tenderers based on their submission of estimated resources, durations or manpower loading.

15.0 SUBMISSION OF TENDERS

15.1 The office shall establish a database, to be known as The Procurement Depository, to which suppliers or contractors can submit information with respect to, among other things, their qualifications and experience”.
All bidders must be registered with the Office of the Procurement Regulator (OPR) Procurement Depository in accordance with Section 26 (1) of the Act.

15.2	The Tender shall be made on the form supplied without any alteration therein. One complete unaltered original of the Tender Documents (together with supplementary information). Tenderers are required to fill in all blank spaces in the Tender Form and other Tender Documents.
15.3	<p>Each Tenderer shall provide the following in their tender submission:</p> <ul style="list-style-type: none"> a) The full name and business address of the tenderer. b) Signature of the person making the offer, or in the case of a company, partnership or business firm, by a duly authorized officer or employee of such company, partnership or business firm. c) The initials of the person making any offer must be inserted next to any alterations or erasures made or in the case of a company, partnership or business firm, by a duly authorized officer or employee of such company, partnership or business firm. d) Completed Form of Tender. e) Submission of mandatory and Valid Income Tax, VAT and NIS Certificates. Failure to submit these requested documents shall result in the tender not moving forward to the evaluation phase of the procurement cycle. f) All other information requested in the Tender Documents.
15.4	Each Tenderer shall submit only One Tender. A Tenderer who submits or participates in more than one Tender shall cause all Tenders with their participation to be disqualified.
15.5	Any documents submitted that are deemed fraudulent shall result in automatic rejection of the submitted Tender
16.0	DEADLINE FOR SUBMISSION OF TENDERS
16.1	Bids shall be delivered at the address specified not later than the time and date specified in the Letter of Invitation or Tender Notice.
16.2	The Named Procurement Officer, may at his discretion, extend the deadline for submission of Tenders by issuing an addendum in which case all rights and obligations of the Employer and the Tenderers previously subject to the original deadline shall thereafter be subject to the new deadline as extended.
16.3	Any Tender received after the deadline for submission of Tenders shall not be considered for evaluation.
17.0	MODIFICATION AND WITHDRAWAL OF TENDERS
17.1	The Tenderer may modify or withdraw his Tender after Tender submission, provided that the modification or notice of withdrawal is received in writing by the Named Procurement Officer prior to the prescribed deadline for submission of Tenders.

17.2	The Tenderer's modification or notice of withdrawal shall be prepared, sealed, marked and delivered with the submission of Tenders, with the inner envelopes additionally marked "MODIFICATION" or "WITHDRAWAL" as appropriate.
17.3	Except as stated in "CLARIFICATION OF TENDERS", no Tender may be modified subsequent to the deadline for submission of Tenders.
18.0	TENDER OPENING
18.1	The Tenders Committee will open the Tenders, including submissions, in the presence of Tenderers' representatives who choose to attend at the date, time and address specified in the Invitation of Tender. The Tenderers' representative who is present shall sign a register evidencing their attendance.
18.2	Tenders for which an acceptable notice of withdrawal has been submitted shall not be opened. The Tenders Committee will examine Tenders to determine whether they are complete, whether the documents have been properly signed, and whether the Tenders are generally in order.
18.3	Tenderers who fail to submit Legal and Clearance documents i.e. Compliance Certificates for VAT, TAX, and NIS will be considered unresponsive. Tenderers are informed that Failure to include updated/valid statutory documents (VAT, Income Tax Certificate and NIS Certification or respective Letters of Exemption) in tender packages, at the opening of tender, upon review and pre-screening, your tender submission shall be deemed as invalid and the MOWT shall not proceed with the evaluation of your tender submission having not met this requirement, in accordance with Section 29 (3) of the PP&DPP Act of 2015.
19.0	PROCESS TO BE CONFIDENTIAL
19.1	No information relating to the examination, clarification, evaluation and comparison of Tenders, and recommendations concerning the award of contract shall be disclosed to Tenderers and other person or persons not officially concerned with the tender process subsequent to the public opening of Tenders and before the announcement of the award to the successful Tenderer
19.2	Any effort by a Tenderer to influence the Tenders Committee in the process of examination, clarification, evaluation, and comparison of Tenders, and in decisions concerning award of contract, shall result in the rejection of the Tenderers' Tender.
20.0	EVALUATION AND COMPARISON OF TENDERS
20.1	For a Tender to be completed, the Tenderer shall fill in all schedules, forms and subsidiary information, which will be taken into consideration in the evaluation of Tenders. Failure to complete all documents as required will render the Tender non- responsive.

