



## REQUEST FOR PROPOSAL

### THE SUPPLY AND DELIVERY OF REAR LOADING REFUSE TRUCKS

RFP NUMBER:

PS20120743

Issue Date: August 7, 2012

Issued By: City of Vancouver

REQUEST FOR PROPOSAL NO. PS20120743  
THE SUPPLY AND DELIVERY OF REAR LOADING REFUSE TRUCKS

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PART A - INTRODUCTION**

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**1.0 OVERVIEW OF RFP**

1.1 This Request for Proposal ("RFP") is an opportunity to submit Proposals for the City's review and, depending on the City's evaluation, to negotiate with the City to finalize and execute a one-year contract for the supply and delivery of the following items:

- Item 1 - Four (4) Tandem Axle Cab and Chassis for 20-yard rear loading refuse truck body with the option to purchase five (5) additional units within the term of the contract;
- Item 2 - Four (4) 20-yard Body with the option to purchase five (5) additional units within the term of the contract ;
- Item 3 - Two (2) Single Axle Cab and Chassis for 8-yard rear loading refuse truck body; and
- Item 4 - Two (2) 8-yard body.

1.2 This RFP consists of 4 parts:

- (a) PART A - INTRODUCTION: This part sets out the key dates and contact information for the RFP process;
- (b) PART B - INSTRUCTION TO PROPONENTS: This part contains an overview of the project and the RFP process, including the terms and conditions governing the RFP process;
- (c) PART C - FORM OF PROPOSAL: This part contains the format and information requested by the City to be contained and submitted in the Proposal. The Proposal should be submitted in a two envelope system: Commercial Proposal and Management Proposal; and
- (d) PART D - FORM OF AGREEMENT: This part contains the City's proposed terms and conditions for the Agreement that will be executed between the City and the successful Proponent, if any.

**2.0 KEY DATES**

2.1 Proponents should note the following key dates:

Event	Time/Date
Deadline for Enquiries	Tuesday, August 28, 2012  Enquiries received during the final five (5) days before the Closing Time may not be processed and may not receive a response. The City's Purchasing Services Office is open on Business Days from 8:30 am to 4:30 p.m. and closed Saturdays, Sundays, and holidays.
Closing Time	3:00:00 pm (PST) Tuesday, September 4, 2012

**3.0 CONTACT PERSON**

3.1 The Contact Person for this RFP is:

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Julia Crosby  
Fax: 604.873.7057  
E mail: purchasing@vancouver.ca

- 3.2 Proponents shall direct all enquiries, in writing, to the Contact Person. Telephone enquiries are not permitted.

**4.0 CLOSING TIME**

- 4.1 Proponents should submit their Proposals on or before the date and time as specified in Section 2.1 (the "**Closing Time**"). Closing Time and "Vancouver time" will be conclusively deemed to be the time shown on the clock used by the City's Purchasing Services Office for this purpose.

**5.0 DELIVERY ADDRESS FOR PROPOSALS**

- 5.1 Proponents shall submit their Proposals to the following address:

City of Vancouver  
453 West 12<sup>th</sup> Avenue  
Vancouver, British Columbia, Canada, V5Y 1V4  
(Courier Delivery and Drop Off - Information Desk, Main Floor Rotunda of the same address)

**Proposals submitted by fax or email will not be accepted.**

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**PART B - INSTRUCTIONS TO PROPONENTS**

In this RFP, capitalized terms have the meanings set out in Section 24 (Definitions) of PART B - INSTRUCTIONS TO PROPONENTS and in PART D - FORM OF AGREEMENT, except where otherwise expressly provided or the context otherwise requires.

**1.0 OVERVIEW**

- 1.1 This RFP identifies a business opportunity for the successful Proponent to provide four (4) tandem axle cab and chassis for a 20-yard body, four (4) 20-yard rear loading refuse bodies, two (2) single axle cab and chassis for an 8-yard body, and two (2) 8-yard rear loading refuse bodies. The primary application for these units is transportation of refuse from the Vancouver Transfer Station to the Vancouver Landfill.
- 1.2 The City is requesting Proposals from interested firms with expertise in the design and build of tandem and single cab and chassis', 20-yard rear loading refuse trucks and 8-yard rear loading refuse trucks based on the specifications provided.
- 1.3 The purpose of this RFP is to select a Proponent with the capability and experience to efficiently and cost-effectively satisfy and deliver all of the requirements described in this RFP.
- 1.4 The successful Proponent will be the Proponent who offers the best value which will be assessed in the City's sole and absolute discretion as a combination of experience, pricing, scope, duration and level of services offered, proposed innovative design, and operations and maintenance enhancements.
- 1.5 The requirements are as envisioned by the City at the time of writing, but may change or be refined in the course of the evaluation and award process.

**2.0 ADMINISTRATIVE REQUIREMENTS**

- 2.1 It is the sole responsibility of all Proponents to check the City's website at: <http://www.vancouver.ca/fs/bid/bidopp/openbid.htm> regularly for amendments, addenda, and questions and answers to this RFP.

