

**SCOPE OF WORK  
FOR  
IRMA SHIPWRECK SALVAGE AND DISPOSAL EFFORT**

**1.0 GENERAL.**

1. The purpose of this contract is to provide removal and disposal of the sunken, grounded, moored, landed or otherwise abandoned vessel(s) shown on the Vessel Inventory Spreadsheet (VIS). The exact locations of the vessels are shown on the VIS as well as on the contract drawing. The complete physical and structural condition of the vessels are currently unknown, however, where observed, general vessel comments may be found in the VIS, which includes pictures of many of the vessels.

Some information as to vessels type, size, and construction is described in the VIS “Condition of Vessel(s)”. The Contractor shall provide all plant, labor, equipment, materials, supplies, divers and services as necessary to remove and dispose of the vessels listed on the VIS. The Contractor may use standard salvage methods which comply with local and/or European Union (EU) or United States Environmental Protection Agency (USEPA) laws, regulations and Best Management Practices (BMPs). The intent of the contract is to have the vessels raised and legally disposed of in accordance with applicable laws and regulations, including but not limited to removal of petroleum fluids, batteries, gray or black water where applicable, salvageable metals, and subsequently grind and dispose of the residual wood and plastic. Steel hull boats may be prepped for disposal at sea as an artificial reef.

2. For the purposes of evaluating the bid, the following components and weightings shall be utilized:

- a. Demonstrable prior experience similar in scale and location (Caribbean basin) 30%
- b. Ability to meet mobilization and work timeframes as detailed in the Scope of Work 20%
- c. Current in-force insurance and Surety 10%
- d. Pricing 40%

Note – A single bid will be accepted for the work described in this scope of work and for the shoreline debris removal activities; it is anticipated that the work will be awarded to a single contractor.

**2.0 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK.**

2.1 The Contractor acknowledges that he has taken steps reasonably necessary to ascertain the nature and location of the work, and that he/she has investigated and satisfied him/her self as to the general and local conditions which can affect the work or its cost. This includes but not limited to (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, and roads; (3) uncertainties of weather, bridge openings, channel widths, tides, or similar physical conditions at the site; (4) the conformation and conditions of the ground at the assigned hauling and graving yard; and (5) the character of equipment and facilities needed preliminary to and during work performance, as well as the transportation costs and availability to mobilize such equipment to Sint Maarten. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform

the work without additional expense to the Government of Sint Maarten or the World Bank, collectively referred to as “The Government”.

2.2 The Government assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Government. Nor does the Government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

2.3 All work shall be accomplished in accordance with the IMO Guidelines for Vessel Disposal (2014), and appropriate Marine Ministry and other Governmental, Territorial and Local regulations. The Contractor shall comply with all appropriate safety practices, regulations and policies, to include personal flotation devices and water safety for all Contractor and Government personnel in or around the work area.

### **3.0 LOCATION OF VESSEL(S).**

The vessels are located within the general Simpson Bay Lagoon area, including Cole Bay, Mullet Bay and the shallows, marinas and the shorelines surrounding. The vessels, when sunk, are generally within 15 feet of the surface, most at a bottom depth of 10 feet or less. The approximate locations of the vessels are shown on the VIS in Degrees Latitude and Longitude, with minutes listed to thousandths of a minute.

### **4.0 PRE-WORK CONFERENCE.**

The Contracting Officer will conduct a pre-work meeting. It will be arranged by the Contracting Officer's Representative (COR) after award of the contract and shall be held before the Notice to Proceed is issued. The successful offeror will be notified and will be required to attend. The COR's will notify the Contractor of the time, date, and location set for the meeting. At this conference, the Contractor shall be oriented with respect to Government procedures and line of authority, contractual, administrative, and work related matters. This meeting shall include a tour of the proposed hauling and graving facilities. This Scope of Work will be discussed and any Contractor questions or concerns will be addressed. Minutes of the meeting shall be prepared by the Contracting Officer or the COR's and signed by both the Contractor and the Contracting Officer or the COR's. The minutes shall become part of the contract file. There may also be occasions when subsequent conferences will be called to reconfirm mutual understanding. The Contractor shall be prepared to discuss all plans and schedules for removing and disposing of the vessels and the conditions which may affect the work.

