

**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSIONS À:**  
**Bid Receiving Public Works and Government  
Services Canada/Réception des  
soumissions/Travaux publics et Services  
gouvernementaux Canada**  
**Building S-111**  
**CFB Petawawa**  
**Petawawa**  
**Ontario**  
**K8H 2X3**  
**Bid Fax: (613) 687-6656**

## **REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government  
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services  
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

**Comments - Commentaires**

<b>Title - Sujet</b> Ground Penetrating Radar and Wall I	
<b>Solicitation No. - N° de l'invitation</b> W0107-12C347/A	<b>Date</b> 2012-06-19
<b>Client Reference No. - N° de référence du client</b> W0107-12CB347	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$PET-903-1192	
<b>File No. - N° de dossier</b> PET-2-37040 (903)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2012-08-14</b>	<b>Time Zone Fuseau horaire</b> Eastern Daylight Saving Time EDT
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Harrington, Mary-Lou	<b>Buyer Id - Id de l'acheteur</b> pet903
<b>Telephone No. - N° de téléphone</b> (613) 687-0789 ( )	<b>FAX No. - N° de FAX</b> (613) 687-6656
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>  Specified Herein Précisé dans les présentes	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

**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 Supply and  
Services Operation  
Petawawa Procurement  
Building S-111  
CFB Petawawa  
Petawawa  
Ontario  
K8H 2X3

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

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## TABLE OF CONTENTS

### PART 1 - GENERAL INFORMATION

1. Security Requirement
2. Statement of Requirement
3. Debriefings

### PART 2 - BIDDER INSTRUCTIONS

1. Standard Instructions, Clauses and Conditions
2. Submission of Bids
3. Enquiries - Bid Solicitation
4. Applicable Laws

### PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

### PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. Evaluation Procedures
2. Basis of Selection

### PART 5 - CERTIFICATIONS

1. Certifications Precedent to Contract Award

### PART 6 - RESULTING CONTRACT CLAUSES

1. Security Requirement
2. Statement of Requirement
3. Standard Clauses and Conditions
4. Term of Contract
5. Authorities
6. Payment
7. Invoicing Instructions
8. Certifications
9. Applicable Laws
10. Priority of Documents
11. SACC Manual Clauses
12. Insurance

### List of Annexes:

- |         |   |
|---------|---|
| Annex A | Statement of Work   |
| Annex B | Basis of Payment  |
| Annex C | Technical Evaluation Checklist and Equipment Checklist for Deliverables |

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## PART 1 - GENERAL INFORMATION

### 1. Security Requirement

There is no security requirement associated with the requirement.

### 2. Requirement

For the supply of **GROUND PENETRATING RADAR AND WALL IMAGING SYSTEM** as detailed herein for delivery to the Department of National Defence at CFB Petawawa, Ontario in accordance with Annex "A" attached.

### 3. Debriefings

After contract award, bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

## PART 2 - BIDDER INSTRUCTIONS

### 1. Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the (<http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp>) Manual issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2012-03-02) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

### 2. Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

### 3. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than five (5) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

### 4. Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders.

## PART 3 - BID PREPARATION INSTRUCTIONS

### 1. Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid ( 1 hard copies)  
 Section II: Financial Bid ( 1 hard copies)  
 Section III: Certifications

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders are encouraged to:

- 1) use paper containing fibre certified as originating from a sustainably-managed forest and/or containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

#### Section I: Technical Bid

In their technical bid, bidders should explain and demonstrate how they propose to meet the requirement and how they will carry out the Work. Bidders shall complete and submit all fill-in pages from the RFP document.

#### Section II: Financial Bid

The bidder must quote a firm lot price all inclusive of supply, training and manuals and software DDP (Petawawa, Ontario), the Goods and Services Tax (GST) and/or the Harmonized Sales Tax (HST) extra, as applicable. Freight charges to destination and all applicable Customs duties and taxes must be included.

##### 1.2.1 SACC Manual Clauses

C3011T Exchange Rate Fluctuation

2010-01-11

#### Section III: Certifications

Bidders must submit the certifications required under Part 5.

## PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

### 1. Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

#### 1.1 Technical Evaluation

All proposals submitted shall be completed in full and provide all of the information requested in the Request for Proposal (RFP) package to enable a full and complete evaluation. If the requirement is not addressed in the bidder's proposal, the proposal will be considered incomplete or non-responsive and will be rejected. The onus is on the bidder to provide all the information necessary to ensure a complete and accurate assessment.

##### Factors for Evaluation

1. PRICING BASIS (MANDATORY): Prices must be firm, DDP Delivered Duty Paid.
2. ABILITY TO MEET THE TECHNICAL REQUIREMENT (MANDATORY):
  - a) Mandatory Technical Criteria  
See annex "A" attached.
  - b) Provision of Supporting Technical Documentation:  
  
Supporting technical documentation for the stores offered shall be provided with the bid at time of bid closing.  
  
Technical brochures or technical data MUST be provided to verify compliancy to the technical mandatory specifications.
3. COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS REQUEST FOR PROPOSAL (MANDATORY)
4. FOR CANADIAN SUPPLIERS ONLY: Please note that the requirements of the Federal Contractors Program for Employment Equity may apply - see herein. (MANDATORY if applicable)
5. The Bidder must provide proof of Certification of RSS-220 – Devices Using Ultra-Wideband (UWB) Technology by Industry Canada (photocopy of certificate will suffice). If the equipment is not listed on the approved Industry Canada website your bid is considered non-compliant - <http://www.ic.gc.ca/app/sitt/reitel/srch/nwRdSrch.do?lang=eng>.

#### 1.2 Financial Evaluation

The lowest evaluated price will be established using the following criteria:

a) prices will be evaluated in Canadian Funds including any applicable Taxes and Canadian Customs Duty (if applicable) and excluding the Goods and Services Tax (GST) or Harmonized Sales Tax (HST). For evaluation purposes, bids received in a foreign currency will be converted to Canadian funds using the appropriate rate of exchange using the rate quoted by the Bank of Canada as being in effect on date of bid closing.

b) prices will be evaluated on a DDP (Petawawa, Ontario).

## 2. Basis of Selection

A0031T

Basis of Selection -  
Mandatory Technical Criteria Only

2010-08-16

## PART 5 - CERTIFICATIONS

Bidders must provide the required certifications to be awarded a contract. Canada will declare a bid non-responsive if the required certifications are not completed and submitted as requested.

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before award of a contract) and after award of a contract. The Contracting Authority will have the right to ask for additional information to verify bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive.

### 1. Certifications Precedent to Contract Award

The certifications listed below should be completed and submitted with the bid, but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.

#### 1.1 Federal Contractors Program - Certification - over \$25,000 and below \$200,000

Suppliers who are subject to the Federal Contractors Program (FCP) and have been declared ineligible contractors by Human Resources and Skills Development Canada (HRSDC) are no longer eligible to receive federal government contracts over the threshold for solicitation of bids as set out in the Government Contracts Regulations. *Suppliers may be declared ineligible contractors either as a result of a finding of non-compliance by HRSDC, or following their voluntary withdrawal from the FCP for a reason other than the reduction of their workforce to less than 100 employees. Any bids from ineligible contractors, including a bid from a joint venture that has a member who is an ineligible contractor, will be declared non-responsive.*

The Bidder, or, if the Bidder is a joint venture the member of the joint venture, certifies its status with the FCP, as follows:

The Bidder or the member of the joint venture

- (a) ( ) is not subject to the FCP, having a workforce of less than 100 full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada;
- (b) ( ) is not subject to the FCP, being a regulated employer under the Employment Equity Act, S.C. 1995, c. 44;
- (c) ( ) is subject to the requirements of the FCP, having a workforce of 100 or more full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada, but has not previously obtained a certificate number from HRSDC, having not bid on requirements of \$200,000 or more;
- (d) ( ) has not been declared an ineligible contractor by HRSDC, and has a valid certificate number as follows: \_\_\_\_\_.

Further information on the FCP is available on the HRSDC Web site.

