

FORM N: DETAILED SPECIFICATIONS 22034

ALUMINUM SERVICE BODY AND CRANE

1. 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. DESCRIPTION OF EQUIPMENT

- 2.1 These specifications describe Service Body and Crane and other equipment and features as specified herein.
- 2.2 The Service Body and Crane shall be a new **2022** model year or newer.
- 2.3 The Service Body and Crane 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. OTHER SPECIFICATIONS AND STANDARDS

- 3.1 All applicable SAE Standards form an integral part of the vehicle specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 3.2 Where applicable, the Service Body and Crane shall comply with the applicable regulations:

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:
https://www.gov.mb.ca/labour/safety/pdf/1_2016_wsh_ar_oc.pdf

Canadian Motor Vehicle Safety Standards C.M.V.S.S.
[Motor Vehicle Safety Regulations \(justice.gc.ca\)](http://www.justice.gc.ca/eng/acts-regulations/acts-road.htm)

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:

[Underwriters Laboratories of Canada \(ULC\)](#)

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 affix their National Safety Mark (NSM) certification sticker on each unit.

State NSM number: _____

4. FUEL

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

5. REFERENCES

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

6. MAKE & MODEL

6.1 State year, make and model being bid:

Model Year: _____

Make: _____

Model: _____

7. PERFORMANCE RELIABILITY

7.1 The responsibility for the design of the Service Body and Crane 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 Body and Crane 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. 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. QUALIFICATIONS OF MANUFACTURER & CONTRACTOR

- 9.1 The manufacturer of the Service Body and Crane shall have five (5) years continuous experience manufacturing **Service Bodies and Cranes**.
- 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 Body and Crane of the type being offered.

10. SPECIFICATIONS

10.1 Supply and Delivery of an **Aluminum Service Body** complete with aluminum deck which will be mounted on a City owned cab and chassis. _____

Supply and Delivery of a telescopic **Crane** to be installed at the rear, curbside of the vehicle on its bumper.

The **Service Body** and **bumper** shall be capable of supporting the **Crane** described in these specifications.

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

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

10.2 Make **State:** make: _____

10.3 Model **State:** model: _____

10.4 Model Year **State:** model year: _____

Weights

10.5 Body Weight **State:** estimated weight of body: _____

10.6 Crane Weight **State:** estimated weight of crane: _____

Installation

10.7 **Service Body and Crane will be installed** on the following City owned Chassis cab vehicle _____

2022 Ford F-550

- 19,500 lbs. GVWR
- 6.7 L, Diesel engine
- 4WD
- Crew Cab
- 60 in. CA
- TorqShift® 6-Spd. Automatic
- Horizontal discharge exhaust

WFMA Vehicle Unit Number:

- 2322361

Drawings

- 10.8 Drawings
- 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
 - Construction of the service body shall not commence until approval is granted
- _____

Aluminum Service Body

- 10.9 Material
- Aluminum
- Service body side packs
 - Compartments
 - Doors
 - Shelving
- _____

General Dimensions

- 10.10 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

- 10.11 Body Height
Appendix A
- Approximately 60 in.
State: body height: _____
- 10.12 Body Length
Appendix A
- Approximately 108 in.
State: body length: _____
- 10.13 Body Width
Appendix A
- Approximately 94 in.
State: body width: _____

Compartment Layout, Road Side
Refer to Appendix A

10.14 Front Vertical
Compartment # 1
Appendix A

- Compartment # 1
- Approximately 38L x 60H x 20D
- 10-drawers
- Qty eight (8) 3.5 inch
- Qty two (2) 6 inch
- Fixed top shelf with a 1 in. (25 mm) lip for extra storage
- 250 lb. maximum load capacity
- 250 lbs. drawer slides

State:

Compartment Size: _____

Drawer Size(s): _____

NOTE: Cabinet drawer configuration subject to change and will be determined at the pre-production meeting

Compartment # 1



10.15 Horizontal
Compartment # 2
Appendix A

- Compartment # 2
- Approximately 40L x 39H x 20D
- Qty two (2) adjustable shelves with a 1 in. (25 mm) lip
- Qty one (1) removeable tray – 6 inch deep
- 250 lb. maximum load capacity

State:

Compartment Size: _____

Compartment # 2



10.16 Rear Vertical
Compartment #3
Appendix A

- Compartment # 3
- Approximately 30L x 60H x 20D
- Qty two (2) adjustable shelves with a 1 in. (25 mm) lip
- 250 lb. maximum load capacity
- Qty six (6) Swivel Hook Ranger P/N 6072 or equivalent supplied loose

