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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

SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION

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

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

Comments - Commentaires

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

Issuing Office - Bureau de distribution
Vehicles & Industrial Products Division
11 Laurier St./11, rue Laurier
7A2, Place du Portage, Phase III
Gatineau, Québec K1A 0S5

Title - Sujet Semi-Trailer, Low Bed, Ultra Low De	
Solicitation No. - N° de l'invitation W8476-144846/A	Amendment No. - N° modif. 002
Client Reference No. - N° de référence du client W8476-144846	Date 2014-01-20
GETS Reference No. - N° de référence de SEAG PW-\$\$HP-912-64328	
File No. - N° de dossier hp912.W8476-144846	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2014-02-17	
F.O.B. - F.A.B. Plant-Usine: <input checked="" type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Pearson, Neil	Buyer Id - Id de l'acheteur hp912
Telephone No. - N° de téléphone (819) 956-3976 ()	FAX No. - N° de FAX (819) 953-2953
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

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

This solicitation amendment 001 is raised to answer questions from bidders and amend Annex "B" and Appendix 1;

1. Questions from Bidders;

Question 1:

Regarding: 3.6.1 – required payload of 45 tonnes (100,000 pounds)

Will the Customer consider reducing the payload requirement?

Answer:

The trailer payload requirements have been amended. Please see updated specification dated 10 January, 2014.

Question 2:

Regarding: 3.6.2(b) – required deck length of 10.6m (35 feet)

Will the Customer consider reducing the required deck length?

Answer:

No. The deck length is unable to be reduced with our current requirements. Please see updated specification dated 10 January, 2014 which could have impact on proposed trailer length.

Question 3:

Regarding: 3.7.1 (a) – required self contained engine located at the rear of the trailer;
3.16 (g) – required winch located at the rear of the trailer

Will the Customer consider the installation of the engine and winch on the gooseneck?

Answer:

Please see updated specification dated 10 January, 2014. The specification has been amended to remove defined winch and engine locations.

Question 4:

Regarding: 3.8 (e) – The brake housings shall have dust shields

Will the Customer consider removing this requirement?

Answer:

No. Brake dust shield are required for the trailer.

Question 5:

Regarding: 3.14 (e) – required hinged bridge plates for vehicle access to upper rear deck

Will the Customer accept removable bridge plates or ramps ilo (in-lieu-of) hinged plates?

Answer:

Yes. Removable and stowable bridging plates are acceptable. Please see updated specification dated 10 January, 2014.

Question 6:

Regarding: 3.14.1 (a) – required deck material is 64mm rough fir planks

Will the Customer accept 35 mm hardwood or equivalent decking?

Answer:

The requirement is defined as a *shall*^(E). Any option will be considered as equivalent as long as appropriate technical information demonstrating the proposed solution will support the loading and transportation of the payload defined within the purchase description.

2. At Annex B Purchase Description;

DELETE: Annex “B” dated 10 Oct 2013.

INSERT: Annex “B” dated 10 Jan 14.

3. At Appendix 1 Technical Informtion Questionnaire;

DELETE: Appendix 1 dated 10 Oct 2013.

INSERT: Appendix 1 dated 10 Jan 14.

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME



NOTICE

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

AVIS

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

10 October 2013
Modified 10 January 2014

ANNEX "B"

PURCHASE DESCRIPTION

FOR

SEMI-TRAILER, LOW BED, MEDIUM SUPPORT VEHICLE SYSTEM (MSVS) RECOVERY VARIABLE HEIGHT, 35 FOOT ULTRA LOW DECK, HYDRAULIC, REMOVABLE GOOSENECK

1.Scope

1.1 Scope This document covers a semi-trailer, low bed. This trailer will be used primarily to transport a Canadian Armed Forces MSVS Mil-COTS vehicle on gravel and paved roads.

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

- (a) Requirements, which are identified by the word "***shall***", are mandatory. Deviations will not be permitted.
- (b) Requirements identified by "***shall***^(E)", are mandatory. However, the Technical Authority will consider alternatives for acceptance as a Technical Authority Approved Equivalent. "Technical Authority Approved Equivalent" is defined as an alternative standard, design, feature, or component that is evaluated by the Technical Authority and determined to meet the specified requirements for equivalent standard, form, fit, function and performance as applicable.
- (c) Requirements identified with a "will" define actions to be performed by the Crown 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 a standard is specified and the Contractor has offered an equivalent, that equivalent

standard ***shall*** be provided, upon request.

- (g) Where certification is required, the Contractor ***shall*** provide the certification or acceptable proof of compliance, upon request.
- (h) Metric measurements ***shall*** be used as defining the requirement. Other measurements are reference only and may not be exact conversions.
- (i) 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 ***shall*** be applied to the interpretation of this Purchase Description:

- (a) “Technical Authority” (TA) is the government official responsible for technical management of this requirement. The Technical Authority is the Director Support Vehicles Program Management.
- (b) “Technical Authority Approved Equivalent” means a standard, means, or component type, which has been evaluated by the Technical Authority and determined to meet the specified requirements for form, fit, function, and performance.
- (c) “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.
- (d) “MSVS” – Medium Support Vehicle System.

