



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

**Parks Canada**  
**John Cabot Building, 10 Barter's Hill,**  
**5th Floor**  
**St. John's, NL A1C 5M9**

**Agence Parcs Canada**  
**Édifice John-Cabot**  
**10 Barter's Hill, 5<sup>e</sup> étage**  
**C. P. 1268**  
**St. John's (T.-N.-L.) A1C 5M9**

**SOLICITATION AMENDMENT #4**

**MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaries**

Vendor/Firm Name and Address  
 Raison sociale et adresse du fournisseur/de l'entrepreneur

<b>Title-Sujet</b> <b>Design, Supply &amp; Installation of Earthmoving at Cape Breton Highlands Link Golf Course</b> <b>Parks Canada/ Conception, fourniture et exécution des travaux de terrassement du terrain de golf Highlands Links au Cap-Breton Parcs Canada</b>		<b>Date</b> <b>09.06.2014</b>
<b>Solicitation No. - No. de l'invitation</b> <b>10131712</b>	<b>Amendment No. - No modif.</b> <b>04</b>	
<b>GETS Reference No. - No de reference de SEAG</b>		
<b>Solicitation Closes</b> <b>L'invitation prend fin -</b> <b>REVISED</b> <b>RÉVISÉ</b> <b>at - à 02:00 PM</b> <b>on - le 2014-06-13</b>	<b>Time Zone /Fuseau horaire -</b> <b>Newfoundland Daylight Savings Time (NDT) /</b> <b>heure avancée de Terre-Neuve-et-Labrador (HAT)</b>	
<b>F.O.B. - F.A.B.</b>		
<b>Address Inquiries to: - Adresser toute demande de renseignements à :</b> <b>Colleen Sheehan</b>		
<b>Telephone No. - No de téléphone</b> <b>(709) 772-6129</b>	<b>Fax No. - No de télécopieur:</b> <b>(709) 772-3651</b>	
<b>Destination of Goods, Services, and Construction:</b> <b>Destinations des biens, services et construction:</b>		
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>		
<b>Name and title of person authorized to sign on behalf of the Vendor/Firm</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur</b>		
<b>Signature</b>	<b>Date</b>	

**TERMS OF REFERENCE AND CONSTRUCTION SPECIFICATIONS  
FOR  
DESIGN, SUPPLY AND INSTALLATION OF EARTHMOVING AT NO. 12  
CB HIGHLANDS LINKS GOLF COURSE  
INGONISH, NOVA SCOTIA**

**Prepared by:  
Asset Management for Parks Canada  
Cape Breton Field Unit  
Ingonish, Nova Scotia  
February 2014**

## TABLE OF CONTENTS

1.0	Description of the Project -----	Page iii
2.0	Background -----	Page iii
3.0	Key Objectives -----	Page iii
4.0	Project Requirements -----	Page iv
5.0	Design Drawings -----	Page ix
6.0	Execution of Work -----	Page x
7.0	General Conditions -----	Page xi
8.0	Tender Submission Requirements -----	Page xii
9.0	Measurement for Payment -----	Page xiii
10.0	CB Highlands Links Earthmoving at No. 12 Specifications -----	Page xiv
•	Section 01 11 00 – Summary of work	5
•	Section 01 14 00 – Work Restrictions	3
•	Section 01 25 20 – Mobilization and demobilization	1
•	Section 01 35 29.06 – Health & Safety Requirements	4
•	Section 01 35 43 – Environmental Procedures	4
•	APPENDIX A – No. 12 Fill Location	2
•	APPENDIX B - Fill Extraction Material Location Sketch	1

## **1.0 Description of Project**

### **1.1 Purpose:**

The purpose of this Terms of Reference is for Parks Canada to acquire a Contractor that will provide design and construction services to perform an earthworks project at No. 12 at the Cape Breton Highlands Links Golf Course in Ingonish, Nova Scotia.

**1.2 Title of Project:** CB Highlands Links Golf Course Fill Material at No. 12

**1.3 Project Location:** 247 Keltic Inn Road, Ingonish, NS

**1.4 Client / User:** PCA, Cape Breton Field Unit

## **2.0 Background**

In 2010 Parks Canada Highlands Links Golf Course sustained substantial flood damage throughout the golf course as a result of extreme weather events that had an affect on the Clyburn River levels. This is the second time in the past 5 years that damage of this magnitude hit the course and as a result Parks Canada decided to investigate potential protection solutions to minimize damage to the golf course while stabilizing the Clyburn River and its aquatic environment.

