



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

# **REQUEST FOR PROPOSAL**

## **THE RE-DEVELOPMENT OF THE PORT OF SPAIN GENERAL HOSPITAL CENTRAL BLOCK - PACKAGE 03 - BUILDERS WORKS, MEP AND EXTERNAL CIVIL WORKS**

The Urban Development Corporation of Trinidad and Tobago Limited, (UDeCOTT) invites suitably qualified and experienced entities to submit proposals for the **Re-Development of the Port of Spain General Hospital Central Block - Package 03 Builders Works, MEP and External Civil Works**.

The successful contractors shall be chosen using a competitive selection process as set out in the Request for Proposals (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. The RFP package may be purchased from **Friday July 22, 2022**, by making a non-refundable deposit of **\$10,000.00 VAT Inclusive**, to UDeCOTT's Operating Account #852948 at any branch of **First Citizens 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, 100622, from **Friday July 22, 2022 (excluding weekends and public holidays)**, between the hours of **9:00 a.m. to 4:00 p.m. (AST)**, with proof of payment (stamped deposit receipt from the bank).

### **SITE VISIT AND INFORMATION SESSION**

An **Online Information Session** will be held via **Microsoft Teams** on **Tuesday August 2, 2022 at 11:00 a.m.** This will be followed by a Site Visit on Wednesday August 3, 2022 at 1:30 p.m. Interested parties are kindly asked to confirm their availability, together with the **names and preferred email addresses** of their representatives who will be in attendance, via email to [tendersecretary@udecott.com](mailto:tendersecretary@udecott.com).

### **SUBMISSION**

Proponents are advised that submissions must include ALL the documents as set forth in the RFP and must be in accordance with the terms therein.

**Failure to do so may result in disqualification.**

Proponents are advised that **only PDF** files can be uploaded onto the E-Tender platform. The responsibility for file conversion resides with the Proponent and failing to submit proposals in PDF format may result in disqualification.

The deadline date for submissions is **Friday September 30, 2022 at 2:00 p.m.**

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

## Project Site

The Port of Spain General Hospital (POSGH) is located in the central urban core of Port of Spain adjacent to the historical districts surrounding the Queens Park Savannah. The site is in the district of Belmont, which borders what is now the volatile neighborhood of East Port of Spain. It is bounded immediately to the west by Charlotte Street and further to the west by the Queen's Park Savannah. To the south it is bounded by Belmont Circular Road and to the east by the St. Ann's River/ East Dry River. To the north is Ministry of Health (MoH) property, which currently houses MoH administrative and national blood testing services.



Figure 1: Location of Site at Port of Spain General Hospital

## Description of Services

### 1. OBJECTIVES

To safeguard the health of Personnel and damage to Property while undertaking the completion of the Re-Development of the new central block building at the fully operational Port of Spain General Hospital.

### 2. SCOPE OF WORKS –

The Scope of Works of the project is for the full completion of the POSGH - Central Block and associated support services. The Project comprise the design completion, supply, deliver, install, construct and complete fit-out in accordance with scope.

The Scope of Works includes the acceptance and completion of existing designs, describing in detail the POSGHCB requirements for design and construction which will anchor the project serving as an essential point of scope reference throughout project.

The principal elements for the POSGHCB Project shall include:

