

FORM A: BID
(See B8)

1. Contract Title SUPPLY AND DELIVERY OF WHEEL LOADERS

2. Bidder

Name of Bidder

Usual Business Name of Bidder as it appears on Invoice (if different from above)

Street

City

Province

Postal Code

Email Address of Bidder

Facsimile Number

(Mailing address if different)

Street or P.O. Box

City

Province

Postal Code

GST Registration Number (if applicable)

The Bidder is:

(Choose one)

a sole proprietor

a partnership

a corporation

carrying on business under the above name.

3. Contact Person

The Bidder hereby authorizes the following contact person to represent the Bidder for purposes of the Bid.

Contact Person

Title

Telephone Number

Facsimile Number

Email Address

4. Definitions

All capitalized terms used in the Contract shall have the meanings ascribed to them in the General Conditions and D3.

5. Offer The Bidder hereby offers to perform the Work in accordance with the Contract for the price(s), in Canadian funds, set out on Form B: Prices, appended hereto.

6. Commencement of the Work The Bidder agrees that no Work shall commence until he/she is in receipt of a notice of award from the Award Authority authorizing the commencement of the Work.

7. Contract The Bidder agrees that the Bid Opportunity in its entirety shall be deemed to be incorporated in and to form a part of this offer notwithstanding that not all parts thereof are necessarily attached to or accompany this Bid.

8. Addenda The Bidder certifies that the following addenda have been received and agrees that they shall be deemed to form a part of the Contract:

No.	_____	Dated	_____
	_____		_____
	_____		_____

9. Time This offer shall be open for acceptance, binding and irrevocable for a period of sixty (60) Calendar Days following the Submission Deadline.

10. Signatures The Bidder or the Bidder's authorized official or officials have signed this _____ day of _____, 20____.

Signature of Bidder or
Bidder's Authorized Official or Officials

(Print here name and official capacity of individual whose signature appears above)

(Print here name and official capacity of individual whose signature appears above)

FORM B: PRICES
 (See B9)

SUPPLY AND DELIVERY OF WHEEL LOADERS AND INDUSTRIAL TRACTOR LOADERS

UNIT PRICES

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	QUANTITY	UNIT PRICE
1.	Industrial Tractor Loader 74HP	17051	Each	4	
1a.	Option 1: Attachments	17051	Each		
	3 Point Hitch			1	_____
	Box Scraper			1	_____
	Snow Bucket			2	_____
	Rear Counter Balance Weight			2	_____
	Clam Bucket 4-in-1			2	_____
	Pallet Forks			1	_____
	Spare tire and rim front R4			4	_____
1b.	Option 2: Attachments Clam Bucket 4-in-1	17051	Each	1	
2.	Articulating Wheel Loader 74HP	17052	Each	2	
2a.	Option 3: Attachments	17052	Each		
	General Material Bucket			2	_____
	Clam Bucket 4-in-1			2	_____
	Snow Bucket			1	_____
	Snow Blade			1	_____
	Pallet Forks			1	_____

 Name of Bidder

FORM N: DETAILED SPECIFICATIONS 17051
INDUSTRIAL TRACTOR LOADER (74HP) STRAIGHT FRAME

1.0 DESCRIPTION OF EQUIPMENT

- 1.1 These specifications describe an **Industrial Tractor Loader** and other equipment and features as specified herein.
- 1.2 The **Industrial Tractor Loader** shall be a new 2017 model year or newer.
- 1.3 The **Industrial Tractor Loader** 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.
- 1.4 It will be the responsibility of the Bidder to inform the City of any errors or omissions in these specifications, for under this Contract the Contractor shall be held responsible for the satisfactory operational function of the equipment.

2.0 OTHER SPECIFICATIONS AND STANDARDS

- 2.1 All applicable SAE standards form an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 2.2 The **Industrial Tractor Loader** shall comply with the applicable regulations:

National Safety Mark, NSM = <http://www.tc.gc.ca/eng/acts-regulations/acts-road.htm>

Manitoba Safety and Health Act, Parts 12, 22 =
<http://web2.gov.mb.ca/laws/statutes/ccsm/w210e.php> and <http://www.gov.mb.ca/labour/safety/>

Canadian Standards Association, CSA = <http://www.csa.ca/about/Default.asp?language=english>

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>.

- 2.3 It will be the responsibility of the Bidder to inform the City of any deficiencies in these specifications, for under this Contract the Contractor shall be held responsible for the design, performance, reliability and satisfactory operational function of the units.

3.0 SERVICE FACILITY

- 3.1 For the purpose of warranty repairs, the Bidder shall have an authorized service facility located within 10 km of the boundaries of the City of Winnipeg. The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered. Further to B9.1, 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.

3.2 If a suitable warranty facility is not available within 10 km of the boundaries of the City of Winnipeg, the Bidder may propose that the City of Winnipeg Repair Facility perform warranty work. Any Work performed by the City of Winnipeg Repair Facility shall be charged to the Contractor at the Facility's shop rate in effect at the time the work is performed **(for example, shop rate for 2017: \$98.00/hour and \$138.00/hour for overtime and callout).**

3.3 Location of the service facility located within 10 km of the boundaries of the City of Winnipeg.

The Bidder shall choose and fill in one of the Clauses listed below. --- 3.4) or 3.5)

3.4 Bidder's own facility location. **State the location of the service facility below.**

3.5 Bidder elects to have warranty work be performed by the City of Winnipeg. Bidder shall provide all warranty authorization processes.

4.0 REFERENCES

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

5.0 MAKE & MODEL

5.1 **State** make, year and model of the equipment bid- _____

6.0 INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS

6.1 Each bid will be evaluated based on adherence to all terms, conditions and requirements outlined in the Bid Opportunity package.

6.2 All items in these specifications must be answered indicating compliance or non-compliance. **BIDDERS SHALL STATE "YES" FOR COMPLIANCE OR STATE DEVIATION**, or give reply where requested to do so. Deviations shall be clearly stated and fully detailed. Alternatives will be considered subject to evaluation.

