FORM N(R1): DETAILED SPECIFICATIONS

23028 SUPPLY AND INSTALLATION OF SERVICE BODIES INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS

1.1 All items in these specifications should be answered indicating compliance or non-compliance.

1.2 **Bidder shall state "yes" for compliance or state "deviation"**, or give a reply where requested to do so. Deviations and/or equivalents shall be clearly stated and fully detailed. Deviations and/or equivalents will be considered subject to evaluation. In every instance where a brand name or design specifications is used, the City will also consider deviations and/or equivalents.

1.3 Lengthy explanations of deviations may be included in a separate document and must reference the appropriate Detailed Specification.

1.4 Each Proponent is required to fill in every blank. Failure to do so may be used as a basis for rejection of bid.

1.5 It will be the responsibility of the Proponent to inform the City of any errors or omissions in these Detailed Specifications, for under this Contract, the Contractor shall be held responsible to ensure that the manufacturer will be responsible for the design, performance, reliability and satisfactory operational function of the unit.

2.0 DESCRIPTION OF EQUIPMENT

2.1 These specifications describe the supply and installation of a **Supply and Installation of Service Body** and other equipment and features as specified herein.

2.2 The **Supply and Installation of Service Body** shall be a new **2023** model year or newer.

2.3 The **Supply and Installation of Service Body** and all other items/components shall be the manufacturer's latest model. The equipment shall be furnished complete and ready for operation. Any parts or accessories not specifically mentioned, but which are required to complete and place the equipment and associated attachments in successful operation shall be furnished as though specifically mentioned in these specifications. The equipment and associated attachments, and all parts thereof, shall conform in strength and quality of material and workmanship, to the best standards and engineering practice of the industry.

2.4 The ratings specified herein merely state the minimum values acceptable to the City, not implying that those values are sufficient for the design of the particular equipment being bid.

3.0 OTHER SPECIFICATIONS AND STANDARDS

3.1 All applicable SAE standards form an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.

3.2 **Where applicable**, the **Supply and Installation of Service Body** shall comply with the applicable regulations:

Standard - Specification/Regulation	Internet URL
Transport Canada, National Safety Mark, NSM:	http://www.tc.gc.ca/eng/acts-regulations/acts-road.htm
Manitoba Safety and Health Regulation, Parts 12, 16, 22:	http://web2.gov.mb.ca/laws/regs/current/217.06.pdf
Canadian Motor Vehicle Safety Standards C.M.V.S.S.:	http://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._1038/section-sched3.html

Standard - Specification/Regulation	Internet URL
Manitoba Highway Traffic Act regulations and requirements including, but not limited to, a Manitoba Government Inspection with Safety Sticker:	http://web2.gov.mb.ca/laws/regs/index.php?act=h60
Canadian Standards Association CSA:	http://www.csagroup.org
Under Writers of Canada U/L:	http://www.ulc.ca
Society of Automotive Engineers SAE:	http://www.sae.org
City of Winnipeg Lighting Visibility Standard:	http://winnipeg.ca/matmgt/pdfs/PublicWorksEquipLightingVisibility.pdf
Manitoba Building Code:	https://web2.gov.mb.ca/laws/regs/current/_pdf-regs.php?reg=31/2011

3.3 Where applicable, the completed unit shall include a Manitoba Government Inspection with Safety Sticker.

3.4 Where applicable, the manufacturer/installer shall be a certified vehicle completer and must affix their National Safety Mark (NSM) certification sticker on each unit.

State NSM number:_____

4.0 FUEL

4.1 Where applicable, the equipment shall be fully fuelled upon delivery (no exceptions).

5.0 REFERENCES

5.1 If available, please provide five (5) references where this equipment is used in a working environment where climatic conditions are similar to the City of Winnipeg.

_____
_____
_____
_____
_____

6.0 MAKE & MODEL

6.1 State year, make and model being bid:

Model Year _____ _____

Make: _____ _____

Model _____ _____

7.0 PERFORMANCE RELIABILITY

7.1 The responsibility for the design of the **Service Bodies** its performance and reliability shall rest upon the Contractor.

7.2 The term “repeated failures” as used herein is defined to mean that the same component, subassembly, or assembly develops repeated defects, breakdowns and/or malfunctions rendering the vehicle inoperative, or requiring repeated shop correction, service and/or replacement during the warranty period applicable for said component, subassembly, of assembly. Minor items or ordinary service adjustments are not included, or considered under the scope of “repeated failures”, as well as other factors, such as operational damage due to accidents, misuse or lack of proper maintenance, service and lubrication attention by not following the manufacturer’s preventative maintenance schedule.

7.3 Where the **Service Bodies** develops “repeated failures” in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.

7.4 The equipment shall be capable of consistent top performance in City of Winnipeg Environment. **Note: The City of Winnipeg has four seasons with ambient temperatures ranging from approximately 90°F (32°C) to -40°F (-40°C).**

8.0 SERVICE FACILITY

8.1 For the purpose of warranty repairs, the Bidder shall have an authorized service facility. The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered. Bidders shall provide a description of the service facility including, but not limited to, number of qualified service staff, years of service experience, and general service capabilities within three (3) Business Days upon request of the Contract Administrator.

9.0 QUALIFICATIONS OF MANUFACTURER & CONTRACTOR

9.1 The manufacturer of the **Service Bodies** shall have five (5) years continuous experience manufacturing **Service Bodies**.

9.2 The manufacturer shall have in effect a documented quality control program ensuring that the quality of materials and workmanship, including welding, conforms to the best standards and engineering practice of the industry.

9.3 The Contractor shall have five (5) years continuous experience servicing, repairing and maintaining **Service Bodies** of the type being offered.

Representative Picture Typical Completed Service Body on Truck Chassis, Pictured below – Passenger’s Side View (R1).

10.0 SPECIFICATIONS

Scope

10.1 Supply and Delivery of **Service Bodies** complete with steel deck which will be mounted on a City owned cab and chassis. _____

The **Service Bodies** shall be capable of consistent top performance for loading and hauling varying payloads year-round in conditions normal to the City of Winnipeg.

- Body and accessories to be mounted by a CMVSS certified installer in accordance with CMVSS regulations as well as the chassis and body manufacturers recommendations.

Note:
The City of Winnipeg has four seasons with ambient temperatures ranging from approximately 90°F (32°C) to -40°F (-40°C)

Make and Model – Service Body

	Make	**State:** make:_____	_____
10.2	Model	**State:** model: _____	_____
10.3	Model Year	**State:** model year:_____	_____

Body Weights

10.4	Body Weight – Service Body	**State:** estimated weight of service body _____	_____

10.5 Weight Scale Ticket

Weigh Scale Ticket: _____

- The Contractor shall provide a certified weigh scale ticket upon delivery of the completed unit
- The scale ticket shall include front and rear axle weights including two (2) operators, all attachments and full of fuel.

Manitoba Inspection (MGI)

10.6
- The Contactor shall provide completed/valid MGI upon delivery of the completed unit. _____
- MGI documentation shall be valid upon release in accordance with an approximate 12-month period application or effectiveness.

Installation

10.7 **Service Bodies will be installed** on the following City owned cab & chassis vehicle:

City Winnipeg Department/Customer	Vehicle Type/Style	Quantity	Description	New Vehicle Unit Number (WFMA)
PW-SM-TRAFSERV-OPERATIONS	2024 Ford F-550	4	17,500 lbs. GVWR Gas, 2WD Regular Cab. Cab; 84 (Cab to Axle Length CA), 7.3 L, V8 Gasoline engine TorqShift® 10-Spd. Automatic Horizontal discharge exhaust, Ford Oxford White Code Z1	2053931 2053932 2053933 2053934

10.8 Availability

The cab chassis will be available during the first quarter of 2024

10.9 Pick-Up

- The Contractor shall be responsible for picking-up the chassis cab vehicles from the City upon commencement of the Contract
- The vehicles will be available for pick-up at the Winnipeg Fleet Management Agency, 185 Tecumseh St., Winnipeg, Manitoba
- Pick-up times will be between 8:00 am and 2:00 pm on any Monday to Friday Business Day
- The Contractor shall be responsible for any related fuel and Insurance costs to and from their facility

Note: The vehicles will be fully fuelled at the time of pick-up by the Contractor

10.10 Drawings

Drawings – Contractor shall supply

- The Contractor shall supply multi-view CAD drawings to the Contract Administrator upon Award of Contract
- Drawings will be reviewed and approved as part of the Pre-Production planning stages
- Contractor to provide a weight analysis after pre-production meetings
- Drawings are to include all dimensions, materials, and specifications as required
- Drawings are to be revised as requested by the City
- Multiple drawing iterations may be required
- Construction of the service body shall not commence until approval is granted

- **Note:** Drawings can be supply as hard copies, PDF's or electronically

Fiberglass or Alumimum Service Body

10.11	**Fibreglass or Alumimum Material**	**High impact resistant fiberglass or alumimum** • **service body side packs** • **compartments** • **doors** • **service body primed and painted with two (2) coats of plastic urethane paint – Fibreglass body** • **Colour impregnated to match chassis cab colour (Ford Oxford White Z1) – Fibreglass body** • **High strength alumimum substructure service body primed and painted with two (2) coats of plastic urethane paint** • **Colour impregnated to match chassis cab colour (Ford Oxford White Z1)**	_____
10.12	**Compartment Interiors**	• **Left in natural fiberglass service body finish** • **Alumimum left in natural unpainted finish**	_____
10.13	Compartment Layout	Each side of vehicle to have: • one (1) front vertical compartment • one (1) horizontal compartment over the wheel well • one (1) rear vertical compartment Rear of Vehicle: • Left (driver's) side of body to have one (1) rear access point (door) that opens down • Reference pictures below **Note: Access to all storage tube compartments required.**	_____

Rear compartment – Closed Drivers side rear.

