

FORM A: BID
(See B8)

1. Contract Title SUPPLY AND DELIVERY OF INDUSTRIAL TRACTORS

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 INDUSTRIAL TRACTORS

UNIT PRICES

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	QUANTITY	UNIT PRICE
1.	Industrial Tractor Loader 74HP	17007	Each	2	
1a.	Option 1: Attachments	17007	Each		
	3 Point Hitch			1	
	Box Scraper			1	
	General Material Bucket			1	
	Snow Bucket			1	
	Rear Counter Balance Weight			1	
	Clam Bucket 4-in-1			1	
	Set of turf tires and rims R3			1	
	Spare tire and rim front R4			1	
	Spare tire and rim front R3			1	
1b.	Option 2: Attachments	17007	Each		
	Clam Bucket 4-in-1			1	
2.	Industrial Tractor Loader Backhoe 95HP	17008	Each	2	
2a.	Option 1: Attachments	17008	Each		
	Clam Bucket 4-in-1 (Loader)			2	
	Digging Bucket (Backhoe)			2	
3.	Industrial Wheel Loader 120-140 HP with General Material Bucket and Grapple Bucket.	17009	Each	1	

 Name of Bidder

FORM N: DETAILED SPECIFICATIONS 17007
INDUSTRIAL TRACTOR LOADER (74HP)

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) Canadian 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	Muffled, 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	Alternator	Approx. 100 Amp, state capacity.	_____
10.21	Combined stop and tail lights	Two (2).	_____
10.22	Signal lights with warning flashers	Two (2) front and two (2) rear.	_____
10.23	Warning flashers	Operable with key removed.	_____
10.24	Headlights	Two (2).	_____
10.25	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.	_____
10.26	Light switches	Independent on/off switch for each pair of work lights, dash mounted, wired through ignition, labeled with permanent type, engraved style labels.	_____
10.27	Cab interior light	Interior light.	_____
10.28	Radio	AM/FM/CD or MP3.	_____
10.29	Radio installation provision	12 volt, 20Amp independent circuit available at a spare circuit breaker, suitable for installation of a 2-way mobile radio.	_____

10.30	Horn	Operable from driving position and from backhoe position.	_____
10.31	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.	_____
10.32	Beacon guard	Ramped, heavy duty bolt-on metal guard, designed to permit servicing of beacon without being removed.	_____
10.33	Back-up alarm	97 dB, factory installed, mounted to be protected from damage.	_____
10.34	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.	_____
10.35	LED lighting	All lighting LED, state .	_____
10.36	Slow moving sign	Grote 71152 or equivalent with bracket mounted to rear of backhoe.	_____

TIRES, RIMS, FENDERS

10.37	Front tires	Michelin or Bridgestone preferred radial or bias, state .	_____
10.38	Ply rating	State ply rating.	_____
10.39	Tread	R4, industrial tractor.	_____
10.40	Rear tires	Michelin or Bridgestone preferred radial or bias, state .	_____
10.41	Ply rating	State ply rating.	_____
10.42	Tread	R4, industrial tractor.	_____
10.43	Fenders	Front and rear, rubber or polymer, state, material.	_____