Through the expert modeling, design and guidance of river specialists Parks Canada has developed a river restoration project which will address flooding issues at #11, #12 and #6 on the golf course. The focus of this project is providing supporting services to the river restoration work anticipated at No.12.

In the summer of 2014 Parks Canada intend to construct a new rock berm to protect #11 and #12 fairways and greens. Prior to this work Parks Canada requires a Contractor to raise the existing elevation of the #12 green area approximately **2.3m above** its current elevation and the fairway area to be blended from the **2.3m elevation** to the existing pond elevation. The enclosed sketch in Appendix A shows the approximate areas to be raised along with the approximate fill limits.

## **3.0 Key Objectives**

The Contractor must provide design, construction drawings, specifications, site supervision, complete construction, clean-up and contract administration for the entire earthmoving project at No. 12. The Contractor must provide all labour, equipment and materials required for full construction to raise the elevation of #12 fairway and green area using material from designated sites on the golf course property which will be remediated at the completion of the earthmoving project. The site terrain and any

---

geotechnical information required to complete this project are the Contractor's full responsibility. Drawings contained in this package are for reference only and must be verified in the field by the Contractor.

### **3.1 Quality**

The Parks Canada requires the Contractor to maintain a high standard of engineering design, based upon recognized design principles. All design elements, planning, engineering and construction must be fully coordinated, and consistent in adherence to good design principles.

### **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. In particular the Contractor must ensure siltation and other environmental considerations are strongly adhered to in this highly sensitive site. The Clyburn River, adjacent pond and waterway areas must not be impacted by construction activities and all best practices must be implemented to ensure its integrity and environmental compliancy.

### **4.0 Project Requirements**

The Contractor will be responsible for the production of drawings and specifications suitable to construct the required earthmoving project.

The Scope of Work is provided as part of this package for information only. Verification of measurements, site conditions, geotechnical information and earthmoving design requirements are the full responsibility of the Contractor. The Contractor shall examine site conditions prior to submitting their tender in order to ensure that details are appropriate to existing conditions.

The Contractor is responsible for all related civil and geotechnical engineering and any other sub-consultants required.

Design consultants and engineers engaged by the Contractor must be fully qualified, accredited professionals, licensed to practice in Nova Scotia. The Consultant must be identified in the Contractor's tender.

The Contractor is responsible for obtaining any and all inspections and permits.

Geotechnical, or topographic surveys required to complete design and construction of this facility are to be commissioned by Contractor. Legal surveys will be the responsibility of Parks Canada.

---

Work shall meet or exceed all applicable codes and standards including, but not limited to: the Canada Labour Code, The Nova Scotia Standard Specification for Municipal Services, the CSA and the Nova Scotia Department of Transportation and Public Works Standard Specifications Highway Construction and Maintenance.

Contractors must be prepared to submit a detailed design / construction schedule and demonstrate that they can meet the deadlines included in these specifications.

Contractor is required to submit a site specific health and safety plan, and an environmental protection plan. Contractor will also be required to follow all recommendations included in the environmental assessment for this project and prevent any site contamination.

Contractor will be required to ensure sufficient containment protection around the pond and Clyburn river from heavy equipment. No fueling of any heavy equipment to be performed on construction site all fueling to be performed in designated fueling location at Ingonish Compound.

#### **4.1 Detailed Requirements include the following:**

The minimum design requirements for this project include but are not limited to the following items:

The Contractor is required to provide design, supply and complete installation services for earthmoving from the designated borrow locations on the golf course property to the #12 hole region detailed in the attached drawings and specifications.

The Contractor must clear the land to acquire fill at designated locations and remove any unsuitable material from site to designated disposal site.

The Contractor to install all suitable material to create a construction surface for the new raised No. 12.

The Contractor to construct an access road at raised elevation to blend into raised No. 12 and existing access road.

Site preparation including, clearing, leveling, etc. are all the responsibility of the Contractor and can only be conducted once approved by Parks Canada.

At the completion of the project the Contractor will be responsible to bring property within the project boundaries to a subgrade finish that has sufficient grade to ensure water is not trapped on the site. Final landscaping including topsoil, and sod will be completed by Parks Canada.

The Contractor to ensure the following minimum design requirements are provided:

## **INITIAL SITE CONDITION / PREPARATION**

Parks Canada will have the entire #12 green and fairway area stripped of sod and topsoil prior to the arrival of the Contractor so the Contractor will start fill installation on a subgrade surface. Contractor is expected to raise the existing access road to No. 12 along the project limits to the same elevation as the raised No. 12 elevation. The current access road elevation is not at the same height as No. 12 so some adjustment in finished elevations will be required.

