

## FORM N: DETAILED SPECIFICATIONS 23009

### WIDE AREA MOWER

#### 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 Wide Area Mower and other equipment and features as specified herein.
- 2.2 The Wide Area Mower shall be a new **2023** model year or newer.
- 2.3 The Wide Area Mower 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 Wide Area Mower 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](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/motor-vehicle-safety-regulations)

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 \(ULC\)](http://www.ul.com/)

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](https://web2.gov.mb.ca/laws/regs/current/_pdf-regs.php?reg=31/2011)

#### 4. FUEL

4.1 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.

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#### 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 **Wide Area Mower**, 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, or 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 **Wide Area Mower** 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 **Wide Area Mower** shall have five (5) years continuous experience manufacturing **Wide Area Mower**.

- 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 **Wide Area Mower** of the type being offered.

**10. SPECIFICATIONS**

**Make and Model**

- 10.0 Equipment Make **State:** make: \_\_\_\_\_
- 10.1 Equipment Model **State:** model: \_\_\_\_\_
- 10.2 Equipment Model Year **State:** model year: \_\_\_\_\_

**Key Dimensions**

- 10.3 Cutting Width Approximately 11 ft. (3.35 m)  
**State:** \_\_\_\_\_
- 10.4 Centre Deck Cutting Width Approximately 62 in. (1575 mm)  
**State:** \_\_\_\_\_
- 10.5 Centre Deck + One (1) Wing Deck Cutting Width Approximately 94 in. (2388 mm)  
**State:** \_\_\_\_\_
- 10.6 Transport Width Approximately 71 – 84 in. (1803 - 2134 mm)  
**State:** \_\_\_\_\_

**Blades**

- 10.7 Blades Mulching blades  
  - Three (3) for center deck
  - Two (2) each for wing deck**State:** type and quantity: \_\_\_\_\_
- 10.8 Extra Flat Blades  
  - One (1) extra set of mulching blades
  - qty seven (7) blades
\_\_\_\_\_
- 10.9 Interchangeability Interchangeable mower blades between all decks \_\_\_\_\_

**Brakes**

- 10.10 Brakes Internal wet disk \_\_\_\_\_
- 10.11 Steering Brakes Individual Foot Operated  
**State:** \_\_\_\_\_
- 10.12 Parking Brake Hand brake  
**State:** \_\_\_\_\_

**ROPS and Canopy**

- |       |                 |   |       |
|-------|-----------------|---|-------|
| 10.13 | ROPS            | <ul style="list-style-type: none"> <li>• Certified</li> </ul>                                   | _____ |
| 10.14 | Canopy/Sunshade | <ul style="list-style-type: none"> <li>• Hard Canopy</li> <li>• Compatible with ROPS</li> </ul> | _____ |

**Controls**

- |       |                    |   |       |
|-------|--------------------|---|-------|
| 10.15 | Throttle           | Electronic 3 Position<br><b>or</b><br>Variable<br><b>State:</b> type: _____   | _____ |
| 10.16 | Forward/Reverse    | Electronic Single Pedal<br><b>or</b><br>Two-Pedal<br><b>State:</b> type: _____  | _____ |
| 10.17 | Mower Lift         | Electro Hydraulic Switches<br><b>or</b><br>Hand operated Levers<br><b>State:</b>  | _____ |
| 10.18 | LCD Display        | Onboard LCD display shows: <ul style="list-style-type: none"> <li>• Gauges</li> <li>• Alerts/faults</li> <li>• Service reminders</li> <li>• Electrical system diagnostics.</li> </ul>   | _____ |
| 10.19 | Indicators         | Indicators for: <ul style="list-style-type: none"> <li>• Fuel level</li> <li>• Coolant temperature</li> <li>• Intake temperature</li> <li>• Oil pressure</li> <li>• Alternator</li> <li>• Engine hours</li> <li>• Engine rpm</li> <li>• Hydraulic oil temperature</li> <li>• Voltage</li> </ul> | _____ |
| 10.20 | Diagnostic Control | Onboard diagnostics for engine and hydraulics   | _____ |

