

**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

Title - Sujet 19 FT PLOW TRUCK 4X4	
Solicitation No. - N° de l'invitation W8476-134040/B	Date 2013-02-06
Client Reference No. - N° de référence du client W8476-134040	
GETS Reference No. - N° de référence de SEAG PW-\$\$HP-918-62150	
File No. - N° de dossier hp918.W8476-134040	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-03-19	
Time Zone Fuseau horaire Eastern Daylight Saving Time EDT	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Huda Dahir	Buyer Id - Id de l'acheteur hp918
Telephone No. - N° de téléphone (819) 956-1702 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: 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

**Vehicles & Industrial Products Division
11 Laurier St./11, rue Laurier
7A2, Place du Portage, Phase III
Gatineau, Québec K1A 0S5**

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

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PART 1 - GENERAL INFORMATION

1. Security Requirement

There is no security requirement associated with this requirement.

2. Requirement

Canada is seeking proposals to procure:

2.1 QUANTITY 2, SNOW-PLOW TRUCK and related items as described in Annex "A" - Pricing and in accordance with Annex "B"- Purchase Description - SNOW-PLOW TRUCK MOUNTED, 5.79 METER (19-FOOT) REVERSIBLE PLOW, PLATFORM BODY 4X4.

2.2 Irrevocable options identified in Annex "A"- Pricing.

2.2.1 The options may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

2.2.2 The options may be exercised in whole or in part and on more than one occasion at the sole discretion of Canada, up to the maximum quantity identified in Annex "A"- Pricing.

2.2.3 The options may be exercised within twelve (12) months after contract award.

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.

4. Interpretation

The mandatory requirements stated in this Request for Proposal use the words "shall" or "must" or "mandatory". Proposals not meeting all of the mandatory requirements will be given no further consideration.

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 (<http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp>) Manual issued by Public Works and Government Services Canada.

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

The **2003 (2012-11-19)** Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection **5.4 of 2003**, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: sixty (60) days

Insert: ninety (90) days

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 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.

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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) days** before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

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

Section I: Technical Bid (2 hard copies);

Section II: Financial Bid (1 hard copy);

Section III: Certifications and Additional Information (2 hard copies).

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 are encouraged to:

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

2. 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 must complete and submit by the bid closing date and time the following;

- 1) Appendix "1" - Technical Information Questionnaire;

2.1 Substitutes and Alternatives

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

2.1.1 Substitutes and alternatives that are equivalent in form, fit, function 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.
- 2.1.2 Substitutes and alternatives offered as equivalent in form, fit, function 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.
- 2.1.3 In conducting the evaluation of bids, Canada may, but will have no obligation to request the bidder offering a substitute and/or an alternative, to provide a copy of the alternative standard and to demonstrate, at the bidder's sole cost, that it is equivalent to the technical requirement.

3. Section II: Financial Bid

Bidders must submit their prices in Annex "A"- Pricing in accordance with the Basis of Payment described in **Part 6 - RESULTING CONTRACT CLAUSES**, at **Clause 6.1 Basis of Payment**.

3.1 Exchange Rate Fluctuation

- 3.1.1 Unless otherwise specified in the bid solicitation, bids must be in Canadian currency.
- 3.1.2 Bidders may request Canada to assume the risk for exchange rate fluctuation. This request must be specifically made at time of bidding.
- 3.1.3 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, Goods and Services Tax or Harmonized Sales Tax, if applicable, 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.
- 3.1.4 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.

- 3.1.5 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.)
- 3.1.6 Rates proposed by bidders will not be accepted for the purposes of this exchange rate adjustment provision.
- 3.1.7 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.
- 3.1.8 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 clause C3015C, C3020C, C3025C, or C3030C.

4. Section III: Certifications and Additional Information

Bidders must submit the certifications required under **PART 5 - CERTIFICATIONS**.

4.1 Additional Information

Canada requests that bidders submit the following information:

4.1.1 Delivery

4.1.1.1 Firm Quantity

While delivery of the vehicles is requested by October 31, 2013, the best delivery that can be offered is as follows:

Item 001 – QUANTITY 2, SNOW-PLOW TRUCK and related items will be delivered within _____ calendar days from the effective date of the contract.

4.1.1.2 Optional Quantity

If an option is exercised, the best delivery that can be offered is as follows:

Item 002 – QUANTITY 2, SNOW-PLOW TRUCK and related items will be delivered within _____ calendar days after an option is exercised.

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4.1.2 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.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. Evaluation Procedures

1.1 Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.

1.2 An evaluation team composed of representatives of Canada will evaluate the bids.

2. Technical Evaluation

2.1 The purpose of the technical evaluation is to determine if the goods and/or services offered meet all mandatory technical requirements outlined in the documents enumerated hereafter and as required in **Section I - Technical Bid of Part 3 -BID PREPARATION**

INSTRUCTIONS:

- Appendix 1 - Technical Information Questionnaire; and
- Annex "B" - Purchase Description - SNOW-PLOW TRUCK MOUNTED, 5.79 METER (19-FOOT) REVERSIBLE PLOW, PLATFORM BODY 4X4.

3. Financial Evaluation

3.1 The purpose of the financial evaluation is to determine the aggregate price, based on the information submitted in Annex "A" - Pricing.

3.2 Aggregate Price Calculation

Bids will be evaluated on an aggregate price basis for the firm quantity and the optional quantity.

3.3 Any **Extended Warranty Period** offered will not be included in the financial evaluation and further negotiations may be required.

4. Basis of Selection

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

PART 5 - CERTIFICATIONS

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

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

1. Mandatory Certifications Required Precedent to Contract Award

1.1 Code of Conduct and Certifications - Related documentation

1.1.1

By submitting a bid, the Bidder certifies, for himself and his affiliates, to be in compliance with the Code of Conduct and Certifications clause of the Standard instructions. The related documentation hereinafter mentioned will help Canada in confirming that the certifications are true. By submitting a bid, the Bidder certifies that it is aware, and that its affiliates are aware, that Canada may request additional information, certifications, consent forms and other evidentiary elements proving identity or eligibility. Canada may also verify the information provided by the Bidder, including the information relating to the acts or convictions specified herein, through independent research, use of any government resources or by contacting third parties. Canada will declare non-responsive any bid in respect of which the information requested is missing or inaccurate, or in respect of which the information contained in the certifications is found to be untrue, in any respect, by Canada. The Bidder and any of the Bidder's affiliates, will also be required to remain free and clear of any acts or convictions specified herein during the period of any contract arising from this bid solicitation.

Bidders who are incorporated, including those bidding as a joint venture, must provide with their bid or promptly thereafter a complete list of names of all individuals who are currently directors of the Bidder. Bidders bidding as sole proprietorship, including those bidding as a joint venture, must provide the name of the owner with their bid or promptly thereafter. Bidders bidding as societies, firms, partnerships or associations of persons do not need to provide lists of names. If the required names have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply will render the bid non-responsive. Providing the required names is a mandatory requirement for contract award.

Canada may, at any time, request that a Bidder provide properly completed and Signed Consent Forms (Consent to a Criminal Record

Verification form- PWGSC-TPSGC 229) (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>) for any or all individuals aforementioned within the time specified. Failure to provide such Consent Forms within the time period provided will result in the bid being declared non-responsive.

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 Federal Contractors Program - \$200,000 or more

1. The Federal Contractors Program (FCP) requires that some suppliers, including a supplier who is a member of a joint venture, bidding for federal government contracts, valued at \$200,000 or more (including all applicable taxes), make a formal commitment to implement employment equity. This is a condition precedent to contract award. If the Bidder, or, if the Bidder is a joint venture and if any member of the joint venture, is subject to the FCP, evidence of its commitment must be provided before the award of the Contract.

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

2. If the Bidder does not fall within the exceptions enumerated in 3.(a) or (b) below, or does not have a valid certificate number confirming its adherence to the FCP, the Bidder must fax (819-953-8768) a copy of the signed form LAB 1168, Certificate of Commitment to Implement Employment Equity, to the Labour Branch of HRSDC.
3. The Bidder, or, if the Bidder is a joint venture the member of the joint venture, certifies its status with the FCP, as follows:

The Bidder or the member of the joint venture

- (a) () is not subject to the FCP, having a workforce of less than 100 full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada;
- (b) () is not subject to the FCP, being a regulated employer under the Employment Equity Act, S.C. 1995, c. 44;

(c) () is subject to the requirements of the FCP, having a workforce of 100 or more full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada, but has not previously obtained a certificate number from HRSDC (having not bid on requirements of \$200,000 or more), in which case a duly signed certificate of commitment is attached;

(d) () is subject to the FCP, and has a valid certificate number as follows:
_____ (e.g. has not been declared an ineligible contractor by HRSDC.)

