THE URBAN DEVELOPMENT CORPORATION OF TRINIDAD AND TOBAGO LIMITED (UDeCOTT)

REQUEST FOR PROPOSAL

DESIGN BUILD EQUIP SERVICES FOR THE POINT FORTIN FIRE STATION

The Ministry of National Security ('MNS'), on behalf of the Trinidad and Tobago Fire Service ('TTFS') has engaged the Urban Development Corporation of Trinidad and Tobago Limited ('UDeCOTT') to perform project management services for the MNS' current programme for TTFS facility upgrade.

The Urban Development Corporation of Trinidad and Tobago Limited, (UDeCOTT) invites suitably qualified and experienced entities to submit proposals for Design Build Equip Services for the Point Fortin Fire Station.

The successful Contractor shall be chosen using a competitive selection process as set out in the Request for Proposals (RFP). Proponents will be required to demonstrate adequate experience in the provision of similar services as defined by the RFP. Proponents are advised that submissions must include ALL the documents as set forth in the RFP. Failure to do so may result in disqualification.

INSTRUCTIONS FOR PURCHASE OF RFP PACKAGE

(i) A complete set of documents may be purchased by making a non-refundable deposit of **TT$5,000.00 VAT Inclusive, to UDeCOTT's Operating Account #852948 at any branch of First Citizen's Bank Limited, by Cash or Manager's Cheque**.

(ii) AFTER payment has been deposited into UDeCOTT's account, the RFP package may then be collected at UDeCOTT's Head Office (with proof of payment), First Floor, 38-40 Sackville Street, Port of Spain or provided electronically upon request, from **Monday January 28th, 2019 to Friday February 1st, 2019 (excluding weekends and public holidays),** between the hours of **9:00 a.m. to 4:00 p.m. (EST), with proof of payment (stamped deposit receipt from the bank). Documents will NOT be available for collection after this deadline.**

SUBMISSION DEADLINE

All submissions, clearly marked "ORIGINAL" or "COPY" and labelled as shown below should be placed in sealed plain envelopes and deposited in the appropriately labelled Tender Boxes located on the First Floor of the Urban Development Corporation of Trinidad and Tobago Limited, 38-40 Sackville Street, Port of Spain **no later than 2:00 p.m. (EST) on March 15th, 2019**:

"Secretary, Tenders Committee
Urban Development Corporation of Trinidad and Tobago Limited
38-40 Sackville Street
Port of Spain
Design Build Equip Services – Point Fortin Fire Station"

Proposals received after the stipulated tender submission deadline **shall not** be eligible for consideration and shall be returned unopened.

The size of the opening in the tender box is 360mm x 50mm and submittals **MUST** be packaged to be able to pass through this opening. Proponents must accurately sign the Tender Submittal Form provided by UDeCOTT's representatives.

Proponents Company's Name, return address, email address and mobile number must be clearly stated on the envelope. Failure to so label the envelopes may result in disqualification.

Additional information may be requested through email forwarded to the attention of **The Secretary, Tenders Committee** at tendersecretary@udecott.com.

UDeCOTT reserves the right to reject any or all proposals for failure to comply with any mandatory requirements stated in the RFP.

SECRETARY, TENDERS COMMITTEE

DESCRIPTION OF PROJECT PHASES AND REQUIREMENTS

The required development Works to be provided by the Design-Build Contractor for this Project can be divided into six (6) main categories as follows:

- Inception and Assessment
- Preliminary Engineering
- Detailed Engineering
- Construction
- Fit-Out and Commissioning
- Training

It should be noted that the abovementioned categories are generic phases that any project is likely to undergo, yet does not necessarily imply that any of UDeCOTT's envisaged projects would undergo all. In the event a multiple phased assignment is awarded, the assignment shall be pursued in a phased approach, and the Design-Builder shall not pursue subsequent phases unless written approval, by UDeCOTT, is issued for the preceding phase.

The following sections outline the envisaged activities under each project phase. These should not be perceived as conclusive, rather, they are intended to convey the merits of the envisaged activities and proposed fully fledged assignments methodology.

