

National Defence

National Defence Headquarters Ottawa, Ontario K1A 0K2

# 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.

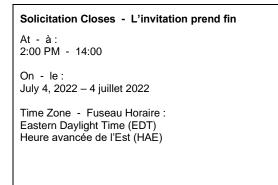
Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires** 

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

By e-mail to: - Par courriel au : DLP53BidsReceiving.DAAT53Receptiondessoumissions@forces.gc.ca

Attention: - Attention : Genevieve Roach DLP 5-3-4-6



Défense nationale

Quartier général de la Défense nationale Ottawa (Ontario) K1A 0K2

Title - Sujet ARC WELDING TRUCK CAMION DE SOUDAGE À L'ARC ÉLECTRIQUE		Amendment No N° modif 001
W8476-226569/B	June 22, 2022 –	22 juin 2022
Address enquiries to: - Adress	er toute demand	e de renseignements à :
Genevieve Roach		
E-Mail Address - Courriel		
Genevieve.roach@forces.gc.ca		
Destination		
See herein - Voir aux présentes		

**Instructions:** Municipal taxes are not applicable. Unless otherwise specified herein all prices quoted must include all applicable Canadian customs duties, GST/HST, excise taxes and are to be delivered Delivery Duty Paid including all delivery charges to destination(s) as indicated. The amount of the Goods and Services Tax/Harmonized Sales Tax is to be shown as a separate item.

**Instructions :** Les taxes municipales ne s'appliquent pas. Sauf indication contraire, les prix indiqués doivent comprendre les droits de douane canadiens, la TPS/TVH et la taxe d'accise. Les biens doivent être livrés « rendu droits acquittés », tous frais de livraison compris, à la ou aux destinations indiquées. Le montant de la taxe sur les produits et services/taxe de vente harmonisée doit être indiqué séparément.

Delivery required Livraison exigée	Delivery offered Livraison proposée
See herein - Voir aux prés	entes
Vendor/Firm Name and A Raison sociale et adresso	ddress du fournisseur/de l'entrepreneur
La personne autorisée à	igner au nom du fournisseur/de l'entrepreneur (tape
La personne autorisée à ou écrire en caractères d	signer au nom du fournisseur/de l'entrepreneur (taper imprimerie) :



# THIS SOLICITATION AMENDMENT IS RAISED TO:

- 1. Provide clarification and answers to questions from potential suppliers; and
- 2. Amend Annex A, Purchase Description.

# **QUESTIONS AND ANSWERS:**

Question 1	Item 3.21.1 (a): The vehicle shall have a welding body with a nominal external length of 3.6m (12ft) (Figs. 1 and 2) These figures are not in the bid document.
Answer 1	The references for figures (1 and 2) will be removed from the tender document.
Question 2	Item 3.21.2 (a) i: These compartments are to be located behind the cab on the left and right sides (Fig. 3 and 4).
Answer 2	The references for the figures (fig. 3 and 4) will be removed from the tender document.
Question 3	What color should the platform be painted?
Answer 3	The platform must be painted in white.

# THIS SOLICITATION IS HEREBY AMENDED AS FOLLOWS:

1.1 DELETE Annex A, Purchase Description dated October 22, 2021 and REPLACE with Annex A, Purchase Description dated June 20, 2022.

# ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.



# PURCHASE DESCRIPTION

# FOR

# ARC WELDING TRUCK, UTILITY BODY, 1.5-TON DED, 4X4, DUAL REAR WHEELS, W/EXTENDED CAB

2022-06-20



# NOTICE

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

## AVIS

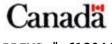
Cette documentation a été révisée par **l'autorité technique** et ne contient pas de marchandises contrôlées.

## 1. SCOPE

- 1.1. <u>Scope</u> This document describes the requirement for an extended cab, diesel powered, 4X4 cab and chassis truck, complete with 3.6 m (12 Foot) flat deck, and storage compartments. The vehicle will be used as a mobile welder.
- 1.2. Instructions The following instructions apply to this specification.
  - (a) Requirements, which are identified by the word "*must*", are mandatory. Deviations will not be permitted;
  - (b) Requirements identified with a "will" define actions to be performed by Canada and require no action/obligation on the Contractor's part;
  - (c) Where "must" or "will" are not used, the information supplied is for guidance only;
  - (d) In this document "provided" must mean "provided and installed";
  - (e) Where a standard is specified and the Contractor has offered an Equivalent, that Equivalent standard *must* be supplied by the Contractor;
  - (f) Where a technical certification is referred to in this specification, a copy of the certification or an acceptable **Proof of Compliance** *must* be supplied for the vehicle when requested by the **Technical Authority**;
  - (g) Dimensions stated as nominal are 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; and
  - (h) While the SI system *must* be used as the primary system of measurement to define

#### OPI DSVPM 4 - DAVPS 4

Issued on Authority of the Chief of the Defence Staff Publiée avec l'autorisation du chef d'état-major de la Défense



RDIMS # 6130440

© 2021 DND Canada Page 1 of 17 requirements of this specification, both the SI system and the standard system for this product may be indicated. Conversion from one system of measurement to the other may not be exact.

