



STATEMENT OF WORK

PD PROJECT INFORMATION

PD 1 PROJECT DESCRIPTION

PD 1.1 Purpose

- .1 To ensure thermal human comfort of personnel with adequate heating, ventilation and air conditioning systems for the Administration and Maintenance Building at the Batoche National Historic Site.

PD 1.2 Description

- .1 Replace the existing rooftop air handling units and modify the ductwork to suit the revised building layout and use.
- .2 Test, adjust, balance and then commission the HVAC systems to meet current occupancy requirements.

PD 2 PROJECT INTRODUCTION AND BACKGROUND

PD 2.1 USER DEPARTMENT

- .1 The Client Park, referred to throughout this Statement of Work, will be the following:
 - a. Batoche National Historic Site

PD 2.2 PROJECT BACKGROUND

- .1 Administration and Maintenance Building rooftop HVAC equipment requires replacement for it is beyond its useful life and components have failed.
- .2 **Batoche Administration and Maintenance Building**
 - a. **HVAC Description**
 - i. The existing rooftop HVAC equipment was installed over 30 years ago. The building was renovated and expanded with no upgrades or changes to the HVAC system.
 - ii. There is one air handling unit and condensing unit on the roof that serves most of the building.
 - iii. There is one direct fired make-up air unit that serves both the Maintenance Garage and Carpentry Shop. There are two exhaust fans associated with the make-up air unit, one for the Maintenance Garage and one for the Carpentry Shop.

PD 2.3 DESIGN CODE AND REGULATIONS

- .1 The standards, codes and regulations to be used for the design and construction of the utilities and associated structures shall be the latest edition of the following (including all amendments, supplements and revisions thereto):
 - a. National Building Code of Canada;
 - b. National Plumbing Code of Canada;
 - c. National Fire Code of Canada;
 - d. Natural Gas and Propane Installation Code;
 - e. Federal Halocarbon Regulations
 - f. Canadian Environmental Protection Act
 - g. Provincial Occupational Health and Safety Regulations;
 - h. Canada Labour Code (including latest revisions of all regulations); and
 - i. Provincial Regulations, Codes and Statutes when applicable.
- .2 The Prime Contractor has the option of consulting other regulations, standards and codes as they deem necessary to complete the Work.

PD 2.4 PRIME CONTRACTOR AND PRIME CONTRACTOR TEAM

- .1 The Prime Contractor for this project must be a firm that has experience in the design and retrofit of



existing HVAC systems for commercial buildings.

- .2 The Prime Contractor must provide either in-house engineering expertise or acquire the services through subcontracting or joint venture with an engineering firm with building mechanical experience.
- .3 The Prime Contractor assumes the responsibility to properly evaluate and make good the infrastructure into which the HVAC equipment will be installed. The Prime Contractor will also take on the responsibility to ensure the systems and controls that the new HVAC equipment will connect to will function properly.
- .4 The Prime Contractor/Consultant team for this project must be capable of providing the following services:
 - a. Demolition of existing HVAC equipment
 - b. Procurement/construction/installation services for new HVAC systems and controls;
 - c. Engineering services to evaluate changes to HVAC systems as required;
 - d. Testing, adjusting, balancing and commissioning services.

PD 2.5 PRIME CONTRACTOR/CONSULTANT APPROACH

- .1 The following Required Services (RS) are the overall Prime Contractor/Consultant services that will be required to deliver this project:
 - a. RS 1 DEMOLITION OF EXISTING HVAC EQUIPMENT;
 - b. RS 2 PROCURE AND INSTALL HVAC EQUIPMENT;
 - c. RS 3 DUCTWORK MODIFICATIONS;
 - d. RS 4 TEST, ADJUST, BALANCE AND COMMISSION.

PD 2.6 SCHEDULE

- .1 The Prime Contractor must prepare a detailed schedule in MS Project format showing the durations and milestones for each of the phases shown in section PD 2.5 and submit as part of the deliverables identified in the Required Services (RS) section of this Statement of Work.

PD 2.7 EXISTING DRAWINGS AND DOCUMENTATION

- .1 The existing drawings and documents provided by the Client Department for this project must be treated as reference material only. Parks Canada cannot ensure their completeness and accuracy. As such, the Prime Contractor is responsible to review and confirm all information and inform Parks Canada of any discrepancies.
- .2 The following documents are provided in this package:
 - a. Batoche Administration and Maintenance Building Drawings
 - b. Batoche Administration and Maintenance Building HVAC Assessment
 - c. AECOM HVAC Assessment - The report was commissioned by Parks Canada to perform an assessment if the existing equipment, which is due for replacement, is still adequate for the building that underwent space changes and expansion.
 - d. Amendments issued with previous RFP Posting.

PA PROJECT ADMINISTRATION

PA 1.1 GENERAL

- .1 The following administrative requirements apply during all phases of the project delivery.
- .2 Requirements described in this Statement of Work are read in conjuncture with the requirements mentioned in the Request for Proposal.

PA 1.2 PROJECT MANAGEMENT

- .1 The Project Authority assigned by Parks Canada to the project is the Departmental Representative.



- .2 The Departmental Representative is the liaison amongst and between the Prime Contractor/Consultant Team and the National Park.
- .3 The Departmental Representative administers the project and exercises continuing control over the project at all times.
- .4 Unless directed otherwise by the Departmental Representative, the Prime Contractor must obtain all Federal requirements, permits, and approvals necessary for the Work from the Departmental Representative.

