

Part 1 General

1.1 WORK COVERED BY CONTRACT DOCUMENTS

- .1 The Work to be completed under this Contract consists of supplying all materials and equipment, plant and labour necessary for the Site Remediation of the areas known as “Pond Access Road (PPAR)” and “Major Dump Site (PMAD)” at Pinetree, Stephenville, NL. Work to be conducted in 2018 Construction Season, as summarized under Clause 1.4 - Description of Work, below. There is polychlorinated biphenyl (PCB) contaminated soil in these areas which exceeds regulatory environmental guidelines for both ecological health and human health risks for the current land use. The PCB impacts are related to historical activities on the site.
 - .1 Appendix A contains test pit logs providing an indication of subsurface soil conditions in the affected areas. Refer to the attached drawings for the locations of the test pits.
 - .2 Refer to Appendix B CEAA Memo and Appendix C Awareness Plan in event of discovery of Low Northern Rockcress within the project limits.

1.2 CONTRACT METHOD

- .1 Construct Work under unit price and lump sum Contract cost items.

1.3 DOCUMENTS REQUIRED

- .1 Maintain at job site, one copy each of following:
 - .1 Contract Documents.
 - .2 Specifications.
 - .3 Addenda.
 - .4 Change orders.
 - .5 Reviewed shop drawings
 - .6 List of outstanding shop drawings.
 - .7 Other modifications to Contract.
 - .8 Field test reports.
 - .9 Copy of approved work schedule.
 - .10 Site Health and Safety Plan.
 - .11 Department of Fisheries Approvals.
 - .12 Department of Environment Approvals.
 - .13 Department of Transportation Permit.
 - .14 Trench Excavation Safety Guide.
 - .15 Workplace Hazardous Materials Information System (WHMIS) Regulations.
 - .16 Transportation of Dangerous Goods (TDG) Certificates.
 - .17 Material Safety and Data Sheets (MSDS).
 - .18 Environmental Protection Plan.

1.4 DESCRIPTION OF WORK

- .1 The Work covered by the Contract can generally be described as follows:
 - .1 Preparation, submission and implementation of a Site Specific Health and Safety Plan and an Environmental Protection Plan.
 - .2 Complete mobilization of all labour, equipment and materials to the Site to execute the Work.
 - .3 Supply of miscellaneous materials and equipment as required.
 - .4 Supply of manpower, including a site supervisor to carry out the Work as required.
 - .5 Supply of excavation equipment and trucks as required.
 - .6 Marking out the Work areas.
 - .7 Supply of stakes and other survey markers required for laying out Work.
 - .8 Clearance of underground services, if any.
 - .9 Upgrade and maintenance of the work site access roads, as necessary.
 - .10 The excavation and/or removal of:
 - .1 Polychlorinated Biphenyl (PCB) impacted soil at the PPAR and PMAD sites as shown on Drawings provided with the tender documents. Areas are subject to change based on confirmatory soil sampling to be completed by the Departmental Representative during soil removal.
 - .2 Removal of debris located on concrete pad at top of access trail to Pond No. 4.
 - .11 Removal and placement of debris and/or soil encountered in the remedial excavations to be placed in a laydown area as approved by the Departmental Representative for confirmatory testing before being properly disposed of. The temporary laydown area shall consist of an area that is level and bermed. The laydown area shall be covered with an impermeable liner onto which debris and/or soil will be temporarily placed to prevent infiltration or runoff of potential contaminants into subsurface soil. The Contractor will be responsible for the timely removal of all debris and/or soil encountered in the remedial excavations and proper disposal at an approved facility.
 - .12 Contractor to limit the placement of debris and/or soil in the onsite laydown area to the time required to confirm sample test results to determine proper approved disposal of materials. The temporary laydown area(s) shall be used for no more than twenty (20) days.
 - .13 Removal of debris, identified in pictures 14, 15 and 16, located on the concrete pad at the top of the access trail to Pond No. 4. The Contractor will be responsible for the removal and transportation of all debris in this area off site for recycling and/or proper disposal at an approved facility.
 - .14 Transportation and disposal of any debris encountered in the remedial Work and excavations to an approved facility.
 - .15 Transportation of the PCB-impacted soil to a licensed PCB treatment facility for proper treatment and disposal.
 - .16 The reinstatement of the excavated areas including infilling, gravel, erosion control, grading etc., as identified.
 - .17 The supply of clean fill materials, as necessary.