2. APPLICABLE DOCUMENTS

2.1 Government Furnished Documents - NOT APPLICABLE

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

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

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

3. REQUIREMENTS

3.1 **Standard Design** - The system ***shall***:

- (a) Be the manufacturer's latest model having demonstrated industry acceptability by having been manufactured and sold commercially for at least 2 years, or, ***shall*** be manufactured by a company that has at least 5 years experience in design and manufacturing of a comparable type of equipment of equivalent or greater complexity.
- (b) Have engineering certification available, upon demand, for this application from the original manufacturers of major equipment systems and assemblies.
- (c) Conform to all applicable laws, regulations and industrial standards governing manufacture, safety, noise levels and pollution in effect in Canada at the time of manufacture.
- (d) Have system and component capacities not greater than their published ratings (i.e. product or component brochures).

3.2 **Safety Standards**

3.2.1 **Safety Regulations** - The system ***shall*** meet the provisions of the Canada Motor Vehicle Safety Act in effect on the date of manufacture of the system.

3.2.2 **Human Engineering and Safety**

The Canadian Forces (CF) population of Users ***shall*** be able to safely use and operate the trailer / equipment.

The trailer / equipment ***shall*** have entry and exit points equipped with handles and steps appropriately sized and positioned to be employed by CF Users having anthropometric characteristics ranging from 95th percentile male characteristics to 5th percentile female characteristics. Where required for operator safety the trailer ***shall*** be equipped with safety features such as warning and instruction plates, non-slip walking surfaces and heat shields.

3.3 **Maintainability** All maintenance and repair tasks, especially routine operator maintenance, ***shall*** be easy to perform with a minimum of special tools and skills.

3.4 **Operating Conditions** The system, under all load conditions, ***shall*** operate safely and efficiently as follows without degradation in performance, reliability and maintainability:

- (a) On paved roads, gravel roads and dirt roads with severe washboard and pot holes.
- (b) In the temperature range of -40°C to 37°C (-40°F to 98°F).
- (c) With the stated payload under all operating conditions.

3.5 Speed The trailer ***shall*** be capable of being towed at a speed of 105-km/h (65-mph) at rated payload.

3.6 Semi-Trailer

3.6.1 Payload

- (a) The trailer ***shall*** be capable of transporting an MSVS vehicle at maximum GVWR. Weights and Dimensions for a Canadian MSVS can be found in Appendix A.
- (b) The trailer ***shall*** have a minimum payload capacity of 30 tonnes (60,000 lbs), evenly distributed over the deck length.

3.6.2 Dimensions The following apply:

- (a) The trailer ***shall*** have a width of 2,615 mm (102 inches) with extensions to increase the width to 3048 mm (120 inches).
- (b) The trailer ***shall*** have a total working deck length of at least 10.6 m (35 feet).
- (c) The trailer kingpin setback ***shall*** ^(E) be 406 mm (16 inches) from the nose of the gooseneck.
- (d) The trailer ***shall*** have an adjustable height kingpin. The kingpin height ***shall*** ^(E) have a range of 1,397 mm (55 inches) in the heights position to 1,219 mm (48 inches) in the lowest position.
- (e) The trailer when loaded with a Canadian MSVS ***shall*** have a maximum height of 4.1m (13' 6").

3.7. Auxiliary Power Systems

3.7.1 Engine The following apply:

- (a) An engine to power the hydraulic system(s) ***shall*** be provided.
- (b) The engine ***shall*** be protected from the elements in an engine compartment. The engine compartment access door(s) ***shall*** ^(E) be mounted on hinges that are designed to allow the door(s) to be swung open or lifted straight up. This feature is required to allow the operator access to the engine compartment when the trailer is transporting a load that prohibits the door(s) from being swung open. The door(s) ***shall*** ^(E) have means to stay open when the operator is working on the engine. The door(s) ***shall*** have louver(s) to allow air flow into the engine compartment.
- (c) All engine controls and instrument gauges ***shall*** be mounted in a illuminated, weatherproof compartment on the left exterior side of the gooseneck.
- (d) The engine ***shall*** ^(E) have a magnetic drain plug for the oil pan.
- (e) The engine ***shall*** be supplied with a 120-volt engine block/oil heater.
- (f) The engine compartment ***shall*** have a heater.

(g) The engine compartment **shall** be illuminated with LED working lights. The light switch control **shall** be mounted with engine controls and instruments..

(h) The engine exhaust **shall**^(E) be directed away from all controls, wiring and hoses.

3.7.2 Engine Shut-down Protection The engine **shall** have both an automatic low oil pressure shutdown device and an automatic high temperature shutdown device.

3.7.3 Engine Instruments Engine operating parameters **shall**^(E) be output to illuminated gages. Engine temperature, engine oil pressure, engine output voltage and engine running time (measured in hours) **shall** be displayed on the instrument panel.

