FORM N: DETAILED SPECIFICATIONS 20008

CUMMINS REMANUFACTURED DIESEL ENGINES FOR E-ONE FIRE APPARATUS TRUCKS

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

- 2.1 These specifications describe <u>Cummins Remanufactured Diesel Engines</u> and other equipment and features as specified herein for Winnipeg Fire Paramedic Service fire apparatus that require engine replacements. The successful bidder is responsible for ensuring all engine requirements meet E-One engine standards and all applicable Canadian Safety Standards and National Fire Protection Association Standard (NFPA), latest revisions.
- 2.2 The described <u>Cummins Remanufactured Diesel Engines</u> and all other items/components shall be the manufacturer's latest model. The equipment shall be furnished complete and ready for operation. Any parts or accessories not specifically mentioned, but which are required to complete and place the equipment and associated attachments in successful operation shall be furnished as though specifically mentioned in these specifications. The equipment and associated attachments, and all parts thereof, shall conform in strength and quality of material and workmanship, to the best standards and engineering practice of the industry.
- 2.3 Bidders are encouraged to view a 2008 E-One Typhoon fire apparatus prior to submitting a bid. To make an appointment to view the units, contact the Contract Administrator in accordance with D5.
- 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 All applicable SAE Standards form an integral part of the vehicle specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 3.2 The Cummins Remanufactured Diesel Engines shall comply with the applicable regulations:

National Fire Protection Association Standard (NFPA), latest version

Transport Canada, National Safety Mark, NSM: http://www.tc.gc.ca/eng/acts-regulations/acts-road.htm

Manitoba Safety and Health Regulation, Parts 12, 16, 22: <u>http://web2.gov.mb.ca/laws/regs/current/217.06.pdf</u>

Canadian Motor Vehicle Safety Standards C.M.V.S.S. <u>http://laws-lois.justice.gc.ca/eng/regulations/C.R.C., c. 1038/section-sched3.html</u>

Manitoba Highway Traffic Act regulations and requirements including, but not limited to, a Manitoba Government Inspection with Safety Sticker. <u>http://web2.gov.mb.ca/laws/regs/index.php?act=h60</u>

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

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

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

City of Winnipeg Lighting Visibility Standard: <u>http://winnipeg.ca/matmgt/pdfs/PublicWorksEquipLightingVisibility.pdf</u>

Manitoba Building Code: https://web2.gov.mb.ca/laws/regs/current/_pdf-regs.php?reg=31/2011

- 3.3 All welding and welding designs of the load supporting elements shall conform to the requirements of the Canadian Standards Association Standard (CSA) W47.1-03 and W59-03.
- 3.4 The completed unit shall include a Manitoba Government Inspection with Safety Sticker on the driver's side window.
- 3.5 In Canada, Modification to vehicles can only be done at facilities that are recognized by Transport Canada. All of these facilities must have a National Safety Mark from Transport Canada. Transport Canada National Safety Mark is a label that indicates that the modifications are compliant with all current Canadian Motor Vehicle Safety Standards (CMVSS).
- 3.6 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.
- 3.7 The completed vehicle shall be complete with a National Safety Mark, NSM.
- 3.8 State NSM Number:

4. SERVICE FACILITY

4.1 For the purpose of warranty repairs, the Bidders 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 of equipment being offered. Further to 9.1, 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.

5. INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS

- 5.1 Each bid will be evaluated based on adherence to all terms, conditions and requirements outlined in the Bid Opportunity package.
- 5.2 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 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 specification is used, the City will also consider deviations and/or equivalents.

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

6. <u>PERFORMANCE RELIABILITY</u>

- 6.1 The responsibility for **Cummins Remanufactured Diesel Engines for Winnipeg Fire Paramedic Service Fire Apparatus**, its performance and reliability shall rest upon the Contractor. Any conversions required are the responsibility of the contractor and shall be completed prior to delivering the engines to WFPS.
- 6.2 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.

6.3 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°F (32°C) to -40°F (-40°C).

7. **QUALIFICATIONS FOR CONTRACTOR**

- 7.1 The Contractor of the Cummins Remanufactured Diesel Engine for Winnipeg Fire Paramedic Service Apparatus and all associated equipment shall have experience supplying Cummins Remanufactured **Diesel Engine.**
- 7.2 The success bidder 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.
- 7.3 The Contractor shall have experience servicing, repairing and maintaining Cummins Remanufactured Diesel Engine for Winnipeg Fire Paramedic Service Fire Apparatus of the type being offered.

8. SCOPE OF WORK: CUMMINS REMANUFACTURED DIESEL ENGINES

8.1 The work consisting of Cummins Remanufactured Diesel Engines shall be supplied for the following vehicles:

a) 2013-2018 Fort Garry Fire Apparatus

b) Note: all trucks listed below are equipment with Cummins ISL 8.3 (330HP) 6-cylinder diesel engines.

Unit Number	Designation	VIN#	Cummins ESN #
823-3950	E15	4S7CT2B9XDC076954	73463478
823-3951	E18	4S7CT2B91DC076955	73481027
823-3952	E25	4S7CT2B93DC076956	73484280
823-3953	E26	4S7CT2B95DC076957	73484284
823-3954	E21	4S7CT2B97DC076958	73481167
823-3955	E7	4S7CT2B91DC076969	73481177
823-3956	E17	4S7CT2B98DC076970	73463567
823-3957	E27	4S7CT2B9XDC076971	73484281
823-5551	E24	4S7CT2D96GC080405	
823-5552	E2	4S7CT2D98GC080406	3LB005368
823-5553	E13	4S7CT2D9XGC080407	73862353

823-5554	E3	4S7CT2D91GC080408	
823-5555	E8	4S7CT2D93GC080409	73858194
823-8561	R9	4S7CT2D90JC084103	74212737
823-8562	E12	4S7CT2D92JC084104	74212739
823-8563	E9	4S7CT2D90JC084105	74212729
823-8564	E10	4S7CT2D96JC084106	74216559

Cummins Remanufactured Diesel Engines

- 8.2 Remanufactured engines shall be a genuine **Cummins ReCon® 6CYL Diesel replacement engine** to the exact engine serial number specifications listed above. The engine comes complete and ready to be installed in the fire apparatus and does not require any conversions/alterations. The engine shall come with the highest HP rating for that CPL.
- 8.3 The Recon engine shall include a new Cummins air compressor, P/N 5301094RX
- 8.4 The remanufactured diesel engine shall meet all Canadian Safety Standards and NFPA 1901 standards applicable to this type of equipment.

9. WARRANTY

9.1 All warranty information be detailed and includes all exclusions. The Contractor shall provide all published warranty information upon delivery of the equipment. Contractor shall State: all warranty information

10. DELIVERY

- 10.2 Delivery Time: Equipment shall be delivered between 8:00 am and 2:00 pm on Business Days.

State: Earliest Delivery Date: _____

10.4 P.D.I: A pre-delivery inspection shall be performed by the Winnipeg Fire Paramedic Service on the Apparatus and equipment.