- **Design** The Employer has substantially completed the designs for the POSGHCB. The Proponent will be required to complete the Architectural Construction Designs (This includes curtain wall designs) inclusive of making any amendments as required/justified to all other designs, but will be deemed considered in the proponents methodology and cost at the time of tender. (Acceptance of Structural Designs, Architectural Floor Layouts, Mechanical Electrical Plumbing and Medical Designs, Architectural Design Development Designs);
- **Construction** (Completion of the 540-bed 13 storey hospital building (Tower 1 & 2), and supply and installation support equipment and services);
- **Construction of all external support structures and civil works** (Construction of the associated external civil works as per the designs, complete with all structures, drainage, service utilities, landscaping and car park spaces in support of the 540 bed hospital and support services (Ancillary Structures in support of the Mechanical Electrical Plumbing and Medical Plant, such as the CEP Building, the Oxygen Concentrators, the Chilled Water Units and the like are deemed included in the scope);
- **Construction** (Installation of 2 Nr. fully functional enclosed connecting bridge links, to connect Tower 1 to the Bed Lifts (at 2<sup>nd</sup> Floor) at the roof level of the existing Operating Theatre Building and at ground floor of the Accident and Emergency Building ());
- **Construction integration (Supply and installation** of all clinical information, communication and technology (ICT) infrastructure and cabling (all types) to ensure complete integration and functionality with the new Central Block and the existing buildings at the POSGH.

– The principal elements for the POSGHCB Project Scope is listed as:

Item	Description	Proponent
1	Contractor's General cost items including Work Programmes, Scaffolding, Temporary Water, Temporary Power, welfare Facilities, Site Offices, Tools, Security, Insurances, Bonds, Statutory Approvals and the like necessary for the works.	
2	Preparation/completion of Design Documents, Construction Drawings, Specifications, Design Reports, Calculations, Engineer of Record and the like necessary for the works. (Inclusive of obtaining all FINAL statutory approvals).	
3	Contractor's General coordination and supervision of pre-installation and installation of items of Medical Equipment having impact on Structural and MEP Services, supplied by the Employer. General Attendance to Employers Contractors such as but not limited to:- <ul style="list-style-type: none"> <li>– Scaffolding, Construction Lifts, Lifting Equipment</li> <li>– Temporary Potable Water</li> <li>– Temporary Power</li> <li>– Washrooms and Common Area</li> <li>– Security</li> </ul>	
4	Design, supply and install <ul style="list-style-type: none"> <li>– Curtain Walls &amp; Cladding</li> <li>– Windows and External Doors (Inclusive of Automatic Doors to Main Entrances)</li> </ul>	
5	Supply, Installation/Construction of: <ul style="list-style-type: none"> <li>– All Roof Equipment Plinths (inclusive of cladding maintenance equipment supports)</li> <li>– Civil Works (road works, kerbs, drainage, landscaping, etc.)</li> <li>– Floor Screening (self-levelling concrete)</li> <li>– CEP Building Complete - Foundation, Superstructure, Roof, Walls etc</li> <li>– All external Medical &amp; MEP above and below ground infrastructure</li> <li>– Roof - Light Weight Concrete, Insulation, Water proofing Membrane, Fulbora etc..– Bridge Links (Enclosed connection from Tower 1 Level 2 to Operating Theatre and covered walkway from Tower 1 to Accident &amp; Emergency</li> </ul>	
6	<ul style="list-style-type: none"> <li>– Interior Walls</li> <li>– Ceiling</li> <li>– Floor Finishes</li> <li>– Wall Finishes</li> <li>– Handrails</li> <li>– Wall Guards</li> <li>– Doors, Frames &amp; Ironmongery</li> </ul>	
7	Supply & Install MEP Services:- <ul style="list-style-type: none"> <li>– Electrical (High Voltage Power Supply (inclusive of all necessary transformers, HV switches, meters, panels, builders work, etc.)) inclusive of all Infrastructure, Equipment and Fixtures.</li> </ul>	