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

[Http://www.hrsdc.gc.ca/eng/labour/equality/fcp/index.shtml](http://www.hrsdc.gc.ca/eng/labour/equality/fcp/index.shtml)

PART 6 - RESULTING CONTRACT CLAUSES

1. Security Requirement

There is no security requirement associated with this requirement.

2. Requirement

- 2.1 The Contractor must deliver QUANTITY 2, SNOW-PLOW TRUCK and related items as described in Annex "A" - Pricing and in accordance with Annex "B" - Purchase Description - SNOW-PLOW TRUCK MOUNTED, 5.79 METER (19-FOOT) REVERSIBLE PLOW, PLATFORM BODY 4X4
- 2.2 The Contractor grants to Canada irrevocable options identified in Annex "A"- Pricing.
 - 2.2.1 The options may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.
 - 2.2.2 The options may be exercised in whole or in part and on more than one occasion at the sole discretion of Canada, up to the maximum quantity identified in Annex "A"- Pricing.
 - 2.2.3 The options may be exercised within Twelve (12) months after contract award.
- 2.3 Optional Extended Warranty Period

The Contractor grants to Canada the irrevocable option to extend the warranty period for an additional (*to be inserted by PWGSC at time of contract award*) months, under the same terms and conditions and at the price stated in the Contract at Annex "A" - pricing. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the option within ninety (90) calendar days after contract award and/or the exercising of an option by sending a written notice to the Contractor.

3. 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 (<http://sacc.pwgsc.gc.ca/sacc/index-e.jsp>) issued by Public Works and Government Services Canada.

3.1 General Conditions

2010A (2012-11-19) General Conditions - Goods (medium complexity), apply to and form part of the Contract.

Section 09 entitled Warranty of general conditions 2010A is amended by deleting subsection 2 in its entirety and replacing it 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), the Department of National Defence 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.

4. Term of Contract

4.1 Delivery of Vehicles

4.1.1 Firm Quantity

Delivery date of the vehicles must be made as follows:

Item 001 - SNOW-PLOW TRUCK and related items must be delivered on or before _____ (Date to be inserted by PWGSC the Contracting Authority at time of contract award.)

4.1.2 Option Quantity

Item 002 - SNOW-PLOW TRUCK and related items to be delivered within _____ calendar days after an option is exercised. (Days to be inserted by PWGSC the Contracting Authority at time of contract award.)

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Huda Dahir

Supply Officer

Organization: Public Works and Government Services Canada - Acquisitions Branch
LEFT Directorate, HP Division,
7A2, Place du Portage, Phase 3, 11 Laurier Street, Gatineau Quebec,
K1A 0S5

Telephone: 819 956-1702

E-mail: huda.dahir@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:

Name: _____ (To be inserted by PWGSC at time of contract award.)

Title: _____

Organization: _____

Telephone: _____ - _____ - _____

Facsimile: _____ - _____ - _____

E-mail: _____

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:

Name: _____ (To be inserted by PWGSC at time of contract award.)

Title: _____

Organization: _____

Telephone: _____ - _____ - _____

Facsimile: _____ - _____ - _____

E-mail: _____

The Technical Authority named above 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

Name and telephone number of the person responsible for :

General enquiries

Name: _____ (To be inserted by PWGSC at time of contract award.)

Title: _____

Telephone: _____
 Facsimile: _____
 E-mail: _____

Delivery follow-up

Name: _____ (To be inserted by PWGSC at time of contract award.)
 Title: _____
 Telephone: _____
 Facsimile: _____
 E-mail: _____

5.5 After Sales Service

5.5.1 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:

Item 001

Name: _____
 Address: _____

 Telephone Number: _____

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

6. Payment**6.1 Basis of Payment - Firm Unit Price(s)**

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid the firm unit price(s) specified in Annex "A" - Pricing, and as follows:

Basis of Payment (BOP) Type 1: Firm unit prices in Canadian dollars, Delivered Duty Paid at destination, Incoterms 2000, including Canadian Custom Duties and Excise Taxes included where applicable, Goods and Services tax/Harmonized Sales Tax extra.

Basis of Payment (BOP) Type 2: Firm unit prices in Canadian dollars, FCA Free Carrier, Incoterms 2000 at Contractor's Canadian facility or Contractor's Canadian distribution point, including Canadian Custom Duties and Excise Taxes included where applicable, Goods and Services Tax/Harmonized Sales Tax extra.

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

6.2 SACC Manual Clauses

H1001C Multiple Payments 2008-05-12

6.3 Exchange Rate/Payment on Delivery

6.3.1 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.

6.3.2 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.

6.3.3 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.

6.3.4 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.

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

7. Invoicing Instructions

7.1 The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions including the Client Ref # BT354. Invoices cannot be submitted until all work identified in the invoice is completed.

Each invoice must be supported by:

(a) a copy of the release document and any other documents as specified in the Contract;

7.2 Invoices must be distributed as follows:

(a) The original and one (1) copy must be forwarded to the following address for certification and payment:

National Defence Headquarters
Mgen George R. Pearkes Bldg
101 Colonel By Drive
Ottawa, Canada
K1A 0K2

Attention: *To be inserted by PWGSC at time of contract award*

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

- (c) One (1) copy must be forwarded to the consignee.

7.3 Holdback

A ten percent (10%) holdback will apply on the total price of each vehicle, Items 001 and Item 002, on any due payment of the said vehicle/equipment. Release of the holdback (10%) is conditional upon receipt and certified acceptance by DND of the said vehicles and all related items as identified in Annex "A" - Pricing.

Goods and Services Tax or Harmonized Sales Tax (GST/HST), as applicable, must be calculated on the total amount of the claim before the holdback is applied. At the time the holdback is claimed, there will be no GST/HST payable as it was claimed and payable under the previous invoice.

- (a) The original and one (1) copy of the invoice for the holdback must be forwarded to the Procurement Authority identified under the section entitled "Authorities" of the Contract.
- (b) One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.
- (c) One (1) copy must be forwarded to the consignee.

8. Certifications

Compliance with the certifications and related documentation provided by 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.

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) 2010A (2012-11-19) General Conditions - Goods (Medium Complexity);
- (c) Annex "A" - Pricing;
- (d) Annex "B" - Purchase Description - SNOW-PLOW TRUCK MOUNTED, 5.79 METER (19-FOOT) REVERSIBLE PLOW, PLATFORM BODY 4X4
- (e) Appendix1- Technical Information Questionnaire
- (f) the Contractor's bid dated _____

11. SACC Manual Clauses

A1009C	Work Site Access	2008-05-12
A9006C	Defence Contract	2012-07-16
A9049C	Vehicle Safety	2011-05-16
C2800C	Priority Rating	2011-05-16
C2801C	Priority Rating - Canadian-based 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 Documents - Foreign based Contractor	2008-12-12
D5605C	Release Documents - US based Contractors	2010-01-11
D5606C	Release Documents - Canadian-based Contractors	2012-07-16
D9002C	Incomplete Assemblies	2007-11-30
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 representative. Should any report, document, good or service not be in accordance with the requirements of the Statement of Work 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

The vehicle / equipment must be serviced, adjusted and delivered in condition for immediate use. The interior and exterior must be cleaned before leaving the factory and being released to DND personnel at the final delivery location.

The fuel tanks must be at least half full prior to release of the vehicle(s) to DND personnel.

All vehicles delivered to the consignee are to be delivered between the hours of 8:00 am and 4:00 pm Monday through Friday, except Federal holidays. Any attempt by the carrier to deliver vehicles before or after these hours may be refused unless arrangements have been made for authorized, qualified personnel to be available to perform inspections and to accept the delivery. 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 additional costs.

14. Shipping Instructions - Delivery at Destination (For Firm quantities)

14.1 The Contractor must ship the goods prepaid DDP - Delivered Duty Paid (as detailed at Annex "A"- Pricing). Unless otherwise directed, delivery must be made by the most economical means. Shipping charges must be shown as a separate item on the Contractor's invoice. The Contractor is responsible for all delivery charges, administration, costs and risks of transport and customs clearance, including the payment of customs duties and taxes.

14.2 The Contractor must deliver the goods by appointment only. The Contractor or its carrier must arrange delivery appointments by contacting the contacts specified in Annex "A"-

Pricing. The consignee may refuse shipments when prior arrangements have not been made.

15. Shipping Instructions (DND) - Canadian-based Contractor (Optional Quantities)

15.1 Delivery will be FCA Free Carrier at the Contractor's Canadian facility or 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.

15.2 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 15.3.

Inbound Logistics Co-ordination Center (ILCC)

Telephone: 1-877-877-7423 (toll free)

Facsimile: 1-877-877-7409 (toll free)

E-mail: ILHQOttawa@forces.gc.ca

15.3 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.
- 15.4 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.
- 15.5 The Contractor must not ship the goods before receiving shipping instructions from the DND Inbound Logistics contact.
- 15.6 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.
- 15.7 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.