**3.0 INFORMATION MEETING - Intentionally Omitted**

**4.0 CONDUCT OF RFP - INQUIRIES AND CLARIFICATIONS**

- 4.1 The City's Director of Supply Management will have conduct of this RFP, and all communications shall be directed only to the Contact Person.
- 4.2 It is the responsibility of all Proponents to thoroughly examine these documents and satisfy themselves as to the full requirements of this RFP. Inquiries shall be in written form only, e-mailed or faxed to the Contact Person as set out in PART A - INTRODUCTION. If required, an addendum will be issued and posted on the City's website as outlined above.

**5.0 CONTRACT REQUIREMENTS**

- 5.1 Proponents should indicate the extent to which the Form of Agreement is consistent with their Proposal. If the Proposal is inconsistent with the Form of Agreement, the Proponent should provide alternative contractual language in their Proposal.
- 5.2 Where the head office of the successful Proponent is located within the City of Vancouver and/or where the successful Proponent is required to perform any work at a site located within

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the City of Vancouver, the successful Proponent is required to have a valid City of Vancouver business license prior to signing the Agreement.

**6.0 PRICING**

- 6.1 Pricing is to be submitted, as part of the Commercial Proposal, in a separate envelope/package from the Management Proposal.
- 6.2 Prices quoted are to be exclusive of HST but inclusive of all other costs including, without limitation, freight, unloading at destination, import duties, taxes (other than HST), brokerage fees, royalties, handling, overhead and profit.
- 6.3 Prices shall be quoted in Canadian currency.

**7.0 SUBMISSION OF PROPOSALS**

- 7.1 The submission instructions for Proposals are provided in Part C - FORM OF PROPOSAL. Proposals should be submitted in a two envelope/package system (Commercial Proposal and Management Proposal, as separate envelopes/packages) clearly marked with the *Proponent's Name, the RFP title and the RFP reference number. The Commercial Proposal and Management Proposal should be clearly identified and distinguishable.*
- 7.2 Proponents should submit two (2) hard copies of their Proposal in two parts as further described in PART C - FORM OF PROPOSAL (Management Proposal and Pricing Proposal) in three-ring binders, with each section tabbed and including all accompanying schedules, appendices and addenda. Proponents should also submit one (1) electronic copy of their Proposal in the same format described above on CD.
- 7.3 Only the English language may be used in responding to this RFP.
- 7.4 Proposals received after the Closing Time or in locations other than the address indicated in PART A - INTRODUCTION, may or may not be accepted and may or may not be returned.
- 7.5 Amendments to a Proposal should be submitted in writing in a sealed envelope(s) or package(s), marked with the Proponent's name and the RFP title and reference number.
- 7.6 Proposals are revocable and may be withdrawn at any time before or after the Closing Time.
- 7.7 All costs associated with the preparation and submission of the Proposal, including any costs incurred by the Proponent after the Closing Time, will be borne solely by the Proponent.

**8.0 PROPOSAL FORMAT**

- 8.1 Unnecessarily elaborate Proposals, beyond that sufficient to present a complete and effective response, are not required and unless specifically requested, the inclusion of corporate brochures and narratives are discouraged.
- 8.2 Proponents are requested to provide their Proposal in the format and including the content described in PART C - FORM OF PROPOSAL.

**9.0 BID SECURITY**

- 9.1 No bid security is required since no irrevocable binding legal offer is made by submitting a proposal in response to this RFP.

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**10.0 OPENING OF PROPOSALS**

- 10.1 The City reserves the right to open all Proposals in a manner and at the time and place determined by the City.

**11.0 EVALUATION OF PROPOSALS**

- 11.1 Proposals will be evaluated by representatives of the City on the basis of the overall best value to the City, based on quality, service, price and any other relevant criteria as determined by the City in its sole and absolute discretion.
- 11.2 The City reserves the right to retain complete control over the RFP process at all times until the execution and delivery of the Agreement. Accordingly, the City is not legally obligated to review, consider or evaluate the Proposals and need not necessarily review, consider or evaluate the Proposals in accordance with the procedures set out in this RFP. The City reserves the right to continue, interrupt, cease or modify its review, evaluation and negotiation process on any or all Proposals at any time without further explanation or notification to any of the Proponents subject only to the express legal terms and conditions which bind the City.
- 11.3 The City may, at any time prior to signing a contract, discuss or negotiate changes to the scope of the RFP with any one or more of the Proponents without having any duty or obligation to advise the other Proponents or to allow the other Proponents to vary their Proposals as a result of such discussions or negotiations.
- 11.4 The City may elect to short list Proponents and evaluate the Proposals in stages. Short-listed Proponents may be asked to provide additional information or details for clarification, which may include attending interviews, making a presentation, supplying sample drawings, performing demonstrations, furnishing additional technical data and proposing amendments to the Form of Agreement. The City will be at liberty to negotiate in parallel with one or more short-listed Proponents, or in sequence, or in any combination, and may at any time terminate all or any one set of negotiations with the short-listed Proponents.
- 11.5 Prior to approval of a Proposal, the City must be satisfied as to the Proponent's financial stability. Proponents may be asked to provide annual financial reports or a set of financial statements prepared by an accountant and covering the Proponent's last two (2) fiscal years.
- 11.6 The City may request that any or all Sub-contractors of the Proponent undergo the same evaluation process.