Item	Description	Proponent
	<ul style="list-style-type: none"> <li>– Power Distribution (inclusive of Switchgear provided for distribution of the full incoming supply capacity to all power, lighting, HVAC systems, external lighting and miscellaneous supplies as required throughout the building and external.</li> <li>– Standby Power Supply inclusive of 100% Generator Power and automatic transfer switch</li> <li>–</li> <li>–</li> <li>– Plumbing :-               <ol style="list-style-type: none"> <li>1. Water Supply – Hot and cold-water supply pipework and fittings including mains connections and any ancillary equipment and works</li> <li>2. Waste water pipework and fittings including main connections any ancillary equipment and works</li> <li>3. Fire Water and Sprinklers, inclusive of all Infrastructure, Equipment, Pumps etc...</li> <li>4. All Sanitary Fixtures – Sinks, WC, Taps, Valves etc...</li> <li>5. Potable and Fire Water Storage &amp; Equipment</li> <li>6. Sewer</li> </ol> </li> <li>– ELV supply and installation inclusive of infrastructure, equipment, fixtures for:               <ol style="list-style-type: none"> <li>1. Fire detection and alarm system including control system</li> <li>2. Nurse Call System</li> <li>3. Access Control System</li> <li>4. CCTV System</li> <li>5. Unified Clock</li> <li>6. Public Address System</li> <li>7. Hospital Queuing</li> <li>8. Building Maintenance System (BMS) - Appropriately programmed and linked to all systems at the facility not limited to HVAC, Electrical, Plumbing, Fire, Medical Gases etc...</li> <li>9. Uninterruptible Power Supply (UPS) for MEP &amp; MEQ (inclusive to critical life support systems and areas including OT, ICU, HDU, CCU etc... as well as UPS to Radiology and other Departments specified</li> </ol> </li> <li>– HVAC               <ol style="list-style-type: none"> <li>1. Air Handlers</li> <li>2. Chillers</li> <li>3. Chill Water Supply and Return Piping</li> <li>4. Chill Water Treatment System (Chemical Dosing)</li> <li>5. VRV's, VFD's and Thermostat controls by room/zone</li> <li>6. Metal Sheet Ducting &amp; insulation</li> <li>7. Dampers and Diffusers</li> <li>8. Full Connectivity to BMS and Fire Alarm System</li> <li>9. All others</li> </ol> </li> <li>– Elevators (6 Passenger/Bed Lifts &amp; 2 Service Lifts)</li> <li>– Medical Gases (All) Inclusive Monitors, Alarms etc... for Oxygen, NOS, Medical Air, AGSS and Vacuum               <ol style="list-style-type: none"> <li>1. Copper Piping</li> </ol> </li> </ul>	

Item	Description	Proponent
	2. Pendants, Headwalls with Outlets including valves, gauges, controls etc... 3. New Oxygen Generation system complete with new building North of the existing Operating Theatre – Seismic Bracing for all Medical, Mechanical, Electrical and Plumbing components & Equipment – Testing and Commissioning - Building Systems, MEP Systems etc... – Training - Operational/Maintenance - MEP Equipment	
8	ICT – Supply & Install:- - All ICT vertical and horizontal infrastructure inclusive of external works for integration (cable trays, metal hooks, underground ducts, etc.) - Fibre Backbone and all ICT Structured Cabling (cat 6e Cabling colour coded) - End to End Testing and labelling of all cables - Communication Room - Fibre optic cables interconnection Link to existing POSGH Campus - ICT Control/Network Room power, anti-static flooring, etc.)	
9	Joinery and cabinetry including shelving (fixed and movable), storage units, counter tops, nurses stations, information desks, laboratory counters, pharmacy counters and the like. Wall mounted Cabinets, Cabinets base with/without sinks etc. FF&E – Fixed:- - Laboratory and Pharmacy Countertops - Cabinets – wall mounted - Cabinets base with clinical sinks - Countertops - Nurses Stations, Security, Reception Desk, Information Desk and the like - Washroom Partitions & Accessories – mirrors, toilet paper holders, soap dispenser, hand sanitizer dispenser, paper towel dispenser - Ice Machine	
10	Design and Construction Coordination of Employer supplied equipment and attendance to Employer Contractors	

**– The following are scope exclusions:**

The procurement of Medical Equipment will be completed by UDeCOTT
The procurement of Movable Furniture will be completed by UDeCOTT
The procurement of ICT Equipment inclusive of software procurement will be completed by UDeCOTT

## FURTHER SCOPE REQUIREMENTS

The Central Block shall be designed and constructed in accordance with AIA-FGI Guidelines – most updated version (2014 or later), in keeping with the approved Architectural Floor Layouts.