3.7.4 Batteries A heavy-duty maintenance free battery(s) **shall** be provided. The battery(s) **shall**^(E) have a minimum total capacity of 700-CCA.

3.7.5 Filtration Systems The following **shall** be provided:

(a) The engine **shall** have a dry type air filter with replaceable elements.

(b) The engine fuel and oil filters **shall** be spin off replaceable type.

3.7.6 Fuel Tank A fuel tank with a minimum capacity of 18-litres **shall**^(E) be provided. The fuel tank **shall** be equipped with a fuel gauge.

3.8 Brakes The trailer **shall** be equipped with an anti-lock air brake system. The following applies:

(a) The brakes **shall** have automatic slack adjusters;

(b) The brakes **shall** have dust shields;

(c) The air tanks **shall** be equipped with remote cable operated drain valves with heated moisture expelling valve(s);

(d) The brakes **shall** have colour coded glad hand couplers with dummy glad hand couplers equipped with a safety chain provided for each glad hand; and

(e) The brakes **shall** be equipped with stroke indicators.

3.9 Gross Axle Weight Rating (GAWR). The GAWR for each axle of the system **shall** be selected and defined by the manufacturers. The defined GAWR(s) **shall** be demonstrated as suitable for all load cases defined in Appendix A. All components factoring into the determination of the GAWR(s) including; axle, brakes, tires, rims and suspension **shall** not exceed the manufacturers rated capacities of those individual components/systems.

3.10 Suspension. The following applies:

(a) The trailer **shall** have an automatic height control valve.

- (b) The trailer **shall** have a manual suspension air dump valve.
- (c) The trailer **shall** have shock absorbers on all axles.
- (d) The trailer **shall** have an air gauge to assist the operator in evenly distributing the load.
- (e) The trailer **shall** have suspension travel limiters. These are devices that prevent suspension over-travel while slinging or lifting the trailer for decking or sea transport. The devices **shall**^(E) be cables or chains fastened to the suspension beam or axle and the under frame at a length approximately equal to or less than the shock absorber extended stroke. The use of shock absorbers as travel limiters is not acceptable.

3.11 Wheels, Tires and Rims

- (a) The trailer wheel assembly **shall** have size and ply ratings which comply with the Tire and Rim Association Standards;
- (b) Components of the wheel assembly **shall** be adequately sized for application and trailer capacity for all scenarios provided;
- (c) The trailer **shall** have a hubodometer reading in kilometres;
- (d) The trailer rims **shall** be non-polished aluminum wheels;
- (e) The trailer **shall** be equipped with wheel nut torque indicators;
- (f) The tires **shall** have an on/off road tread pattern; and
- (g) **Spare Tires** Two spare wheel assemblies **shall** be provided. The spare wheel assemblies **shall** have a mounting location on the trailer. The Technical Authority will approve the spare wheel assemblies mounting location.

3.12 Electrical System The following applies:

- (a) The engine **shall** have a keyless ignition “Start/Stop” switch.
- (b) The engine **shall** be equipped with a suitably sized alternator to maintain a full charge at the batteries.
- (c) The trailer **shall** be equipped with a multi voltage system: a 12 volt negative ground electrical system in accordance with CMVSS and a 24 volt SMP (Standard Military Pattern) compliant system.
- (d) The trailer **shall** have two connectors located in accordance with SAE Recommended Practice J702. One connector **shall** be a seven-pin 12-volt trailer receptacle for commercial use. The second connector **shall** be compatible with a SMP system.

- (e) All electrical components ***shall*^(E)** be easily accessible for servicing.
- (f) **Protected Wiring** - The wiring ***shall*** be protected by design and positioning to prevent damage and contact with spilled hydrocarbon fuels. This ***shall*** meet the minimum requirements of NFPA 407 (paragraph referring to **Vehicle Lighting and Electrical Equipment**). This ***shall*** include as a minimum electrical wiring used for the connection to the tractor vehicle designed for heavy-duty use, with positive engaging connectors, which are mounted securely to the trailer.
- (g) A coloured wiring schematics for the trailer ***shall*** be provided. The wiring schematics ***shall*** include details of the multi voltage LED lighting system, engine wiring and all other trailer electrical components.