PA 1.3 HEALTH AND SAFETY

.1 GENERAL REQUIREMENTS

The Prime Contractor must:

- a. Develop a written Site-Specific Health and Safety Plan (SSHSP) based on hazard assessment prior to beginning any field work and continue to implement, maintain, and enforce the plan through all phases of the project;
 - i. The SSHSP needs to cover all activity of the Prime Contractor team (the Prime Contractor's personnel, sub-Prime Contractors and contractors).
 - ii. The SSHSP must include:
 1. Contractor's safety policy.
 2. Emergency Response Plan.
 3. Identification of applicable compliance obligations.
 4. Definition of responsibilities for project safety/organization chart for project.
 5. Site specific hazard assessment.
 6. General safety rules for project.
 7. Job specific safe work procedures.
 8. Inspection policy and procedures.
 9. Incident reporting and investigation policy and procedures.
 10. Occupational Health and Safety meetings.
 11. Occupational Health and Safety communications and record keeping procedures.
 12. Results of safety and health risk or hazard analysis for site tasks and operation.
- b. Incorporate in their SSHSP and abide by any additional constraint or safety requirement imposed by Parks Canada for accessing and using Parks Canada property or part thereof;
- c. Coordinate field work with Parks Canada activity on or adjacent to the project site(s);
- d. Provide all required personnel protective equipment, equipment and material as required to meet the intent of the safety requirement set in the SSHSP or as required by the provincial occupational health and safety legislation;
- e. Be responsible for health and safety for all of their team on site, and for protection of general public and government employee adjacent to site to the extent that they may be affected by conduct of the field work;
- f. Prior to starting field work, attend a safety briefing meeting with Parks Canada; and
- g. Conduct daily tailgate meetings at the project site. Where appropriate, Parks Canada operation staff is to



participate in the daily tailboard meetings. Records of tailboard meetings must be submitted to the Departmental Representative on a daily basis.

- h.** Submit copies of Material Safety Data Sheets (MSDS)
- i.** Medical Surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of Work, and submit additional certifications for any new site personnel to Departmental Representative.

.2 REFERENCE CODES AND STANDARDS

- a.** Canada Labour Code;
- b.** Provincial code, regulations, statutes and authorities.

.3 SUBMITTALS

The Prime Contractor must:

- a.** Submit a Site-Specific Health and Safety Plan (SSHSP) as per Section PA 1.10 General Project Deliverables. The SSHSP must be developed specifically for the work site and must include:
 - i.** Results of site specific safety hazard assessment;
 - ii.** Mitigation and precaution measures that will be implemented as a results of safety and health risk or hazard analysis for site tasks and operations;
 - iii.** Prime Contractors' team safety communication plan; and
 - iv.** Contingency and Emergency Response Plan addressing standard operating procedures specific to the project site to be implemented during emergency situations. Where applicable, coordinate the plan with the existing Parks Canada emergency response requirements and procedures provided by Departmental Representative.
- b.** In addition to the SSHSP, the following documents must also be submitted:
 - i.** A copy of the Prime Contractor Team WCB clearance certificates;
 - ii.** Occupational Health and Safety training and certification records. The Prime Contractor must provide documentation verifying all members of the workforce for the Prime Contractor have received the appropriate safety training including equipment operation training as required to perform the specific field work.
- c.** At the request of the Departmental Representative, who will respond in writing, where deficiencies or concerns are noted, resubmit the SSHSP with correction of deficiencies or concerns either accepting or requesting improvements; and
- d.** Not construe the Departmental Representative's review of Prime Contractor's final SSHSP as approval which does not reduce the Prime Contractor's overall responsibility for construction health and safety at the project site(s).

PA 1.4 ENVIRONMENTAL PROTECTION PLAN

.1 GENERAL REQUIREMENTS

The Prime Contractor must:

- a.** Prepare an Environmental Protection Plan (EPP) and execute the work required to complete the project as per the following direction. The EPP must be submitted as per Section PA 1.10 – General Project Deliverables.



- b. Preparation and management of the EPP is considered incidental to the contract and shall not be considered separately.
- c. **NATIONAL PARK REGULATIONS**
 - .1 The Contractor shall ensure that all work is performed in accordance with the ordinances, laws, rules and regulations set out in the Canada National Parks Act and Regulations.
- d. **START-UP AND ENVIRONMENTAL BRIEFING**
 - .1 All staff employed at the construction site will be subject to a briefing regarding their individual and collective responsibilities to ensure avoidable adverse environmental impact do not arise from their activities and personal choices. Employees must attend this briefing before beginning their work at the site. It is recognized new employees may join the Contractors' work force after the initial round of "environmental briefing". In that case and as required, subsequent "environmental briefings" can be presented as numbers warrant, by arrangement with the SITE REPRESENTATIVE through the Departmental Representative. Also, some sub-trades may be present at the site for a short time, to perform once-only duties. In these cases, the "environmental briefing" will be replaced by the Contractor explaining the environmental sensitivity of the work location to the sub-trade worker(s), and reviewing highlights of personal conduct expected, with reference to a one-page briefing summary to be provided to the Contractor by the SITE REPRESENTATIVE. A copy of this summary will be provided to each sub-trade worker joining the work force at the site.
 - .2 Parks Canada will have a SITE REPRESENTATIVE attending the site to monitor the construction activity for conformance with the EPP. The SITE REPRESENTATIVE or alternate designated Parks Canada staff member will present the "environmental briefing". The SITE REPRESENTATIVE's main duties are to monitor the progress of the construction on an on-going basis to ensure compliance with environmental protection measures, and to provide guidance through the Departmental Representative, in the event of unanticipated environmental problems. Although the SITE REPRESENTATIVE has authority to enforce National Parks Act violations, direction to the Contractor will be the duty of the Departmental Representative.
- e. **CONSTRUCTION SITE ACCESS AND PARKING**
 - .1 An area will be set aside as a lay down area for the project. The Prime Contractor will use this area to marshal all materials and equipment required to perform the work. The area will also serve as the parking area for contractor vehicles.
 - .2 The Contractor shall ensure that the environment beyond the work limits is not negatively impacted or damaged by workers' vehicles or construction machinery and shall instruct workers so that the "footprint" of the project is kept within defined boundaries.
 - .3 The EPP is to indicate how the area will be managed and what mitigation measures will be put in place to minimize environmental impacts and any measures required to return the area back to the condition it was in prior to commencement of the work.
- f. **PROTECTION OF WORK LIMITS**
 - .1 The Contractor is to prepare an EPP which details how the work limits shall be marked and what procedures will be employed to ensure trespass outside these limits does not occur, to the satisfaction of the Departmental Representative and the SITE REPRESENTATIVE.



