

# **Summary of Work**

## **Life Safety Refurbishments**

**Victoria Coast Guard Base, Victoria B.C.**

## **1.0 Introduction**

### **1.1 Title**

Life Safety Refurbishments

### **1.2 Project Introduction**

Electrical and Mechanical Site Services are being sought for the installation and integration of an addressable fire alarm system and devices, as well as a public address system into the existing life safety equipment and system on site. Work also includes refurbishments to mechanical life safety components. This Canadian Coast Guard Base in Victoria BC is a Fisheries and Oceans Canada facility operated by its Real Property Branch.

## **2.0 Scope of Work**

### **2.1 Services Required**

Department of Fisheries & Oceans Canada (DFO) will retain a Contractor through PWGSC for the provision of construction services for this project.

Contractors are to provide a lump sum bid. Contractors are to bid according to the current site conditions observed at the bidders site visit as well as specifications provided.

### **2.2 Overview of Scope**

The Contractor will provide all labour, materials, and equipment required to complete the full installation of the new life safety system. The contractor shall provide each component in accordance with the component descriptions in the attached specifications, general drawings, details, as well as comply with the overall intent of the National Building Code, the British Columbia Building Code, the Canadian Electrical Code, and instruction from electrical engineering firm assisting in the project oversight.

**Work of this Contract comprises of but is not necessarily limited to the supply and installation of the following items:**

#### **Addressable Fire Alarm system:**

- Provide all labour, material and equipment necessary to extend, expand and replace the existing fire alarm system into the Project area. Make modifications to the existing fire alarm system as indicated in the drawings and specified herein.
- Include all wiring and material required to complete the installation. Items obviously necessary or reasonably implied to complete the work are to be supplied as if indicated on the drawings and called for in the specifications.
- All new components shall be ULC listed and approved for use on the intended equipment and to be compatible to the existing Siemens fire alarm system.

Coordinate on site as required.

**Work Included:**

- Provide new addressable detectors, ancillary relays, and signaling devices as indicated on the drawing
- Connect to existing fire alarm panel as required
- Modify all existing annunciators as required
- Modify the existing fire alarm annunciators as required
- Perform all the required programming, verification & documentation as required.

**Public Address System:**

Public address system to include:

- Microphone.
- Speakers.
- Mixing Amplifier.
- IP Paging Unit.
- Connection with the existing fire alarm system (to mute the PAS when fire alarm systems activated)
- Accessories and incidentals necessary for a complete operational system as intended.

**SYSTEM OVERVIEW**

- The sound system shall provide intelligible voice coverage inside the building where speakers are shown.
- Locate the equipment rack in rooms as shown on the drawings.
- The loudspeaker system should be organized in zones where applicable, as shown on drawings.
- System to have individual volume control for each zone at the equipment rack.
- System to be capable of selecting each zone independently and the volume controlled separately so that one or more zones could be turned off or down while the sound system is used for an event in the other zone or zones.
- There will be no expectation to use the sound system for all zones and simultaneous events.
- The loudspeaker system should be sufficiently directional to minimize excitation of the reverberant field, and should be capable of good quality voice reproduction, with a low frequency response to a minimum of 80Hz, and extended high frequency response to at least 15kHz at the listening positions.
- The speaker system shall make use of the optimum quantity of devices to achieve the required coverage.
- Quantity and power of the amplifiers to be sufficient to guarantee intelligible speech at all locations under peak ambient noise.

- The contractor shall install, test and commission the equipment in accordance with the tender drawings.
- Contractor is responsible for providing any necessary fire watch when any existing fire safety component is not available to operate in normal function mode due to modifications to the system underway.
- The contractor will inspect the equipment on site and advise the owner and engineer of any deficiencies, concerns or missing equipment prior to the work commencing.