<u>Inception and Assessment</u>

The Inception and Assessment shall be keyed to investigating the existing conditions, situation analysis, assessments, identification of key activities, developing detailed assignment methodologies, highlighting points requiring additional attention and so forth. The outcome of this phase shall revolve in the sphere of defining the broad outlines of the project activities including conceptual cost estimates and implementation schedules.

It is envisaged that the following tasks and activities will be included in this phase:

- Review of Design Brief with the End User and Construction Administration Consultant.
- Establishment of working relations with all involved parties.
- Delineation of assignment data requirements.
- Data collection, field verification and records documentation.
- Site investigations.
- Establishment of relevant local authority/counterpart's particular requirements related to the Project.
- Situation analysis, assessment and establishment of existing conditions. i.e. reference line
- Establishment of project bottlenecks i.e. (risks and challenges), constraints and mitigation measures.
- Development of detailed assignment methodology and work plan.

- Definition of overall project requirements and shaping of proposed project interventions.
- Preparation of conceptual designs, cost estimates and implementation schedule.
- Liaising with relevant local authorities and acting on behalf of UDeCOTT in all required aspects including issuing of formal letters, obtaining approvals and so forth.
- Preparation of Assignment Inception and Assessment Report.

Deliverables: These shall include as a minimum

1. Final Comprehensive Listing of End-User Deliverables
2. Preliminary/Outline Approvals
3. Existing Site and Building Plans
4. Existing Utility Layouts
5. Existing Civil Infrastructure Layouts
6. Preliminary Conceptual Site and Building Plans
7. Preliminary Conceptual Civil Works Layouts
8. Four (4) hard copies and Three (3) Electronic Copies of the above in CD format

<u>Preliminary Engineering</u>

Following the Inception and Assessment deliverables, the Design-Build Contractor shall proceed with the ultimate outcome which shall be the preliminary engineering documents for the project.

This phase shall, generally, embrace the following tasks and activities:

- Review of, and as required, revision and finalization of the optimum engineering project concept.
- Development of preliminary design criteria and performance standards.
- Preparation of preliminary design drawings.
- Preparation of outline specifications including data sheets, guarantee tables…etc.
- Preparation of project preliminary Bills of Quantities (BOQ's).
- Establishment of project preliminary cost estimates.
- Development of preliminary project implementation schedule.
- Liaising with relevant counterparts, key stakeholders, local authorities and acting on behalf of UDeCOTT in all required aspects including issuing of formal letters, obtaining approvals and so forth.
- Preparation of Assignment Preliminary Engineering Report

Deliverables: These shall include as a minimum

1. Preliminary Plans, Sections and Elevations, Structural, Civil and M&E Details
2. Typical Construction Details
3. Three-dimensional Sketches
4. Preliminary Equipment Layouts

5. Preliminary Landscape Design
6. Preliminary Design Calculations
7. Outline Specifications, Bills of Quantities and Material Lists
8. Four (4) hard copies and Three (3) Electronic Copies of the above in CD format

Detailed Engineering

Following approval of the Preliminary Engineering deliverables, the Design-Build Contractor shall proceed with the Detailed Engineering, the ultimate outcome of which shall be the detailed engineering documents of the project. This phase shall generally embrace the following tasks and activities:

- Review, revision and finalization of project concept and preliminary designs.
- Development of detailed design criteria and performance standards.
- Preparation of detailed design calculations and reports.
- Preparation of detailed design drawings.
- Preparation of detailed specifications including data sheets, guarantee tables etc.
- Preparation of project detailed BOQ's.
- Establishment of project final cost estimates.
- Development of final project implementation schedule.
- Liaising with relevant counterparts, local authorities, key stakeholders and acting on behalf of UDeCOTT in all required aspects including issuing of formal letters, obtaining approvals and so forth.
- Preparation of Assignment Detailed Engineering Report

Deliverables: These shall include as a minimum

1. Final Site and Building Plans
2. Final Sections, Elevations and Structural, Civil and M&E Details
3. Final detailed Specifications, Bill of Quantities and material lists
4. Final Design Report inclusive of Final Design Calculations
5. Four (4) hard copies and Three (3) Electronic Copies of the above in CD format

Construction

Following approval of the Detailed Engineering deliverables, the Design-Build Contractor shall proceed with the Construction of the Works, the ultimate outcome of which shall be the completed substantive structure and associated external and internal utilities. This phase shall generally embrace the following tasks and activities:

- Submission of Construction issue drawings and specifications.
- Implementation of construction activities to the agreed schedule of construction.
- Implementation of Quality Assurance and Quality Control activities.

