



GOVERNMENT OF BERMUDA

**Ministry of Government Public Works
Department of Public Land and Buildings**

EXTERNAL PAINTING & REPAIRS SPECIFICATION

SYLVIA RICHARDSON CARE FACILITY

Between the Owner: Ministry of Public Works
Department of Public Lands and Buildings
2 Aeolia Drive Devonshire DV05
Hamilton
Bermuda
1441-292-2500

And the Contractor: TBC

For the Project: Sylvia Richardson Care Facility
4 Old Military Rd., St Georges,
Bermuda, GE03

Building #'s: All

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IMPORTANT NOTES:

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

The Contractor will be responsible for ensuring clear access is provided to all surfaces to be painted

The contractor is to ensure that all surfaces to furniture and fittings which are not to be painted are adequately protected by dustsheets etc.

Works to be carried include repairs to the concrete, masonry, roof and steel railings and balustrading

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 existing power service without disrupting local service requirements.

01518 - Temporary Water

The contractor is to connect to an existing water source for construction operations.

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; elevators, hoists, 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 or alternative safety harness system.

01550 - Vehicular Access and Parking

Arrange and agree with client 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. 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 affects.

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

Construction site to be in a clean and orderly condition throughout the construction process. At the conclusion of construction, the project shall be properly cleaned. This should include but not be limited to; cleaning the exterior glass, surfaces exposed to view, remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, and remove all waste and surplus materials.

DIVISION 3. CONCRETE

03000 – General

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

03050 – Concrete Specifications

All concrete work shall be designed on the basis of “Strength Design” in accordance with the “Bermuda Building Code Requirements for reinforced Concrete.” Concrete work shall be proportioned in accordance with “Specifications for Structural Concrete” and “Recommended Practice for Selecting Proportions for Normal Weight Concrete”. Concrete slabs, patios and walls shall be constructed of a **minimum 3000 to 3600 psi concrete**, 28 day test, with a 4” minimum to 6” maximum slump maximum, air-entrained to 5 - 8%. No additional water shall be added to concrete after slump test is recorded. Cylinders shall be taken from every batch and tested for compressive strength at 7 and 28 days. Concrete should be a mix of high grade Portland cement, clean sand or granular fill and washed gravel or crushed stone as coarse aggregate per ACI 530. Maximum aggregate size shall be $\frac{3}{4}$ ”. All aggregates shall conform to ASTM C33. Gravel should be well graded and not exceed 1 1/2” in size. Water shall not exceed 5 1/2 gallons for each bag, unless sand is very dry. Concrete shall be mixed using an approved batch machine or mobile mixer until uniform in color and providing a 4” minimum to 6” maximum slump.

03350 – Concrete Repairs–

Repair concrete surface defects by removing all loose concrete and cleaning surfaces and form or pouring of slab. Provide broom finish texture for all exterior slabs. Slope exterior patio or porch slabs away from building to match existing. Patch all voids and depressions exceeding 3/8 inch in any direction

DIVISION 04. MASONRY

04000 - General

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

04100 – Walls

All cracks or defects should be repaired and sealed leaving all ready to receive paintwork.

The edges of the repair must be cut square. Cut out all cracks to a minimum depth of $\frac{1}{4}$ inch. Brush off all dust with clean water and thereafter apply mortar repair to all defective masonry areas including for reforming joints to match existing profile.

DIVISION 5. METALS

05000 – General

Contractor shall review the extent of metal work needing repairs on site and provide labor and materials pertaining to metal work as required in said documents and as specified herein, while complying with all applicable building codes.

05100 – Rusting Metals

The contractor shall remove rust from the metal surfaces using a wire brush or other equally effective method that does not affect the structural integrity of the steel members. The contractor is to apply a primer and undercoat before apply the finish coats as required.

DIVISION 07. ROOFING

07000 - General

Contractor shall provide labor and materials pertaining to thermal and moisture protection work as specified herein, while complying with all applicable building codes.

07090 – Waterproofing Concrete Flat Roofs

All roof joints and penetrations shall be made watertight using approved methods and materials.

Include allowance for patch repairs to roof comprising removing all loose masonry and vegetation to ensure the surface to be repaired is stable. The edges of the repair must be cut square. Cut out all cracks to a minimum depth of ¼ inch. Brush off all dust with clean water and thereafter apply mortar repair to all defective masonry areas including for reforming joints to match existing profile.

07110 – Repairs to Pitched Bermuda Stone Roofs

All roof joints and penetrations shall be made watertight using approved methods.

Include allowance for patch repairs to roof comprising removing and repairing all loose masonry and vegetation to ensure the surface to be repaired is stable. The edges of the repair must be cut square. Cut out all cracks to a minimum depth of ¼ inch. Brush off all dust with clean water and thereafter apply mortar repair to all defective masonry areas including for reforming joints to match existing profile.

Include for repairing cracks to masonry around existing rainwater outlets. Leave repairs ready to receive subsequent painting coats.

07111 – Repairs to Liquid Membrane Coated Roofs

Scrape and cut out all cracks and blisters. Brush off all loose and friable paintwork and ensure that the deck is sound and free from holes, surface de-lamination, splitting, and that all unsupported joints are not flexing. Repair all areas that require attention.