#### 1.3. Definitions

- (a) "Technical Authority" means the official responsible for the technical content of this requirement;
- (b) "Equivalent" means a standard, means, or component type, which the Technical Authority has approved for this requirement as meeting the specified requirements for fit, form, function and performance;
- (c) **"Road Legal"** means the vehicle can be legally operate on all Canadian highways and secondary roads, without restrictions or special permits;
- (d) "Curb Weight" (CW) means the weight of the fully equipped vehicle. The curb weight includes the cab and chassis, all attached accessories, equipment, fuel, lubricant and coolants.
- (e) "Payload" means the maximum cargo load carrying capacity of the vehicle;
- (f) "Gross Vehicle Weight" (GVW) means the sum of the Curb Weight, the weight of a driver and passenger (80 kg per person) and the weight of their personal kit and equipment and the Payload. The GVW cannot exceed the Gross Vehicle Weight Rating (GVWR);
- (g) "Gross Vehicle Weight Rating" (GVWR) means the maximum operating weight of the vehicle as stated by the manufacturer;
- (h) "Gross Combined Weight Rating" (GCWR) means the maximum allowable combined weight of the vehicle, with passengers and equipment in the vehicle and the Payload plus the weight rating of the trailer and the payload in the trailer; and
- (i) **"Cab and Chassis"** means the vehicle configuration before the addition of any features and accessories;
- (j) **"Vehicle"** is defined as a Class 5 Diesel Truck chassis complete with flat deck, and storage compartments, as detailed in this Purchase Description.

2. <u>APPLICABLE DOCUMENTS</u> - The following documents are referenced in this specification. Canada will not be supplying any reference documents. Available information on the organization is supplied.

SAE Standards

SAE World Headquarters

400 Commonwealth Dr,

Warrendale, PA, 15096-0001

http://www.sae.org

Motor Vehicle Safety Act (MVSA)

Government of Canada / Transport Canada,

http://www.tc.gc.ca/eng/act-regulations/regulations-crc-c1038htm

Hazardous Products Act

Government of Canada / Department of Justice

http://laws-lois.justice.gc.ca/eng/acts/H-3/

Federal Standard 595C

COLOURS USED IN GOVERNMENT PROCUREMENT

U.S. General Services Administration

http://www.fed\_std-595.com/FS-595-paint-spec.html

#### 3. **REQUIREMENTS**

#### 3.1. Standard Design

- (a) The vehicle *must* be the latest model from a manufacturer who has demonstrated acceptability by selling this type and size class of vehicle for at least five (5) years;
- (b) The vehicle *must* have engineering certification available for this application from the original manufacturers of major equipment, systems and assemblies;
- (c) The vehicle *must* conform to all applicable laws, regulations and industrial standards governing manufacture, safety, noise levels and emissions in effect in Canada at the time of manufacture; and
- (d) The vehicle and accessories *must* operate in accordance with all OEM (original equipment manufacturers) rated capacities and performance specifications.

#### 3.2. Operating Conditions

- 3.2.1. <u>Weather</u> The vehicle *must* start and operate under the extremes of weather conditions found in Canada in temperatures ranging from -40 to 40°C.
- 3.2.2. <u>Terrain</u> The vehicle *must* operate in all season, all-weather operations on highways and secondary roads.

#### 3.3. Vehicle Safety Regulations

- (a) The vehicle *must* meet the provisions of the Canada Motor Vehicle Safety Act;
- (b) The completed vehicle *must* be provided with a Safety Compliance Certification Label with a National Safety Mark (NSM), as a seal of compliance; and
- (c) All systems and components *must* be safe and easy to use by a 5-95<sup>th</sup> percentile male or female under all operating conditions.
- 3.4. Performance The vehicle must have the following minimum performance capabilities:
  - (a) The vehicle *must* have a road speed of at least 105 km/h operating at the GVWR on a flat, level road;
  - (b) The vehicle *must* have a gross engine horsepower of at least 300 HP;
  - (c) The vehicle *must* have a GVWR of at least 8,895 kg (19,500 lbs);
  - (d) The vehicle *must* have a payload capacity of at least 1,361 kg (3,000 lbs); and
  - (e) The vehicle *must* have a towed load capacity of at least 4,536 kg (10,000 lbs).