16. Shipping Instructions (DND) - Foreign-based Contractors

- 16.1 Delivery will be FCA Free Carrier at the Contractor's Canadian facility or 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.
- 16.2 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 16.3.

Address: *To be inserted by PWGSC at time of contract award*

- 16.3 The Contractor must provide the following information to the DND Inbound Logistics contact when arranging for shipment:
- (a) the Contract number;
 - (b) consignee address (if 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 (e.g. carton, crate, drum, skid);
 - (e) actual weight and dimensions of each piece type, including gross weight;
 - (f) copy of the commercial invoice (in accordance with clause C2608C, section 4, of the Standard Acquisition Clauses and Conditions Manual) or a copy of the Canada Border Services Agency form CI1, Canada Customs Invoice;
 - (g) Schedule B codes (for exports) and the Harmonized Tariff Schedule codes (for imports);
 - (h) North American Free Trade Agreement Certificate of Origin (in accordance with clause C2608C, section 2) for the U.S. and Mexico only;
 - (i) 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, or International Air Transport Association regulations or the applicable Canadian Dangerous Goods Shipping Regulations and a copy of the material safety data sheet.
- 16.4 Following receipt of this information by Canada, Canada will provide the appropriate shipping instructions, which may include the requirement for specific consignee address labelling, the marking of each piece with a Transportation Control Number and customs documentation.
- 16.5 The Contractor must not ship goods before receiving shipping instructions from the DND Inbound Logistics contact.
- 16.6 If the Contractor delivers the goods at a place and time that 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.
- 16.7 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 and distribute them as follows:

- (a) Copy 1: mail to consignee marked: "Attention: Receipts Officer";
- (b) Copies 2 and 3: with shipment (in a waterproof envelope) to the consignee;
- (c) Copy 4: to the Contracting Authority;
- (d) Copy 5: to:
National Defence Headquarters
Mgen George R. Pearkes Building
101 Colonel By Drive
Ottawa, ON K1A 0K2

Attention: *To be inserted by PWGSC at time of contract award*

- (e) Copy 6: to the Quality Assurance Representative;
- (f) Copy 7: to the Contractor;
- (g) Copy 8: all non-Canadian Contractors 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/Pre-Production Meeting

Within ten (10) working days of the receipt of the Contract, the Contractor must contact the Technical Authority to determine the details of a pre-production meeting. The meeting will be held at the Contractor's plant_____ (specify location). Cost of holding such pre-production meeting must be included in the price of the bid. Please note that the travel and living expenses for Government Personnel will be arranged and paid for by the Canada.

19. Progress Reports

The contractor must prepare and submit monthly progress reports in two (2) copies, one to the DND Procurement Authority and one copy of the report must also be forwarded to the PWGSC Contracting Officer.

Each progress report must address the following questions:

- (a) Is the delivery on schedule?
- (b) Is the Contract free of any areas of concern in which the assistance or guidance of Canada may be required?

(c) Each negative response must be supported with an explanation.

20. Tools and Loose Equipment

For shipment verification, all items and tools, which are shipped loose with the vehicle/equipment must be listed on the Inspection Certificate (CF 1280) or on an attached packing note.

21. Spare Parts Availability

The contractor must ensure that spare parts required to properly maintain and repair the complete vehicle covered by this specification will be available for purchase by the Department of National Defence, or its authorized agents, for a period of **ten (10) years**.

22. Material

Material supplied must be new unused and of current production by manufacturer. (latest model year).

23. Design Changes

The "Design Change, Design Deviation and Waiver Procedure" as defined in National Defence Standard D-02-006-008/SG-0001 must apply.

24. Interchangeability

Unless changes during the production run are authorized by Procurement Authority , all vehicles supplied against any one item of a contract must be the same make and model, and all like assemblies, sub-assemblies and parts must be interchangeable.

25. Packaging

The methods used for preservation and packaging must be in conformity with the Contractor's normal standard for domestic shipment or, if necessary, with standards for overseas shipment as below deck cargo.

26. Service at Delivery

The Contractor must send a Service Representative to each delivery destination to perform the assembly/preparation on all vehicles delivered. Cost to provide this service must be included in the price of each vehicle.

ANNEX "A" - PRICING**Item 001 SNOW-PLOW TRUCK (Firm Quantity)**

The Contractor must deliver the vehicles/equipment including the sample manuals, CD of all manuals, data summary, photographs, warranty letter(s), preventative maintenance replacement parts kit list, line setting ticket, cataloguing information and Special tools list and familiarization training in accordance with the attached Annex "B" - Purchase Description - SNOW-PLOW TRUCK MOUNTED, 5.79 METER (19-FOOT) REVERSIBLE PLOW, PLATFORM BODY 4X4.

The SNOW-PLOW TRUCKS and related items must be delivered to:

19 WG COMOX
Major Equipment Section
COMOX, BC
VOR 2K0
CANADA

Delivery contact: _____ (Name to be inserted by PWGSC at time of contract award.)

Date of delivery: _____ (Date to be inserted by PWGSC at time of contract award.)

Firm unit price of \$ _____ per vehicle, including all equipment and related items, in accordance with Basis of Payment Type 1 (as detailed at Clause 6.1 Basis of Payment).

Quantity: TWO (2)

Item 002 SNOW-PLOW TRUCK(Optional Quantity)

If this option is exercised, the Contractor must deliver the vehicle/equipment including the approved manuals, warranty letters, and line setting tickets in accordance with the attached Annex "B" - Purchase Description - SNOW-PLOW TRUCK MOUNTED, 5.79 METER (19-FOOT) REVERSIBLE PLOW, PLATFORM BODY 4X4.

Firm unit price of \$ _____ per vehicle/equipement in accordance with Basis of Payment Type 2 (as detailed at Clause 6.1 Basis of Payment).

Quantity: Up to TWO (2).

Item 003 Familiarization instructions/training (Option)

If this option is exercised, the Contractor must provide up to TWO (2) familiarization instruction/training, in accordance with the attached Annex "B" - Purchase Description - SNOW-PLOW TRUCK MOUNTED, 5.79 METER (19-FOOT) REVERSIBLE PLOW, PLATFORM BODY 4X4.

Firm unit price of \$ _____ in accordance with Basis of Payment Type 2 (as detailed at Clause 6.1 Basis of Payment).

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. 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 Optional Extended Warranty Period

Optional warranty coverage available: YES _____ NO _____

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

(This item will not be included in the financial evaluation)

If exercised, the warranty period will be extended for an additional period of _____ calendar days.

Firm unit price of \$_____ Basis of Payment Type 2 (as detailed in Part 6)



15 Octobre 2012

PURCHASE DESCRIPTION

FOR

**SNOW-PLOW TRUCK MOUNTED, 5.79 METER (19-FOOT) REVERSIBLE PLOW,
PLATFORM BODY 4X4**

ECC 167136

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1. SCOPE

1.1 Scope – This purchase description describes the requirement for a 4X4 truck front mounted with a 5.8 M (19 foot) reversible plow. The vehicle will be used for runway snow removal.

1.2 Instructions – The following instructions apply 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^(E)**” 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^(E)**”, or “will” are not used, the information provided is for guidance only;
- (e) In this document “provided” **shall** mean “provided and installed”;
- (f) Where technical certification is required, a copy of the certification or an acceptable proof of compliance **shall** be provided;
- (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; and

- (c) “Proof of Compliance” - A document such as a brochure, a third party test report, a report generated by third party software, or a certificate of attestation signed by a senior representative of the Original Equipment Manufacturer (such as a certified engineer) indicating the performance and/or feature specified.
- (d) “Guidance” is defined as a requirement that may be followed. The guidance is provided to indicate a preferred component Make and Model or dimension that would be best for the application. However, deviating from a guidance doesn’t consider the bid non-compliant;

2. APPLICABLE DOCUMENTS

2.1 Other Publication(s) – The following document(s) form(s) part of this Purchase Description. The date(s) of issue are those in effect on the date of release of the RFP. Source is as shown:

SAE Handbook

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

Yearbook

Tire and Rim Association Inc.,
3200 West Market St.,
Akron, Ohio, 44321
<http://www.us-tra.org/traHome.htm>

Canadian Motor Vehicle Safety Standards (CMVSS)

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

Canadian General Standards Board

<http://www.tpsgc-pwgsc.gc.ca/cgsb/home/index-e.html>
CAN/CGSB 3.517-2007 Automotive Ultra Low-Sulphur Diesel Fuel

3. REQUIREMENTS

3.1 **Standard design** – The vehicle *shall*:

- (a) Be the latest model from a manufacturer who has demonstrated acceptability by manufacturing and selling this type and size class of vehicle for at least 5 years;
- (b) Have engineering certification available, upon demand, for this application from the original manufacturers of major equipment systems and assemblies;
- (c) Not have system and component capacities increased above published ratings;
- (d) Include all components, equipment and accessories normally supplied for this application, although they may not be specifically described in this purchase description;
- (e) Have a life expectancy before major overhaul of at least 10 years, with a desirable life expectancy of 15 years; and
- (f) Conform to all applicable laws, regulations and industry standards governing manufacture, safety, noise levels, and emissions in effect in Canada at the time of manufacture.