6.3 **EACH BIDDER IS REQUIRED TO FILL IN EVERY BLANK. FAILURE TO DO SO MAY BE USED AS A BASIS FOR REJECTION OF BID**

7.0 PERFORMANCE RELIABILITY

7.1 The responsibility for the design of the **Industrial Tractor Loader**, 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 **Industrial Tractor Loader** 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 FUEL

8.1 Where applicable, all equipment must be fully fuelled upon delivery (no exceptions).

9.0 QUALIFICATIONS OF MANUFACTURER & CONTRACTOR

9.1 The manufacturer of the **Industrial Tractor Loader** shall have five (5) years continuous experience manufacturing the equipment.

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 **Industrial Tractor Loader** of the type being offered.

10.0 SPECIFICATIONS:

ENGINE

10.1	Engine make & model	State	_____
10.2	Engine specification	Diesel, Emissions Tier IV Diesel Interim or Final, must meet current Emission Standards.	_____
10.3	Horse Power	Approx. Net 74 hp. state.	_____
10.4	Torque	Net torque, state.	_____
10.5	Engine aspiration	State.	_____
10.6	Fuel shut off	Electric solenoid type.	_____
10.7	Fuel Filter	With water separator.	_____
10.8	Oil filter	Full flow, spin-on type.	_____
10.9	Air cleaner	Dry cartridge type with dash mounted restriction indicator.	_____
10.10	Throttle	Hand operated with foot override.	_____
10.11	Exhaust	Muffler, vertical discharge with bend and 40° cut-off (rain cap unacceptable)	_____

10.12	Coolant	Extended life, protected to -40 ⁰ C.	_____
10.13	Engine block heater	Approx. 750 Watts.	_____
10.14	Cold weather starting aid	Glow plugs or air intake warmer, state type.	_____
10.15	Engine protection shutdown system	Visual and audible warning of principle machine systems including engine oil pressure and coolant temperature c/w engine shutdown.	_____
10.16	Fuel tank	State capacity.	_____

**ELECTRICAL/ LIGHTING/
SAFETY**

10.17	Type	12-Volt, negative ground electrical system.	_____
10.18	Electric starter	With key starter switch.	_____
10.19	Batteries	Dual batteries, 1600CCA combined capacity.	_____
10.20	Battery disconnect switch (lockable)	Protected from the elements. Switch to be lockable with pad lock.	_____
10.21	Alternator	Approx. 100 Amp, state capacity.	_____
10.22	Combined stop and tail lights	Two (2).	_____
10.23	Signal lights with warning flashers	Two (2) front and two (2) rear.	_____
10.24	Warning flashers	Operable with key removed.	_____
10.25	Headlights	Two (2).	_____
10.26	Working lights	Front- four (4) front mounted, adjustable, located immediately below cab roof line. Rear-four (4) rear mounted, adjustable, located immediately below the cab roof line. Side-two (2) side mounted, located immediately below cab roof line.	_____
10.27	Light switches	Independent on/off switch for each pair of work lights, dash mounted, wired through ignition, labeled with permanent type, engraved style labels.	_____
10.28	Cab interior light	Interior light.	_____
10.29	Radio	AM/FM/CD or MP3.	_____

10.30	Radio installation provision	12 volt, 20Amp independent circuit available at a spare circuit breaker, suitable for installation of a 2-way mobile radio.	_____
10.31	Horn	Operable from driving position and from backhoe position.	_____
10.32	Safety lighting (beacon)	Make and Model: Whelen L31 Series Super-LED, SAE Class 1 (or equivalent) Blue/Amber (individual control) beacon, 360 degree visibility. Wired through ignition, lights shall be wired for separate amber and separate blue labelled independently "winter", "off", "summer". The winter mode will turn on both blue and the summer will only turn on the amber lights.	_____
10.33	Beacon guard	Ramped, heavy duty bolt-on metal guard, designed to permit servicing of beacon without being removed.	_____
10.34	Back-up alarm	97 dB, factory installed, mounted to be protected from damage.	_____
10.35	Wiring	All locally installed accessories shall be color coded, loomed and properly secured. Splicing in any factory harness is unacceptable. All electrical power for locally supplied electrical components to be supplied from an OEM power distribution box. All joining of wires and electrical connectors shall be soldered and sealed with heat shrink tubing. All wiring for work lights and warning lights shall be supplied with no exposed wiring.	_____
10.36	LED lighting	All lighting LED, state .	_____
10.37	Slow moving sign	Grote 71152 or equivalent with bracket mounted to rear of backhoe.	_____

TIRES, RIMS, FENDERS

10.38	Front tires	Michelin or Bridgestone (or equivalent) radial or bias, state .	_____
10.39	Ply rating	State ply rating.	_____
10.40	Tread	R4, industrial tractor.	_____
10.41	Rear tires	Michelin or Bridgestone (or equivalent) radial or bias, state .	_____
10.42	Ply rating	State ply rating.	_____

- 10.43 Tread R4, industrial tractor. _____
- 10.44 Fenders Front and rear, rubber or polymer, **state**, material. _____

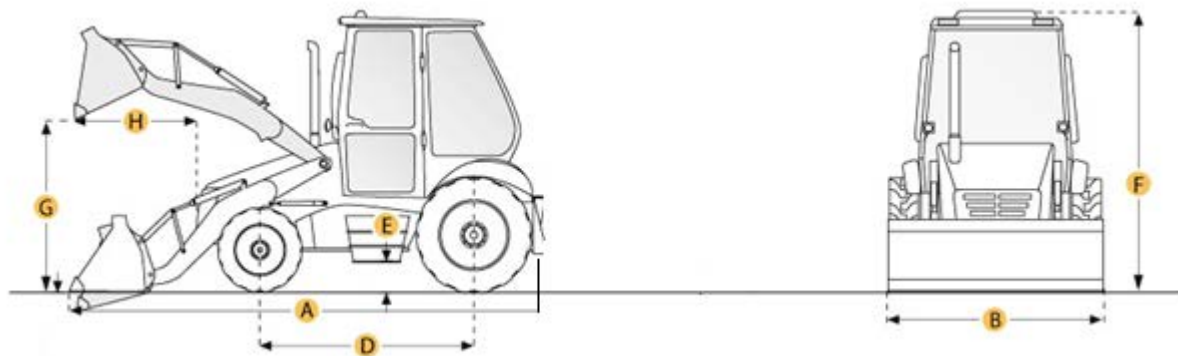
AXLES & BRAKES

- 10.45 Front axle Driven type (4WD) with guarded drive shaft (limited slip differential). _____
- 10.46 Rear axle Differential lock, push button activation. _____
- 10.47 Brakes Wet disk type with individual pedals simultaneous or independent operations. _____
- 10.48 Parking brake Foot or hand operated, **state** type. _____