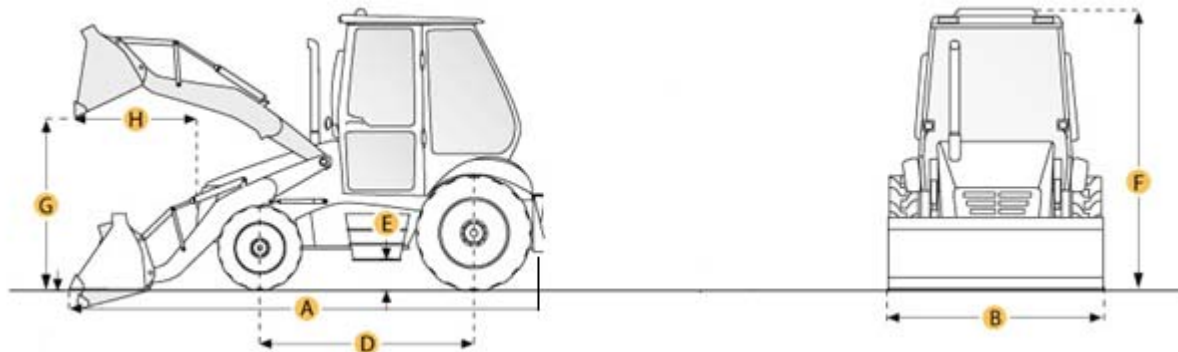
AXLES & BRAKES

- | | | | |
|-------|---------------|--|-------|
| 10.44 | Front axle | Driven type (4WD) with guarded drive shaft (limited slip differential). | _____ |
| 10.45 | Rear axle | Differential lock, push button activation. | _____ |
| 10.46 | Brakes | Wet disk type with individual pedals simultaneous or independent operations. | _____ |
| 10.47 | Parking brake | Foot or hand operated, state type. | _____ |

TRANSMISSION

- | | | | |
|-------|----------------|--|-------|
| 10.48 | Type | Power-shift transmission with torque convertor, manual shift with power reverser preferred, state . | _____ |
| 10.49 | Shifting | Fully synchronized. | _____ |
| 10.50 | Speeds forward | Four (4). | _____ |
| 10.51 | Speeds reverse | Four (4). | _____ |
| 10.52 | Power-shift | Direction reverser. | _____ |

DIMENSIONS



- | | | | |
|-------|---------------------------------|---|-------|
| 10.53 | Overall transport length (A) | Approx. 16', state . | _____ |
| 10.54 | Overall transport width (B) | Approx. 7', state . | _____ |
| 10.55 | Overall width | Stabilizer spread, outside edge of pad, state . | _____ |
| 10.56 | Wheelbase (D) | Approx. 84", state . | _____ |
| 10.57 | Operating weight (as bid) | Approx. 11,000lbs, (without attachments) state weight. | _____ |
| 10.58 | Ground clearance (E) | Approx. 12", state . | _____ |
| 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° 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: One unit to have the following attachments

10.72	3 Point hitch	For Box scraper.	_____
10.73	Box scraper	Approx. 84" width with replaceable bolt-on cutting edges and scarifier. Weight approx. 1500 lbs. State weight.	_____
10.74	General material bucket	Approx. 82" width 1.0 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	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.	_____

10.76	Rear counter balance weight	Approx. 600lbs. OEM, factory installed, required to provide proper machine balance and loading characteristics. State weight of counterbalance.	_____
10.77	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.	_____
10.78	One (1) set of turf R3 tires and rims	Turf R3 tires, state tire size, make/model, front and rear	_____
10.79	Spare tires	One (1) front R4 industrial tractor tire and rim. One (1) Front R3 turf tire and rim.	_____ _____

Option 2: One unit to have the following attachments

10.80	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

10.81	Greasing system	Groeneveld/CPL Systems Inc (or Equivalent) 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.	_____
10.82	Greasing points	State , quantity of greasing points.	_____
10.83	Grease fittings	Readily accessible with remote grease zerks.	_____

OPERATOR CAB

10.84	Type-ROPS	Roll-over protective structure complete with pressurized cab, OSHA certified or equal.	_____
10.85	Insulation and headliner	For sound suppression and severe weather/climate.	_____
10.86	Floor covering	Rubber matting, throughout.	_____
10.87	Seat	Cushioned, adjustable bucket type with arm rests, cloth upholstery air suspension with retractable seat belt.	_____