### **6.0 CONTRACT DRAWINGS.**

6.1 The contract drawings will consist of one map showing the listed vessel locations based on the information included in the VIS. In addition, a Vessel Image file, and Location Map of the Hauling and Graving yard shall be included.

6.2 The Contractor shall maintain a working list of the vessels, including separate columns for confirmed location/access, hauling status, de-polluting status, decommissioning status, disposal technique and date of completion, and final disposal method/location. Upon completion of the work, the Contractor shall sign the working list in the following manner: “I CERTIFY THAT THIS CORRECTED WORKING LIST INDICATES SALVAGE AS ACTUALLY

PERFORMED IS AN ACCURATE REPRESENTATION OF THE SPECIFIED WORK. .” The working list, including all waste disposal manifests for waste products such as fluids and batteries and the like, as well as photographs of each boat upon haul out and staging (identified by VIS identification number) shall then be furnished to the Contracting Officer prior to acceptance of the work. The Government reserves the right to withhold final payment until acceptable final working list, waste disposal manifests and photographic documentation has been submitted.

6.3 The below listed items are incorporated as part of this contract.

<u>Title</u>	<u>Attachment No.</u>
Vessel Inventory Spreadsheet, Vessel Image File ..	1
Map of Shipwreck Positions .....	2
Map of Hauling and Graving Yard .....	3
Best Management Practices .....	4
Additional Construction Drawings.....	5

## **7.0 PERMITS AND RESPONSIBILITIES.**

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits not already obtained by the Government, and for complying with any Governmental, Territorial, and local laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's negligence or fault, and shall take proper safety and health precautions to protect the work, the workers, the public, and the property of others. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work.

## **8.0 BRIDGE TO BRIDGE COMMUNICATIONS.**

Because this work will occur within a body of water and channel with heavy traffic, and in order that radio communication may be made with passing vessels, all tugs or salvage vessels that work under this contract shall be equipped with bridge-to-bridge radio telephone equipment. The radio equipment shall operate on a single channel of very high frequency (VHF) FM, on a frequency of [specify] MHZ with low power output having a communication range of approximately ten miles. Channel 16 must be monitored at all times.

## **9.0 CONTRACT PRICES - BIDDING SCHEDULES**

Payment for the work specified in the Bidding Schedule shall constitute full compensation for furnishing all plant, labor, equipment, supplies, and materials, and for performing all operations required to complete the work in accordance with the drawings and specifications. All costs for work not specifically mentioned in the Bidding Schedule, but that is necessary for a complete job, shall be included in the contract price.

## **10.0 MISPLACED MATERIAL.**

Should the Contractor, during the progress of the work, lose, dump, throw overboard, sink, or misplace any material, plant, machinery, or debris, the Contractor shall recover and remove the same with the utmost dispatch. The Contractor shall give immediate notice, with description

and location of such obstructions, to the Contracting Officer or inspector, and when required shall mark or buoy such obstructions until the same are removed. Should the Contractor refuse, neglect or delay compliance with the above requirements, such obstructions may be removed by the Government, and the cost of such removal will be deducted from any money due or to become due the Contractor, or will be recovered under his bond. The liability of the Contractor for the removal of a vessel wrecked or sunk without fault or negligence shall be limited to that provided in Sections 15, 19, and 20 of the River and Harbor Act of March 3, 1899 (33 U.S.C. 419 et seq.).

#### **11.0 SUPERINTENDENCE BY THE CONTRACTOR.**

At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly supervise the work and have on the work site a competent superintendent who has the authority to act and sign for the Contractor. All guidelines established in the paragraph "Contractor Quality Control" shall be followed.