**.1 The installation will be undertaken in a live environment. Interruptions to electrical service to the facility require a minimum of 72 hours' notice. All interruptions will be agreed in advance with the owner.**

### **2.3 Specifications and Standards**

- .1 Work performed under this contract shall meet the objectives laid out in the SOW, Specifications, General Drawings, and Details by taking a logical, structured and cost effective approach.
- .2 The workmanship is to be of a uniform, high quality finish in accordance with the best trade practices. Electrical permit to be obtained at Contractors cost.
- .3 The Contractor shall ensure work complies with the National Building Code, the Master Municipal Construction Drawings, and the British Columbia Building Code. Where conflict arises, the more stringent standard shall apply. The contractor is responsible for obtaining clarifications prior to Tender Closing in the time allotted.
- .4 The Contractor shall comply with all WorkSafe BC Health and Safety Standards and provide a Health and Safety Plan prior to commencement

### **2.4 Milestones**

- .1 The following milestones (in calendar days) have been established for the implementation of this project. The Contractors detailed schedule should meet the milestones or match as closely as possible for each task.

<b>Project Milestone</b>	<b>Time-Frame</b>
Contract Award	Day 0
Pre-commencement Meeting	Award + 7 days
Contractor Shop Drawings/Submittals to DFO Project Manager	Award + 14 days
Contract Completion Date (CCD-100%)	<b>15 May 2017</b>

- .2 Following the approval of the Contractor's schedule by the DFO Project Manager, the

Contractor shall notify the tenants of the work schedule, and take the necessary measures to complete the work within the scheduled time-frame

- .3 Product submittals are required to ensure that the specified material and products are furnished and installed in accordance with design intent as expressed in the contract documents. Until submittals are reviewed and approved by the project authority, work involving relevant material or product may not proceed. Submittals will be reviewed by the project authority and responses provided within 3 working days.

## **2.5 Method and Source of Acceptance**

Unless otherwise noted, the manner in which the work will be judged as complete and satisfactory will only be accepted in writing from the overseeing Electrical and Mechanical Engineering firm. Contractor is responsible to provide close out documents including O&M manuals, warranty documentation, and new as built drawing in AutoCAD format. All Close out documentation is to be submitted electronically in pdf format.

## **2.6 Tender Prices**

Bidders are to provide a lump sum quotation.

## **3.0 Other Terms and Conditions of the SOW**

### **3.1 Communications Management**

- .1 All communications shall be directed to the DFO Project Manager.

### **3.2 Health and Safety**

- .1 Health and safety considerations required to ensure that DFO shows due diligence towards health and safety on construction sites, and meets the requirements laid out in PWGSC/RPB Departmental Policy DP 073 - Occupational Health and Safety - Construction.

## **.2 REFERENCES**

- .1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations
- .2 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
  - .1 Material Safety Data Sheets (MSDS).
- .3 Province of British Columbia
  - .1 Workers Compensation Act, RSBC 1996 - Updated 2006.

### **.3 SUBMITTALS**

- .1 Submit site-specific Health and Safety Plan: Within 7 days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must
  - .1 Results of site specific safety hazard assessment.
  - .2 Results of safety and health risk or hazard analysis for site tasks and operation found in work plan.
- .2 Submit copies of reports or directions issued by Provincial health and safety inspectors.
- .3 Submit copies of incident and accident reports.
- .4 Consultant will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within 5 days after receipt of plan. Revise plan as appropriate and resubmit plan to Consultant within 5 days after receipt of comments from Consultant.
- .5 Consultant's review of Contractor's final Health and Safety plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.
- .6 On-site Contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations.

### **.4 FILING OF NOTICE**

- .1 File Notice of Project with Provincial authorities prior to beginning of Work.

### **.5 SAFETY ASSESSMENT**

- .1 Perform site specific safety hazard assessment related to project.

### **.6 MEETINGS**

- .1 Schedule and administer Health and Safety meeting with Consultant prior to commencement of Work.