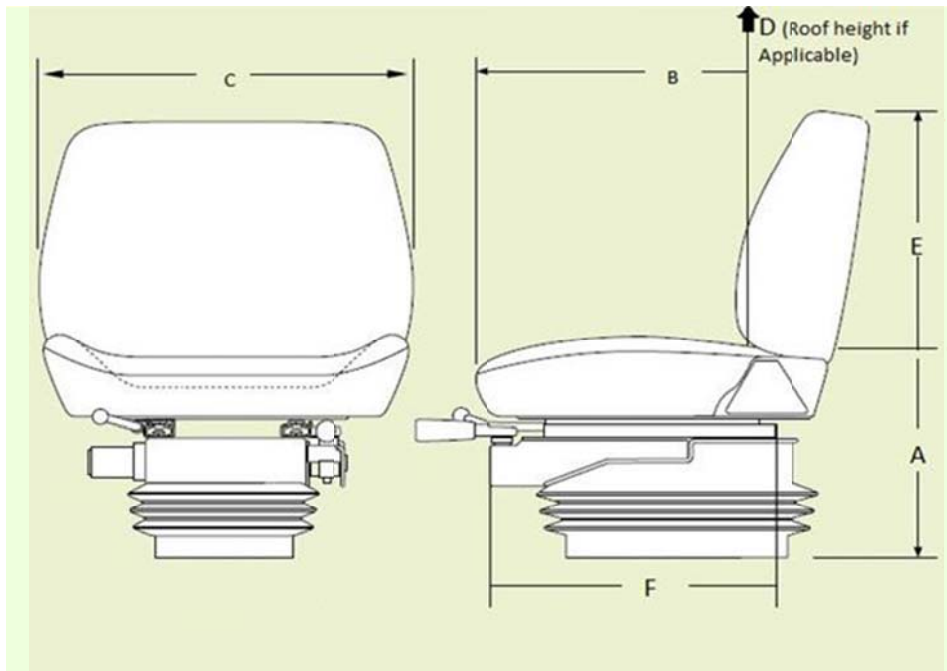
10.88	Ride control	Factory installed.	_____
10.89	All Windows	Tinted safety glass with appropriate markings for all panes and opening type where applicable.	_____
10.90	Ignition keys	Three (3) sets required per machine.	_____
10.91	Doors	One (1) each side with spring assisted strut, lockable with common key.	_____
10.92	Interior rear-view mirror	Adjustable.	_____
10.93	Windshield wipers	Intermittent preferred, requires front and rear.	_____
10.94	Heater/defroster	Heavy duty, hot water type with multi-speed fan, capable of keeping all windows clear at -40 ⁰ C.	_____
10.95	Window fans	Two (2) with guards.	_____
10.96	Air conditioning	Factory installed with under hood compressor. (Note: roof mounted air conditioners are not acceptable).	_____
10.97	Steps	Open grate style.	_____
10.98	Toolbox	Lockable, state location.	_____
10.99	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.	_____
10.100	Noise Level, interior	85 dB(A), measured in accordance with SAE J336, state noise level.	_____
10.101	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.	_____
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) 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 17008
INDUSTRIAL TRACTOR LOADER BACKHOE (95HP)

1.0 DESCRIPTION OF EQUIPMENT

- 1.1 These specifications describe an **Industrial Tractor Loader Backhoe** and other equipment and features as specified herein. The specifications describe the supply and delivery of a trailer mounted, self-contained, diesel fuelled Industrial Tractor Loader machine.
- 1.2 The **Industrial Tractor Loader Backhoe** shall be a new 2017 model year or newer.
- 1.3 The **Industrial Tractor Loader Backhoe** 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 Backhoe** 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.