Rear compartment – Open, all tubes accessible; Drivers side rear.

General Dimensions

For the purpose of these specifications:

- L – Length along or parallel to chassis longitudinal axis.
- H – Height, vertical.
- D – Depth on horizontal plane across vehicle

Note: Unless otherwise specified, all dimensions are in inches and are the nominal sizes.

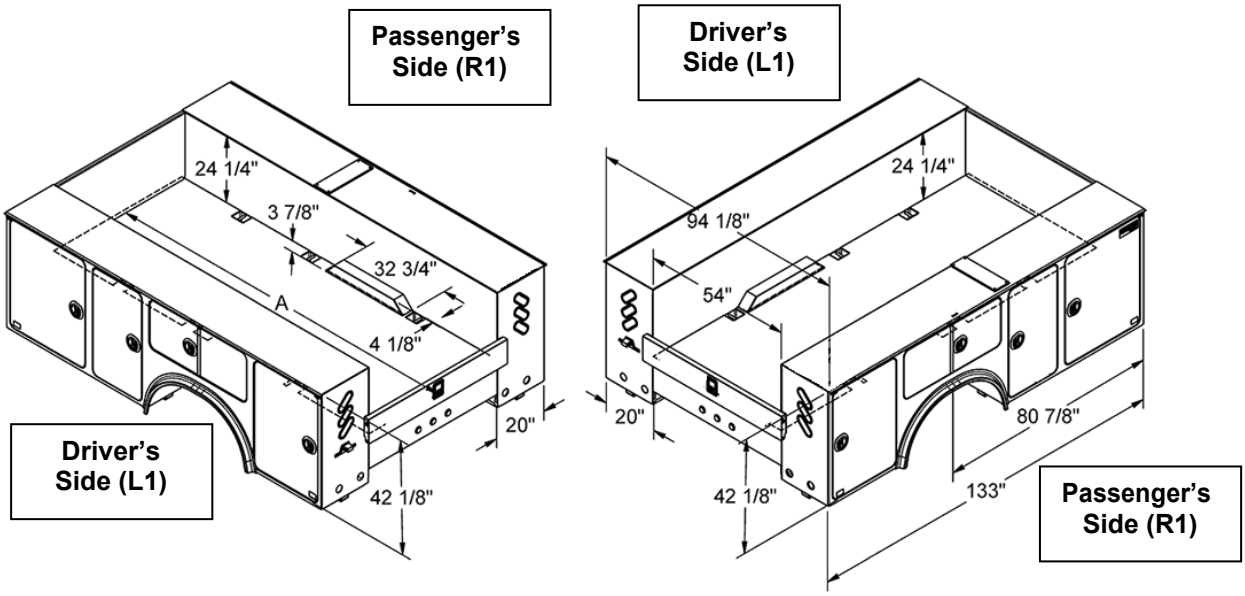
- Left and right is always based on perspective when sitting in the vehicle, so:
- Driver side is the left - L1
- Passenger side is on the right – R1.

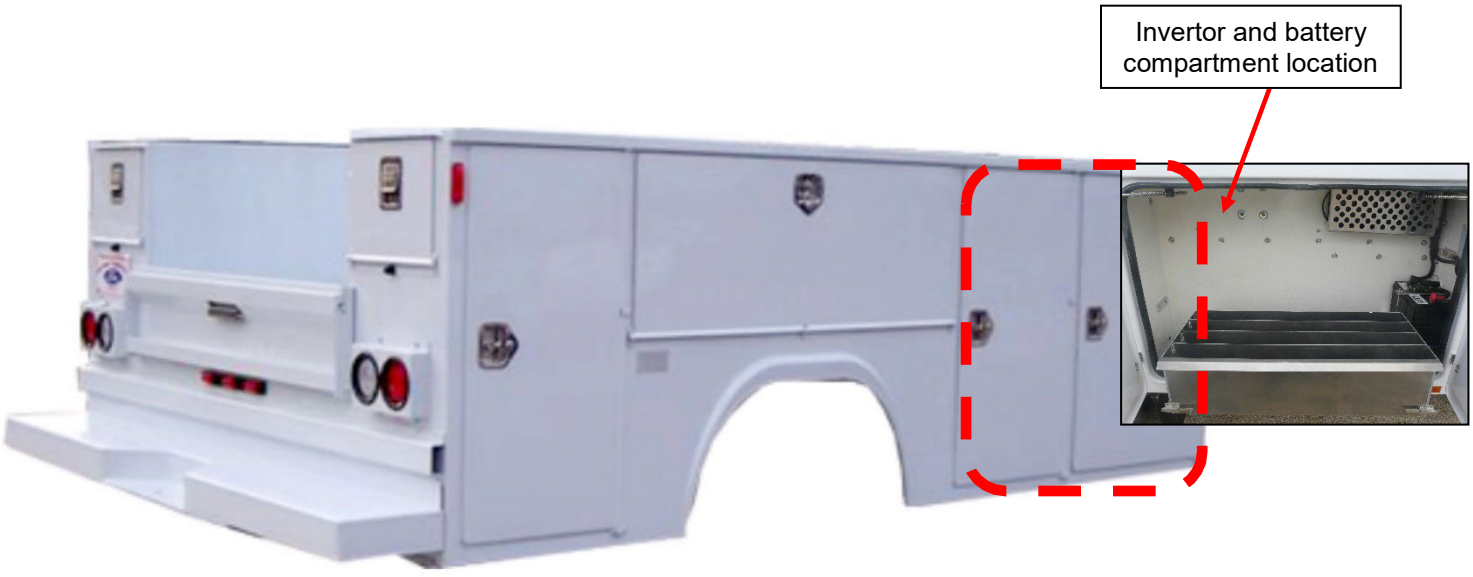
- The designations for the driver's side may be referred to as L1 within the documentation.

- The designations for the passenger's side may be referred to as R1 within this documentation.

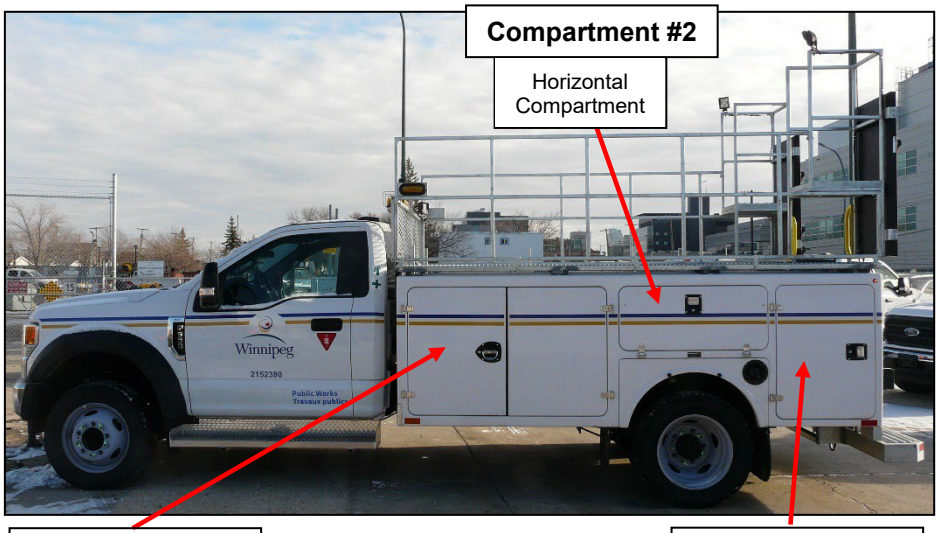
10.14	Body Height	**Driver's Side – L1** Approximately 40 - 42" inches. L1 side, **Passenger's Side – R1** Approximately 40 - 42" inches. R1 side, State: Body Height:_____	_____
10.15	Body Length	Approximately 132" inches (work platform included) State: Body Length: _____	_____
10.16	Body Width	Approximately 90" – 96" inches State: Body Width:_____	_____

Representative Pictures of Fiberglass Service Body – This image shown for illustration purposes only and may not be an exact representation of the final product but should be a similar configuration and style.





Service Body Compartment Layout, Driver's Side (L1)



The present configuration of the service body compartment. (Driver's Side – L1)

COMPARTMENT SIZES – Approximate Dimesnions		
1	60" W x 40" H x 18" D	18" D
2	46" W x 20" H x 18" D	18" D
3	26" W x 40" H x 18" D	18" D
Length 132" inches	Height range approximalety 40" inches	Width 90.25" – 96" inches
Approximate Estimated Weight 2,125 lbs.		

