Public Works and Government Services Canada

Travaux publics et Services gouvernementaux Canada

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Public Works and Government Services Canada
Telus Plaza North, 5th floor
10025 Jasper Avenue
Edmonton
Alberta
T5J 1S6
Bid Fax: (780) 497-3510

SOLICITATION AMENDMENT
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 - Commentaires

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

Issuing Office - Bureau de distribution

Public Works and Government Services Canada
Northern Contaminated Site Program
Telus Plaza North, 5th floor
10025 Jasper Avenue
Edmonton
Alberta
T5J 1S6

Title - Sujet Ennadal Lake Remediation	
Solicitation No. - N° de l'invitation EW699-133161/A	**Amendment No. - N° modif.** 004
Client Reference No. - N° de référence du client AANDC	**Date** 2013-03-21
GETS Reference No. - N° de référence de SEAG PW-$NCS-002-9737	
File No. - N° de dossier NCS-2-35420 (002)	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-04-09	**Time Zone** **Fuseau horaire** Mountain Standard Time MST
F.O.B. - F.A.B. **Plant-Usine:** ☐ **Destination:** ☑ **Other-Autre:** ☐	
Address Enquiries to: - Adresser toutes questions à: Poot (NCS), Marc	**Buyer Id - Id de l'acheteur** ncs002
Telephone No. - N° de téléphone (780) 497-3520 ( )	**FAX No. - N° de FAX** (780) 497-3510
Destination - of Goods, Services, and Construction: **Destination - des biens, services et construction:**	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	**Delivery Offered - Livraison proposée**
Vendor/Firm Name and Address **Raison sociale et adresse du fournisseur/de l'entrepreneur** **Telephone No. - N° de téléphone** **Facsimile No. - N° de télécopieur**	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) **Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)** **Signature**	**Date**

Canada

SOLICITATION AMENDMENT NO.004

Part 1: **Questions and Answers are provided in reference to the specifications for clarification.**

1. **Q.** There was some talk at the Bidders conference that once the Contractor transfers old fuels from existing tanks to drums (supplied by PWGSC) that at that point the drums and fuel are outside of scope of this contract (although contractor has right to use fuel for project) – so can you please confirm the insurance is not to include these stored tanks/drums (that may or may not be new).

A. The fuel that is transferred into the drums will remain the property of the Crown, therefore contractor does not need insurance on them.

Revision 1:

Annex “C”

Specifications

(Attached as a Separate Electronic Document)

THE PURPOSE OF THIS ADDENDUM IS TO GIVE EFFECT TO THE FOLLOWING:

1 Specification Section 31 32 19 02 Geomembranes

Delete entire section and replace with the following:

PART 1 - GENERAL

1.1 Related Requirements

.1 Section 31 22 13 – Rough Grading.

.2 Section 31 23 33.01 - Excavating, Trenching and Backfilling.

.3 Section 31 32 19.01 – Geotextiles.

1.2 Measurement and Payment

.1 All costs for the supply, delivery, and installation of geomembrane are to be included in the lump sum payment under Item 31 32 19.02-1.

.2 No payment will be made for other construction applications where geomembrane is required.

.3 Payment at the tendered price shall be full compensation for furnishing all materials, preparation, delivery, storage, installation of the geomembrane and for all labour, equipment, tools and other work incidental to this section.

.4 Overlap and seams of geomembranes shall be considered incidental to surface area covered.

.5 No separate payment for repairs to damaged geomembranes.

.6 No separate payment for surface preparation.

.7 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Basis of Payment Schedule. Indicate the cost of this Work as a separate line item in the cost breakdown specified in Section 01 32 18 - Construction Progress Schedules – Bar (GANTT) Chart.

1.3 References

.1 All references to this Specifications, Standards, or Methods shall be understood to refer to the latest adopted revision, including all amendments.

.2 American Society for Testing and Materials International (ASTM)

.1 ASTM D5034-09 Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test).

.2 ASTM D751-06(2011) Standard Test Methods for Coated Fabrics (Elongation).

.3 ASTM D2261-13 Standard Test Method for Tearing Strength of Fabrics by the Tongue (Single Rip) Procedure (Constant Rate of Extension Tensile Testing Machine) (Tear Resistance).

