Annex G - General Requirements

1. Introduction

1.1 These requirements are to be read in conjunction with the solicitation documents and contractual agreement which together defines the Works. They are a general, rather than specific, therefore some content may not be relevant; notwithstanding, the general requirements shall be taken as job specific unless the notes on the drawings specify otherwise – in which case, such notes shall take precedence.

1.2 The general requirements outline the Contractor's obligations. The Contractor is responsible for coordinating and integrating the various elements of Work, that is, to deliver a building, fit for its intended purpose and which reflects the true and whole intention of the contract.

1.3 The documents forming the contract are to be taken as mutually explanatory of one another. If there are any ambiguities or discrepancies, the Project Manager will issue a clarification or instruction otherwise the order of precedence shall be as noted in the Contract.

1.4 The Contractor shall comply with the manufacturer's instructions and recommendations where the extent is more detailed or stringent than requirements contained directly herein.

2. Definitions and Standards

2.1 The "Owner" means the Government of Bermuda and is represented by the Department as set out in the contract, and is referred to as the "Government", "we", "our" or "us" in the contract.

2.2 The supplier of services under the Contract, whose name and contact details will be set out in the Contract, will be referred to as the "Contractor" or "you".

2.3 The Government and you are individually referred to as a "**party**" and collectively as the "**parties**".

2.4 The Owner has appointed a Project Manager who has assisted the owner in developing the project and is responsible for coordinating the project team. The Project Manager is the single point of contact between the Contractor and the Owner.

2.5 The "**Work(s)**" means the construction and services required by the Contract Documents, and includes all labour, materials, equipment and services provided or to be provided to fulfill the Contractor's or his sub-contractors' and suppliers' obligations, or part thereof. Works also means Temporary Works.

2.6 "**General Requirements**" means the document entitled "General Requirements" and drawing notes. This includes additions and modifications.

2.7 " **Drawings**" means the stamped approved drawings by the Department of Planning, and any additional and modified drawings issued by the Owner in accordance with the Contract.

2.8 "**Notice**" shall mean written notice.

2.9 "**Approval**" shall mean written approval.

2.10 "**Directed, Requested, Approved, Accepted**" etc. imply it was done by the Project Manager or representative delegated during the contract period.

2.11 "**Approved by Project Manager**" in no case releases the Contractor from the responsibility to fulfill the requirements of the Contract Documents.

2.12 "**Furnish**" or "**Supply Only**" shall include delivery to the site, unloading, unpacking, and similar subsequent requirements prior to installation.

1.13 "**Install**" or "**Fix Only**" includes, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar requirements.

1.14 "**Provide**" means furnish and install complete and ready for intended use.

1.15 "**Remove**" means remove from site, unless otherwise stated, and make good where disturbed. "Bid" means the same as "Tender".

1.16 "**Tender**" means the mandatory documentation completed and submitted by the contractor.

3.0 Abbreviations

3.1 Where abbreviations or acronyms are used in the Contract Documents, they stand for the recognized name in the building construction industry; uncertainties shall be referred to the Project Manager before proceeding.

5.0 Tender/Bid Price

5.1 If the procuring entity procures bids through a method other than an RFP then proponents shall price the Work(s)/requirements specified in the solicitation documents and shall only price options/alternates when an RFP has been issued.

6.0 Contractor's Pricing Documents

6.1 Tenderers are required to submit their total bid along with their pricing and rates schedules. These schedules and bid forms are provided in the solicitation documents.

6.2 The Elemental Pricing Schedule consists of both group and sub elements of Work. Each group and sub element requires a price.

6.3 **Preliminaries** form part of the elemental schedule. Preliminaries are items which are not directly related to an element of Work, but which enable the management of the project. Examples include site establishment, temporary services, security, cleaning, fees and charges and safety.

6.4 The Elemental Pricing Schedule may include provisional sums (PS) for any element of Work where it is not certain that the Works will be carried out (defined provisional sums) or Works that cannot be sufficiently defined (undefined provisional sums). A Defined Provisional Sum will not result in an extension of time whereas a contractor may claim for an extension of time for an undefined provisional sum.