TRANSMISSION

- 10.49 Type Power-shift transmission with torque convertor, manual shift with power reverser preferred, **state**. _____
- 10.50 Shifting Fully synchronized. _____
- 10.51 Speeds forward Four (4). _____
- 10.52 Speeds reverse Four (4). _____
- 10.53 Power-shift Direction reverser. _____

DIMENSIONS



- 10.54 Overall transport length (A) Approx. 16', **state**. _____
- 10.55 Overall transport width (B) Approx. 7', **state**. _____
- 10.56 Wheelbase (D) Approx. 84", **state**. _____
- 10.57 Operating weight (as bid) Approx. 11,500lbs, (without attachments) **state** weight. _____
- 10.58 Ground clearance (E) Approx. 12", state. _____

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|-------|---------------------------------|---|-------|
| 10.59 | Overall height (top of cab) (F) | Approx. 9', state. | _____ |
| 10.60 | Turning radius | Curb clearance with brakes applied, state. | _____ |

FRONT END LOADER

- | | | | |
|-------|----------------------------|---|-------|
| 10.61 | Lift capacity, full height | Approx. 6500lbs., state. | _____ |
| 10.62 | Bucket breakout force | Approx. 9,000lbs., state. | _____ |
| 10.63 | Dump clearance as bid (G) | Bucket @ 45 ⁰ approx. 105 inches, state. | _____ |
| 10.64 | Controls | Single lever with clutch disconnect button, return –to-dig and float. | _____ |
| 10.65 | Self-levelling bucket | With level indicator. | _____ |
| 10.66 | Wear plate (s) | Required to prevent bucket heel from rubbing on ground with bolt-on cutting edge in place. | _____ |
| 10.67 | Lashing ring | Heavy duty, steel weld-on hook with spring mounted clasp, top-center mounted at front of loader bucket. | _____ |
| 10.68 | Loader safety prop bar | Preferred. | _____ |
| 10.69 | Hydraulic function | 3 function hydraulics. | _____ |
| 10.70 | Hydraulic quick attach | For loader buckets. | _____ |
| 10.71 | OEM ride control | State. | _____ |

ATTACHMENTS

Note: Options to be priced only as indicated on Form B: Prices

Option 1: Attachments (Item 1a).

- | | | | |
|-------|---------------|---|-------|
| 10.72 | 3 Point hitch | For Box scraper. | _____ |
| 10.73 | Box scraper | Quick attach, approx. 84" width with replaceable bolt-on cutting edges and scarifier. Weight approx. 1500 lbs. State weight. | _____ |
| 10.74 | Snow bucket | Approx. 82" width, 2.0 yd ³ capacity, state. With bolt-on cutting edge. Wear plates required to prevent bucket heel from rubbing on ground with bolt-on cutting edge in place. Width to exceed machine width at rear tires. | _____ |

10.75	Rear counter balance weight	Quick attach, approx. 600lbs. OEM, factory installed, required to provide proper machine balance and loading characteristics. State weight of counterbalance.	_____
10.76	Clam bucket	4 in 1 combination, with and bolt-on cutting edge. Approx. width 82" with 1.3 yd ³ capacity, state . Replaceable bolt-on cutting edges for all three edges of the bucket.	_____
10.77	Pallet forks	Carriage and fork set with 48" tines	_____
10.78	Spare tires	One (1) front R4 industrial tractor tire and rim.	_____

Option 2: Attachments (Item 1b).

10.79	Clam bucket	4 in 1 combination, with and bolt-on cutting edge. Approx. width 82" with 1.32 yd ³ capacity, state . Replaceable bolt-on cutting edges for all three edges of the bucket.	_____
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GREASING SYSTEM

10.80	Greasing system	Groeneveld CPL Systems Inc. or Lubcore (or Equivalent) complete automatic greasing system including all required grease points on the flusher body, and automatic low level shut-off with in-cab red light indicator.	_____
10.81	Grease lines	Low temperature compatible 800 bar/12000 PSI grease line with a bending radius of ¾ inch.	_____
10.82	Check valves	One way check valves on each line.	_____
10.83	Flow dividers	One piece flow dividers with manual over ride.	_____
10.84	Greasing points	State , quantity of greasing points.	_____
10.85	Grease fittings	Readily accessible with remote grease zerks.	_____

OPERATOR CAB

10.86	Type-ROPS	Roll-over protective structure complete with pressurized cab, OSHA certified or equal.	_____
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10.87	Insulation and headliner	For sound suppression and severe weather/climate.	_____
10.88	Floor covering	Rubber matting, throughout.	_____
10.89	Seat	Cushioned, adjustable bucket type with arm rests, cloth upholstery air suspension with retractable seat belt.	_____
10.90	Ride control	Factory installed.	_____
10.91	All Windows	Tinted safety glass with appropriate markings for all panes and opening type where applicable.	_____
10.92	Ignition keys	Three (3) sets required per machine.	_____
10.93	Doors	One (1) each side with spring assisted strut, lockable with common key.	_____
10.94	Interior rear-view mirror	Adjustable.	_____
10.95	Windshield wipers	Intermittent preferred, requires front and rear.	_____
10.96	Heater/defroster	Heavy duty, hot water type with multi-speed fan, capable of keeping all windows clear at -40 ⁰ C.	_____
10.97	Window fans	Two (2) with guards.	_____
10.98	Air conditioning	Factory installed with under hood compressor. (Note: roof mounted air conditioners are not acceptable).	_____
10.99	Steps	Open grate style.	_____
10.100	Toolbox	Lockable, state location.	_____
10.101	Instrumentation	Coolant temperature-gauge with audible alarm. Engine oil pressure-gauge or warning light with audible alarm. Engine hour meter-non resettable type. Tachometer. Fuel gauge.	_____
10.102	Noise Level, interior	85 dB(A), measured in accordance with SAE J336, state noise level.	_____
10.103	Fire extinguisher	Five (5) lbs. High volume ABC type, State location.	_____