Compartment #1

10.17 Front Vertical Compartment #1 (Behind truck cab)

- Compartment # 1
- Approximately 60" inches width x 40" inches height x 18" inches depth
- Barn style doors that overlap each other
- No centre divider panel
- 250 lb. minimum load capacity

_____

State:
Compartment Size:_____

Compartment #2

10.18 Horizontal Compartment #2 (over wheel well)

- Compartment # 2
- Approximately 46" inches width x 20" inches height x 18" inches depth
- 250 lb. minimum load capacity

_____

State:
Compartment Size:_____

Compartment #3

10.19 Rear Vertical Compartment #3 (Street Pole Storage Tubes)

- Compartment # 3
- Approximately 26” inches width x 40” inches height x 18” inches depth
- 13” height rear access door providing access to street pole storage tubes
- The service body shall accommodate
- Qty nine (9)
- 3” inch diameter x 114” inches long PVC tubes
- Tube storage system has downward slop toward front cab compartment

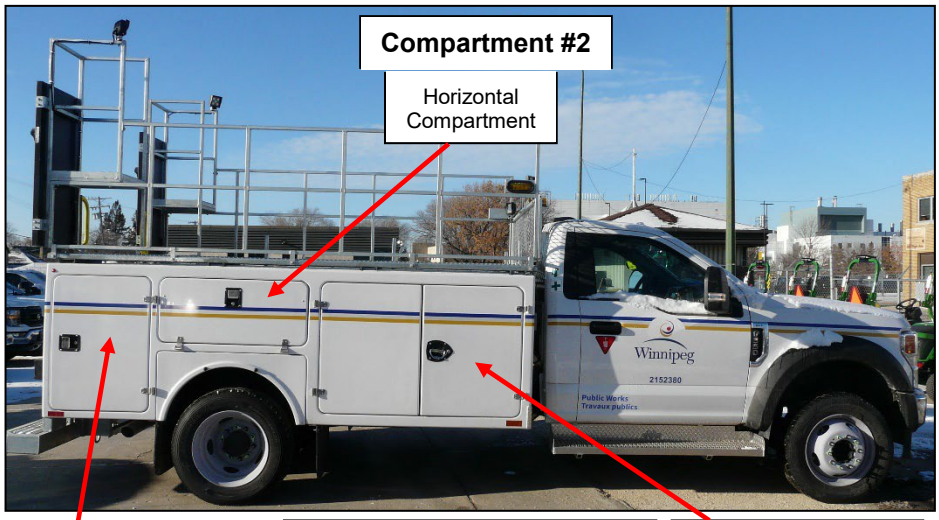
Road side view showing pole storage - downward slop towa d front cab

- Tube ends fitted with stop on the front to prevent poles from sliding through to hit service body
- The tubes shall be secured in place and designed to hold 120” inches long steel pipes with a total combined weight of approximately 200 lbs.
- An aluminum plate shall be affixed to the rear access door for the tube storage to prevent the steel pipes from damaging the service body

Street Pole Storage Door – Open View

- 250 lb. minimum rated load capacity for steel tub storage

Service Body Compartment Layout, Passenger's Side (R1)



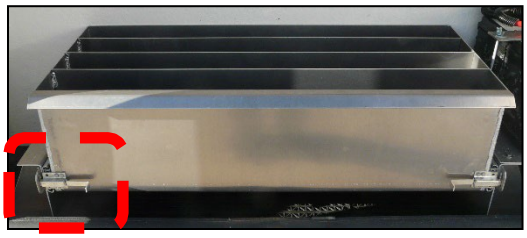
The present configuration of the service body compartment. (Passenger's Side – R1)

COMPARTMENT SIZES – Approximate Dimesnions		
1	60" W x 40" H x 18" D	18" D
2	46" W x 20" H x 18" D	18" D
3	26" W x 40" Hx 18" D	18" D
Length 132 inches	Height range approximalety 40" inches	Width 90.25" – 96" inches
Approximate Estimated Weight 2,125 lbs		

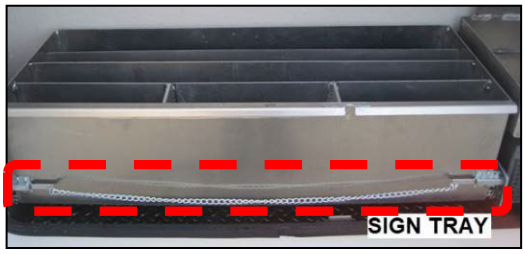
Compartment #1

10.20 Front Vertical Compartment # 1 (Behind truck cab)

- Compartment #1
- Approximately 60” inches width x 40” inches height x 18” inches depth
- Barn style doors that overlap each other
- No centre divider panel
- One (1) 38” inches long approximately full depth, slide out shelf with auto locks when pushed in (closed)



- Heavy duty sliders that allow the shelf to slide-out of the body in its entirety with a 36” inches x 30” inches sign in pace
- Shelf divided longitudinally into four (4) equally sized sections with 10” inches height divider panels
- Handle required at front of shelf.
- Aluminum or stainless-steel 1/4" inch diameter nylon coated aircraft cable affixed to locking mechanism for releasing simultaneously and pulling out shelf



- 250 lb. minimum load capacity
- 250 lb heavy duty draw sliders

State:
Compartment Size:_____
Reinforcement of Cabinet:_____

Compartment #2

10.21	Horizontal Compartment #2 (over wheel well) (Fastener Tray) Wrench Hooks Horizontal compartment	• Compartment # 2 • Approximately 46” inches length x 20” Height x 18” Depth • Fastener Tray – approximately 30” Length x 3” Height x 15” Depth • 1st compartment approximately 10” inches long x 15” inches depth • Remaining compartment approximately 4” inches long x 7-1/2” inches depth • Six (6) wrench hook on each side of wall.	_____ _____

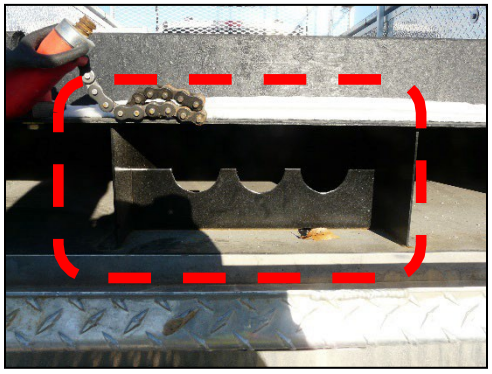
Compartment #3

10.22	Rear Vertical Compartment #3 (Hooks)	• Two (2) hook on each sidewall • One (1) shovel hook centered on back wall	_____
10.23	Rear Vertical Compartment	• Approximately 26” inches length x 40” inches height x 18” inches depth • Compartment lined with heavy duty rubber on three (3) sides	_____

Service Body Compartment Layout, Tailgate, Rear Compartment, Main Deck and Under Compartment

Main Deck Assembly

10.24	Finish	All steel components of the Main Deck assembly including the Under-Deck Compartments shall be primed and finished with rust preventative coating/ membrane	
10.25	Deck	• $^{3}/_{16}$ in. steel checker plate with an under-deck storage compartment • Rain lip or drip moulding to prevent water from entering into the storage compartment • Rain lip shall protrude to prevent water penetration, but shall not interfere with pipe vise functionality.	
10.26	Deck Width	Approximately 54 in. between fibre glass side packs	
10.27	Under Deck Floor	⅛ in. steel plate	
10.28	Under Deck Compartment Tailgate	• $^{3}/_{16}$ in. aluminum construction • Fold-down type with heavy duty hinges • Chrome or stainless-steel paddle style door handle and latch Lubrication • Grease fitting required on each hinge Or • Hinge assembly and hinge pin is aluminum and has enough clearance that it will not seize up over time • The end of the hinge is open and can be sprayed with lubricant if desired 	
10.29	Under Deck Compartments	• Qty three (3) complete with ⅛ in. thick steel dividers • Section dimensions from right to left as follows **Note:** Widths are measured between wheel wells	
10.30	Under Deck Compartment # 1	Approximately 106L x 7H x 19D	

10.31	Under Deck Compartment # 2	Approximately 73L x 7H x 16D	
10.32	Under Deck Compartment # 2 (Cut-a-Way Stand)	• 3/16 in. steel plate • dimensions approximately 4H x 16D • Welded near rear of compartment space to prevent pipes/rods from rolling from side to side • The plate shall have qty three (3), ½ circles cut into the top of the plate where pipes/rods will rest • ½-circle cut-outs to be approximately 3 in. diameter 	
10.33	Under Deck Compartment # 3	Approximately 122L x 7H x remaining width	
10.34	Drain Holes	¾ in. drain holes required at front of each under deck compartment	
10.35	Deck Sides	3/16 in. aluminum checker plate, extended full height up sides of Fibreglass side packs	
10.36	Front Headboard	• Aluminum construction • Expanded metal • Approximately 27H x width of vehicle	
10.37	Kick Plate, Rear of Body	• 3/16 in. aluminum checker plate • Full width below deck floor level	
10.38	Kick Plate, Front	• 3/16 in. aluminum checker plate to protect lower front area of body protruding past chassis cab • Each side • Approximately 8 in. kick plate height	