# 3.5. Vehicle Cab – Extended Cab

- (a) <u>Cab</u> The vehicle *must* be provided with an extended cab with a rear visibility window;
- (b) Cab Features
  - i The cab *must* be provided with a tinted side windows;
  - ii The extended cab *must* be provided with a storage area behind the front seats;
  - iii The cab *must* be provided with windshield wipers with at least two (2) continuous speeds and one (1) intermittent speed;
  - iv The windshield wipers *must* be provided with arctic wiper blades;
  - v The cab *must* be provided with two (2) rotating and pivoting interior sun visors;

- vi The cab *must* be provided with an armrest on all doors;
- vii The cab *must* be provided with coat hooks;
- viii The cab *must* be provided with black rubber floor covering;
- ix The cab *must* be provided with powered windows; and
- x The cab *must* be provided with powered door locks.
- (c) Seats
  - i The vehicle *must* be provided with a high-back driver's seat with medium to dark coloured cloth upholstered;
  - ii The driver's seat *must* be provided with a fold-up arm rest on the interior side;
  - iii The vehicle *must* be equipped with a bench seat for two (2) passengers; and
  - iv All seating positions *must* be provided with retractable shoulder/lap belt assemblies. A lap belt assembly will be acceptable for the center passenger in the front and rear seat.

# (d) Mirrors

- i The vehicle *must* be provided with two (2) extendable heavy-duty type mirrors with two convex mirrors mounted below the mirror assemblies;
- ii The mirrors *must* be Velvac Mirror with sensor or Equivalent;
- iii The mirrors *must* comply with CMVSA;
- iv The mirrors *must* provide the driver with a view to the rear along both sides of the vehicle providing an unobstructed view of blind spots and passing lanes around the vehicle;
- v The mirrors glass *must* be separately replaceable;
- vi The mirrors glass *must* be electrically adjusted from inside the cab;
- vii The mirrors glass *must* be provided with heating defrost elements;
- viii Mirror heating *must* be activated by an in-cab control accessible to the driver; and
- ix Heating elements *must* be replaceable.
- (e) Air Conditioning The vehicle must be provided with an air conditioning system;
- (f) Radio
  - i The vehicle *must* be provided with a Bluetooth connection; and
  - ii The radio *must* turn off automatically when the vehicle ignition is turned off.

## 3.6. Suspension

- (a) The vehicle *must* be provided with a front spring suspension and leaf springs with stabilizer bars rear suspension; and
- (b) The suspension system *must* be provided with shock absorbers at each wheel station.
- 3.7. <u>Engine</u> The vehicle *must* be provided with a turbo-diesel engine.

# 3.7.1. Engine Components

- (a) The engine *must* be provided with a replaceable dry-type air filter;
- (b) The engine *must* be provided with an engine coolant suitable for temperatures down to -40° C; and
- (c) The engine *must* be provided with an exhaust system that clears the body and is directed away from critical areas such as wiring, storage areas and mud flaps.

## 3.7.2. Fuel Reservoir(s)

- (a) The vehicle *must* have a total fuel capacity of at least 170 litres;
- (b) The fuel tank filler areas *must* be marked to identify the required vehicle fuel; and
- (c) The caps for fuel tanks *must* be lockable.

#### 3.7.3. Engine Cold Weather Aids

- (a) The engine *must* be provided with cold weather starting aids to enable the engine (operating with winter grade fuels/oils) to be started at temperatures down to -40° C. The engine starting aids may include but are not limited to: glow plug(s) and intake air grid heater;
- (b) The engine *must* be provided with 110-Volt AC powered engine cold start heaters (oil/coolant) with the capacity as recommended by the engine manufacturer or conforming to SAE J1310; and
- (c) The engine *must* be provided with a heated, fuel filter/water separator to preheat diesel fuel prior to starting.

## 3.8. Vehicle Driveline

## 3.8.1. Automatic Transmission

- (a) The vehicle *must* be provided with an automatic transmission;
- (b) The transmission *must* have at least five (5) forward speeds and one (1) reverse speed;
- (c) The transmission *must* be provided with a neutral start safety switch;
- (d) The transmission *must* be equipped with an instant release, electrically operated, programmable, electronic high idle control;
- (e) The high idle control *must* be connected so as not to allow the high idle to engage when the transmission is in gear and the parking is applied;
- (f) The vehicle *must* have an external transmission oil cooler; and
- (g) The vehicle *must* be provided with a power take-off (PTO).
- 3.8.2. <u>Axles</u> The vehicle *must* be provided with rear limited slip differential axle.
- 3.8.3. Brake System
  - (a) The brake system *must* be provided with anti-lock (ABS) brake system configuration;
  - (b) The brake system *must* be provided with dust shields at each wheel station; and
  - (c) The vehicle *must* be provided with a trailer brake control mounted on or near the steering column.