6.5 The Unit Rate Schedule requires a price per unit (SF, LF, CY etc.) for any one described item of Work. The unit rate shall be calculated as gross, that is, it must include allowances for material, labour, tools, plant and equipment. This includes importation, material handling, waste and fixing. Where general office costs such as insurances taxes, etc. are not covered by preliminaries, because it is directly related to the fixing of an element, then it must also be included in the calculation of the unit rate. The unit rate shall include the contractor’s overhead and profit.

6.6 Costs relating to any item not identified and priced by the tenderer will be assumed to have no cost or be included elsewhere in the pricing documents.

6.7 Both schedules and the Respondent’s Bid Form are the contractor's pricing documents and will be used for the administration of the contract - to determine the value of Works completed and to calculate the cost of changes to the Contract.

6.8 Unit rates shall be the first option used in valuing variations. Where the nature or character of Work, of the variation, differs from that described in a Unit rate, the Unit price shall form the basis of the valuation. Fair current rates of construction shall be used for the valuing of variations where neither the contract Unit rates nor prices are of similar nature or character. Day Work (cost and charge) rates

shall only be used for valuing variations which are incapable of being measured and priced.

6.9 Dimensions are provided in metric. To reflect local, traditional practices, imperial units are provided throughout the drawings.

7.0 Description of Works

7.1 A description of works provided by a schedule is to be read alongside the general requirements and drawings. An abridge description of works is provided in the schedules primarily for explanation and to give bidders an understanding of the Works. Bidders shall, with their discretion, ensure all elements and components for the Works are included in their pricing, if not stated in the drawings and this section. Descriptions are deemed to include supply and installation of materials as well as all equipment, plant and tools as necessary:

8.0 Facilitating Works

8.1 Facilitating works are Works which need to be completed before any building works can commence. These may comprise:

8.2 Coordinating with the utility companies to shut-off required services and setting up temporary services.

8.3 Disconnect and remove existing plumbing, electrical and mechanical fixtures and fittings, piping, panel, etc.; tap off and prepare for new connections.

8.4 Support and or protect plants, adjacent structures, furnishing, land etc. from potential damage.

8.5 Demolitions (Greenhouses, shade building and systems).

8.6 Filling in existing drainage channels and other alterations to slab, ancillary structures, and systems incl. surface prep. and cleaning.

8.7 Cut existing posts at substructure level (Sht. S004).

8.8 Prepare bed for 4" drainage piping.

8.9 Make good concrete, block and bermuda stone structures (pathway, steps, stone wall etc.) where disturbed.

8.10 Cart away all debris off site, unless mentioned otherwise elsewhere.

9.0 Substructure

9.1 Foundations (anchor bolts, base plate, insitu concrete, formwork and surface finishes to concrete.

9.2 Excavate reduced levels for foundations and slabs; dispose excavated materials off site; level and ram bottoms of excavation; lay sand blinding; make up levels from fill and compact sand blinding as required.

9.3 Fix anchor bolts if required and wire mesh to disturbed slabs.

9.4 Pour in-situ concrete to form foundations and grade slabs. Fix base plates.

9.5 Provide formwork to foundations and slab if required.

10.0 Superstructure

10.1 Galvanised columns including sway rods and accessories; Polycarbonate siding & manually operated curtain siding; Galvanised roof truss system including sway rods and purlins; Roof covering- Polycarbonate clear corrugated panels and doors. Steel building frame and roof framework for staging area; manually operated retractable shade.

10.2 Contact details of the roof covering and siding supplier:
H&H Manufacturing Corporation
110 Railroad Drive

Ivyland, PA 18974 Derek
Cohen
dcohen@hfmfgcorp.com
(215) 355-0250

For roofing specification see supplier product information and installation guide at Annex C. Also see roofing notes on drawing sheet S000

11.0 Surface Finishes

11.1 Surface finishes to concrete slab (e.g. brush, float, trowelled etc.), foundations, plastering and paint to masonry etc.