**Dimensions**

- |       |   |                     |       |
|-------|---|---------------------|-------|
| 10.21 | Wheel Base  | <b>State:</b> _____ | _____ |
| 10.22 | Overall Length (with deck)                        | <b>State:</b> _____ | _____ |
| 10.23 | Overall Width                                     | <b>State:</b> _____ | _____ |
| 10.24 | Height<br>(Include Rollover Protection Structure) | <b>State:</b> _____ | _____ |
| 10.25 | Weight  | <b>State:</b> _____ | _____ |
| 10.26 | Ground Clearance                                  | <b>State:</b> _____ | _____ |

**Drivetrain**

10.27	Transmission	Hydrostatic	_____
10.28	Transaxle Type	<b>State:</b> _____	_____
10.29	Transaxle	Planetary gear type, with double reduction <b>State:</b> _____	_____
10.30	Drive System	4WD	_____
10.31	4WD Drive Type	Parallel hydrostatic, closed loop	_____
10.32	Differential Lock	<b>State:</b> _____ Type: _____ Location: _____	_____

**Engine**

10.33	Engine	Tier IV Final compliant	_____
10.34	Horsepower	55 HP – 60 HP (41 - 44 kW) <b>State:</b> horsepower @ rpm: _____	_____
10.35	Displacement	Approximately 127 cu.in (2.1 L) <b>State:</b> _____	_____
10.36	Torque	Approximately 103 - 125 lb.-ft. (140 – 169 Nm) <b>State:</b> operating torque: _____	_____
10.37	Cylinders	Four (4) cylinder	_____
10.38	Starting Aid	Intake air heater <b>or</b> Glow plugs <b>State:</b> type: _____	_____
10.39	Rated Engine Speed	Approximately 2000 – 3000 rpm <b>State:</b> _____	_____
10.40	Lubrication	Pressurized <b>State:</b> _____	_____
10.41	Oil Filter	Replaceable, spin-on type <b>State:</b> _____	_____
10.42	Cooling	Liquid Cooled <b>State:</b> type _____	_____
10.43	Cooling System	Variable speed temperature actuated reversing fan <b>or</b> Manufacturer's standard <b>State:</b> type: _____	_____
10.44	Crankcase Capacity	Approximately 6.0 L <b>State:</b> capacity: _____	_____
10.45	Air Cleaner	Dual Element, Dry Type	_____

10.46 Air Restriction Indicator Required \_\_\_\_\_

**Electrical System**

10.47 Electrical Charging system – Automotive type \_\_\_\_\_

10.48 Alternator Approximately 75 - 80 amp  
**State:** amp: \_\_\_\_\_

10.49 Battery Voltage 12 Volt  
**State:** CCA: \_\_\_\_\_

**Fuel System**

10.50 Type Diesel \_\_\_\_\_

10.51 Fuel Injection Direct fuel injection  
**State:** \_\_\_\_\_

10.52 Fuel Pump Type Electronic High-Pressure Rail  
**or**  
Mechanical  
**State:** type: \_\_\_\_\_

10.53 Fuel Filter Replaceable, spin-on type \_\_\_\_\_

10.54 Fuel Capacity **State:** capacity: \_\_\_\_\_

**Hydraulic System**

10.55 Hydraulic Filtration **State:** type: \_\_\_\_\_

10.56 Hydraulic Reservoir Capacity Approximately 8 – 14 US gal (30 – 53L)  
**State:** capacity: \_\_\_\_\_

**Lighting**

10.57 Lighting - LED  

- Headlights
- Red and amber flashers
- Turn signals
- Tail lights
- Brake lights

\_\_\_\_\_

**Lubrication**

10.58 Grease Zerks \_\_\_\_\_

Due to operator safety requirements and convenience:

- All manual grease zerks shall be accessible to the operator (Excluding driveline)
- Hard to access and/or near a heat sources, a remote block with hydraulic lines shall be mounted to accommodate manual lubrication
- Remote block to be fitted with hydraulic lines with an approximately maximum working pressure of 5000 psi using #4 JIC fittings