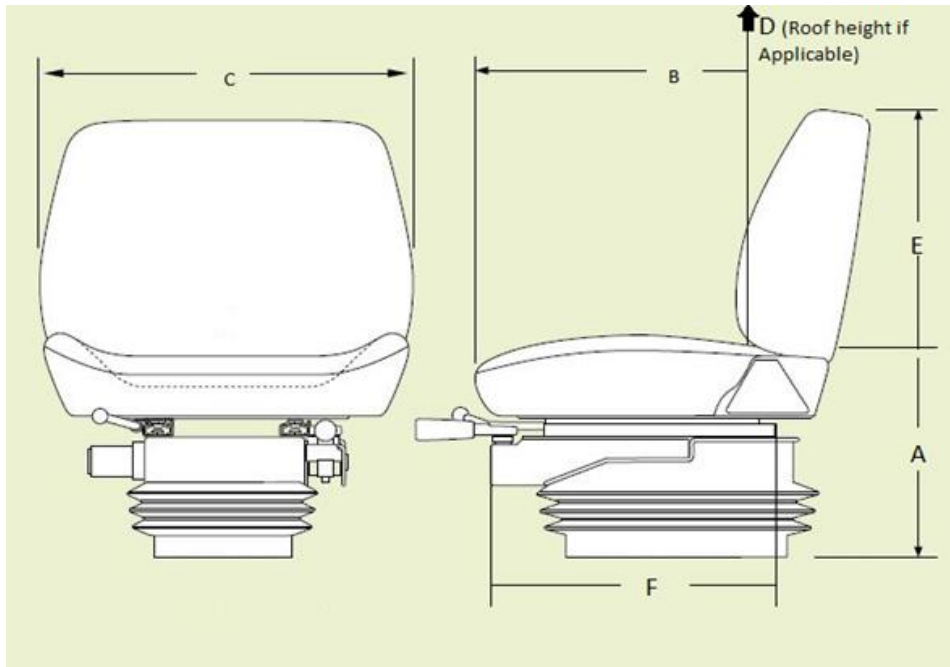
11.0 **OPERATOR STATION ERGONOMICS**

Entry/ Exit

11.1	First step entry height	State , height of first step in inches.	_____
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- | | | | |
|------|------------------------------|---|-------|
| 11.2 | First handhold entry height | State , first handhold entry height in inches. | _____ |
| 11.3 | Access to equipment | State , door opening height in inches. | _____ |
| 11.4 | Access to equipment | State , door opening width in inches. | _____ |
| 11.5 | Designed to prevent slipping | Anti-slip steps/handholds (Y or N)? | _____ |

Seat (use below diagram to answer questions)



- | | | | |
|-------|---|---|-------|
| 11.6 | Sitting height range from floor (where feet rest) (A) | State , seat height range in inches. | _____ |
| 11.7 | Seat length/depth (B) | State , seat length/depth in inches. | _____ |
| 11.8 | Seat width (C) | State , seat width in inches. | _____ |
| 11.9 | Cab height from seat to roof (if applicable) (D) | State , cab height range in inches. | _____ |
| 11.10 | Back rest height (E) | State , back rest height in inches. | _____ |
| 11.11 | Seat travel range (F) | State , seat travel in inches. | _____ |
| 11.12 | Lumbar support | Is lumbar support provided (Y or N)? | _____ |
| 11.13 | Head rest | Is head rest provided (Y or N)? | _____ |
| 11.14 | Seat is made of breathable material | State , type of seat material. | _____ |

Operation

- | | | | |
|-------|---------------------------------|--|-------|
| 11.15 | Reaching distance to usual work | State , reaching distance in inches. | _____ |
| 11.16 | Maximum reaching distance | State , maximum reach distance in inches. | _____ |

11.17 Adjustable pedals (accelerator/brake/clutch) Are pedals adjustable (Y or N)? _____

11.18 Adjustable steering wheel Is steering wheel adjustable (Y or N)? _____

11.19 Adjustable shoulder belt Is belt adjustable and anchored (Y or N)? _____

Cargo Area

11.20 Lid opens to provide adequate space Lid opens to provide adequate space _____

11.21 Loading height State, trunk height in inches _____

Environment

11.22 Operator compartment is insulated from equipment noise (while operating) State, dBA inside cab while operating _____

11.23 Operator insulated from equipment vibration Is operator insulated from vibration (Y or N)? _____

11.24 Heating/cooling systems State, cab temperature range _____

11.25 Cab lighting State, lumens inside cab _____

12.0 **WARRANTY**

12.1 All warranty information shall be detailed and include all exclusions. The successful bidder shall provide all published warranty information upon delivery of the equipment. Bidder shall state all warranty information. _____

12.2 Basic coverage (Complete Machine) Warranty 2 years, 2000 hours. _____

12.3 Power train (Engine, Transmission) Warranty 2 years 2000 hours. _____

12.4 Hydraulics warranty (Hydraulics) Warranty 2 years, 2000 hours. _____

12.5 Batteries warranty (Batteries) Warranty 1 year. _____

12.6 Tires warranty (Tires) Warranty 1 year. _____

12.7 Electrical warranty (Electrical) Warranty 2 years, 2000 hours. _____

13.0 **DELIVERY**

13.1 Delivery Point: The complete unit shall be serviced, ready for operation and delivered F.O.B. with the freight prepaid, including invoice and N.I.V.S. (if applicable) to the WFMA 185 Tecumseh Street, Winnipeg MB. The successful bidder shall be notified by the Contractor Administrator the delivery address prior to issuance of the purchase order. _____

13.2 Delivery Time: **Twelve (12) calendar weeks** from the date of award. Equipment shall be delivered between 8:00 am and 2:00 pm on Business Days. _____