3.13 Lighting The following applies:

- (a) All trailer lighting ***shall*** be multi voltage LED lights.
- (b) SMP blackout lighting is not required.
- (c) The trailer lights and reflectors ***shall*^(E)** be recessed or otherwise protected from damage.
- (d) The trailer clearance lights and reflectors ***shall*** be installed in accordance with CMVSS standards for commercial operations. This ***shall*** include:
 - i Three red identification lights in a cluster, at the centre of the rear of the trailer.
 - ii At least one license plate light.
 - iii Four red clearance lights.
 - iv Two amber clearance lights one each side at the front.
 - v Four red reflectors positioned at each rear corner.
 - vi Trailer mid section clearance and signal lights.
- (d) The trailer ***shall*** be provided with two detachable amber strobe lights, one at each rear corner of the trailer. The amber strobe lights ***shall*** be activated when the trailer running lights are activated.
- (e) The trailer ***shall*** be provided with four adjustable working lights mounted outside of engine compartment. Two ***shall*^(E)** be facing forward and two facing rearward. The light switch ***shall*^(E)** be mounted outside the compartment and ***shall*^(E)** be weather resistant.
- (f) A LED strobe light bar for the wide load sign ***shall*** be provided. The strobe light bar ***shall*** be activated when the trailer running lights are activated.
- (f) Wide load pullout lights at the front and rear corners ***shall*** be provided.

3.14 Trailer Construction

- (a) The trailer frame **shall** be reinforced for towing points.
- (b) The main frame beams **shall^(E)** be constructed of high strength steel with yield strength of at least 689-MPa (100,000-psi) and load bearing cross members constructed of high strength steel with yield strength of at least 552-MPa (80,000-psi).
- (c) The trailer deck **shall** be equipped with side extensions (outriggers). The side extensions **shall** add at least 254-mm (10-inches) to each side of the trailer, for a total of at least a 508-mm (20-inch) increase to the overall width. The side extensions **shall** be equipped with suitable, removable planking. The planking **shall** be the length of the working/main deck. The side extensions **shall** have the capacity to support a load equivalent to the deck area and **shall** have a lockable device to secure the side extensions in place. When not in use, the side extensions **shall** fold out of the way to a secured position.
- (d) The trailer **shall** be equipped with two tapered, flip-up, ramps one on each side of the trailer. The ramps **shall^(E)** be located between the outside edge and the side of the gooseneck, and be as wide as possible. Ramps **shall** be securely stowed using chains while not in use. The ramps will be used to facilitate the loading of wheeled vehicles.
- (e) Hinged or removable bridging plates located between the main deck and the rear portion of the trailer over the axles **shall** be provided. Removable plates **shall** have a stowed position on the trailer when not in use.
- (f) All pin and pivot holes **shall^(E)** be equipped with replaceable bushings. The surface of each pin **shall^(E)** be knurled/spiralled to allow grease to encircle the pin and reach the end plate.

3.14.1 Deck Floor The deck floor :

- (a) The deck floor **shall^(E)** be 64-mm (2.5-inches), rough, fir planks. The rear deck area **shall** be steel checker plate.
- (b) The deck floor **shall^(E)** be treated with Linseed oil.
- (c) The rear deck **shall** cover the top wheel openings as this area will be used to transport vehicles or cargo.

3.14.2 Features The following, with nominal dimensions, **shall** be provided:

- (a) **Exterior Side Tie-down Points**. The trailer **shall^(E)** be equipped with eight tie-down points (D-rings) on each exterior side beam and an additional four tie-down points (D-rings) on each side of the decking above the tridem axles. Two additional flush mounted tie-down points (D-rings), one on each side, at the rear of the trailers **shall^(E)** be provided. Tie-down rating **shall** be at least 9,072-kg (20,000-lbs)
- (b) **Main Deck/Rear Deck Mounted Tie-down Points**. Two rows, evenly spaced, recessed flush mounted tie-down rings with drain holes, bolted to the main deck floor and not more than 203-mm (8-inches) from the sides **shall^(E)** be provided. Each row will contain nine tie-downs. Additional

tow rows of four tie-downs on each side of the rear deck **shall** be provided. Tie-down rating **shall** be at least 9,072-kg (20,000-lbs).

- (c) **Gooseneck Mounted Tie-down Points**. Two rows of two tie-downs on the gooseneck **shall** be provided. Tie-down rating **shall** be at least 9,072-kg (20,000-lbs).
- (d) **Storage Compartments**. Two, lockable, upper deck, storage compartments **shall** be provided. The compartments floor **shall**^(E) be covered with DRI decking. The floor of the compartment(s) **shall** be equipped with drain holes with evacuation valves.

The following compartment size is provided as guidance: 152-mm (6-inches) high by 279-mm (11-inches) wide by 737-mm (29-inches) deep.

3.14.3 Kingpin A 51-mm (2-inch) kingpin **shall** be provided.

3.15 Hydraulic System The following applies:

- (a) The hydraulic system **shall**^(E) have a 45-litre capacity reservoir tank. The tank **shall**^(E) include;
 - i An intake filter screen.
 - ii An inspection plate bolted to a raised lip located on the top of the tank.
 - iii An external fluid level indicator.
- (b) Two hydraulic filters, one located in the pressure line and the other located in the return line **shall** be provided.
- (c) Auxiliary couplers with captive protective caps and a selector valve in order to power the system from an external source **shall** be provided. The couplers and selector valve **shall**^(E) be conveniently mounted on the left or right exterior side of the gooseneck.
- (d) A Wet kit connector on the front of the gooseneck **shall** be provided.
- (e) All forward hydraulic controls **shall**^(E) be conveniently located on the left exterior side of the gooseneck.
- (f) Hydraulic schematics for the entire hydraulic system **shall** be provided.