.4 ASTM D2136-02(2012) Standard Test Method for Coated Fabrics Low Temperature Bend Test (Low Temperature Bend).

.5 ASTM D3785 / D3786 Standard Test Method for Bursting Strength of Textile Fabrics Diaphragm Bursting Strength Tester Method (Burst Strength).

.6 ASTM G151-10 Standard Practice for Exposing Nonmetallic Materials in Accelerated Test Devices that Use Laboratory Light Sources (UV Resistance, strength retained).

.7 ASTM D6392-12 Standard Test Method for Determining the Integrity of Nonreinforced Geomembrance Seams Produced Using Thermo Fusion Methods (Heat Bonded Seam Strength and Heat Bonded Adhesion Strength).

.8 ASTM D5641-94(2011) Standard Practice for Geomembrane Seam Evaluation by Vacuum Chamber (Heat Bonded Seam Strength, Peel Adhesion Strength).

1.4 Action and Informational Submittals

.1 Obtain written acceptance from Departmental Representative for geomembrane before installation of material.

.2 Submit in accordance with Section 01 33 00 - Submittal Procedures.

.3 Product Data:

.1 Submit manufacturer's instructions, printed product literature and data sheets for geomembranes and include product characteristics, performance criteria, physical size, finish and limitations.

.4 Shop Drawings:

.1 Submit drawings stamped and signed by professional engineer registered or licensed in Nunavut or Northwest Territories, Canada.

.2 Submit shop drawings and indicate installation layout, dimensions and details, including fabricated and field seams, anchor trenches and protrusion details.

.5 Samples:

.1 Submit following samples 4 weeks minimum before beginning Work:

.1 Minimum 2 m length of standard width membrane.

.2 Minimum of 1 m seam with at least 300 mm of membrane on both sides of seam.

.6 Certificates:

.1 Submit 3 copies of manufacturer's mill test data 4 weeks minimum before beginning Work.

.2 Submit certificates, including test results 2 weeks before delivery to job site.

1.5 Quality Assurance

.1 Test quality of resin and membrane to ensure consistency of raw material and geomembrane quality in accordance with manufacturer's recommendations.

.2 Test seams in strength and peel at beginning of each seaming period, and at least once every 4 hours if seaming operation is interrupted, for each seaming apparatus and seamer used that day.

.1 Also test at least two samples from each panel, with samples taken from extra material, such that panel is not damaged and blanket geometry is not altered.

.3 If seam test specimen fails in seam, repeat on new specimen.

.1 If new specimen fails in seam, material will not be used for seaming until deficiencies are corrected and two consecutive successful test seams are achieved.

.4 Test seams by non-destructive methods over their full length, using vacuum test unit, air pressure test or thermo-fusion methods as specified in the ASTM test methods.

.5 Provide test results to Departmental Representative, for each day's production, including documentation of non-destructive testing and repairs at end of each shift.

1.6 Delivery, Storage and Handling

.1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements.

.2 Contractor to supply and deliver all geomembranes to the site in sufficient quantities to cover the area designated in the Contract Documents and as requested by Departmental Representative.

.3 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.

.4 During delivery and storage, protect geo-membranes from direct sunlight, ultraviolet rays, excessive heat, mud, dirt, dust, debris and rodents.

.5 Storage and Handling Requirements:

.1 Store materials in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.

.2 Replace defective or damaged materials with new.

PART 2 - PRODUCTS

2.1 Materials

.1 Geomembrane: oil resistant reinforced polyethylene (OR RPE).

.1 Supplied in sufficient quantify for the Work required. The geomembrance will be manufactured for its intended purpose and will be manufactured from new, first quality resin.

.2 Composed of minimum 20 mil (.50 mm) reinforced polyethylene resin with inhibitors added to resist deterioration by chemicals, hydrocarbons, ultra-violet, and heat exposure.

.3 Manufacturer will acquire enough resin to produce the required amount of geomembrane to ensure uniform composition of all the panels require for the Work.