10.39 Sign Storage Provision

- Qty one (1)
- 1 in. square steel tubing construction
- Galvanized
- Approximately 38L x 15H x 10D
- Will use the brackets and bolt system from this refence specification 10.44 of this document
- Removeable and adjustable
- Refer to below for design
- It is imperative that the pieces smoothly glide and separate without any binding

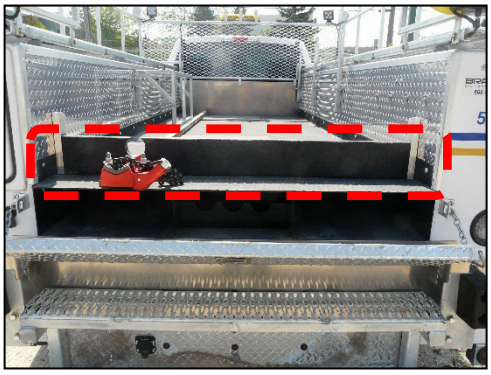
10.40

Sign Storage Provision - Front

Sign Storage Provision - Side

10.41 Tailboard - Polyboard

- 6-inch height, black poly board mandatory
- Wood material substitute not accepted
- Mounted towards the front approximately 7 in. (i.e. towards cab) of the pipe vice
- Adequate cut-away for pipe to extend past body



10.42	Pipe Vice	• , 1/8 in. – 4 in. Top Screw Bench Chain Vise • Mounted on the driver's side rear corner of the deck • Vice to be oriented so that an inserted pipe runs parallel to the vehicle length • Additionally, positioned and cleared to guarantee the functionality of the pipe vise without the need to open the tailgate for chain clearance   **Location to be determined at pre-production meeting**	_____
10.43	Sealant	Deck sides and kick plates caulked along edges using elastomeric sealant (automotive grade)	_____

Barricade Storage Brackets

10.44 Construction

- Qty six (6) brackets - three (3) per side
- Qty four (4) posts 19 in. L x 1.0 sq. tube
- Brackets shall be a 3W x 7H x $^{3}/_{16}$ steel bearing plate bolted to the side packs on the interior of the deck area.
- Spaced approximately 38 in. apart to match 10.39 - Sign Storage Provision specification in this document
- Height adjustable with a bolt system drilled through all tubes
- Once adjusted the tubing will be held in place by a safety pin, double wire snap 1/4" inch.

- All components galvanized

Locations to be determined at pre-production meeting

Catwalk Structure

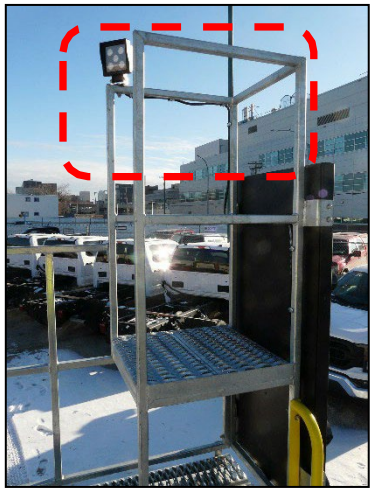
10.45	Regulations (Railings)	Manitoba Workplace Safety and Health Regulation, MR 217/2006, Part 14 Fall Protection Guard Rails must be: (a) is at least 900 mm (35.5 in.) high and not more than 1,060 mm (42 in.) above the working surface, with an intermediate rail at between 450 and 530 mm (18 and 21 in.) above the working surface; and (b) is constructed and secured to resist a static load of 900 N in any direction in which the load may be applied at any point on the top rail and on any intermediate rail	_____
10.46	Construction	• 1 in. square steel tubing construction • Wrap around the front, sides and partial rear of the body	_____
10.47	Construction	• 1 in. square steel tubing construction • Wrap around the front, sides and partial rear of the body	_____
10.48	Finish	• Galvanized finished all components • All galvanized parts which move must be smoothed, cleaning or conditioning after the galvanizing process to ensure function and appearance requirements are met which may include removal of sharp edges, lumps and repair	_____
10.49	Walkway	• Galvanized Grip Strut Safety Grating • Installed to top of side packs • Full length x full width • 4-Diamond + 3-Diamond Grip Strut • Bolt holes sealed as required	_____
10.50	Platform	• Curb and street side railing to incorporate a platform • 1st Platform approximately 18D x 20L • 3-Diamond + 4-Diamond Grip Strut • Approximately 18 in. above top of service body at rear corners • Platforms shall have a railing above platform - three (3) sides	_____

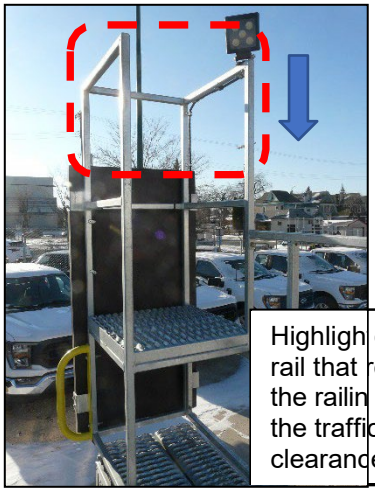
Platform- Front view

Platform – Front view, both sides

Platform – Side view

10.51	Catwalk railing back platform colipase/retract section	The upper part of the railing system should be collapsible and fit flush with the traffic advisory sign to accommodate low clearance height areas. However, it is imperative that this section still meets the safety standards set forth by Manitoba Workplace Safety and Health Regulation, MR 217/2006, Part 14 Fall Protection **Exact design to be determined at pre-production meeting**	_____





Highlighted in red is the portion of the rail that required collapsing/sliding into the railing tubing below to fit flush with the traffic advisor signal sign for clearance height areas.

10.52	Mounting Bracket (Arrow Board)	Incorporate a mounting bracket or frame suitable for mounting a pair of Traffic Arrows at the rear of the body above the top of the compartment, one per side	_____

Arrow board incorporated mounting on frame of catwalk

Rear Bumper and Hitch

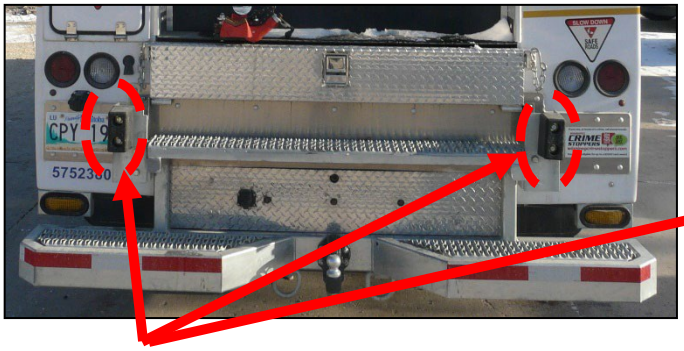
10.53	Rear Bumper	• Heavy duty step type bumper • Tubular steel construction • Galvanized • Tapered at outer ends • 12 in. steel grip strut surface • Recess for a Pintle hitch mount • Approximately 16 in. step height from ground	_____
10.54	Auxiliary Step	• Aluminum grip strut • Approximately 7 in. L x full width of deck • Located equidistant between bumper and deck level	_____

Rear Bumper and Auxiliary Step

10.55 Dock Bumpers

- Rear mounted
- One (1) on each side of unit
- Vertically mounted to a heavy-duty tubular steel frame welded to the rear of unit
- Approximately 34-1/2 to centre of bumper from the ground

Exact mounting location to be determined at pre-production meeting



Bumper Docks

10.56 Combination Hitch

Premier Model 150 with 2 in. ball

10.57 Eye Bolt
(Required for Trailer Safety Chains)

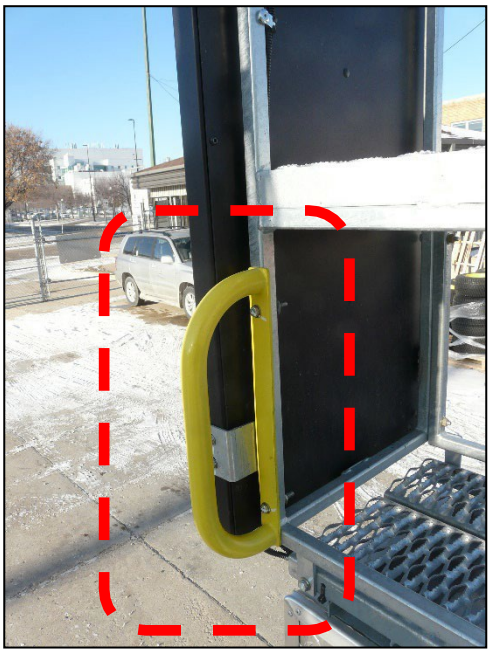
- One (1) each side of hitch
- Buyers Products B56730 or equal