**State:** quantity and locations: \_\_\_\_\_

10.59 **Mower Decks**

10.60 Deck Sizes **State:** \_\_\_\_\_  
Centre \_\_\_\_\_  
Wing \_\_\_\_\_

10.61 Deck Drive Type **State:** type: \_\_\_\_\_

10.62 Discharge Rear \_\_\_\_\_

10.63 Spindle Shaft **State:** type and construction: \_\_\_\_\_

10.64 Impact Impact-absorbing wing deck system \_\_\_\_\_  
**State:** type: \_\_\_\_\_

10.65 Cut-Height Range

- Approximately 1 – 6 in. (25 – 153 mm)
- Height of cut adjustable in ½ in (13 mm) increments

**State:** \_\_\_\_\_  
Range: \_\_\_\_\_  
Increments: \_\_\_\_\_

10.66 Wing Deck Float Approximately 45 degrees upward \_\_\_\_\_  
Approximately 20 degrees downward  
**State:** \_\_\_\_\_  
Upward: \_\_\_\_\_  
Downward: \_\_\_\_\_

10.67 Transport Lock Required \_\_\_\_\_

**Mower Mulch Kit**

10.68 Mower Mulch Kit

- Baffles \_\_\_\_\_
- Deflector shields \_\_\_\_\_

**Seat**

10.69 Seat

- Air ride suspension \_\_\_\_\_
- High-back \_\_\_\_\_
- Arm rests \_\_\_\_\_
- 4-Way adjustable with seat belt \_\_\_\_\_
- Seat to come with an extra seat belt extension \_\_\_\_\_

**Steering**

10.70 Type Hydrostatic Steering with Tilt \_\_\_\_\_

10.71 Steering Wheel Tilt \_\_\_\_\_

**Tie Down Provisions**

10.72 Tie Downs

- Tie down provisions for unit trailering \_\_\_\_\_
- Front and rear \_\_\_\_\_

**Tires**

10.73 Tires **State:** \_\_\_\_\_  
Drive size and ply: \_\_\_\_\_  
Steer size and ply: \_\_\_\_\_

10.74	Tread	Turf Tires (spring, summer, fall application)	_____
10.75	Spares	One (1) of each front and rear complete with rims	_____
	Caster Wheels	All caster wheels to be solid/foam filled	_____
10.76	Spare Caster Wheels	Spare set of (3) castor wheels	_____
	<b>Toolbox</b>		
10.77	Toolbox	<ul style="list-style-type: none"> <li>• Approximately 19 in. L x 6 in. W x 6.5 in. H</li> <li>• Mounted</li> <li>• Permanent</li> </ul> <b>State:</b> Size: _____ Location: _____	_____
		<b>Note:</b> Final size and location to be determined at a pre-production meeting	
	<b>Towing</b>		
10.78	Towing Provisions	Towing Provisions required <b>State:</b> _____	_____
	<b>Safety</b>		
10.79	Safety	Safety certified and conform to ANSI 71.42004 Safety Certification Specifications for Commercial Turf Care Equipment)	_____
10.80	Battery Disconnect Switch	Lockable with padlock	_____
10.81	Fire Extinguisher	<ul style="list-style-type: none"> <li>• 2.5 lbs.</li> <li>• High volume ABC type</li> <li>• Securely mounted with quick release</li> </ul>	_____
10.82	Beacon	<ul style="list-style-type: none"> <li>• HELLA MLB 10012-24VDC Part #H27996011 LED Micro Light bar 12-24V Magnetic Amber</li> <li>• SAE Class 1</li> <li>• Beacon to be located to achieve 360-degree visibility</li> <li>• Wired directly to the ignition i.e. no switch</li> </ul>	_____
10.83	Beacon Guard	Required	_____
10.84	Horn	Horn	_____
10.85	Back Up Alarm	<ul style="list-style-type: none"> <li>• Approximately 90 – 112 dB</li> <li>• Protected from damage</li> </ul> <b>State:</b> dB(A): _____	_____
10.86	Slow Moving Vehicle Sign	Mounted	_____



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 **Wide Area Mower** 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 Basic Vehicle (Comprehensive) **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 units 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. \_\_\_\_\_