#### 3.9. <u>Steering</u>

(a) The vehicle *must* be provided with a power assisted steering system; and

(b) The steering system *must* be provided with a telescopic/tilt steering column.

# 3.10. Wheels and Tires

- (a) The front axle *must* be provided with single wheels;
- (b) The rear axle *must* be provided with dual wheels;
- (c) The front axle *must* be provided with tires with mud and snow treads;
- (d) The rear axle *must* be provided with tires with mud and snow treads;
- (e) All tires provided *must* be steel-belted, tubeless and radial;
- (f) All wheels provided *must* be hub piloted, disc wheels;
- (g) All wheel stations *must* be provided with loose wheel nut indicators;
- (h) The wheel assemblies *must* have a capacity equal to or greater than the load applied;
- (i) The wheel assemblies *must* be assembled in accordance with the tire and rim manufacturer's specifications;
- (j) The vehicle *must* be provided with a spare tire assembly with the same rim and tire as those mounted on the front axle;
- (k) A dedicated and secure storage location for the spare tire assembly *must* be provided on the vehicle; and
- (I) The vehicle *must* be provided with rear mud flaps mounted on angle type spring-loaded hangers or **Equivalent**.
- 3.11. <u>Controls</u> The vehicle *must* be provided with a cruise control system with a fast idle feature.

# 3.12. Instruments

- (a) All dash board gauges and readouts *must* be in metric units; and
- (b) Gauges and readouts which show both metric and English units will be accepted.

## 3.13. Electrical System

- (a) The vehicle *must* be provided with an electrical system;
- (b) The electrical system *must* be provided with an alternator with an output of at least 200 amperes;
- (c) The electrical system *must* be provided with maintenance-free batteries with at least 1,500 cold cranking amperes (CCA);
- (d) The wiring *must* be protected by insulating grommets where passing through metal;
- (e) The electrical system *must* include a backup alarm to alert personnel that the vehicle is in back-up mode;
- (f) Electrical circuits *must* be protected with fuses, relays or circuit breakers;
- (g) The wiring *must* be enclosed in a metal conduit if exposed to the exterior of the vehicle; and
- (h) A seven (7) pin electrical trailer receptacle *must* be conveniently located at the rear of the vehicle.

# 3.14. Lighting

- (a) The vehicle *must* be provided with LED lighting;
- (b) The headlights *must* use halogen or LED lights; and
- (c) The lighting system *must* include clearance lights, stop lights, turn signal lights, tail-lights and reverse movement lights.

# 3.15. Lubricants and Hydraulic Fluids

- (a) The vehicle *must* operate using synthetic non-proprietary lubricants and hydraulic fluids; and
- (b) Grease fittings *must* conform to SAE J534.

# 3.16. Paint

- (a) Welding body *must* be painted white;
- (b) Paint applied *must* be in accordance with the paint manufacturer's recommendations and the manufacturer's best production procedures, rendering a durable finish and a smooth appearance free from runs, sag and orange peel;
- (c) White *must* be applied on exposed exterior surfaces normally painted for the commercial trade;
- (d) Chassis items *must* be painted black; and
- (e) Chromed, polished and mill finished surfaces *must* not be painted.
- 3.17.1. **Conspicuity** Conspicuity tape *must* be provided in accordance with MVSA regulations.
- 3.17.2. <u>Corrosion Protection</u> The vehicle *must* be provided with a rust protection treatment such as Krown Rust Control, Rust Check or an **Equivalent**.
- 3.18. <u>Identification</u> The vehicle information (manufacturer's name, model, Vehicle Identification Number (VIN) and the GAWR, GVWR and GCWR ratings) *must* be permanently marked in conspicuous and protected locations.

## 3.19. Warning and Instruction Plates

- (a) The vehicle *must* be provided with warning and operation instruction plates in accordance with SAE J115; and
- (b) The plates *must* use graphic symbols, as defined in SAE J1362 or be written in the two (2) official languages (English and French).

# 3.20. Equipment, Features and Accessories

- 3.20.1. Equipment
  - (a) <u>Tow Hooks</u>
    - i The vehicle *must* be provided with tow hooks mounted at the front and at the rear; and
    - ii Tow hooks and mountings of sufficient strength to permit the recovery of the vehicle *must* be provided.