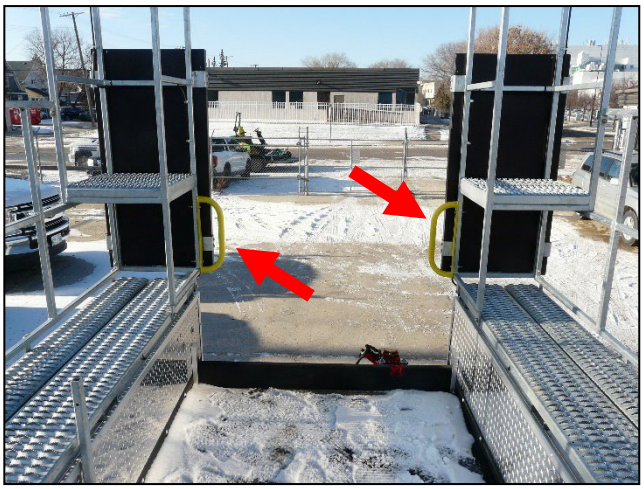
Grab Handles

10.58 Grab Handles

- Located for ergonomic access to deck
- Qty two (2)
- Diameter 1-1/4 in. (32 mm) – 1-1/2 in. (38 mm)
- Spacing behind grab bars approximately 3 in. (76 mm)
- Slip resistant
- Bolt-on construction
- Primed and painted safety yellow

Design and installation to be determined at a pre-production meeting





Grab handle locations on rear of service body and catwalk

Running Boards

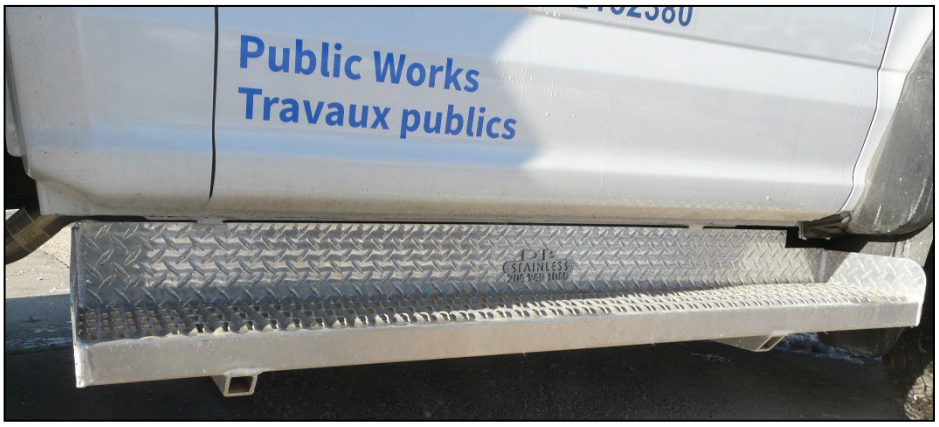
10.59 Construction

Custom made:

- Extending entire length of underside of front and rear doors, each side.
- AGS 6061 aluminum grip strut, 9-1/2” inches x 2.0” inches x 0.08” inches
- Inside kick plate shall consist of 1/8” inches aluminum checker plate
- Support brackets shall consist of 1-1/2” inches x 1-1/2” inches x 1/8” inches RC aluminum square tubing with 1/4" inches aluminum support plates

10.60 Mounting

- Cab steps to be mounted using the existing holes in the frame and body where applicable
- Use 3/8-16 nut inserts to secure the mounting brackets to the body



Running Boards

Rear Fenders

10.61	Rear Fenders	• Heavy Duty rear poly half-moon fenders complete with steel mounting hardware or • Aluminium wheel well covers	_____

Trailer Equipment

10.62	Trailer Connector	SAE J560 7-Way Flat trailer receptacle mounted and installed in rear hitch plate complete with all necessary wiring **Note:** The cab and chassis will be supplied (unattached) with Ford OEM Trailer Plug Socket and Electric Trailer Brake Controller **Installation to be determined at pre-production meeting**	_____
10.63	Deck Width	Approximately 50” inches between aluminum side packs	_____
10.64	Under Deck Floor	1/8” steel plate	_____
10.65	Under Deck Compartment	• Rectangular pull-out trap tray • Approximately 106” – 122” inches long x 7” inches height x 46” inches width • Locking mechanism quick release for access for pull-out tray draw. **State:** Compartment Size:_____	_____
10.66	Drain Holes	• 3/4” inch drain holes required at front of under deck compartment	_____

Standards – Service Body (Where Applicable)

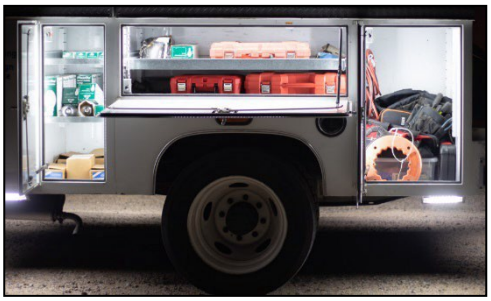
10.67	Service Body/Truck Chassis	Service body must be attached to the truck chassis and properly supported. i.e. bolted and automotive grade U-bolts used to secure service body to truck chassis main frame members. Mounting of the service body and any equipment shall be in accordance with the chassis manufacturer's guidelines for body mounting including, but not limited to, guidelines for tire and suspension clearances. Note: in some cases, the following must be conducted in accordance with service body manufacturers specifications for installation. Body and accessories to be mounted by a CMVSS certified installer in accordance with CMVSS regulations as well as the chassis and body manufacturers recommendations. **EXAMPLE:** Ford & Ram Specific Requirements – The under structure of the service body must be attached to the truck frame using a minimum of four points. The front two mounts closest to the cab of the truck must be spring mounted. Exception for Aerial/Crane Device equipped Service Bodies: If an aerial/crane device is involved, the body is to be spring mounted at the opposite end of the device at the two-service body under structure to truck frame attachment points. After the installation of the body to the chassis verify: - Doors shut and seal correctly, if not, adjust striker assembly - Master Lock Rod System, if equipped, functions as advertised, if not, adjust components - After the adjustments are made, perform a water intrusion test	_____
10.68	Compartment Floor Reinforcement	Front driver's side compartment and both rear vertical compartments shall be lined with a $^{3}/_{16}$ in. steel plate covered with rubber matting	_____
10.69	Compartment Floor Lining	Both horizontal compartments and front passenger side compartments shall be lined with Dri-Dek material or equivalent material having same material specifications	_____
10.70	Isolators	• All interfaces between aluminium and steel are to be separated by an approximately $^{1}/_{16}$ in. thick rubber or neoprene sheet • Shall be bolted through with stainless steel bolts and non-conductive bushings	_____
10.71	Drain Holes	All body compartments to include a ½ in. drain hole complete with plug	_____

10.72	Doors Design and Weather Stripping	Automotive door design with neoprene seals or equivalent seals having same specifications to minimize moisture and dust intrusion. Automotive grade weather stripping. 	_____
10.73	Doors	All vertical compartments doors to vertically hinged	_____
10.74	Door Latches	• Flush mounted with locks for all compartment doors • All locks shall be keyed alike	_____
10.75	Compartment Door Handles	• Tri-Mark door handles, Chrome plated or stainless-steel paddle style handles or equivalent model having same specifications • Barn door handles which shall be chrome plated or stainless-steel D-ring type	_____
10.76	Door Hinges and Latches	Chromed or stainless steel with adjustable striker plates	_____
10.77	Compartment Door Openings	Sealed using automotive type bulb gasket door seal	_____
10.78	Door Hold-Open Devices	• Over-centre door holders on front and rear compartments • Detachable cables on horizontal compartments	_____
10.79	Cabinet Locks	• Service Body cabinets to be keyed to the same key for all cabinets. • Master Locking system to be installed on both side of the service body for all compartments	_____

Representative Picture of Master Lock System for Aluminum Service Body.

This image shown for illustration purposes only and may not be an exact representation of the final product.

10.80	Service Body Cabinet Light (LED) System	• Aluminum service body cabinets, all to be Illuminated with integrated high performance and long-life LED lighting. • Actuated when the doors are opened	_____
10.81	Rubber Bumpers	• Installed on the body below the horizontal compartments to prevent contact between the compartment door and the body • Two (2) bumpers per door	_____
10.82	Wheel Well Area	• Shall incorporate a Fibreglass or rubber fender flare • Wheel Well panels are removable	_____
10.83	Drip Edge	• Installed along the full length of the body above the door openings • Designed to prevent water from entering into the storage compartments **State:** method _____	_____
10.84	Mud Flaps	• No name, fabric reinforced, black rubber mud flaps installed fore and aft of rear tires • ½ in. diameter steel bar anti-sail brackets	_____
10.85	Rubber Bumpers	• Installed on the body below the horizontal compartments to prevent contact between the compartment door and the body • Two (2) bumpers per door	_____
10.86	Wheel Well Area	• Shall incorporate a fibreglass or rubber fender flare • Wheel Well panels are removable	_____