3.2 **Operating Conditions** – The vehicle under all operating conditions *shall* operate as follows without degradation in performance, reliability, or maintainability:

3.2.1 Weather – The vehicle/equipment *shall* operate under the extremes of weather conditions found in Canada in temperatures ranging from -40°C to 37° C (-40°F to 99° F) and cold starting from -40°C with external aids. The vehicle *shall* be capable of being stored in ambient temperatures of -50°C to 60°C.

3.2.2 Terrain – The vehicle *shall* operate over uneven surfaces of paved and compacted gravel airport runways and taxiways including snow, hard packed snow, and ice, without the use of operator installed supplementary traction aids, i.e. tire chains.

3.3 **Human Engineering and Safety** – The vehicle/equipment, all systems and components *shall*:

- (a) Be designed for easy performance of all maintenance and repair tasks with a minimum of special tools. A 95th percentile male or 5th percentile female *shall* be able to easily access all engine, drive train heating/cooling system, electrical and hydraulic components for preventive maintenance, removal and repair tasks. No access panel *shall* be permanently attached (i.e. no riveted plates);

- (b) Be safe and easy to use by a 95th percentile male or 5th percentile female under all operating conditions;
- (c) Have all entry and exit points equipped with handles and steps suitably positioned, to accommodate a 95th percentile male or a 5th percentile female under all operating conditions; and
- (d) Be equipped, where required for operator safety, with safety features such as warning and instruction plates, non-slip walking surfaces and heat shields.
- (e) Not cause foreign object damage. This vehicle will be operated on and around airfields and *shall* be prepared so that components that are loose or regularly disconnected do not cause Foreign Object Damage to aircraft. All components/ accessories such as oil filler caps, quick connect fitting protective caps and electrical connector protective caps *shall* be tethered to the vehicle or *shall* be secured in position or stored in a closed compartment. “Dog tag” style beaded chains *shall* not be provided. Approval *shall* be received from the Technical Authority, prior to final acceptance, for method(s) of securing of components/accessories.
- (f) Have auto-ejector outlets to prevent accidental damage to vehicle or power cable when plugged in to shore power.

3.4 Noise Level - The vehicle/equipment interior and exterior noise level *shall* meet the requirements of legislation relative to Occupational Safety and Health both at the operator’s station and exterior to the vehicle.

3.5 Weights and Dimensions

3.5.1 Weight Ratings – The vehicle *shall* have a Gross Vehicle Weight Rating (GVWR), as published in the manufacturer's literature and engineering data which is at least equal to the total of the load rating and the curb weight of the completed vehicle and *shall* be as follows:

- (a) The truck *shall* have a Gross Axle Weight Rating (GAWR) for each axle equal to or less than the load rating of the weakest component in the axle system, i.e., axle housing, suspension, wheels, or tires;
- (b) The GAWR for each axle *shall* be sufficient to support the total load imposed on the axle when the truck is fully loaded; no truck component to be loaded greater than its rated capacity;

- (c) Component and vehicular load and capacity ratings *shall* not be raised above normal commercial levels in order to meet the requirements of this specification; and
- (d) Maximum turning radius to be (8.5 M) 28 ft to centerline of front tire as per SAE J695.

NOTES:

- 1. The curb weight *shall* include full fuel tanks, all lubricants and fluids, and all special equipment.
- 2. The chassis manufacturer *shall* provide engineering certification of the chassis for this application.

3.6 Performance - The vehicle *shall* have the following performance:

- (a) Top speed of at least 96 km/h;
- (b) Gross engine horsepower of at least 280 HP; and
- (c) The Contractor *shall* provide a computer generated vehicle performance prediction analysis for a fully loaded vehicle which *shall* be performed in conformance with SAE J2188, using proposed equipment engine and transmission.

3.6.1 Ratings - The vehicle *shall* have a towed load rating of at least 13,610 kg (30,000 lb).

3.7 Chassis Frame – The vehicle *shall* be equipped with a frame, which *shall* be of reinforced construction suitable to meet the gross laden weight. The design *shall* provide adequate strength and torsional stiffness to ensure satisfactory operation under specified operating conditions. The Contractor *shall* provide an engineering certification of the chassis suitability for this application upon request. The frame *shall*:

- (a) Have adequate Section Modulus and resisting bending moment using a minimum 110, 000 psi High Strength Steel;
- (b) Have adequate strength at towing points, and variant system mounting points; and
- (c) Be strong at the towing and mounting points and suitable for the application.

3.8 Engine Systems – The following *shall* be provided:

- (a) A liquid cooled diesel engine;

- (b) The engine *shall* operate on diesel fuel to CAN/CGSB Standard 3.517-2007 Type A-ULS or B-ULS without detrimental effects on the engine. Certification by the engine manufacturer of this ability *shall* be available on request;
- (c) Manufacturer's recommended safety or emergency shut-down controls in the cab;
- (d) An automatic or manually activated fast idle system to raise engine speed when required for operations. The system *shall* have interlocks to prevent engine starting or shut down, gear shifting, or travelling with fast idle engaged and *shall* not interfere with the operation of the emergency engine shut-down system;
- (e) A replaceable severe-service type air cleaner protected from the ingress of snow and rain, and an air cleaner restriction indicator;
- (f) A full flow oil filter with a spin-on or replaceable element;
- (g) An engine shutdown system or engine de-rate for low oil pressure or high water temperature which should incorporate an operator-controlled override and indicator light. An audible alarm is desirable;
- (h) 110/220V heating elements in the engine oil, coolant, fuel, and any other systems as necessary to enable starting and operation in the environmental conditions specified in Paragraph 3.2. The wiring and connections *shall* terminate in the minimum number of receptacles of sufficient capacity, securely mounted and clearly labelled. The receptacle(s) *shall* include either a dust and weatherproof plug with a rustproof retaining chain or a spring loaded hinged cover;
- (i) If a diesel particulate filter is used, a manual or parked regeneration feature *shall* be provided to remove excess soot from the filter; 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 operation in the environmental conditions specified in Paragraph 3.2.

3.8.1 Engine Components – Engine components *shall* include:

- (a) Weather guards or an effective device to prevent entry of rain into intake and exhaust stacks if applicable;

- (b) A governor to limit engine speed to the operating range recommended by engine manufacturer;
- (c) A drain plug in the oil pan which may be magnetic and easily accessible;
- (d) A cooling system which **shall** control engine temperature within manufacturers recommended operating range when subject to specified operating conditions;
- (e) A radiator is to be a severe duty type, which includes OEM approved long life coolant protection to -40° C;
- (f) An engine fan is to incorporate a thermostatically controlled fan clutch, if not air to air engine; and
- (g) All radiator and heater hoses are to be silicon type. All hose clamps **shall** be silicon hose type.

3.8.2 Fuel System – Fuel system **shall**:

- (a) Have a minimum capacity to allow for the equipment to be operated at full capacity for a minimum of eight hours without requiring refill; (The vehicle fuel delivery system **shall** include fuel reservoir(s) that is mounted on heavy-duty support brackets and having a minimum total capacity of 375 litres (100 US gallons))
- (b) Have a fuel tank equipped with a non-spill type air vent;
- (c) Have a drain cock or plug installed at the lowest point of the tank;
- (d) Be at least half full when delivered to the destination; and
- (e) Have a fuel filler cap which should be located road side of the vehicle.

3.8.3 Engine 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 temperatures down to -40° C. External electrical power for the engine and battery heaters **shall^(E)** be provided at a location, accessible without lifting the engine covers, with a single cover-protected plug. It is preferred that the plug includes or is accompanied by a light (preferably LED) indicating when power is being supplied to the 110 volt components. The following **shall** be included:

- (a) 110-volt engine heater(s) with a capacity as recommended by the engine manufacturer or conforming to SAE Information Sheet J1310;

- (b) 110-volt battery heater(s) having wattage matched to battery size to prevent battery damage due to overheating. The battery *shall* be housed in an insulated battery box or in a heated cab;
- (c) A water separator/ fuel filter incorporating an electrical heating system to preheat diesel fuel prior to starting;
- (d) An in-line fuel heater. The heater *shall* be thermostatically controlled to prevent fuel temperature from rising above approximately 43°C (110°F). It is preferred that this be a heat exchanger type connected to the cooling system; and
- (e) A low temperature starting aid. The engine *shall* have an ether injection system, glow plug or intake air preheat system; and
- (f) The wiring and connections for the engine and battery heaters *shall* terminate in a receptacle of sufficient capacity and securely mounted. The receptacle *shall* include a dust and weatherproof plug with a rustproof retaining chain.

3.9 Transmission - The truck *shall* be equipped with an electronically controlled fully automatic transmission, which is compatible with the provided diesel engine. Automatic transmissions are defined as transmissions that require no driver intervention, to start, to change ratio, or to stop, once the drive ratio has been selected. The transmission *shall*^(E):

- (a) Have a minimum of five (5) forward speeds with 3rd gear hold and one reverse speed;
- (b) Be equipped with a neutral start safety switch;
- (c) Be programmed to allow the fast idle to engage only when the transmission is in neutral and the parking brake is applied;
- (d) Be programmed to prevent the transmission from engaging when the fast idle is engaged or disengage fast idle when attempting to engage the transmission with fast idle engaged;
- (e) Have an illuminated shift control quadrant; and
- (f) Have a transmission oil cooler.

3.9.1 Additional Driveline Components – The vehicle *shall* be equipped with a driver selectable all wheel drive two-speed transfer case.

3.10 Steering - The vehicle *shall* be equipped with a power assisted steering system with a telescopic/tilt steering column.

3.11 Brakes - The vehicle *shall* be equipped with full air actuated service brakes and spring actuated parking brakes, which comply with Canadian Motor Vehicle Safety Standards. The brake system *shall*^(E) include:

- (a) A low air pressure indicator controlling a buzzer audible to the driver and a red warning light on the instrument panel. The warning devices *shall*^(E) operate only when the ignition switch is in the "ON" position;
- (b) An air compressor of at least 5 litres per second capacity complete with an air cleaner. The compressor *shall*^(E) be pressure lubricated and liquid cooled from the engine;
- (c) An air pressure governor;
- (d) A wet tank equipped with automatically operated, electrically heated, moisture-expelling valve(s). The wet tank *shall*^(E) be capable of being recharged from an external source using a glad hand air coupler;
- (e) Glad hands air couplers, with integral cover, mounted on the rear of the vehicle to supply breaking action to the trailer, plus a minimum 1.2 metres (4 feet) of air line. A blue cover for service connection and a red cover for emergency connection *shall* be provided;
- (f) A trailer brake control mounted at the operator's station on or near the steering column;
- (g) A spring applied, air released, parking brake with arrangements for automatic service brake application on the rear axles in the event of loss of air pressure;
- (h) A 4-channel anti-lock brake system (ABS);
- (i) Automatic slack adjusters;
- (j) An automatic air dryer;
- (k) Brake housing dust shields and visual brake stroke indicators on all wheels;
- (l) Air brake hoses conforming to SAE Standard J1402. Brake lines passing through metal *shall*^(E) be protected to prevent damage or failure due to chafing or vibration; and
- (m) Air compressor of sufficient capacity to account for a trailer as specified in 3.6.1.

3.12 Suspension - The vehicle *shall* be equipped with spring suspension sufficient capability to support the extra load imposed by the front mounted snow plow and hitch mechanisms *shall* be provided.

3.13 Axles - The following axle equipment *shall* be provided:

- (a) **Front Drive Steer Axle** - Be equipped with a single-speed front drive steer axle that includes driver controlled differential lock; and
- (b) **Single Rear Drive Axle** - Be equipped with a single-speed rear drive axle that includes driver controlled differential lock.

3.14 Cab - The vehicle *shall* be equipped with a conventional air suspended cab. The cab *shall*^(E) include:

- (a) High-back air suspended driver and co-driver seats with cloth inserts, retractable shoulder/lap belt assemblies and retractable arm rests;
- (b) Two heavy-duty motorized, left hand and right hand remote controlled, mirrors with heating elements and marker lights. Mirrors *shall*^(E) include a minimum 20 cm (8 inch) diameter convex mirrors mounted below the mirror assemblies on each side. Mirror glass *shall*^(E) be replaceable;
- (c) Two rotating and pivoting interior sun visors;
- (d) Cab insulation, dark upholstery, coat hooks, vinyl mats, and molded armrests on both doors;
- (e) Manufacturer's standard interior trim;
- (f) Interior and exterior grab handles;
- (g) Cup holders;
- (h) An AM/FM stereo radio with CD player and auxiliary port;
- (i) A five (5) lb minimum dry chemical fire extinguisher mounted externally on the cab accessible by the operator;
- (j) A mobile radio power leads and antennae cable shall be wired into the vehicle. The power and antennae leads shall be provide with a service loop terminating at the overhead console for future installation of radio equipment; and

- (k) A roof mounted antennae base.

3.14.1 Cab Equipment - The following Cab equipment *shall* be provided:

- (a) Visibility Window - A visibility window in the front lower portion of the doors of the cab;
- (b) Horns - Air and electric horns *shall* be provided. If air horns are mounted on the roof, then snow shields *shall* be provided;
- (c) Fog Lights - Fog lights mounted in bumper or plow frame with amber lens and rock guards;
- (d) Tinted Safety Glass - Tinted safety glass to reduce solar heating effects;
- (e) Windshield - *shall^E* be heated with electric grid;
- (f) Power Window - Electrically powered windows, with passenger side power window controls at the driver's side; and

3.14.2 Air Conditioning Unit - The air conditioning system *shall*:

- (a) Be manufacturer's standard for the given climatic condition;
- (b) Be factory installed;
- (c) Equipped with all components and controls required for regulation of the cab interior temperature; and
- (d) Equipped with an environmentally friendly and not ozone depleting refrigerant such as R134A. Refrigerants *shall* not be chlorofluorocarbons (CFCs) and *shall^(E)* be hydro fluorocarbons.

3.15 Controls and Instruments - All controls and instruments *shall^(E)* conform to the general criteria set out in SAE J1814, J898 and J1362. The vehicle *shall* be equipped with:

- (a) Electric windshield washers;
- (b) Windshield wipers with at least intermittent, low and high speeds;
- (c) Cruise control system;

- (d) Engine fast idle feature;
- (e) Tachometer;
- (f) Odometer (indicating kilometres);
- (g) Coolant temperature gauge with a high coolant temperature indicator;
- (h) Transmission temperature gauge with a high transmission temperature indicator;
- (i) Oil pressure gauge with a low engine oil pressure indicator;
- (j) Voltmeter or ammeter;
- (k) Air pressure gauge with low pressure warning light and audible alarm;
- (l) Differential lock(s) engaged indicator(s);
- (m) Transfer case engaged indicator;
- (n) Back up alarm;
- (o) Self-cancelling turn signal; and
- (p) Outside air temperature sensor.

3.16 *Wheels, Rims and Tires* – Wheel, rim, and tire requirements *shall* include:

- (a) Steel belted tubeless, radial ply tires of the same size and ply rating on all wheels. Ply ratings not tabled in the Tire and Rim Association Year Book *shall* not be acceptable;
- (b) Wheel assemblies and rims, if possible, interchangeable, front and rear.
- (c) Both front and rear wheels to be steel disc type.
- (d) Rear inner tires with stem valve extension for easy access, if applicable;
- (e) Rims and dual spacing (if required) in accordance with Tire and Rim Association Standards;

- (f) With the specified payload, the load on any tire is not to exceed the recommended load tabled in the Tire and Rim Association Year Book; and
- (g) Each tire *shall* balance within practicable limits; wheels, hubs and brakes *shall* be effectively in balance. Balancing *shall* be adequate to preclude wheel shimmy at all vehicle speeds;
- (h) A spare wheel, rim, and tire of same ply and rating as provided in 3.16 (a); and
- (i) The wheels shall comply with the axle manufacturer's rating for imposed loads and operating conditions.

3.17 Electrical System – The vehicle *shall* be equipped with a 12-volt electrical system that *shall* include:

- (a) Maintenance free battery(s), the batteries *shall* be in an accessible well-protected location. Mounting *shall* include adequate bottom rubber padding, heat shielding if necessary, and proper hold-downs;
- (b) To preserve the battery and prolong its life, alternator output voltage should be set to the specific battery type as per manufacturer specifications. The alternator *shall* be a heavy duty type for snow plow application. In addition the alternator *shall* be equipped with temperature compensation circuit to protect the battery from under- or overcharging;
- (c) Batteries having a minimum of 2500 CCA capacity;
- (d) Rubber grommets to protect the wiring where it passes through metal;
- (e) Back-up warning alarm device of a type that senses ambient noise level and automatically adjusts output volume to compensate;
- (f) A master switch which effectively cuts off any flow of electricity from the batteries to protect the entire electrical system of the vehicle. A manual control for this switch *shall* be readily accessible from the ground on the operator's side of the cab. The "live" wire *shall*^(E) be as short as possible and be protected;
- (g) The wiring and connections for the block heater *shall* terminate in a receptacle of sufficient capacity and securely mounted. The receptacle *shall* include a dust and weatherproof plug with a rustproof retaining chain;
- (h) A 110V battery trickle charger with overcharge protection and an appropriately labelled receptacle located near the winterization receptacle;

- (i) A 12-volt booster receptacle installed in a location accessible with the platform and suspension raised or lowered. It *shall* be marked “Caution emergency boost only (see manual) Attention pour démarrage secours seulement (voir manuel)”. A compatible 20 foot long slave cable with the NATO standard slave pin receptacle in accordance with STANAG 4074 (NSN: 5935-01-097-9974) *shall* be supplied as part of the vehicle equipment;
- (j) A seven (7) pin twelve volt tractor receptacle;
- (k) SAE approved fuses or circuit breakers with trip indicators protecting all circuits; and
- (l) An engine compartment light with conveniently located switch shall be provided.

3.17.1 Lighting System – The vehicle *shall* be equipped with:

- (a) Lights, reflective devices and associated equipment complying with all requirements of the Canadian Motor Vehicle Safety Standards (CMVSS);
- (b) LED type clearance lights, turn signals, stop and taillights, back-up, and licence plate lights as required. Halogen or LED type headlights with high/low beam *shall* be provided. Lights and reflectors at the rear *shall* be recessed or otherwise protected from damage. All lighting equipment at the rear of the vehicle and all identification and clearance lighting equipment mounted on the tank *shall* be of a sealed unit design, with flexible rubber mounting rings and waterproof connectors. These lights *shall* be wired into the truck electrical system, using a prefabricated sealed harness system;
- (c) Turn, stop, and taillights at the rear located as far apart as possible from the centre line of the vehicle;
- (d) Front amber turn signal lights;
- (e) Variable intensity adjustable instrument panel lights;
- (f) At least one LED interior light for the cab including dome and reading lights with individual switches; and
- (g) A roof mounted amber LED stroboscopic beacon light to allow for 360 degree visibility.

3.18 Hydraulic System – The hydraulic system *shall* be of sufficient capacity to handle the maximum load. The system operating pressure on all components *shall* not

exceed the manufacturer's recommended rating and be suitably protected by relief valves. The hydraulic system **shall** meet the following requirements:

- (a) Hydraulic pumps and motors developing the required flow and pressure to operate all hydraulic functions;
- (b) Hydraulic oil reservoir of sufficient capacity to operate the hydraulic system and incorporate adequate baffling to ensure cooling of the oil before re-entry to the hydraulic pump. The reservoir shall have an inspection cover sealed against the entry of water and large enough to permit cleaning of the tank. The reservoir shall be equipped with a fluid level dipstick or a sight gauge, a tank breather and a drain sump. The sump shall incorporate a drain valve and a 3/4-inch NPT magnetic plug or a magnetic ring inside the reservoir. The reservoir shall be mounted higher than the pump to ensure a continuous flow of fluid to the pump. The filler opening **shall^(E)** be the vented type and fitted with a replaceable strainer. The filler and cleanout **shall^(E)** be easily accessible;
- (c) Sufficient gate valves to prevent the loss of oil from the system when servicing the filters and pump;
- (d) Control valve located at the operators control panel;
- (e) Hydraulic hoses that comply with the requirements of SAE J517. Rubber grommets **shall^(E)** be used to protect the hoses where they pass through metal components;
- (f) A heavy-duty crankshaft driven dry mode pump or a combination transmission mounted PTO and pump assembly;
- (g) A set of control levers of the pneumatic feathering proportional type to operate the plow. The spacing between the levers **shall^(E)** be sufficient to allow an operator wearing gloves to safely actuate them;
- (h) A bank of hydraulic control valves located outside of the cab to operate plow. All lines to the valve assembly **shall^(E)** be colour coded or labelled for ease of maintenance; and
- (i) An in-circuit hydraulic filter assembly equipped with a filter condition indicator. The filter assembly **shall** be positioned so as to allow filter changes without a complete loss of hydraulic fluid from the reservoir.

3.19 Towing –Towing component **shall** include:

- (a) A full tow apron;

- (b) Rear swivel mount pintle hook with cushion, to accommodate the rated towed load and up to a 41 mm (1.62 inch) cross-section drawbar eye; and
- (c) Two (2) heavy duty towing eyes shall be provided on the front and rear of the truck and shall be of sufficient strength for recovery of the fully laden plow truck.

3.20 Equipment – Equipment *shall* include:

- (a) Licence plate holders, front and rear. The Rear licence plate *shall* be LED illuminated;
- (b) A front bumper;
- (c) Front and rear mud flaps in accordance with SAE Recommended Practice J682; and
- (d) A heavy section, channel type, full width, bolt-on rear bumper.

3.21 Accessory Equipment

3.21.1 Platform Body - The vehicle *shall* be equipped with a platform body. The platform body *shall*^(E):

- (a) Be fitted with two (2) removable cement blocks which are 80 inches wide, 40 inches long, and 27 inches high. The top of each cement block *shall* be fitted with two (2) lifting hooks which can safely support the weight of the block. The top circumference of each cement block *shall* be fitted with round aluminium handrails which are no higher than four (4) inches above the cement block. The bottom of each cement block *shall* be fitted with two (2) steel rails which shall be securely fastened to the outside edges of the deck. The cement weight blocks, handrails, and bottom rails *shall* be painted to match the deck colour; and
- (b) Be securely fastened to the ballast using materials that are rust resistant.

3.21.2 Front Hitch - The front hitch assembly *shall*^(E):

- (a) Include front cheek plates of at least 13 mm (1/2 inch) thick steel that are set back as far as possible along the truck chassis frame rails in order to provide optimum support;
- (b) Include a power lift cylinder of suitable diameter;

- (c) Include rubber shock mounted rectangular quartz-halogen or LED headlights with integrated LED directional lights positioned to provide additional lighting during plowing operations and to illuminate the frontal area when the plow is raised;
- (d) Be a Quick Hitch design utilizing one steel self aligning mechanism on the top and a clamping device to score the plow hitch and truck hitch together;
- (e) The hitch shall be a parallel lifting type consisting of two parallel tubular push arms. Plow *shall* autolevel with respect to ground level when turning left or right. The hitch shall incorporate a heavy duty turntable that allows oscillation of the plow with respect to the truck permitting the plow to follow the contours of the paved surface;
- (f) The quick hitch is to be designed so that the lift cylinder can be used to detach the plow from the truck mounting plate; and
- (g) The quick hitch truck portion shall incorporate the female portion of the self aligning mechanism for a one man hitching and unhitching operation.

3.21.3 19 Foot Reversible Snow Plow - The vehicle *shall* be equipped with a 5.8 metre (19-foot) reversible snow plow. The snow plow *shall*^(E):

- (a) Be equipped with a continuous curve poly material type moldboard assembly that includes an upper horizontal support, a lower horizontal support and vertical ribs. The plow *shall*^(E) have the following minimum dimensions:
 - i. Overall height - 106 cm (42 inches);
 - ii. Overall length - 5.85 metre (19 feet); and
 - iii. Thickness of moldboard material - 9 mm (3/8 inch).
- (b) Include a compression type trip cutting edge assembly with a multi-section Tungsten carbide cutting blade;
- (c) Be equipped with two height adjustable skid shoe assemblies;
- (d) Be equipped with abrasion resistant steel curb (scuff) shoes mounted at each extremity of the blade;
- (e) Be equipped with telescoping type hydraulic cylinders enabling the plow to be angled either left, right or straight ahead;
- (f) Include a maximum angle to the left or right of 30 degrees;

- (g) Be equipped with an adjustable pneumatic dual caster wheel assembly;
- (h) Be equipped with a caster wheel assembly of the 360 degree swivel type;
- (i) Be equipped with four (4) wheels and tires with two (2) on each side riding in tandem;
- (j) Be equipped with two (2) caster barred adjustments for vertical adjustment of the plow;
- (k) Include a spring loaded adjustable brake dampener on each caster to minimize wheel wobble; and
- (l) Include adjustable spring arrangements to adjust the oscillation tension.

3.22 Commercial Paint and Corrosion Protection

3.22.1 Paint Finish – The following applies:

- (a) The prime coating *shall* be a high-durability, corrosion-resistant type. The prime coating *shall*^(E) be epoxy type or baked powder coat;
- (b) The colour shall be high visibility yellow with antiglare flat black paint on top of hood; and
- (c) Chassis items painted Manufacturer's standard black, chromed, polished and/or mill finished surfaces need not be painted in colour specified in 3.22.1 (b).

3.22.2 Corrosion Protection - The following *shall* be provided for the vehicle:

- (a) 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 vehicle;
- (b) 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) 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) 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; and
 - (e) A decal and warranty papers accompanying each vehicle.

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

3.22.3 Corrosion Resistant Materials – The following applies:

- (a) The material used in construction *shall* be selected to prevent galvanic corrosion. Fasteners *shall^(E)* be stainless steel; zinc plated or hot dipped galvanized aluminium rivets, and plastic black oxide brass fasteners.

3.23 Plates, Markings and Controls – All plates, markings and controls *shall^(E)* 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;
- (c) An identification plate shall be provided in a conspicuous and protected location listing the manufacturer's name, model number, model year and serial number;

- (d) Instruction plate(s) shall be provided in the cab within easy view of the driver. The instruction plate(s) *shall*^(E) permanently display instructions detailing operation for engine starting and shut-down, differential locking, transmission operation, and any other special procedures to be followed in operating the vehicle;
- (e) Have controls easily accessible to the operator. Joystick controls are desired; and
- (f) Have a removable key type ignition switch with a safety device ensuring that the engine can only be started with the transmission in a neutral position.

3.24 Lubricants and Fluids – The vehicle *shall* be serviced with manufacturer's standard lubricants and hydraulic fluids compatible with delivery location and season. Vehicles requiring manufacturer's special lubricants and hydraulic fluids after the break-in period will not be acceptable. It is desirable that the hydraulic system operates year round at the specified temperature extremes with only one type of hydraulic fluid.

4. INTEGRATED LOGISTIC SUPPORT – The Contractor is required to ensure that spare parts required to properly maintain and repair vehicles are available for purchase for a period of 10 years.

4.1 Documentation and Support Items – The Contractor *shall* provide the following documentation and support items.

4.1.1 Items with Each Vehicle – The Contractor *shall* provide the following items with each vehicle:

- (a) **Vehicle Manuals** – The vehicle *shall* be provided with all manuals required for the safe operation, maintenance and repair of the vehicles and all sub-systems, attachments, components and accessories included in the vehicle supplied. The following manuals *shall* be provided:
 - i. **Operator's Manuals** – Operator's Manuals *shall* be provided in a bilingual format or as 2 manuals in a single binder (one English, one French). Operators' Manual(s) *shall* be supplied in paper format. The Operator's Manual *shall* include:
 - 1. Instructions for the safe operation of the vehicle;
 - 2. Daily operator maintenance instructions/checks (including lubrication);
 - 3. Safety warnings; and

4. Hand signals (as necessary).
- ii. **Parts Manuals** – The Parts Manuals *shall* be in English (French translation is desirable). The Parts Manuals *shall* include:
 1. Illustrations showing all components of the vehicle including equipment and accessories from other manufacturers that is supplied for the requirements of the contract. The illustrations *shall* have numbers for the itemization of the parts;
 2. A listing for all itemized manufacturer's parts showing the manufacturer's part number of the illustration, the part name and a brief description of the item; and
 3. Cross reference relating the manufacturer part number to the correct figure and item number.
 - iii. **Maintenance (Shop Repair) Manuals** - The Maintenance (Shop Repair) Manual *shall* be in English (French translation is desirable). The Maintenance (Shop Repair) Manuals *shall* include:
 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, fluid volumes required and a section listing any special tools (including item part numbers); and
 3. Information on the order of disassembly and assembly of the systems and components of the vehicle.
 - iv. **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 i, ii, and iii above. For usability, CD/DVD-ROM *shall not* require password and/or Internet connection to be accessed. Operator's manuals *shall* also be supplied in paper format.
 - v. **Sample Manuals** – The Contractor *shall* deliver a set of sample manuals, including all documents in items i through iv above. The Sample Manuals *shall* be delivered to the Technical Authority. Sample Manuals will not be returned. In the event that manuals are dependent on first vehicle completion, Sample Manuals *shall* be submitted within 30 days after the pre-production vehicle approval or first production vehicle inspection. The Technical Authority will provide approval or comments

on the manuals within calendar 30 days. If corrections are required, the contractor *shall* ensure that the Technical Authority has a complete set of corrected manuals.

Notes: In the event that the manuals are not available at time of shipment, provisional manuals *shall* accompany the 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 30 calendar days of receipt of approval of manuals.

- (b) **Warranty Letter** – A paper copy of the completed bilingual Warranty Letter with each vehicle shipped in the approved format. The Contractor *shall* send a copy of the Warranty Letter to the Technical Authority, by completing the Technical Authority provided template, for each vehicle, at shipment. Designated warranty providers *shall* honour the warranty letter.
- (c) **Initial Parts Kit** – One Initial Parts Kit accompanying each vehicle/equipment. Each Initial Parts Kit *shall* include a complete set of filters and filter elements from the Original Equipment Manufacturer. The Contractor *shall* provide the list to the Technical Authority

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 provided template with data and a vehicle picture. The Contractor *shall* provide a Data Summary electronically in MS-Word format, if possible, before shipment of vehicles;
- (b) **Photographs** – Two (2) digital pictures, one left-front three-quarter view, and one right-rear three-quarter view of each make/model/ configuration. It is preferred that pictures have an uncluttered background. Pictures *shall* have a size of at least 4 Mega pixels; and
- (c) **Preventive Maintenance Replacement Parts Kit List** – A list of parts needed to perform preventive maintenance on a vehicle/equipment during the first scheduled preventive maintenance. The list *shall* include the parts provided in the Initial Parts Kit and additional items recommended by the Original Equipment Manufacturer for review and acceptance by the Technical Authority. The list *shall* include the following elements:
 - i.
 - 1. Part description;

2. Original Equipment Manufacturer Part number;
 3. Suggested quantity; and
 4. Unit cost.
- ii. Be delivered to the Technical Authority for approval and action. The list ***shall*** be supplied in an editable electronic format, preferably as a spreadsheet.
- (d) **Special Tools List** - The Contractor ***shall*** provide a list detailing the special tools required for the vehicle/equipment that would not be included in a mechanics toolbox. The list could include items such as special wrenches, or extraction devices and special diagnostic tools/software. The Special Tools List ***shall*** include the following information:
- i. Item name;
 - ii. Contractor's part number;
 - iii. Original component/equipment manufacturer's part number;
 - iv. Original manufacturer's NATO Supply code (NCAGE) or name and address (if known);
 - v. NSN (NATO Stock Number) (if known);
 - vi. Quantity recommended;
 - vii. Unit price; and
 - viii. Unit of issue.
- (e) **Recommended Spare Parts List** – The Contractor ***shall*** provide to the Technical Authority a list detailing the spare parts deemed necessary to maintain the vehicle for a period of 12 months exclusive of any warranty period. The Recommended Spare Part List ***shall***:
- i. Include the following information:
 1. Item name;
 2. Contractor's part number;
 3. Original component/equipment manufacturer's part number;

4. Original manufacturer's NATO Supply code (NCAGE) or name and address;
5. NSN (NATO Stock Number) (if known);
6. Quantity per equipment;
7. Quantity recommended;
8. Unit price; and
9. Unit of issue.

- ii. Be delivered to the Technical Authority for review. The list ***shall*** be supplied in an editable electronic format, preferably as a spreadsheet.

(f) **Cataloguing Information** – The contractor ***shall*** provide the Technical Authority, upon request, the information necessary to catalogue the parts for the vehicle/equipment. Cataloguing Information ***shall***:

- i. Include the NSN of the part, if known. If the NSN is provided no other supporting technical data need be provided for that item; and
- ii. Include technical information, which ***shall*** be sufficient to allow DND to identify, classify and fully describe the part(s) to a NATO standard. This could include specifications, standards, drawings, or catalogues with brief description(s) of relevant dimensional, material, mechanical, electrical and physical/ performance characteristics. Drawings will not be sent to other suppliers for production.

Note: Drawings sent to the Technical Authority will remain the property of the contractor.

Note: This may require meetings between DND and the contractor to obtain and validate information.

(g) **Safety Recalls and Servicing Data** – The following information is required to be provided to all customer locations, on a continuing basis, throughout the life expectancy of the vehicle or for no less than 10 years:

- i. Safety Recalls; and
- ii. Manufacturers technical Service Bulletins, or equivalent.

Note: This service can be made available as an Internet Service.

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*^(E) be given at the contractor's manufacturing facility. The course *shall* be held for a minimum duration of two (2) days to provide training of up to four (4) maintenance personnel. Canada will pay for travel costs for DND personnel to attend Maintenance training. The final dates *shall* be arranged with the Technical Authority (TA). After completion of the course the Contractor *shall* have a **“PROOF OF MAINTAINER TRAINING”** certificate signed by a Crown Representative. The Technical Authority will supply this document in an electronic format. The course curriculum *shall* include:
- i. Operation and maintenance safety precautions;
 - ii. Preventive maintenance including servicing schedules (10 % of classroom time);
 - iii. Trouble shooting, testing and adjustments (70 % of classroom time); and
 - iv. Special tools and test equipment.
- (b) **Training - Operators** – The Contractor *shall* provide an operator training course. The course *shall* be given at the delivery destination for a minimum duration of two (2) days to provide training for up to six (6) DND operators. The final dates *shall* be arranged with the Technical Authority (TA). 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 will supply this document in an electronic format. The course curriculum *shall* include:
- i. Safety precautions to be observed while operating and servicing the vehicle;
 - ii. Vehicle/equipment operating characteristics;
 - iii. Vehicle/equipment operating procedures;
 - iv. Pre-operating and pre-shutdown procedures;
 - v. Daily/weekly operator servicing procedures; and
 - vi. A minimum of two (2) hours practical operating experience per operator.

October 15, 2012

TECHNICAL INFORMATION QUESTIONNAIRE

DETACH, COMPLETE, AND RETURN

REPRODUCE THIS QUESTIONNAIRE FOR THE CONFIGURATION

1. SCOPE

1.1 SCOPE - This Questionnaire covers technical information to be supplied by a bidder. This information is required by the Technical Authority for technical assessment of equipment offered. If a paragraph item does not apply to the Configuration, insert NA in response.

NOTE: IT IS THE BIDDER'S RESPONSIBILITY TO CLARIFY OUTSTANDING TECHNICAL ISSUES, BY WRITTEN REQUEST, TO THE CONTRACTING OFFICER PRIOR TO BID SUBMISSION.

PURCHASE DESCRIPTION PARAGRAPHS

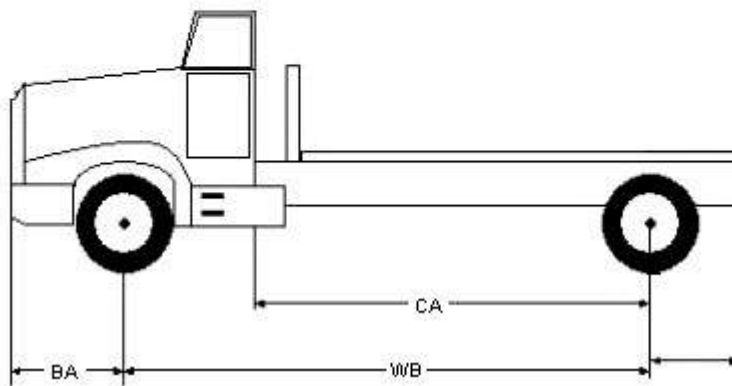
A load distribution analysis for the proposed chassis equipped with a platform body, and reversible plow blade as specified in the Purchase Description shall be provided. The analysis shall detail the following:

- (a) Chassis BA, WB, CA & AF dimensions;

Note the illustration of required dimensions on the line drawing.

- (b) Weight & location of counter balance/concrete block(s) in order to achieve optimum weight distribution (Note that one weight and location of counter balance/concrete block shall be selected for plows in up and down positions); and
- (c) Front and rear axle weight (GAW front & rear) for loaded vehicle with accessories for:
 - i. Both Plows in the upper position; and
 - ii. Both Plows in the lower position (While in operation).

Rated axle and vehicle capacities shall not be exceeded.



Reversible Plow in Up Position

	<u>Axle Loads (kgs)</u>		Total
	Front Axle	Rear Axle	
Tare:			
Body:			
Reversible Plow:			
Concrete Weight:			
Other:			
Total:			
Rating (GAWR, GVWR)			

Reversible Plow & Side Wing in Down Position

	<u>Axle Loads (kgs)</u>		Total
	Front Axle	Rear Axle	
Tare:			
Body:			
Reversible Plow:			
Wing Plow:			
Concrete Weight:			
Other:			
Total:			
Rating (GAWR, GVWR)			

LOAD DISTRIBUTION ANALYSIS

3.1 Standard Design – As specified? Yes_____No_____

Make and Model _____

Model Year _____

3.2 Operating Conditions – As specified? Yes_____No_____

3.3 Human Engineering and Safety – As specified? Yes_____No_____

3.4 Noise Level – As specified? Yes_____No_____

3.5 Weights and Dimensions – As specified? Yes_____No_____

3.5.1 Weight Ratings

Gross Vehicle Weight Rating (GVWR)_____kg

Gross Combination Weight Rating (GCWR)_____kg

Gross Axle Weight Rating (GAWR FRONT)_____kg

Gross Axle Weight Rating (GAWR REAR)_____kg

3.6 Performance – As specified? Yes_____No_____

(a) Vehicle Top Speed _____km/h

Vehicle Gradeability_____Percent at _____km/h

(b) Gross Engine Horsepower_____HP

Computer Generated vehicle performance prediction included?

Yes___No___

3.6.1 Ratings – As specified? Yes_____No_____

Towed load rating _____kg

3.7 Chassis Frame – As specified? Yes_____No_____

Front bumper to front axle centre line (BA)_____cm

Wheel Base (WB)_____cm

End of cab to rear axle centre line (CA)_____cm

Rear axle centre line to end of frame (AF)_____cm

Overall Length (OAL)_____cm

Overall Width_____cm

3.8 Engine - As specified? Yes_____No_____

Engine - Make, Model and Rating _____

3.8.1 Engine Components – As specified? Yes_____No_____

3.8.2 Fuel System – As specified? Yes_____No_____

Fuel Reservoir Capacity_____litres

3.8.3 Engine Cold Weather Aids – As specified? Yes_____No_____

(a) Engine Heater

Make, Model _____

Power _____Watts

(b) Battery Heater

Make, Model _____

Power _____Watts

(c) Water Separator/ Fuel Filter

Make, Model _____

(d) Fuel Heater

Make, Model _____

(e) Low Temperature Starting Aid (ether injection system, glow plug or intake air preheat system)

Make, Model _____

3.9 Transmission

Automatic Transmission - As specified? Yes _____ No _____

Make/Model _____

Number of Forward speeds _____

3.9.1 Additional Driveline Components

Two Speed Transfer Case - As specified? Yes _____ No _____

Make/Model _____

3.10 Steering - As specified? Yes _____ No _____

3.11 Brakes - As specified? Yes _____ No _____

Air Compressor - As specified? Yes _____ No _____

Make/Model _____

3.12 Suspension – As specified? Yes _____ No _____

Front Make _____ Model _____

Rear Make _____ Model _____

Rated Capacity Front _____ kg

Rear _____ kg

3.13 Axles – As specified? Yes _____ No _____

(a) Front Drive Steer Axle - As specified? Yes _____ No _____

Make/Model _____

Rated Capacity _____ kg

Differential Lock - Make/Model _____

(b) Single Rear Drive Axle - As specified? Yes _____ No _____

Make/Model _____

Rated Capacity _____ kg

Differential Lock - Make/Model _____

3.14 Cab - As specified? Yes _____ No _____

(a) Driver's Seat - Make/Model _____

Passenger's seat - Make/Model _____

(b) Mirror Size _____ cm X _____ cm

Convex Mirror Diameter _____ cm

3.14.1 Cab Equipment

(a) Visibility Window - As specified? Yes _____ No _____

(b) Horns - As specified? Yes _____ No _____

(c) Fog Lights - As specified? Yes _____ No _____

(d) Tinted Safety Glass - As specified? Yes _____ No _____

(e) Windshield – As specified? Yes _____ No _____

(f) Power Window - As specified? Yes _____ No _____

3.14.2 Air Conditioning Unit - As specified? Yes _____ No _____

3.15 Controls and Instruments - As specified? Yes _____ No _____

3.16 Wheels, Rims and Tires - As specified? Yes _____ No _____

Wheel Type & Size _____

Front Tires Make _____ Size _____

Rear Tires Make _____ Size _____

Tread Pattern _____

3.17 Electrical System - As specified? Yes _____ No _____

Alternator Output _____ Amperes

2500 CCA Batteries - As specified? Yes _____ No _____

3.17.1 Lighting System - As specified? Yes _____ No _____

3.18 Hydraulic System - As specified? Yes _____ No _____

3.19 Towing - As specified? Yes _____ No _____

3.20 Equipment - As specified? Yes _____ No _____

3.21 Accessory Equipment

3.21.1 Platform Body - As specified? Yes _____ No _____

3.21.2 Front Hitch - As specified? Yes _____ No _____

3.21.3 19 foot Reversible Snow Plow - As specified? Yes _____ No _____

Make _____ Model _____

3.22 Commercial Paint and Corrosion Protection

3.22.1 Paint - As specified? Yes _____ No _____

(b) Paint Colour - As specified? Yes _____ No _____

3.22.2 Corrosion Protection - As specified? Yes _____ No _____

3.22.3 Corrosion Resistant Materials - As specified? Yes _____ No _____

3.23 Plates, Markings and Controls - As specified? Yes _____ No _____

3.24 Lubrication and Fluids - As specified? Yes _____ No _____

Conformance Certificate If the equipment and options tendered do not conform exactly to the requirements of this specification, list all deviations below and provide details of any alternatives offered in lieu of the item specified. Complete and sign the appropriate signature block.

DEVIATIONS AS LISTED

COMPANY NAME_____

ADDRESS_____

SIGNED (COMPANY OFFICER)_____TITLE_____

DATE_____TELEPHONE NUMBER_____

NO DEVIATIONS

COMPANY NAME_____

ADDRESS_____

SIGNED (COMPANY OFFICER)_____TITLE_____

DATE_____TELEPHONE NUMBER_____