- .18 Other work to ensure the project is completed to the intent of the Contract.
- .19 Complete demobilization of all equipment and materials from site, including final cleanup.
- .20 Work including final cleanup and demobilization is to be completed within this construction season.
- .21 Quantities for the scope of Work are subject to change.

Note: Contractor is advised that the equipment and labourers will be working in close contact with soil that is impacted with Polychlorinated Biphenyl (PCB) concentrations in exceedance of 50 ppm. See Section 01 35 29.14 – Health and Safety for Contaminated Sites for recommended measures to minimize worker exposures to impacted soil and groundwater as a result of performing routine tasks while excavating and handling soils or groundwater known or suspected to contain PCBs. The following *maximum detected concentrations* of PCBs in soil were measured *in the areas requiring remediation*:

Site	Chemical of Concern	Maximum Detected Concentration of Chemical of Concern	Sample No.
PPAR	PCBs	4,190 mg/kg	SS13
PMAD	PCBs	150 mg/kg	PMAD-03TP-13-SS-01

.2 Location and Access

- .1 Area “C” - Pond Access Road (PPAR) and Area “F” - Major Dump Site (PMAD) sites are located at Pinetree Table Mountain, NL. The Pinetree Table Mountain site is located on Table Mountain approximately 20 km northwest of Stephenville, NL on Route 462.
- .2 Area “C” (Pond No. 4 Access Road - PPAR) is located in the southeast portion of the main site area as shown on Drawing No. E2.
- .3 Pond No. 4 is located at Area “C”. No other ponds or streams are present on the Pond No. 4 access road area. Surface drainage at the site is by overland flow and infiltration, with surface flow direction generally towards Pond No. 4. Surface water and groundwater on the property and within the general property area are not utilized as sources of drinking water.
- .4 Area “F” (Major Dump Site - PMAD) is located southwest of the minor dump site area on the west side of the main site area as shown on Drawing No. E2. Based on the results of previous site investigations, Area “F” is comprised of three separate dump sites (i.e., DS-9, DS-10 and DS-14).
- .5 No ponds or streams are present at the PMAD area. Surface drainage at the site is by overland flow and infiltration, with surface flow direction generally towards the west. Groundwater on the property and within the general property area is not utilized as a source of drinking water.
- .6 Debris requiring removal from site under the Contract is located on a concrete pad at the top of an access trail to Pond No. 4.
- .7 The Contractor shall protect the adjacent properties from damage and hold the Departmental Representative harmless from claims which may arise from operations under the Contract.
- .8 The Contractor shall obtain permission for access to the Site and surrounding areas from the Departmental Representative prior to commencement of Work.

- .9 The work site(s) shall be closed to all non-authorized personnel and visitors.
- .10 The Contractor shall ensure all persons entering the work site(s) shall receive a verbal safety advisory identifying areas of concern within that work site(s).
- .11 The Contractor to protect species at risk, the Low Northern Rockcress, and shall not disturb areas identified as per the EA documents, Appendix C – Awareness Plan.

1.5 WORK SCHEDULE

- .1 Submit construction schedule of Work to Departmental Representative within seven (7) days of Contract award. Schedule to show anticipated progress stages and final completion of Work within time period required by Contract Documents.
- .2 Format:
 - .1 Prepare schedule in form of a horizontal bar chart.
 - .2 Provide a separate bar for each major item of work or operation.
 - .3 Split horizontally for projected and actual performance.
 - .4 Provide horizontal time scale identifying first work day of each week.
 - .5 Format for listings: chronological order of start of each item of work.
- .3 Departmental Representative will review schedule and return review copy within five (5) working days after receipt.
- .4 After review, revise and resubmit schedule to comply with project schedule requirements.
- .5 During progress of Work revise and resubmit at project progress meetings or as approved by Departmental Representative.
- .6 Construction schedule to reflect the typical construction season for the area: May 1 to September 30.