10.87	Drip Edge	• Installed along the full length of the body above the door openings • Designed to prevent water from entering into the storage compartments **State:** method _____	_____
10.88	Deck Width	Approximately 52 in. between side packs	_____
10.89	Deck Sides	• $^{3}/_{16}$ in. steel checker plate • Extended full height up sides of side packs	_____
10.90	Tie-Down Eyes	• Eight (8) total • Corrosion protected • One (1) required near each corner of floor/deck flush mounted • Two (2) equally spaced on inside of side packs, mid-height, each side • Floor mounted tie-down eyes rated for lifting service body with an overhead crane • Three (3) total • Corrosion protected • One (1) mounted near each corner of the inside wall of service body, flush mounted is possible. • One (1) mounted in the middle of inside wall of service body, flush mounted if possible. **State:** method of corrosion protection: _____	_____
10.91	Front Headboard	• 3/16” inch aluminum checker plate • Approximately 52 in. • Top of headboard shall not protrude higher than the lower portion of the rear truck window	_____
10.92	Kick Plate, Rear of Body	• 3/16” inch. Aluminum checker plate • Full width below deck floor level	_____
10.93	Kick Plate, Front	• 3/16” inch. aluminum checker plate (corrosion-resistant 5052-H32 marine grade aluminum) to protect lower front area of body protruding past chassis cab • Each side • Approximately 8 in. kick plate height	_____
10.94	Sealant	Deck sides and kick plates caulked along edges using automotive grade elastomeric sealant	_____

Rear Bumper and Receiver – Truck Chassis/Service Body

Back-Up Alarm

10.95 Back-Up Alarm

- SWS model 99202 or equivalent model having same specifications and functionality

- Mounted between frame rails at rear of vehicle
- Protected from damage and road spray/damage

Rear View Camera

10.96 Rear View Camera

- The cab and chassis will be supplied (unattached) with a rear-view camera
- Rear-view camera prep kit to include camera, screen (or displayed in rear view mirror) mounting hardware and OEM wiring harness
- To be installed by body supplier
- The installation of the rear-view camera is carried out by a professional installer in order to guarantee an unobstructed view during the process of reversing

Conspicuity Tape

10.97 Conspicuity Tape

Truck-Lite 98127 or equal, affixed or equivalent model having same specifications

10.98 Rear Safety Signage – Service Body

The safety signage should be applied to the center of the back of the fixed panel of the service body, as shown in the picture below.

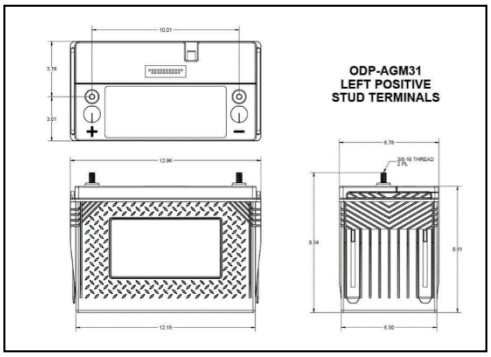
Should Read:
"CAUTION FREQUENT STOPS"

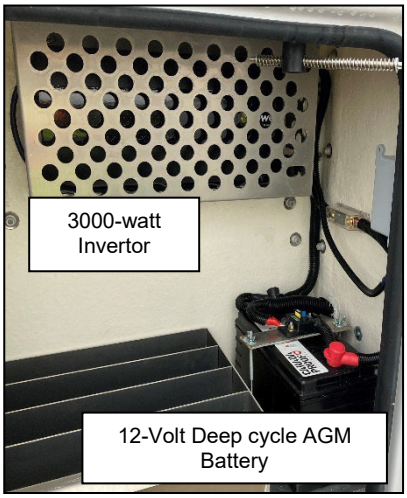
Grease Fittings

10.99	Grease Fittings	**Required:** On tailgate release mechanisms, pivot points and drop-down side linkages	_____

Inverter

10.100	Inverter	CSA approved • 110 Volt, 3000 Watts minimum • Make: Xantrex • Model: XPower 3000 Inverter or equivalent rated unit model having same specifications or functionality • Part Number: 813-3000-UL • **State:** Make:_____ Model: _____	_____
10.101	Deep Cycle Battery	• Group 31, approximately 900 CCA or equivalent Model AGM Battery/Deep Cycle • Mounted in the same location as invertor in a reinforced compartment • Battery - Operating temperature range- 40°F / -40°C to 140°F / +60°C • Battery Cold Start Performance S.A.E J537	_____





Battery cover to protect terminals and unintentional shock hazard.

10.102	Installation	All exposed inverter terminals shall be: • Coated with a dielectric grease • Completely covered with or rubber fittings • The battery lid cover supplied to provide protection for the terminals, ensuring their shielding.	_____
10.103	Location	Front of service body bed with invertor and battery mounted in self-contained aluminum box. **Location to be confirmed at pre-production meeting.**	_____
10.104	Wiring	• Invertor wired through ignition at the dash. Ensure to mounted inverter manufacturer remote switch • Labeled • Inverter to be complete with suitable solenoid and battery isolator • The wiring should have the capability to carry approximately 14 volts of alternator charging voltage from the engine compartment (when engine running) to the deep cycle battery connected to the invertor.	_____
10.105	Installation	No exposed invertor terminals • Terminals coated with a dielectric grease • Completely coved with adhesive-sealant-lined shrink tubing must be used to guarantee joint integrity, waterproofing and strain relief or rubber fittings	_____

10.106 Receptacle

- One (1) required
- Duplex receptacle
- Mounted at front of service body, passenger side (Passenger ‘s Side – R1)
- Forward facing
- Mounted as high as practicable so as not to interfere with interior shelf positioning

- The Duplex receptacle shall be minimum 20 Amp, GFI, CSA approved
- Weatherproof type with hinged covers with automatic cover closure/spring closure mechanism built in to the housing cover.

Location to be confirmed at pre-production meeting.

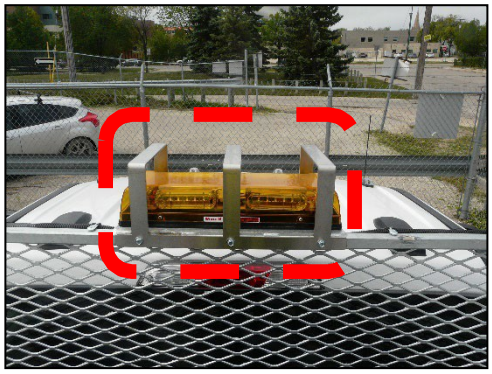
Lighting

10.107 LED Lighting

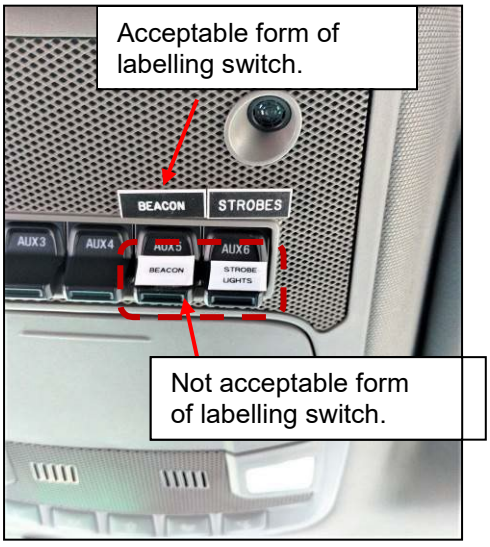
- All safety waring lights shall be Class 2 or equivalent specification and functionality _____

10.108 Mini Light Bar - Amber

- Whelen, SWS or Grote Series Amber LED Mini Light Bar or suitable equivalent _____
- Mounted to center top of traffic advisor signal

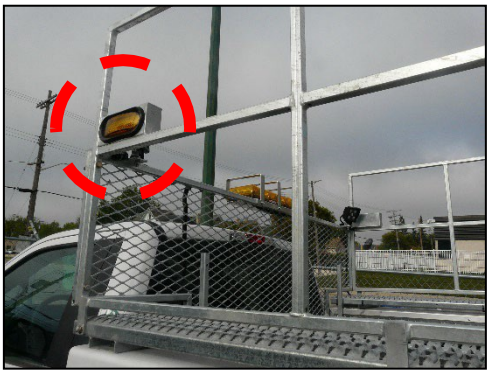


- Protected by branch guard – heavy duty construction
- Mini Light Bra shall be wired “Hot” (i.e. able to use without the key on) wired through a single OEM dash mounted switch or on the control panel enclosure. labelled “Light Bar” with a permanent type engraved style label
- Mounting of labels with 3M VHB Tape or equivalent
- Switch shall be capable of amber mode



State:
Manufacturer:_____
Model:_____

Lighting – Where applicable/requirement in accordance with application.