### **No. 12 EARTHWORKS:**

Contractor to survey the existing #12 hole region and provide this survey data in hard copy and digital to the Department Representative prior to commencing fill operations. This must be approved by the Department Representative prior to any fill being installed and exact limits of fill materials must be confirmed and approved by Department Representative in the field prior to commencing operations.

Raise the existing #12 green region **2.3m from** the edge of the green (approximate 1+450 chainage) to the toe of the existing pump house bank (approximate chainage 1+420). The fill is to be placed from the top of the existing river bank to the south side of the existing access road. The Contractor must ensure all fill placed is clean, compacted and passable by heavy equipment. Raised area to include the green, rough area and existing access road.

Raise the existing #12 fairway between the new **2.3m elevation** of the green (approximate chainage 1+450) and existing pond elevation (approximate chainage 1+500) on a sloped elevation that has a consistent slope to blend into these two fixed elevations. The entire area from the edge of the river bank to the south side of the access road must be raised. Raised area to include the fairway, rough area and existing access road.

Contractor must provide finished survey elevations in hard copy and digital form to the Department Representative for confirmation that required new elevations have been achieved.

It is anticipated that approximately 7,700 m<sup>3</sup> (10,000 yd<sup>3</sup>) of material will be required to raise the existing grade; however, this is an estimate and it is the Contractors full responsibility to verify this quantity and provide all material required to achieve new raised elevation of No. 12 which will be dependent on the exact field conditions.

All material being placed at No. 12 must meet the following minimum compaction results:

All material placed in subgrade shall be spread and bladed smooth in successive

---

uniform layers, not to exceed 200 mm in compacted depth to the full width of the cross-section. Layers greater than 200 mm maybe permitted by the Engineer providing specified density is obtained.

Each layer shall be compacted to a minimum of 95% of the Standard Proctor dry density. The upper 300 mm of the subgrade shall be compacted in 150 mm layers to a minimum of 98% of the Standard Proctor dry density. Unless otherwise approved by the Engineer, moisture content of the material shall be within  $\pm 2\%$  of its optimum moisture content as determined by Standard Proctor Density test.

When the original ground will not support the weight of the compaction equipment, the lower part of the embankment may be constructed by dumping successive loads in uniformly distributed layers of a thickness not greater than that necessary to support the equipment, after which the remainder of the embankment shall be compacted as specified.

Contractor is responsible for all compaction testing costs and must complete a minimum of 2 compaction tests on each level of compacted material. Compaction test results to be provided to Department Representative at completion of compaction for approval. Contractor to ensure finished subgrade surface has a minimum 2 percent grade that allows water not to pond on the finished surface until the green area can be restored.

Contractor will be required to raise 2 existing manholes on No.12 to be flush with finished subgrade elevation. Contractor will also be required to raise the existing air vent piping associated with one of these manholes to finished subgrade elevation.

Parks Canada will raise the 11 existing sprinkler heads and 3 valve boxes associated with the sprinkler system located on No. 12; however, it will be the Contractors responsibility to coordinate timing of the raising of these heads with a minimum of 12 hours notice to Department Representative. Parks Canada will provide all necessary parts and labour for the extensions.

Contractor must ensure heavy equipment does not drive directly over sprinkler heads, valves or manholes on the course to prevent damage. These obstacles will be clearly marked by Parks Canada staff prior to commencing earthmoving activities and it will be the Contractors responsibility to ensure they maintain their location without disturbing them. Contractor will be required to repair and pay for all costs associated with any damage incurred by earthmoving operations.

Contractor will be required to supply and install all site / environmental controls required to prevent any material from entering the Clyburn River, pond adjacent to No. 12 or any minor waterways leading into these two water surfaces.

Contractor to install a new 300mm diameter corrugated steel culvert the full width of the service road which will extend a minimum of 300mm beyond the finished edge of the



---

travel surface on both sides of the service road. The 300mm diameter corrugated steel culvert will replace the existing overflow culvert and will be installed to match new ditch lines at the new raised road and No. 12 elevations.

Contractor will be required to install new ditch adjacent to new raised elevation road on the south side of service road. This ditch must tie into existing ditch and incorporate new overflow pipe for pumping station.

### **MATERIAL BORROW LOCATIONS:**

Fill material to be placed on No. 12 will be acquired from designated locations shown on sketch in Appendix B.

