

Ministry of Public Works Department of Public Lands and Buildings

ROOF AND WALL CLADDING SPECIFICATION TYNE'S BAY SALT WATER REVERSE OSMOSIS PLANT

Between the Owner: Department of Public Lands & Buildings

2 Aeolia Drive Devonshire DV05

Hamilton Bermuda 441-292-8485

And the Contractor: To Be Advised

For the Project: Tyne's Bay

Salt Water Reverse Osmosis Plant

45 North Shore Road

Devonshire

Building #, 0157

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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

The Contractor is to connect to the existing power service without disrupting local service requirements.

01518 - Temporary Water

The Contractor is to connect to the existing water source for construction operations.

01519 - Permits

Not Applicable.

01523 - Sanitary Facilities

The Contractor will be able to use the existing sanitary facilities, which he shall maintain in a neat and sanitary condition.

01530 - Temporary Construction

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

01540 - Construction Aides

The contractor to provide all construction aids needed during construction which shall include but not limited to; scaffolding, elevators, hoists, cranes, etc.

01542 - Construction Scaffolding and Platforms

The contractor shall provide and maintain for duration of work all required temporary standing scaffolding and 'Independent tied' scaffold.

01550 - Vehicular Access and Parking

Arrange parking areas to accommodate construction personnel.

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. Install barricades and covered walkways required by governing authorities for public right of ways.

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.

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 effects.

01630 - Product Substitution Procedures

If unable to source the specified product on island the Contractor is to investigate alternative 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.

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 all applicable building codes. 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.

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

The construction site is to be in a clean and orderly condition throughout the construction process. Clean interior spaces prior to the application of the 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, and mop all tiled surfaces, etc. Remove all waste and surplus materials

01760 - Protecting Installed Construction

The Contractor is 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.

01904 - Hazardous Materials Removal and Disposal

The owner shall arrange for the removal and disposal of all hazardous material before beginning construction.

01904 - Submittals

Prior to starting work, the roofing contractor must submit the following:

Shop drawings showing layout, details of construction and identification of materials.

A sample of the manufacturer's Warranty.

DIVISION 02. METAL CLADDING

02000 - General

Contractor is to allow for the careful removal and disposal of the existing metal wall and roof cladding, door frames, doors, roller door, skylights, louvre vents, rainwater gutters and down pipes.

Thereafter the contractor shall provide labor and materials pertaining to new metal roof and wall cladding, door frames, doors louvre vents, rainwater gutter and downpipe installation as specified herein, while complying with all applicable building codes.

Metal roof and wall panels to be supplied by MBCI, type PBR, 26 gauge, HDG produced to ASTM A653/A653M-G90 (or equal approved).

On completion the contractor is to provide a **20 year weather tightness warranty** for the metal roof cladding system.

Note: Gavalume products are not to be used.

02100 – Metal Roofing - Install raised rib metal roof system with exposed fastening system as shown on construction documents.

Metal roof finish: Smooth, Signature 200

(The contractor shall include for providing an alternative quote for the option of retrofitting a new metal clad roofing system over the existing metal roof cladding. The retrofit system to be similar to the existing roof cladding system or equal approved. This quote shall **not** be included in the submitted total fixed tender sum).

02200 – Metal Wall Cladding - Install vertical metal wall cladding as specified in the construction documents. Provide all necessary starter strips, drip cap, corner detailing, etc. required by manufacturer and as stated in construction documents.

Metal wall finish: Smooth, Signature 200

02300 – Gutters and Downspouts - Install 6" wide metal gutters and 4" PVC down pipes. Attach every 2'-6" on center (OC) with straps and/or fasteners. Metal should be minimum 26 gauge aluminum. Contractor to include for all support brackets, couplings and hardware required to complete the installation.

02400 – Metal Doors – Allow for removing and disposing of the 4# existing single external doors and frames and supply and install new fiberglass doors and frames.

New fiberglass doors and frames to be supplied by Chem Pruf. Doors to be heavy duty single 36" x 80" Kraft honeycomb with mist grey matte finish.

Frames to be TD double rabbet 2" x 5 ¾" frame profile Allow for providing and installing all new hardware including but not limited to: hinges, closers, exist devices, wall bumpers, thresholds, strike plates etc. Note: allow for reusing existing locks.

02500 – Motor Operated Roller Shutter Door – Allow for removing and disposing of the existing motor operated roller shutter door and frames and install new motor operated roller shutter door and frames including for all wall angles, guides end plates and bottom bar angles all galvanized finished. The curtain to be galvanized with a poly grey finish with end/wind locks. The motor operator to include an override hand chain. Include for all associated electrical work

02600 - Louvre Vents

Allow for supplying and installing new louvre vents to match existing.

02700- Skylights

Allow for supplying and installing new skylights to match existing.

02800 - Caulking

All exterior caulking shall be either external quality **Dow Corning** or Marine quality caulk 5200 as supplied by **3M** or similar to the prior approval of the contract administrator. Caulking shall be applied in accordance with the manufacturer's instructions, including surface. Closed-cell polyethylene backer-rod must be used in all joints deeper or wider than ½"; such joints shall be kept to a minimum in any event. Caulk shall be guaranteed non-staining, non sagging type. Caulk color shall match closely the finish of the masonry.

Joints and spaces to be caulked shall be thoroughly clean, dry, free of paint, putty oils, grease, dust and other foreign matters, and shall be primed if necessary. All caulking shall be removed from areas to receive new caulk. All surfaces to accept caulk shall be left broom clean before new application.

Application of caulk to the masonry, plaster, surfaces shall be provided in a manner recommended by the manufacturer. Caulk beads should be smooth and slightly concave, Excess, messy, or convex caulking will not be permitted, nor beads exceeding 3/8" wide.

All caulking shall be done using an approved type of caulking gun and applying the material under pressure, except where the use of a caulking gun is not practical. Caulk joints shall be tooled immediately upon application to assure maximum adhesion and neat joint appearance.

APPENDIX 1

(PHOTOGRAPHS)