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

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

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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 Backhoe**, 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 Backhoe** 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 Backhoe** 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 Backhoe** 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 95 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	Muffled, 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	Alternator	Approx. 100 Amp, state capacity.	_____
10.21	Combined stop and tail lights	Two (2).	_____
10.22	Signal lights with warning flashers	Two (2) front and two (2) rear.	_____
10.23	Warning flashers	Operable with key removed.	_____
10.24	Headlights	Two (2).	_____
10.25	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.	_____
10.26	Light switches	Independent on/off switch for each pair of work lights, dash mounted, wired through ignition, labeled with permanent type, engraved style labels.	_____
10.27	Cab interior light	Interior light.	_____
10.28	Radio	AM/FM/CD or MP3.	_____
10.29	Radio installation provision	12 volt, 20Amp spate/independent circuit available at a spare circuit breaker, suitable for installation of a 2-way mobile radio.	_____

10.30	Horn	Operable from driving position and from backhoe position.	_____
10.31	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.	_____
10.32	Beacon guard	Ramped, heavy duty bolt-on metal guard, designed to permit servicing of beacon without being removed.	_____
10.33	Back-up alarm	97 dB, factory installed, mounted to be protected from damage.	_____
10.34	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.	_____
10.35	LED lighting	All lighting LED, state .	_____
10.36	Slow moving sign	Grote 71152 or equivalent with bracket mounted to rear of backhoe.	_____

TIRES, RIMS, FENDERS

10.37	Front tires	Michelin or Bridgestone preferred radial or bias, state .	_____
10.38	Ply rating	State ply rating.	_____
10.39	Tread	R4, Industrial tractor.	_____
10.40	Rear tires	Michelin or Bridgestone preferred radial or bias, state .	_____
10.41	Ply rating	State ply rating.	_____
10.42	Tread	R4, industrial tractor.	_____
10.43	Fenders (extensions)	Front and rear, rubber or polymer, state , material.	_____

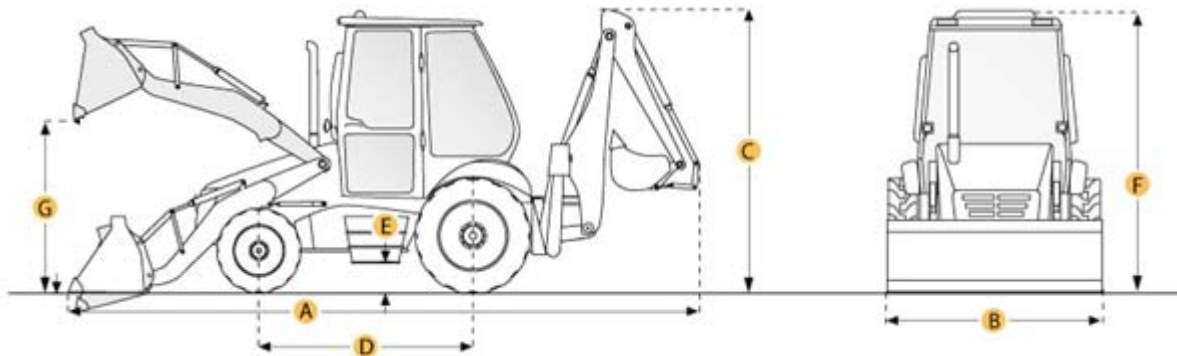
AXLES & BRAKES

- | | | | |
|-------|---------------|--|-------|
| 10.44 | Front axle | Driven type (4WD) with guarded drive shaft (limited slip differential). | _____ |
| 10.45 | Rear axle | Differential lock, push button activation. | _____ |
| 10.46 | Brakes | Wet disk type with individual pedals simultaneous or independent operations. | _____ |
| 10.47 | Parking brake | Foot or hand operated, state type. | _____ |

TRANSMISSION

- | | | | |
|-------|----------------|--|-------|
| 10.48 | Type | Power-shift transmission with torque convertor, manual shift with power reverser preferred, state . | _____ |
| 10.49 | Shifting | Fully synchronized. | _____ |
| 10.50 | Speeds forward | Four (4). | _____ |
| 10.51 | Speeds reverse | Four (4). | _____ |
| 10.52 | Power-shift | Direction reverser. | _____ |