Deliverables: These shall include as a minimum

1. Final as-built Site and Building drawings
2. Final project quality dossier.
3. Complete Fire Station structure consistent to the design documents.
4. Four (4) hard copies and Three (3) Electronic Copies in CD format of items 1 and 2 above.

Fit Out and Commissioning

Following approval of the Construction deliverables, the Design-Build Contractor shall proceed with the fit-out and commissioning of the works, the ultimate outcome of which shall be the fully operational Fire Station. This phase shall generally embrace the following tasks and activities:

- Supply and installation of furnishings, fixed equipment and building systems.
- Testing and Commissioning of fixed equipment and building systems.
- Complete Fitted-out Fire Station consistent to the design documents and User Brief.

Deliverables: These shall include as a minimum

1. Equipment and system testing and commissioning reports.
2. Equipment and system warranties.
3. Equipment and system manuals.
4. Four (4) hard copies and Three (3) Electronic Copies in CD format

Training

The Design-Build-Equip Contractor shall provide training which shall include all equipment furnished and installed pursuant to the Contract.

There shall be two (2) consecutive training sessions for each department within this new facility. Each training session shall last a minimum of two (2) hours. The schedule time for each training session shall be coordinated with UDeCOTT and End User. The Design-Build-Equip Contractor or its representative shall be a qualified trainer from the manufacturer or specialist sub-contractor, trained in the use of that piece of equipment. A copy of the Trainer's qualifications shall be provided to UDeCOTT for review and approval, at least 72 hours prior to the training session. After each training session, the Design-Build-Equip Contractor, his representative, or the specific Training instructor, shall be available for up to one (1) hour for follow up questions and/or instructions. The cost associated with all training requirements listed above, shall be the sole responsibility of the Design-Build-Equip Contractor.

Each training session shall be professionally video-taped on DVD disc. Three (3) copies of the DVDs shall be provided to the Client by the Design-Build-Equip Contractor within 48 hours after

each training session. UDeCOTT or the End User shall be entitled to make as many copies as possible for current or future use.

The Design-Build-Equip Contractor shall ensure that for each training session, a minimum of thirty (30) training manuals shall be available in hard and electronic (PDF) copy. All electronic and hard copies of the manual shall be written in English. The training manuals shall include, at a minimum, the following for each piece of equipment: detailed data cut sheets and specifications, operations manual, wiring diagrams (if applicable), the performance and operational plan, a listing of replacement parts and supplier, the maintenance manual, the detailed warranty coverage certificate, the commissioning plan with sign-off certification.

DESIGN-BUILDER REQUIREMENTS

It is expected that the design will consider:

- The requirements of the User Brief
- Statutory codes, standards and guidelines
- International codes, standards and guidelines
- Or where not applicable, industry accepted bets practices.

Should there be any discrepancy in the above, the more stringent requirement should be applied, unless varied by tender addendum.

DESIGN

The design phase for this project will consist of the following:

- Preliminary investigations
- Inception and Assessment
- Preliminary / Schematic Design and Engineering
- Detailed Design and Engineering

Architectural Design Criteria

General Design Guidelines:

1. Functional, modern, economically and environmentally sustainable design is a mandatory requirement for the Fire stations.
2. Sustainable design should consider all aspects of the works from construction to use.
3. The security challenges shall be creatively addressed and inherent in the design solutions in terms of building layout and envelope.
4. The building should consider proper space planning as well as proper material and equipment selection for energy efficient operations. Exterior finishes and materials must be able to withstand the demands of the climate (heat, humidity, rainfall) as well as reduce building cooling loads.
5. Maintenance requirements should be minimal to ensure that the building is attractive for many years without extensive upgrading and maintenance.
6. Interior finishes are required to be attractive, durable and easy to maintain yet be of high aesthetic value. It is expected that the stations will be intensively used and finishes need to be durable, easily cleaned and vandal resistant.