.2 Minimum Physical Properties:

.1 Nominal Thickness (ASTM 5199): 0.51 mm.

.2 Coating Thickness (nominal): 0.063 mm

.3 Tensile Strength (MD/CD) (ASTM D5034): 1500 N.

.4 Elongation at Failure (ASTM D751): 15%.

.5 Tear Resistance (MD/CD) (ASTM D2261): 400 N

.6 Burst Strength (ASTM D3786): 4000 kPa

.7 UV Resistance (ASTM G151-10): > 80%

.8 Required physical properties may vary with type of geomembrane material. Properties other than those listed above may be required.

.3 Seams: welded in accordance with manufacturer's recommendations.

.1 Physical properties for resin used for seams are same as those for resin used in manufacture of membrane.

.2 Seam Strength (ASTM D6392 and/or D5641-94[2011]): 21.0 N/mm

.3 Peel Adhesion Strenght (ASTM D6392 and/or D5641-94[2011]): FTB AD-DEL

PART 3 - EXECUTION

3.1 Examination

.1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for geomembranes installation in accordance with manufacturer's written instructions.

.1 Visually inspect substrate in presence of Departmental Representative.

.2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.

.3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.

3.2 Preparation

.1 Geotextile fabric shall be installated in accordance with Section 31 32 19.01 – Geotextiles prior to geomembrane installation.

.2 A certificate of subgrade acceptance will be prepared by the geomembrane installation contractor prior to membrane installation.

3.3 Installation

.1 Maintain area of installation free of water, deleterious materials and snow accumulations.

.2 Prepare excessively soft supporting material as directed by Departmental Representative.

.3 Do not proceed with panel placement and seaming when ambient temperatures are below minus 5 degrees C or above 40 degrees C, during precipitation, in presence of excessive moisture (i.e., fog, dew).

.4 Installation of the membrane in winds above 20 km/hr can proceed only if the installer can demonstrate that the lner will not be at rist of damage.

.5 Do not install in any weather conditions that may be detrimental to the function of the membrane.

.6 Ensure all personnel working on the geomembrane do not use damaging footwear.

.7 Place and seam panels in accordance with manufacturer's recommendations on graded surface in orientation and locations indicated. Minimize wrinkles, avoid scratches and crimps to geomembranes and avoid damage to supporting material.

.8 Protect installed membrane from displacement, damage or deterioration before, during and after placement of material layers.

.9 Replace damaged, torn or permanently twisted panels to approval of Departmental Representative. Remove rejected damaged panels from site.

.10 Keep field seaming to minimum. Locate field seams up and down slopes, with no horizontal field seam less than 1.5 m beyond toe of slope.

.11 Keep seam area clean and free of moisture, dust, dirt, debris and foreign material.

.12 Make field seam samples in accordance with requirements described in PART 2 on fragment pieces of geo-membrane and test to verify that seaming conditions are adequate.

.13 Test field seams as seaming work progresses by non-destructive methods over their full length. Repair seams which do not pass non-destructive test. Reconstruct seam between failed location and any passed test location, until non-destructive testing is successful.

3.4 Sections Repair

.1 Inspect seams and non-seam areas for holes, tears or other defects.

.2 Repair minor tears and pinholes by patching until non-destructive testing is successful.

.3 Patches to be round or oval in shape, made of same geomembrane material, and extend minimum of 75 mm beyond edge of defect.

.4 Verifications of repairs: All repair to be visually inspected.

.5 Keep records of all repairs and the results of inspections.

3.5 Protection

.1 Protect panels from damage.

.2 Handle carefully to avoid damaging the geomembrane.

.3 Do not permit vehicular traffic directly on membrane.

- END OF SECTION -

Part 2: **The following questions and answers arer provided for clarification to the Request for Proposal document:**

2. **Q.** One area that the insurer will ask for clarification is around Section 1.8 - Pollution Liability - Fixed Site Coverage and Storage Tank Third Party Liability coverage.
Can you confirm if they are asking The Contractor to pick up the coverage for tanks that currently exist on the site, or are they only referring to tanks that may be brought in to complete the project.

A. This insurance is for tanks that the contractor may bring to to sight to complete the project.