DIMENSIONS



- | | | | |
|-------|---------------------------------|--|-------|
| 10.53 | Overall transport length (A) | Approx. 24', state . | _____ |
| 10.54 | Overall transport width (B) | Approx. 8', state . | _____ |
| 10.55 | Overall transport height (C) | Approx. 12'5", state . | _____ |
| 10.56 | Overall width | Stabilizer spread, outside edge of pad, state . | _____ |
| 10.57 | Wheelbase (D) | Approx. 84", state . | _____ |
| 10.58 | Ground clearance (E) | Approx. 12", state . | _____ |
| 10.59 | Overall height (top of cab) (F) | Approx. 9', state . | _____ |

10.60	Operating weight (as bid)	Approx. 16,000lbs, (without attachments) state weight.	_____
10.61	Turning radius	Curb clearance with brakes applied, state .	_____

FRONT END LOADER

10.62	Lift capacity, full height	Approx. 7000lbs., state .	_____
10.63	Bucket breakout force	Approx. 11,000lbs., state .	_____
10.64	Dump clearance as bid (G)	Bucket @ 45 ⁰ approx. 105 inches, state	_____
10.65	Controls	Single lever with clutch disconnect button, return –to-dig and float.	_____
10.66	Self-levelling bucket	With level indicator.	_____
10.67	Wear plate (s)	Required to prevent bucket heel from rubbing on ground with bolt-on cutting edge in place.	_____
10.68	Lashing ring	Heavy duty, steel weld-on hook with spring mounted clasp, top-center mounted at front of loader bucket.	_____
10.69	Loader safety prop bar	Preferred.	_____
10.70	Hydraulic function	3 function hydraulics.	_____
10.71	Hydraulic quick attach	For loader bucket.	_____
10.72	OEM ride control	State .	_____

BACKHOE

10.73	Type	Centre pivot with extendable dipper-stick.	_____
10.74	Maximum digging depth	Approx. 19'6", state digging depth.	_____
10.75	Digging force	Bucket cylinder (SAE), with 24 inch bucket approx. 15,000lbs., state .	_____
10.76	Dogging force	Crowd cylinder (SAE), with dipper-stick retracted approx. 9,500lbs., state .	_____
10.77	Controls	SAE excavator style, pilot operated hydraulic joystick controls.	_____
10.78	Multi-brand Quick coupler attachment bracket	For quick attachment of all buckets and hydraulic hammers, state make and model being bid.	_____
10.79	Hydraulic quick attach	For backhoe bucket.	_____
10.80	Attachment bracket	Permit use of two (2) bucket positions.	_____

10.81	Attachment bracket	Permit bucket, and bucket position changes.	_____
10.82	Certified lifting hooks	All buckets to be complete with certified lifting hooks.	_____
10.83	Stabilizer pads	Reversible, flip-over type pads.	_____
10.84	Front counterweight	Supplied as to provide proper machine balance and loading characteristics.	_____
10.85	Replaceable bushings and grease fittings	At backhoe pivot points, cylinder rod and closed ends, and bucket links.	_____
10.86	Auxiliary hydraulics	Couplers and controls shall be provided as required on all machines to accommodate hydraulic hammers.	_____

ATTACHMENTS

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

Option 1: two units to have the following attachments

10.87	Clam bucket	4 in 1 combination, with bolt-on cutting edge. Approx. width 90" with 1.3 yd ³ capacity. Replaceable bolt-on cutting edges for all three edges of the bucket. (Quick Attach)	_____
10.88	24 inch digging bucket	24 inch heavy duty digging bucket with replaceable pin-on teeth, complete with required attachment pin(s) and certified lifting hooks. Backhoe to be delivered with 24 inch digging bucket (w/teeth) installed.	_____