12.0 Services

12.1 Audit exstg. pipe fittings and piping and make good for gutters, leaders and piping distribution system; New piping, fittings and fixtures as required connecting from below ground tank and Reverse Osmosis plant to primary plant and ancillaries; Audit exstg. RO plant and make necessary repairs

Ventilation – manual vent openers/windows; mechanical exhaust and circulating fans. Electrical installations (electricity power supply and distribution, power installations, lighting installations, earthing and bonding). Fire protection (strobe horns); heat and smoke detectors; fire alarm panel. External drainage (surface water/land drainage).

13.0 Builders Work in Connection with Services

13.1 Refer to drawing notes and consider builders' works which would reasonably arise from the Works. Repairs to existing services, protective coatings to fittings, piping and as required for existing services.

14.0 Works to Existing Structures and Ancillary Structures

14.1 Minor alteration Works arising out of demolition and alteration works. Repairs to existing surfaces, masonry repairs, concrete repairs and timber repairs.

15.0 Tenderer's Programme of the Works

15.1 Tenderers are required to submit their start and completion dates of the Works in the form of a Gantt chart. The Gantt chart must include main and sub task corresponding with the group and sub elements of work as listed in the contractor's pricing schedule of elemental values. The critical path, submittal submissions and review, inspections, applications for payments and as appropriate for the proper administration of the contract, shall all be included in the programme of works.

16.0 Contract Administration

16.1 Product Submittals

16.1.2 As required by the Project Manager during the execution and final completion of the Works, the contractor shall submit as required progress photos, copies of all warranties, guarantees, operating instructions, maintenance instructions, tools and operating manuals, copies of the "Certificate of Use and Occupancy" and other Government approvals. Also, copies of keys for doors, panels, cabinets, valves, equipment, and as-built record drawings etc. are to be submitted upon substantial completion.

16.1.3 Electrical

The contractor shall provide product submittals for review. Refer to approved drawings.

16.2 Structural

16.2.1 The contractor shall provide product submittals for review. Refer to approved drawings.

16.3 Mechanical and Plumbing

16.3.1 The contractor shall provide product submittals for review. Refer to approved drawings.

17.0 Payment for the Works

17.1 The Project Manager shall apply the Contractor's Schedule of Elemental Values to value and certifying progress payments. The format shall be aligned with the schedule of values provided within the solicitation documents.

17.2 The frequency of payments is as provided in the contractual agreement.

17.3 The Project Manager will only certify payment for materials or goods, not yet incorporated into the Works or that are on or adjacent to the site providing the materials or goods are in accordance with the contract, adequately protected from the weather and other casualties, and were not prematurely delivered to site.

17.4 Under exceptional circumstances, payment may be made for materials or goods stored off-site. Such materials or goods shall be covered by the Contractor's insurance and properly identified as belonging to the project.

17.5 The Contractor shall be asked to provide original supplier invoices should a variation be carried out on a cost and charge basis.

17.8 Variations may be initiated by the client or contractor and must be approved by the client prior to carrying out works. Variations shall outline any cost or time impacts.

18.0 Retention

18.1 The Government may deduct and retain an amount calculated as a percentage of the total value of Works certified for payment as per the contract. A percentage shall be deducted from each progress payment. Following the issue of the Certificate of Substantial Completion, the percentage deductible shall be reduced as per the contract and held during the Warranty Period. The percentage shall be released after the Warranty Period has expired and after an assessment of the Works by the client which confirms that defects have been corrected.

18.2 The Project Manager shall, within 7 days of receiving an application for final retention payment, issue a certificate to the Owner for such amount as he determines to be properly due, stating in writing to the Contractor his reasons for any amounts withheld.

19.0 Project Conduct

19.1. The Contractor shall keep on the site a competent superintendent, and any instructions given to him by the Project Manager shall be deemed to have been given to the Contractor.

19.2 The Contractor shall be responsible for the conduct of his Workmen, and shall, upon the direction of the Project Manager cease to employ any person who may, in the opinion of the Project Manager, may not be carrying out the Works with the reasonable skill and care of an ordinarily competent tradesmen in the same circumstances.