With regard to space requirements and functionality, the design completion must follow the approved Architectural Floor Layouts. Every effort shall be made during the design process to anticipate changes in treatment modalities and provide flexibility to be able to adapt the facility and staffing accordingly. In particular, the design of the new Central Block shall ensure:

- All necessary physical requirements to minimize the transmission of infection, specifically, air-handling and ventilation needs in surgical services, airborne infection isolation and protective isolation rooms, laboratories, local exhaust systems for hazardous agents and other special systems are included in the new hospital.
- Required adjacencies of the various functional services necessary to support efficient patient flow.
- The requisite standards (design, construction and outfitting)
- The finishes, decor and ambience of the hospital must be relaxing, comfortable and to the greatest extent possible non-institutional in appearance.
- Supportive care elements such as healing gardens and artwork should be incorporated into the design. The use of natural light should be maximized through design features.
- All staff spaces should be ergonomically designed with attention to occupational health and safety requirements.
- Incorporation of Patient-Friendly physical facilities and Child-Friendly facilities at the new hospital.
- All shared workspaces should be designed and furnished in such a way as to provide appropriate sound attenuation.
- All examination and consult rooms must have doorways wide enough to accommodate stretchers. All corridors must be wide enough to accommodate free passage of side-by-side stretchers.
- All spaces where appropriate will be wheelchair accessible and every effort must be made to accommodate persons with disabilities.
- Strategically located waiting spaces are to be provided for all areas with consideration to be given as appropriate to shared waiting space based on configurations. The visitor waiting spaces are to be provided with toilet accommodation.
- The hospital must be designed to standards to allow integrity for use as a disaster shelter and continued operation and provision of care. Design considerations are required to protect essential services such as emergency power generations, water etc, as applicable.
- Design should appropriately cater for biohazard and chemotherapy waste disposal.



- Design and site landscaping should adequately consider for appropriate drainage infrastructure as part of the landscape development, to ensure proper drainage of ground water.

## DESIGN CODES AND STANDARDS

The Proponent will refer to the most current version of Codes and Standards to carry out a satisfactory design completion, quality of assemblies, allocation of space, overall construction and the selection or sizing of systems. The proponent is to use the most current version of the applicable codes and standards and shall include, at the minimum and not limited to, the following standards:

### GENERAL

- All local statutory agencies.
- American Concrete Institute ACI Codes
- American Society for Testing and Materials (ASTM)
- Construction Specifications Institute (CSI) - Formats
- Factory Mutual, FM
- Masterpec - Specifications
- Municipal Laws and Regulations
- Trinidad and Tobago Bureau of Standards (TTBS)
- Underwriters Laboratories (UL)
- Uniform federal Accessibility Standards (UFAS)

### STRUCTURAL

- International Building Code (IBC 2009)
- American Society of Civil Engineers (ASCE 7-10)
- For Reinforced Concrete:
  - ACI 318-05
- For Structural Masonry:
  - ACI 530-05
  - ASCE 5-05
  - TMS 402-02
- For Structural Steel:
  - AISC 341-05 including Supplement No. 1 dated 2006
  - AISC 360-05
  - AISC 358-05 including Supplement No. 1 dated 2009

## ARCHITECTURE

- AIA-FGI Guidelines (The American Institute of Architects-Guidelines for Design and Construction of Health Care Facilities (2014 or latest edition)
- JCI (Joint Commission International)