OPERATOR CAB

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

10.94	All windows	Tinted safety glass with appropriate markings for all panes and opening type where applicable.	_____
10.95	Ignition keys	Three (3) sets required per machine.	_____
10.96	Doors	One (1) each side with spring assisted strut, lockable with common key.	_____
10.97	Interior rear-view mirror	Adjustable.	_____
10.98	Windshield wipers	Intermittent preferred, requires front and rear.	_____
10.99	Heater/defroster	Heavy duty, hot water type with multi-speed fan, capable of keeping all windows clear at -40 ⁰ C.	_____
10.100	Window fans	Two (2) with guards.	_____
10.101	Air conditioning	Factory installed with under hood compressor. (Note: roof mounted air conditioners are not acceptable).	_____
10.102	Steps	Open grate style.	_____
10.103	Toolbox	Lockable, state location.	_____
10.104	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.	_____
10.105	Noise Level, interior	85 dB(A), measured in accordance with SAE J336, state noise level.	_____
10.106	Fire extinguisher	Five (5) lbs. High volume ABC type, State location.	_____

GREASING SYSTEM

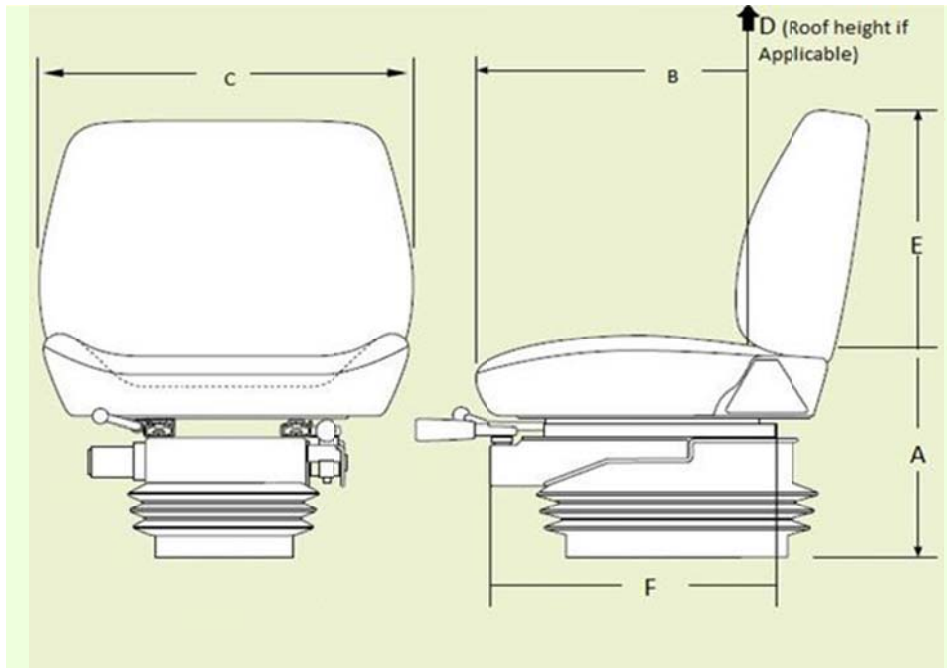
10.107	Greasing system	Groeneveld/CPL Systems Inc (or Equivalent) . complete CPL automatic greasing system including all required grease points on the flusher body, and automatic low level shut-off with in-cab red light indicator.	_____
10.108	Greasing points	State , quantity of greasing points.	_____
10.109	Grease fittings	Readily accessible with remote grease zerk.	_____

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) 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 17009
INDUSTRIAL WHEEL LOADER (120-140HP)

1.0 DESCRIPTION OF EQUIPMENT

- 1.1 These specifications describe an **Industrial Wheel Loader** and other equipment and features as specified herein.
- 1.2 The **Industrial Wheel Loader** shall be a new 2017 model year or newer.
- 1.3 The **Industrial 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 **Industrial 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) Canadian 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 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 **Industrial 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)