ENGINEERING CRITERIA

The Design-Builder Contractor shall be required to establish and secure approval of all engineering and technical design criteria for each discipline, as well as the relevant codes and standards (both local and international) that would govern the design.

Civil Engineering Requirements

Drainage

Design Storm Return period to be in accordance with the requirements of the Ministry of Works and Transport Drainage Division.

Pavement

Design of pavements shall be in accordance with Ministry of Works and Transport guidelines and of the User Brief requirements

Structural Requirements

Fire resistance

The fire resistance of the structure and designated zones are to be as per requirements of the Authority having Jurisdiction (AHJ) in Trinidad and Tobago

Lateral Loads / Seismic design

Building shall meet seismic codes and standards applicable in Trinidad and Tobago.
Buildings within coastal flood plains to be designed in accordance with the Statutory Codes of Trinidad and Tobago.

MEP Requirements

Fire Protection

Fire protection shall be provided in accordance with the requirements of the:

- Trinidad and Tobago Fire Authority
- NFPA (USA) standards
- It is anticipated that, at minimum, the building will contain:
- a suitably rated hose reel system in accordance with NFPA 14 with a dedicated water storage system
- dry suppression system(s) for critical areas which would include the server room
- Portable fire extinguishers of a suitable specification and quantity as stipulated by the AHJ.
- Addressable, microprocessor based, zoned, non-coded, electrically supervised, two-stage fire alarm system with DCLA style data communication link.
- Provide two alpha-numeric remote annunciators, one on the Main Fire Alarm Panel located in the entrance area or communications room.

- Design and install system in accordance with the requirements of all applicable NFPA/UL standards.
- Annunciation for and connections to sprinkler system and fire standpipe systems and air handling systems.
- System verified and commissioned in accordance with NFPA.
- System to be modular in design to allow for minimum of 25% future expansion. Each circuit shall not be loaded to more than 80% capacity.

Plumbing

Water supply, storage, reticulation and treatment shall be provided in accordance with:

- Standards and guidelines of the Water and Sewerage Authority of Trinidad and Tobago (WASA)
- National Plumbing Code of Trinidad and Tobago
- International Plumbing Code (IPC) – 2012 edn
- Domestic water storage facilities to allow for three (3) days of normal operation without external water supply.
- The building shall be connected to the WASA sewer main in the area, if available and approved by WASA. If interconnection is not possible or permitted, a wastewater treatment and disposal system acceptable to the WASA and Health Authorities shall be provided. This system shall discharge an acceptable level of effluent as per statutory requirements
- Water supply for irrigation purposes shall be provided where convenient
- Water storage and supply system for fulling the water tenders is required
- A fire hydrant is required on the site. Contractor is to liaise with TTFS regarding the specification of the hydrant and with WASA regarding the installation guidelines.

Ventilation and Air Conditioning

- Design Conditions: Refer to 2005 ASHARE Handbook – Fundamentals – Design Conditions for CROWN POINT AIRPORT, Trinidad and Tobago
- VAC system shall be provided in accordance with ASHRAE 90.1 – 2016
- All VAC equipment to be AHRI rated / UL Listed
- Equipment exposed to saline environments to be specified for corrosion resistance and coated accordingly
- Indoor Design Conditions for Public, Office, and Living Spaces:

Min Temp:
21 degrees C (70 degrees F) Max Temp:
26 degrees C (78 degrees F) Max Relative Humidity:
65%

- Ventilation rate(s) shall be provided in accordance with ASHRAE 62.1-2013

- Equipment area ventilation: Minimum of 3 CFM per sq. ft
- Enclosed parking garages must have a forced, mechanical exhaust system along with a carbon monoxide / nitrogen dioxide monitoring and alarm system. The make-up air must be filtered to prevent the ingress of saline air into internal spaces
- Acoustical Criteria (maximum values):
- Meeting Rooms and Private Offices – NC30
- General Office Spaces – NC35
- Circulation Spaces – NC40
- ALL VAC Systems to be tested and commissioned. Commissioning reports to include air balancing reports