Contractor is responsible to acquire fill from designated borrow locations on the golf course property for this project including all extraction, transport and compaction costs related to acquiring, transporting and placing material. The Contractor will be required to verify acceptable selected backfill material can be acquired at these locations with sufficient quantities to supply the project. Contractor is to extract material from Location A, B and then C which will be dependent on the acceptability of material and volumes that can be extracted while maintaining guidelines in these specifications. Contractor to provide Department Representative with estimated quantities of material to be removed along with depths of material to be removed at designated locations for approval. This approval maybe required multiple times during the project if material is unsuitable.

Contractor should make all attempts to remove material from the borrow locations uniformly across the extraction area and prior to completion this level surface must be graded to ensure borrow areas blend into the existing ground elevations on all sides of the borrow area without significant inclines.

Contractor will be responsible to provide all labour, equipment and materials to excavate and transport all fill material for the project from the designated areas to the #12 project site using the approved travel routes detailed in these specifications. Blasting will not be permitted to acquire materials from these locations.

Travel route for this project, known as the service road, is a 1-way gravel road which is used by multiple users so Contractor will have to provide traffic control at all times while utilizing this road to ensure the safety of all users.

Selected backfill used to supply material to the #12 green to meet the following minimum standards:

SELECTED BACKFILL – common fill which is free from stumps, trees, roots, sod, organics; rocks, boulders and masonry larger then 200mm in any dimension; and other deleterious materials.

---

Contractor must adhere to the following minimum requirements when excavating fill material from the designated sites.

Contractor is permitted to extract material from any of the designated locations with the provisions that following material extraction the Contractor must remediate the area with very low sloped banks that can be hydro seeded to blend into existing landscape. Sharp rock faces or grades steeper than 20% on banks will not be acceptable as final grade finished surfaces on extracted material sites. Contractor is responsible for all final grading to subgrade on these sites.

Contractor is responsible to hydro seed all extraction / borrow and disposal sites after the site has been subgraded and prepared.

Prior to extracting material from any of the designated fill areas the Contractor must clear and grub the area to be worked and strip unsuitable surface materials. Dispose of cleared, grubbed and unsuitable material to designated disposal site(s).

The sites designated for borrow / selected backfill currently have some tree cover and the Contractor will be required to remove trees prior to commencing the material extraction process. Contractor must provide a screen of trees between the cleared area at the designated borrow sites and the service road.

When excavation is complete, dress ridges of excavation to nominal 1.5:1 slope and provide drains and ditches as required to prevent surface standing water.

Trim off and dress slopes of waste material piles and leave site in neat condition.

### **DESIGNATED DISPOSAL SITE(S)**

The Contractor will be permitted to dispose of unsuitable fill material extracted from the borrow areas such as: trees, stumps, etc. in the designated disposal site provided by Parks Canada. The designated disposal site will be adjacent to the potential fill extraction locations. Contractor will be permitted to excavate a hole a maximum of 2m deep on the far east or west ends of the designated fill removal sites and all unsuitable materials are to be buried in this hole. Department Representative must approve exact disposal site location and depths prior to transporting material to this location. Contractor to provide desired locations at the start of the project for approval and update as required throughout project.

The Contractor will be required to fully bury all unsuitable fill material in the disposal site with a well graded and free draining finished surface. There must be a minimum 200mm granular cap installed on top of all buried unsuitable material. Contractor will be responsible to hydro seed the finished surface of disposal area.

The Contractor must ensure that all materials buried in this disposal area are within a

---

delineated area and are stabilized with fill during the burying process to ensure that no unstable surfaces remain at this location upon project completion.

## **5.0 Design Drawings**

The Contractor shall provide design drawings for the earthworks project at No. 12. These drawings are to be stamped by a Professional Engineer who is registered and licensed to practice in the province of Nova Scotia. These drawings must be reviewed and approved by the Parks Canada. 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.

The Contractor shall allow seven (7) days for review each shop drawing/submission, etc.

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

## **6.0 Execution of the Work**

In general, the work shall be carried out in accordance with the drawings and specifications submitted and approved for construction.

Qualified and experienced trades people shall be employed in this earthworks project. The construction work shall be executed under the continuous supervision and direction of a competent foreman/superintendent. Suitable written evidence of the supervisor's qualifications must be provided to the Department Representative prior to the start of the work.

Once started, the installation shall be continuous until completion.