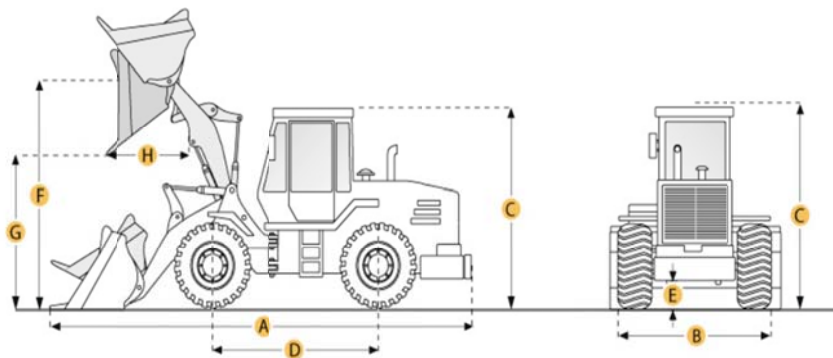
8.0 **FUEL**

- 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 **Industrial 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 **Industrial 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. 22', state. | _____ |
| 10.4 | Width: over tires (B) | Approx. 8', state. | _____ |
| 10.5 | Overall height (top of cab) (C) | Approx. 10'6", state. | _____ |
| 10.6 | Wheelbase (D) | Approx. 9', state. | _____ |
| 10.7 | Ground clearance (E) | Approx. 12-15 inches, state. | _____ |
| 10.8 | Hinge pin height (F) | Approx. 12', state. | _____ |

- | | | | |
|-------|--|---|-------|
| 10.9 | Dump clearance at max raise at 45 ⁰ (G) | Approx. 9', state . | _____ |
| 10.10 | Reach at max lift and dump 45 ⁰ | Approx. 4-5', state . | _____ |
| 10.11 | Operating weight (as bid) | Approx. 19,000 to 24,000 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 120-140 hp, 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. 1000 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 | 24-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	Protected from the elements.	_____
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, state make model being bid.	_____
10.53	Ply rating	Bias ply rock tires, state ply rating.	_____
10.54	Tread	Snow 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	Limited slip or hydraulic locking differential, State type.	_____
10.59	Rear axle	Limited slip 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	Shall have the capability of allowing the operator to select either automatic or manual shifting. Shall have the capability of full power shift with torque converter.	_____ _____
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	_____

FRONT END LOADER

10.74	Breakout Force	Approx. 17,000 lbs.	_____
10.75	Tipping load straight	Approx. 14,000 lbs.	_____
10.76	Tipping load 40° turn	Approx. 11,000 lbs.	_____
10.77	Hinge pin height fully raise	Approx. 12 ft.	_____

10.78	Loader Controls	One dual function lever that provides lift and curl of the bucket. Automatic return-to-carry.	_____
10.79	Self-levelling bucket	With level indicator.	_____
10.80	Boom height control (kick-out)	Automatic, adjustable.	_____
10.81	Ride control system	OEM system, ride control system shall be of the type that automatically engages or disengages, dependent on the machines ground speed.	_____
10.82	Safety prop bar	OEM approved.	_____
10.83	Hydraulic fluid level indicator		_____
10.84	Auxiliary hydraulics	For attachment growth, 3 rd function valve.	_____
10.85	Hydraulic quick attach	For loader bucket.	_____

ATTACHMENTS

10.86	General material bucket	Approx. 2.6 yd ³ 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.	_____
10.87	Grapple bucket	Approx. 2.5 yd ³ , top clamp, full sides with dual hydraulic cylinders to allow independent actuation of each cylinder for clamping uneven loads, quick coupler hydraulics.	_____

GREASING SYSTEM

10.88	Greasing system	Groeneveld/CPL Systems Inc (or Equivalent) 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.	_____
10.89	Greasing points	State , quantity of greasing points.	_____
10.90	Grease fittings	Readily accessible with remote grease zerks.	_____