19.3 The Contractor is responsible for all co-ordination and timing of the Work of his sub-contractors. The Contractor shall provide all general and special attendances required and shall be responsible for the satisfactory fulfillment of his sub-contracts.

19.4 If the Government has a reasonable objection to any subcontractor proposed by the Contractor, the Contractor shall propose another to whom the Government has no reasonable objection. If the changing of subcontractor causes an increase to the bid amount, the increase will only be accepted if the Contractor has acted promptly and responsively and has provided adequate information for approval.

20.0 Records

20.1 The Contractor shall maintain all records required to administer the Works including managing and documenting the progress of the Works, site meetings, making progress payment applications, supporting request for alternates, changes to the Works, claims, accident reports and as such to ensure a safe Working environment and timely execution.

20.2 During construction, the Contractor shall maintain an accurate record of all approved changes between the Works indicated on the drawings and the actual construction on site.

20.3 Prior to Substantial Completion of the Works, the Contractor shall prepare and deliver to the Project Manager, two sets of as-built drawings of all the Work as constructed, including electrical, HVAC and plumbing installations. The Project Manager shall have the right employ a competent person to produce the said drawings and to recover the costs of such services from the Contractor should the Contractor not provide these drawings.

20.4 The contractor is responsible for establishing, organizing and conducting periodic progress report meetings for the client.

21.0 The Site

21.1 The site, designated for the use of the Contractor, shall be all the area delineated on the site/location plan and may temporarily include areas within contract limits off site as agreed. Notwithstanding, the contractor is only required to cordon off the site area.

21.2 The Contractor shall obtain and pay for all licenses and permits and all fees and charges for connecting outside services. He shall comply with all laws, acts, regulations and building control code requirements which are applicable to the Work.

21.3 The Contractor shall erect and maintain all necessary site and safety information, signage, hoardings, screens and as necessary to ensure a safe and secure site. Where demolition Works are required, the Contractor must consider whether additional protection may be required for his personnel and the public.

21.4 The Contractor shall conduct his operations with the least inconvenience to the public.

21.5 The Contractor shall provide adequate latrines for the use of his Workers and all other persons lawfully visiting the site and shall maintain the facilities in a sanitary condition.

21.6 The Contractor shall provide water necessary for the Works and for the needs of his Workers. Drinking water and water for construction materials shall be potable.

21.7 The Contractor shall make all necessary arrangements for the provision of such temporary power as is required for the carrying out the Works, temporary metering and pay all charges in connection therewith.

21.8 The Contractor shall erect and maintain signage providing all necessary site and safety information and confine his operations within site barriers, except for related off-site Work (e.g. utilities) which shall be protected.

21.9 The Contractor shall take all necessary precautions to adequately protect the site, the Works (both incomplete and complete), any existing property, landscaping, trees, vegetation, features or goods stored on the site, and all property surrounding the site, from potential damage arising out of the Works. The Contractor is to provide a form of fencing, hoarding, screens etc. around the site for the duration of the contract until substantial completion.

21.10 All necessary precautions to prevent loss or damage by fire must be taken.

21.11 The Contractor is to control equipment emissions, and prevent spills, pollution and contamination, disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.

21.12 The site is to be maintained throughout the duration of the contract, and debris and waste should not be allowed to accumulate but should be removed at regular intervals and disposed of in a lawful manner. The Contractor shall not burn trash or other material for disposal on or adjacent to the site. All trash and debris shall be removed from site and disposed of lawfully, unless otherwise stated.

21.13 The Contractor shall make good all Work disturbed unless directed otherwise by the Project Manager.

21.14 Materials and equipment stored on, adjacent to, or offsite, shall be adequately protected from the weather, damage, and theft.

22.0 General Field Requirements and Setting Out

22.1.1 Information pertaining to existing conditions has been obtained through investigation and has been gathered with reasonable care, but is not warranted, and may be of a schematic nature. The Contractor is to verify all levels and dimensions on site prior to ordering or construction.

22.1.2 The Contractor shall make all reasonable enquiries and take all reasonable measures to ascertain locations of, and protect, existing mains, services and utilities, and shall ensure continuity of service to existing buildings.