State:

Compartment Size: _____

Compartment # 3



Compartment Layout, Curb Side Refer to Appendix A

10.17 Front Vertical
Compartment # 4
Appendix A

- Compartment # 4
- Approximately 38L x 60H x 20D
- Qty four (4) adjustable shelves with a 1 in. (25 mm) lip
- 250 lb. maximum load capacity

State:

Compartment Size: _____

10.18 Horizontal
Compartment # 5
Appendix A

- Compartment # 5
- Approximately 40L x 39H x 20D
- Qty two (2) adjustable shelves with a 1 in. (25 mm) lip
- Qty one (1) removeable tray – 6 inch deep
- 250 lb. maximum load capacity

State:

Compartment Size: _____

Compartment # 5



10.19 Rear Vertical
Compartment # 6
Appendix A

- Compartment # 6
- Approximately 30L x 60H x 20D
- Qty four (4) adjustable shelves
- Aluminum
- 250 lb. maximum load capacity

State:

Compartment Size: _____

Compartment # 6



**Compartment Layout, Rear
Refer to Appendix A**

10.20	Doors	<ul style="list-style-type: none"> • Full height • Barn door style • Complete with holdbacks 	_____
10.21	Roof	<ul style="list-style-type: none"> • 3-Piece sliding roof • Covers cargo area • Drip edge over rear doors 	_____

Compartment Rear



Standards

10.22	Compartment Doors	Double panel construction	_____
10.23	Drain Holes	All body compartments to include a ½ in. drain hole complete with plug	_____
10.24	Door Latches	<ul style="list-style-type: none"> • Flush mounted with locks for all compartment doors • All locks shall be keyed alike 	_____
10.25	Compartment Door Handles	Chrome plated or stainless-steel paddle style handles	_____
10.26	Door Hinges and Latches	Chromed or stainless steel with adjustable striker plates	_____
10.27	Compartment Door Openings	Sealed using automotive type bulb gasket door seal	_____
10.28	Door Hold-Open Devices	<ul style="list-style-type: none"> • Gas shock door hold-backs on all compartments 	_____
10.29	Wheel Well Area	<ul style="list-style-type: none"> • Shall incorporate a fibreglass or rubber fender flare • Wheel Well panels are removable 	_____

- 10.30 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 _____

Main Deck Assembly

- 10.31 Deck $\frac{3}{16}$ in. aluminum checker plate _____

- 10.32 Deck Width Approximately 54 in. between side packs _____

- 10.33 Drain Holes $\frac{3}{4}$ in. drain holes required at front of each under deck compartment _____

- 10.34 Deck Sides $\frac{3}{16}$ in. aluminum checker plate, extended full height up sides of fibreglass side packs _____

- 10.35 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

State: method of corrosion protection _____

- 10.36 Rear Bumper (Tail Shelf)
- Heavy duty
 - Shall support the installation and operation of the crane specified in these specifications
 - All rear lighting to be incorporated
 - Outriggers are required



Crane

10.37	Requirements	<ul style="list-style-type: none"> • Capable of lifting objects from ground level and loading into the bed of the service body • Approximately 1900 lbs. lifting capacity • 360-degree rotation • Telescopic • Boom foldable for traveling • Approximately 5 ft. or greater reach • Electric-hydraulic operation • Mounted at rear curbside corner of vehicle on bumper/tail shelf 	_____
10.38	Make	Venturo or equivalent State: make: _____	_____
10.39	Model	CT310KX or equivalent State: model: _____	_____
10.40	Lifting Capacities	Approximately 1900 lbs. State: maximum lifting capacity: _____	_____
10.41	Power Source	Electric power 12V DC Hydraulic power (extension/elevation)	_____
10.42	Reach (Boom Extensions)	Hydraulic - approximately 4 ft. 5 in. to 6 ft. 5 in. State: hydraulic reach: _____ Manual - approximately 6 ft. 5 in. to 9 ft. 3 in. State: manual reach: _____ State: maximum reach: _____	_____
10.43	Controls	12V DC Proportional Hydraulics State: controls: _____	_____
10.44	Boom Elevation	Approximately -50 to +60 degrees State: boom elevation: _____	_____
10.45	Rotation	360 degrees rotation State: rotation: _____	_____
10.46	Stowed Boom Length	State: _____	_____
10.47	Height, In-Stowed Position	State: _____	_____
10.48	Base Plate	Must meet crane capacity requirements State: size and thickness: _____	_____
10.49	Overload Protection System	Required: State: details: _____	_____