07920 - Caulking and Sealants

For all paintable surfaces allow for removing all existing defective caulking and renewing. Use a Latex based caulk. Color shall match paint.

07930 – Roof Glides

Repair all defective or damaged roof glides. Cut out all damaged sections of existing roof glides and reform glides using materials to match the existing to leave a smooth continuous finish ready to receive painting coat.

DIVISION 09. FINISHES

Generally

The Contractor shall ensure that all surfaces are in a fit and proper condition to receive the coatings specified.

Clean down, remove all foreign matter including grease, dust, dirt, fill cracks and holes, fine sand and leave smooth. The whole surface must be thoroughly dry unless otherwise specified before coating commences. If there is mould or moss on the surface treat it with an appropriate fungicide.

All surfaces shall be finished with the appropriate coating system to produce a satisfactory result. No variation will be made for alleged additional work or alternative finish without prior approval from the Project Manager.

The Contractors shall remove furniture, switch plates, light fittings, etc., before coating, and replace on completion. Allow each coat to harden thoroughly, then sand down and dust clean before re-coating.

Cutting in between different colours shall be done neatly in straight lines to satisfaction of Project Manager.

Manufacturer's instructions shall be strictly followed

09910 - Exterior Walls

Repairs surface defects (as required by surface conditions)

- a) Patching: Repair surface defects such as spalls, bug holes, pitting or other voids in the surface by applying an appropriate leveler in one or multiple applications to fill the void until it is flush with the surface. Moist cure the patch when hot or dry weather conditions exist.
- b) Crack Repair : Repair static surface cracks up to 1/16 inch wide (1.6 mm) by centering a 4-6 inch (100-150 mm) wide strip of reinforcing fabric over the length of the crack and fully embedding the fabric in the leveling material. Feather the edges so the build-up in material will not be noticeable.
- c) All nail heads shall be set below the surface and finished smooth.
- d) Mildew: the mildew must be removed and surface treated to inhibit further mildew growth. Exterior walls shall receive a primer coat and two coats of flat or semi-gloss paint.
- e) Efflorescence: Where efflorescence has occurred, wash with a 10% muriatic solution, rinse thoroughly with clean water and allow to thoroughly dry at least one week before painting or sealing.

Paint - All external walls to be painted with a sealing coat (to new or patch repaired plaster) and a minimum two finishing coats of exterior quality paint as per the existing paint.

09910 – Bermuda Stone Roofs

All work is to be inclusive of surface preparation, including the Clorox cleaning and scraping of the existing roofs (by brush) Jet spraying is not permitted. If mildew is evident, the mildew must be removed and surface treated to inhibit further mildew growth.

Paint - All Bermuda stone roof surfaces that have been previously painted with a Cement based painting product are to be coated with minimum of two finishing coats of “Proseal” cement based products or similar approved painting products.

09910 – Liquid Membrane Coated Roofs

All work is to be inclusive of surface preparation, including the Clorox cleaning and scraping of the existing roofs (by brush) Jet spraying is not permitted.

If mildew is evident, the mildew must be removed and surface treated to inhibit further mildew growth.

Paint - All liquid membrane coated roof surfaces are to be coated with minimum of two finishing coats of paint to match the existing roof scheme.

09911 - Exterior Wood Surfaces

All nail heads shall be set below the surface and finished smooth. If mildew is evident, the mildew must be removed and surface treated to inhibit further mildew growth. When staining, pre-prime with the same product as specified for the final coat. Sand and putty wood surface smooth before finish is applied. Surfaces shall be sanded before each finish layer is applied. Windows and doors are to be painted in the open position and include for painting all exposed edges

Paint - Prime wood surfaces including faces, edges and ends before installation. After installation, apply at least one coat of wood primer and two coats of finish paint.

Specify Trim Paint: Apply at least one coat of alkyd-type enamel primer and two finish coats color to match existing.

09971 – External Steel and Iron

Before applying a finish, remove dirt, oil, grease and other loose particles. Wash with solvent. If rusted, wire brush or sand clean.

Paint: Apply at least two finish coats, where required apply one coat of alkyd-type enamel primer.

Notes:

- (i) Prior to submitting a bid, you must visit the site and satisfy yourself as to the nature, complexity associated with completing these works.
- (ii) Paints are to be supplied from one of the below suppliers (or similar approved).

Bermuda Paint Co. Ltd
Brighton Hill
Devonshire DV06
Tel: (441) 236 4662
Email www.bermudapaint.bm

Home Paint Ltd
22 St John's Road
Pembroke HM 09
Tel: (441) 292 7274
Email: homepaintdebbie@cwbd.a.bm

Pembroke Paint Co. Ltd
Market & Bakery Lanes
West Hamilton HM 09
Tel: (441) 292 8368
Email: paint@northrock.bm

Smooth & Easy Ltd
1 Middle Road
Warwick WK04
Tel: (441) 236-5317
www.smoothneasy.com

- (iii) All materials and labour will be provided by the successful Contractor and shall therefore be included in his price.
- (iv) Contractor to use Glidden "Gripper" Primer on walls/ceilings that are water stained, or experience mildew and on timber that has hairline cracks.
- (v) Contractor to use Xypex on masonry surfaces experiencing dampness prior to applying paint.