1.6 WORK METHODOLOGY

- .1 Provide to the Departmental Representative prior to start-up, a work methodology plan that demonstrates how the soil remediation activities including shipping of impacted material will be carried out. The work plan shall clearly and succinctly describe how the Contractor proposes to undertake the Work, including dewatering of soil and treatment of groundwater, if necessary. The methodology plan shall also include a schedule showing anticipated progress stages and final completion of Work within the time period required by Contract Documents. The schedule shall show the sequence of work activities and shall indicate those activities needed to be completed prior to certain work components.
- .2 The Contractor's work schedule must reflect the fact that there will be a period of delay between the time confirmatory soil and sediment samples/swab samples are collected from the remedial excavation/debris/site equipment by the Departmental Representative to the time that the analytical results will be available and a decision can be made as to whether to backfill the excavation or continue with additional soil removal. Contractor is to sequence Work to account for this.

- .3 The Departmental Representative shall conduct final excavation sampling by collection of samples and submission to an off-site analytical laboratory.
- .4 Excavation(s) shall remain open until the laboratory results are received by the Departmental Representative and they confirm that the site(s) has been remediated to the Site Specific Target Level (SSTL) of 33 mg/kg.
- .5 Should confirmatory sampling results exceed the SSTL (33 mg/kg), the Contractor shall continue excavation work to remediate that site as approved by the Departmental Representative.
- .6 Contractor shall assist Departmental Representative with collection of all soil samples.
- .7 Contractor shall provide Departmental Representative adequate time to complete testing. There will be no compensation to the Contractor due to delays associated with testing and/or additional contaminated soil removal from excavation.
- .8 All excavated areas must be backfilled or regraded before demobilization from Site unless otherwise approved by Departmental Representative.

1.7 EXAMINATION OF THE SITE

- .1 Prior to submitting a bid for this work, it is recommended that contractors visit the sites and make their own assessment of the form, nature and extent of the Work, materials needed for the completion of the Work, the means of access to the sites and the condition and suitability of work area access roads, the severity, exposure and uncertainty of weather, soil conditions, any accommodations they may require, the facilities available in the area and in general shall obtain all information as to risks, contingencies and other circumstances which may influence or affect their bid or costs to do the Work. No allowance shall be made subsequently in this connection on account of error or negligence to properly observe and determine the conditions that will apply. Contractor is advised that clean backfill material (including topsoil and common fill) will need to be imported to the site. Contractor is strongly advised to assess the suitability and quantities of backfill available in the Stephenville area prior to the tender closing.
- .2 Contractor is advised of the presence of the Low Northern Rockcress within the boundaries of the project site. Low Northern Rockcress is a protected plant under the Newfoundland and Labrador provincial Endangered Species Act.
 - .1 Refer to Appendix B CEAA Memo and Appendix C Awareness Plan in event of discovery of Low Northern Rockcress within the project limits.

1.8 TAXES, PERMITS, LICENSES AND CERTIFICATES

- .1 Contractor must:
 - .1 Pay all applicable Federal, Provincial and Municipal Taxes.
 - .2 Obtain and pay for all permits, licenses, fees and certificates required for the Work.
 - .3 Furnish the permits, licenses and certificates to the Departmental Representative prior to start of Work.

- .4 Provide the authorities having jurisdiction with all information as required.

1.9 ABBREVIATIONS AND STANDARDS

- .1 The following abbreviations of standard specifications have been used in this specification.
 - .1 PWGSC - Public Works Government Services Canada
 - .2 NLDMAE - Newfoundland and Labrador Department of Municipal Affairs and Environment
 - .3 CGSB - Canadian Government Specifications Board
 - .4 CSA - Canadian Standards Association
 - .5 ASTM - American Society for Testing and Materials
 - .6 CCME - Canadian Council of Ministers of the Environment.
- .2 Where these abbreviations and standards are used in this project, the latest edition in effect on the date of tender call will be considered as applicable.