Electrical Power and Lighting

The electrical power and lighting system shall be provided in accordance with requirements of:

- National Electrical Code (NEC) 2018
- TTS 171: Part 1: 2015 Trinidad and Tobago Electrical Wiring Code Part 1 – Low Voltage Installation
- TTS 171: Part 2: 2002 Trinidad and Tobago Electrical Wiring Code Part 2 – High Voltage Installation
- NFPA 780 – Standard for the Installation of Lighting Protection System 2011
- IEEE 81 – IEEE Guide for Measuring Earth Resistivity, Ground Impedance and, Earth Surface Potentials of a Ground System
- IESNA standards
- The building shall be connected to the electrical infrastructure (T&TEC) in the area. A three-phase supply should be sought in most areas but there may be certain areas where only a two-phase supply is available. All incoming power will be underground.
- Emergency power (100% standby) will be supplied to the entire distribution network by means of generator(s). Stand-by generator(s) shall be equipped with sufficient fuel supply for 3 days autonomy.
- Systems for Transient Voltage Surge Suppression (TVSS) and lightning protection will also be installed.
- An auxiliary switch to activate the lighting to the dorms is to be located in the control room.

Uninterruptible Power Supply (UPS) Systems

- UPS shall be installed to provide clean electrical power (115-120V) outlets for all essential loads. These outlets would be a different colour to “normal” outlets.
- Security System (Intrusion alarm, access control and CCTV)
- Communication Systems
- Critical operations areas
- Fire Alarm and building safety systems

- Computer systems.

Communication Systems

- The End User will advise of the requirement for an aerial radio antenna and the specifications thereof. If required, underground ductwork is to be installed from the radio antenna to the main radio control room
- Underground ductwork is required from the property boundary to the server room to facilitate cabling by the End User's selected Internet Service Provider (ISP)
- Extra underground ductwork is required for managed television system and future use.
- A structured cabling solution is required which will comprise:
    - ✓ Fibre optic vertical backbone to link floors
    - ✓ Fibre optic horizontal cabling to link various buildings / major blocks
    - ✓ Horizontal distribution cabling (CAT 6).
    - ✓ There must be at least two (2) data drops per workstation

- Include for patch cables from outlet to devices
- Identify telecommunications spaces, pathways, cabling terminations, and related equipment in accordance with ANSI/TIA/EIA-606-A-2002; Administration Standard for Commercial Telecommunications Infrastructure; May 16, 2002.
- Grounding in accordance with ANSI/J-–D--607-A-2002; Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications, Latest version.

Security System

Access Control and Intrusion Alarm System

- Provide a suitable Passive Alarm System, Access/Door Control System and Intrusion Detection System
- System may be analog or IP-based

Closed Circuit Television System (CCTV) System

- Surveillance should be viewable at a centralized security management system inclusive of desk, monitors, multiplexers, etc.
- System to be IP based
- Video surveillance system shall include recording and archiving functions for 14 days minimum
- The number of cameras and IT equipment will be determined during the finalization of the scheme designs.
- System to have remote viewing capability

Public Address and Alarm Notification System

- A centralized public address system inclusive of microphone console, amplifiers, AV tuner, media player wiring, speakers, etc.
- System can be analog or IP based
- A dedicated button located near the main console is to be incorporated into the public address system which will be used for activating 'call out' procedures. This button will enable broadcast of a pre-determined tone on the public address system.

Diesel Storage System

- A diesel storage and dispensing system shall be installed in accordance with the requirements of the Ministry of Energy and Energy Industries (MEEI).
- The capacity of the system is stated in the User Brief
- The activating signal to permit operation of the fuel dispenser shall be installed in an adjacent Petrol Office.