13.3 Delivery Contact: The Contractor shall contact the Contract Administrator prior to delivery of the equipment. _____

13.4 P.D.I: A pre-delivery inspection shall be performed by the Contractor on the equipment. Proof upon inspection including completed check list _____

14.0 **MANUALS**

14.1 Manuals supplied under this contract shall cover the complete equipment including all components thereof, CD or USB flash drive is preferred where available. _____

14.2 The following manuals shall be supplied with the units when delivered:

a) Operator's manual – Two (2) per unit (one operator manual shall be sent to the Equipment Operator Training Branch _____

b) Parts and service manuals – one (1) complete sets including preventative maintenance schedules. CDs or USB flash drive are preferred. _____

15.0 **FIRST SERVICE PREVENTATIVE MAINTENANCE KIT**

15.1 In order to assure minimum downtime of the equipment in future service, the Contractor shall 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, cab and hydraulic, or otherwise all known necessary common replacement filters required for the first preventative maintenance servicing. _____

15.2 The Contractor shall 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 **PARTS/LABOUR PRICING**

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

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

FORM N: DETAILED SPECIFICATIONS 17052
ARTICULATING WHEEL LOADER (74HP)

1.0 DESCRIPTION OF EQUIPMENT

- 1.1 These specifications describe an **Articulating Wheel Loader** and other equipment and features as specified herein.
- 1.2 The **Articulating Wheel Loader** shall be a new 2017 model year or newer.
- 1.3 The **Articulating Wheel Loader** 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.
- 1.4 It will be the responsibility of the Bidder to inform the City of any errors or omissions in these specifications, for under this Contract the Contractor shall be held responsible for the satisfactory operational function of the equipment.

2.0 OTHER SPECIFICATIONS AND STANDARDS

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

- 2.2 The **Articulating Wheel Loader** shall comply with the applicable regulations:

National Safety Mark, NSM = <http://www.tc.gc.ca/eng/acts-regulations/acts-road.htm>

Manitoba Safety and Health Act, Parts 12, 22 =
<http://web2.gov.mb.ca/laws/statutes/ccsm/w210e.php> and <http://www.gov.mb.ca/labour/safety/>

Canadian Standards Association, CSA = <http://www.csa.ca/about/Default.asp?language=english>

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>.

- 2.3 It will be the responsibility of the Bidder to inform the City of any deficiencies in these specifications, for under this Contract the Contractor shall be held responsible for the design, performance, reliability and satisfactory operational function of the units.

3.0 SERVICE FACILITY

- 3.1 For the purpose of warranty repairs, the Bidder shall have an authorized service facility located within 10 km of the boundaries of the City of Winnipeg. The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered. Further to B9.1, 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.

3.2 If a suitable warranty facility is not available within 10 km of the boundaries of the City of Winnipeg, the Bidder may propose that the City of Winnipeg Repair Facility perform warranty work. Any Work performed by the City of Winnipeg Repair Facility shall be charged to the Contractor at the Facility's shop rate in effect at the time the work is performed **(for example, shop rate for 2017: \$98.00/hour and \$138.00/hour for overtime and callout).**

3.3 Location of the service facility located within 10 km of the boundaries of the City of Winnipeg.

The Bidder shall choose and fill in one of the Clauses listed below. --- 3.4) or 3.5)

3.4 Bidder's own facility location. **State the location of the service facility below.**

3.5 Bidder elects to have warranty work be performed by the City of Winnipeg. Bidder shall provide all warranty authorization processes.

4.0 REFERENCES

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

5.0 MAKE & MODEL

5.1 **State** make, year and model of the equipment bid- _____

6.0 INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS

6.1 Each bid will be evaluated based on adherence to all terms, conditions and requirements outlined in the Bid Opportunity package.

6.2 All items in these specifications must be answered indicating compliance or non-compliance. **BIDDERS SHALL STATE "YES" FOR COMPLIANCE OR STATE DEVIATION**, or give reply where requested to do so. Deviations shall be clearly stated and fully detailed. Alternatives will be considered subject to evaluation.

6.3 **EACH BIDDER IS REQUIRED TO FILL IN EVERY BLANK. FAILURE TO DO SO MAY BE USED AS A BASIS FOR REJECTION OF BID**

7.0 PERFORMANCE RELIABILITY

7.1 The responsibility for the design of the **Articulating Wheel Loader**, 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 **Articulating Wheel Loader** 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)

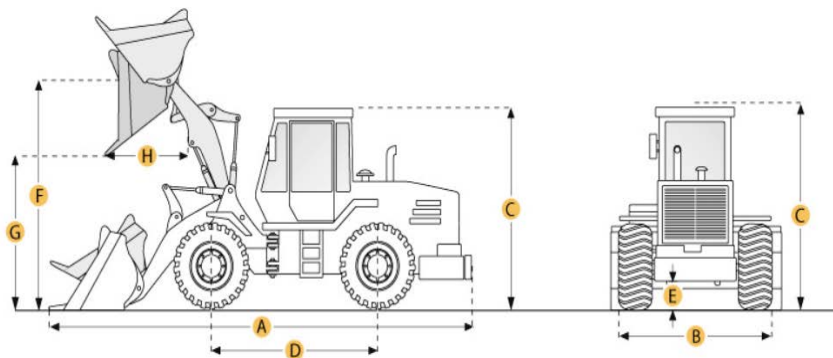
8.0 FUEL

8.1 Where applicable, all equipment must be fully fuelled upon delivery (no exceptions).

9.0 QUALIFICATIONS OF MANUFACTURER & CONTRACTOR

- 9.1 The manufacturer of the **Articulating Wheel Loader** shall have five (5) years continuous experience manufacturing the equipment.
- 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 **Articulating Wheel Loader** of the type being offered.