## MECHANICAL, ELECTRICAL AND PLUMBING

### AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS (ASHRAE)

- ASHRAE 2017 Handbook of Fundamentals - HVAC Applications
- ASHRAE HVAC Design Manual for Hospitals and Clinics, 2nd Edition
- Humidity Control Design Guide for Commercial and Institutional Buildings
- Standard 52.1 - 1992, Gravimetric and Dust-Spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particle Matter
- Standard 52.2 - 1999, Method for testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size
- Standard 55 - 2010, Thermal Environmental Conditions for Human Occupancy
- Standard 62 - 2010, Ventilation for Acceptable Indoor Air Quality
- Standard 90.1 - 2013, Energy Standard for Buildings Except Low-Rise Residential Buildings
- Standard 170 -2013, Ventilation of Health Care Facilities

### AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

- ANSI/ASME A17.1 – 2010, Safety Code for Elevators and Escalators
- ANSI/ASME A17.3 – 2005, Safety Code for Existing Elevators and Escalators

### AMERICAN WATER WORKS ASSOCIATION (AWWA)

- M14 Recommended Practice for Backflow Prevention and Cross-Connection Control, 2015

### ENVIRONMENTAL MANAGEMENT AUTHORITY (EMA)

- Water Pollution Rules 2001 (Amended in 2006)
- Requirements of the EMA of Trinidad and Tobago

### INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

- Standard 427 - 2007, Recommended practice for grounding of Industrial and Commercial power system
- Standard 602 - 2007, Recommended Practice for Electric Systems in Health Care Facilities

### ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA (IESNA)

- ANSI / IES RP-29-16, Lighting for Hospitals and Healthcare Facilities
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#### **INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)**

- BS EN/IEC 62305-1:2011, Standard for Lightning Protection

#### **MINISTRY OF PUBLIC HEALTH OF TRINIDAD AND TOBAGO (MPH)**

- Requirements of the Public Health Department in accordance with the Public Health Ordinance Act

#### **NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) – Editions enforced by the AHJ apply**

- Standard 13, Standard for the Installation of Sprinkler Systems
- Standard 20, Standard for the Installation of Stationary Pumps for Fire Protection
- NFPA 70, National Electrical Code
- Standard 72, National Fire Alarm and Signaling Code
- Standard 80, Standard for Fire Doors and Other Opening Protectives
- Standard 82, Standard on Incinerators and Waste and Linen Handling Systems and Equipment
- Standard 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations
- Standard 99, Health Care Facilities Code
- Standard 101, Life Safety Code
- Standard 110, Standard for Emergency and Standby Power Systems
- Requirements of the Trinidad and Tobago Fire Service (TTFS), Ministry of National Security of Trinidad and Tobago
- Requirements of the Electrical Inspectorate Division, Ministry of Public Utilities of Trinidad and Tobago

#### **OCCUPATIONAL SAFETY AND HEALTH AUTHORITY OF TRINIDAD AND TOBAGO (OSHA)**

- Requirements of the OSH Authority in accordance with the OSH Act 2004 with amendments of 2006

#### **SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION (SMACNA)**

- HVAC Duct Construction Standards- latest edition

#### **TRINIDAD AND TOBAGO BUREAU OF STANDARDS (TTBS)**

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- TTS 171: PART 1: 2015, Trinidad and Tobago Electrical Wiring Code - Part 1: Low voltage installations (1st Revision)
- TTS 171: PART 2: 2002, Trinidad and Tobago Electrical Wiring Code - Part 2: High Voltage Installation

#### **TRINIDAD AND TOBAGO ELECTRICITY COMMISSION (TTEC)**

- Requirements of the Trinidad and Tobago Electricity Commission

#### **WATER AND SEWEAGE AUTHORITY OF TRINIDAD AND TOBAGO (WASA)**

- National Plumbing Code of Trinidad and Tobago
- Guidelines for Distribution of Water and Wastewater
- Requirements of the Water and Sewerage Authority of Trinidad and Tobago

#### **APPROVALS FROM REGULATORY AUTHORITIES**

The Proponent shall ensure that all approvals, both outline/preliminary if not obtained and final, of designs are obtained from the relevant Regulatory Authorities in Trinidad and Tobago. These approvals shall include, at the minimum and not limited to, the following:

- Electrical Inspectorate
  - Environmental Management Authority (EMA)
  - Fire Services Division of the Ministry of National Security, Trinidad and Tobago
  - Local Health Authority
  - Ministry of Energy
  - Occupational Health and Safety Authority (OSHA)
  - Port of Spain City Corporation
  - Town and Country Planning Division
  - Trinidad and Tobago electricity Commission (T&TEC)
  - Telecommunications Services of Trinidad and Tobago (TSTT)
  - Water and Sewerage Authority
  - Ministry of Works and Transport (Structural and Drainage approval)
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## OTHER SERVICES & PERFORMANCE REQUIREMENTS ASSOCIATED WITH THE PROJECT

- The Project must be designed to cater for differently-abled persons in the provision of parking, bathrooms, ramps, and any other relevant function or area.
- Building services must include integrated intra and extra network computer set installations in accordance with The Ministry of Health Guidelines.
- Windows should be capable of being opened should the Air Conditioning be disrupted.
- Disruption of Air Conditioning over the entire building should be avoided. Air Conditioning should be zoned.
- Wastewater and Effluent Treatment Systems must be designed to meet or exceed applicable Statutory Codes.
- Reserve water supply shall be catered for.
- The proponent shall submit specific information on the equipment they intend to supply. Such information shall include but not be limited to:
  - Name of Product and Model;
  - Manufacturer's Name, Address and Contact details;
  - Detailed Product Specifications and Descriptions;
  - Details on all equipment warranties to be provided;
  - Accreditation and/ or certification standards for the product e.g.
  - CE Marking, US Food & Drug Administration (FDA);
  - All accessories to be provided with the equipment;
  - Software licenses required for the use, operation and maintenance of the equipment;
  - List of accredited local distributors, Dealers and Service Centre together with their particulars;
  - A training plan as part of the technology transfer is to be provided for the ongoing and refresher training for the operators (applications) and maintenance (service training) staff. The plan should indicate the details of the training to be provided, duration and content of such training and the outcomes to be achieved. Applications and Maintenance training must be provided directly by the manufacturer. Appropriate certification should be

## **FREQUENTLY ASKED QUESTIONS (FAQs)**

### **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 specialised expertise necessary to undertake the Project.

### **I am interested in this project. Can I view the RFP before purchasing to confirm the requirements prior to purchasing?**

The RFP will be available for viewing at UDeCOTT's Office from Friday July 22, 2022. Due to Covid-19 protocols, proponents are requested to forward an email to the Secretary of the Tenders Committee indicating the date and time that they would like to come in to view the RFP. A confirmatory email will be sent accompanied by UDeCOTT's Covid-19 Visitor Screening Questionnaire. Proponents will be required to complete and return the questionnaire via e-mail prior to the appointment date.

### **What is the Location of the site?**

The Port of Spain General Hospital (POSGH) is located in the central urban core of Port of Spain adjacent to the historical districts surrounding the Queens Park Savannah. The site is in the district of Belmont, which borders what is now the volatile neighborhood of East Port of Spain. It is bounded immediately to the west by Charlotte Street and further to the west by the Queen's Park Savannah. To the south it is bounded by Belmont Circular Road and to the east by the St. Ann's River/ East Dry River. To the north is Ministry of Health (MoH) property, which currently houses MoH administrative and national blood testing services.

### **Are there any eligibility requirements for this Procurement Process?**

- Submission of Annual Return – 2020 (2021 if applicable);
- Incorporation or otherwise registered to do business in Trinidad and Tobago as evidenced by the Certificate of Incorporation or Registration (as applicable);
- Submission of valid Statutory Clearance/Compliance Certificates, namely;
  - Copy of VAT Clearance Certificate
  - Copy of BIR Clearance Certificate
  - Copy of NIS Certificate of Compliance
- Bid Bond in the value of Two Million Trinidad and Tobago Dollars (TT\$2,000,000.00);

**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 fulfil and comply with all requirements of the Request for Proposals.**