3.16 Winch A hydraulic winch **shall** be provided. The following applies:

- (a) The winch **shall**^(E) have a first layer load capacity of at least 13,608-kg (30,000-lbs);
- (b) The winch **shall**^(E) be equipped with a minimum of 38.5-metre (85-foot), 5/8-inch cable with a suitably sized hook;
- (c) The winch **shall**^(E) be equipped with dual slope winch cable rollers;

- (d) The winch ***shall*^(E)** be equipped with air cable tensioner;
- (e) The winch ***shall*^(E)** be equipped with air operated winch free wheel;
- (f) The winch ***shall*^(E)** be provided with a remote control for winch operation; and
- (g) The winch ***shall*^(E)** be equipped with a four (4) roller fairlead.

3.17 Miscellaneous Equipment

3.17.1 Equipment Location All systems and components ***shall*** be properly located and/or protected from road hazards such as water, mud and gravel.

3.17.2 Towing/Tie-down Points Two rear towing points positioned and of sufficient strength to permit recovery ***shall*** be provided.

3.17.3 Mud Flaps Rubber mud flaps rear of the rear axle ***shall*^(E)** be provided.

3.17.4 Conspicuity Tape Strips of reflective tape ***shall*** be applied in accordance with Transport Canada regulations.

3.17.5 Licence Plate Holder An illuminated rear licence plate holder ***shall*** be provided.

3.17.6 Document Holder A document holder ***shall*** be provided. The holder ***shall*^(E)** be installed on the left front of the semi trailer deck.

3.18 Paint and Corrosion Protection The trailer ***shall*** be painted in accordance with the manufacturer's best production procedures using standard commercial practices and materials, rendering a durable finish of the required film thickness and a smooth appearance free from runs, sag and orange peel. The finish ***shall*** be olive drab 34088 in accordance with FED STD 595. All additional lettering and symbols on the outside of the trailer ***shall*** be flat black using paint compatible with the topcoat selected. The colour ***shall*^(E)** be flat black 37030 in accordance with FED STD 595.

3.18.1 Corrosion Protection System The following applies:

- (a) Dissimilar metals ***shall*** be protected against galvanic corrosion.
- (b) In addition to standard factory rustproofing, a rust prevention coating ***shall*** be applied to the trailer underbody. The product applied ***shall*^(E)** be a commercial product such as Krown Rust, or Rust Check. A decal and warranty papers ***shall*^(E)** accompany the trailer.

3.19 Miscellaneous

3.19.1 Identification Plate The following information ***shall*** be provided as a minimum, permanently marked and in a conspicuous and protected location:

- (a) Manufacturer, model, model year and serial number.

- (b) GAWR and GVWR ratings.

3.19.2 Warning and Instruction Plates

- (a) The warning and instruction plates **shall** be within easy view of the user and in accordance with standard commercial practice.
- (b) The warning and instruction plates **shall** be international symbols and/or bilingual markings.
- (c) The warning and instruction plates **shall** have instructions for engine starting and any other special procedures to be followed.
- (d) All tie-down locations as described in section 3.14.2 **shall** have the maximum load rating permanently marked at each location.

3.19.3 Lubricants and Fluids The trailer **shall**^(E) be serviced with standard lubricants and fluids compatible with the delivery location and season.

3.20 Deliverable Information The following is applicable to the complete system. The following items **shall** be provided:

- (a) **Equipment Manuals** – The following manuals **shall** be provided:
- i. **Operator's/Owner's Manuals** – Operator's manuals **shall** be furnished in a bilingual format or as 2 manuals in a single binder (one English, one French). **A hard copy of the Operator's manual shall be delivered with each trailer.**
 - ii. **Parts Manuals** – The Parts Manuals **shall** be in English (French translation is desirable).
 - iii. **Maintenance (Shop Repair) Manuals** - The Maintenance (Shop Repair) Manual **shall** be in English (French translation is desirable).
 - iv. A copy of the manuals on CD/DVD-ROM will be acceptable. This **shall** include all the manuals provided in clauses 3.20 (a) i, ii and iii. For usability, CD/DVD-ROM **shall not** require password to be accessed. The mandatory requirement as detailed in paragraph 3.20(a) i **shall** be met.
 - v. **Sample Manuals** – A set of Sample Manuals, including all of the above manuals. The sample manuals **shall** be delivered to the Technical Authority 15 working days before delivery of trailers. Sample manuals will not be returned. The Technical Authority will provide manual approval or comments within 30 days.
- (b) **Data Summary** – The Contractor **shall** provide a Data Summary to the Technical Authority for each complete trailer make/model furnished. The Contractor **shall** complete Data Summary by filling in the required data and an electronic picture into a Data Summary template provided by the Technical Authority.