10.0 SPECIFICATIONS:



10.1 DIMENSIONS

10.2	Loader type	Articulating.	_____
10.3	Overall transport length (A)	Approx. 18'6", state.	_____
10.4	Width: over tires (B)	Approx. 6', state.	_____
10.5	Overall height (top of cab) (C)	Approx. 8'6", state.	_____
10.6	Wheelbase (D)	Approx. 7'6", state.	_____
10.7	Ground clearance (E)	Approx. 12-15 inches, state.	_____
10.8	Hinge pin height (F)	Approx. 11', state.	_____

- | | | | |
|-------|--|---|-------|
| 10.9 | Dump clearance at max raise at 45 ⁰ (G) | Approx. 8', state . | _____ |
| 10.10 | Reach at max lift and dump 45 ⁰ (H) | Approx. 2'6", state . | _____ |
| 10.11 | Operating weight (as bid) | Approx. 14,000 lbs., state weight. | _____ |

ENGINE

- | | | | |
|-------|-----------------------------------|--|-------|
| 10.12 | Engine make & model | State | _____ |
| 10.13 | Engine specification | Diesel, Emissions Tier IV Diesel Interim or Final, must meet current Emission Standards. | _____ |
| 10.14 | Horse power | Approx. Net 74, state . | _____ |
| 10.15 | Torque | Net torque, state . | _____ |
| 10.16 | Engine aspiration | State . | _____ |
| 10.17 | Fuel shut off | Electric solenoid type. | _____ |
| 10.18 | Fuel Filter | With water separator. | _____ |
| 10.19 | Oil filter | Full flow, spin-on type. | _____ |
| 10.20 | Air cleaner | Dry cartridge type with dash mounted restriction indicator. | _____ |
| 10.21 | Throttle | Hand operated with foot override. | _____ |
| 10.22 | Exhaust | Muffled, vertical discharge with bend and 40 ⁰ cut-off (rain cap unacceptable). | _____ |
| 10.23 | Coolant | Extended life, protected to -40 ⁰ C. | _____ |
| 10.24 | Engine block heater | Approx. 750 Watts. | _____ |
| 10.25 | Cold weather starting aid | Glow plugs or air intake warmer, state type. | _____ |
| 10.26 | Engine protection shutdown system | Visual and audible warning of principle machine systems including engine oil pressure and coolant temperature c/w engine shutdown. | _____ |
| 10.27 | Programmable anti-idling system | For carbon emission Reduction/fuel consumptions. | _____ |
| 10.28 | Fuel tank | State capacity. | _____ |

ELECTRICAL/ LIGHTING/ SAFETY

- | | | | |
|-------|------|---|-------|
| 10.29 | Type | 12-Volt, negative ground electrical system. | _____ |
|-------|------|---|-------|

10.30	Electric starter	With key starter switch.	_____
10.31	Starter switch	Key type or keyless type with security code, state .	_____
10.32	Batteries	Dual batteries, 1600CCA combined capacity.	_____
10.33	Battery disconnect switch (lockable)	Protected from the elements. Switch to be lockable with pad lock.	_____
10.34	Alternator	Approx. 100 Amp, state capacity.	_____
10.35	Combined stop and tail lights	Two (2). LED.	_____
10.36	Signal lights with warning flashers	Two (2) front and two (2) rear, LED.	_____
10.37	Warning flashers	Operable with key removed.	_____
10.38	Headlights	Two (2).	_____
10.39	Working lights (heavy duty)	Front- two (2) front mounted, adjustable, mounted near to pivot of loader lift arm. Rear-two (2) rear mounted, adjustable.	_____
10.40	Light switches	Independent on/off switch for each pair of work lights, dash mounted, wired through ignition, labeled with permanent type, engraved style labels.	_____
10.41	Full set of Manitoba Highways provincially approved highway lights (wigwag lights).	Independently controlled through a separate switch. Highway lights not to extend past cab.	_____
10.42	Cab interior light	Interior light.	_____
10.43	Radio	AM/FM/CD or MP3.	_____
10.44	Radio installation provision	12 volt, 20Amp spate/independent circuit available at a spare circuit breaker, suitable for installation of a 2-way mobile radio.	_____
10.45	Horn	Operable from driving position and from backhoe position.	_____
10.46	Safety lighting (beacon)	Make and Model: Whelen L31 Series Super-LED, SAE Class 1 (or equivalent) Blue/Amber (individual control) beacon, 360 degree visibility. Wired through ignition, lights shall be wired for separate amber and separate blue labelled independently "winter", "off", "summer". The winter mode will turn on both blue and the summer will only turn on the amber lights.	_____

10.47	Beacon guard	Ramped, heavy duty bolt-on metal guard, designed to permit servicing of beacon without being removed.	_____
10.48	Back-up alarm	97 dB, factory installed, mounted to be protected from damage.	_____
10.49	Wiring	All locally installed accessories shall be color coded, loomed and properly secured. Splicing in any factory harness is unacceptable. All electrical power for locally supplied electrical components to be supplied from an OEM power distribution box. All joining of wires and electrical connectors shall be soldered and sealed with heat shrink tubing. All wiring for work lights and warning lights shall be supplied with no exposed wiring.	_____
10.50	LED lighting	All lighting LED, state .	_____
10.51	Slow moving sign	Grote 71152 or equivalent with bracket mounted to rear of backhoe.	_____

TIRES, RIMS, FENDERS

10.52	Tire brand	Michelin or Bridgestone (or equivalent), state make model being bid.	_____
10.53	Radial Tractor Tire		_____
10.54	Tread	Agricultural style tread, front and rear.	_____



10.55	Size	State , size.	_____
10.56	Rims	3-piece design.	_____
10.57	Fenders	Front and rear, rubber or polymer, with anti-skid tape on step surfaces where applicable. State , material.	_____

AXLES, STERING & BRAKES

10.58	Front axle	Electronic or hydraulic locking differential, State type.	_____
10.59	Rear axle	Electronic or hydraulic locking differential, State type.	_____
10.60	Rear axle	Semi-floating or oscillating rear axle	_____
10.61	Differential drain plugs	Magnetic.	_____
10.62	Brakes	4-wheel, hydraulic operated wet disk type.	_____
10.63	Parking brake	Spring applied and hydraulically released.	_____
10.64	Two control pedals	Accelerator pedal. Dual purpose pedal: transmission disconnect with braking.	_____
10.65	Steering	Articulated with approx. 35 ° articulations left and right of center, state .	_____
10.66	Articulating center pin components	State type.	_____
10.67	Operational Steering and Articulating Requirements	a) Steering and Articulation of the machine must be smooth, controlled and continuous, fully raised and loaded at engine idle speed. b) Steering wheel movement must be smooth, controlled and continuous fully raised and loaded engine speed. There shall be no erratic, pulsating or jerking movement of the steering wheel. c) Steering equipped with neutralizer valves or equivalent to prevent frame to frame contact at full articulation.	_____ _____ _____
10.68	Steering frame lock	Required.	_____