#### **12.0 UNIDENTIFIED OBJECTS.**

Should the Contractor, during salvage operations, encounter any objects or vessels on the lagoon bottoms, shallows or shoreline, which has not been previously identified on the VIS, he/she shall notify the Contracting Officer immediately as to the location of object, and any other pertinent information necessary for the Contracting Officer's information and action as he/she determines to be necessary.

#### **13.0 INSPECTION BY THE GOVERNMENT.**

13.1 Government personnel will inspect the salvage operations when in progress and at any time deemed appropriate by The Government. The Contractor is required and shall furnish Government personnel transportation from shore to the site of salvage operations as necessary.

13.2 The Government intends to document the removal and disposal operations. The Contractor will be required to perform the work in an orderly fashion, with staging and hauling areas delineated from de-polluting, decommissioning and graving areas

#### **14.0 PAYMENT**

The Government will pay 60% of the mobilization and demobilization lump sum price when the Contractor has mobilized and arrived at the work site with the necessary plant and equipment to perform the job. Following commencement of the work, the Contractor may submit weekly percent completion invoices in accordance with rates shown in the bid schedule, copies of waste shipment/disposal receipts must be attached. Payment will be issued following satisfactory review by the COR. There will be no Reimbursement for tasks not specially listed in the Bidding Schedule, unless it is approved in writing by the COR.

#### **15.0 WORK SCHEDULE**

The Contractor will be required to work a minimum eight (8) hour day six (6) days a week. Work day shall be normal daylight hours. The Contractor may work more than eight (8) hours per day if desired. Work hours and schedules to be discussed and approved by Contracting Officers Representative. No work is allowed on Sunday without prior approval of the Government.

## **16.0 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK.**

The Contractor shall be required to (a) commence removal operations under this contract within 30 calendar days after the date the Contractor receives the Notice to Proceed, (b) prosecute the work diligently, and (c) to complete the work (raising, towing, hauling, de-polluting, decommissioning and graving (re-sinking at reef location for steel boats) in its entirety not later than 90 calendar days after the date the Contract or receives the Notice to Proceed. The time stated for completion shall include final inspection, submittal of paperwork and successful return of assigned yard to the owner.

## **17.0 REMOVAL AND DISPOSAL.**

17.1 Because of the variables on the individual vessel's construction and structural competence, the Contractor will have to perform a complete physical assessment of the vessels structural stability prior to hauling. The removal of aluminum, stainless, lead, rigging, and other items of value should be made property of the contractor for salvage, recycling or disposal. The contractor should reflect any reclaimed cost value in their bid. The Contractor may utilize any standard removal method to complete the work defined in this contract. The Government does require that certain actions occur during the removal and disposal operation. If any of the said conditions are not met, then the Contractor will not have met the contract expectations and will be in violation of the Contract agreement. The Contractor shall be required to correct all deficiencies at no additional cost to the Government and without any further time extension.

The removal of batteries, fuels, hydraulic oils and potentially hazardous or explosive items such as propane tanks, gas cans, flares and the like should be accomplished in a staged fashion and according to Best Management Practices (BMP). A copy of a suitable BMP document is attached as Exhibit B.

- The salvage contractor should provide double walled above ground storage tanks with secondary containment (polyethylene) for the storage and eventual recycling or disposal of all petroleum fluids and associated water cut.
- Spill kits should be readily available at all times during the de-polluting process. In addition, boomed or diked areas must be utilized during the de-polluting process in order to prevent an uncontrolled release of petroleum or other fluids onto the ground surface or the waters.
- Batteries should be removed and stored in weather proof bins on impervious surfaces and also under a canopy prior to transport and recycling to prevent the accumulation of rainwater, etc.
- All transport and recycling should be conducted under specific shipping and disposal manifest including quantity and final resting place or recycling center.
- Metals such as brass and stainless steel should be segregated into roll off bins and readied for recycling and transport.
- Lead keels should be likewise collected and prepped for recycling. Keels are often comprised of shot or pellets, and may not be solid lead ingot. The Contractor needs to

take proper care and caution prior to cutting off and removing keels in order to prevent the release of lead shot onto the ground and/or into the waters.