## 1.2 Contractor's Contacts:

Name and telephone number of the person responsible for:

General Enquiries:

Delivery follow-up:

Contractor's Representative:

## PART 6 - RESULTING CONTRACT CLAUSES

### 1. Security Requirement

There is no security requirement associated with the requirement.

### 2. Requirement

For the supply of **GROUND PENETRATING RADAR AND WALL IMAGING SYSTEM** as detailed herein for delivery to the Department of National Defence at CFB Petawawa, Ontario in accordance with Annex "A" attached.

### 3. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the (<http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp>) Manual issued by Public Works and Government Services Canada.

#### 3.1 General Conditions

2010A (2012-03-02), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

### 4. Term of Contract

#### 4.1 Delivery Date

Delivery date offered is on or before \_\_\_\_\_.

#### 4.2 Shipping Instructions - Delivery at Destination

Goods must be consigned to the destination specified in the Contract and delivered:

Delivered Duty Paid (DDP), CFB Petawawa Incoterms 2000 for shipments from a commercial contractor.

## **5. Authorities**

### **5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Mary Lou Harrington  
Supply Specialist  
Public Works and Government Services Canada  
Acquisitions Branch, Petawawa Procurement  
Bldg S-111, CFB Petawawa, Ontario

Telephone: 613-687-0789  
Facsimile: 613-687-6656  
E-mail address: marylou.harrington@pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

### **5.2 Project Authority**

The Project Authority for the Contract is:

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_

Telephone : \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

### **5.3 Contractor's Representative**

*(Fill in or delete as applicable)*

## **6. Payment**

### **6.1 Basis of Payment**

#### **6.1 Basis of Payment - Firm Price**

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm lot price, as specified in the contract for a cost of \$ \_\_\_\_\_ (to be filled in only at contract award). Customs duties and tax are included and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

## 6.2 SACC Manual Clauses

H1000C Single Payment

2008-05-12

## 6.3 Payment of Invoices by Credit Card

The credit card \_\_\_\_\_ is accepted.

OR

The credit cards \_\_\_\_\_ and \_\_\_\_\_ are accepted.

## 7. Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

2. Invoices must be distributed as follows:

(a) The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.

## 8. Certifications

8.1 Compliance with the certifications provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification or it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

## 9. Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario

## 10. Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the general conditions 2010A (2012-03-02) General Conditions - Goods (Medium Complexity);
- (c) Annex A, Pricing Basis;

- 
- (d) the Contractor's bid dated \_\_\_\_\_ (insert date of bid) (If the bid was clarified or amended, insert at the time of contract award: “, as clarified on \_\_\_\_\_” **or** “, as amended on \_\_\_\_\_” and insert date(s) of clarification(s) or amendment(s))

#### 11. SACC Manual Clauses

A9006C	Defence Contract	2008-05-16
B1501C	Electrical Equipment	2006-06-16
A9062C	Site Regulations	2010-01-11
B7500C	Excess Goods	2006-06-16

#### 12. Insurance

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

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**ANNEX "A"****STATEMENT OF WORK**

14 May 2012

Specification for Ground Penetrating Radar and Wall Imaging System

CCID CB 347

1) Identification

- a) Work under this requirement comprises all supervision, labour, materials, tools and equipment required to supply and deliver one Complete Ground Penetrating Radar system and one complete, Wall Imaging System, including Training on both pieces of equipment for up to 20 personnel on each system for CFB Petawawa, Ontario.

2) Standards

- a) Canadian Standards Association (CSA)
- b) Radio Standards Specification -220

3) Requirement

a) Equipment

i) Ground Penetrating Radar

- (1) Must be a completely self contained unit that has a shielded dipole antennas with a fixed central frequency and bandwidth equal to the center frequency.
- (2) Must have a stable, low drift, linier time base and signal amplitude data.
- (3) Must have digital equivalent time sampling which enables instant/start stop acquisition and precise timing control.
- (4) System must have active compensation for temperature and supply voltage. As temperature fluctuates and battery voltage drops the data quality must remain the same.
- (5) Must be able to collect data in a high loss environment where GPR signals are being attenuated.
- (6) Stacking must be 1 to 2048 times or greater.
- (7) Points per trace must be 10 to 5,000 or greater
- (8) System must be weatherproof and able to work in all types of environment.
- (9) 120volt ac Power supply for re-charging battery.
- (10) Unit will have a wheel odometer.
- (11) Unit will be mounted on a collapsible, wheeled cart.

- (12) Will have a single re-chargeable battery with an operating life of minimum 3hrs and is not a specialized battery for the unit and can be purchased from anywhere.
- (13) One Spare Battery provided with unit.
- (14) System must be portable, easily transportable and must weigh less then 20kg.
- (15) Protective carrying cases for all components.
- (16) Non reflective display screen which measures diagonally, a min of 7 inches mounted on the system.
- (17) System must be able to incorporate Global Positioning S Universal Transverse Mercator Grid coordinates into computer programming software that comes with the device,
- (18) Must have recording device to record entire survey so it can be viewed at a later date, or taken back to the unit so others can evaluate what has been recorded.

## **II) SOFTWARE**

- (1) Required software license for the system must be provided for 20 users. Must be able to load software on 15 desktop workstations and 15 laptops.
- (2) Must have 3dimensional data visual capability
- (3) Must have 2dimensional time and depth slicing capability
- (4) Must be able to generate depth slices
- (5) Must be able to identify depth
- (6) Must be able to save images as .BMP or .JPG files
- (7) Must be able to record in real time and allow for a scroll review of recording.
- (8) Contractor shall provide all software updates and new releases to the purchaser for a period of 10 years following the acceptance, at no additional cost.
- (9) Software must be compatible with Windows XP and higher and allow downloading by memory card or USB connection.

## **III)Performance**

- (1) Must be able to locate the following under ground:
  - (2) Water mains
  - (3) Water valves
  - (4) Steam lines
  - (5) Sewer lines
  - (6) Electrical power cables
  - (7) Electrical conduits
  - (8) Foreign objects
  - (9) High resolution imaging at a minimum of 640 X 480 pixels
  - (10) Metal pipe, ABS/PVC pipe, cement pipe, other plastic pipe, old asbestoses composite pipe, re-bar.
  - (11) Must be able to view all of the above pipes, conduits, cables and other object through asphalt or concrete roadway surfaces.

### **iv) Wall Imaging System**

- (1) Must be compact self-contained design with stable, low drift, linear time base and signal amplitude data.
- (2) Must have a minimum of 15" color monitor with the ability to display Data in eleven different color palettes in the field.
- (3) Minimum of three interfaces for the system: remote control, keypad on sensor head or a key pad for the Monitor.
- (4) System must be portable, easily transportable and must weigh less then 20 kg
- (5) 120volt ac supply and Battery operation. Will have a single re-chargeable battery with an operating life of minimum 3hrs and is not a specialized battery for the unit.
- (6) Unit will have a wheel odometer.
- (7) Protective carrying cases for all components.
- (8) Remote portable sensor head C/W all connecting cables.
- (9) Non reflective display screen portable in carrying case.
- (10) Unit must be collapsible and fold down to be stored in a protective case
- (11) Dynamic quality index that measures the quality of Data collected by displaying a graphical color bar. The colors must allow the user to determine if data is being collected to fast.

#### **V) Software**

- (1) 3D Imaging
- (2) Must be able to generate depth slices
- (3) Must be able to identify depth
- (4) Must be able to save images as .BMP or .JPG files
- (5) Required software license for the system must be provided for 20 users. Must be able to load software on 15 desktop workstations and 15 laptops.
- (6) Contractor shall provide all software updates and new releases to the purchaser for a period of 10 years following the acceptance, at no additional cost.
- (7) Software must be compatible with Windows XP and higher and allow downloading by memory card or USB connection.

#### **VI) Performance**

- (1) Must be able to locate and identify conduits, cables, pipes and voids in concrete or block walls.
- (2) Must be able to measure concrete slab thickness.
- (3) Must be able to map rebar in walls and floors.
- (4) Must be able to measure cover depths.
- (5) Must be able to detect current carrying power cables in line scan or grid scan modes.
- (6) Must have a drill locator mode for determining the safe place to core drill in the field.

#### **B) Warranty**

- i) Both entire system and all accessories will be fully warranted for 12 Months from the date of purchase.

## C) Training

- i) Contractor will provide two courses one for each system following the course out line below.
- ii) Course Outline

- (1) Course will cover how both systems operate, how they are maintained, how to use the software for the systems, calibrations and all safety practices to be followed while operating the systems.

- iii) Topics to be Covered

- (1) Principles of GPR
  - (2) Operation of system
  - (3) Maintenance of System
  - (4) Calibration of the System
  - (5) Safety standards
  - (6) Computer Program

- iv) Training Methods

- (1) Classroom presentations of the system works and what it is able to do.
  - (2) Hands-on operation, maintenance and safety of system
  - (3) Computer based training to show how the software works

- v) Training Handouts

- (1) Course handout material
  - (2) Operating Manual will be provided to every participant for duration of training and then returned to the contractor. Upon completion of training a minimum of 5 operating manuals will be supplied by the contractor for the purchaser to retain.

- vi) Testing

- (1) Participants will be tested on being able to use the system completely. This will include operating of the machine, transferring the data to the computer program and being able to navigate, understand and use the computer program. The intent of the testing is to confirm individual competence with both systems. Contractor will provide testing.
  - (2) Contractor will provide a summary of the participant's test results

- vii) Certificates

- (1) Contractor will provide each participant with a certification card upon completion of training.

- (2) Contractor will provide a list to the Technical Authority of all participants that were successfully qualified.

viii) Course Timings

- (1) Course will be during regular work hours, 0800-1600
- (2) Course duration will be a minimum of 3 days long
- (3) Course will begin within a maximum of 10 working days once the system has been delivered.

ix) Number of Participants

- (1) Training will be for a minimum of 10 participants to a max of 20 participants per system.

x) Location of Training

- (1) Training will be on site at CFB Petawawa. Classroom will be provided.
- (2) Contractor will provide every participant with laptops that have software loaded to use for training purposes.

xi) Qualification of Trainer

- (1) Require instructor with minimum of 3 years experience and knowledge of the system and software.

d) Deliverables

- i) Contractor must provide all documentation as per the attached Documentation checklist annex C.

**ANNEX B****BASIS OF PAYMENT**

Item	Description	Unit of Issue	Usage	Unit Price
1	Complete Ground Penetrating Radar System including all software and associated accessories as per spec dated 14 May 2012	Lot	1	\$_____
2	Complete Wall Imaging System including all software and associated accessories as per spec dated 14 May 2012	Lot	1	\$_____
3	Complete Training and Testing on the Ground Penetrating Radar System including all required materials as per spec dated 14 May 2012	Lot	1	\$_____
4	Complete Training and Testing on the Wall Imaging System including all required materials as per spec dated 14 May 2012	Lot	1	\$_____

## ANNEX C

### Technical Evaluation Checklist And Equipment Checklist for Deliverables

The following tables will be used by the evaluation team to assess the bids. **Bidders are NOT required to fill in these tables however they can be used as a reference. If the evaluation team checks No in any of the mandatory criteria your bid will be considered non-compliant and your bid will be disqualified.**

**Table C.1 - Mandatory Technical Criteria for Ground Penetrating Radar**

Item	Description	Yes	No
Must be able to locate the following under ground			
1.	Water mains		
2.	Water valves		
3.	Steam lines		
4.	Sewer lines		
5.	Electrical power cables		
6.	Electrical conduits		
7.	Foreign objects		
8.	Metal pipe, ABS/PVC pipe, cement pipe, other plastic pipe, old asbestoses composite pipe, re-bar.		
Must be able to view all of the following pipes, conduits, cables and other object through asphalt or concrete roadway surfaces.			
9.	Water mains		
10	Water valves		
11	Steam lines		
12	Sewer lines		
13	Electrical power cables		
14	Electrical conduits		
15	Foreign objects		

16	Metal pipe, ABS/PVC pipe, cement pipe, other plastic pipe, old asbestoses composite pipe, re-bar.		
17	Must have digital equivalent time sampling which enables instant/start stop acquisition and precise timing control.		
18	System must have active compensation for temperature and supply voltage. As temperature fluctuates and battery voltage drops the data quality must remain the same.		
19	Must be able to collect data in a high loss environment where GPR signals are being attenuated.		
20	System must be weatherproof and able to work in all types of environment.		
21	120volt ac Power supply for re-charging battery.		
22	Will have a single re-chargeable battery with an operating life of minimum 3hrs and is not a specialized battery for the unit and can be purchased from any where		
23	Non reflective display screen which measures diagonally, a min of 7 inches mounted on the system.		
24	Must have recording device to record entire survey so it can be viewed at a later date, or taken back to the unit so others can evaluate what has been recorded.		
25	Required software license for the system must be provided for 20 users. Must be able to load software on 15 desktop workstations and 15 laptops.		
26	Contractor shall provide all software updates and new releases to the purchaser for a period of 10 years following the acceptance, at no additional cost.		
27	Software must be compatible with Windows XP and higher and allow downloading by memory card or USB connection.		

**Table C.2 - Mandatory Technical Criteria for Wall Imaging System**

Item	Description	Yes	No
1.	Must be able to locate and identify conduits, cables, pipes and voids in concrete or block walls.		
2.	Must be able to map rebar in walls and floors.		
3.	Must be able to detect current carrying power cables in line scan or grid scan modes.		
4.	Must have a drill locator mode for determining the safe place to core drill in the field.		
5.	Must be compact self-contained design with stable, low drift, linear time base and signal amplitude data.		
6.	Must have a minimum of 15" color monitor with the ability to display Data in eleven different color palettes in the field.		
7.	System must be portable, easily transportable and must weigh less than 20 kg		
8.	120volt ac supply and Battery operation. Will have a single re-chargeable battery with an operating life of minimum 3hrs and is not a specialized battery for the unit and can be purchased from anywhere.		
9.	Dynamic quality index that measures the quality of Data collected by displaying a graphical color bar. The colors must allow the user to determine if data is being collected to fast		
10	Required software license for the system must be provided for 20 users. Must be able to load software on 15 desktop workstations and 15 laptops.		
11	Contractor shall provide all software updates and new releases to the purchaser for a period of 10 years following the acceptance, at no additional cost.		
12	Software must be compatible with Windows XP and higher and allow downloading by memory card or USB connection.		

**Table C.3 - Equipment Checklist** - Documentation Checklist

Ser	Deliverables prior to adding to service contract	OPI	Date accepted	Comment
1	<b>Instruction Manual</b>			
a	Purpose of equipment/system explained			
b	Safety information about system / equipment explained			
c	Explanation of system / equipment			
d	Operator safety instructions including pre-use safety inspection provided			
e	Operating instructions provided for 100% of system/ equipment features			
f	Maintenance instructions provided for 100% of the components			
g	Trouble shooting checklist provided			
h	Critical component and operating features inspection procedures provided			
i	Serialized exploded view and serialized parts list for 100% components including accessories			
j	Schematics for all disciplines provided (electrical, control, safety, mechanical)			

2	<b>Log Book</b>			
a	Equipment/ system specific log book provided			
b	Critical component inspection checklist provided			
c	Logbook storage system provided			
d	Initial inspection completed and documented in log book			
3	<b>Labelling</b>			
a	All operational, safety and capacity labelling is provided			
4	<b>On-site acceptance</b>			
a	Contracting agency provided full training, and demonstrated full operational / functional tests including ancillary components			
b	Operator instruction provided			
c	Maintainer instruction provided			
d	BCE Inspection service contract Instruction provided			
e	Safety features verified and tested			
f	System/equipment operates as designed and intended			
g	Safety features confirmed			

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5	<b>Certifications</b>			
a	All certifications are included with log book, BCE library and on project file			
b	External agency certifications are provided			
c	Licensing is in proper corporate BCE name / account			
d	As built drawings are provided			
e	All information required to include equipment / system in applicable service contract is provided.			