21.0	Evaluation Criteria
21.1	The evaluation and award will be made considering the tenderer's capability to undertake the works and the price.
21.2	During the examination of the financial evaluation and comparison of Tenders, the Tenders Committee may ask Tenderers individually for clarification or additional information of their Tenders, including breakdowns of unit rates. The request for clarification and the response shall be in writing, but no change in the price or substance of the Tender shall be sought, offered or permitted except as required to confirm the correctness of arithmetic errors discovered by the Tenders Committee during the evaluation of the Tenders
22.0	CORRECTION OF ERRORS
22.1	<p>Tenders will be checked by the Tenders Committee for any arithmetic error in computation and summation. Errors will be corrected by the Tenders Committee as follows:</p> <p>(a) Where there is a discrepancy between amounts in figures and in words, the amount in words will govern; and</p> <p>(b) If it is found on examination of a Tender that there is any discrepancy between the total amounts inserted in the Bill of Quantities (of Tender) and the amounts arrived at by valuing the quantities set out in the Bill of Quantities at the rates set against them by the Tenderer, then the amount of the Tender shall be considered to be that amount arrived at by valuing the quantities set out in the Bill of Quantities at the rates set against them by the Tenderer, unless in the opinion of the Employer there is an obviously gross misplacement of the decimal point in the unit rate, in which event the total amount as quoted will govern and the unit rate will be corrected. The Tenderer shall be directed to alter the total amount of his Tender to the amount so arrived at and if the Tenderer shall refuse to make such alteration; such Tender shall be deemed to be rejected.</p> <p>(c) Where errors are discovered after acceptance of the Tender, the errors will be adjusted by the Tenders Committee using the foregoing methods as the Tenderer would be deemed to have stood by his Tender.</p> <p>(d) The Tenderer shall not alter or otherwise qualify of the text of this Bill of Quantities. Any alteration or qualification made without the written approval of the Tenders Committee shall be ignored and the text of the Bill of Quantities as printed shall be adhered to.</p>
23.0	ACCEPTANCE OR REJECTION OF TENDERS
23.1	The Employer reserves the right to reject any or all Tenders, without limiting the generality of the foregoing. A Tender will be summarily rejected if it is conditional, is incomplete, obscure or irregular, and has erasures or corrections not initialled in the Form of Tender and Bill of Quantities. The Employer may cancel this Tender or accept or negotiate any Tender in whole or in part, at the Employer's sole discretion.

23.2	Negotiations (where applicable) - In accordance with the PPDPP Act, Section 39(3) <i>“Any discussions, communications, negotiations or dialogue between a procuring entity and a supplier or contractor shall be confidential, unless the disclosure is ordered by the court or required by law”</i> .
23.3	The Employer reserves the right to accept or reject any Tender, and to annul the Tendering process and reject Tenders, at any time prior to Award of Contract, without incurring any liability to the affected Tenderer or Tenderers in accordance with Section 33.3 of the PP&DPP Act 2015, the MOWT reserves the right to Re-tender this project based on receipt of Tender Submissions which were deemed as unsatisfactory in accordance with the evaluation criteria identified
23.4	The Employer may declare the Tendering void when none of the Tenders meet the intent of the specifications or when it is evident that there has been a lack of competition and/or that there has been collusion. In addition, all Tenders may be rejected if they are substantially higher than the official budget approved. Individual Tenders may be rejected in cases where the particular Tender is so much lower than the official estimate that it is reasonable to conclude that the Tenderer will not be able to complete the works within the specified time and at the price offered.
23.5	The Employer does not bind itself to accept the lowest or any offer or to reimburse tenderers for any expenses incurred in tendering.
23.6	Any tender which in the opinion of the Employer is so unbalanced between various unit prices in the Bill of Quantities, as to be detrimental to the interest of the Employer shall be rejected.
24.0	AWARD CRITERIA
24.1	The Employer will award the contract to the Tenderer: Whose Tender has been determined to be fully responsive to the Technical requirements of Tender Documents and who has offered the lowest reasonable evaluated tender price after due consideration of Item 23.
25.0	CANCELLATION OF TENDERS
25.1	The Employer reserves the right to cancel the bidding process in its entirety or even partially without defraying any costs incurred by any firm.
26.0	NOTIFICATION OF AWARD
26.1	Prior to the expiration of the period of tender validity prescribed by the Employer, the successful Tenderer will be notified of the acceptance of the Tender by “Letter of Award” from the Employer in writing, mailed and delivered to the address designated in the Tender. No other act of the Employer shall constitute the acceptance of a Tender
26.2	The “Letter of Award” shall name the sum that the Employer will pay to the Contractor in consideration of the execution and completion of the Services as prescribed by the Contract (hereinafter called “The Contract Price”).