## (b) License Plate Holders

i The vehicle *must* be provided with front and rear license plate holders; and

- ii The rear license plate *must* be illuminated.
- (c) <u>Filler Caps</u> The vehicle *must* be provided with permanently marked filler caps, which identify the contents using international symbols or in writing using both French and English;
- (d) Mud flaps The vehicle must be provided with front and rear mud flaps;

#### (e) Dangerous Goods Placard Holders

- i The vehicle *must* be provided with four (4) aluminum dangerous goods placard holders;
- ii One holder *must* be mounted at the centre of each side of the body, near the bottom;
- iii One holder *must* be mounted at the rear of the body, at the lower curb side corner; and
- iv One holder *must* be mounted on the front of the vehicle body on the left side.
- (f) <u>Warning Reflectors</u> Two triangular warning reflectors complete with storage case *must* be provided.

#### (g) Fire Extinguisher

- i An ABC rated fire extinguisher, minimum 2,3 kg (5 lbs) complete with a quick release mounting bracket *must* be supplied; and
- ii The bracket **must** be mounted on the rear of left vertical compartment (A) inner right rear corner of the utility body.

## 3.21. Body Equipment

# 3.21.1. Welding Body

- (a) The vehicle *must* be provided with a welding body having a nominal exterior length of 3.6 m (12 foot);
- (b) The welding body *must* have a nominal exterior width of 2.4 m (8 foot);
- (c) The welding body floor area *must* be constructed of structural channel steel main frame rails with nominal dimensions of 100 mm by 48 mm (4 inches by 1-7/8 inch);
- (d) Channel steel or "I" beam cross-members of at least 100 mm by 38 mm (4 inches by 1-1/2 inch), *must* be provided on 305 mm (12 inches) centres;
- (e) The welding body floor *must* be constructed of at least ¼ inch flat plate on the last three
  (3) feet of the deck;
- (f) The welding body *must* be mounted using "U" bolts and shear plates as required for the length of body or **Equivalent**;
- (g) The welding body floor area *must* be provided with an anti-skid coating with no wheel wells;
- (h) The welding body panelling and under structure *must* be welded steel;
- The welding body floor *must* be provided with two (2) rows of three (3) evenly spaced 2275 kg(5000 lbs) capacity, recessed (flush mounted),tie-down rings;

- (j) The tie-down rings *must* be "D" shaped with drain holes, bolted to the floor as close as possible to the sides of the floor, but not more than 203 mm (8 inches) from the sides;
- (k) The welding body floor *must* be provided with two (2) winch binders sliding tracks on the sides complete with winch binders and at least 46 mm (3 inches) x 9,144 mm (30 feet) straps;
- (I) A mounted bulkhead *must* be provided;
- (m) The bulkhead *must* be constructed using of at least 50 x 50 x 3 mm (2 x 2 x 1/8 inch) steel frame covered with at least 12 gauge steel, braced to the platform, topped with an additional section 508 mm (20 inch) high of expanded metal;
- (n) A full width recessed safety step bumper constructed of grip strut material *must* be provided.
- 3.21.2. <u>Storage Compartments</u> The vehicle *must* be provided with vertical and frame mounted storage compartments accessible from the exterior;
  - The storage compartments **mus**t be of waterproof construction with anti-return type drainage;
  - ii Holes *must* be drilled before painting, in stanchion locations to prevent water and dirt accumulation, causing premature metal damage/rust; and
  - iii All compartment bottoms *mus*t be lined with Lewitt-Safety Dri-Dek or Equivalent;

#### (a) Vertical Compartments (A)

- i The vertical compartments (A) *must* located behind the cab on the curbside and roadside;
- ii The compartments *must* have nominal dimensions of 680 mm x 610 mm x 1,760 mm (27 x 24 x 69 inches);
- iii The storage compartments sides, top and bottom *must* be constructed of at least 12 gauge steel;
- iv Each compartment *must* have a load capacity of at least 136 kg;
- v A removable, perforated vinyl matting *must* be provided on the floor of each compartment;
- vi Vertical compartment (A) left side *must* be equipped with retaining hardware to secure one (1) oxygen bottle, and one (1) acetylene bottle;
- vii Vertical compartment (A) right side *must* be equipped with retaining hardware to secure two (2) argon bottles;
- viii The vertical compartments *must* be vented on the top and the bottom; and
- ix The compartments *must* have interior LED lighting mounted in a protected location.