Maintenance Requirements

The proponent is required to incorporate maintenance systems and considerations for maintenance such as:

- Allow for washing and cleaning of car park areas, fire tenders, parking garage, etc. and provide proper drainage for run-off water.
- Access ways, platforms, walkways, etc. to permit ease of maintaining equipment and the building façade
- Suggested maintenance plan inclusive of schedules, manuals, as-built drawings, etc.

Preventive Maintenance System

The Design-Build Contractor must develop in conjunction with the Client's maintenance team, a detailed Preventive Maintenance System for all mechanical, electrical, security and architectural components of the buildings.

FREQUENTLY ASKED QUESTIONS (FAQs)

Design-Build-Equip Services for the Point Fortin Fire Station

1. What is the purpose of this Request for Proposal?

The purpose of this Request for Proposal is to identify and contract a suitably qualified and experienced Contractor with the Design-Build-Equip expertise necessary to undertake the Project

What is the Location of the site?

2. The new Point Fortin Fire Station (PFFS) is proposed to be constructed along Techier Main Road, Point Fortin. The project site is approximately 0.9556 Ha. The Design-Builder will be responsible for establishing the service levels of the existing electricity, water or sewage and telecommunication utilities available at the Site. Where applicable, the Proponent shall cater for the provision of a shared access between the proposed Fire Station site and adjacent facilities.

3. Are there any eligibility requirements for this Procurement Process?

In order to be eligible for evaluation and/or consideration to provide the Works, the Proponent must be able to demonstrate the following:

- Submission of receipt for the purchase of the RFP package;
- Independently Audited Financial Statements (for companies) and Accountant's Reports (for partnerships and sole proprietors only) for 2015, 2016 **and** 2017 in accordance with International Financial Reporting Standards or any other such internationally accepted accounting standards (For Joint Ventures, each member MUST meet this requirement) which clearly identify the individual financial position of the Proponent;
- Registration or incorporation for at least four (4) years (For Joint Ventures, each member MUST meet this requirement) ;
- Proof of current membership status of all Architects with the Board of Architecture of Trinidad and Tobago (BOATT) where applicable.
- Proof of current membership status of all Engineers with the Board of Engineering of Trinidad and Tobago (BOETT).
- Incorporation or otherwise registered to do business in Trinidad and, as evidenced by the appropriate statutory documents i.e. VAT, NIB, BIR Clearance Certificates and Certificates of Incorporation or Registration. (This shall apply to both a foreign Proponent applying alone or a Joint Venture with a foreign member);
- Firms must submit all supporting documents as required by Section 6 of the RFP;

4. Are Proponents required to submit a Bid Bond with their Proposals?

Each proposal must be accompanied by an original Bid Bond in the value of TT$1,000,000.00 in the form of a Bank Guarantee acceptable to UDeCOTT and shall be valid for thirty-five (35) days beyond the end of the Tender Proposal Validity Period.

5. Would proposals submitted by Joint Ventures be acceptable?

Proposals submitted by Joint Venture (JV) entities would be acceptable providing that the following is included in their Proposals:

1. Joint Venture Guarantee
2. Joint Venture Agreement (executed)
3. Audited Financial Statements, Litigation History and Experience of each member
4. Other related documents identified in the RFP.

6. What is the recommended team composition?

At a minimum, the proposed team should comprise the following:

1. Project Lead/Director (1 No.)
2. Design Manager/Lead (1 No.)
3. Construction Manager/Project Engineer (1 No.)
4. Construction Supervisor (1 No.)
5. HSSE Manager (1 No.)
6. QA/QC Manager (1 No.)
7. Administration Manager (1 No.)

7. What experience is the Proponent's Key Human Resources required to demonstrate?

An individual may only be proposed for one position and must demonstrate experience on projects of similar nature in which the key human resource has participated, for which the construction cost exceeds Eighteen Million Trinidad and Tobago Dollars (TTD$, 25,000,000.00).
Greater consideration will be given to those proponents who can demonstrate experience projects of a higher value.

Proponents are to note that the responses provided as guidance to these Frequently Asked Questions does not relieve the Proponent of its obligation and responsibility to fulfill and comply with all requirements of the Request for Proposals.