### **.7 GENERAL REQUIREMENTS**

- .1 Develop written site-specific Health and Safety Plan based on hazard assessment prior to beginning site Work and continue to implement, maintain, and enforce plan until final demobilization from site. Health and Safety Plan must address

**.8 RESPONSIBILITY**

- .1 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.
- .2 Comply with and enforce compliance by employees with safety requirements of Contract Documents, applicable federal, provincial, and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.

**.9 COMPLIANCE REQUIREMENTS**

- .1 Comply with Workers Compensation Act, B.C.

**.10 UNFORSEEN HAZARDS**

- .1 When unforeseen or peculiar safety-related factor, hazard, or condition occur during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Province having jurisdiction and advise Consultant verbally and in writing.

**.11 HEALTH AND SAFETY CO-ORDINATOR**

- .1 Employ and assign to Work, competent and authorized representative as Health and Safety Co-ordinator. Health and Safety Co-ordinator must:
  - .1 Have working knowledge of occupational safety and health regulations.
  - .2 Be responsible for completing Contractor's Health and Safety Training Sessions and ensuring that personnel not successfully completing required training are not permitted to enter site to perform Work.
  - .3 Be responsible for implementing, enforcing daily and monitoring site-specific Contractor's Health and Safety Plan.
  - .4 Be on site during execution of Work and report directly to and be under direction of site supervisor.

**.12 POSTING OF DOCUMENTS**

- .1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of Province having jurisdiction, and in consultation with Consultant.

**.13 CORRECTION OF NON-COMPLIANCE**

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by Consultant.
- .2 Provide Consultant with written report of action taken to correct non-

compliance of health and safety issues identified.

- .3 Consultant may stop Work if non-compliance of health and safety regulations is not corrected.

#### **4.0 Site Control**

- .1 Contractor supplied disposal bins are to have a closable lid, and remain closed when being loaded.
- .2 Clean-up, temporary fencing, and storage; The Contractor shall provide, install and maintain all necessary control measures to ensure the work does not impact the adjacent environment or occupants. Provide secure temporary storage facilities and fencing for materials and equipment if necessary. Clean up debris daily from the work area and ensure all hazardous impediments are removed or adequately stored or protected. The jobsite shall be left clean, neat and in a safe condition at the completion of each workday to the satisfaction of the DFO representative.
- .3 Adequate storage areas for material and equipment will be provided onsite for the Contractor for the duration of the project
- .4 The contractor shall provide sanitary facilities for use by employees.
- .5 Smoking is not permitted on the worksite.

#### **5.0 Security**

- .1 Personnel employed on this project will be subject to security check. Obtain clearance, as instructed, for each individual who will require to enter the premises, unless directed otherwise by the owners representative.
  - .2 Personnel will be checked daily at start of work shift and provided with pass which must be worn at all times. Pass must be returned at end of work shift and personnel checked out.
- #### **2 SECURITY ESCORT**
- .1 Personnel employed on this project must be escorted when executing work in non-public areas during normal working hours. Personnel must be escorted in all areas after normal working hours.
  - .2 Submit an escort request to Consultant at least 10 days before service is needed. For requests submitted within time noted above, costs of security escort will be paid for by a DFO Departmental Representative. Cost incurred by late request will be Contractor's responsibility.
  - .3 Any escort request may be cancelled free of charge if notification of cancellation is given at least 4 hours before scheduled time of escort. Cost incurred by late request will be Contractor's responsibility.

.4 Calculation of costs will be based on average hourly rate of security officer for minimum of eight hours per day for late service request and of four hours for late cancellations.

## **6.0 Hours or Work**

Hours or work are to be between 0800-1600 Monday to Friday. Evening and weekend work may be required to accommodate the Administration building and Regional Operation Center operational schedule. Any work conducted outside of the stipulated hours; require owner's written approval before commencing.

## **7.0 Site Parking**

Site parking will be made available for official "Company Marked" Vehicles only. Personal vehicles will not be permitted onsite.