- Additional materials, such as wood and fabrics, cushions and paper goods should be segregated into separate bins for land disposal, most likely in the landfill; however, other options such as off-island disposal or incineration may be available, with prior Government permission.
- Provisions for tying down or otherwise securing hauled vessels for hurricane conditions must be made and communicated to the Government prior to initiating work.
- Provisions for securing the Contractor's equipment including, but not limited to, barges, cranes, travel lifts, fork lifts, backhoes, skip loaders and other heavy equipment, storage and recycling bins, disposal bins, storage tanks and graving debris for hurricane conditions must be made and communicated to the Government prior to initiating work.
- Grinding of fiberglass and recycling or disposal is preferable to breaking and burial. At this time, disposal of vessel hulls in part or in whole may not be disposed of at the SXM Landfill. Offsite disposal options must be preapproved by the Government prior to initiating any disposal activities. Fiberglass boats may not be disposed of at sea under any circumstances.
- Grinding of fiberglass boats must be accomplished with no visible emissions
- Steel and Aluminum boats should be de polluted and decommissioned and staged for reef construction.
- Wood hulled boats may be disposed of in the landfill or at sea after full de-polluting and decommissioning, with prior approval of The Government.

17.2 Any deviations from these general guidelines must be discussed with and approved by the Contracting Officer prior to taking action.

## **18. SHIPWRECK DEBRIS CLASSIFICATION.**

18.1. **Burnable Debris.** Burnable debris includes all biodegradable matter except that included in the following definitions of other categories of debris. It includes, but is not limited to, paper and cardboard goods, general household trash accumulated on vessels, untreated structural timber; untreated wood products; and brush or organic biomass collected in the course of shipwreck collection.

18.2. **Non-Burnable Debris.** Non-burnable debris includes, but is not limited to, treated timber; plastic (including fiberglass); glass; rubber products; metal products; sheet rock; cloth items; non-wood building materials, furniture, and carpet and padding, cushions life jackets and rings.

18.3 **Metals.** Metals including keels, rudders, pintels, engines, transmissions, water heaters, shafts propellers, masts, railings, winches, anchors chain, chain-plates, and various other ship parts, fixtures, tanks, structural steel and appliances.

18.4. **Household Hazardous Waste (HHW)**. HHW includes household cleaners, oils, paints, flammables, insecticides, fuel cans, propane gas bottles, refrigerant and batteries.

18.5 **Fiberglass Debris**. Grinding of fiberglass and recycling or disposal is preferable to breaking and burial. At this time, disposal of fiberglass vessel hulls in part or in whole may not be disposed of at the SXM Landfill. Offsite disposal options must be preapproved by the Government prior to initiating any disposal activities. Fiberglass boats may not be disposed of at sea under any circumstances.

- Grinding of fiberglass boats must be accomplished with no visible emissions

18.6 **Ineligible Debris**. Debris that is not covered in this contract is debris located on private property and household garbage not found on vessels. Also not included are hazardous or toxic materials or waste such as asbestos, electrical transformers, and known or suspected hazardous materials.

## **19.0 PROTECTION OF EXISTING STRUCTURES, EQUIPMENT, AND UTILITIES.**

19.1 The Contractor shall preserve and protect all structures, equipment, vegetation, and utilities at or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required at the work site. The Contractor shall repair any damage to those facilities, including those that are property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

19.2 The Contractor will be responsible for verifying the locations and depths of all utility crossings and take precautions against damages which might result from his operations. If any damage occurs as a result of his operations, the Contractor will be required to suspend work until the damage is repaired and approved by the Contracting Officer. Costs of such repairs and downtime of the operation and attendant plant shall be at the Contractor's expense.