Timelines on this project are very critical to ensure minimal disruption to the Highlands Links Golf Course and they are as follows:

- 1 May – 15 May: Golf Course CLOSED to public. Contractor to work on earthmoving to No. 12 with full access to haul road. Contractor must provide a complete path access to Highlands Links staff and Contractors staff across the haul road. This path must be wide enough to permit the safe passage of golf carts and park maintenance equipment such as mowers that will need access between No. 11/12 and the top of the haul road during construction. Traffic Control must be in place to ensure safety of general public and staff.

16 May – 2 June: Golf Course OPEN to public. Contractor to complete earthmoving to No. 12 no later than June 2, 2014. Contractor must provide a complete path access to the public, Highlands Links staff and Contractors staff to haul road. This path must be wide enough to permit the safe passage of golf carts and park maintenance equipment such as mowers that will need access between No. 11/12 and the top of the haul road during construction. Traffic Control must be in place to ensure safety of general public and provide coordination of haul vehicles that ensures golf course clients are not delayed more than 5 minutes as they attempt to leave No. 11/12 to gain access to trail above haul road.

3 June – 25 June: Contractor can complete remediation work, hydro seeding, etc. on extraction and disposal sites with minimal disruption to service road.

Contractor must ensure service road is maintained without holes or depressions throughout construction and condition of the road upon project completion is equal or better condition than at the start of the project.

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 required for the project.

The Contractor is to obtain approval from the Departmental Representative 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 Parks Canada operations.

The Contractor shall be responsible for the storage and security of his own materials and equipment. Parks Canada 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(s) and access.

Total performance for the project occurs when the earthmoving is complete, all material has been extracted from designated sites, remediation of extraction and disposal sites has been completed and the Departmental Representative has issued notification of

acceptance.

## **7.0 General Conditions**

- 7.1 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.
- 7.2 Drawings and documents or copies thereof required for the work shall be exchanged between the Contractor and Parks Canada. All drawings and documents prepared by the Contractor for Parks Canada shall be the property of Parks Canada, free from all claims by the Contractor of any nature and kind whatsoever.
- 7.3 Parks Canada 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.
- 7.4 The Contractor agrees to obtain the consent of Parks Canada before publishing or issuing any account of the project.
- 7.5 Drawings shall be prepared in SI units in standard size sheets using the title block and format acceptable to Parks Canada.
- 7.6 Drawings shall be produced using CADD and the final working drawings shall be accompanied by the appropriate electronic format acceptable for use by Parks Canada. No other systems are acceptable.
- 7.7 Earthmoving and compaction to be designed in accordance with the National Master Specifications, Standard Municipal Specifications, and Nova Scotia Department of Transportation and Public Works Standard Specifications Highway Construction and Maintenance.
- 7.8 The design must be completed under the supervision of Engineers in the Province of Nova Scotia for their respective portions of the work.
- 7.9 Where deliverables and submissions include reports, summaries drawings, specifications, plans or schedules, two (2) hard copies shall be provided plus one (1) copy in electronic format unless otherwise specified.
- 7.10 Unless otherwise arranged with the Departmental Representative, the Contractor shall communicate with the Departmental Representative only.
- 7.11 The Contractor shall not respond to requests for project related information or questions from the media. Such inquiries shall be directed to the Departmental

Representative.

- 7.12 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.

## **8.0 TENDER SUBMISSION REQUIREMENTS**

Tender Submission shall address all items as follows:

- 8.1 A brief approach and methodology to meet the requirements together with sufficient detail to demonstrate a grasp of the project and the Contractor's competence to carry out the work.
- 8.2 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; opposite each person /category shall be shown the charge-out rate and the estimated hours to be worked by that person/category.
- 8.3 A detailed schedule showing the work to be completed from the day of the award.

## **9.0 MEASUREMENT FOR PAYMENT**

Payment for the design and supply of the earthmoving services to be on a lump sum basis. The lump sum shall include all engineering, labour, materials, equipment, and delivery required to design and construct the earthworks required for this project.

---

## **10.0 CB Highlands Links Earthmoving at No. 12 Specifications**

### **Table of Contents**

Section 01 11 00	Summary of Work
5	
Section 01 14 00	Work Restrictions
3	
Section 01 25 20	Mobilization and Demobilization
1	
Section 01 35 30	Health and Safety Requirements
4	
Section 01 35 43	Environmental Procedures
4	
	Appendix A - Earthmoving Location Sketch
2	
	Appendix B - Fill Extraction Location Sketch
1	

**APPENDIX A**  
**Earthmoving Location Sketch**



**APPENDIX B**  
**FULL EXTRACTION LOCATION SKETCH**