



ANNEX E

STATEMENT OF WORK

PROJECT BRIEF



Rocky Harbour Salt Storage Facility

Gros Morne National park

Rocky Harbour Security Compound
23 D.O.T. Road
Rocky Harbour, Newfoundland

Parks Canada
Western Newfoundland and Labrador Field Unit
Project No. 1137



TABLE OF CONTENTS

1.0	Description of the Project -----	Page 2
2.0	Background -----	Page 2
3.0	Key Objectives -----	Page 2
4.0	Project Requirements -----	Page 4
5.0	General Conditions -----	Page 10
6.0	Proposal Submission Requirements -----	Page 11
7.0	Financial Requirements -----	Page 12
8.0	Salt Shed Construction Specifications -----	Page 13
	Section 01 11 00 – Summary of work -----	Page 13
	Section 01 14 00 – Work Restrictions -----	Page 14
	Section 01 25 20 – Mobilization and demobilization -----	Page 16
	Section 01 31 00 – Project Management Coordination -----	Page 17
	Section 01 35 30 – Health & Safety Requirements -----	Page 18
	Section 01 35 43 – Environmental Procedures -----	Page 20



1.0 **DESCRIPTION OF THE PROJECT**

The purpose of this Terms of Reference is for Parks Canada Agency (PCA) to acquire a pre-engineered membrane building system to house road salt for winter operations out of Rocky Harbour, Gros Morne National Park, Western Newfoundland & Labrador Field Unit (WNLFU).

- 1.1 Title of Project: Rocky Harbour Salt Shed Facility, Gros Morne National Park
- 1.2 Project Location: 23 D.O.T. Road, Rocky Harbour, NL
- 1.3 Project Number: 1137
- 1.4 Client / User: PCA, Western Newfoundland and Labrador Field Unit

2.0 **BACKGROUND**

The existing structure was constructed in 1980 and is currently in poor condition. The doors have been removed, many of the supporting trusses have been damaged along with their supports. The current facility is used to store our annual supply of winter road salt and is a requirement that it be a covered building to insure we meet our salt management plan directives.

3.0 **KEY OBJECTIVES**

The key objective is the design, supply, and construction of a salt storage shed and all accompanying sub-assemblies, for the purpose of storing 4000 tonnes of road salt, including but not limited to adjustment of site grading, construction of reinforced concrete foundations, walls and slab on grade, erection of a pre-engineered membrane building, vehicle protection measures, building ventilation, and fire protection systems. The construction window for this project is from April 1st, 2017 – August 31st, 2017, Firm. The project is to include the following key items;

Building Particulars

60 x 140' (approximately)
Coverall system w/ galvanize truss
Salt storage 4000 tonnes

Foundation

10' high concrete wall
Asphalt floor (optional based on available funding)
Equipment opening with no garage door
Emergency man door



Fabric Covering

Removable sectional panels (i.e. repairable, etc.)
Green panels on both ends, and translucent panels in the middle
Inside liner required

Electrical

LED Lighting
Emergency Lighting
Re-use existing 200 amp electrical (new) panel. Existing electrical panel mounted outside building
Dedicated electrical outlets for heavy equipment

Mechanical

Electrical louvers/fans in gables
Capable of passive ventilation.

Demolition of Existing Structure

Salvage existing wood materials, where possible material to become property of contractor.

Construction of New Structure

Potential contractors are advised this work consists of the design, supply, and erection of a new tension membrane structure to be installed on top of a 10 foot high by 1.0 foot thick reinforced concrete foundation (thickness is approximate based on structural frame requirements for previously investigated systems). It is the responsibility of the contractor to retain the services of an engineer licensed in the province of Newfoundland to design the foundation walls). Bidders are to provide the foundation conceptual design for their structures including schematic foundation drawings, schematic structural drawings and technical data for the tension membrane structure for evaluation upon tender award.