## (b) Horizontal Compartments (B)

- i The horizontal compartments (B) *must* be located immediately to the rear of the vertical compartment on the curbside and roadside);
- ii The compartment *must* have nominal dimensions of 762 mm x 610mm x 860mm;

- iii The storage compartments sides, top and bottom *must* be constructed of 12 gauge steel;
- iv The storage compartments *must* be evenly divided into two (2) separate compartments, with two (2) access doors;
- v Each of the four (4) compartments *must* be equipped with two (2) roll-out shelves each, and have nine (9) dividers per drawer;
- vi All drawers *must* be equipped with a lock-in latch;
- vii All shelves whether fixed or in the full rollout position *must* have a load capacity of at least 22.7 kg (50 lbs); and
- viii A grab handle shall be fitted to the rear face of each storage compartment to assist with access to the deck floor.

#### (c) Frame Mounted Compartments (C)

- i The frame mounted compartments (C) *must* be located immediately to the rear of the vertical compartment on the curbside and roadside;
- ii The compartments *must* have nominal dimensions of 660 mm x 530 mm x 300 mm (26 x 21 x 12 inches);
- iii The storage compartments sides, top and bottom *must* be constructed of at least 12 gauge steel;
- iv Each compartment *must* have a load capacity of at least 136 kg;
- v The compartments *must* have interior LED lighting mounted in a protected location; and
- vi Frame mounted storage provisions *must* be provided to securely store two (2) standard Jerry Cans.
- (d) Storage Compartments doors must be equipped with the following features:
  - i Large, recessed, stainless steel paddle handles with keyed locks. All construction body locks *must* be keyed identically;
  - ii The storage compartment doors *must* be constructed of at least 14 gauge steel;
  - iii At least two (2) bolted stainless steel hinges with non-removable pins *must* be mounted on each compartment door. Piano type hinges are not acceptable;
  - iv All doors in the vertical compartments *must* be equipped with holding open devices;
  - v A bulb type perimeter door seals *must* be installed on the door or door frame. "Peel and Stick" style door seals are not acceptable; and
  - vi Each storage compartment door *must* be equipped with flush mounted slam action latches that can be locked with a padlock.

#### 3.21.3. Electric-Hydraulic Crane

- (a) The vehicle *must* be provided with an electric-hydraulic crane;
- (b) The crane *must* be installed in the right rear corner of the work area (curbside);
- (c) The crane *must* be an Auto Crane 3203EH model or Equivalent;

- i The crane *must* have a removable, socket mounted, with 360 degree locking manual rotation;
- ii The telescopic boom *must* be within a range of 914 mm to 2,134mm (3 ft. to 7 ft.);
- iii The crane lifting capacity *must* be at least 1,450 kg (3,200 lbs);
- iv A 3,048 mm (10ft) removable plug in remote control *must* be provided; and
- v An ignition controlled power disconnect for the crane *must* be provided.
- vi The crane *must* be provided with stabilizers to support the maximum overturning moment of the crane;
- vii The stabilizers *must* be self-stowing;
- viii The stabilizers *must* be provided with pivoting foot plates; and
- ix Each foot plate *must* be provided with a load spreader plate.

### 3.21.4 Air Compressor

- (a) The vehicle *must* be provided with Hydraulic driven air compressor with storage tank;
- (b) The air compressor *must* be a VMAC H60 model or Equivalent;
- (c) The air compressor *must* have an air compressor output of at least 40 CFM;
- (d) The air compressor *must* have a storage tank of at least 60 litres; and
- (e) The air connections *must* be installed into cabinets and on rear of welding deck.

#### 3.21.5 Body Lighting System

- (a) Two (2) swivel type of at least 720 lumen, LED flood lights *must* be mounted on the upper rear exterior wall of the storage cabinets A;
- (b) The lights switch *must* be mounted on the instrument panel in the cab;
- (c) All lights *must* be wired through the accessory side of the ignition switch to a circuit that is controlled by a lighted master switch mounted on the dash;
- (d) An amber strobe light *must* be mounted on the exterior top center of the cab; and
- (e) The light switch *must* be mounted on the instrument panel in the cab;
- 3.21.6 Winch
  - (a) The vehicle *must* be provided with an electric winch;
  - (b) The winch *must* have a rated first layer capacity of at least 5,443 kg (12,000 lbs);
  - (c) The winch *must* be mounted in between the frame rails behind the front bumper;
  - (d) An automatic drag and safety brake, a free spooling feature, at least 610 mm (2 feet) leader chain with hook and a roller fairlead *must* be provided;
  - (e) A wire rope of at least 35 m (115 foot) *must* be provided;
  - (f) The rope *must* have a rated capacity of at least 5,897 kg (13,000 lbs); and
  - (g) An electric remote control with at least 3.6 m (12 feet) cable *must* be provided.
- 3.21.7 Pintle Hook

- (a) A duplex pintle hook frame mounted *must* be provided at the rear of the vehicle;
- (b) The pintle hook *must* be a Holland Hitch Model BH200RN41 or Equivalent;
- (c) The horizontal centerline of the pintle hook *must* be 610 mm to 710 mm (24 to 28 inches) above the ground;
- (d) The pintle hook assembly *must* have a towing capacity of at least 4,536 kg (10,000 lbs);
- (e) Safety chains shackles *must* be provided on each side of the pintle hook; and
- (f) The towing capacity *must* be clearly marked on the rear face of the pintle hook assembly.