10.50	Winch	<ul style="list-style-type: none"> • 12-Volt electric • Galvanized aircraft quality cable • Safety hook complete with safety latch 	_____
10.51	Remote Control Pendant	<ul style="list-style-type: none"> • Proportional control • Tethered • Removable • Approximately 20 ft. of cable 	_____
10.52	Circuit Breaker	Required: Approximately 150 Amp	_____
10.53	Master Disconnect Switch	Required:	_____
10.54	Outriggers	Required: <ul style="list-style-type: none"> • Designed for crane quoted • Installation by the City of Winnipeg • Outriggers shall include a heavy-duty cross tube rated for crane capacity • Manually extendable with a crank-down leg on each side 	_____

Crane Installation

10.55	General	The crane shall be supplied complete and ready for installation including, but not limited to, mounting hardware, fasteners, base plate etc.	_____
10.56	Installation Manual	<ul style="list-style-type: none"> • The Contractor shall provide an installation manual providing installation instructions for the crane • The manual shall include, but not limited to, recommended fasteners, base plate, welding criteria, recommended outrigger design criteria, etc. 	_____
10.57	Operator's Manual	Required:	_____

**Standards
(Where Applicable)**

Finish

10.58	Aluminum	<ul style="list-style-type: none"> • Aluminum service body primed and painted with two (2) coats of plastic urethane paint • Colour impregnated to match chassis cab colour (Ford Oxford White Z1) 	_____
10.59	Compartment Interiors	Left in natural unpainted finish	_____

Welding

10.60	Welds	Continuous welds	_____
10.61	Standard	CSA Standard W47.1-30 and W59-03	_____
10.62	Weld Spatter	Weld spatter to be removed prior to finish	_____

Lighting and Electrical

- | | | |
|-------|--|-------|
| 10.63 | Conformance: <ul style="list-style-type: none">• LED Lighting• C.M.V.S.S.• Manitoba Highway Traffic Act.• City of Winnipeg Lighting Visibility Standard
http://winnipeg.ca/matmgt/pdfs/PublicWorksEquipLightingVisibility.pdf | _____ |
| 10.64 | Lighting: <ul style="list-style-type: none">• Supplier installed• High count LED | _____ |
| 10.65 | Visibility: <ul style="list-style-type: none">• Taillights, back-up lights and warning lights to be fully visible when tailgate is lowered to horizontal position• No clearance light shall protrude beyond Service body | _____ |
| 10.66 | Identification: <ul style="list-style-type: none">• All warning lights and switches to be identified with permanent, engraved type labels | _____ |
| 10.67 | LED Strobe Lights: <ul style="list-style-type: none">• 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 | _____ |
| 10.68 | Connection System: <ul style="list-style-type: none">• Weather Pack Sealed Connection System | _____ |
| 10.69 | Grommets: <ul style="list-style-type: none">• Rubber grommets unless otherwise specified | _____ |
| 10.70 | Harnesses: <ul style="list-style-type: none">• Harness system, properly routed and secured.• All harnesses shall be internally grounded, no exceptions• Colour coded or numbered | _____ |
| 10.71 | Junction Box: <ul style="list-style-type: none">• Complete with necessary compression fittings, required for all vehicle lighting harness connections• Securely located• Readily accessible for servicing• Waterproof• Protected from road spray | _____ |
| 10.72 | All Plug-In Connectors: <ul style="list-style-type: none">• All plug-in connectors shall be coated with Truck-Lite NYK Corrosion Preventive Compound prior to assembly | _____ |
| 10.73 | Wiring: <ul style="list-style-type: none">• All wiring to be colour coded, loomed and properly secured. | _____ |
| 10.74 | Electrical Connectors: <ul style="list-style-type: none">• All electrical connectors to be crimped, soldered and then sealed using heat shrink tubing | _____ |

10.75 Joining of Wires: _____
• All joining of wires to be soldered and sealed using heat shrink tubing or approved OEM weather tight connections

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

10.76 Wiring Routing: _____
• Any holes required to run wires through shall be drilled (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 Body and Crane 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 Factory Warranty - Crane **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. _____