The foundation design is to include wall and footing dimensions, anchor bolt/plate layout patterns, and frost protection systems. The foundations are to be designed in accordance with Part 4 of latest edition of the National Building Code of Canada (NBCC 2015) to resist the effects gravity and lateral loads imparted by the tension membrane structure. Submissions do not require designs for items other than the footings, and foundation walls, however items not identified on drawings must describe in sufficient detail to demonstrate conformance with the requirements detailed herein.



The tension membrane structure is to be designed in accordance with the latest edition of the National Building Code of Canada (NBCC 2015) including all amendments up to tender closing time. The snow and wind loading shall be based upon design data provided in the National Building Code of Canada (NBCC 2015), Volume 2. Design for internal and external wind pressures and suction forces shall be carried out using hourly velocity pressure with a 1 in 50 year probability. The structure shall be designed using data for Rocky Harbour, Newfoundland. The building classification is to be commercial (Group F, Division 2) with an importance factor of 1.0. The structure shall be designed so that it can be extended in the longitudinal direction in the future if desired. Bidders are to describe in words the means and methods which would be employed in order to elongate the structure as well as the means and methods for repairing the tension membrane should it be damaged by high winds or punctured.

3.1 Quality

The Agency expects the Supplier to maintain a high standard of engineering design, based upon recognized design principles and industry best practices. All design elements, planning, engineering and architecture must be fully coordinated, and consistent in adherence to sound design principles which are, upon request, to be demonstrable to the satisfaction of Parks Canada.

3.2 Code Compliance

Codes, regulations, by-laws and decisions of authorities having jurisdiction will be observed. The Contractor shall comply with all other jurisdictions appropriate to the project, notably the province of Newfoundland and Labrador and the Government of Canada.

4.0 **PROJECT REQUIREMENTS**

The Contractor will be responsible for the production of drawings and specifications and obtaining all permits necessary to construct the required storage building including all architectural, civil, structural, electrical, mechanical, commissioning, demolition, and training elements of the design.

Detail Requirements include the following:

4.1 Design Requirement-Reinforced Concrete Foundations

The foundation shall be such that no interior support are required (thus providing unobstructed floor space. All wall thickening, piers, buttresses if required must be constructed on the exterior face of the foundation walls.



All penetrations through the foundation walls to accommodate doors are to be reinforced to resist the effects of accidental impact by equipment including dump trucks and wheeled loaders to avoid compromising the structural integrity of the foundation walls and the supported tension membrane structure.

The foundation design is to include an exterior apron to accommodate loading and unloading operations typically be carried out by dump trucks and front end wheeled loaders, facilitate easy clean-up and prevent cross contamination of materials. The apron is to extend 3.0 meters beyond the face of the building and be sloped away from the shed.

All concrete employed in the construction of foundations shall be suitable to resist exposure to chlorides under freezing and thawing conditions and to resist mechanical wear a result of storing, loading, and moving salt with a wheeled loader.

Concrete to be of type C-1 or better in accordance with CSA A23.1 with a minimum compressive strength of 35 MPa at 28 days. All concrete structures must be designed to accommodate thermal movement and all expansion joints must be designed to prevent infiltration of water into the building.

All reinforcing steel to be placed such that the concrete cover complies with CSA A23.1 minimum cover for type C1 concrete for exposure condition for walls (60mm) and cast against exposed earth (75mm).

All steel in contact with the concrete surface is to be hot-dipped galvanized for corrosion protection in accordance with ASTM A123M or CSA G164. At all locations where protective coating is damaged as a result of welding and fabrication, the Contractor will repair with a zinc rich paint.

The foundation design is to include all appropriate drainage assemblies to control run off, manage surface water, and protect footings. All materials employed in the construction of the foundations are to be free of regular maintenance for a period of 10 years.

4.2 Design Requirement-Structural Frame

The frame of the facility shall be such that there are no interior support membranes (thus providing unobstructed floor space) and there are no exterior purlins, guy ropes, or cables for anchoring the structure (i.e. the structure must be self-supporting).