TRANSMISSION

10.69	Type	Hydrostatic transmission 4 wheel drive. with adjustable hydrostatic response.	_____
10.70	Shift control	Single lever.	_____ _____
10.71	Speeds forward	State number of speeds.	_____
10.72	Speeds reverse	State number of speeds.	_____
10.73	Power-shift	Direction reverser	_____

10.74 Creep gear range Approx.0-6 km/hr. Allows max. hydraulic flow at constant speed for cold planning and snow removal. _____

FRONT END LOADER

10.75 Breakout Force Approx. 12,000 lbs. _____

10.76 Tipping load straight Approx. 10,000 lbs. _____

10.77 Tipping load 40° turn Approx. 8,100 lbs. _____

10.78 Hinge pin height fully raise Approx. 8 ft. _____

10.79 Loader Controls One dual function lever that provides lift and curl of the bucket. Automatic return-to-carry. _____

10.80 Self-levelling bucket With level indicator. _____

10.81 Boom height control (kick-out) Automatic, adjustable. _____

10.82 Ride control system OEM system, ride control system shall be of the type that automatically engages or disengages, dependent on the machines ground speed. _____

10.83 Safety prop bar (if available) OEM approved. _____

10.84 Hydraulic fluid level indicator _____

10.85 Auxiliary hydraulics For attachment growth, 3rd function valve. High flow pump, approx. 34 gpm. _____

10.86 Hydraulic quick attach For loader bucket. _____

10.87 Skid steer loader coupler Mounting plate, quick attach. _____

ATTACHMENTS

Note: Options to be priced only as indicated on Form B: Prices

Note: Option 3: Attachments (Item 2a.)

10.88 General material bucket Approx. 1.7 yd³ capacity, **state**. With bolt-on cutting edge. Bottom wear plates required to prevent bucket heel from rubbing on ground with bolt-on cutting edge in place. Side wear plates, bolt-on replaceable Width to exceed machine width at tires. _____

10.89 Clam bucket 4 in 1 combination, with and bolt-on cutting edge. Approx. width 82" with 1.3 yd³ capacity, **state**. Replaceable bolt-on cutting edges for all three edges of the bucket. _____

10.90	Snow bucket	Approx. 82" width, 2.0 yd ³ capacity, state . With bolt-on cutting edge. Wear plates required to prevent bucket heel from rubbing on ground with bolt-on cutting edge in place. Width to exceed machine width at rear tires.	_____
10.91	Pallet forks	Carriage and fork set with 48" tines	_____
10.92	Snow blade with side wings	Metal Pless model PLSS0830-13 (or equivalent). 180° multiple hydraulic side wing positions. Dimensions, blade position and width: Box 8', Scoop 10.5', Extended 13'. With live edge trip system.	_____

GREASING SYSTEM

10.93	Greasing system	Groeneveld/CPL Systems Inc or Lubecore complete CPL automatic greasing system including all required grease points on the flusher body, and automatic low level shut-off with in-cab red light indicator.	_____
10.94	Grease lines	Low temperature compatible 800 bar/12000 PSI grease line with a bending radius of ¾ inch.	_____
10.95	Check valves	One way check valves on each line.	_____
10.96	Flow dividers	One piece flow dividers with manual over ride.	_____
10.97	Greasing points	State , quantity of greasing points.	_____
10.98	Grease fittings	Readily accessible with remote grease zerks.	_____

OPERATOR CAB

10.99	Type-ROPS	Roll-over protective structure complete with pressurized cab, OSHA certified or equal	_____
10.100	Insulation and headliner	For sound suppression and severe weather/climate.	_____
10.101	Floor covering	Rubber matting, throughout.	_____
10.102	Seat	Cushioned, adjustable bucket type with arm rests, cloth upholstery air suspension with retractable seat belt.	_____
10.103	Ride control	Factory installed.	_____

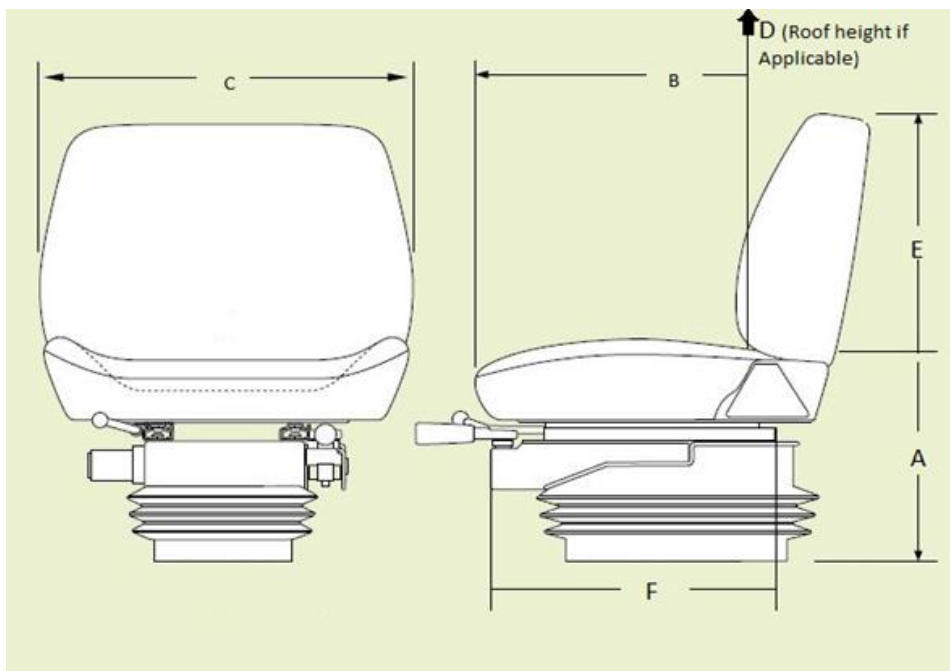
10.104	All Windows	Tinted safety glass with appropriate markings for all panes and opening type where applicable.	_____
10.105	Ignition keys	Three (3) sets required per machine.	_____
10.106	Left and right doors	Lockable with common key. Door/window shall latch in fully opened position Complete with a full length ladder to provide safe exit if required.	_____
10.107	Interior rear-view mirror	Adjustable.	_____
10.108	Exterior rear view mirrors	One (1) each side.	_____
10.109	Windshield wipers	Intermittent preferred, requires front and rear.	_____
10.110	Windshield washers	Front and rear.	_____
10.111	Heater/defroster	Heavy duty, hot water type with multi-speed fan, capable of keeping all windows clear at -40 ⁰ C.	_____
10.112	Steering wheel	Tilt type.	_____
10.113	Air conditioning	Factory installed with under hood compressor. (Note: roof mounted air conditioners are not acceptable).	_____
10.114	Steps	Open grate style.	_____
10.115	Toolbox	Lockable, state location.	_____
10.116	Instrumentation	Coolant temperature-gauge with audible alarm. Engine oil pressure-gauge or warning light with audible alarm. Engine hour meter-non resettable type. Tachometer. Fuel gauge.	_____
10.117	Sun shades	Front and rear fold down style.	_____
10.118	Rear view camera	OEM installed.	_____
10.119	Steps and hand rails	To provide safe cleaning of front windshield.	_____
10.120	Self-cleaning steps	For safe entry and exit.	_____
10.121	Noise Level, interior	85 dB(A), measured in accordance with SAE J336, state noise level.	_____
10.122	Fire extinguisher	Ten (10) lbs. High volume ABC type, State location.	_____