22.1.3 Should any known service passing through the site require adaptation, the Contractor shall carry out such removal, relocation or disconnection as may be required and shall give sufficient notice to the Project Manager and others relevant prior to interruption of services. The Contractor shall co-ordinate with the utility companies for shut-off of live or active services.

22.1.4 Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, the Contractor shall consult the utility owner immediately for directions and co-operate with the Owner and utility companies in keeping respective services and facilities in operation. The Contractor shall repair damaged utilities to the satisfaction of the utility owner.

22.1.5 Upon taking possession of the site, the Contractor shall verify all levels, angles, grades, rises and dimensions shown on the drawings.

22.1.6 The Contractor shall be solely responsible for the accurate setting out of the Works and shall employ a qualified surveyor whenever necessary. Any damages incurred as a result of the incorrect setting out of the Works shall be the responsibility of the Contractor.

22.1.7 Apart from Design and Build contracts, should any setting out discrepancies or errors be discovered on the drawings and/or should there be any differences in existing site conditions, the Contractor shall immediately inform and seek clarification from the Project Manager.

23.0 Demolition and Alteration Works

23.1 The location of selective demolition and alteration Works to the structure is indicated on the drawings as required to accommodate new construction.

23.2 If the Contractor encounters hazardous materials, the Contractor shall ease Work and submit a report to the Project Manager.

23.3 Other Work such as cutting concrete floors, and masonry walls for piping may be required.

23.4 The Owner assumes no responsibility for the condition of items or structures to be demolished

24.0 Maintenance of Surrounding Roads and Pathways

24.1 The Contractor shall protect and maintain all existing roads, footpaths and tracks within the site boundary, and keep them in a clean and serviceable condition and make good any damage or soiling prior to handing over the site to the Owner on completion.

24.2 The Contractor shall be responsible for keeping all roads, footpaths and tracks on the grounds free from physical damage and mud and other materials deposited by vehicles connected with the Works, whether used by the Contractor or not.

24.3 If the Contractor should fail to make good damage or soiling so caused, the Owner shall have the power to employ a separate contractor to repair or cleanse the roads damaged or soiled, and the cost of such Works shall be recoverable from the Contractor.

25.0 Noise and Nuisance

25.1 The Contractor shall employ the best practicable means to meet the 1949 Public Health Act and 1982 Safety and Health Act to minimise the noise and vibration resulting from his operations and shall have regard to current standards.

25.2 Any machinery which is in intermittent use shall be shut down in intervening periods of non-use or, where this is impracticable, throttled back to a minimum.

25.3 The Contractor shall not burn trash or other material for disposal on or adjacent to the site. All trash and debris shall be removed from site and disposed of lawfully, unless otherwise stated.

26.0 Substantial Completion

26.1. The Contractor shall complete and/or submit the following before requesting the Project Manager to inspect the Work, or part thereof, for certification of Substantial Completion:

26.2. Executed warranties, maintenance manuals, tools, spare parts, keys and similar operational items, removal of temporary facilities and tools, final cleaning, Certificate of Use and Occupancy" and other Government approvals, including Fire and Health

26.3. Upon receipt of the Contractor's request, the Project Manager will either proceed with inspection or advise the Contractor of prerequisites not fulfilled. Following initial inspection, the Project Manager will either prepare the certificate of Substantial Completion or advise the Contractor of Work which must be performed prior to issuance of the certificate. The Project Manager will repeat the inspection when requested to ensure that the Work has been substantially completed. Results of the completed inspection will form the initial "punch/defects list" for final acceptance.

26.4. The Project Manager will re-inspect the Work upon receipt of the Contractor's notice that, except for the items whose completion has been delayed due to circumstances that are acceptable to the Project Manager, the Work has been completed, including defect-list items from earlier inspections and defective Work arising during the Warranty Period. Upon completion of re-inspection, and at the end of the Warranty Period, the Project Manager will either recommend final acceptance and final payment or will advise the Contractor of Work not completed or obligations not fulfilled as required for final acceptance. If necessary, this procedure will be repeated.