- (c) **Photographs** – The contractor **shall** provide the Technical Authority with two (2) digital pictures, one of the left front three-quarter view, and one of the right rear three-quarter view. All pictures **shall**^(E) be taken with a clear uncluttered background.
- (d) **Warranty Letter** – The contractor **shall** provide a copy of the completed Warranty Letter with each trailer shipped in the format approved by the Technical Authority. The Contractor **shall** send a copy of the completed Warranty Notification Letter to the Technical Authority for each trailer shipped, at shipment. A copy of the Warranty Letter **shall** be forwarded to the Technical Authority in electronic format.
- (e) **Line Setting Ticket** – The Contractor **shall** provide a Line Setting Ticket, or equivalent, describing the components provided on the system. One copy of the Line Setting Ticket **shall** accompany each completed trailer to the final delivery point. One copy of the Line Setting Ticket **shall** be forwarded to the Technical Authority as soon as they are available.
- (f) **Familiarization** - A Contractor representative **shall** provide a minimum of six (6) hours of Operator familiarization training to a maximum of eight (8) persons and a minimum of six (6) hours of Maintainer familiarization training to a maximum of eight (8) persons at each delivery location. A proof of familiarization instruction completion **shall** be provided through a Familiarization Instruction Completion Form. The Form **shall** be completed and signed by an authorized representative. The form **shall** accompany the payment invoice. Familiarization **shall** be available in French and English. The Technical Authority will provide Familiarization Instruction Completion Form template.

4. **QUALITY ASSURANCE PROVISIONS**

4.1 Quality System Requirements- The Contractor's Quality System **shall** be in compliance with Quality Assurance Clause found in the Contract. The contractor **shall** be responsible for the Quality System. The Quality Assurance Representative (QAR) will assure that the contractor is providing a Quality System.

4.2 Performance and Verification Testing- The first system **shall** be examined and performance tested by the contractor, to ensure item by item conformance to specified requirements. The QAR and/or the Technical Authority may witness this testing and operate the system sufficiently to assess the handling characteristics.

APPENDIX A – Weights and Dimensions

Note: Information contained within Appendix A has been reproduced from: C-32-F41-000/MA-000, Data Summary, Truck, 8 Tonnes, 6x6 Cargo, MSVS, MILCOTS, Canadian Series Field Engineer. Dated: 2010-09-08. Some illustrations have been modified from the original document.

All Dimensions provided are in millimetres (mm).

WEIGHTS AND DIMENSIONS

Curb Weight	15043 kg (33,009 lbs)
Gross Vehicle Weight Rating	21772 kg (48,000 lbs)
Payload Capacity	6729 kg (14,991 lbs)
Towed Load Capacity	9979 kg (22,000 lbs)
Overall Length	11113.35 mm (437.53 in.)
Overall Height	3754.00 mm (143.74 in.)
Overall Width	2580.67 mm (101.60 in.)
Cab Height to Ground (Including Storage Box)	3232.00 mm (127.24 in.)
Cargo Box Length (Over All)	3918.00 mm (154.25 in.)
Cargo Box Length (Outside Bulkhead)	3821.00 mm (150.43 in.)
Cargo Box Length (Inside Bulkhead)	3625.00 mm (142.16 in.)
Cargo Box Width (Inside Bulkhead)	2378.01 mm (93.62 in.)
Cargo Box Width (Outside Bulkhead)	2498.66 mm (98.37 in.)
Cargo Box Floor Height	1621.70 mm (63.85 in.)
Wheel Base	6650.00 mm (261.81 in.)
Front Track Width	2159.00 mm (85.00 in.)
Rear Track Width	2139.95 mm (84.25 in.)
Pintle Hook Height	959.00 mm (37.76 in.)