All steel used in the fabrication of the building frames shall be new and of minimum Grade 300W in accordance with CAN/CSA G40.20 and CAN/CSA G40.21 or approved equivalent. All steel tubing used in the structure must have the minimum structural and mechanical properties of ASTM A-500 GR B with an ultimate tensile strength of 380 MPa and yield strength of 345 MPa. Aluminum framed structures fabricated from aluminum with an ultimate tensile strength of 260 MPa will also be considered acceptable.

The entire building frame and all connecting elements and bolts shall be either batch hot dip galvanized or inline galvanized for corrosion protection in accordance with ASTM A123M or CSA G164. If inline galvanized material is provided then the interior surfaces of all sections must be coated with full zinc based organic coating applied to 100% of the interior surface as a corrosion barrier. As well, a chromate conversion coating must be applied over all galvanized surfaces and a clear organic polymer applied as a top surface coat. All inline galvanized structural steel tubing used shall be “viper Steel” as manufactured by Allied Tube & Conduit or an approved equal. At all locations where protective coating is damaged as a result of welding and fabrication, the Contractor will repair with a zinc rich paint.

The Contractor is responsible for the design of the anchorage of the steel frame and membrane to the concrete foundation. The detail is to be included as part of the design drawings for the structure.

The Contractor shall handle, transport, and store the frame so as to prevent any damage to the galvanized protective coating. All material is to be reviewed and approved by the Departmental Representative prior to erection. The contractor is to facilitate the review of all materials by un-palleting and separating materials for review. Material which does not meet which is damaged will be repaired or replaced at the cost of the contractor to the satisfaction of the Departmental Representative.

To provide for structural stability and for the installation of accessory items, the main structural steel trusses shall be laterally braced at intervals required by the truss design and shall allow for the installation and attachment of electrical and mechanical equipment such as lighting and sprinklers.

4.3 Design Requirements – Tension Membrane

The tension membrane shall be a fire retardant UV stabilized waterproof low maintenance membrane, free of defects and manufactured by an approved and reputable supplier with demonstrated long term performance.

A polyvinyl chloride (PVC) membrane with a top coat of acrylic/PVDF (coated weight of 950 g/m) such as “Duraweave FR” will be considered acceptable.



The membrane material shall have a minimum grab tensile strength of 1511 N as tested per ASTM D-5034. The membrane material provided will be subject to the approval of the Parks Canada Agency.

The tension membrane shall not be designed to function as a structural member such that should any damage to or penetrations of the membrane occur, the integrity of the structural frame work shall not be affected.

The membrane shall be manufactured so that it can be removed from a single bay (frame centerline to frame centerline) and replaced without removing the membrane from the rest of the structure. An acceptable alternative would be to supply a membrane which is installed in one, two, or three larger sections (dependant on building length).

The structure membrane shall be fabricated in such a way that it will be attached to the steel truss system as required.

Substitution of material and equipment shall be with the approval of the Project Manager.

4.4 Design and Shop Drawings

The Contractor shall provide two sets of design drawings for the tension membrane facility and the reinforced concrete foundation. Each will require two full sets of drawings. These drawings, for both the tension membrane facility and the reinforced concrete foundation, are to be stamped by a Professional Engineer who is registered and licensed to practice in the province of Newfoundland and Labrador. These drawings must be reviewed and approved by the Parks Canada Agency. Approval will not release the engineer whose professional stamp appears on the drawings or the Contractor from responsibility for conformity to specifications, codes, correct details, or adequacy design.

Stated on the design drawings shall be any assumptions made in the calculation of all loads considered in the design (i.e. ground snow load, wind pressures, temperature ranges, etc.) and a breakdown of all reactions due to these loads.

The contractor shall provide manufacturer's erection drawings and specifications as necessary for construction of the structure. Erection procedures and specifications must be submitted by the Contractor, under approval of the manufacturer, for review by the Agency prior to erection.

The Contractor is to work closely with the Project Manager to ensure total co-ordination of all design aspects of the project.

The services to be provided by the Contractor shall be carried out in two stages.



The stages are as follows:

The preliminary design stage shall be completed within 3 weeks of award. This package will be reviewed and approved by Parks Canada prior to the final design. It is estimated that this review will require approximately 10 working days. The final design shall be completed within 3 weeks of PCA acceptance of the preliminary design. It is estimated that this review will require approximately 10 working days.

The structure and membrane installation stage will begin immediately after foundations and concrete work has had an adequate amount of time to cure for frame – membrane installation to begin. This work will be coordinated with the PCA project manager. All work must be coordinated and completed to meet the 2017 salt supply contract delivery for the first week of September 2017.

4.5 Execution of the Work

In general, the work shall be carried out in accordance with the National Building Code of Canada (NBCC).

The erection of the tension membrane structure is to be carried out in accordance with the drawings and specifications submitted and approved for construction.

Qualified and experienced trades people shall be employed in the erection of the tension membrane structure. The construction and erection work shall be executed under the continuous supervision and direction of a competent foreman/superintendent approved by the manufacturer. These supervisory personnel must have experience in the construction and erection of tension membrane structures. Suitable written evidence of the supervisor's qualifications must be provided to the Engineer prior to the start of the work.

The Contractor will provide on-site finished, quality products as specified and shown on the shop drawings. Burning, cutting, welding, or other on-site modifications to the structure will not be permitted unless approved by the Departmental Representative.

The contractor shall handle, transport, and store the frame so as to prevent any damage to the galvanized protective coating. If the protective coating is damaged prior to final acceptance, regardless of the cause, the Contractor will use a wire brush to clean the metal and hand paint the damaged area with a cold galvanizing compound. The cleaned surface shall receive one application of metal conditioner to de-oxidize, degrease, and phosphatise the metal surface to be treated. Premixed, ready-to-apply, liquid cold galvanizing compound must be of a type that imparts cathodic protection against corrosion. The cold galvanizing compound must meet or exceed Canadian Government specification 1-GP-181A and be to the satisfaction of the Engineer.



Once started, the installation shall be continuous until completion.

The Contractor is to assume full responsibility and provide all equipment for layout of the work including, but not limited to, all locations, lines, and grades as required for the completion of the project.

The Contractor is to obtain approval from the Engineer for any shutdown or interruption of active service, facility, or operations in the work area. The contractor shall adhere to any approved interruption schedule.

The Contractor shall keep the site free from debris and shall store his equipment and material on site so as to not interfere with the operations at the depot.

The Contractor shall be responsible for the storage and security of his own materials and equipment. The Agency will not be held liable for any materials or equipment which are stolen or damaged at the site.

The Contractor shall be responsible for temporary power, water and toilet facilities.

The Contractor shall be responsible for the removal and disposal of all materials and debris remaining after the work has been completed and the overall cleanup of the site.

Total performance for the project occurs when the structure is complete and the Engineer has issued notification of acceptance. Issuance of a certificate of Total Performance will require written certification from the manufacturer's design engineer that the structure has been constructed in accordance with the approved design/working drawings and specifications.

A final inspection of the structure and written report to the Engineer must be undertaken by the manufacturer upon completion of the work. The Contractor is required to coordinate the scheduling of the final inspection with the Project Manager.

Upon completion of the project, two (2) copies of an Operation and Maintenance Manual prepared and written by the Manufacturer shall be supplied to the Owner outlining recommended maintenance, repair, and inspection procedures for the structure.

The Contractor will provide to the Owner written inspection reports twice a year for the first two (2) years after the structure is completed. The inspections will be carried out by an approved and qualified manufacturer's representative.



4.6 Ventilation

The structure shall be supplied with a passive ventilator (louver) in one end, approximate size of 1.2 meters by 1.2 meters and a hydrostatic fan of a size and make recommended by the structure supplier in the other end.

4.7 Standard of Acceptance

The supplied membrane structure standard of acceptance is an XP60x144 Fabric Road Salt / Sand Storage Structure – 1005-A 60 feet by 144 feet MegaDome or equivalent

4.8 Warranty

A comprehensive warranty that the project is free of defects for a period of one year from date of substantial completion of the project. The contractor will remedy the situation to the satisfaction of PCA.

The Contractor of the tension membrane structure shall supply to the Agency, as a minimum, a 10 year prorated warranty on the membrane and steel frame against corrosion and defect in quality or workmanship as a result of design, manufacture, or installation.

The Contractor shall provide a written copy of this warranty to Parks Canada.

5.0 **GENERAL CONDITIONS**

5.1 The Contractor shall use the best available methods of performing the work and shall employ only skilled and competent staff thereon, who will be under the supervision of a senior member of the Contractor's staff.

5.2 Drawings and documents or copies thereof required for the work shall be exchanged between the Contractor and the Agency on a reciprocal basis. All drawings and documents prepared by the Contractor for the Agency shall be the property of the Agency, free from all claims by the Contractor of any nature and kind whatsoever.

5.3 The Agency may, in writing, at any time increase/decrease or otherwise alter the whole or any part of the work. Payment for the contract adjustment will be subject to price negotiation.

5.4 The Contractor agrees to obtain the consent of the Agency before publishing or issuing any account of the project.

5.5 Drawings shall be prepared in SI units in standard size sheets using the title block and format acceptable to the Agency



5.6 Drawings shall be produced using CAD and the final working drawings shall be accompanied by the appropriate electronic format acceptable for use by the Agency. No other systems are acceptable.

5.7 Buildings and systems to be designed in accordance with the National Building Code of Canada (NBCC).

5.8 The design must be completed under the supervision of the Architects or Engineers in the Province of Newfoundland & Labrador for their respective portions of the work.

5.9 Where deliverables and submissions include reports, summaries drawings, specifications, plans or schedules, four (4) hard copies shall be provided plus one (1) copy in electronic format unless otherwise specified.

5.10 Unless otherwise arranged with the Project Manager, the Contractor shall communicate with the Project Manager only.

5.11 The Contractor shall not respond to requests for project related information or questions from the media. Such inquiries shall be directed to the Project Manager.

5.12 The Contractor shall not be entitled to payment in respect to cost incurred by the Contractor in remedying errors and omissions in the services that are attributable to the Contractor, the Contractor's employees, or persons for whom the Contractor has assumed responsibility in performing the services.

6.0 **PROPOSAL SUBMISSION REQUIREMENTS – PART 1**

Proposals are meant to satisfy "Part 1 - Technical Portion" of the Submission Requirements of the proponents bid. Please refer to the Submission Requirements & Evaluation section in the RFP for more information on the evaluation criteria of this section. Proposal Submission shall address all items as follows:

6.1 The Contractor is to outline their Design-Build Capacity and Experience delivering projects similar in nature to the one contained in this RFP:

6.2 A brief approach and methodology with sufficient detail to demonstrate that the Contractor has a grasp of the project and the competencies to carry out the work (i.e. Understanding of the Project):

6.3 A list of key personnel by name (principals, Professional staff, technicians etc.) including sub-Contractors and supporting staff by category, for everyone who will perform work on the Project.



6.4 A detailed schedule showing that the work is to be completed from the day of the award to no later than August 31, 2017.

The Agency reserves the right to:

- a) Reject the proposal received in response to this RFP;
- b) Enter into negotiations on any or all respects of the relevant proposal;
- c) Accept any proposal in whole or in part;
- d) Cancel or re-issue this RFP at any time.

7.0 **FINANCIAL REQUIREMENTS – PART 2**

Payment for the design and supply of the tension membrane salt storage facility shall be on a lump sum basis. The lump sum shall include all engineering, labour, materials, equipment, and delivery required to design and supply the tension membrane salt storage facility. Payment will be due on delivery of all components and required drawings.

Payment for installation shall be on a lump sum basis. The lump sum price shall include all labour and equipment to install and supervise the installation of the tension membrane salt storage facility. The twice yearly inspections shall be considered incidental to the installation and no additional payment will be made. The payment structure will be: 90% due on completion of installation with the final 10% due within 3 months of completion.

This information will be used as a basis for a "Ceiling Price" contract. This amount will not be exceeded under any circumstances unless specifically authorized by the Agency in writing. The consultant shall notify the Project manager by letter when the value of services provided has reached 80% of the contracted "ceiling" price in each stage.

No consideration will be given to extra fees for any part of the project unless submitted in writing PRIOR TO PERFORMING THE WORK and accompanied by full substantiation for the proposed additional work.

Payment will be made to the Contractor upon submission of detailed invoices to the Project Manager, and subject to the satisfactory performance of the work.



8.0 **SALT SHED SPECIFICATIONS**

Section 01 11 00 Summary of Work

Part 1 General

1.1 PROJECT LOCATION

- .1 Rocky Harbour, NL

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- .1 The major Work Items of this Contract comprises erection of a pre-engineered structure on concrete foundations (built by others) and the installation of membrane roofing system and other building supplied element as set out in the project Terms of Reference.
- .2 Without limiting the scope of work, the work of this Contract generally comprises of the following:
 - .1 Erection of pre-engineered structural frame in accordance with manufactures specifications on pre-prepared concrete foundations built by others.
 - .2 The installation of a membrane roofing system over the pre-engineered frame in accordance with the TOR and manufactures specifications.
 - .3 The installation of all other pre-engineered structural building components in accordance with the TOR and manufactures specifications.

1.3 WORK SEQUENCE

- .1 Schedule work progress to allow Owner/Agency Representative unrestricted access to inspect all phases of the Work.

1.4 OWNER OCCUPANCY

- .1 Owner will occupy premises during entire construction period for execution of normal operations.
- .2 Cooperate with Owner in scheduling operations to minimize conflict and to facilitate Owner usage.

1.5 CONSTRUCTION SIGNAGE

- .1 No signs or advertisements, other than warning signs, are permitted on site.
- .2 Signs and notices for safety and instruction shall be in both official languages. Signs shall be diamond grade and shall conform to CAN3-Z321.
- .3 Maintain approved signs and notices in good condition for duration of project, and dispose of off-site on completion of project or earlier if directed by the Agency Representative.

END OF SECTION



Section 01 14 00 Work Restrictions

Part 1 General

1.1 EXISTING SERVICES

- .1 Provide for pedestrian, and other regular traffic for the duration of the construction.

1.2 USE OF THE WORK SITE

- .1 The Work Site shall be specified by PCA and shall only be used for the purposes of the Work. The Work Site will be made available by PCA to the Contractor for its non-exclusive use for the duration of the Work, unless otherwise provided in the Contract Documents. The Contractor's work or equipment shall not exceed the contract boundaries.
- .2 The Contractor shall maintain adequate drainage at the Worksite.
- .3 The Contractor shall keep the Work Site clean and free from accumulation of waste materials and rubbish regardless of source.
- .4 Damage to the Work Site caused by the Contractor shall be repaired by the Contractor at their expense.

1.3 UTILITIES

- .1 The Contractor shall coordinate an on-site inspection with the Agency Representative to locate any utility prior to starting work. The Contractor shall be responsible for work related to the protection or relocation of all utilities.
- .2 The locations of Utilities, if any, shown or not shown are subject to verification by the Contractor.
- .3 Whenever working in the vicinity of Utilities, the Contractor shall locate such Utilities and expose those that may be affected by the Work, using hand labour as required.
- .4 The Contractor shall immediately report any damage to Utilities to the Agency Representative and to the Utility company or authority affected, and shall promptly undertake such remedial measures as are necessary at no additional cost to the Owner.

1.4 SURVEY OF EXISTING PROPERTY CONDITIONS

- .1 Submission of tender is deemed to be confirmation that the Contractor has inspected the site and is conversant with all conditions affecting execution and completion of work.
- .2 The Contractor shall regularly monitor the condition of the Work Site and of property on and adjoining the Work Site throughout the construction period, and shall immediately notify the Owner if any deterioration in condition is detected. Such monitoring shall cover all pertinent features and property including, but not limited to, buildings, structures, roads, walls, fences, slopes, sewers, culverts and landscaped areas.