g. EROSION CONTROL

- .1 Erosion control measures that prevent sediment from entering any waterway, water body or wetland in the vicinity of the construction site are a critical element of the project and shall be implemented by the Contractor.
- .2 If necessary, on-site sediment control measures shall be constructed and functional prior to initiating activities associated with the asphalt plant and the paving. The Contractor shall prepare an Erosion Control Plan to the satisfaction of the Departmental Representative and the SITE REPRESENTATIVE.
- .3 The regular monitoring and maintenance of all erosion control measures shall be the responsibility of the Contractor. If the design of the control measures is not functioning effectively they are to be repaired. The Departmental Representative and SITE REPRESENTATIVE also will monitor erosion control performance.
- .4 The site will be secured against erosion during any periods of construction inactivity or shutdown.

h. POLLUTION CONTROL

- .1 The Contractor shall prevent any deleterious and objectionable materials from entering streams, rivers, wetlands, water bodies or watercourses that would result in damage to aquatic and riparian habitat. Hazardous or toxic products shall be stored no closer than 100 metres from the adjacent water course.
- .2 A Spill Response Plan will be prepared as part of the EPP and shall detail the containment and storage, security, handling, use and disposal of empty containers, surplus product or waste generated in the application of these products, to the satisfaction of the Departmental Representative and the Site Representative and in accordance with all applicable federal and provincial legislation. The EPP shall include a list of products and materials to be used or brought to the construction site that are considered or defined as hazardous or toxic to the environment. Such products include, but are not limited to, waterproofing agents, grout, cement, concrete finishing agents, hot poured rubber membrane materials, asphalt cement and sand blasting agents.
- .3 The containment, storage, security, handling, use, unique spill response requirements and disposal of empty containers, surplus product or waste generated in the use of any hazardous or toxic products shall be in accordance with all applicable federal and provincial legislation. Hazardous products shall be stored no closer than 100 metres from the adjacent waters.
- .4 An impervious berm shall be constructed around fuel tanks and any other potential spill area. The berms shall be capable of holding 110% of tank storage volumes and shall be to the satisfaction of the Departmental Representative and the SITE REPRESENTATIVE before start-up. Measures such as collection/drip trays and berms lined with occlusive material such as plastic and a layer of sand, and double-lined fuel tanks can prevent spills into the environment.
- .5 The Contractor shall prevent blowing dust and debris by covering and/or providing dust control for temporary roads and on-site work by methods that are approved by the Departmental Representative or SITE REPRESENTATIVE.
- .6 The Contractor shall provide spill kits at re-fuelling, lubrication, and repair locations that will be capable of dealing with 110% of the largest potential spill and shall be maintained in good working order on the construction site. The SITE REPRESENTATIVE and Departmental Representative prior to project start-up must approve these spill kits. The Contractor and site staff shall be informed of the location of the spill response kit(s) and be trained in its use.
- .7 Timely and effective action shall be taken to stop, contain and clean-up all spills as long



as the site is safe to enter. The Departmental Representative and the SITE REPRESENTATIVE shall be notified immediately of any spill. Spill response cards will be distributed during the initial Environmental Briefing with basic instructions and phone numbers.

- .8 In the event of a major spill, all other work shall be stopped and all personnel devoted to spill containment and clean-up.
- .9 The costs involved in a spill incident (the control, clean up, disposal of contaminants and site remediation to pre-spill conditions), shall be the responsibility of the Contractor. The site will be inspected to ensure completion to the expected standard and to the satisfaction of the Departmental Representative and SITE REPRESENTATIVE.

i. EQUIPMENT MAINTENANCE, FUELLING AND OPERATION

- .1 The Contractor shall ensure that all soil, seeds and any debris attached to construction equipment to be used on the project site shall be removed (e.g. power washing) outside the Batoche National Historic Site before delivery to the work site.
- .2 Equipment fuelling sites will be identified by the Contractor and approved by the Departmental Representative and the SITE REPRESENTATIVE. Except for chain saws, any fuelling closer than 100 meters to streams, wetlands, water bodies or waterways shall require the authorization and oversight of the Departmental Representative.
- .3 Diesel and gasoline delivery vehicles, including bulk tankers shall be parked more than 100 meters from any streams, wetlands, water bodies or watercourses. Gravity fed fuel systems are not allowed. Manual or electric pump delivery systems shall be used. Fuelling personnel shall maintain presence at and immediate attention to the fuelling operation
- .4 Mobile fuel containers (e.g. slip tanks, small fuel carboys) shall remain in the service vehicle at all times. Protection and containment of approved fuel storage sites is addressed in # 4 of Pollution Control above.
- .5 Equipment used on the project shall be fuelled with E10, and low sulphur diesel fuels and shall conform to local emission requirements. The Contractor is to ensure that unnecessary idling of vehicles is avoided.
- .6 Oil changes, lubricant changes, greasing and machinery repairs shall be performed at locations approved by the SITE REPRESENTATIVE or the Departmental Representative. Waste lubrication products (e.g. oil filters, used containers, used oil, etc.) shall be secured in spill-proof containers and properly recycled or disposed of at an approved facility. No waste petroleum, lubricant products or related materials are to be discarded, buried or disposed of in borrow pits, turnouts, picnic areas, viewpoints, etc. anywhere within Batoche National Historic Site.
- .7 The Contractor shall ensure that all equipment is inspected daily for fluid/fuel leaks and maintained in good working order.
- .8 Fuel containers and lubricant products shall be stored only in secure locations specified by the Departmental Representative. Fuel tanks or other potentially deleterious substance containers shall be secured to ensure they are tamperproof and cannot be drained by vandals when left overnight in Batoche National Historic Site.

j. OPERATION OF EQUIPMENT

- .1 Equipment movements shall be restricted to the 'footprint' of the construction area. The work limits shall be identified by stake and ribbon or other methods approved by the Departmental Representative. Unless authorized by the Departmental Representative, activities beyond the work limits are not permitted. No machinery will



enter, work in or cross over streams, rivers, wetlands, water bodies or watercourses, nor damage aquatic and riparian habitat or trees and plant communities.