11.0 OPERATOR STATION ERGONOMICS

Entry/ Exit

- | | | | |
|------|------------------------------|---|-------|
| 11.1 | First step entry height | State , height of first step in inches. | _____ |
| 11.2 | First handhold entry height | State , first handhold entry height in inches. | _____ |
| 11.3 | Access to equipment | State , door opening height in inches. | _____ |
| 11.4 | Access to equipment | State , door opening width in inches. | _____ |
| 11.5 | Designed to prevent slipping | Anti-slip steps/handholds (Y or N)? | _____ |

Seat (use below diagram to answer questions)



- | | | | |
|-------|---|---|-------|
| 11.6 | Sitting height range from floor (where feet rest) (A) | State , seat height range in inches. | _____ |
| 11.7 | Seat length/depth (B) | State , seat length/depth in inches. | _____ |
| 11.8 | Seat width (C) | State , seat width in inches. | _____ |
| 11.9 | Cab height from seat to roof (if applicable) (D) | State , cab height range in inches. | _____ |
| 11.10 | Back rest height (E) | State , back rest height in inches. | _____ |
| 11.11 | Seat travel range (F) | State , seat travel in inches. | _____ |
| 11.12 | Lumbar support | Is lumbar support provided (Y or N)? | _____ |
| 11.13 | Head rest | Is head rest provided (Y or N)? | _____ |
| 11.14 | Seat is made of breathable material | State , type of seat material. | _____ |

Operation

- 11.15 Reaching distance to usual work **State**, reaching distance in inches. _____
- 11.16 Maximum reaching distance **State**, maximum reach distance in inches. _____
- 11.17 Adjustable pedals (accelerator/brake/clutch) Are pedals adjustable **(Y or N)**? _____
- 11.18 Adjustable steering wheel Is steering wheel adjustable **(Y or N)**? _____
- 11.19 Adjustable shoulder belt Is belt adjustable and anchored **(Y or N)**? _____

12.0 WARRANTY

- 12.1 All warranty information shall be detailed and include all exclusions. The successful bidder shall provide all published warranty information upon delivery of the equipment. Bidder shall state all warranty information. _____
- 12.2 Basic coverage (Complete Machine) Warranty 2 years, 2000 hours. _____
- 12.3 Power train (Engine, Transmission, Axles) Warranty 2 years 2000 hours. _____
- 12.4 Hydraulics warranty (Hydraulics) Warranty 2 years, 2000 hours. _____
- 12.5 Batteries warranty (Batteries) Warranty 1 year. _____
- 12.6 Tires warranty (Tires) Warranty 1 year. _____
- 12.7 Electrical warranty (Electrical) Warranty 2 years, 2000 hours. _____

13.0 DELIVERY

- 13.1 Delivery Point: The complete unit shall be serviced, ready for operation and delivered F.O.B. with the freight prepaid, including invoice and N.I.V.S. (if applicable) to the WFMA 185 Tecumseh Street, Winnipeg MB. The successful bidder shall be notified by the Contractor Administrator the delivery address prior to issuance of the purchase order. _____
- 13.2 Delivery Time: **Twelve (12) calendar weeks** from the date of award. Equipment shall be delivered between 8:00 am and 2:00 pm on Business Days. _____
- 13.3 Delivery Contact: The Contractor shall contact the Contract Administrator prior to delivery of the equipment. _____
- 13.4 P.D.I: A pre-delivery inspection shall be performed by the Contractor on the equipment. Proof upon inspection including completed check list. _____

14.0 **MANUALS**

14.1 Manuals supplied under this contract shall cover the complete equipment including all components thereof, CD or USB flash drive is preferred where available. _____

14.2 The following manuals shall be supplied with the units when delivered:

a) Operator's manual – Two (2) per unit (one operator manual shall be sent to the Equipment Operator Training Branch _____

b) Parts and service manuals – one (1) complete sets including preventative maintenance schedules. CDs or USB flash drive are preferred. _____

15.0 **FIRST SERVICE PREVENTATIVE MAINTENANCE KIT**

15.1 In order to assure minimum downtime of the equipment in future service, the Contractor shall 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, cab and hydraulic, or otherwise all known necessary common replacement filters required for the first preventative maintenance servicing. _____

15.2 The Contractor shall 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 **PARTS/LABOUR PRICING**

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

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