



GOVERNMENT OF BERMUDA

**Ministry of Public Works**

**Department of Public Lands and Buildings**

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**BOILERS, WATER HEATERS AND STORAGE TANKS RENEWAL**

**EMPLOYER'S REQUIREMENTS**

**Between the Owner:** Ministry of Public Works  
3<sup>rd</sup> Floor General Post Office Building  
56 Church Street  
Hamilton HM12  
Bermuda  
441-295-5151

**And the Contractor:** To Be Confirmed

**For the Project:** Westgate Correctional Facility  
6 Pender Road  
Sandys

**Building #:** 0091 – Westgate

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## **DIVISION 01. GENERAL REQUIREMENTS**

### **01500 - Temporary Facilities and Controls**

This work shall consist of the application of temporary measures throughout the life of the project.

### **01510 - Temporary Utilities**

All connections and extensions required to provide temporary utilities shall be made by the Contractor at the Contractor's expense.

### **01511 - Temporary Electricity**

Contractor to provide and install temporary power for construction site. Connect to existing power service without disrupting local service requirements. Power feeder service characteristics shall be compatible with the service from which it is taken. Size, type and loading shall be per requirements as established by the National Electric Code (NEC). The contractor shall provide main service disconnect and over-current protection at a convenient location in accordance with the NEC. The Contractor shall provide power outlets for construction operations, with branch wiring and distribution boxes located as necessary and shall provide flexible power cords as required. Provide and install distribution equipment, wiring and outlets to provide single phase branch circuits for power and lighting.

### **01515 - Temporary Lighting**

Contractor to provide and install temporary lighting for construction site. Provide and install temporary lighting in all work areas sufficient to maintain a lighting level during working hours not less than the lighting level required by OSHA standards. As permanent lighting facilities are completed, they may be used in lieu of temporary facilities. Provide temporary lighting as required to satisfy safety and security requirements. Maintain a minimum illumination level of 30 foot-candles measured 3 ft. above floor in areas where finish trades are performing work. At exterior areas, provide 1 foot-candle of light after dark for security purposes.

### **01518 - Temporary Water**

Contractor to provide and install temporary water for construction site. Connect to an existing water source for construction operations.

### **01520 - Construction Facilities**

Field offices and sheds shall be portable or mobile buildings, or buildings constructed with floors raised above the ground, securely fixed to foundations, with steps and landings at entrance doors. Structurally sound, secure, weather tight enclosures for office and storage spaces shall be maintained during progress of work and removed at completion of work. Size of field offices and sheds shall depend on contractors needs. Install appropriate fire extinguisher. HVAC shall be adequate to maintain comfortable conditions. At completion of work, all temporary facilities shall be removed and area restored to new condition.

### **01523 - Sanitary Facilities**

Contractor shall provide and maintain in a neat and sanitary condition such accommodations for the use of his employees as will comply with laws and regulations.

**01530 - Temporary Construction**

The contractor shall provide and maintain for duration of work all required temporary stairs, ladders, ramps and runways for use of all trades.

**01560 - Temporary Barriers and Enclosures**

The contractor shall provide barriers to prevent unauthorized entry into construction areas and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

**01600 - Product Requirements (Scope of Work)**

All materials shall be installed in strict accordance with the manufacturer's written specifications or Material's Institute Standards. Where the manufacturer's recommended details are used, the manufacturer shall be responsible for the performance of their product. All Items not specifically mentioned that are required to make the work complete and operational shall be included.

Prior to submitting a bid, you must visit the site and satisfy yourself as to the nature and complexity and quantity of the works to be finally performed and the relevant equipment and labor skills, productivity and hours required to complete these works.

**Installation and Storage** - All materials, supplies and equipment shall be installed per manufacturer's recommendations and per applicable codes and requirements. Material stored on site shall be protected from damage by moisture, wind, sun, abuse or any other harmful affects.

**01630 - Product Substitution Procedures**

Contractor to investigate proposed products and determine that they are equal or superior in all respects to products specified. Coordinate installation of accepted substitutions into the Work, making such changes as may be required for the Work to be complete in all respects. Meet with clients and get change order request signed.

**01640 - Owner Furnished Products**

Contractor is not responsible for products furnished by the owner that are damaged prior to opening or receiving. Additional work required to install owner furnished products will be charged to the owner and due upon installation.