- .2 The Contractor shall instruct workers to prevent pushing, placement, raveling, storage or stockpiling of any materials (e.g. slash, rock, fill or topsoil) in the trees bordering the right-of-way or into watercourses or water bodies.
- .3 When, in the opinion of Parks Canada, negligence on the part of the Contractor results in damage or destruction of vegetation, or other environmental or aesthetic features beyond the designated work area, the Contractor shall be responsible, at his or her expense, for complete restoration including the replacement of trees, shrubs, topsoil, grass, etc. to the satisfaction of the Departmental Representative and SITE REPRESENTATIVE.
- .4 Restrict vehicle movements to work limits.
- .5 Workers private vehicles are to remain within the construction footprint.

k. FIRE PREVENTION AND CONTROL

- .1 A fire extinguisher shall be carried and available for use on each machine and at locations within the plant in the event of fire. Basic firefighting equipment recommended (e.g. a water truck; minimum 500 Imperial gallons with 500 feet of fire hose and a pump capable of producing 45 psi water pressure at the nozzle, three shovels, two Pulaskis, and two five gallon backpack pumps) shall be maintained at the construction site at a location known and easily accessible to all the Contractors' staff. Contractor's staff shall receive basic training in early response to wildfire events during the "environmental briefing".
- .2 Water can be obtained from the Batoche Compound. The Site Representative will indicate where a connection point is available. Prior to use access must be approved by the Site Representative.
- .3 Construction equipment shall be operated in a manner and with all original manufacturers' safety devices to prevent ignition of flammable materials in the area.
- .4 Care shall be taken while smoking on the construction site to ensure that the accidental ignition of any flammable material is prevented. Fires or burning of waste materials is not permitted.
- .5 In case of fire, the Contractor or worker shall take immediate action to extinguish the fire provided it is safe to do so. The SITE REPRESENTATIVE and the Departmental Representative shall be notified of any fire immediately. Call 911 as required.
- .6 Fires or burning of waste materials is not permitted.

l. WILDLIFE

- .1 During the Environmental Briefing all personnel shall be instructed by the SITE REPRESENTATIVE on procedures to follow in the event of wildlife appearance near or within the work site and any other wildlife concerns.
- .2 Avoid or terminate activities on site that attract or disturb wildlife and vacate the area and stay away from the immediate location if bears, cougars, wolves, elk or moose display aggressive behavior or persistent intrusion. Extra care to control materials that might attract wildlife (e.g. lunches and food scraps) must be exercised at all times.
- .3 Notify the SITE REPRESENTATIVE and Departmental Representative immediately about dens, litters, nests, carcasses (road kills), bear activity or encounters on or around the site or crew accommodation. Other wildlife-related encounters are to be reported within 24 hours.



m. RELICS AND ANTIQUITIES

- .1 Artifacts, relics, antiquities and items of historical interest such as cornerstones, commemorative plaques, inscribed tablets and similar objects found on the work site shall be reported to the SITE REPRESENTATIVE or the Departmental Representative immediately. The Contractor and workers shall wait for instructions before proceeding with their work.
- .2 All historical or archaeological objects found in Batoche National Historic Site are protected under the National Parks Act and Regulations and are the property of Parks Canada. The Contractor and workers shall protect any articles found and request direction from the SITE REPRESENTATIVE or the Departmental Representative.

n. WASTE MATERIALS STORAGE AND REMOVAL

- .1 The Contractor and workers shall dispose of hazardous wastes in conformance with the Environmental Contaminants Act and applicable provincial regulations while observing the Code of Good Practice for Management of Hazardous and Toxic Wastes at Federal Establishments.
- .2 All wastes originating from construction, trade, hazardous and domestic sources, shall not be mixed, but will be kept separate.
- .3 Construction, trade, hazardous waste and domestic waste materials shall not be burned, buried or discarded at the construction site or elsewhere in Batoche National Historic Site. These wastes shall be contained and removed in a timely and approved manner by the Contractor and workers, and disposed of at an appropriate waste landfill site located outside the park. Construction waste storage containers, provided by the Contractor, shall be emptied by the Contractor when 90% full. Waste containers will have lids, and waste loads shall be covered while being transported.
- .4 A concerted effort shall be made by the Contractor and workers to reduce, reuse and recycle materials.
- .5 All efforts to prevent wildlife from obtaining food, garbage or other domestic wastes shall be made by the Contractor and contract staff while undertaking their work in Batoche National Historic Site. Such wildlife attractants shall not be stored at the work site overnight. Lunches, coolers and food products, including waste food products, shall be securely stored away from access by animals. It is incumbent on the Contractor to notify Parks Canada and make specific arrangements to have garbage collected by Parks Canada when using existing Parks Canada receptacles.
- .6 The Contractor and workers shall immediately report any circumstances related to food/garbage (e.g. overflowing container or strong smell) and wildlife to the SITE REPRESENTATIVE or the Departmental Representative.
- .7 Sanitary facilities, such as a portable container toilet, shall be provided by the Contractor and maintained in a clean condition.

o. MISCELLANEOUS SITE MANAGEMENT CONTINGENCIES

- .1 The Contractor shall prepare an EPP which details how the work limits will be marked and what procedures will be employed to ensure trespass outside these limits does not occur, to the satisfaction of the Departmental Representative and the Site Representative.
- .2 Removal and storage of snow shall be arranged with the SITE REPRESENTATIVE and the Departmental Representative.
- .3 The Contractor shall control blowing dust and debris generated from the construction site by means such as covering or wetting down dry materials and rubbish. Dust control measures for temporary access roads may also have to be initiated.



- .4 Security services at the construction site may be desirable or necessary during the contract, especially during quiet times. Fuel tanks or other potentially deleterious substance containers must be secured by the Contractor to ensure they are tamperproof and cannot be drained by vandals.
- .5 Pets shall not be brought to or maintained at the construction site.
- .6 Should the Contractor require/request a water source, the Departmental Representative, in consultation with the SITE REPRESENTATIVE may give direction as to an alternative location to be used. Specific intake measures are required when water is approved to be withdrawn from open watercourses.