1.10 REGULATORY REQUIREMENTS

- .1 Codes/Standards
 - .1 Ensure the requirements of the Contract Documents and all specified codes, standards and referenced documents are met or exceeded.
- .2 Relics and Antiquities
 - .1 Protect relics, antiquities, items of historical or scientific interest such as cornerstones and contents, commemorative plaques, inscribed tablets, and similar objects found during course of Work.
 - .2 Give immediate notice to Departmental Representative and await Departmental Representative's written instructions before proceeding with work in this area.
 - .3 Relics, antiquities and items of historical or scientific interest remain Her Majesty's property.

1.11 PRIVATE LANDS

- .1 The Contractor shall not enter upon or occupy with men, equipment, tools, or materials of any nature any lands other than public streets and roadways or other areas designated by the Departmental Representative and required for the performance of the Work, without the written permission of the Departmental Representative of the land to be used.

1.12 SETTING OUT OF WORK

- .1 The general locations of facilities are shown on Drawing Nos. E2 to E5 provided with the tender documents, however the Contractor must confirm and map out the location of wells, underground services, etc., within the area to be excavated.
- .2 The Contractor shall identify all utility poles which may be affected by site work and contact the authority having jurisdiction to protect or temporarily move and replace/reinstate these items.

- .3 The Contractor shall assume full responsibility for and execute complete layout of Work to locations, lines and elevations indicated.
- .4 The Contractor shall establish lines and levels, locations and lay out, by instrumentation.
- .5 The Contractor shall set stakes for grading, fill and placement.
- .6 The Contractor shall maintain a complete, accurate log of control and survey work as it progresses.
- .7 The Contractor shall obtain all necessary permits to carry out work in the designated areas.
- .8 The Contractor shall supply stakes and other survey markers required for laying out the Work.
- .9 The Contractor shall prepare management and protection procedures, instructions, and reports to be used in event of discovery and/or avoidance of Low Northern Rockcress within the project limits.

1.13 ADDITIONAL DRAWINGS

- .1 Departmental Representative may furnish additional drawings for clarification. These additional drawings have same meaning and intent as if they were included with plans referred to in Contract Documents.

1.14 NATURE OF SITE

- .1 Investigate and become familiar with the nature of the ground in which the Works are to be constructed and all other matters affecting the installation of the Works.
- .2 The groundwater table on part of the site may be at such a level as to cause infiltration into the excavation. Observe all precautions against water infiltrating the excavation including proper handling of any impacted groundwater that may be present and put devices in place to keep the excavation free of water. Refer to Section 01 35 43 – Environmental Procedures for additional information on dewatering of the excavation and wastewater treatment and management.
- .3 Excavate any trial holes and do any other work necessary for locating existing structures, pipelines, cables, underground services and other obstructions, shown on the Contract Documents, affecting the remediation work.
- .4 Contractor should be aware of site conditions that may impact the Work and schedule, including but not limited to: the elevation of site, short construction season (May 1 to September 30), and dense fog conditions.
- .5 Contractor is advised of the presence of the Low Northern Rockcress within the boundaries of the project site.

1.15 MATERIALS SUPPLIED BY OTHERS

- .1 The Contractor shall be responsible for the delivery of all specified material supplied by Others.

1.16 RELATED REQUIREMENTS

- .1 Particular environmental requirements for inspection and confirmatory testing to be carried out by testing laboratory as approved and designated by the Departmental Representative.
- .2 Materials testing of Contractor supplied materials to be carried out by testing laboratory as approved and paid by the Contractor.

1.17 TEMPORARY FACILITIES

- .1 Include in the Work temporary facilities required as remediation aids or by jurisdictional authorities, or as otherwise specified. Install to meet needs of remediation as Work progresses. Maintain temporary facilities during use, relocate them as required by the Work, remove them at completion of need and make good adjacent Work and property affected by their installation.
- .2 For details on temporary facilities see Section 01 52 00 – Construction Facilities.