OPERATOR CAB

10.91	Type-ROPS	Roll-over protective structure complete with pressurized cab, OSHA certified or equal	_____
10.92	Insulation and headliner	For sound suppression and severe weather/climate.	_____
10.93	Floor covering	Rubber matting, throughout.	_____
10.94	Seat	Cushioned, adjustable bucket type with arm rests, cloth upholstery air suspension with retractable seat belt.	_____
10.95	Ride control	Factory installed.	_____
10.96	All Windows	Tinted safety glass with appropriate markings for all panes and opening type where applicable.	_____
10.97	Ignition keys	Three (3) sets required per machine.	_____
10.98	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.	_____
10.99	Interior rear-view mirror	Adjustable.	_____
10.100	Exterior rear view mirrors	One (1) each side. Heated with remote electric adjusting.	_____
10.101	Windshield wipers	Intermittent preferred, requires front and rear.	_____
10.102	Windshield washers	Front and rear.	_____
10.103	Heater/defroster	Heavy duty, hot water type with multi-speed fan, capable of keeping all windows clear at -40 ⁰ C.	_____
10.104	Steering wheel	Tilt type.	_____
10.105	Air conditioning	Factory installed with under hood compressor. (Note: roof mounted air conditioners are not acceptable).	_____
10.106	Steps	Open grate style.	_____
10.107	Toolbox	Lockable, state location.	_____
10.108	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.	_____
10.109	Sun shades	Front and rear fold down style.	_____

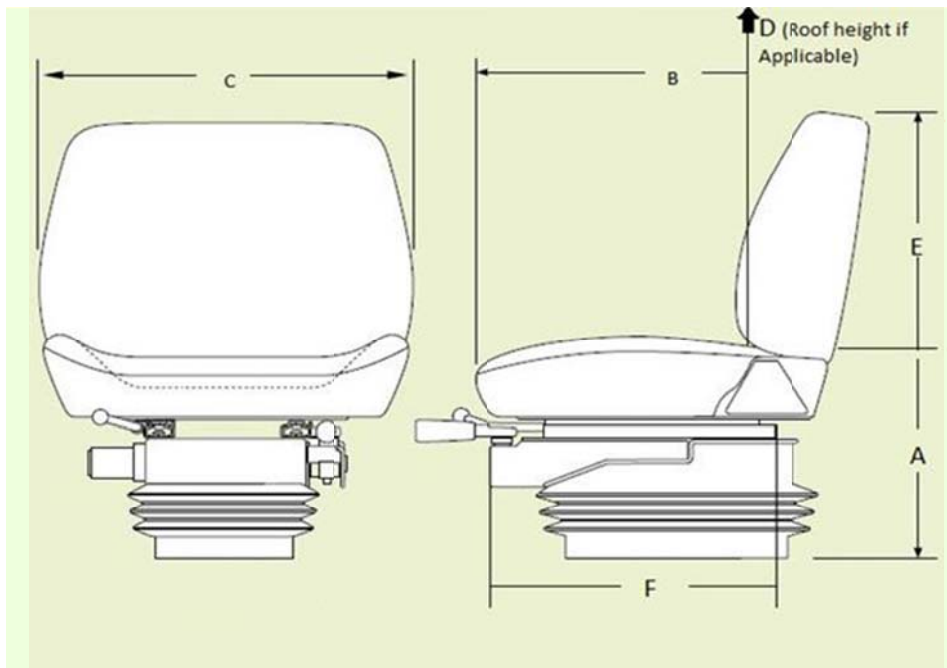
10.110	Rear view camera	OEM installed.	_____
10.111	Steps and hand rails	To provide safe cleaning of front windshield.	_____
10.112	Self-cleaning steps	For safe entry and exit.	_____
10.113	Noise Level, interior	85 dB(A), measured in accordance with SAE J336, state noise level.	_____
10.114	Fire extinguisher	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)? | _____ |

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. | _____ |

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-** _____