PA 1.5 QUALITY MANAGEMENT & COMMISSIONING

The Prime Contractor must:

- .1 Prepare a Quality Control & Commissioning Program. The purpose of the program shall be to ensure the performance the work in accordance to Contract requirements
- .2 The Quality Control & Commissioning Program shall be described in a Quality Control and Commissioning Manual. The Prime Contractor shall submit to the Departmental Representative for acceptance in accordance to Section PA 1.10 General Project Deliverables. The Manual shall develop a logical system for tracking and documenting the Quality Control of the work and layout and document the Commissioning process and requirements to ensure the final product is functioning within the parameters and targets specified in the contract. A systematic format and a set of procedures patterned on a recognized Quality Control Standard and Commissioning Standard for this type of work will be acceptable, subject to review by the Departmental representative.
- .3 The development, submission, and implementation of the Quality Control and Commissioning Program is considered incidental to the contract and will not be measured for payment.
- .4 The Prime Contractor shall be fully responsible and bear all costs for all quality control testing/inspections and shall conduct such testing in the following manner:
 - a) Provide testing facilities and personnel for the tests and inform the Departmental Representative in advance to enable the Departmental Representative to witness the tests if it so desired;
 - b) Notify the Departmental Representative when sampling will be conducted;
 - c) Within one Day after completion of testing, submit test results to the Departmental Representative; and
 - d) Identify test reports with the name and address of the organization performing all tests, and the date of the tests.
- .5 Approval of tested samples will be for characteristics or use named in such approval and shall not change or modify any Contract requirements.
- .6 Testing agencies, their inspectors, and their representatives are not authorized to revoke, alter, relax, enlarge or release any requirement of the Contract Documents, nor to approve or accept any part of the Work
- .7 Quality Control:
 - .1 The Quality Control portion of the Manual shall include the following information:
 - a. Distribution list, providing a list of names to whom the Manual shall be distributed;
 - b. Title page, identifying the Contract, Contractor and copy number;
 - c. Revision page, identifying the revision number and date of the Manual;
 - d. Table of contents;
 - e. Revision control, tabulating the revision number, date of revision, description of revisions and authorized signature;



- f. Details of measuring and testing equipment including methods and frequency of calibration;
 - g. Purchasing details of all materials and equipment including procurement documents and vendor's Quality Control Program standards;
 - h. Procedures for inspection of incoming items, in-process inspection and final inspection and tagging of all supply items;
 - i. Details of special processes as identified by the Departmental Representative, including qualifications of personnel and certification;
 - j. Procedures for shipping, packaging and storage of materials;
 - k. Procedures for maintaining quality records and Statements of Compliance, including filing and storage of documents for a period of one year after Completion of the Works;
 - l. Details of any non-conformance, including identification and recording of deficiencies, tagging procedures for "HOLD" or "REJECT" items, and final disposition of non-conformance forms by the Quality Control Manager;
 - m. Inspection and test checklists, including tabulated checklists describing all manufacturing and delivery activities such as Inspection or Test, frequency of tests, description of tests, acceptance criteria of tests, such as verification, witnessing or holding tests and sign-off by the Quality Control Manager and the Departmental Representative, if the Departmental Representative witnesses the tests; and
 - n. Forms used to ensure the application of the inspection and test checklist requirements. These forms shall be identified in the checklists and describe all testing requirements for Specification compliance.
- .2 The Prime Contractor shall appoint a Quality Control Manager who shall report regularly to the Contractor's management at a level which shall ensure that Quality Control requirements are not subordinated to manufacturing, construction or delivery. The Quality Control Manager shall be empowered by the Contractor to resolve quality matters.
- .3 The Quality Control Manual shall include samples of all forms to be filled in by the Quality Control Inspectors. All forms shall be signed by the Quality Control Manager and submitted promptly to the Departmental Representative who will add its review signature.
- .4 An independent check of all Work shall be performed by the Contractor. The Contractor shall appoint Quality Control Inspectors to ensure compliance of products and workmanship with Contract requirements. The same personnel may not be used to perform a given task and to check the quality and accuracy of the task.
- .5 At completion of the Work a bound and itemized copy of all Quality Control documents and reports shall be prepared by the Contractor's Quality Manager and submitted to the Departmental Representative.
- .6 INSPECTION
- a. Allow Departmental Representative access to Work. If part of Work is in preparation at locations other than Place of Work, allow access to such Work whenever it is in progress.
 - b. Give timely notice requesting inspection if Work is designated for special tests, inspections or approvals by Departmental Representative instructions, or law of Place of Work.
 - c. If Contractor covers or permits to be covered Work that has been designated for special tests, inspections or approvals before such is made, uncover such Work, have inspections or tests satisfactorily completed and make good such Work.
 - d. Departmental Representative may order any part of Work to be examined if Work is suspected to be not in accordance with Contract Documents. If, upon examination such



work is found not in accordance with Contract Documents, correct such Work and pay cost of examination and correction.

.7 INDEPENDENT INSPECTION AGENCIES

- a. Independent Inspection/Testing Agencies will be engaged by the Departmental Representative for purpose of inspecting and/or testing portions of Work. Cost of such services will be borne by Departmental Representative.
- b. Employment of inspection/testing agencies does not relax responsibility to perform Work in accordance with Contract Documents.
- c. If defects are revealed during inspection and/or testing, appointed agency will request additional inspection and/or testing to ascertain full degree of defect. The Contractor shall correct defect and irregularities as advised by the Departmental Representative at no cost to the Departmental Representative.

.8 ACCESS TO WORK

- a. Allow inspection/testing agencies access to Work, off site manufacturing and fabrication plants.
- b. Co-operate to provide reasonable facilities for such access.

.9 PROCEDURES

- a. Notify appropriate agency and Departmental Representative in advance of requirement for tests, in order that attendance arrangements can be made.
- b. Provide labour and facilities to obtain and handle samples and materials on site.