1.18 SECURITY

- .1 The Contractor shall assume full responsibility for the security of the Work. In the context of this clause, security shall include the provision of all flagmen, watchmen, and other measures necessary for the protection of the whole of the Work, the public, and all persons employed in connection with the Work throughout the duration of the Contract.
- .2 Open excavation and other hazards shall be protected (e.g., installation of 1.2 m high snow fence or other barrier) to restrict access at the completion of each day's activities. Maintain temporary enclosure(s) in good repair.
- .3 The gravel road to the work site has locked gate to limit access. Departmental Representative to coordinate access for Contractor.
- .4 The work site shall be closed to all non-authorized personnel and visitors.
- .5 The Contractor shall ensure all persons entering the work site shall receive a verbal safety advisory identifying areas of concern within that work site.

1.19 CONTRACTOR'S USE OF SITE

- .1 Use of site: exclusive and complete for execution of Work.
- .2 Access to the work areas can be made via the following:
 - .1 Area "C" PPAR: a gravel access road (as shown on Drawing Nos. E3 and E4 and Aerial Photo No. 1) leads from the Main Access Road to the Area "C" PPAR site. The Contractor will ensure that the access road to Area "C" PPAR is

upgraded and maintained to allow safe access for equipment and trucks to the work area. The areas requiring remediation are generally surrounded by level terrain or graded fill material. The Contractor shall assess the areas requiring remediation to determine access. Temporary access roads leading to the areas requiring remediation may be required and will be the responsibility of the Contractor. Refer to Section 01 52 00 – Construction Facilities for information pertaining to temporary access roads.

- .2 Area “F” PMAD: a gravel access road (as shown on Drawing No. E5 and Aerial Photo No. 1) leads from the Main Access Road to the Area “F” PMAD site. The Contractor will ensure that the access road to Area “F” PMAD is upgraded and maintained to allow safe access for equipment and trucks to the work area. The area requiring remediation is generally surrounded by level terrain or graded fill material. The Contractor shall assess the area requiring remediation to determine access. Temporary access roads leading to the area requiring remediation may be required and will be the responsibility of the Contractor. Refer to Section 01 52 00 – Construction Facilities for information pertaining to temporary access roads.
- .3 The Contractor will not store fill materials on the areas of the site requiring remediation.
- .4 Exercise care so as not to obstruct or damage public or private property in the area. Trucks and excavators should travel and turn in designated areas to minimize the tear-up of grass surfaces or gravel roads on the site.
- .5 At completion of Work, restore adjacent areas to the original condition. Damage to roads, ground and property will be repaired by the Contractor. Remove all remediation materials, residue, excess, etc., and leave site in a condition acceptable to the Departmental Representative.

1.20 PROJECT MEETINGS

- .1 Departmental Representative to arrange times and locations of project meetings.
- .2 Departmental Representative to notify participants of meetings.
- .3 The Contractor to record minutes of meetings and provide to Departmental Representative to distribute to participants within 7 days of meeting.
- .4 The Contractor will have a responsible member of the firm present at all project meetings.

1.21 EXISTING UNDERGROUND SERVICES

- .1 Before commencing Work, establish location and extent of known service lines, pipelines, cables, structures and other obstructions in area of Work and notify Departmental Representative of findings. Protect all known aboveground and underground services affected by operations under this Contract and repair any damage caused by such operations, either directly or indirectly, and pay all costs.
- .2 Where unknown services are encountered, immediately advise Departmental Representative and confirm findings in writing.

- .3 Record locations of maintained, re-routed and abandoned service lines.
- .4 No valve or other control on any existing water system or other utility shall be operated for any purpose by the Contractor without the prior written approval of the Departmental Representative. Such approval requires 4 days written notice unless otherwise specified by the Departmental Representative. The Departmental Representatives and a representative of the utility will be present when these controls are operated.

1.22 FIRE COMMISSIONER'S BULLETINS

- .1 All Work and installations shall comply with installation, safety and fire requirements of the Provincial Fire Commissioner.

1.23 SMOKING PRECAUTION

- .1 There is a "No Smoking" policy at the work site.
- .2 Observe smoking regulations and restrictions at all times.

1.24 ATTENDANCE UPON THE DEPARTMENTAL REPRESENTATIVE

- .1 The Contractor shall provide, at the Departmental Representative's request, whatever assistance is required to aid the Departmental Representative in his measurement and inspection of the Works.