## **20.0 ENVIRONMENTAL CONCERNS.**

The Contractor shall comply with all applicable regulations and laws concerning environmental matters, which may include but are not limited to the Government of Sint Maarten, US EPA, and the European Union. The contractor shall take proper steps to protect the uplands, beach, and open waters from environmental damages of any kind. The Contractor shall comply with all requirements under the terms and conditions set forth in the permits list in the paragraph entitled, "PERMITS AND RESPONSIBILITIES".

Recycling of waste streams including various metals (lead keels, brass and stainless fittings, aluminum, engines, transmissions, drive shafts, propellers) is preferable to land disposal, however, the Government understands that recycling may not be possible in all circumstances.

Recycling of petroleum fluids, batteries, casings and other compounds and chemicals as discovered is also preferable.

Recycling subcontractors must be pre-certified by The Government prior to the initiation of transport and recycling of wastes. The Bid proposal should include the names, license information and insurance certificates of chosen recycling or disposal sub contractor options.

If an off-island facility or location is chosen for the final disposition of any vessel, fluid, structure, compound or related item, prior approval of The Government must be obtained, and, at a minimum, Shipping and disposal or final resting place manifests must be provided with the acceptees contact and licensing information.

## **21.0 OBSTRUCTION OF NAVIGABLE WATERWAYS.**

21.1 The Contractor shall:

21.1.1 Promptly recover and remove any material, plant, machinery, or appliance which the Contractor loses, dumps, throws overboard, sinks, or misplaces, and which, in the opinion of the Contracting Officer, may be dangerous to or obstruct navigation.

21.1.2 Give immediate notice, with the description and locations of any such obstructions, to the Contracting Officer.

21.1.3 When required by the Contracting Officer, mark or buoy such obstructions until the same are removed.

21.2 The Contracting Officer may:

21.2.1 Remove the obstruction by contract or otherwise should the Contractor refuse, neglect, or delay compliance with this paragraph; and

21.2.2 Deduct the cost of removal from any monies due or to become due to the Contractor; or

21.2.3 Recover the cost of removal from the Contractor's bond.

## **22.0 NOTIFICATION OF MARINE MINISTRY.**

The Contractor must notify the Marine Ministry prior to commencement of the work. Information pertaining to contract work schedule, location of rig and equipment during work, and potential hazards of the operation should be provided. The individual to be contacted locally will be provided prior to the start of work. All vessels that are regulated by the Marine Ministry shall have current inspections and certificates before being placed in service for use for this contract. A copy shall be posted in a public area aboard the vessel.

## **23.0 FINAL EXAMINATION.**

The Contractor and Government will inspect the areas where the vessels and debris have been removed. Any items found at the work sites will be removed by the Contractor at no additional cost to the Government. Inspection may include side-scan sweeping, diving, and/or visual if necessary to insure all wreckage and debris have been removed. The Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer.

After conclusion of the recovery, salvage, de-polluting, decommissioning, graving and final disposal of the vessels, the assigned graving yard should be restored as closely as possible to it's pre-operation condition. This will include the following:

- Removing waste bins, barges, cranes, derricks, land equipment such as travel lifts, front end loaders and excavators, above ground storage tanks, trash and debris remaining as a result of the subject operations.
- Restoration of damaged pavement or other physical plant facilities at the yard caused by the subject operations.
- Repeat of the Phase II ESA to document post project soil and ground water quality conditions on the property.
- Photographic Documentation of the pre condition and final condition of the yard, accompanied by waste disposal manifests for the various waste streams including hulls, metals, fuels and other liquids, as well as an inventory list of the vessels recovered and graved.
- Final release of the yard back to the normal owner and/or operator and termination of the usage agreement between the Government and the owner and/or operator upon successful final inspection

## **24.0 ACCOMPANYING DOCUMENTS.**

- Attachment 1: Vessel Inventory Spreadsheet; Image File
- Attachment 2: Map of Shipwrecks
- Attachment 3: Map of Assigned Graving Yard
- Attachment 4: Best Management Practices