## 3.21.8 Metal Storage Rack

- (a) The metal storage rack must be able to carry at least 3.6 m (12 feet) lengths;
- (b) The rack must hold up to 100lbs;
- (c) The rack must be in the center of the body on top of the deck; and
- (d) The rear upright must be removable.

# <u>4</u> INTEGRATED LOGISTIC ITEMS

# 4.1. Contractor Documentation and Integrated Logistic Items

# 4.1.1. Documents to Technical Authority (Designated Contact) on Contract

# (a) Manuals for Approval

- i The Contractor *must* supply access to a set of manuals in digital format including the operator, parts and maintenance (shop repair) manuals;
- ii The set of manuals *must* include manuals for all the specified accessories and features for the Configuration. Accessory manuals may be included as supplements to the vehicle manuals;
- iii Digital copies *must* be supplied as a searchable PDF;
- iv On-line maintenance manuals may be supplied in lieu of the digital maintenance manuals, however, these *must* be provided without subscription fees;
- v Digital copies *must* be functional without the requirement for a password, an auto-run installation procedure or an Internet connection;
- vi Digital copies *must* be supplied on a CD or a DVD;
- vii A separate CD/DVD *must* be supplied with all accessories;
- viii The CD or DVD *must* be permanently and legibly marked with a list of contents;
- ix Manuals will not be returned;
- x Manual approval or comments will be supplied within 15 working days of receipt; and
- xi The Contractor *must* supply responses to the *Technical Authority's* comments.

## (b) Photographs and Line Drawings

- i The Contractor *must* supply two (2) digital colour photographs, one left-front three-quarter full vehicle view, and one right-rear three-quarter full vehicle view;
- ii One (1) digital colour photograph of each attachment taken at the three-quarter view that best illustrates the attachment *must* be supplied;
- iii One front-view and one side-view line drawing showing dimensions of the vehicle *must* be supplied. Brochure line drawings are acceptable;
- iv Photographs *must* have a plain background;
- v Photographs *must* be in a JPEG (Joint Photographic Experts Group) format; and
- vi Photographs *must* have a resolution of at least eight (8) Mega pixels.

## (c) Data Summary

- i The Contractor **must** supply a bilingual data summary for each Configuration/model, with vehicle data (including accessories and features) and a vehicle picture;
- ii The **Technical Authority** will supply a bilingual template of a data summary to the Contractor;

- iii The Contractor *must* submit a digital copy (MS Word) of the completed data summary for approval;
- iv Data summary approval or comments will be supplied within 15 working days of receipt; and
- v The Contractor must provide responses to the **Technical Authority**'s comments.

# (d) Warranty Letter

- i The **Technical Authority** will supply a current bilingual warranty letter template to the Contractor;
- ii The Contractor **must** supply a complete description of the warranty with the requested warranty terms and any system or sub system warranty that exceeds the minimum requested;
- iii The warranty letter *must* include the name and contact information of the closest designated warranty provider and other designated warranty providers across Canada;
- iv Designated warranty providers *must* honour the warranty letter; and
- v The Contractor *must* supply a copy of the warranty letter, in PDF digital format, for each vehicle delivered, to the **Technical Authority**.

# (e) Safety Data Sheets

- i The Contractor *must* supply a list, in digital format, of all hazardous materials used on the vehicle;
- ii If there are no hazardous materials are used, this *must* be stated on the list; and
- iii The Contractor *mus*t supply safety data sheets of all hazardous materials in the list.
- (f) <u>Rust Protection Warranty</u> A copy, in digital format, of the warranty from the rust protection provider *must* be supplied, to the *Technical Authority*;
- (g) <u>**Training Plan(s)**</u> The Contractor *must* supply the training plan for approval, for each of the training requirements listed in paragraph 4.2 to the *Technical Authority*; and
- (h) <u>Line Setting Ticket</u> The Contractor *must* supply a copy of the production line setting ticket, in digital format, with supplemental listing for each completed vehicle, to the Technical Authority.
- 4.1.2. Items Supplied with Each Vehicle
  - (a) **<u>Operator's Manual</u>** The Contractor *must* supply an approved bilingual operator's manual in both paper and digital format;
  - (b) Warranty Letter The Contractor must supply a paper copy of the warranty letter;
  - (c) Safety Data Sheets
    - i The Contractor *must* supply a set of safety data sheets; and
    - ii The safety data sheets *must* be the same as those provided to the **Technical Authority** as per paragraph 4.1.1 (e).
  - (d) <u>Rust Protection Warranty</u> The Contractor *must* supply a copy of the warranty letter from the rust protection provider; and