1.25 COMPACTION DENSITIES

- .1 Unless specified otherwise all compaction densities are 95% standard Proctor Density to ASTM D698-91 (reapproved in 1998) Method D and corrected as noted in Section 31 23 33.01 – Excavating and Backfilling.

1.26 PROGRESSIVE CLEANING

- .1 The Contractor shall keep the Work, all property, road surfaces, in the vicinity of the Work and in areas where the Contractor's equipment and trucks will travel, in a clean and orderly condition; so far as is reasonably practical for the type of Work. All cleaning will be conducted in accordance with Section 01 35 43 – Environmental Procedures and Section 01 74 11 - Cleaning.
- .2 When the Work is complete, the Contractor shall remove all surplus products, tools, construction machinery and equipment, and any waste and debris, and leave the Work clean and suitable for use by the Departmental Representative unless otherwise specified. Final cleaning to Section 01 74 11 – Cleaning.

1.27 WARRANTY

- .1 As per General Conditions of Unit Price Contract, GC3-13 Warranty.
- .2 The Contractor shall correct, at his own expense:
 - .1 Work found not in accordance with the Contract;

- .2 Defects in Work due to faulty products and/or workmanship.
- .3 The Contractor shall correct and/or pay for any damage to other work resulting from any corrections required.
- .4 Neither the Final Certificate of the Work nor payment thereof shall relieve the Contractor of his responsibility hereunder.
- .5 The Contractor and all applicable sub-contractors shall meet with the Departmental Representative on an as-needed basis during the warranty period to review any and all deficient, maintenance and/or warranty work.

1.28 REGULATORY AGENCIES

- .1 Where reference is made to jurisdictional authorities, it shall mean all authorities who have within their constituted powers the right to enforce the laws of the place of Work.
- .2 WHMIS
 - .1 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials; and regarding labelling and provision of material safety data sheets acceptable to Labour Canada and Health and Welfare Canada.
- .3 Public Works Government Services Canada
 - .1 Conduct all activities in accordance with instructions from Public Works Government Services Canada and its agents. Comply with requirements of the NL Environmental Protection Act and Regulations as well as the requirements of applicable permits that may be obtained in relation to the Work.

1.29 CONFLICT OF INTEREST

- .1 The Contractor, its employees, agents, and sub-contractors, as part of its consideration under this contract, declares that it is not in a conflict of interest with respect to any and all work performed under this contract. Furthermore, if during the period of this contract, the Contractor becomes aware of the potential for any real or perceived conflict of interest with respect to its performance of work under the Contract, the Contractor is to immediately advise the Departmental Representative. The Contractor will take immediate steps to rectify any conflict of interest situation to the satisfaction of, and at no cost to, the Departmental Representative.

1.30 INVOICING

- .1 Project Number.
- .2 Contract Number.
- .3 Period of time covered by the invoice.
- .4 Location of work.
- .5 Description of work.

- .6 Quantity broken down as per Schedule of Quantities and Prices.
- .7 Supporting documentation as required.
- .8 Weigh scale slips for all soil removed from the site for treatment, and for all backfill materials brought onto the site, and for which payment is required are to be submitted with the invoice. The weigh slips must be collected from a weigh scale that is certified by the Province or the manufacturer's authorized representative to have an accuracy of at least $\pm 5\%$. Minimum age of calibration is one year.
- .9 In the event of a dispute, the Contractor is to make any and all records available to the Departmental Representative to substantiate invoiced amount.
- .10 Attach the following information with each application for payment:
 - .1 Letter of Good Standing from Workplace Health, Safety and Compensation Commission.
 - .2 Statutory Declaration attesting that they have made all payments to subcontractors, suppliers, and workmen on behalf of whom amounts were included in the previous claim for payment.
 - .3 Other submissions required by other Specification Sections.
 - .4 Remain in good standing with Safety Association and Commission at least until the date for the end of the warranty period established and provide evidence, acceptable to the Contracting Authority, of good standing when requested in writing to do so.

1.31 BASIS FOR PAYMENT

- .1 Unless otherwise specified no separate or direct payment will be made for work specified in this Section. Costs of all work specified in this Section are deemed to be included in the lump sum and unit prices quoted in the Schedule of Quantities and Prices.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION