



**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSIONS À:**

**Bid Receiving - PWGSC / Réception des  
soumissions - TPSGC**

**11 Laurier St. / 11, rue Laurier  
Place du Portage, Phase III  
Core 0A1 / Noyau 0A1  
Gatineau, Québec K1A 0S5  
Bid Fax: (819) 997-9776**

**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> TRACKED LINE CONSTRUCTION VEHICLES	
<b>Solicitation No. - N° de l'invitation</b> W8476-144458/A	<b>Date</b> 2013-08-26
<b>Client Reference No. - N° de référence du client</b> W8476-144458	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$HS-636-63376	
<b>File No. - N° de dossier</b> hs636.W8476-144458	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2013-10-07</b>	<b>Time Zone</b> <b>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> Khan, Shazia	<b>Buyer Id - Id de l'acheteur</b> hs636
<b>Telephone No. - N° de téléphone</b> (819) 956-7345 ( )	<b>FAX No. - N° de FAX</b> (819) 956-5227
<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**

Industrial Vehicles & Machinery Products Division  
11 Laurier St./11, rue Laurier  
7B1, Place du Portage, Phase III  
Gatineau  
Québec  
K1A 0S5

<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</b> <b>(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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## **PART 1 - GENERAL INFORMATION**

### **1. Introduction**

The bid solicitation and resulting contract document is divided into seven (7) parts plus annexes as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation and states that the Bidder agrees to be bound by the clauses and conditions contained in all parts of the bid solicitation;
- Part 3 Bid Preparation Instructions: provides bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications: includes the certifications to be provided;
- Part 6 Security, Financial and Other Requirements includes specific requirements that must be addressed by bidders; and
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The attachments include the Annex A - Pricing, Annex B - Federal Contractors Program for Employment Equity - Certification, the purchase description, the technical information questionnaire.

### **2. Summary**

The Department of National Defence has a requirement to purchase five (5) Tracked Line Construction Vehicles and ancillary items, including maintenance personnel training and operators training, in accordance with the Purchase Description for Tracked Line Construction Vehicle 40 ft, dated 2013-04, and as described at Annex A - Pricing.

The requirement includes an option to purchase up to three (3) Tracked Line Construction Vehicles and ancillary items to be exercised within twelve (12) months from the effective date of the contract.

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The requirement is subject to the provisions of the World Trade Organization Agreement on Government Procurement, the North American Free Trade Agreement, the Canada-Columbia Free Trade Agreement, the Canada-Peru Free Trade Agreement, the Canada-Panama Free Trade Agreement and the Agreement on Internal Trade.

### **3. Debriefings**

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

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## 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 Standard Acquisition Clauses and Conditions Manual issued by Public Works and Government Services Canada (PWGSC).

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

The 2003 (2013-06-01) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

**Subsection 05.4** of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

**Delete:** Bids will remain open for acceptance for a period of not less than **sixty (60) days** from the closing date of the bid solicitation

**Insert:** Bids will remain open for acceptance for a period of not less than **ninety (90) calendar days** from the closing date 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 **seven (7)** 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.

#### **5. Improvement of Requirement During Solicitation Period**

Should bidders consider that the specifications, Statement of Work or Purchase Description contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least **seven (7)** calendar days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

#### **6. Environmental Considerations**

Canada is committed to greening its supply chain. In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to acquire products and services that have a lower impact on the environment than those traditionally acquired. Environmental performance considerations include, among other things: the reduction of greenhouse gas emissions and air contaminants; improved energy and water efficiency; reduced waste and support reuse and recycling; the use of renewable resources; reduced hazardous waste; and reduced toxic and hazardous substances. In accordance with the Policy on Green Procurement, for this solicitation:

The successful bidder will be requested, after contract award, to provide all correspondence including (but not limited to) documents, reports and invoices in electronic format unless otherwise specified by the Contracting Authority, the Technical Authority or the Procurement Authority, thereby reducing printed material.

Bidders should recycle (shred) unneeded copies of non-classified/secure documents (taking into consideration the Security Requirements).

Product components used in performing the services should be recyclable and/or reusable, whenever possible.

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## **PART 3 - BID PREPARATION INSTRUCTIONS**

### **1. Bid Preparation Instructions**

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

First page of the Request for Proposal signed by the bidder or an authorized representative of the Bidder (1 signed copy)

Section I: Technical Bid (2 hard copies)

Section II: Financial Bid (1 hard copy)

Section III: Certifications (1 hard copy)

Section IV: Additional Information (1 hard copy)

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 Policy on Green Procurement (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and 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 requirements and how they will carry out the Work.

Bidders should submit, with their bid, the completed Technical Information Questionnaire.

### **1. Substitutes and Alternatives**



Bidders may propose substitutes and alternatives where "shall<sup>(E)</sup>" is indicated in the technical requirement description (Purchase Description/Statement of Requirement/Statement of Work).

1. Substitutes and alternatives that are equivalent in form, fit, function, quality and performance will be considered for acceptance by the Technical Authority where the Bidder:

- (a) Clearly identifies a substitute and/or an alternative;
- (b) Designates the brand name, model and/or part number of the substitute and/or of the product, where applicable;
- (c) States that the substitute product is fully interchangeable with the item specified in the technical requirement description;
- (d) Provides complete specifications and brochures, where applicable;
- (e) Provides compliance statements that include technical details showing the substitute and/or the alternative meet all technical requirements specified in the technical requirement description; and
- (f) Clearly identifies those areas in the technical requirement description and in the brochures that support the substitute and/or the alternative compliance with the technical requirements.

2. Substitutes and alternatives offered as equivalent in form, fit, function quality and performance will not be considered for acceptance by the Technical Authority if:

- (a) The bid fails to provide all of the information requested to allow the Technical Authority to fully evaluate the evaluate the equivalency; or
- (b) The substitute and/or the alternative fail to meet or fail to exceed the technical requirements specified in the technical requirement description.

3. Bidders are encouraged to offer or suggest green products whenever possible.

## **Section II: Financial Bid**

Bidders must submit their bid in accordance with the Basis of Payment specified in Part 7 and at Annex A - Pricing. The total amount of applicable taxes must be shown separately. Bidders should complete Annex A and submit it with their bid.

### **1. SACC Manual Clauses**

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## 1.1 Exchange Rate Fluctuation

1. Unless otherwise specified in the bid solicitation, bids must be in Canadian currency.
2. Bidders may request Canada to assume the risk for exchange rate fluctuation. This request must be specifically made at time of bidding.
3. The foreign currency component is defined as the element of the price that will be directly affected by exchange rate fluctuations. It could include the net price FOB foreign manufacturer's plant, costs associated with applicable duty, excise tax and Applicable Taxes, entry fees, transportation costs or delivery charges payable in a foreign currency, and any other charges associated with being the importer of record if they originated from and are required to be paid in a foreign currency.
4. The foreign value of the foreign currency component of the bid or negotiated price must be provided before contract award. Form PWGSC-TPSGC 9411, Claim for Exchange Rate Adjustments, may be used for this purpose. If milestone payments are proposed, it is recommended to indicate on the above form the foreign currency component associated with each milestone event.
5. All bids are evaluated in Canadian currency. Therefore, for evaluation purposes, the noon rate quoted by the Bank of Canada as being in effect on date of bid closing, or such other date as may be specified in the bid solicitation, will be applied as the initial conversion factor for the specified currency. (Column 3 of the above form will be completed by the Contracting Authority.)
6. Rates proposed by bidders will not be accepted for the purposes of this exchange rate adjustment provision.
7. If there are two (2) identical bids, and provided that the bid selected would still be considered the most advantageous to Canada, preference will be given to the Bidder who assumes all or part of the exchange rate adjustment risk over a bidder who does not assume any of this risk. Furthermore, preference will be given to the Bidder who assumes all of the exchange rate adjustment risk over a bidder who assumes only part of this risk.
8. Canada will pay the exchange rate adjustment amount in Canadian currency using the prevailing noon rate on the date of payment by Canada or, as applicable, in accordance with one of the following clauses: C3015C, C3020C, C3025C, or C3030C.

## Section III: Certifications

## 1. Certifications

Bidders must submit the certifications required under Part 5.

## Section IV: Additional Information

### 1. Additional Information

Canada requests that bidders submit the following information:

#### 1.1 Delivery

##### 1.1.1 Firm Quantity

While delivery of the equipment/vehicle is requested by January 15, 2014, the best delivery that could be offered is as follows:

Item 001 – five (5) Tracked Line Construction Vehicles and ancillary items will be delivered within \_\_\_\_\_ weeks/calendar days from the effective date of the contract.

##### 1.1.2 Optional Quantity

The best delivery that could be offered is as follows:

Item 002 - If an option is exercised, up to three (3) Tracked Line Construction Vehicles and ancillary items will be delivered within \_\_\_\_\_ weeks/calendar days.

#### 1.2 Supplier Contacts

Name and telephone number of the person responsible for:

General enquiries

Name: \_\_\_\_\_

Telephone No. \_\_\_\_\_

Facsimile No. \_\_\_\_\_

E-mail address: \_\_\_\_\_

Delivery follow-up

Name: \_\_\_\_\_

Telephone No. \_\_\_\_\_

Facsimile No. \_\_\_\_\_

E-mail address: \_\_\_\_\_

#### 1.3 After Sales Service

Canada requests that the Bidder provide the names, addresses and telephone numbers of their dealers and/or agents authorized to provide after sales service, maintenance and warranty repairs, and a full range of repair parts for the vehicle/equipment offered. The Bidder should show the

distance between the delivery location and the authorized dealer and/or agent and the delivery location, which should not be more than 100 kilometres.

**Location: CFB Gagetown**

Distance between the delivery location and the dealer and/or agent: \_\_\_\_\_ km

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone number: \_\_\_\_\_

**Location: Garnison Valcartier**

Distance between the delivery location and the dealer and/or agent: \_\_\_\_\_ km

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone number: \_\_\_\_\_

**Location: CFB Petawawa**

Distance between the delivery location and the dealer and/or agent: \_\_\_\_\_ km

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone number: \_\_\_\_\_

**Location: CFB Shilo**

Distance between the delivery location and the dealer and/or agent: \_\_\_\_\_ km

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone number: \_\_\_\_\_

**Location: CFB/ASU Wainwright**

Distance between the delivery location and the dealer and/or agent: \_\_\_\_\_ km

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone number: \_\_\_\_\_

**1.4 Manufacturer's Standard Warranty Period**

Canada requests that the Bidder provide details of the manufacturer's standard warranty period for the vehicle/equipment and its component that exceeds the minimum warranty period of **twelve (12) months or 2000 hours of usage, whichever comes first**. Any additional manufacturer's standard warranty such as those derived from the Original Equipment Manufacturer (OEM) for component/sub-assemblies will form part of the proposed contract.

**1.5 Extended Warranty Period**

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Canada requests that the Bidder indicate if an extended warranty period is being offered that exceeds the minimum warranty period of **twelve (12) months or 2000 hours of usage, whichever comes first.**

If yes, Canada requests that the Bidder provide details and pricing information of any extended warranty period available for the vehicle/equipment and any ancillary items.

Any extended warranty period offered will not be included in the financial evaluation.

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## **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. Mandatory Technical Evaluation Criteria**

##### **1.1.1 Mandatory Proof of Compliance**

Bidders must submit, with their bid, all proof of compliance required in the Purchase Description and the Technical Information Questionnaire.

##### **1.1.2 Substitutes and/or Alternatives**

Bidders proposing substitutes and/or alternatives must provide with their bid, all the information as detailed in Part 3, Section 1, - Substitutes and Alternatives to be considered for evaluation.

### **1.2 Financial Evaluation**

#### **1.2.1 Mandatory Financial Evaluation Criteria**

**1.2.1.1** Bidders must provide with their bid all financial information requested in the bid solicitation and at Annex A - Pricing.

**1.2.1.2** The prices of the bid must be in Canadian dollars, DDP Delivered Duty Paid at destination, Incoterms 2000, for the firm quantity and FCA Free Carrier at Contractor's Canadian facility or the Contractor's Canadian Distribution Point, Incoterms 2000 for the optional quantity, Canadian Custom Duties and Excise Taxes included where applicable, and Applicable Taxes are extra.

#### **1.2.1.3 Aggregate Evaluated Price**

Bids will be evaluated on an aggregate price basis for the firm quantity, the optional quantity and maintenance personnel training and operators training as follows:

a) the firm lot prices for the firm quantity, the optional quantity and maintenance personnel training and operators training will be multiplied by their identified estimated quantities; and

b) the sum of all results will determine the evaluated aggregate price.

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## **2. Basis of Selection**

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical and financial evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated aggregate price will be recommended for award of a contract.

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## PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and documentation to be awarded a contract.

The certifications provided by bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default, if any certification made by the Bidder is found to be untrue whether during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with this request will also render the bid non-responsive or will constitute a default under the Contract.

### 1. Mandatory Certifications Required Precedent to Contract Award

#### 1.1 Code of Conduct and Certifications - Related documentation

By submitting a bid, the Bidder certifies that the Bidder and its affiliates are in compliance with the provisions as stated in Section 01 Code of Conduct and Certifications - Bid of Standard Instructions 2003. The related documentation therein required will assist Canada in confirming that the certifications are true.

#### 1.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" list ([http://www.labour.gc.ca/eng/standards\\_equity/eq/emp/fcp/list/inelig.shtml](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)) available from Human Resources and Skills Development Canada (HRSDC) - Labour's website

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list at the time of contract award.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list during the period of the Contract.

The Bidder must provide the Contracting Authority with a completed annex [Federal Contractors Program for Employment Equity - Certification](#), before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex [Federal Contractors Program for Employment Equity - Certification](#), for each member of the Joint Venture.



## **2. Additional 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.

### **2.1 Product Conformance**

The Bidder certifies that all vehicles/equipment proposed conform, and will continue to conform throughout the duration of the contract, to all technical specifications of the purchase description(s).

This certification does not relieve the bid from meeting all mandatory technical evaluation criteria detailed in Part 4.

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Bidder's authorized representative signature

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Date

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## **PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS**

### **1. Security Requirement**

There is no security requirement associated with this bid solicitation.

### **2. Financial Capability**

**SACC Reference**  
A9033T

**Title**  
Financial Capability

**Date**  
2012-07-16

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## PART 7 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

### 1. Requirement

The Contractor must deliver five (5) Tracked Line Construction Vehicles and ancillary items, including maintenance personnel training and operators training, in accordance with the Purchase Description Tracked Line Construction Vehicle 40 ft, dated 2013-04, and at Annex A - Pricing.

An option is included to purchase up to three (3) vehicles and ancillary items to be exercised within twelve (12) months from the effective date of the contract.

#### 1.1 Technical Changes, Substitutes and Alternatives

Any technical changes, substitutes and alternatives proposed by the Contractor must be evaluated for acceptance by the Technical Authority. Any substitutes and alternatives must be equivalent in form, fit, function and performance. Substitutes and alternatives that are offered as equivalent will only be acceptable once they are approved by the Technical Authority as an equivalent. A contract amendment or a completed Design Change/Deviation form will be issued.

Should the Technical Authority not accept the substitute or the alternative and the Contractor is unable to meet the technical requirement, Canada may terminate the contract for default in accordance with the general conditions stated in the contract.

#### 1.2 Optional Goods and/or Services

The Contractor grants to Canada the irrevocable option to acquire the goods, services or both described herein under the same conditions and at the prices and or rates stated in the Contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The option may be exercised at the discretion of Canada in whole or in part or in more than one occasion, up to the maximum quantity identified herein.

The Contracting Authority may exercise the option within twelve (12) months after contract award by sending a written notice to the Contractor.

The Contractor must advise the Technical Authority and Contracting Authority of any design updates that could affect the procurement of additional vehicles/equipment.

### 2. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual

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(<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

## **2.1 General Conditions**

2010A (2013-04-25), General Conditions - Medium Complexity - Goods, apply to and form part of the Contract.

Section 09 entitled Warranty of General Conditions 2010A is amended as follows:

At subsection 1, delete the following: "The warranty period will be twelve (12) months" and replace with the following: "The warranty period will be twelve (12) months, or 2,000 hours of usage, whichever comes first".

Delete subsection 2 in its entirety and replace with the following:

The Contractor must pay the transportation cost associated with returning the Work or any part of the Work to the Contractor's plant for replacement, repair or making good. The Contractor must also pay the transportation cost associated with forwarding the replacement or returning the Work or part of the Work when rectified to the delivery point specified in the Contract or to another location as directed by Canada. If, in the opinion of Canada, it is not expedient to remove the Work from its location, the Contractor must carry out any necessary repair or making good of the Work at that location. In such cases, the Contractor will be responsible for all Costs (including travel and living expenses) incurred in so doing, Canada will not reimburse these Costs.

If action to effect repairs under warranty cannot be initiated within two (2) working days and completed within a reasonable length of time or if the Contractor has no repair facilities in the immediate vicinity (within 100 kilometres) of the specified delivery destinations (consignees), Canada reserves the right to make such repairs and be reimbursed by the Contractor at the rate of \$103.91 per hour for labour and the cost for replaced parts."

All other provisions of the warranty section remain in effect.

## **3. Security Requirement**

There is no security requirement applicable to this Contract.

## 4. Term of Contract

### 4.1 Delivery Date

Delivery of the vehicle/equipment must be made as follows:

#### Firm Quantity

Item 001 – five (5) Tracked Line Construction Vehicles and ancillary items must be delivered within **to be inserted by PWGSC** weeks/calendar days from the effective date of the contract.

#### Optional Quantity

Item 002 - If the option is exercised, up to three (3) Tracked Line Construction Vehicles and ancillary items must be delivered within **to be inserted by PWGSC** weeks/calendar days after an option is exercised.

## 5. Authorities

### 5.1 Contracting Authority

The Contracting Authority for the Contract is:

Shazia Khan

Supply Officer

Public Works and Government Services Canada

Acquisitions Branch

LEFTD - HS Division

Place du Portage, Phase III, 7B1

Gatineau, Quebec K1A 0S5

Telephone: 819-956-7345

Facsimile: 819-956-5227

E-mail address: shazia.khan@pwgsc-tpsgc.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 Procurement Authority

The Procurement Authority for the contract is:

To be inserted by PWGSC

DLP \_\_\_\_\_

National Defence Headquarters

Mgen. George R. Pearkes Building

101 Colonel By Drive

Ottawa, Ontario K1A 0K2

Telephone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

E-mail address: \_\_\_\_\_

The Procurement Authority is the representative of the department or agency for whom the Work is being carried out under the Contract. The Procurement Authority is responsible for the implementation of tools and processes required for the administration of the Contract. The Contractor may discuss administrative matters identified in the Contract with the Procurement Authority however the Procurement Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of Work can only be made through a contract amendment issued by the Contracting Authority.

## 5.3 Technical Authority

The Technical Authority for the Contract is:

To be inserted by PWGSC

National Defence Headquarters

Mgen. George R. Pearkes Building

101 Colonel By Drive

Ottawa, Ontario K1A 0K2

Telephone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

E-mail address: \_\_\_\_\_

The Technical 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 Technical Authority; however, the Technical 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.

## 5.4 Contractor's Representative

### General enquiries

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Name: To be inserted by PWGSC

Telephone No. \_\_\_\_\_

Facsimile No. \_\_\_\_\_

E-mail address: \_\_\_\_\_

### **Delivery follow-up**

Name: To be inserted by PWGSC

Telephone No. \_\_\_\_\_

Facsimile No. \_\_\_\_\_

E-mail address: \_\_\_\_\_

### **5.5 After Sales Service**

The following dealer and/or agent is authorized to provide after sales service, maintenance and warranty repairs; and a full range of repair parts for the vehicle/equipment offered:

#### **Location: CFB Gagetown**

Distance between the delivery location and the dealer and/or agent:

**to be inserted by PWGSC** km

Name:

Address:

Telephone Number:

#### **Location: Garrison Valcartier**

Distance between the delivery location and the dealer and/or agent:

**to be inserted by PWGSC** km

Name:

Address:

Telephone Number:

#### **Location: CFB Petawawa**

Distance between the delivery location and the dealer and/or agent:

**to be inserted by PWGSC** km

Name:

Address:

Telephone Number:

#### **Location: CFB Shilo**

Distance between the delivery location and the dealer and/or agent:

**to be inserted by PWGSC** km

Name:

Address:

Telephone Number:

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Buyer ID - Id de l'acheteur

hs636

Client Ref. No. - N° de réf. du client

File No. - N° du dossier

CCC No./N° CCC - FMS No/ N° VME

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**Location: CFB/ASU Wainwright**

Distance between the delivery location and the dealer and/or agent:

**to be inserted by PWGSC** km

Name:

Address:

Telephone Number:



## 6. Payment

### 6.1 Basis of Payment

#### 6.1.1 Firm Quantity

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid firm prices, in Canadian dollars, Delivered Duty Paid at destination, Incoterms 2000 including Canadian Custom Duties and Excise Taxes included where applicable, and Applicable Taxes are extra.

#### 6.1.2 Optional Quantity

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid firm prices, in Canadian dollars, FCA Free Carrier, at Contractor's Canadian facility or the Contractor's Canadian distribution point, Incoterms 2000 including Canadian Custom Duties and Excise Taxes included where applicable, and Applicable Taxes are extra.

### 6.2 SACC Manual Clauses

SACC Reference	Title	Date
C6000C	Limitation of Price	2011-05-16
H1001C	Multiple Payments	2008-05-12

### 6.3 Exchange Rate/Payment on Delivery

1. The price in Canadian currency includes the foreign currency component in respect of goods, services or both originating outside Canada, as detailed in form PWGSC-TPSGC 9411, Claim for Exchange Rate Adjustments.
2. The price must be adjusted to reflect the exchange rate in effect and applied by Canada Border Services Agency (CBSA) on the date of importation, but only in respect of the foreign currency component detailed in the above form.
3. No price adjustment directly resulting from the application of the provisions contained in this clause will be applied for increases or decreases in the exchange rate within a variation of: plus or minus 2 percent of the exchange rate(s) mentioned above; or plus or minus \$100 of the total cumulative amount claimed for exchange rate adjustment under the Contract.
4. On each invoice or claim for payment submitted under the Contract, the Contractor must indicate the exchange rate adjustment amount (either upward, downward or no change) as a separate item. In addition, the invoice must be accompanied by a copy of CBSA Form B3-3, Canada Customs Coding Form, for the imported goods, services or both.

5. Canada will have the right to audit any revision to costs and prices under this clause.

## **7. Invoicing**

### **7.1 Invoicing Instructions**

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions.

2. Invoices cannot be submitted before delivery, inspection and acceptance of the vehicle/equipment/service.

3. The Applicable Taxes must be calculated on the total amount of the invoice before the holdback is applied. At the time the holdback is claimed, there will be no taxes payable as they were claimed and payable under the previous invoice for the vehicle/equipment/service.

4. Upon delivery, inspection and acceptance of all ancillary items related to such vehicle/equipment/service the Contractor can submit an invoice for the release of the holdback.

5. Each invoice must be supported by:

(a) a copy of the invoices, receipts, vouchers for all direct expenses, and all travel and living expenses;

6. The Contractor is requested to provide invoices in electronic format unless otherwise specified by the Contracting Authority or Procurement Authority, thereby reducing printed material.

7. Invoices must be distributed as follows:

(a) The original must be forwarded or emailed to the Procurement Authority identified under the section entitled "Authorities" of the Contract for acceptance and payment.

(b) One (1) copy must be forwarded or emailed to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

### **7.2 Holdback**

1. Canada will apply a ten (10) percent holdback on any due payment for the vehicle/equipment/service (Items 001 to 002) until delivery, inspection and acceptance of all ancillary items related to such vehicle/equipment/service.

2. Subsequent to delivery, inspection and acceptance of all ancillary items related to such vehicle/equipment/service the Contractor must submit an invoice for the release of the Holdback in accordance with "Invoicing Instructions" found in this contract.

## 8. Certifications

### 8.1 Compliance

Compliance with the certifications and related documentation 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, provide the related documentation or if 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.

### 8.2 Federal Contractors Program for Employment Equity - Default by the Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and HRSDC-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "FCP Limited Eligibility to Bid" list. The imposition of such a sanction by HRSDC will constitute the Contractor in default as per the terms of the Contract.

## 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 2010A (2013-04-25) General Conditions - Medium Complexity - Goods;
- (c) Annex A - Pricing;
- (d) Purchase Description for 40 ft Tracked Line Construction Vehicles dated 2013-04;
- (e) Annex B - Federal Contractors program for employment equity - Certification
- (f) The Contractor's bid dated **(to be inserted by PWGSC)** \_\_\_\_\_, as amended **(to be inserted by PWGSC)** \_\_\_\_\_.

## 11. SACC Manual Clauses (as applicable)

SACC Reference	Title	Date
A1009C	Work Site Access	2008-05-12
A9006C	Defence Contract	2012-07-16
C2800C	Priority Rating	2013-01-28
C2801C	Priority Rating - Canadian Contractors	2011-05-16
D5510C	Quality Assurance Authority - (DND) - Canadian Based Contractor	2012-07-16
D5515C	Quality Assurance Authority (DND) - Foreign-based and United States Contractor	2010-01-11
D5540C	ISO 9001:2008 Quality Management Systems - Requirements (QAC Q)	2010-08-16
D5604C	Release Document (DND) - Foreign Based Contractor	2008-12-12
D5605C	Release Documents (DND) - United States-based Contractor	2010-01-11
D5606C	Release Documents (DND) - Canadian-based Contractor	2012-07-16
G1005C	Insurance	2008-05-12

## 12. Inspection and Acceptance

The Technical Authority is the Inspection Authority. All reports, deliverable items, documents, goods and all services rendered under the Contract are subject to inspection by the Inspection Authority or its representative. Should any report, document, good or service not be in accordance with the requirements of the Purchase Description and to the satisfaction of the Inspection Authority, as submitted, the Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor before recommending payment.

## 13. Preparation for Delivery

1. The vehicle/equipment shall be serviced, adjusted and delivered in condition for immediate use. The interior and exterior shall be clean when it arrives at the delivery destination.

2. All vehicles/equipment are to be delivered by appointment only. Any attempt by the carrier to deliver the vehicles/equipment without an appointment may be refused. When the carrier is required to return due to its failure to make an appointment for delivery, Canada will not be liable, to pay for any additional costs.

## 14. Shipping Instructions - Delivery at Destination (Firm Quantity)

1. The Contractor must ship the goods prepaid DDP - Delivered Duty Paid (... named place of destination) as specified below. Unless otherwise directed, delivery must be made by the most economical means. The Contractor is responsible for all delivery charges, administration, costs

and risks of transport and customs clearance, including the payment of customs duties and Applicable Taxes.

2. The Contractor must deliver the goods by appointment only. The Contractor or its carrier must arrange delivery appointments by contacting the person identified below. The consignee may refuse shipments when prior arrangements have not been made.

Item 001 - the contact persons for each destination are:

(Insert name of the contact person) at (insert telephone number) at (insert complete delivery address)

(Insert name of the contact person) at (insert telephone number) at (insert complete delivery address)

(Insert name of the contact person) at (insert telephone number) at (insert complete delivery address)

(Insert name of the contact person) at (insert telephone number) at (insert complete delivery address)

(Insert name of the contact person) at (insert telephone number) at (insert complete delivery address)

## **15. Delivery and Unloading (firm quantity)**

1. Delivery trucks must be equipped with an unloading device which will permit unloading at sites with no hydraulic, stationary or other type of unloading facility.

## **16. Shipping Instructions (Optional Quantity)**

1. Delivery will be FCA Free Carrier at the Contractor's Canadian facilities or the Contractor's Canadian Distribution Point, Incoterms 2000. The Contractor must load the goods onto the carrier designated by the Department of National Defence (DND). Onward shipment from the delivery point to the consignee will be Canada's responsibility.

2. Before shipping the goods, the Contractor must contact the following DND Inbound Logistics Coordination Center by facsimile or e-mail, to arrange for shipment, and provide the information detailed at paragraph 3. **(The DND Inbound Logistics Coordination Center will be identified if the option is exercised.)**

3. The Contractor must provide the following information to the DND Inbound Logistics Coordination Center when arranging for shipment:

- (a) the Contract number;
- (b) consignee address (for multiple addresses, items must be packaged and labeled separately with each consignee address);
- (c) description of each item;
- (d) the number of pieces and type of packaging (i.e., carton, crate, drum, skid);
- (e) actual weight and dimensions of each piece type, including gross weight;
- (f) full details of dangerous material, as required for the applicable mode of transportation, signed certificates for dangerous material as required for shipment by the International Maritime Dangerous Goods Code, the International Air Transport Association regulations or the applicable Canadian Dangerous Goods Shipping Regulations, and a copy of the material safety data sheet.

4. Following receipt of this information by Canada, Canada will provide the appropriate shipping instructions, which may include the requirement for specific consignee address labeling, and the marking of each piece with a Transportation Control Number.

5. The Contractor must not ship the goods before receiving shipping instructions from the DND Inbound Logistics contact.

6. If the Contractor delivers the goods at a place and time which are not in accordance with the given delivery instructions or fail to fulfill reasonable delivery instructions given by Canada, the Contractor must reimburse Canada any additional expenses and costs incurred.

7. If Canada is responsible for delays in delivering the goods, ownership and risk will be transferred to Canada upon expiry of either thirty (30) days following the date on which a duly completed shipping application is received by Canada or by its appointed forwarding agent, or thirty (30) days following the delivery date specified in the Contract, whichever is later.

## **17. Release Documents - Distribution**

The Contractor must prepare the release documents in a current electronic format and distribute them as follows:

One (1) copy mailed to consignee marked: "Attention: Receipts Officer";

Two (2) copies with shipment (in a waterproof envelope) to the consignee;

One (1) copy to the Contracting Authority;

One (1) copy to:

National Defence Headquarters  
Mgen George R. Pearkes Building  
101 Colonel By Drive  
Ottawa, ON K1A 0K2  
Attention: **To be inserted by PWGSC**

One (1) copy to the Quality Assurance Representative;

One (1) copy to the Contractor; and

For all non-Canadian contractors, one (1) copy to:

DQA/Contract Administration  
National Defence Headquarters  
Mgen George R. Pearkes Building  
101 Colonel By Drive  
Ottawa, ON K1A 0K2  
E-mail: ContractAdmin.DQA@forces.gc.ca.

## **18. Post-Contract Award Meeting**

Within ten (10) calendar days from the effective date of the Contract, the Contractor must contact the Contracting Authority to determine if a post-contract award meeting is required. A meeting will be convened at the discretion of the Technical Authority after contract award to review technical and contractual requirements. The Contractor shall be responsible for the preparation and distribution of the minutes of meeting within five (5) calendar days after the meeting has been held. The meeting will be held at the Contractor's facilities or at the Department of National Defence facility or via teleconference, at Canada's discretion at no additional cost to Canada, with representatives of the Contractor, the Department of National Defence and Public Works and Government Services Canada.

## **19. Progress Reports**

The Contractor must prepare and submit a monthly progress report electronically to the Procurement Authority, Technical Authority and Contracting Authority.

The Contractor must answer the following questions:

- (i) Is the delivery of the vehicle/equipment and ancillary items on schedule?
- (ii) Is this requirement free of any areas of concern in which the assistance or guidance of Canada may be required?

Each negative response must be supported with an explanation.

## **20. Vehicle Safety**

Each vehicle supplied pursuant to the Contract must meet the applicable provisions of the Motor Vehicle Safety Act, S.C. 1993, c. 16, and the applicable regulations that are in force on the date of its manufacture.

## **21. Environmental Considerations**

Canada is committed to greening its supply chain. In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to acquire products and services that have a lower impact on the environment than those traditionally acquired. Environmental performance considerations include, among other things: the reduction of greenhouse gas emissions and air contaminants; improved energy and water efficiency; reduced waste and support reuse and recycling; the use of renewable resources; reduced hazardous waste; and reduced toxic and hazardous substances. In accordance with the Policy on Green Procurement:

The Contractor is requested to provide all correspondence including (but not limited to) documents and reports in electronic format unless otherwise specified by the Contracting Authority, the Technical Authority or the Procurement Authority, thereby reducing printed material.

The Contractor should recycle (shred) unneeded copies of non-classified/secure documents (taking into consideration the Security Requirements).

Product components used in performing the services should be recyclable and/or reusable, whenever possible.



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## ANNEX A - PRICING

### Item 001 – Tracked Line Construction Vehicle 40 ft (**Firm Quantity**)

The Contractor must deliver purchase five (5) Tracked Line Construction Vehicles and ancillary items such as, but not limited to, vehicle manuals, data summary, photographs, warranty letter(s) and maintenance personnel training and operators training, in accordance with the attached Purchase Description purchase of Tracked Line Construction Vehicle 40 ft, dated 2013-04.

Quantity : one (1), firm lot price of \$\_\_\_\_\_ per vehicle/equipment, Delivered Duty Paid at **CFB Gagetown**\_\_\_\_\_, in accordance with Part 7 Basis of Payment.

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Quantity : one (1), firm lot price of \$\_\_\_\_\_ per vehicle/equipment, Delivered Duty Paid at **Garnison Valcartier**\_\_\_\_\_, in accordance with Part 7 Basis of Payment.

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Quantity : one (1), firm lot price of \$\_\_\_\_\_ per vehicle/equipment, Delivered Duty Paid at **CFB Petawawa**\_\_\_\_\_, in accordance with Part 7 Basis of Payment.

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Quantity : one (1), firm lot price of \$\_\_\_\_\_ per vehicle/equipment, Delivered Duty Paid at **CFB Shilo**\_\_\_\_\_, in accordance with Part 7 Basis of Payment.

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Quantity : one (1), firm lot price of \$\_\_\_\_\_ per vehicle/equipment,

Delivered Duty Paid at **CFB/ASU Wainwright**\_\_\_\_\_, in accordance with Part 7 Basis of Payment.

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

**Item 002 – Tracked Line Construction Vehicle 40 ft (Optional Quantity)**

If this option is exercised, the Contractor must deliver up to three (3) Tracked Line Construction Vehicles and ancillary items such as, but not limited to, vehicle manuals, warranty letter(s) and excluding maintenance personnel training and operators training, in accordance with the attached Purchase Description of Tracked Line Construction Vehicle 40 ft, dated 2013-04.

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Firm lot price of \$\_\_\_\_\_ per vehicle/equipment, FCA Free Carrier at Contractor's Canadian facility or Contractor's Canadian distribution point in accordance with Part 7 Basis of Payment.

**Item 003 - Maintenance Personnel Training (Option)**

If this option is exercised, the Contractor must provide up to three (3) maintenance personnel training, in accordance with the attached Purchase Description for Tracked Line Construction Vehicle 40 ft, dated 2013-04.

Firm unit price of \$\_\_\_\_\_ and Applicable Taxes extra.

The Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the National Joint Council Travel Directive (<http://www.njc-cnm.gc.ca/directive/index.php?sid=90&hl=1&lang=eng>), and with the other provisions of the directive referring to "travellers", rather than those referring to "employees".

All travel must have the prior authorization of the Technical Authority Authority. All payments are subject to government audit.

All travel and living expenses incurred in the performance of the work outside Canada will be the Contractor's responsibility.

**Item 004 - Operators Training (Option)**

If this option is exercised, the Contractor must provide up to three (3) operators training, in accordance with the attached Purchase Description for Tracked Line Construction Vehicle 40 ft, dated 2013-04.

Firm unit price of \$\_\_\_\_\_ and Applicable Taxes extra.

The Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the National Joint Council Travel Directive (<http://www.njc-cnm.gc.ca/directive/index.php?sid=90&hl=1&lang=eng>), and with the other provisions of the directive referring to "travellers", rather than those referring to "employees".

All travel must have the prior authorization of the Technical Authority Authority. All payments are subject to government audit.

All travel and living expenses incurred in the performance of the work outside Canada will be the Contractor's responsibility.

**Item 005 – Extended Warranty Period**

If the warranty period is extended for an additional period of \_\_\_\_\_ months/calendar days, the Contractor will be paid a firm unit price of \$\_\_\_\_\_ per vehicle/equipment, and Applicable Taxes extra.

## ANNEX B

## FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - CERTIFICATION

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with such request by Canada will also render the bid non-responsive or will constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit HRSDC-Labour's website.

Date: \_\_\_\_\_ (YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

☐ A1. The Bidder certifies having no work force in Canada.

☐ A2. The Bidder certifies being a public sector employer.

☐ A3. The Bidder certifies being a federally regulated employer being subject to the Employment Equity Act.

☐ A4. The Bidder certifies having a combined work force in Canada of less than 100 employees (combined work force includes: permanent full-time, permanent part-time and temporary employees [temporary employees only includes those who have worked 12 weeks or more during a calendar year and who are not full-time students]).

A5. The Bidder has a combined workforce in Canada of 100 or more employees; and

☐ A5.1. The Bidder certifies already having a valid and current Agreement to Implement Employment Equity (AIEE) in place with HRSDC-Labour.

OR

☐ A5.2. The Bidder certifies having submitted the Agreement to Implement Employment Equity (LAB1168) to HRSDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity

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Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

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Client Ref. No. - N° de réf. du client

File No. - N° du dossier

CCC No./N° CCC - FMS No/ N° VME

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(LAB1168), duly signing it, and transmit it to HRSDC-Labour.

B. Check only one of the following:

☐ B1. The Bidder is not a Joint Venture.

OR

☐ B2. The Bidder is a Joint Venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)



## NOTICE

This documentation has been reviewed by the technical authority and does not contain controlled goods.

## AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées.

### PURCHASE DESCRIPTION FOR TRACKED LINE CONSTRUCTION VEHICLE 40ft

#### 1. SCOPE

**1.1 Scope** - This Purchase Description describes the requirements for tracked line maintenance type vehicles with a rear mounted Digger Derrick unit. The tracked vehicle will be used in domestic and expeditionary operations for aerial, overhead and underground telecommunications cable installation and maintenance, post/pole hole digging, setting, and removal.

**1.2 Instructions** - The following instructions **shall** be applied to this Purchase Description:

- (a) Requirements, which are identified by the word "**shall**", are mandatory. Deviations will not be permitted;
- (b) Requirements identified by "**shall**<sup>(E)</sup>" are mandatory. The Technical Authority will consider substitutes/alternatives for acceptance as an Equivalent;
- (c) Requirements identified with a "will" define actions to be performed by Canada and require no action/obligation on the Contractor's part;
- (d) Where "**shall**", "**shall**<sup>(E)</sup>", or "will" are not used, the information provided is for guidance only;
- (e) In this document "provided" **shall** mean "provided and installed";

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Issued on Authority of the Chief of the Defence Staff

Publiée avec l'autorisation du Chef d'état-major de la Défense

- (f) Where technical certification is required, a copy of the certification or an acceptable **Proof of compliance** *shall* be provided upon request, at no cost to Canada;
- (g) Metric measurements *shall* be used to define the requirement. Other measurements are for reference only and may not be exact conversions; and
- (h) Dimensions stated as nominal *shall* be treated as approximate dimensions. Nominal dimensions reflect a method by which materials or products are generally identified for sale commercially, but which differ from the actual dimensions.

**1.3 Definitions** - The following definitions apply to the interpretation of this Purchase Description:

- (a) **"Technical Authority"** - The government official responsible for technical content of this requirement;
- (b) **"Equivalent"** - A standard, means, or component type, which has been accepted by the Technical Authority as meeting the specified requirements for form, fit, function and performance;  
  
**"Proof of Compliance"** - Is defined as an unaltered document, such as a brochure and/or technical literature and/or a third party test report provided by a nationally and/or internationally recognized testing facility and/or a report generated by a nationally and/or internationally recognized third party software. The document shall provide detailed information on each performance requirement and/or specification. Where a document submitted as Proof of Compliance does not cover all the performance requirements and/or specifications or when no such document is available or when modifications to the original equipment or customization are required to achieve the performance requirements and/or specifications, a Certificate of Attestation (as a separate document) signed by a senior engineer representing the Original Equipment Manufacturer (OEM) detailing the modifications and how they meet the performance requirements and/or specifications shall be provided. The certificate shall detail all performance requirements and/or specifications required to substantiate compliance. One certificate can be provided for one or all performance requirements and/or specifications.
- (d) **"Tracked vehicle"** - refers to the cab, frame, and parts provided with the frame before the addition of the aerial;
- (e) **"Tracked vehicle/equipment"** - refers to the completely manufactured tracked lift platform vehicle with aerial device, and related parts and equipment installed;

## **2. APPLICABLE DOCUMENTS**

**2.1 Government Furnished Documents** - Not applicable.

**2.2 Other Publications** - The following documents form part of this purchase description. Web sites for the organization are given when available. Effective documents are those in effect on date of manufacture. Sources are as shown:

Canadian Motor Vehicle Safety Standards (CMVSS)  
Transport Canada,  
Road Vehicle and Motor Vehicle Regulation,  
330 Sparks Street,  
Ottawa, Ontario K1A 0N5  
<http://www.tc.gc.ca/acts-regulations/GENERAL/M/mvsa/menu.htm>

CAN/CSA C225-10 Vehicle Mounted Aerial Devices  
CSA W47.1-09 Certification of Companies for Fusion Welding Steels  
CSA W59-03 (R2008) Welded Steel Construction (Metal Arc Welding)  
CSA W59.2-M1991 (R2008) Welded Aluminum Construction  
Canadian Standards Association  
5060 Spectrum Way, Suite 100  
Mississauga, Ontario, L4W 5N6  
<http://www.csa.ca/language/default.asp?thisUrl=%2FDefault%2Easp>

ANSI/ASSE A10.31-2006 Safety Requirements, Definitions and Specifications for  
Digger Derricks  
American National Standards Institute  
1819 L Street, NW, 6<sup>th</sup> Floor  
Washington, DC, 20036  
<http://www.ansi.org/>

International Organization for Standardization  
ISO Central Secretariat  
1, ch. de la Voie-Creuse  
CP 56 - CH-1211 Geneva 20, Switzerland  
<http://www.iso.org/>

Occupational Health and Safety Act (OHSA), 1990  
Ontario Ministry of Labour,  
400 University Ave.,  
Toronto, Ontario M7A 1T7  
<http://www.labour.gov.on.ca/>

SAE Handbook  
Society of Automotive Engineers Inc.  
400 Commonwealth Dr.,  
Warrendale, PA, 15096  
<http://www.sae.org>

FED STD 595C - Colors Used in Government Procurement  
GSA - Specification Section  
470 L'Enfant Plaza  
Suite 8100  
Washington, DC, 20407  
<http://apps.fss.gsa.gov/pub/fedspecs/>



### 3. REQUIREMENTS

#### 3.1 Standard Design - The tracked vehicle/equipment **shall**:

- (a) **Latest Model** - Be the manufacturer's latest model
- (b) **Industry Acceptability** - Have demonstrated industry acceptability by having been manufactured and sold commercially for at least 2 years, or, **shall** be manufactured by a company that has at least 5 years experience in design and manufacturing of a comparable type of equipment of equivalent or greater complexity. A product brochure **shall** be attached in bid submission;
- (c) **Engineering Certification** - Have engineering certification available, upon demand, for this vehicle/equipment from the original manufacturers of major equipment systems and assemblies;
- (d) **Regulation** - Conform to all applicable laws, regulations and industrial standards governing manufacture, safety, noise levels and pollution in effect in Canada at the time of manufacture;
- (e) **Published Ratings** - Not have system and component capacities increased above published ratings (i.e. product or component brochures) or accompanied by proof of compliance; and
- (e) **Standard Components** - Include all components, equipment, and accessories normally supplied for this application, although they may not be specifically described in this Purchase Description.

##### 3.1.1 Design Principles

- (a) **Standard Components** - Commercially available standard parts complying with commercial standards **shall** be used wherever possible;
- (b) **Interchangeability** - All components, assemblies, and sub-assemblies used in the construction **shall** be designed and manufactured to dimensional tolerances, which will permit interchangeability and facilitate replacement of parts;
- (c) **Spare Parts** - The manufacturer **shall** select components readily available for a minimum period of fifteen (15) years from the date of manufacture;
- (d) **Maintainability** - All maintenance and repair tasks, especially routine operator maintenance, **shall** be easy to perform with a minimum of special tools and skills; and
- (e) **Modularity** - Major assemblies **shall** be easily disconnected and removed from the tracked vehicle without the necessity for extensive disassembly of components.

#### 3.2 Operating Conditions

3.2.1 **Weather** - The tracked vehicle/equipment **shall** operate under the extremes of weather conditions found in Canada in temperatures ranging from - 40 to 37° C (-40 to 99° F).

3.2.2 **Terrain** - The tracked vehicle/equipment **shall** be capable of being operated on off-road (e.g. construction sites, open fields, and dirt tracks). Terrain conditions **shall** include year round operations on snow, mud, sand and ice.

### 3.3 **Safety**

3.3.1 **Vehicle Safety Regulations** - The vehicle **shall** meet the provisions of the Canada Motor Vehicle Safety Act in effect on the date of manufacture of the vehicle. The completed vehicle **shall** have Safety Compliance Certification Label with a **National Safety Mark (NSM)**, as a seal of compliance. The bidder **shall** submit the variant equipment integrator NSM certification number as a proof of registration with Transport Canada as a final stage manufacturer.

3.3.2 **Aerial device safety** - The installation of the rear mounted aerial device and digger derrick **shall** comply with the most recent requirements of CSA C225-10 and ANSI/ASSE A10.31-2006 and relevant sections of the OHSA. All welded fabricated items; assemblies and sub-assemblies **shall** conform to the latest issue of CSA W59.

3.3.3 **Noise Levels** - The noise level **shall not** exceed:

- (a) 85 decibels (dB(A)) in the cab when measured in accordance with SAE Recommended Practice J336; and
- (b) 86 decibels (dB(A)) at the tracked vehicle platform when measured in accordance with SAE Recommended Practice J1096.

3.3.4 **Human Engineering and Safety** - The tracked vehicle/equipment, all systems and components **shall**:

- (a) Be safe and easy to use by a 95<sup>th</sup> percentile male or 5<sup>th</sup> percentile female under all operating conditions as published in SAE Recommended Practice J833;
- (b) Have all entry and exit points equipped with handles and steps suitably positioned, to accommodate a 95<sup>th</sup> percentile male or a 5<sup>th</sup> percentile female under all operating conditions; and
- (c) Be equipped, where required for operator safety, with safety features such as warning and instruction plates, non-slip walking surfaces and heat shields.

3.4 **Tracked Vehicle Performance** - The tracked vehicle with all specified equipment installed and fully loaded **shall** have the following performance:

- (a) Have a maximum forward speed of at least 12 km/h;
- (b) Have an uphill climbing capability of at least 60%;
- (c) Have a side hill climbing capability of at least 30%;
- (d) Have a ground pressure with 6" penetration of maximum 2.0 psi without load and maximum 5.0 psi fully loaded;

#### 3.4.1 Weights and Dimensions

- (a) **Gross Vehicle Weight Rating (GVWR)** - The tracked vehicle **shall** have a gross vehicle weight not exceeding the GVWR, as published in the manufacturer's literature and engineering data;
- (b) **Centre of Gravity** - The centre of gravity of the tracked vehicle/equipment under all loading conditions and driving positions **shall** be within the chassis manufacturer's allowable conditions.
- (c) The Contractor **shall** provide the following chassis information:
  - i Overall Width (OW): Width of body including tracks
  - ii Overall Height (OH): Height of body
  - iii Overall Length (OL): Length of body
  - iv Ground Clearance
- (d) Component, vehicle load and capacity ratings **shall** not be raised above normal commercial levels in order to meet the requirements of this purchase description.

3.4.2 Vehicle Delivery Condition - The tracked vehicle/equipment **shall** be delivered to destination in a fully operational condition (serviced and adjusted) and both the interior and exterior **shall** be cleaned. If the tracked vehicle requires assembly at destination, the Contractor **shall** be responsible for all manpower and equipment to perform assembly. The consignee will provide the area required for assembly. For shipment verification, all items such as wheel wrenches, jacks, and all other tools, equipment and accessories, which are shipped loose with the equipment, **shall** be listed on the shipping certificate or to an attached packing note.

#### 3.5 Cab, Chassis and Body

3.5.1 Cab - The tracked vehicle cab **shall** be a one-person cab. The cab **shall**<sup>(E)</sup> include:

- (a) **Door** - A door for entry and egress. The cab door **shall** be equipped with locks, capable of being opened independently from the exterior and interior of the cab;
- (b) **Ergonomic Features** - Hand grips, steps (not removable), and other features required for the safe entry and egress for the range of fifth percentile female to ninety-fifth percentile male;
- (c) **Front mounted brush-guard;**
- (d) **Escape Hatch** - An escape hatch with a detachable tempered glass that accommodates the range of fifth percentile female to ninety-fifth percentile male;
- (e) **Windows** - Windows on the driver and curb-side of the sliding type;

- (f) **Premium Insulation** - Premium insulation in the cab including the floor;
- (g) **Trim** - Manufacturer's standard interior trim;
- (h) **Driver's Seat** -The driver's seat shall be a high-back air suspended seat with cloth inserts and retractable 3-points seat belt assembly;
- (i) **Mats** - Heavy duty rubber matting or spray polyurethane coating installed over the entire cab floor;
- (j) **Temperature Controls** - High output temperature controlled fresh air heater and defroster adequate for the operating conditions specified;
- (k) **Air-Conditioning** - Air-Conditioning equipped with all components and controls required for regulation of the cab interior temperature. The air conditioning system **shall** not use ozone-depleting refrigerants (chlorofluorocarbons (CFCs)) and **shall**<sup>(E)</sup> use hydrofluorocarbons (HFCs);
- (l) **Interior sun visors**;
- (m) **Mirror** - One rectangular, external rear view mirror with replaceable heads and glass, located on the driver's side of the tracked vehicle which provide the clearest possible undistorted view to the rear from the driver's position. The mirror **shall** be constructed such that the mirror glass is shock mounted and sealed against the ingress of moisture; The mirror **shall**<sup>(E)</sup> be equipped with lights, defroster elements, a convex portion on each side, and be capable of folding rearward against the tracked vehicle. Power mirror is desirable;
- (n) **Windshield wipers** - Intermittent windshield wiper(s) capable of clearing the windshield during driving operations and where the wiper blades **do not** travel from a vertical centre windshield position to a horizontal position near the roof line;
- (o) **Halogen headlights**; and
- (p) **Panel lights** - Interior and instrument panel lights to provide adequate lighting for nighttime operations.

3.5.1.1 **Roll-over Protection:** The cab **shall** be ISO 3471 or SAE J1040 Roll-over protection certified.

3.5.2 **Frame** - The frame **shall** be strong at the towing and mounting points and suitable for the application. The frame **shall**<sup>(E)</sup> be a welded steel tub type.

3.5.2.1 **Sub-Frame** - The sub-frame **shall**<sup>(E)</sup> be a full length, heavy duty, tubular steel frame directly attached to the outriggers to constitute a complete unit.

3.5.3 **Body** - The body **shall** be the manufacturer's standard or standard option proven suitable in service in this application. The body **shall**<sup>(E)</sup> include:

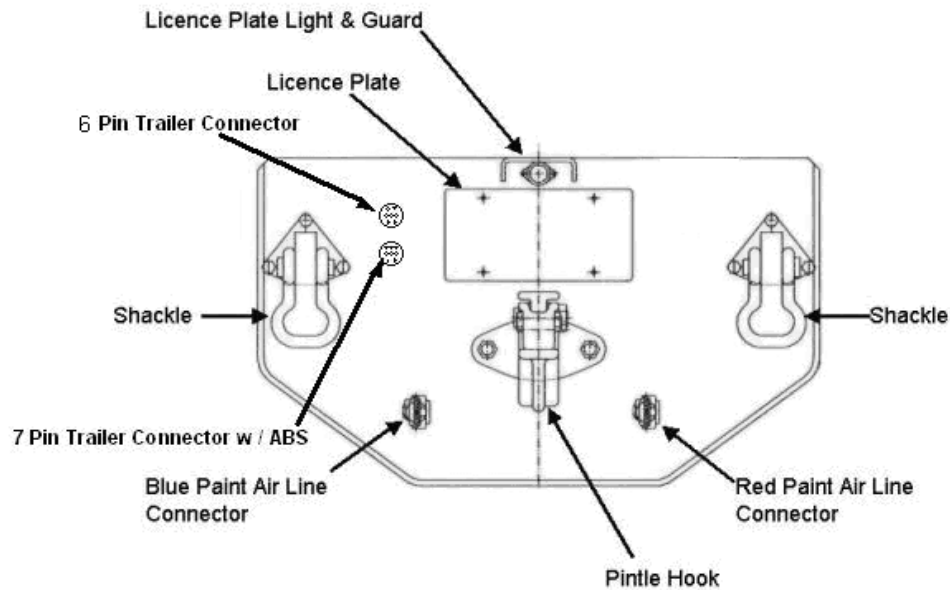
- (a) Floor panels constructed of a minimum thickness 4.8mm (3/16 inch) checker plate including deck entrance steps;

- (b) Folding rear deck entrance steps;
- (c) Assist grab handles at all deck entrances;
- (d) Aluminum drip mouldings **shall** be installed over all doors and access panels;
- (e) Removable side ladder for access to the deck;
- (f) Removable wooden side walls;
- (g) Have a "U" channel complete with wood manufactured material stops at rear deck entrance;
- (h) Aluminum rock guards to protect exposed areas on the front corners;
- (i) At least six (6) 907 kg recessed tie-down loops on deck, evenly spaced, for cargo lashing;
- (j) At least 2 racks to carry poles;
- (k) Front and rear centre located 2" square receiver sockets; and
- (l) Front and rear rectangular ground lugs.

3.5.3.1 **Trailer Capability** - The following **shall** be provided for the capability to attach a trailer:

- (a) Rear pintle hook complete with frame reinforcement capable of towing the maximum allowed Gross Trailer Weight for the tracked vehicle provided. The pintle hook **shall**<sup>(E)</sup> be Holland Hitch model PH-T-60-AOL-8.
- (b) Two (2) safety chain towing shackles **shall** be installed on both sides of the pintle hook.
- (c) In case a plate is required for pintle hook installation, the plate **shall** be fabricated using steel. Stress analysis **shall** be conducted to confirm the ability of the plate to withstand the maximum towed load capability of the vehicle. The result of the analysis **shall** be provided to the Technical Authority upon request. A line drawing for the plate design **shall** be provided to Technical Authority upon request. The line drawing shall detail the location of the following components:
  - i The licence plate;
  - ii Licence plate light and guard;
  - iii Two shackles; and
  - iv Six-pin trailer connector.

**NOTE:** An example of a pintle hook set up describe in 3.5.4.2 is provided below.



Licence Plate Light & Guard	Feu et cache de plaque d'immatriculation
Licence Plate	Plaque d'immatriculation
6 Pin Trailer Connector	Prise de remorque à 6 broches
Shackle	Maillon d'attache
7 Pin Trailer Connector w / ABS	Prise de remorque à 7 broches avec ABS
Blue Paint Air Line Connector	Raccord de système de freinage pneumatique peint en bleu
Shackle	Maillon d'attache
Red Paint Air Line Connector	Raccord de système de freinage pneumatique peint en rouge
Pintle Hook	Crochet d'attelage

**3.6 Engine** - The engine **shall**<sup>(E)</sup> be turbocharged and **shall** be capable of operating on diesel fuel to the CAN/CGSB Standard 3.517-2007. The engine **shall** be compliant with current EPA standards at the time of production. The design of the engine system **shall** include:

- (a) A control system suitable for this application;
- (b) A horsepower sufficient enough to meet all performance requirements; and
- (c) Engine manufacturer's certification **shall** be available upon request.

**3.6.1 Engine Components** - The engine **shall** include:

- (a) A severe service air cleaner protected from the ingress of rain and snow;
- (b) A full flow oil filter with a spin-on or replaceable type element;
- (c) A governor to limit engine speed to the operating range recommended by

the engine manufacturer;

- (d) Engine coolant and a heavy duty cooling system recommended by the OEM that is capable of operating within the conditions stated in section 3.2;
- (e) A thermostatically controlled ON/OFF type fan clutch unless the engine is intercooled;
- (f) A fan shroud;
- (g) A fast-idle device to automatically set engine idle speed at a predetermined rpm when activated for aerial device operation;
- (h) An electronic adjusting hand throttle;
- (i) An automatic shutdown system for low oil pressure and high coolant temperature. Indicator lights **shall**<sup>(E)</sup> be located at each control station to indicate a shut down due to low oil pressure or high temperature; and
- (j) Any measures other than those already required by this purchase description that are necessary to adhere to the engine manufacturer's recommendations for aerial device and tracked vehicle operation under cold weather conditions.

3.6.2 **Fuel Tank(s)** - The design of the fuel tank(s) **shall**:

- (a) Include a tank with a minimum capacity for 10 hours continuous operation;
- (b) Include primary and secondary fuel filters;
- (c) Include a non-spill type air vent with filler cap marked "Diesel Fuel Only";
- (d) Include sufficiently protected drain valve(s);
- (e) Include a switch for selection of the fuel tank and gauge, if more than one fuel tank is provided; and
- (f) Be at least half full when delivered to the destination.

3.6.3 **Primary Cold Weather Aids** - The engine **shall** be equipped with cold weather aids to enable the engine (operating with winter grade fuels/oils) to be started at soak temperatures down to -40° Celsius (-40° Fahrenheit), with an external power source. The following **shall**<sup>(E)</sup> be included:

- (a) **Fuel Filter** - A water separator/fuel filter incorporating an electrical heating system to preheat diesel fuel prior to starting. The heater **shall** be thermostatically controlled.
- (b) **Fuel Heater** - An in-line fuel heater. The heater **shall**<sup>(E)</sup> be thermostatically controlled to prevent fuel temperature from rising above approximately 43° Celsius (110° Fahrenheit) and be a heat exchanger type connected to the cooling system; and

- (c) **Low Temperature Starting Aids** - The engine **shall**<sup>(E)</sup> have glow plugs and / or intake air preheat system.

3.6.4 **Auxiliary Cold Weather Aids** - The engine **shall** be equipped with auxiliary cold weather aids and both **shall**<sup>(E)</sup> be connected on one outlet. The following auxiliary cold weather aids **shall** be:

- (a) **Block Heater** - 110-volt engine heater(s) with a capacity as recommended by the engine manufacturer or conforming to SAE Information Sheet J1310;
- (b) **Battery Heater** - 110-volt battery heater(s) having wattage matched to battery size to prevent battery damage due to overheating; and
- (c) **Coolant Heater** - 12-volt coolant heater with a capacity of 17000 BTU/h.

3.6.5 **Exhaust System** - The exhaust system **shall**:

- (a) Be non-intrusive to the tracked vehicle; and
- (b) Include a flame arrester.
- (c) Be applicable to meet the engine EPA standards.

3.7 **Track Drive Train and Suspension** - The track drive train and suspension **shall**<sup>(E)</sup>:

- (a) Be a two-speed, at a minimum, hydrostatic system;
- (b) Include two (2) independent hydrostatic pumps, one for each track;
- (c) Include an oil cooler of a capacity approved by the hydrostatic drive system manufacturer for the service intended;
- (d) Include an oil filter;
- (e) Include sufficient number of road wheels per track suitable for the requirement in this purchase description. Each road wheel **shall** have an independent torsion axle;
- (f) Include a drive sprocket and an idler for each track;
- (g) Include an adjustable tensioner. The tensioner **shall** be designed such that it can be adjusted at the operator skill level.

3.7.1 **Tracks** - The track **shall**:

- (a) Include rubber 5-ply belts as a minimum;
- (b) Include at least 29" rubber cross-links; and
- (c) Be able to be fitted with ice cleats when required. Ice cleats **shall** be provided with each tracked vehicle.

3.7.2 **Power Take-Off (PTO)** - The tracked vehicle **shall**<sup>(E)</sup> have provisions for



installing a PTO system. The Contractor **shall** provide the Technical Authority with the information that would be suitable for these provisions.

**3.8 Braking system** - The tracked vehicle **shall** be equipped with hydrostatic service brakes, capable of successfully completing the performance requirements specified in CMVSS.

**3.8.1 Parking Brakes** - The parking brakes **shall** be pressure release, spring applied, multi-disc type brakes. Parking brakes **shall** be automatically engaged prior to engine start-up.

**3.9 Steering** - The tracked vehicle **shall** be equipped with power assisted steering by means of joy sticks or a steering wheel.

**3.10 Vehicle Controls** - Controls **shall**<sup>(E)</sup> conform to the general criteria set out in SAE J1814 and J898 and **shall**:

- (a) Not restrict the operator's field of view;
- (b) Be permanently marked to identify and show function of each control lever or switch with markings/instructions in English and French or international symbols as defined by SAE J1362. Markings **shall** include permanently attached instructions detailing operation of the engine, hydrostatic drive system, and attachments; and
- (c) Have controls easily accessible to the operator.

**3.11 Vehicle Instruments** - Instruments **shall** be readily visible while seated in the tracked vehicle driver's seat. Panel instrument lamps **shall**<sup>(E)</sup> have a dimmer switch. Instruments **shall** include:

- (a) **Electrical Meter** - Ammeter or voltmeter;
- (b) **Oil pressure** - Oil pressure gauge with a low engine oil pressure indicator;
- (c) **Fuel Gauge(s)** - A fuel gauge or fuel gauges, as required;
- (c) **Coolant Temperature** - Coolant temperature gauge with a high coolant temperature indicator;
- (e) **Hydrostatic Drive System Temperature Gauge** - Hydrostatic drive system temperature gauge or warning device to indicate high temperature;
- (f) **Odometer**;
- (g) **Tachometer**; and
- (h) **Outrigger Position Warning Light**.

### **3.12 Equipment**

**3.12.1 Derrick** - A hydraulic radial boom derrick **shall** be provided and the derrick:

- (a) **Shall**<sup>(E)</sup> be rear mounted;
- (b) **Shall** have the following minimum sheave heights:
  - i Upper boom - 12.19 meters (40 feet);
  - ii Intermediate boom - 9.15 meters (30 feet); and
  - iii Lower boom - 6.1 meters (20 feet).
- (c) **Shall** be a 3-stage box type construction boom, where:
  - i The first and second stages are constructed of high strength steel;
  - ii The third stage is constructed of reinforced fibreglass; and
  - iii The boom is complete with a hydraulic pole guide (pole claw).
- (d) **Shall** be dielectrically tested to 46 kV in accordance with CSA C225-10 and ANSI/ASSE A10.31-2006;
- (e) **Shall** be capable of a minimum boom articulation range of 15 to 20 degrees below horizontal to 85 to 80 degrees above horizontal respectively;
- (f) **Shall** have a minimum digging radius of 3.05 meters (10 ft), and a maximum digging radius of 6.1 meters (20 ft). A 305 mm (1 ft) deviation is acceptable;
- (g) **Shall** be equipped with a boom overload protection system;
- (h) **Shall** have 360 degree continuous rotation or a minimum 370 degrees non-continuous rotation. If continuous rotation is used, a worm gear complete with side load protection to protect against rotation damage shall be provided. If non-continuous is used, the rotation stop **shall**<sup>(E)</sup> be at forward centre of turret to allow free rotation at rear of tracked vehicle;
- (i) **Shall** have a lateral reach, with the intermediate boom extended, of at least 6.1 metres (20 ft) and with fibreglass self-storing extension of at least 9.15 metres (30 ft);
- (j) **Shall** have the following minimum lifting capacities (with the auger stowed) (not bare boom):
  - i 1,905 kg (4,200 lbs.) with the boom at maximum elevation above the horizontal and all booms extended;
  - ii 1,089 kg (2,400 lbs.) at 45 degrees with all booms extended; and
  - iii 409 kg (900 lbs.) at 0 degrees with all booms extended.

**Note:** A lift capacity chart **shall** be provided (showing load capacity vs. radius) for all boom positions.

(k) Third extension applies:

- i A fibreglass hydraulic third extension **shall** be provided;
- ii The third extension **shall**<sup>(E)</sup> be at least 2.74 metres (9 feet) long; and
- iii A pulley at the end of the fibreglass extension **shall** be provided.

(l) **Shall**<sup>(E)</sup> be equipped with fully adjustable load holding valves on the boom lift cylinder, and one-way pilot operated holding valves on the boom lift cylinder and the boom extension cylinders. Where possible, these valves are desired to be integral with the cylinder. If not possible, high-pressure steel tubing **shall**<sup>(E)</sup> be used between the hydraulic cylinder and the holding valve to adequately protect against damage;

(m) **Shall**<sup>(E)</sup> be equipped with pivot and lift cylinder pins with grease fittings; and

(n) **Shall**<sup>(E)</sup> be equipped with hydraulic digger mounting brackets on the main and intermediate boom sections.

3.12.2 **Winch** - The following winches **shall** be provided:

(a) **Boom Tip Winch** - A hydraulic boom tip winch **shall** be provided. The minimum bare drum rated winch capacity **shall** be at least 2,268 kg (5,000 lbs). The winch **shall**<sup>(E)</sup> be provided with a 23 metre (75 foot) long cable. The winch cables **shall**<sup>(E)</sup> be supplied with a mechanical spliced eye at the end, of equal or greater strength than the cable.

(a) **Front and Rear Winch** - A portable electric winch **shall**<sup>(E)</sup> be provided as follows:

- i The winch **shall** have a rated first layer capacity of at least 4,536 kg (10,000 lbs);
- ii The winch **shall**<sup>(E)</sup> be provided with a 76 m (250 feet) long cable;
- iii Two hitch receivers **shall**<sup>(E)</sup> be provided, one located behind an extended front bumper and one located at the rear of the vehicle;
- iv The winch cable **shall**<sup>(E)</sup> be supplied with a mechanical spliced eye at the end, of equal or greater strength than the cable.
- v A wireless remote control unit powered in both directions **shall**<sup>(E)</sup> be provided;
- vi A snatch block capable of withstanding a double line pull capacity of the winch **shall**<sup>(E)</sup> be provided; and

vii A roller fairlead *shall*<sup>(E)</sup> be provided.

### 3.12.3 Hydraulic Digger / Auger

- (a) A two speed hydraulic digger *shall* be provided. The digger *shall* have a minimum torque rating of 12,000 ft-lbs at low speed and 3,000 ft-lbs at high speed;
- (b) Two (2) vehicle-mounted augers *shall* be provided as follows:
  - i One (1) 16" Kentucky rock auger with 2.5" hex diameter;
  - ii One (1) 20" dirt auger with 2.5" hex diameter;
  - iii Be equipped with carbide teeth; and
  - iv Come complete with a screw anchor wrench assembly for 1 ½" anchors and 2 ½" Kelly bar with locking dog assembly.
- (c) Oil auger release valve *shall*<sup>(E)</sup> be provided;
- (d) An auger overwind protection system *shall* be provided;
- (e) A nylon rope to elevate the auger to the stored position *shall*<sup>(E)</sup> be provided;
- (f) All necessary plumbing and controls to operate digger *shall* be provided;
- (g) Stowage for extension shaft and out-put digger shaft *shall* be provided; and
- (h) Stowage bracket for one auger *shall* be provided. Location of bracket can be finalized at a pre-production meeting; suggested locations could be on the front boom rest.

3.12.4 Platform - One (1) one-man, Fiber Reinforce Plastic (FRP) bucket with integral external access steps *shall* be provided. The bucket shall be used with an insulating liner constructed from non-conductive material certified category "C" dielectric rating in accordance with CSA C225-10 or ANSI/SIA A10.31-2006. The bucket *shall*<sup>(E)</sup>:

- (a) Have a minimum of 136 kg (300 lbs) rated capacity with the liner and 158 kg (348 lbs) without the liner;
- (b) Be 24"x24"x42" as a minimum;
- (c) Have an automatic hydraulic bucket levelling system and bucket dump feature (manual or hydraulic) incorporated into the design and that *shall* maintain the dielectric integrity of the aerial device;
- (d) Have a mount to include a hydraulic bucket rotator to provide bucket rotation from the stowed position to the boom tip. Bucket *shall* rotate

a minimum of 180 degrees about the boom tip;

- (e) Have safety lanyard attachment points as per CSA C225-10. Safety harnesses, fall arrests shock absorbing type lanyards will be supplied with the buckets;
- (f) Have a bucket covering system;
- (g) Have removable tool trays suitable for the bucket and liner tendered; and
- (h) 4-function wireless radio control for engine start/stop override and horn control.

#### 3.12.5 **Pole Equipment**

- (a) **Pole Puller** - A hydraulic pole puller **shall** be provided, with a minimum rated capacity of 22680 kg (50,000 lbs) at 2000 psi. The pole puller **shall**<sup>(E)</sup> fit into a mounting tray on the platform deck or on an outrigger and **shall** include at least 2.1 metres (7 feet) of 16 mm (5/8 inch) high tensile chain and base.
- (b) **Pole Tamper** - A hydraulic tamper at least 1.8 metres (72 inches), including quick release couplers **shall** be provided. The tamper **shall**<sup>(E)</sup> have a kidney-shaped foot, control valve on tube, and a free flow return line.
- (c) **Pole Grabber** - A hydraulic tilting pole grabber **shall** be provided. It **shall** be mounted in such a position so as to not interfere with the operation of fibreglass extension or cause the bucket to be removed to effect operation. A pole tang interlock **shall**<sup>(E)</sup> be provided.

3.12.6 **Front Plow** - A full width, 2-way, hydraulic front plow **shall** be provided.

3.12.7 **Brackets** - The following **shall**<sup>(E)</sup> be provided:

- (a) Holders located on each side of the tracked vehicle used for storage of the outrigger pads; and
- (b) A spindle bar and brackets located at the rear of the cargo compartment, complete with a storage bracket for the bar. The brackets are to be mounted at a height adequate to allow the use of a 1,219 mm (48 in) diameter reel.

3.12.8 **Outriggers** - Primary and auxiliary hydraulic, folding shoe, radial type outrigger jacks **shall** be provided. Each outrigger **shall** be equipped with a pad of at least 457 mm by 457 mm by 50.8 mm thick (18 in by 18 in by 2 in) in a secured stowage bracket. The installation **shall**<sup>(E)</sup> include:

- (a) Two-way, double acting, pilot operated check valves on all outrigger cylinders. Where possible, these valves are desired to be integral with the cylinder. If not possible, high-pressure steel tubing **shall**<sup>(E)</sup> be

used between the hydraulic cylinder and the holding valve and **shall**<sup>(E)</sup> be adequately protected against damage; and

- (b) Ice cleats for each outrigger pad.

**3.12.9 Derrick Instruments and Controls** - The derrick **shall** be equipped with upper and lower controls. Controls **shall** be permanently marked to identify and show function of each control lever or switch with markings/instructions in English and French or international symbols as defined by SAE J1362. The lower control seat **shall** be mounted beside the turret. The upper controls **shall** be located on or at the working level of the bucket. Each control station **shall** be equipped with the following instruments and controls:

- (a) Stop and start engine ignition switch;
- (b) A direct reading type hydraulic hour meter with registration not less than 9,999 hours;
- (c) Hydraulic pressure gauges to indicate operating pressures (mandatory for lower controls only, desirable on upper controls);
- (d) Warning device when overloading the boom;
- (e) Boom base control override located in the bucket and the lower control station to lower the fibreglass bucket in case of an emergency;
- (f) **Shall**<sup>(E)</sup> be equipped with full pressure hydraulic catrack style upper controls mounted on the boom;
- (g) **Shall**<sup>(E)</sup> have a boom rest position warning light mounted in the cab; and
- (h) **Shall**<sup>(E)</sup> have a mechanism to prevent the boom from being operated if and when the outriggers are not deployed to provide the required stability.

**3.13 Other Equipment** - The tracked vehicle **shall** be equipped with the following miscellaneous equipment:

- (a) **Licence Plate** - License plate holders, front and rear with license plate lights in accordance with CMVSS 108. The license plate light **shall** be connected to the current lighting system;
- (b) **Tow Points** - Two recovery tow points mounted at the front and at the rear, hooks and mountings of sufficient strength to permit the recovery of the fully loaded tracked vehicle and for use during transport on a truck; and
- (d) **Fire Extinguisher** - A certified fire extinguisher, easily accessible, properly mounted, suitable for low temperature use, with a minimum capacity of 2.3 kg (5 lbs), located in the cab in a convenient location.

**3.14 Electrical System** - The tracked vehicle/equipment **shall**<sup>(E)</sup> be supplied with a 12 volt electrical system, and **shall**<sup>(E)</sup> include:

- (a) Heavy-duty maintenance free batteries, in an accessible well protected

location, mounting **shall**<sup>(E)</sup> include heat shielding if necessary, and proper hold-downs. Batteries **shall** have a minimum of 1800 cold cranking amperes (CCA) available at -18°C for 30 seconds;

- (b) An alternator with a minimum output of 135 amperes and capable of supplying sufficient current to carry all electrical load requirements;
- (c) Grommets protecting electrical wiring passing through metal components;
- (d) An audible back-up alarm to alert personnel that the tracked vehicle is in reverse;
- (e) All cold weather aids **shall** be connected together with a single, cover-protected, external electrical power plug. The plug **shall** be in accordance to CSA-C22.2-Wiring Devices;
- (f) A seven-pin twelve-volt trailer receptacle mounted at the rear of the tracked vehicle, plus 1.2 metres (4 feet). The trailer electrical receptacle **shall**<sup>(E)</sup> be Phillips J560, conforming to ISO 3731;
- (g) A back-up camera system which will give the driver a real-time view of the area behind the tracked vehicle. The system **shall** incorporate an in cab driver accessible screen. The system **shall**<sup>(E)</sup> be Zone Defence model ZDM.300.1 b; and
- (h) A master disconnect switch for electrical system.

**3.15 Lighting** - The tracked vehicle/equipment **shall** have lights and reflectors in accordance with CMVSS. Lights **shall**<sup>(E)</sup>:

- (a) Be recessed or otherwise protected from damage with all components easily accessible for servicing;
- (b) Be LED, including all lamps and reflectors;
- (c) Include one (1) Star Warning Systems 25000 amber coloured LED beacons mounted in a suitable location to achieve maximum visibility and protection from boom rotation. Switches mounted within the cab **shall**<sup>(E)</sup> operate the beacon light;
- (d) Include instrument panel lamps;
- (e) Include an interior cab lamp;
- (f) Installation of a trailer light package;
- (g) Include three (3) driver operated spot/flood lamps. They **shall** be mounted as follows:
  - i One at each of the upper right and left rear corners of the cab;
  - ii One mounted on the boom. Location is to be determined at the pre-production meeting;
- (h) Include a working lamp at the lower control station; and

- (i) Audible reverse lights to aid vision while reversing in low-light conditions.

**3.16 Hydraulic System** - A hydraulic system complete with pump, reservoir, filters, and control valves **shall** be provided. The following applies:

- (a) The system **shall** include one hydraulic fluid supply outlet and one hydraulic fluid return outlet on each of: the lower control station and upper control station;
  - i The hydraulic fluid supply outlet is desired to be Male fitting Aero-Quip 5602-12-12S, equipped with male dust cap Aero-Quip 5657-12; and
  - ii The hydraulic fluid return outlet is desired to be female fitting Aero-Quip 5601-12-12S, equipped with female dust cap Aero-Quip 5659-12.
- (b) Hydraulic Hose and Reel - Two (2) 50 ft (15.24 m) hydraulic hoses (one supply line and one return line) with two (2) quick disconnect couplings, dust caps and fittings for hydraulic tool use, **shall** be installed on a manual reel, with spring retract capability;
- (c) All hydraulic hose assemblies **shall**<sup>(E)</sup> comply with SAE J517;
- (d) The hydraulic tandem pump **shall**<sup>(E)</sup> deliver an appropriate flow for derrick operation, and derrick and winch operation combined.
- (e) The hydraulic cylinders **shall**<sup>(E)</sup> have chrome-plated piston rods;
- (f) The oil reservoir **shall** be of sufficient volume so that the oil does not overheat during normal operations. The reservoir **shall**<sup>(E)</sup> be mounted against the front wall of the rear cargo compartment;
- (g) The supply tubes on the boom that supply hydraulic fluid to the digger and winch are desired to be telescopic with Lenz "O" Ring tube fittings or high pressure "U" cup seal and wiper. The telescopic tubes **shall**<sup>(E)</sup> be protected from damage by telescopic steel covers, which **shall**<sup>(E)</sup> be removed easily to allow inspection or servicing of the hydraulic system;
- (h) Gate valves in the suction and return lines to the hydraulic pump **shall**<sup>(E)</sup> be installed to prevent loss of oil from the system when serving the filters and pump;
- (i) The suction line from the reservoir **shall**<sup>(E)</sup> be fitted with a 60 mesh reusable strainer with a 3 psi bypass valve. The return line filter **shall**<sup>(E)</sup> be fitted with a 10-25 micron paper element filter with a 15 psi bypass valve. The filter **shall**<sup>(E)</sup> have a flow rate of a least 205 lpm (45 gpm). All filters **shall** be readily accessible for servicing; and
- (j) A test fitting **shall**<sup>(E)</sup> be located at the outlet of the pump so that a



pressure meter may be installed to check the system if required.

**3.17 Lubricants and Hydraulic Fluids** - The tracked vehicle **shall**:

- (a) Be serviced with manufacturer's standard lubricants and hydraulic fluids compatible with delivery location and season; and
- (b) Operate satisfactorily on Canadian Forces Supply Line lubricants, which include 15W40, 85W140, DEXRON III, or synthetic equivalents. Tracked vehicle hydraulic systems **shall** operate using DEXRON III.

**3.18 Paint** - The following paint procedure **shall**<sup>(E)</sup> be followed for the vehicle including the cab chassis and variant systems, as applicable:

- (a) **Manufacturer's Painting Method** - Paint applied in accordance with the paint manufacturer's recommendations and the manufacturer's best production procedures, rendering a durable finish and a smooth appearance, free from runs, sags and orange peel; and
- (b) **Phosphate Treatment** - A phosphate treatment plus primer or an E-coat system on all ferrous metals, followed by a minimum of one coat of paint and a clear coat.

**3.18.1 Paint Colour** - The vehicle **shall** be painted white. The chassis components may be painted the manufacturer's standard colour.

**3.19 Corrosion Protection System** - The following **shall** be provided for the tracked vehicle:

- (a) **Rust Proofing** - Aftermarket rust proofing provided in addition to standard factory rust proofing. The treatment will normally be applied within the first year of service. The treatment date will be directed by the Technical Authority to optimize seasonal rust prevention benefits. If not demanded prior to delivery, a pre-paid certificate authorizing treatment at an aftermarket outlet **shall** be provided with the tracked vehicle;
- (b) **Rust Preventive** - Metal surfaces treated with a rust preventive oily film product having the following properties;
  - i Moisture displacing;
  - ii Creeping (capillary action);
  - iii Low solvent content;
  - iv Compatibility with rubbers, plastics, and all other materials used in automotive construction;
  - v Non toxic; and
  - vi Minimal dripping.
- (c) **Salt Spray Endurance Test** - Written proof of a twelve hour ASTM B117 salt spray endurance test certification by an independent test

laboratory. Krown Rust Kontrol and Rust Check products have been previously certified, proof not required;

- (d) **Application Areas** - The application includes, but is not limited to the underside of fenders and hood, enclosed and boxed-in sections, seams, mouldings, crevices, weld points, underbody, and exposed exterior brackets;
- (e) **Warranty Documentation** - A decal and warranty papers accompanying each tracked vehicle; and
- (f) **Availability** - Corrosion protection system widely available across Canada or available through mobile services.

**Note:** The following corrosion protection system is provided as guidance: Krown Rust Kontrol or Rust Check products.

3.19.1 **Corrosion Resistant Materials** - The tracked vehicle/equipment **shall**<sup>(E)</sup>:

- (a) **Rivets** - Be provided with stainless steel, zinc plated or hot dipped galvanized aluminium rivets, and plastic black oxide brass fasteners; and
- (b) **Corrosion Protection Design** - Be designed to prevent galvanic corrosion.

3.20 **Warning, Markings and Instruction Plates** - International symbols and/or bilingual markings **shall** be provided for all identification, instructional, and warning labels. The following items **shall** be provided:

- (a) Be bilingual and within easy view of the operator and/or make use of graphic symbols, as much as possible, as defined in SAE J1362;
- (b) Engraved metal plates labelling all gauges and controls and **shall** be attached with rivets wherever possible.
- (c) Detailed, bilingual operating instruction plates for all operations, including, but not limited to:
  - i Remote on/off start controls;
  - ii Engine starting and shut-down, in the cab within easy view for the driver;
  - iii Hydrostatic drive system operation, in the cab within easy view for the driver;
  - iv PTO operation, in the cab within easy view for the driver;
  - v Operation of the winch;
  - vi Operation of the hydraulic controls; and
  - vii Hydraulic Derrick capacity chart.

3.20.1 **Vehicle identification** - The following information placards **shall**<sup>(E)</sup> be permanently and clearly marked, bilingual and installed in a conspicuous and protected location:

- (a) The cab and frame manufacturer's name, model number, serial number, and model year;
- (b) The body manufacturer's model and serial number;
- (c) The digger derricks manufacturer's model and serial number; and
- (d) The GVWR rating.

3.20.2 **Rear Markings** - A diagonal, black and white striped, warning pattern **shall** be formed on the rear face of the platform extension, the back of the left side of the line body, and the rear face of the derrick main frame. Gloss black paint and white reflective tape **shall** be used to form stripes 76 mm (3 in) wide.

3.21 **Spare Parts** - Recommended spare part **shall** be provided the first 100 hours maintenance.

4. **INTEGRATED LOGISTICS SUPPORT** - The Contractor should ensure that spare parts required to properly maintain and repair completed tracked vehicles are available for purchase for a minimum period of fifteen (15) years.

4.1 **Documentation** - The Contractor **shall** provide the following documentation:

4.1.1 **Deliverable Information** - The Contractor **shall** provide the deliverable information with each tracked vehicle:

- (a) **Warranty Letter** - A paper copy of the completed bilingual Warranty Letter with each tracked vehicle shipped in the approved format. The Contractor **shall** send a copy of the Warranty Letter, in electronic format, to the Technical Authority for each tracked vehicle, at shipment. Warranty information and certification for corrosion protection **shall** be provided. Designated warranty providers **shall** honour the warranty letter.
- (b) **Vehicle Manuals** - The Tracked vehicle **shall** be provided with manuals required for the safe operation, maintenance, and repair of the tracked vehicle, sub-systems, attachments, components, and accessories supplied. Manuals **shall** be provided in accordance with the terms of the contract. The following manuals **shall** be provided:
  - i **Operator's Manual** - Operator's manual **shall** be provided in a bilingual format or as two manuals in a single binder (one English, one French). The operator's manual **shall** contain the following information:
    - 1. Instructions for the safe operation of the tracked vehicle;
    - 2. Daily operator maintenance instructions/checks (including lubrication);

3. Safety warnings; and
  4. Hand signals (as necessary).
- ii **Parts Manual** - The Parts Manual **shall** be in English (French translation is desirable). The Parts Manual **shall** contain the following information:
1. Illustrations showing all components of the tracked vehicle including equipment and accessories from other manufacturers that is supplied against the requirements of the contract. The illustrations **shall** have numbers for the itemization of the parts;
  2. A listing for all itemized parts showing the manufacturer's part numbers (including Original Equipment Manufacturer's) of the illustration, the part name, and a brief description of the item; and
  3. Cross reference relating all part numbers (including Original Equipment Manufacturer's) to the correct figure and item number.
- iii **Maintenance (Shop Repair) Manual** - The Maintenance (Shop Repair) Manual **shall** be provided in a bilingual format or as two manuals in a single binder (one English, one French). The Maintenance (Shop Repair) Manual **shall** contain the following information:
1. A trouble shooting guide, showing the steps and tests required to determine the exact cause of a problem and an explanation of what steps would be required to correct a problem;
  2. A listing of the necessary tolerances, torque levels, and fluid volumes required.
  3. A section listing any special tools (including item part numbers) required **shall** be included; and
  4. Information on the order of disassembly and assembly of the systems and components of the tracked vehicle.
- (c) **Equipment Manuals** - All Equipment provided by the prime contractor and added to the tracked vehicle **shall** have their own set of manuals. These **shall** include:
- i Operating Instructions with all the elements given in paragraph 4.1.1.b.i and information on the operating instructions and configurations that provide stable operation of the aerial device at net platform and net supplement capacities as per CSA C225-10, as per 3.14.1 (m);
  - ii Parts Manual with all the elements given in paragraph 4.1.1.b.ii; and

- iii Maintenance Manual (Shop Repair) with all the elements given in paragraph 4.1.1.b.iii.
- (d) **Manuals on CD/DVD-ROM** - A copy of the manuals on CD/DVD-ROM **shall** be provided. This **shall** include all the manuals provided in clauses 4.1.1 (a) and (b) above. Manuals on CD/DVD-ROM **shall**<sup>(E)</sup> be interactive so that a maintainer can troubleshoot, disassemble and determine the part numbers required with a minimum of searching. The manuals in electronic format **shall** include a full search capability. The Technical Authority **shall** approve the electronic manual format. Operators' manual(s) **shall** also be supplied in paper format. For usability, CD/DVD-ROM **shall not** require password and/or Internet connection to be accessed.
- (e) **Sample Manuals** - The Contractor **shall** deliver a set of sample manuals, in electronic format only, including all documents in items 4.1.1 (a) and (b) above. The sample manuals **shall** be delivered to the LCMM. Sample manuals will not be returned. In the event that manuals are dependent on first tracked vehicle completion, sample manuals **shall** be submitted within thirty (30) days after the pre-production tracked vehicle approval or first production tracked vehicle inspection. The Crown shall provide approval or comments on the manuals within thirty (30) days.

- NOTES:**
- 1. No information on methods or location for spare parts ordering shall be included in the manuals. Warranty Information in the manuals shall be identical to the warranty requirements of the contract.
  - 2. The Government of Canada reserves the right to translate and reproduce, for government use only, all or any part of the publications supplied.
  - 3. The Contractor is requested to maintain the delivery schedule of the manuals to the same as the tracked vehicle/ equipment. In the event that the manuals are not available at time of shipment, provisional manuals shall accompany the tracked vehicle/equipment. Provisional Manuals shall be clearly identified with the word "PROVISIONAL". Provisional manuals shall be replaced with approved manuals to all shipping locations within thirty (30) calendar days of receipt of approval of manuals.

**4.1.2 Documents Provided to Technical Authority** - The Contractor **shall** provide the following documents to the Technical Authority:

- (a) **Data Summary** - A bilingual Data Summary for each make/model/ configuration by completing Technical Authority's template with data and a tracked vehicle picture. The Contractor **shall** provide a Data Summary, if possible, before shipment of the tracked vehicle.
- (b) **Photographs** - Three (3) digital pictures, one left-front three-quarter view, one right-rear three-quarter view, and one of the control panel. It is preferred that pictures have an uncluttered background. Pictures **shall** have a size of at least 4 Mega pixels.

- (c) **Recommended Spare Parts List** - The Contractor **shall** provide, to the Technical Authority, a list detailing the spare parts deemed necessary to maintain the tracked vehicle for a period of 12 months exclusive of any warranty period. The Recommended Spare Part List **shall**:
- i A complete change of all filters and filter elements **shall** be included;
  - ii Components such as fan belts and fuses may be included; and
  - iii For each part listed, the following elements **shall** be included:
    1. Part description;
    2. Original Equipment Manufacturer;
    3. Original Equipment Manufacturer Part Number;
    4. Suggested quantity; and
    5. Unit cost.
- (d) **List of Special Tools** - The Contractor **shall** provide a list detailing the special tools required for the tracked vehicle that would not be included in a mechanics toolbox. This would include items such as special wrenches or extraction devices, winter tire chains, and special diagnostic tools/software. For each item listed the following elements **shall** be included:
1. Part description;
  2. Original Equipment Manufacturer;
  3. Original Equipment Manufacturer Part Number;
  4. Suggested quantity; and
  5. Unit cost.
- (e) **Line Setting Ticket** - One copy of the chassis manufacturer's Line Setting Ticket, or equivalent, describing the components provided on the cab and chassis **shall** be provided to the Technical Authority. One copy **shall** accompany the tracked vehicle to the final delivery point.

**4.2 Training** - The Contractor **shall** perform the following training:

- (a) **Training - Maintenance Personnel** - The Contractor **shall** provide a maintenance/repair training course. The course **shall**:
- i Be given at the delivery destination;
  - ii Have a minimum duration of one (1) day to provide training of up to eight (8) maintenance personnel;

- iii Be available in both official languages for locations in the province of Quebec and when requested by the Crown;
  - iv Have the final dates arranged with the Life Cycle Material Manager (LCMM);
  - v Have a syllabus or course outline and schedule available for review seven (7) days prior to the course commencement date;
  - vi Include the following items in the curriculum:
    - 1. Operator's training detailed in 4.2(b)vi below;
    - 2. Operation and maintenance safety precautions;
    - 3. Preventive maintenance including servicing schedules (10 % of classroom time);
    - 4. Trouble shooting, testing, and adjustments (70 % of classroom time); and
    - 5. Special tools and test equipment.
  - vii After completion of the course, the Contractor **shall** have a "PROOF OF MAINTAINER TRAINING" certificate signed by a Crown Representative for the destination. The Technical Authority shall supply this document in an electronic format.
- (b) **Training - Operators** - The Contractor **shall** provide an operator training course. The course **shall**
- i Be given at the delivery destination;
  - ii Have minimum duration of one (1) day to provide training for up to six (6) DND operators.
  - iii Be available in both official languages for destinations in the province of Quebec and when requested by the Crown.
  - iv Have the final dates arranged with the Life Cycle Material Manager (LCMM);
  - v Have a syllabus or course outline and schedule available for review seven (7) days prior to the course commencement date;
  - vi The course curriculum **shall** include:
    - 1. Safety precautions to be observed while operating and servicing the tracked vehicle;
    - 2. Tracked vehicle/equipment operating characteristics;
    - 3. Tracked vehicle/equipment operating procedures;
    - 4. Pre-operating and pre-shutdown procedures;

- 5. Daily/weekly operator servicing procedures; and
- 6. A minimum of two (2) hours practical operating experience, per operator.
- vii After completion of the course the Contractor **shall** have a "**PROOF OF OPERATOR TRAINING**" certificate signed by a Crown Representative for the destination. The Technical Authority shall supply this document in an electronic format.
- (c) Training Materials - For all training provided by the Contractor, for each attendee, the Contractor **shall** provide training syllabi, which **shall** include, at least:
  - i A list of topics to be covered;
  - ii An approximate timetable showing when topics are scheduled to be covered and how much time is scheduled for each topic; and
  - iii Lists any reference material.
  - iv Make available any reference material used.

**4.3 Certification** - The Contractor **shall** provide the following certification:

- (a) Written manufacturers certification, by a Professional Engineer that the mounted unit meets or exceeds CSA Standard C225-10 for structural and stability requirements, ANSI/ASSE A10.31-2006 for dielectric requirements, and OHSA to be included with each completed tracked vehicle and a copy sent to the TA.
- (b) Engineering certification of the frame suitability for this application upon request.
- (c) The completed tracked vehicle **shall** have Safety Compliance Certification Label with a **National Safety Mark (NSM)** in accordance with the Canada Motor Vehicle Safety Act; and
- (d) Written proof of a twelve hour ASTM B117 salt spray endurance test certification by an independent test laboratory if required. Krown Rust Kontrol and Rust Check products have been previously certified, proof not required (reference back to 3.19c).

**4.4 Testing** - The following testing **shall** be performed on the tracked vehicle:

- (a) All testing required meeting the C225-10 and ANSI/ASSE A10.31-2006 certifications for dielectrical rating, stability, and structure;
- (b) **Performance and Verification Testing** - The first tracked vehicle to be delivered **shall** be examined and performance tested by the Contractor, under real or equivalent load and operating conditions, to ensure item by item conformance to specified requirements. The QAR and/or the Technical Authority may witness this testing and operate the unit



sufficiently to assess the handling characteristics. The Contractor **shall** have a fully equipped tracked vehicle weighed on certified scales, and the total weight and weight on each axle **shall** be furnished.

- (c) **Remaining Vehicle Testing** - The remaining tracked vehicles **shall** be tested by the Contractor, with or without load, to check general performance and operation.



TECHNICAL INFORMATION QUESTIONNAIRE

This questionnaire covers technical information, which **shall** be provided for evaluation of the configurations of the vehicle offered.

Where the specification paragraphs below indicate "**Proof of Compliance**", the "**Proof of Compliance**" **shall** be provided for each performance requirement/specification.

Offerors should indicate the document name/title and page number where the **Proof of Compliance** can be found.

CONTRACTOR INFORMATION

Contractor Name \_\_\_\_\_

Date \_\_\_\_\_

Substitutes/Alternatives

Are any substitutes/alternatives offered as **Equivalent**?

YES ☐ NO ☐

Vehicle Make \_\_\_\_\_ - Model \_\_\_\_\_  
Equipment Make \_\_\_\_\_ - Model \_\_\_\_\_

**SPECIFICATION PARAGRAPHS**

**3.3.1 Vehicle Safety Regulations - Proof of Compliance**

Registration with Transport Canada in document \_\_\_\_\_ on page \_\_\_\_\_

**3.4 Tracked Vehicle Performance - Proof of Compliance**

- (a) Maximum forward speed in document \_\_\_\_\_ on page \_\_\_\_\_
- (b) Uphill climbing capability in document \_\_\_\_\_ on page \_\_\_\_\_
- (c) Side hill climbing capability in document \_\_\_\_\_ on page \_\_\_\_\_
- (d) Maximum ground pressure (without load) in document \_\_\_\_\_ on page \_\_\_\_\_  
Maximum ground pressure (fully loaded) in document \_\_\_\_\_ on page \_\_\_\_\_

**3.4.1 Weights and Dimensions - Proof of Compliance**

- (a) Gross Vehicle Weight Rating (GVWR) in document \_\_\_\_\_ on page \_\_\_\_\_  
Gross Vehicle Weight (GVW) in document \_\_\_\_\_ on page \_\_\_\_\_
- (b) Chassis information  
Overall Width (OW) in document \_\_\_\_\_ on page \_\_\_\_\_  
Overall Height (OH) in document \_\_\_\_\_ on page \_\_\_\_\_  
Overall Length (OL) in document \_\_\_\_\_ on page \_\_\_\_\_  
Ground clearance in document \_\_\_\_\_ on page \_\_\_\_\_

**3.5.1.1 Roll-Over Protection - Proof of Compliance**

Roll-Over Protection Certificate in document \_\_\_\_\_ on page \_\_\_\_\_

**3.12.1 Derrick- Proof of Compliance**

- (b) Minimum sheave heights in document \_\_\_\_\_ on page \_\_\_\_\_
- (e) Minimum boom articulation range in document \_\_\_\_\_ on page \_\_\_\_\_
- (f) Maximum and minimum digging radius in document \_\_\_\_\_ on page \_\_\_\_\_
- (h) Rotation in document \_\_\_\_\_ on page \_\_\_\_\_
- (j) Minimum lifting capacities in document \_\_\_\_\_ on page \_\_\_\_\_

**3.12.3 Hydraulic Digger / Auger - Proof of Compliance**

- (a) Minimum torque rating at low and high speed in document \_\_\_\_\_ on page \_\_\_\_\_