.10 REJECTED WORK

- a. Remove defective Work, whether result of poor workmanship, use of defective products or damage and whether incorporated in Work or not, which has been rejected by Departmental Representative as failing to conform to Contract Documents. Replace or re-execute in accordance with Contract Documents.
- b. Make good other Contractor's work damaged by such removals or replacements promptly.
- c. If in opinion of Departmental Representative it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents, Owner may deduct from Contract Price difference in value between Work performed and that called for by Contract Documents, amount of which shall be determined by Departmental Representative.

.11 REPORTS

- a. Submit copies of inspection and test reports to Departmental Representative

.8 Commissioning:

- .1 The Prime Contractor is responsible for developing a commissioning program that effectively proves that the new equipment is functioning properly.
- .2 As part of the program, the Prime Contractor will supply all the technical information and manuals for the maintenance and operation for the new equipment and provide training into the proper maintenance and operation of the new HVAC equipment and associated controls.
- .3 The development and implementation of the commissioning program is considered incidental to the contract and will not be measured separately for payment.



- .4 The Commissioning portion of the manual will include but not be limited to the following information:
 - a. Table of contents;
 - b. Revision control, tabulating the revision number, date of revision, description of revisions and authorized signature;
 - c. Details of measuring and testing equipment including methods and frequency of calibration required for the commissioning procedures;
 - d. Details of specific requirements and procedures that must be followed to test and evaluate the equipment including qualifications of personnel and certification;
 - e. Training procedures to familiarize the PCA staff with the operation and maintenance of the new equipment;
 - f. Procedures for maintaining the records and Statements of Compliance, including filing and storage of documents for a period of one year after Completion of the Works;
 - g. Details of any non-conformance, including identification and recording of deficiencies, tagging procedures for "HOLD" or "REJECT" items, and final disposition of non-conformance forms by the Commissioning Manager;
 - h. Inspection and test checklists, including tabulated checklists describing all commissioning activities such as inspection or testing, frequency of tests, description of tests, acceptance criteria of tests, such as verification, witnessing or holding tests and sign-off by the Commissioning Manager and the Departmental Representative, if the Departmental Representative witnesses the tests; and
 - i. Forms used to ensure the application of the inspection and test checklist requirements. These forms shall be identified in the checklists and describe all testing requirements for compliance.
- .5 The Prime Contractor shall appoint a Commissioning Manager who shall report regularly to the Contractor's management at a level which shall ensure that Commissioning requirements are being met. The Quality Control Manager shall be empowered by the Contractor to resolve quality matters.
- .6 The Commissioning Manual shall include samples of all forms to be filled in by the Commissioning personnel. All forms shall be signed by the Commissioning Manager and submitted promptly to the Departmental Representative who will add its review signature.
- .7 An independent check of all Work shall be performed by the Contractor. The Contractor shall appoint Commissioning personnel to ensure compliance of products and workmanship with Contract requirements. The same personnel may not be used to perform a given task and to check the quality and accuracy of the task.
- .8 At completion of the Work a bound and itemized copy of all Commissioning documents, manuals, and reports shall be prepared by the Contractor's Quality Manager and submitted to the Departmental Representative.

PA 1.6 – PROJECT SCHEDULE

The Prime Contractor must:

- .1 Submit a Gantt chart based schedule, in Microsoft Project format, indicating the tasks, durations, and milestones associated with the work.
- .2 The schedule is to contain all tasks required to complete the work associated with the RFP. Such tasks will include but not be limited to:
 - a. Contact Award
 - b. Project submittals
 - c. Mobilization



- d. Site preparation
 - e. Installation of interim system
 - f. Removal of existing equipment
 - g. Design/modification requirements to ensure HVAC systems are code compliant
 - h. Procurement of new equipment
 - i. Installation of new equipment
 - j. Modifications of existing HVAC systems
 - k. Training of PCA staff to operate/maintain new plant
 - l. Commissioning
 - m. Demobilization
 - n. Contract completion
- .3 Submit to the Departmental Representative with 10 days of Award of Contract a Gantt chart as the Master Plan for planning, monitoring, and reporting on project progress.
- .4 The Project Schedule is to be updated on a monthly basis reflecting activity changes and completions, as well as activities in progress.

PA 1.7 LINES OF COMMUNICATION

The Prime Contractor must:

- .1 Unless otherwise directed by the Departmental Representative, conduct all project communication through the Departmental Representative only; and
- .2 Ensure formal contact between the Prime Contractor and the Parks Canada project team, which includes the Client Park Representative, is through the Departmental Representative. Direct communication between members of the Parks Canada project team on routine matters is required to enable discussion and resolution of technical issues. However, no communication shall alter the terms of the project scope, budget, or schedules unless directed in writing by the Departmental Representative and authorized in writing by the Contracting Authority via a contract amendment.

PA 1.8 MEDIA

The Prime Contractor must:

- .1 Not respond to requests for project related information or questions from the media. Such inquiries must be directed to the Departmental Representative.

PA 1.9 SITE REQUIREMENTS

- .1 By submitting a proposal for the RFP, the Prime Contractor acknowledges that they have reviewed the documents and site conditions and accepts the responsibility to deliver the work as described in the RFP.
- .2 The Prime Contractor will ensure that the worksite is protected and controlled and that access will be restricted to only those involved with the delivery of the work. Measures are to be taken to prevent the general public from having access to the worksite.
- .3 The Prime Contractor is responsible for all layout of required measurements and survey to complete the work. The Prime Contractor shall have reviewed the existing drawings and will confirm all measurements to ensure the proper installation of equipment and materials.
- .4 Use of the worksite:
 - a. The Work Site shall be specified by Parks Canada and shall only be used for the purposes of the Work. The Work Site will be made available by Parks Canada to the Contractor for its non-exclusive use for the duration of the Work, unless otherwise provided in the Contract Documents.