10.109	Amber Strobe Lights (Warning)	• Four (4) total • Whelen 5GA00FAR, SWS, Grote Series Amber Strobes LED or suitable equivalent • Mounting garments flush with service body • Two (2) located outside of 3-Light cluster, rear facing in rear kick plate • Two (2) located in service body facing near front • Amber Strobes shall be wired “Hot” (i.e. able to use without the key on) wired through a single OEM dash mounted switch or on the control panel enclosure. labelled “Strobes” with a permanent type engraved style label  **Locations to be confirmed/finalized at pre-production meeting**	

10.110	Traffic Advisors	• SWS 67301, Whelen or Grote equivalent in functionality • 1-piece aluminium with 1-1/2square frame • Aluminium front and rear panels • Approximate size – 44 in. H x 22 in. W x 3-3/8 in. D • 10 dual optic, LED modules with half sun shade • Six (6) flash patterns • 20 ft. of cable per half • In-cab controller SWS 77501 with 10A auxiliary port • Traffic Arrows shall be wired “Hot” (i.e. able to use without the key on), wired through a single OEM dash mounted switch or on the control panel enclosure, labelled “Traffic Advisors” with a permanent type, engraved style label	_____

10.111	Light Switch Configuration(s)	• Amber strobes (rear ovals) controlled with one switch • Mini Light Bar controlled with one switch capable of amber mode • Traffic Advisor – separate controller	_____
10.112	Combination Turn/Stop and Taillights	• Top Mounted - One (1) per side • Bottom Mounted - One (1) per side • P/N Truck-Lite 44302R with P/N 44710 mounting grommets	_____

10.113	Back-Up Lights	• One (1) per side • P/N Truck-Lite 44206C with P/N 44710 mounting grommets	_____
10.114	3-Light Cluster	• Three (3) • P/N Truck-Lite10250R with P/N 10403 mounting grommets • Located to protect from damage	_____
10.115	Clearance Lights	• Grote 49333 and 49332 with mounting grommets Or • Truck-Lite 33050R and 33050Y with 3370 mounting grommets **Note:** The clearance light on the service body must remain within the boundaries of the body itself.	_____
10.116	Harness	Truck-Lite 50 Series or equivalent harness system, properly routed, internally grounded and secured	_____
10.117	Catwalk Rear Work Lights	• One work light to be mounted and wired on each side of the rear of the catwalk face forward. One (1) per side • Lights must be movable with a collapsible section of the catwalk, as specified in Section 10.51.	_____

10.118	Amber Strobe Lights (Warning)	• One (1) per side • Whelen, SWS or Grote Series lighting Class 2 or suitable equivalent • Mounting grommets **State:** Manufacturer:_____ Model:_____	_____
10.119	Light Switch Configuration(s)	<u>On Vehicles equipped with Amber:</u> • Amber strobes (rear ovals) controlled with one switch • Mini Light Bar controlled with one switch capable of amber mode • Traffic Advisor – separate controller	_____
10.120	License Plate Light	• Complete with license plate bracket • P/N Truck-Lite 36140 (Light) • P/N Truck-Lite 36710 (Bracket)	_____
10.121	Rear Light Mounting Location (Rear Sill) • Rear-Corner Clearance Lights, qty two (2), one per side • Combination Turn/Stop and Taillights, qty two (2), one per side • Back-Up Lights, qty two (2), one per side The lights shall be situated so that no debris or door opening contacts/obstructs the lights. **Location of Lights to be confirmed at pre-production meeting**		_____
10.122	Rear Light Mounting Location (Top-Rear of Body) • Combination Turn/Stop and Taillights, qty two (2), one per side • Amber Strobe Lights, qty two (2), one per side • 3-Light Cluster, qty three (3) **Location of Lights to be confirmed at pre-production meeting**		_____
10.123	Clearance Light Mounting Locations: • Front – qty two (2), located one on each bottom corner of body • Sides – qty two (2) per side, located on front and rear bottom corners • Rear – qty two (2), located one on each bottom or top corner **Location of Lights to be confirmed at pre-production meeting**		_____

Options
<u>Note: Options to be priced only as indicated on Form B: Prices – Where Applicable</u>

Welding Standards

10.124	Welds	Continuous welds	
10.125	Standard	CSA Standard W47.1-30, (CSA W47.1, Certification of companies for fusion welding of steel) and W59-03, (CSA W59, Welded steel construction). **Where Applicable:** CSA W47.2 Fusion Welding of Aluminium Company Certification, CSA W59.2 - 2018 – Welded Aluminium Construction Or Equivalent American Welding Society (AWS)	
10.126	Weld Quality Inspection	• Straight and uniform • Consistent thickness • No spatter drops • No slag, cracking or holes • No dips or craters in the bead • No holes, breaks or cracks in the bead/fillet **Not Acceptable** – cause for rejection. • Lack of uniformity and straightness • Visible spatter • Cracking, undercutting or breaks in the bead • Bead width inconsistent	
10.127	Weld Spatter	All weld spatter must be removed prior to final finish	

Finish

10.128	Steel	Match chassis cab colour: Ford Oxford White Z1	
10.129	Aluminum Components	• Unfinished • Material Grade corrosion-resistant 5052-H32 marine grade aluminum • Mill certificates for the material utilized in the construction of the specific tender must be made accessible upon inquiry	
10.130	Galvanized	• All galvanized parts which move must be smoothed, cleaning or conditioning after the galvanizing process to ensure function and appearance requirements are met which may include removal of sharp edges, lumps and repaired	
10.131	Deck	Deck surface properly cleaned and coated with: • Rust-Oleum AS5400 Anti-Slip Floor Covering or equivalent performance product • Color Black	

10.132	Preparation	All steel components unless otherwise noted in these specifications shall be sandblasted, properly cleaned, primed and finished with the Endura, DuPont or Tristar paint process in order to prevent rust formation	_____
10.133	Primer	**Required:** Epoxy or Polyurethane primer Endura EP321 Intermix Epoxy Primer or DuPont polyurethane or Tristar Coatings Inc. Epoxy Primer Two (2) coats – Dry Film Thickness 3.0 – 4.0 mils	_____
10.134	Paint	**Required:** Polyurethane **Colour:** 2023 Ford Oxford White Code Z1 Endura EX-2C or DuPont Polyurethane or Tristar Coatings Inc. Polyurethane Two (2) coats: 3 - 5 mils Wet Film Thickness with a total combined overall average Dry Film Thickness of 4 – 6 mils	_____
	Clearance		
10.135	Clearance	Clearance between aluminium service body and the back of the truck cab shall be a minimum of 3” inches in accordance with the Cab & Chassis Incomplete Vehicle Manual.	_____
10.136	Tire Clearance	Aluminium service body shall provide for an approximate 4” inch clearance with rear springs fully loaded.	_____
	Installation		
10.137	Not-Permitted	• Drilling on chassis frame flanges • Welding on the chassis frame	_____
10.138	Installation Guidelines	• A comprehensive installation guide must be provided to the Contract Administrator for validation during the construction phase. These instructions/guidelines pertain to the proper installation/mounting of the body or equipment, following the chassis manufacturer's guidelines for body mounting	_____
10.139	Holes	• When necessary and permitted in accordance with manufacturers specifications and regulations holes in the frame shall be drilled, remade and deburred to fit bolts • Bolt holes shall not have excessive play • Holes required to run wires through shall be drilled and deburred (not punched), grommeted and sealed as required when permitted.	_____

10.140 Isolators

- All interfaces between aluminum and steel are to be separated by an approximate 1/16” inch thick rubber or neoprene sheet.
- Shall be bolted through with non-ferrous stainless-steel bolts and non-conductive bushings.

10.141 Mounting Brackets

- Shall be bolted to the frame using Grade-8 fasteners

Grade Marking	Specification	Material	Bolt and Screw Size in.	Proof Load, psi	Tensile Strength min.,psi
	SAE-Grade 8	Medium Carbon Alloy Steel, Quenched and Tempered	1/4 thru 1-1/2	120,000	150,000
	ASTM-A 354 Grade BD	Alloy Steel, Quenched and Tempered			

10.142 Bolt Requirements

- All bolts must be high tensile
- Hardened washers must be installed under both the bolt head and under the nut
- All nuts need to be high tensile and self locking (Nyloc, Conelock or other suitable self-locking variation)
- At least two bolt threads must protrude from all nuts
- Any suspension component bolts must be ISO Class10.9 or SAE Grade8
- All bolts that have been installed to replace OEM bolts must be at least an equivalent class/grade.

When mounting tow couplings (towbars, fifth wheels etc.) the bolt shank needs to protrude through the entire interface of the material. This avoids stress concentration on the threaded portion and maximises the available bolt cross-section that is subject to shearing forces.

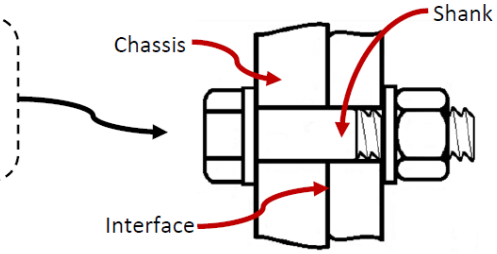
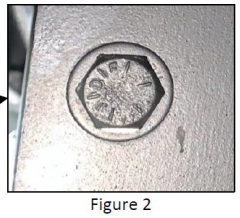


Figure 1



SAE Grade 8
ISO Class 10.9

Figure 2

ISO Class 8.8 bolts should not be confused with SAE Grade 8 bolts.

- ISO Class 10.9 bolts are equivalent to SAE Grade 8 bolts (6 radial embossed on the bolt head – Figure 2).
- ISO Class 8.8 bolts are equivalent to SAE Grade 5 bolts (3 radial embossed on the bolt head).