1.5 PROTECTION OF PERSONS AND PROPERTY

- .1 The Contractor shall comply with all applicable safety regulations of the Workers' Compensation Board of Newfoundland and Labrador including, but not limited to,



WCB's Industrial Health and Safety Regulations, Industrial First Aid Regulations, and Workplace Hazardous Materials Information System Regulations.

- .2 The Contractor shall take all necessary precautions and measures to prevent injury or damage to persons and property on or near the Work Site.
- .3 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 PCA so directs, shall promptly reimburse to PCA the costs resulting from such loss or damage.

1.6 USE OF PUBLIC AREAS

- .1 The Contractor shall ensure that its vehicles and equipment do not cause nuisance in public areas. All vehicles and equipment leaving the Work Site and entering public roadways shall be cleaned of mud and dirt clinging to the body and wheels of the vehicle. All vehicles arriving at or leaving the Work Site and transporting materials shall be loaded in a manner which will prevent dropping of materials or debris on the roadways, and where contents may otherwise be blown off during transit such loads shall be covered by tarpaulins or other suitable covers. Spills of materials in public areas shall be removed or cleaned immediately by the Contractor at no cost to the Owner. All activities shall be in accordance with Section 01 35 43 - Environmental Procedures.

1.7 MEETINGS

- .1 The Work includes attending meetings between the Contractor and the Agency Representative. The meetings will be called and chaired by the PCA Project Manager/Agency Representative. The Contractor shall be represented at such meetings to the satisfaction of the Agency Representative.
- .2 The Agency Representative will schedule an initial pre-construction meeting to be held on site after award notification.
- .4 Cost of attending the above meetings shall be considered incidental to the contract price proposal.

1.8 WASTE DISPOSAL

- .1 All surplus, unsuitable and waste materials shall be removed from the job site to appropriate sites outside of Gros Morne National Park.
- .2 Deposit of any construction debris into any waterway is strictly forbidden.
- .3 Cost for Waste Disposal described above shall be considered incidental to the contract price; no additional payment will be made.

END OF SECTION



Section 01 25 20 Mobilization and Demobilization

Part 1 General

1.1 DESCRIPTION

- .1 Mobilization and Demobilization consists of preparatory work and operations including but not limited to, those necessary for the movement of personnel, equipment, buildings, shops, offices, supplies and incidentals to and from the project sites.

1.2 MEASUREMENT PROCEDURES

- .1 This Work shall be incidental to contract and will not be measured for payment.

END OF SECTION



Section 01 31 00 Project Managing and Coordination

Part 1 General

1.1 MEASUREMENT PROCEDURES

- .1 This Work shall be incidental to the contract price proposal.

1.2 COORDINATION

- .1 Perform coordination of progress schedules, submittals, use of site, temporary utilities, construction facilities, and construction Work, with progress of Work of other Contractors, and Work by Owner.

1.3 PROJECT MEETINGS

- .1 Attend weekly project meetings throughout the progress of Work and provide information as determined by the Agency Representative. Meetings shall be chaired by the PCA Project Manager/Agency Representative. The Contractor will prepare the minutes of the meetings.
- .2 Coordinate field engineering and layout work with the Agency Representative.

1.4 ON-SITE DOCUMENTS

- .1 Maintain at job site, one copy each of the following:
- Contract Drawings.
 - Safety Plan.
 - Environmental Screening Document.
 - Copy of accepted Work schedule and most recent updated schedule.
 - Labour conditions and wage schedules.
- .2 The Owner will not be responsible for any construction delays resulting from delays in submission acceptance if the submittal dates shown in the Submittal Schedule are not achieved.

1.5 PROJECT SCHEDULES

- .1 Submit construction progress schedule to Agency Representative coordinated with Owner's project schedule.

END OF SECTION



Section 01 35 30 Health and Safety Requirements

Part 1 General

1.1 MEASUREMENT PROCEDURES

- .1 This work shall be incidental to contract price proposal and will not be measured for payment.

1.2 REFERENCES

- .1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations.
- .2 Health Canada/Workplace Hazardous Materials Information System. (WHMIS).Material Safety Data Sheets (MSDS).
- .3 Province of Newfoundland and Labrador. Occupational Health and Safety Act,

1.3 SUBMITTALS

- .1 Submit site-specific Health and Safety Plan: Within seven (7) days after date of Notice to Proceed and prior to commencement of Work.
- .2 Agency Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor. Revise plan as appropriate and resubmit plan to Agency Representative.
- .3 Perform site specific safety hazard assessment related to project.

1.4 REGULATORY REQUIREMENTS

- .1 Do Work in accordance with National Parks Act.

1.5 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 project specifications.
- .2 Agency Representative may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.

1.6 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, territorial and local statutes, regulations and ordinances, and with site-specific Health and Safety Plan.

1.7 UNFORESEEN HAZARDS

- .1 When unforeseen or peculiar safety related factor, hazard, or conditions 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 Agency Representative verbally and in writing.

1.8 HEALTH AND SAFETY COORDINATOR

- .1 Employ and assign to Work, competent and authorized representative as Health and Safety Coordinator. Health and Safety Co-ordinator must:
 - Have minimum 2 years site related working experience specific to activities associated with roadway construction.
 - Have working knowledge of occupational safety and health regulations.
 - 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.
 - Be responsible for implementing, enforcing daily and monitoring site-specific Contractor's Health and Safety Plan.
 - Be on site during execution of Work and report directly to and be under direction of site supervisor.

1.9 CORRECTION OF NON-COMPLIANCE

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by Agency Representative.
- .2 Provide Agency Representative with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 Agency Representative may stop Work if non-compliance of health and safety regulations is not corrected.

1.10 WORK STOPPAGE

- .1 Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule considerations for Work.

END OF SECTION



Section 01 35 43 Environmental Procedures

Part 1 General

1.1 This work shall be incidental to contract price proposal and will not be measured for payment.

1.2 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.

1.3 CANADIAN ENVIRONMENTAL ASSESSMENT ACT (CEAA)

.1 Execution of the work is subject to the provisions within the Canadian Environmental Assessment Act (CEAA) Guidelines Order of 2003 and subsequent amendments.

.2 Failure to comply with or observe environmental protection measures as identified in these specifications may result in the work being suspended pending rectification of the problems.

1.4 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 work site before delivery.

.2 Equipment fuelling sites will be identified by the Contractor and approved by the Agency Representative and the EPO. Except for chain saws, any fuelling closer than 100 meters to any streams, rivers, wetlands, water bodies or waterways shall require the authorization and oversight of the Agency Representative or Environmental Protection Officer (EPO).

.3 Diesel and gasoline delivery vehicles, including bulk tankers shall be parked more than 100 meters from any other streams, rivers, 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.

.5 Equipment used on the project shall be fuelled with E10, and low sulfur 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 EPO or the Agency 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 Gros Morne National Park.

.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 Agency 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.

1.5 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 Agency Representative. Unless authorized by the Agency 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 When, in the opinion of PCA, inadequate care 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 Agency Representative and EPO.
- .3 Restrict vehicle movements to work limits.
- .4 Workers private vehicles are to be parked in areas approved by the Agency Representative or EPO

1.6 FIRE PREVENTION AND CONTROL

- .1 A fire extinguisher shall be carried and available for use on each machine and at locations within the work area in the event of fire.
- .2 Construction equipment shall be operated in a manner and with all original manufacturers’ safety devices to prevent ignition of flammable materials in the area.
- .3 Fires or burning of waste materials is not permitted.
- .4 In case of fire, the Contractor or worker shall take immediate action to extinguish the fire provided it is safe to do so. The EPO and the Agency Representative shall be notified of any fire immediately.

1.7 WILDLIFE

- .1 Avoid or terminate activities on site that attract or disturb wildlife and vacate the area and stay away from the immediate location if bears, coyotes or moose displaying 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.

- 1.8 Notify the EPO and Agency 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.

1.9 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 Construction, trade, hazardous waste and domestic waste materials shall not be burned, buried or discarded at the construction 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.
- .3 A concerted effort shall be made by the Contractor and workers to reduce, reuse, and recycle materials.
- .4 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.

END OF SECTION