FORM N: DETAILED SPECIFICATIONS 24001

CUMMINS RECONDITIONED ENGINES FOR TRANSIT BUS

1. INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS

- 1.1 All items in these specifications should be answered indicating compliance or non-compliance.
- 1.2 **Bidder/Proponents shall state "yes" for compliance or state "deviation"**, or give a reply where requested to do so. Deviations and/or equivalents shall be clearly stated and fully detailed. Deviations and/or equivalents will be considered subject to evaluation. In every instance where a brand name or design specifications is used, the City will also consider deviations and/or equivalents.
- 1.3 Lengthy explanations of deviations may be included in a separate document and must reference the appropriate Detailed Specification.
- 1.4 Each Bidder/Proponent is required to fill in every blank. Failure to do so may be used as a basis for rejection of bid/proposal.
- 1.5 It will be the responsibility of the Bidder/Proponent to inform the City of any errors or omissions in these Detailed Specifications, for under this Contract, the Contractor shall be held responsible to ensure that the manufacturer will be responsible for the design, performance, reliability and satisfactory operational function of the unit.

2. DESCRIPTION OF EQUIPMENT: Reconditioned Engine, Cummins DR6549RX

- 2.1 These specifications describe reconditioned engine, Cummins DR6549RX and other equipment and features as specified herein for a transit bus. The successful bidder is responsible for ensuring that all engine requirements meet all applicable specifications and standards as listed in section **3**.
- 2.2 The reconditioned engine, Cummins DR6549RX shall be a 2007 model year or newer. The engine must contain Cummins OEM parts and must meet Cummins specifications.
- 2.3 The reconditioned engine, Cummins DR6549RX will include all auxiliary equipment and be furnished complete and ready for use. The Equipment and all parts not specifically mentioned but which are required for the complete unit shall conform in strength, quality of material and workmanship, to the best standards and engineering practice in the industry.
- 2.4 The ratings specified herein merely state the minimum values acceptable to the City, not implying that those values are sufficient for the design of the particular equipment being bid/Proposed.

3. OTHER SPECIFICATIONS AND STANDARDS

- 3.1 Genuine Cummins Factory Remanufactured Engines shall include a "Engine Test Report" or a "Dyno Report" demonstrating performance, origin and test at the Cummins factory"
- 3.2 Reconditioned engine, Cummins DR6549RX when applicable, shall comply with the applicable regulations:

Canadian Standards Association, CSA: <u>http://www.csagroup.org/</u>

Under Writers of Canada, U/L: http://www.ulc.ca/

Society of Automotive Engineers, SAE: http://www.sae.org/

4. SERVICE FACILITY

4.1 For the purpose of warranty repairs, the Bidder shall have a 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 of equipment being offered. Further to B12.6, 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.

5. PERFORMANCE RELIABILITY

- 5.1 The responsibility for <u>Cummins Reconditioned Engines for Transit Bus</u>, its performance and reliability shall rest upon the Contractor.
- 5.2 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.
- 5.3 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 degrees Fahrenheit, (32 degrees Celsius) to -40 degrees Fahrenheit (-40 degrees Celsius).

6. QUALIFICATIONS OF CONTRACTOR

- 6.1 The Contractor of the <u>Cummins Reconditioned Engines for Transit Buses</u> and all associated equipment shall have experience supplying Cummins equipment.
- 6.2 The successful bidder shall have in effect a documented quality control program ensuring that the quality of materials and workmanship, conform to the best standards and engineering practices of the industry.
- 6.3 The Contractor shall have experience servicing, repairing and maintaining **Cummings Reconditioned Engines for Transit Buses** of the type being offered.

7. SCOPE OF WORK: CUMMINS RECONDITIONED ENGINES FOR TRANSIT BUSES

- 7.1 The work consisting of Cummins Reconditioned Engines for Transit Buses shall be supplied for the City of Winnipeg Transit buses.
- 7.2 Reconditioned engines shall be a **Cummins DR6549RX** engine. The engine comes complete and ready to be installed in the transit bus, and does not require any conversions / alterations. The Contractor is responsible for the engine core charge. The engine core will be returned to the Contractor when it is removed from the Transit bus.

8.0 WARRANTY

- 8.1 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator all detailed published warranty information. State the following warranties:
- 8.2 Reconditioned engine Cummins DR6549RX
- 8.3 Provide details on any extended Warranty coverage available.

9.0 DELIVERY

9.1 "Equipment shall be delivered on an "as required" basis during the term of the Contract, f.o.b. destination, freight prepaid, to:

City of Winnipeg, Transit Stores Receiving – FRG1 421 Osborne Street Winnipeg, MB, R3L 2A2

- 9.2 Equipment shall be delivered between 7:00 a.m. and 2:00 p.m. on Business Days.
- 9.3 Equipment shall be delivered with in five (5) Business Days of the placing of an order..

10. LIQUIDATED DAMAGES

- 10.1 If the Contractor fails to achieve delivery of the goods within the time specified in 9.0 Delivery the Contractor shall pay the City seventy-three dollars (\$73.00) per Working Day for each and every Working Day until the goods have been delivered.
- 10.2 The amount specified for liquidated damages in 10.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Delivery by the day fixed herein for same.
- 10.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

11.0 SPECIFICATIONS

11.1 These Specifications shall apply to the Work.

Recon Engine Information			
Part Number	DR6549RX	Fuel Rate Option	FR92004
Description	ENG ISL 8.9 07 B 280@2200 HPCR	Fuel Pump Option	FP90595
Family	ISL	Fuel Calibration Code	FP90744
Liters	8.9 L	Fuel Pump Type	HPCR
Application	AUTOMOTIVE	Fuel Type	DIESEL
CPL	0915	Fuel Solenoid Voltage	24V
Aspiration	CHARGE AIR COOLED	Fuel Pump Govenor Type	N/A
ECM Model	CM2150	Turbo Location	HMRO SF
Model Year	2007	Oil Pan	REAR
Emission Level	EPA 07	Air Compressor	18.7 CFM
Emission Certification	9CEXH0540LAO	Vibration Damper	VISCOUS
Configuration #	D563008BX03	PTO Location	N/A
Rated HP @ RPM	280@2200 RPM	Paint Color	CUMMINS RED
Peak Torque	900@1300 RPM	Core Part Number	DR0650600D
Torque Rise	69.23%	Piston Part Number	4932721
<u>Comments</u>			
29JUN2017:			
The EGR Cooler has been upgraded to the New Vertical Plate Cooler per TSB140008-New Flyer Bus Application.			

First ReCon DR6549-RX ESN to Include this upgrade.