27.0	EXECUTION OF AGREEMENT
27.1	The successful Tenderer will be required to execute an Agreement, after having submitted evidence of having entered into the required Performance Security and Retention Bond as stated in the Appendix to Tender, such Agreement to be prepared at the cost of the Employer. Obligations by and between the Parties shall become binding only upon the execution of the Agreement.
28.0	COMMENCEMENT OF WORK
28.1	The commencement of work shall be as identified in Item 3 of the Form of Tender.
29.0	COMPLIANCE WITH THE LAW
29.1	The Contractor shall comply in every respect with all applicable laws, regulations and building and construction codes of the Republic of Trinidad and Tobago.
30.0	ACCESS TO SITE
30.1	The Contractor shall allow free access to the Employer or his duly assigned representative for inspection visits to the site where the Works are being undertaken.

(Figures TT\$).....

plus Value Added Tax (in Word TT\$).....

(Figures TT\$).....

or such sum as may be ascertained in accordance with the Conditions of Contract for Construction (FIDIC 1999), for Building and Engineering Works designed by the Employer.

2. We agree to do any extra work, which may be ordered by the Employer, and to accept full compensation at such prices as may be agreed upon in writing by the Employer and us in accordance with the Conditions of Contract for Construction – (FIDIC 1999), for Building and Engineering Works Designed by the Employer.
3. Unless and until the Agreement is prepared and executed, this Terms of Reference together with your written “Notice of Award of Contract” hereof, shall constitute a binding Contract between us and the Employer, the rights and obligation provided for in the Contract shall become effective and binding upon our submission of the Performance Security and its acceptance by the Employer.
4. We further agree to commence the Works on the date specified in the “Notice to Proceed” from the Employer and to execute the said Works in such a manner as to complete them within the time limit set forth on the Terms of Reference, failing which, liquidation damages shall be paid by us to the Employer at the rate specified in the Terms of Reference, until the Works shall have been completed as per requirements of the Contract Documents.
5. The Tender is submitted without collusion with any other Tenderer. We have exercised our own judgement regarding the information required to prepare and submit this Terms of Reference and have utilized all data which we believe pertinent from the Employer, Employer and other sources in arriving at our conclusion.

6. We agree to abide to this Terms of Reference for a period of sixty (60) calendar days from the date fixed for receiving the same, and shall remain binding upon us and may be accepted at any time before expiration of that period.
7. We understand that you are not bound to accept the lowest or any tender you may receive.

We are,

Sir / Madam,

Yours faithfully,

..... (Signature of Tenderer) *

..... (Name of Signatory)

Block Letters

..... (Name of Company)

..... (Address in full)

.....

.....

..... (Date)

*Note In case of a Tender by a Firm or Company, the signature of a person fully authorized by the Firm or Company to sign on behalf of the Firm or Company.

BILL

OF

QUANTITIES

PREAMBLE TO BILL OF QUANTITIES

1. The number, quantities and measurement given in the Bill of Quantities represent approximate values for the place materials and works actually done by the Contractor.
2. The MOWT reserves the right to increase or diminish the amount of any item in the Bill of Quantities; provided that in no event will the amount of any item increase or decrease by more than fifteen percent (15%) of the amount of an item in the Bill without affording the Contractor the opportunity to submit revised prices for that item.
3. The sum to be paid to the Contractor will be the value at the rates or prices inserted by the Contractor in the Bill of Quantities of the materials actually supplied and the work actually done by the Contractor and accepted by the Employer.
4. The rate and prices stated in the priced Bill of Quantities shall cover all the Contractor's obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.
5. A price or rate is to be entered against each item in the Bill of Quantities, whether quantities are stated or not. Items against which no price is entered are considered to be covered by other prices or rates in the Bills.
6. General directions and description of work and materials given in the specification and the scope of works are not necessarily repeated in the Bill of Quantities since all the documents are to be read in conjunction with each other.
7. Additional works, necessitating a positive variation to the Contract, would not commence until the Contractor is in receipt of an approved Change Order, failure to adhere will result in non-payment for such claim.



**Ministry of Works and Transport
Maritime Services Division**

Project Name: Consultancy Services for the Structural Evaluation and Retrofit Design of the Galera Point Lighthouse, Toco and the Design of a Public Restroom Facility

BILL SUMMARY

ITEM	DESCRIPTION OF WORKS	AMOUNT
1.	Fees	\$
2.	Reimbursables	\$
	Sub-Total 1	\$
	Contingency (10%)	\$
	Sub-Total 2	\$
	12.5% Value Added Tax	\$
	Total to Form of Tender	\$

TOTAL IN WORDS

.....

Name of Person Tendering.....

Name of Signatory.....

Company.....

Address.....