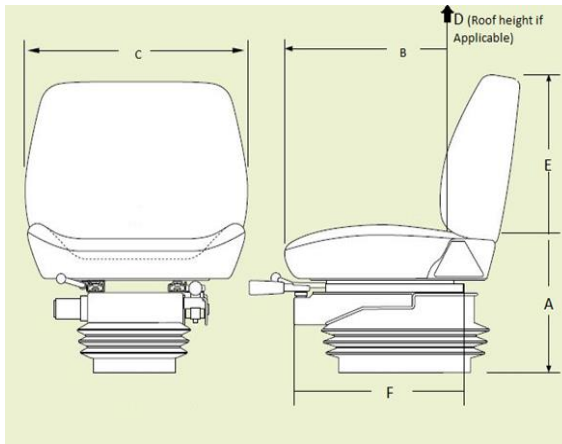
16.0 **ERGONOMIC SPECIFICATIONS**

**Entry/ Exit**

- 16.1 First step entry height **State:** height of first step in inches: \_\_\_\_\_
- 16.2 First handhold entry height **State:** first handhold entry height in inches: \_\_\_\_\_
- 16.3 Access to equipment **State:** door opening height in inches: \_\_\_\_\_
- 16.4 Access to equipment **State:** door opening width in inches: \_\_\_\_\_
- 16.5 Designed to prevent slipping **Anti-slip steps/handholds (Y or N)?** \_\_\_\_\_

**Seat**

16.6 Use diagram to answer questions.



- 16.7 Sitting Height Range (from floor (where feet rest) (A)) **State:** seat height range in inches: \_\_\_\_\_
- 16.8 Seat Length/Depth (B) **State:** seat length/depth in inches: \_\_\_\_\_
- 16.9 Seat Width (C) **State:** seat width in inches: \_\_\_\_\_
- 16.10 Cab Height (from seat to roof (if applicable) (D)) **State:** cab height range in inches: \_\_\_\_\_
- 16.11 Back Rest Height (E) **State:** back rest height in inches: \_\_\_\_\_
- 16.12 Seat Travel Range (F) **State:** seat travel in inches: \_\_\_\_\_
- 16.13 Lumbar Support **Is lumbar support provided (Y or N)?** \_\_\_\_\_

16.14 Head Rest Is head rest provided (**Y or N**)? \_\_\_\_\_

16.15 Seat is made of breathable material  
State: type of seat material: \_\_\_\_\_

**Operation**

16.16 Reaching Distance (to usual work) State: reaching distance in inches: \_\_\_\_\_

16.17 Maximum Reaching Distance State: maximum reach distance in inches: \_\_\_\_\_

16.18 Adjustable Pedals (accelerator/brake/clutch) Are pedals adjustable (**Y or N**)? \_\_\_\_\_

16.19 Adjustable Steering Wheel Is steering wheel adjustable (**Y or N**)? \_\_\_\_\_

16.20 Adjustable Shoulder Belt Is belt adjustable and anchored (**Y or N**)? \_\_\_\_\_

**Cargo Area**

16.21 Lid opens to provide adequate space Adequate space provided (**Y or N**)? \_\_\_\_\_

16.22 Loading Height State: trunk height in inches: \_\_\_\_\_

**Environment**

16.23 Operator compartment is insulated from equipment noise (while operating) State: dB inside cab while operating: \_\_\_\_\_

16.24 Operator insulated from equipment vibration Is operator insulated from vibration (**Y or N**)? \_\_\_\_\_

16.25 Heating/Cooling Systems State: cab temperature range: \_\_\_\_\_

16.26 Cab Lighting State: lumens inside cab: \_\_\_\_\_

**Maintenance/ Inspection**

16.27 Lift Assistance (when necessary) Is lift assistance provided (**Y or N**)? \_\_\_\_\_

16.28 Easy Access (to compartment doors) Is easy access provided (**Y or N**)? \_\_\_\_\_

16.29 Include any other relevant ergonomic specifications and applicable range of adjustment: \_\_\_\_\_  
\_\_\_\_\_