(e) <u>Line Setting Ticket</u> – The Contractor *must* supply a copy of the production line setting ticket with supplemental list;

# 4.1.3. Additional Items

# (a) Digital Maintenance Manual - English

- i The Contractor *must* supply the approved searchable digital maintenance (shop repair) manuals in English required for maintenance and repair of the vehicle features and accessories;
- ii The Contractor may supply this deliverable as a bilingual package;
- iii On-line maintenance manuals may be supplied in lieu of the digital maintenance manuals, however, these *must* be provided without subscription fees; et
- iv Paper format maintenance manuals may be supplied in lieu of the digital maintenance manuals.

# (b) Digital Parts Manual

- i The Contractor **must** supply the approved searchable digital parts manuals required the vehicle, features and accessories on a CD/DVD-ROM;
- ii On-line parts manuals may be supplied in lieu of the digital maintenance manuals, however, these *must* be provided without subscription fees; and
- iii Digital copies *must* be functional without the requirement for a password, an auto-run installation procedure or an Internet connection.

# 4.2. <u>Training</u>

# (a) Training – Familiarization - English

- i The Contractor **must** supply a familiarization course in English, at the delivery destination, optimized for operators and technicians who are qualified on the vehicle type but require training on newer or unique features and sub-systems of the delivered model;
- ii The instructor *must* be an OEM Factory Certified Training Provider;
- iii <u>Curriculum</u>
  - 1. The familiarization course *must* include operation and maintenance segments;
  - The operation segment *must* include safety precautions to be observed while operating and servicing the vehicle, vehicle operating characteristics, preoperating and shutdown procedures and daily/weekly operator servicing procedures;
  - 3. The operation segment *must* include sub-systems including automatic grease system and pre-heaters; and
  - 4. The operation segment *must* demonstrate all safety measures required for safe vehicle maintenance.
- iv The familiarization course *must* have a minimum duration of eight (8) hours, divided into four (4) hours for operators and four (4) hours for technicians;
- v The familiarization course *must* accommodate up to eight (8) personnel; four (4) operators and four (4) technicians;

- vi For vehicles shipped to DND, the date for the familiarization course *must* be arranged with the Technical Authority, or the identified user or designated contact person for vehicles shipped for users other than DND;
- vii After completion of the familiarization course, the Contractor *must* have the "PROOF OF FAMILIARIZATION" certificate signed by the senior course attendee; and
- viii The Technical Authority will supply **the "PROOF OF FAMILIARIZATION"** document template in a digital format.

## (b) Training – Familiarization - French

- i The Contractor **must** supply a familiarization course in French when requested by the Technical Authority, at the delivery destination, optimized for operators and technicians who are qualified on the vehicle type but require training on newer or unique features and sub-systems of the delivered model;
- ii The instructor *must* be an OEM Factory Certified Training Provider;

#### iii <u>Curriculum</u>

- 1. The familiarization course *must* include operation and maintenance segments;
- The operation segment *must* include safety precautions to be observed while operating and servicing the vehicle, vehicle operating characteristics, preoperating and shutdown procedures and daily/weekly operator servicing procedures;
- 3. The operation segment *must* include sub-systems including automatic grease system and pre-heaters; and
- 4. The operation segment *must* demonstrate all safety measures required for safe vehicle maintenance.
- iv The familiarization course *must* have a minimum duration of eight (8) hours, divided into four (4) hours for operators and four (4) hours for technicians;
- v The familiarization course *must* accommodate up to eight (8) personnel; four (4) operators and four (4) technicians;
- vi For vehicles shipped to DND, the date for the familiarization course *must* be arranged with the Technical Authority, or the identified user or designated contact person for vehicles shipped for users other than DND;
- vii After completion of the familiarization course, the Contractor *must* have the "PROOF OF FAMILIARIZATION" certificate signed by the senior course attendee; and
- viii The Technical Authority will supply the "PROOF OF FAMILIARIZATION" document template in a digital format.