**01700 - Execution Requirements**

The execution of all work shall be in strict accordance with these specifications and manufacturer's written specifications or Material's Institute Standards. Where the manufacturer's recommended details are used, the manufacturer shall be responsible for the performance of their product. All work not specifically mentioned that is required to make the work complete and operational shall be included.

**Codes** - Construction shall comply with the Bermuda Building Code. It is the responsibility of the Contractor to insure compliance with said codes and modify the specifications as needed to comply with such codes.

**Measurements** - The Contractor shall check and verify all dimensions and conditions before proceeding with construction. Do not scale drawings. Noted dimensions take precedence.

**Workmanship** - Workmanship shall conform to the best and highest standards of quality in each trade and shall include all items of fabrication, construction and installation. All work shall be completed by skilled tradesmen and mechanics. Installation of all equipment and materials shall be in strict accordance with manufacturer's recommendations.

**Insurance** - Builders Risk Insurance shall be maintained by the contractor during the course of construction until final acceptance by the owner. All bonding and insurance requirements shall be coordinated with the Owner prior to beginning construction. All contractors shall provide and be solely responsible for necessary barricades and safety precautions, and strictly adhere to all governing codes on safety, including the OSHA Act.

#### **01740 - Cleaning**

Construction site to be in a clean and orderly condition throughout the construction process. Clean interior spaces prior to the start of finish painting and the application of other finishes. At the conclusion of construction, the project shall be properly cleaned. This should include but not be limited to; cleaning the interior and exterior glass, surfaces exposed to view, remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surface areas, sweep and mop all tiled surfaces, etc. Replace filters of operating equipment. Clean equipment and fixtures to a sanitary condition. Clean exterior such as debris from roof, gutters, landscape areas, driveways and walks, etc. Remove all waste and surplus materials.

#### **01760 - Protecting Installed Construction**

Contractor to protect all installed construction. If products or materials come with a protective coating, contractor shall maintain protective coating until construction is complete. Contractor shall replace any items that become defective or damaged. All materials and labor shall be provided by the successful contractor and shall therefore be included in his price.

The successful contractor will be responsible for all protection to all adjacent surfaces, clean up and supply of all materials and equipment to undertake the work and maintain the site in a tidy state

#### **01740 - Access**

The successful contractor is required to comply with the access requirements of these secured correctional facilities all as detailed in (External Contractors Entrance Protocol) located within the tender documents. All employees are required to be police vetted prior to allowing site access

## DIVISION 02. SITE WORK

### 02000 - General

The works at Westgate Correctional Facility comprise the following:

The removal and disposal of the existing boilers, water heaters, storage tanks and all associated deteriorated pipework, valves, pumps, and controls and thereafter the contractor is required to design and install a new hot water system comprising new boilers, storage tanks and associated pipework, valves, pumps, and controls and including for provision of hot water supply and return, cold water, relief and gas piping as required. The existing boilers, water heaters, storage tanks location (occupancy), and types are as follows:

<b>Westgate (Existing) Boilers, Water Heaters and Storage Tanks</b>				
<b>Location</b>	<b>Water Heater/Boiler Type</b>	<b>BTU's</b>	<b>Storage tanks</b>	<b>Occupancy (Max)</b>
E - Block	3# Munchkin Boilers	597,000	1# 500g	144 inmates
Maximum Security/Remand	1# Munchkin boiler	199,000	1# 400g	64 inmates
Kitchen	1# B&W Water Heater (SS Burners)		1#350g	N/A
Laundry	2# Instant Industrial Gas Water Heaters		None	N/A
Medical Administration & Segregation	None at present <i>(Hot water required to these areas)</i>		None	N/A

The contractor is required to carry out all associated construction work as necessary during the above works.

All such removed/demolished items are to be cleared to a government licensed refuse site at the sole cost of the Contractor.

All adjacent areas are to be made good following construction.

## DIVISION 15. MECHANICAL

### 15000 - General

Contractor shall provide labour and materials pertaining to the mechanical systems as required and as specified herein, while complying with all applicable building codes.

**15100 - Plumbing**

Provide and install all internal piping and re-piping of existing connections where necessary, to include circulating pumps. Provide and install appropriate insulation around piping. All permits and inspections are to be obtained by contractor as required by local building codes.

**DIVISION 16. ELECTRICAL****16000 - General**

Contractor shall provide labour and materials pertaining to the electrical systems as required and as specified herein, while complying with all applicable building codes.

Contractor to carry out all associated electrical works and provide electrical connections as required.