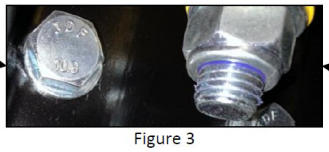


Figure 3

Figure 3 shows an ISO Class 10.9 bolt head and a Nylock nut securing a separate bolt. Notice that both the bolt head and nut are installed with hardened washers and there are more than two threads protruding from the nut.

10.143 Mounting Standards

- Mounting of the body shall be in accordance with the chassis manufacture’s guidelines for body mounting, including but not limited to guidelines for tire and suspension clearance and fuel filler installation.

10.144	Mountings Standards	• If applicable the aluminum side packs shall be mounted to the steel deck using cadmium plated carriage bolts and fender washers • Bearing plates shall be used in high stress areas.	_____
10.145	Mounting Standards	• Any holes required in the fame if permitted must be drilled, reamed and deburred to fit the bolts.	_____
10.146	Mounting Standards	• All non-continuous body seams (joints) shall be caulked with an automotive grade elastomeric sealant	_____
10.147	Bolted Connections to Chassis Frame	• Mounting to the chassis frame is permitted however the bolt/nut assembly must have no gap or skewed connections are allowed; bolt/nut connection must be perpendicular to the clamping surface. • **<u>Not Recommended</u>**, However, if hole is to be drill to accommodate bolt/nut assembly, ensure hole is drilled far enough away from any seams, splices or overlays in the chassis frame to ensure bolted and nut/washer connection will be flat, ensure total contact with chassis frame.	_____

The assembly of bolt and nut through the chassis frame must adhere to certain guidelines. In the event that the hole is situated on a curved surface or where a transition occurs in the frame, it is not recommended to utilize it as a mounting location.

However, if the hole location is to be utilized as a mounting location, the following protocol must be observed: A levelling washer must be employed to ensure that the bolt clamping force is fully applied and perpendicular to the frame, with no gaps permitted.

The bolt/nut assembly, located on the seam, is deemed unacceptable.

Lighting and Electrical Standards

10.148 Conformance:

- LED Lighting – Class 2
- C.M.V.S.S.
- Manitoba Highway Traffic Act.
- City of Winnipeg Lighting Visibility Standard

http://winnipeg.ca/matmgt/pdfs/PublicWorksEquipLightingVisibility.pdf

10.149 Lighting:

- Supplier installed
- LED – Class 2
- Stop / turn / tail lights
- Clearance lights
- Back-up lights
- 3-Light cluster
- Two (2) strobe lights in front Grille, (location to be confirmed at pre-production meeting and signed off by contract administrator).

- Two (2) strobe lights in lower back plate of service body

10.150 Visibility:

- Taillights, back-up lights and warning lights to be fully visible when tailgate is lowered to horizontal position
- No clearance light shall protrude beyond the service body

10.151 Licence plates:

- The front license plate holder is securely installed and comes with the necessary mounting screws for the license plate.
- The back-license plate holder is securely installed and must have an LED light to illuminate it and should be positioned on the left side at the rear of the vehicle, ensuring it is not obstructed.

10.152 Identification:

- All dash mounted warning lights and switches to be identified with permanent, engraved type labels
- Mounting of labels with 3M VHB Tape or equivalent. To ensure adhesion to interior surfaces 3M Adhesion Promoter 06396 is a convenient liquid primer for enhancing the adhesion of 3M™ Acrylic Foam Tapes in automotive applications. This adhesion promoter works with most LSE plastics used for interior and exterior automotive trim and parts
- No labels to be located on upper surface of dash

Not Acceptable – Not Permanently Label Picture above shows example of permanent engraved label switches.

10.153 LED Strobe Lights:

- Shall be wired “Hot” (I.e. able to be used without the key on)
- All LED strobe lights shall be wired through the ignition, wired through a single OEM dash mounted switch or on the control panel enclosure, labelled “Strobes” with a permanent type, engraved style label

10.154 Connection System:

- Weather Pack Sealed Connection System or equivalent system having same industry specifications.
- Genuine OEM connectors, terminals, and wire seals are used to guarantee quality and 100% fitment.
- (“J-Box” and shrink tube acceptable)

10.155 Grommets:

- Rubber grommets unless otherwise specified

10.156 Harnesses:

- Harness system, properly routed and secured.
- All harnesses shall be internally grounded, no exceptions
- Colour coded or numbered

10.157 Junction box:

- Complete with necessary compression fittings, required for all vehicle lighting harness connections
- Securely located – inside rear of truck frame
- Waterproof
- Readily accessible for servicing
- Protected from road spray

10.158 All Plug-In Connectors:

- All plug-in connectors shall be coated with Truck-Lite NYK Corrosion Preventive Compound prior to assembly

10.159 Compartment Lights:

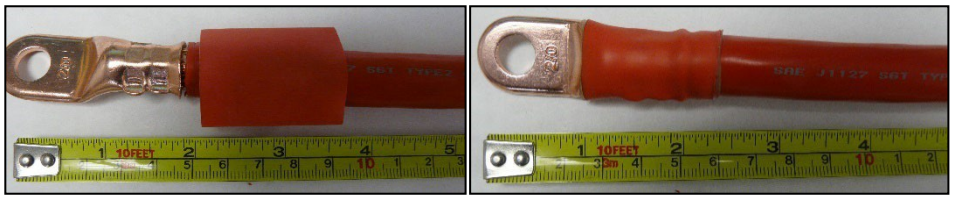
- LED continuous “rope” style lighting in all service body compartments, properly secured to prevent damage

10.160 Wiring:

- All wiring to be colour coded, loomed and properly secured.
- Genuine OEM connectors, terminals, and wire seals are used to guarantee quality and 100% fitment
- All LED strobe lights shall be wired through the ignition, wired through a single OEM dash mounted switch or on the control panel enclosure, labelled “Strobes” with a permanent type, engraved style label

10.161 Electrical Connectors:

- All electrical connectors to be crimped, soldered and then sealed using adhesive-sealant-lined shrink tubing must be used to guarantee joint integrity, waterproofing and strain relief or rubber fittings



➢ Pictures above showing acceptable crimping and sealant using adhesive-sealant-lined shrink tubing must be used to guarantee joint integrity, waterproofing

10.162 Joining of Wires:

- All joining of wires to be soldered and adhesive-sealant-lined shrink tubing must be used to guarantee joint integrity, waterproofing and strain relief

Note: Crimp on electrical connectors for joining wires are not acceptable

10.163 Wiring Routing:

- Any holes required to run wires through shall be drilled and deburred (not punched), grommeted and sealed

11.0 **WARRANTY:**

11.1 All warranty information shall be detailed and **include all exclusions**.

The Contractor shall provide all published warranty information upon delivery of the equipment.

Bidder shall state all warranty information.

11.2 The warranty for the **Service Bodies** shall cover the complete equipment, and all parts thereof against any defects of workmanship, construction and materials.

Any equipment that has become defective during said warranty period and has not proven to have been caused by negligence on the part of the user shall be repaired or replaced at no cost to the City.

The warranty shall be effective from the date the equipment is put into service by the City of Winnipeg

11.3 Factory Warranty - Body **State:** Terms:_____

11.4 Invertor **State:** Terms:_____

11.5 Electrical **State:** Terms:_____

11.6 Battery **State:** Terms:_____

11.7 Paint **State:** Terms:_____

12.0 **DELIVERY:**

12.1 **Delivery Point:**

The complete unit shall be serviced, ready for operation and delivered F.O.B. with the freight prepaid, including invoice and N.V.I.S. (if applicable) to the WFMA 185 Tecumseh Street, Winnipeg MB.

12.2 **Delivery Time:**

Equipment shall be delivered between 8:00 am and 2:00 pm on Business Days.

State: earliest delivery time from date of award:_____

12.3 **Delivery Contact:**

The Contractor shall contact the Contract Administrator prior to delivery of the equipment.

12.4 **P.D.I:**

A pre-delivery inspection shall be performed by the Contractor on the equipment. Proof upon inspection including completed check list

13.0 **MANUALS:**

13.1 **Manuals:**

The following manuals shall be supplied with the equipment when delivered:

Operator – Two (2) Copies

- One (1) copy shall be sent to the Equipment Operator Training Branch
- One (1) copy to be left with the equipment

Parts and Service

- One (1) complete set including preventative maintenance schedules

Note: CD or USB flash drive is preferred where available.

14.0 **PARTS/LABOUR PRICING:**

14.1 Bidder to provide City of Winnipeg Parts Discount % Pricing from retail parts pricing. **State percentage discount** _____

14.2 Bidder to provide City of Winnipeg Labor Discount % Pricing from Retail shop labor rate. **State percentage discount** _____

15.0 **FIRST SERVICE PREVENTATIVE MAINTENANCE KIT:**

15.1 If applicable, in order to assure minimum downtime of the Equipment in future service, the Contractor must provide one (1) complete replacement set of new OEM filters for each unit purchased. The set of required filters shall include (if applicable to the equipment type) air, fuel, oil, transmission, cab and hydraulic, or otherwise all known necessary common replacement filters required for the first preventative maintenance servicing and first transmission service. _____

15.2 The Contractor must provide a list of factory recommended lubricants to be used with the equipment, as well as a complete cross reference guide for all warranty approved lubricants and filters that can be used during Preventative Maintenance servicing. _____