Tires

Make	Michelin
Type	XZL - Load range J
Size	395/85R20

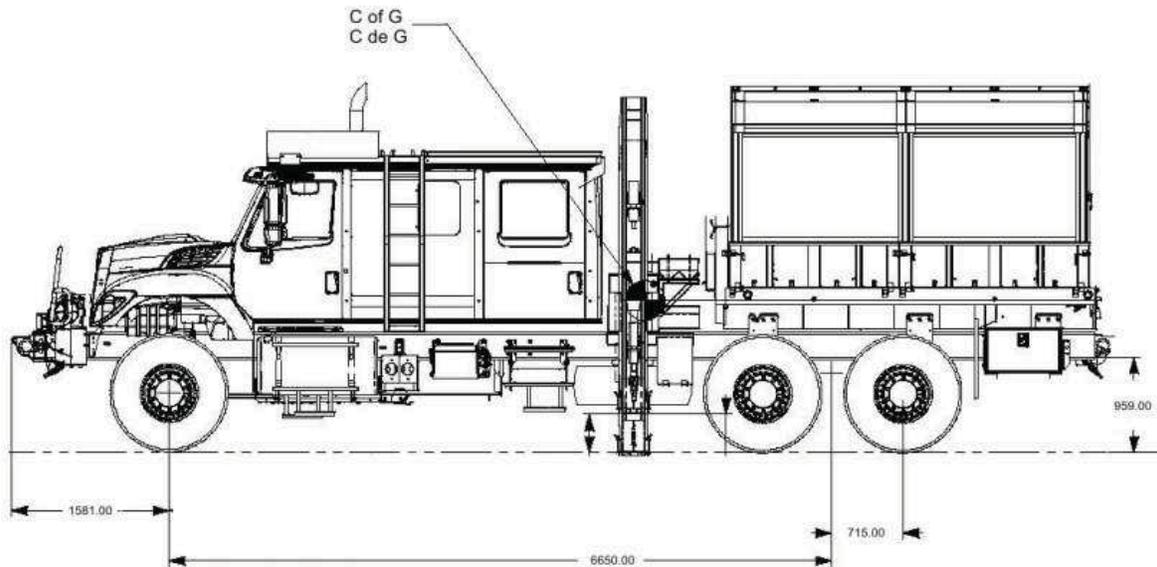


Figure 1: Left Side

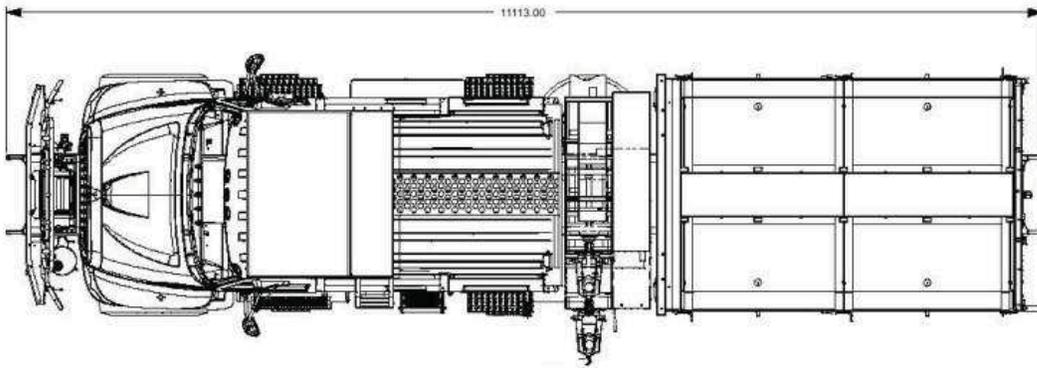


Figure 2: Top View

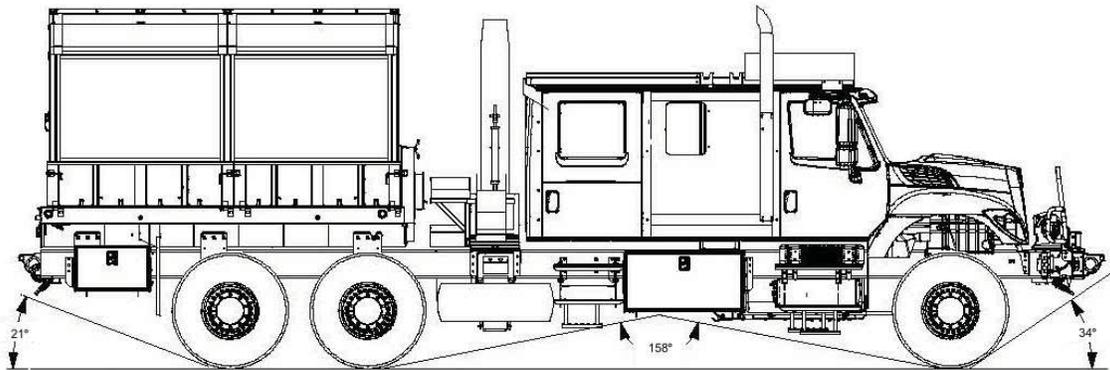


Figure 3: Right Side - Approach

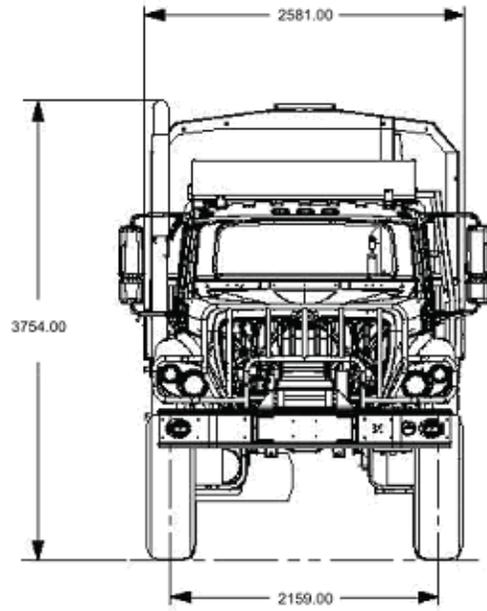


Figure 4: Front View



NOTICE

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

AVIS

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

10 October 2013
Modified 10 January 2014

**SEMI-SEMITRAILER, LOW BED, MEDIUM SUPPORT VEHICLE SYSTEM (MSVS)
RECOVERY VARIABLE HEIGHT, 35 FOOT ULTRA LOW DECK, HYDRAULIC,
REMOVABLE GOOSENECK**

TECHNICAL INFORMATION QUESTIONNAIRE

This questionnaire covers technical information, which *shall* be provided for evaluation of the configuration(s) of the vehicle(s) offered.

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

Bidders should indicate the requested information and indicate the document name/title and page number where the Proof of Compliance can be found.

Definitions for *Equivalent* and *Proof of Compliance* are found in the DEFINITIONS section at the end of this document.

CONTRACTOR INFORMATION

Contractor Name _____

Proposal Date _____

Substitutes/Alternatives

Are any equipment substitutes/alternatives offered as *Equivalent*? YES NO
If yes, please identify all equipment substitutes/alternatives offered as *Equivalents* below:

OPI DSVPM 4 – DAPVS 4

Issued on Authority of the Chief of the Defence Staff

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



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REQUIRED TECHNICAL INFORMATION AND DOCUMENTS:

Make: _____, Model: _____, Year: _____

Load Analysis – Proof of Compliance

A semitrailer load analysis showing all semitrailer axle and kingpin loads under loading scenarios provided in Appendix A as well as the minimum required payload defined in Section 3.6.1 is required for Proof of Compliance.

Information can be found in document(s): _____ page: _____.

Semitrailer Drawing(s) – Proof of Compliance

Semitrailer Drawing(s) showing semitrailer configuration and dimensions is required for Proof of Compliance.

Information can be found in document(s): _____ page: _____.

SPECIFICATION PARAGRAPHS

3.6.1 Payload – Proof of Compliance

(a) MSVS transporting requirements:

(Technical drawings and load analysis are the suggested proof of compliance to demonstrate capability against Appendix A requirements)

Payload information can be found in document(s) _____ page: _____.

Dimensional information can be found in document(s) _____ page: _____.

(b) Minimum Payload requirements:

The rated payload of the semitrailer is: _____ kg.

The empty weight of the semitrailer is: _____ kg.

Rated payload information can be found in document(s): _____, page: _____.

3.6.2 Dimensions – Proof of Compliance

Clause	Description	Value	Document Name/Title	Page
3.6.2 (a)	Semitrailer width			
3.6.2 (a)	Semitrailer width – Extensions			
3.6.2 (b)	Deck Length			
3.6.2 (c)	Kingpin Setback location			
3.6.2 (d)	Kingpin height – Highest			
3.6.2 (d)	Kingpin height – Lowest			
3.6.2 (e)	Loaded semitrailer height			

3.7.1 Engine

Engine make: _____ model: _____.

Fuel type is: _____.

Engine information can be found in document(s): _____ page: _____.

3.8 Brakes – Proof of Compliance

(a) Anti-lock air brake system configuration can be found in document(s): _____ page: _____.

3.9 Gross Axle Weight Rating (GAWR) – Proof of Compliance

GAWR information can be found in document(s): _____ page: _____.

GAWR is: _____ kg,

Axle configuration can be found in document(s): _____ page: _____.

Axle capacity is: _____,

And can be found in document(s): _____ page: _____.

Suspension configuration can be found in document(s): _____ page: _____.

Suspension capacity is: _____,

And can be found in document(s): _____ page: _____.

Tire make: _____ model: _____.

Tire load rating is: _____ kg,

And can be found in document(s): _____ page: _____.

Brake system rated capacity is: _____,

And can be found in document(s): _____ page: _____.

3.14 Semitrailer Construction – Proof of Compliance

(b) Main frame material and construction can be found in document(s): _____ page: _____.

3.14.1 Decking information can be found in document(s): _____ page: _____.

3.16 Winch – Proof of Compliance

Winch make: _____ model: _____.

(a) Winch capacity is: _____ kg.

Winch information can be found in document(s): _____ page: _____.

DEFINITIONS

The following definitions apply to the interpretation of this Technical Information Questionnaire:

- a) “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.

- b) “Proof of Compliance” is defined as an unaltered document, such as a brochure and/or technical literature and/or a third party test report provided by a nationally and/or internationally recognized testing facility and/or a report generated by a nationally and/or internationally recognized third party software. The document ***shall*** provide detailed information on each performance requirement and/or specification. Where a document submitted as Proof of Compliance does not cover all the performance requirements and/or specifications or when no such document is available or when modifications to the original equipment or customization are required to achieve the performance requirements and/or specifications, a Certificate of Attestation (as a separate document) signed by a senior engineer representing the Original Equipment Manufacturer (OEM) detailing the modifications and how they meet the performance requirements and/or specifications ***shall*** be provided. The certificate ***shall*** detail all performance requirements and/or specifications required to substantiate compliance. One certificate can be provided for one or all performance requirements and/or specifications.