- b. The Contractor must make Private Accommodation Arrangements. Office-tool trailer may be set up at the lay-down area subject to the Departmental Representatives Directions.
- c. The Contractor shall keep the Work Site clean and free from accumulation of waste materials and rubbish regardless of source. Snow shall be removed by the Contractor as necessary for the performance and inspection of the Work.
- d. The Contractor shall provide sanitary facilities for work force in accordance with governing regulations and the Environmental Procedures for this project. The Contractor shall post notices and take such precautions as required by local health authorities and keep area and premises in sanitary condition.
- e. Any damage to the Work Site caused by the Contractor shall be repaired by the Contractor at its expense.
- f. The Contractor may work 12 hours per day, six days per week with the following restrictions:
 - .1 No work will be allowed during a Statutory Holiday unless approved by the Departmental Representative.

.5 PROTECTION OF PERSONS AND PROPERTY

- a. The Contractor shall comply with all applicable safety regulations of the Workers' Compensation Board (WCB) including, but not limited to, WCB's Industrial Health and Safety Regulations, Industrial First Aid Regulations, and Workplace Hazardous Materials Information System Regulations.
- b. The Contractor shall take all necessary precautions and measures to prevent injury or damage to persons and property on or near the Work Site.
- c. The Contractor shall promptly take such measures as are required to repair, replace or compensate for any loss or damage caused by the Contractor to any property or, if Parks Canada so directs, shall promptly reimburse to Parks Canada the costs resulting from such loss or damage.

.6 SUPERVISORY PERSONNEL

- a. Within five Days after award notification, the Contractor shall submit to the Departmental Representative confirmation of the names of the supervisory personnel and other key staff designated for assignment on the Contract.
- b. The following personnel shall be included in the list:
 - a. Project Superintendent;
 - b. Safety Representative.
- c. The above personnel shall perform the following duties:
 - .1 The Project Superintendent shall be employed full time and shall be present on the Work Site each and every workday that Work is being performed, from the commencement of Work to Total Performance of the Work;
 - .2 The Project Superintendent shall nominate a Deputy Project Superintendent who shall have the authority of the Project Superintendent during the latter's absence;
 - .3 The Safety Representative shall possess safety experience in general construction. Duties shall encompass all matters of safety activities from commencement of Work until the Total Performance of the Work.



.7 WASTE DISPOSAL

- d. All surplus, unsuitable and waste materials shall be removed from the job site to approved sites outside Batoche National Historic Site. Refer to Section 01 35 43 - Environmental Procedures and Environmental Protection Plan.
 - .1 Deposits of any construction debris into any waterway are strictly forbidden.
 - .2 Cost for Waste Disposal described above shall be considered incidental to the Unit Price items and no additional payment will be made.
 - .3 Waste Disposal shall be completed in accordance with Section PA 1.4 - Environmental Protection Plan.

PA 1.10 GENERAL PROJECT DELIVERABLES

The Prime Contractor must:

- .1 Where deliverables and submissions include summaries, reports, network diagrams, drawings, plans, specifications or finish schedules submit deliverables as follows:
 - a. Hard copies: one (1) original English;
 - b. Electronic format: one (1) copy English. The electronic deliverables must be provided using Microsoft applications;
 - c. Design drawings shall be AutoCAD format as described in the Parks Canada Electronic Document Standards.
 - d. Alternatively, the Prime Contractor may submit all electronic format work in Adobe Acrobat (*.pdf) format except for network diagrams which must be submitted in their original electronic format; and
 - e. Generate and distribute all drawings in a format using layering and file transfer protocols as prescribed in the Parks Canada Electronic Document Standards.
 - f. Any software and associated required for control system operations.
- .2 Submittals associated with the RFP, as noted in Section PA1.3.3, are required within 10 days of Notification of award and in any event not less than 15 days prior to the commencement of construction.
- .3 Any detailed design drawings that are required for modifications of the existing plant to accommodate the installation of the new plant shall be prepared and submitted for compliance review when the design is 70% and 100% complete
- .4 PCA will endeavour to secure reviews and acceptances within ten (10) days of receipt of the documents requesting same. The Prime Contractor shall allow time in the schedule for the review/acceptance process. The Prime Contractor shall identify with each review/acceptance submission those elements that lie on the critical path of the schedule.
- .5 PCA shall have the authority to reject any element of the Prime Contractors design if in the opinion of PCA the design is in non-conformance with any element of this RFP.
- .6 Drawings of Record and supporting documents used of construction shall be supplied by the Prime Contractor and shall include the following:
 - a. Final "as-built" record plans of all structures and equipment
 - b. All Quality Control and Commissioning information showing test procedures, commissioning procedures, data and performance records, and any other records associated with Quality Control and Commissioning
 - c. All vender shop drawings or specifications
 - d. Operations Manuals for new equipment.
- .7 The contract will not be considered to be complete until the Drawings of Record have been submitted. As a result, the Final Completion Certificate for the completion of the work will not be issued until these submissions



have been received.

PA 1.11 ACCEPTANCE OF PROJECT DELIVERABLES

- .1 While Parks Canada acknowledges the Prime Contractor's obligations to meet project requirements; the project delivery process entitles Parks Canada to review work. Parks Canada reserves the right to reject undesirable or unsatisfactory work. The Prime Contractor must obtain Departmental Representative acceptances during each of the project stages.
- .2 Acceptances indicate that based on a general review of material for specific issues, the material is considered to comply with governmental and departmental objectives and practices, and that overall project objectives are being satisfied.
- .3 Acceptance does not relieve the Prime Contractor of professional responsibility for the Work and compliance with the Contract.
- .4 Parks Canada acceptances do not prohibit rejection of work, which is determined to be unsatisfactory at later stages of review. If progressive inspection and reporting development or time/ cost/ risk updates or technical investigation reveals that earlier acceptances must be withdrawn, the Prime Contractor is responsible for correcting work and re-submitting for acceptance at the Prime Contractor's cost.
- .5 Acceptances by the Client/ users and other agencies and levels of government must be obtained to supplement Parks Canada acceptances. The Prime Contractor must assist the Departmental Representative in securing all such acceptances and adjust all documentation as required by such authorities when securing acceptance.

PA 1.12 COORDINATION WITH SUB-PRIME CONTRACTORS

The Prime Contractor must:

- .1 Throughout all phases of the project, assume responsibility for coordinating the Work of any sub-Prime Contractors and specialists retained by the Prime Contractor;
- .2 Ensure clear, accurate and ongoing communication of inspection work, reporting, budget, and scheduling issues including changes as they relate to the responsibilities of all sub-Prime Contractors and specialists from initial base building reviews to post construction reports;
- .3 Co-ordinate input for the Departmental Representative's Risk Management Plan;
- .4 Co-ordinate the Quality Assurance process ensuring submissions of sub-Prime Contractors are complete and signed-off by the designated senior reviewer; and
- .5 Ensure sub-Prime Contractors provide adequate site inspection services and attend all required meetings.

PA 1.13 MEETINGS AND PROGRESS REPORTS

The Prime Contractor must:

- .1 Attend a face-to-face project start-up meeting with the Departmental Representative and Client Park Representatives to go over required procedures for working within a National Park and environmental concerns that must be addressed as part of the Work. At the start-up meeting the Prime Contractor must be prepared to provide a presentation indicating the approach to be taken to complete the Work including identification of the principles involved, preliminary schedule for the various components of the Work and to identify any concerns or additional information that may be required to complete the Work;
- .2 Provide a progress report to the Departmental Representative by e-mail every week throughout the entire project development and implementation period from the Prime Contractor indicating the following:
 - a. Current status of project;
 - b. Planned activities and work;



- c. Issues; and
 - d. Impacts on Schedule and Budget (if any).
- .3 Attend, at the request of the Departmental Representative, a conference call including the Client Park Representatives to review progress in the project and to discuss plans or issues that may be coming forward;
- .4 For all meetings:
- a. Attend the meetings;
 - b. Record the issues and decisions; and
 - c. Prepare and distribute minutes within two (2) working days of each conference call.
 - d. Cost of meetings is considered incidental to the contract and no additional payment will be made.

RS REQUIRED SERVICES

RS 1 DEMOLITION OF EXISTING HVAC EQUIPMENT

RS 1.1 GENERAL

The Prime Contractor must:

- .1 Review and assess existing documentation, existing facility and equipment and devise a method to remove the existing HVAC rooftop equipment.
- .2 Provide temporary heating and ventilation to the building.

RS 1.2 DELIVERABLES

The Prime Contractor must:

- .1 Submit a demolition drawing and plan for the HVAC, signed and sealed by a professional engineer registered in the Province of Saskatchewan. Including the requirements stipulated in the Federal Halocarbon Regulations.
- .2 Submit a temporary heating and ventilation plan for the building, and implement the plan prior to the start of construction and keep the temporary heating and ventilation operational until the new HVAC equipment is installed and operational.
- .3 Provide all labour, equipment, and materials required to remove and dispose of the existing HVAC rooftop equipment.

RS 2 PROCURE AND INSTALL NEW HVAC EQUIPMENT

RS 2.1 SCOPE OF SERVICES

The Prime Contractor must:

- .1 Evaluate the existing HVAC systems that will be connect to the new rooftop HVAC equipment and determine what modifications will be required to make the new HVAC equipment function with the existing remaining plant.
- .2 Procure new HVAC equipment and associated controls to meet the heating, ventilation and air conditioning requirements of the existing Administration and Maintenance building. Conduct calculations, complete detailed design, and prepare construction drawings and shop drawings required to facilitate the procurement and installation of the new HVAC equipment.

RS 2.2 DELIVERABLE

The Prime Contractor must:



- .1 Prepare and submit any design and shop drawings/specifications required to procure and install the new HVAC equipment and associated controls, signed and sealed by a professional engineer registered in the Province of Saskatchewan.
- .2 Purchase new HVAC equipment with associated controls and equipment to be installed on the roof of the existing Administration and Maintenance building.
- .3 Provide all the labour, equipment, and materials to install the new HVAC equipment complete with controls onto the existing Administration and Maintenance building and to make operational, so that the building is provided with the required heating, ventilation and air conditioning.

RS 3 DUCTWORK MODIFICATIONS

RS 3.1 GENERAL

The Prime Contractor must:

- .1 Evaluate the existing information provided by PCA and conduct a site review. Determine occupancy and use of each space within the building and the required ventilation in accordance with current applicable codes.
- .2 Modify existing ductwork configuration to provide supply and return air to all occupied spaces.

RS 3.2 DELIVERABLES

The Prime Contractor must:

- .1 Prepare and submit drawing indicating modifications to the ductwork as well as a revised air balance. **The design of the ductwork extensions is not required to be sealed by an Engineer. The Air Balance report should show that the new layout achieves the goal of providing required heating/cooling/air flow as appropriate to these spaces. If the Air Balance report shows that the design is not successful, this will need to be fixed, and an Engineer may be required, at the contractor's cost, depending on the issue.**
- .2 Provide all labour, equipment, and materials to modify the ductwork so all spaces within the building received adequate airflow for ventilation, heating and air conditioning.

RS 4 TEST, ADJUST, BALANCE AND COMMISSION

RS 4.1 SCOPE OF SERVICES

The Prime Contractor must:

- .1 Prepare a program to test, adjust, balance and commission the new HVAC equipment and associated systems.
- .2 Complete testing, adjusting, balancing and commissioning of the HVAC systems to confirm the equipment is operating as intended to deliver the heating, ventilation and air conditioning requirements of all building spaces.

RS 4.2 DELIVERABLES

The Prime Contractor must:

- .1 Prepare and submit the testing, adjusting, and balancing report for the HVAC systems.
- .2 Prepare and submit the commissioning plan for the new HVAC equipment and associated systems;
- .3 Supply all labour, equipment, and materials required to complete testing, adjusting, balancing and commissioning of the HVAC Systems.



Provided Documentation

The following documents are included with this package:

- .1 A - Batoche Administration and Maintenance Building Drawings
- .2 B - Batoche Administration and Maintenance Building HVAC Assessment
- .3 C – AECOM HVAC Assessment - The report was commissioned by Parks Canada to perform an assessment if the existing equipment, which is due for replacement, is still adequate for the building that underwent space changes and expansion.
- .4 D – Amendments from Initial RFP Posting