**12.0 PROPOSAL APPROVAL**

- 12.1 Proposal approval is contingent on funds being approved and the Proposal being approved by Vancouver City Council. Only then may the successful Proponent and the City proceed to settle, draft and sign the Agreement.
- 12.2 The City will notify the successful Proponent in writing that its Proposal has been approved in principle and invite the Proponent to proceed with discussions to settle, draft and sign the Agreement.
- 12.3 The City is not under any obligation to approve any Proposal and may elect to terminate this RFP at any time.



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**13.0 ALTERNATE SOLUTIONS**

- 13.1 If in addition to proposing services which meet the requirements, the Proponent wishes to offer an alternative, the alternative solution is to be submitted separately as an appendix within the Management Proposal. Any pricing impact of the alternate solution should be provided separately in the Commercial Proposal.

**14.0 FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY ACT**

- 14.1 Proponents should note that the City of Vancouver is subject to the *Freedom of Information and Protection of Privacy Act* (British Columbia), which imposes significant obligations on the City's consultants or contractors to protect all personal information acquired from the City in the course of providing any service to the City.

**15.0 NON-RESIDENT WITHHOLDING TAX**

- 15.1 Please note that the *Income Tax Act* (Canada) requires that payments to non-residents for any services performed in Canada are subject to a Non-resident Withholding Tax of a specified percentage (depending on residency of the contractor). Exemption from this withholding tax is available in some circumstances, but the non-resident must apply directly to the Canada Revenue Agency ("CRA") at least thirty (30) days before commencing the service.

**16.0 NO OBLIGATION ASSUMED BY CITY**

- 16.1 Unless expressly stated in this RFP, the City assumes no legal duty or obligation in respect of this RFP unless and until the City enters into the Agreement.
- 16.2 The Proponent agrees that the Proponent will bear all costs and expenses incurred by the Proponent in preparing its Proposal and participating in the RFP.

**17.0 NO CLAIM AGAINST THE CITY**

- 17.1 The Proponent acknowledges and agrees that the City will not be responsible for any costs, expenses, losses, damages (including damages for loss of anticipated profit) or liabilities incurred or alleged to be incurred by the Proponent and by submitting a Proposal each Proponent shall be deemed to have agreed that it has no claim whatsoever.

**18.0 INDEMNITY**

- 18.1 The Proponent now indemnifies and will protect and save the City harmless from and against all Losses, in respect of any claim or threatened claim by any of the Proponent's Sub-contractors or agents alleging or pleading:
- (a) any breach by the City or its officials or employees of the RFP;
  - (b) any unintentional tort of the City or its officials or employees occurring in the course of conducting this RFP process; or
  - (c) liability on any other basis related to this RFP process.

**19.0 DISPUTE RESOLUTION**

- 19.1 Any dispute relating in any manner to this RFP process shall be resolved by arbitration in accordance with the *Commercial Arbitration Act* (British Columbia), amended as follows:

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- (a) the arbitrator will be selected by the City's Director of Legal Services;
- (b) Section 17(Release) and Section 18 (Indemnity) will:
  - (i) bind the City, Proponent and the arbitrator; and
  - (ii) survive any and all awards made by the arbitrator; and
- (c) the Proponent will bear all costs of the arbitration.

**20.0 ACCESS/OWNERSHIP OF PROPOSAL INFORMATION**

- 20.1 All RFP packages and addenda provided to the Proponent by the City remain the property of the City and must be returned to the City upon request.
- 20.2 The documentation containing the Proposal, once submitted to the City, becomes the property of the City, and the City is under no obligation to return the Proposal.

**21.0 CONFIDENTIALITY**

- 21.1 Subject to the applicable provisions of the *Freedom of Information and Protection of Privacy Act* (British Columbia) and the City's full right to publicly disclose any and all aspects of the Proposal in the course of publicly reporting to the Vancouver City Council on the Proposal results or announcing the results of the Proposals to the Proponent(s), the City will treat all material and information expressly submitted by the Proponent (and the City's evaluation of it) in confidence in substantially the same manner as it treats its own confidential material and information.
- 21.2 The Proponent irrevocably waives all rights it may have by statute, at law or in equity, to obtain any records produced or kept by the City in evaluating its Proposal (and any other submissions) and now agrees that under no circumstances will it make any application to the City for disclosure of any records pertaining to the receipt, evaluation or selection of its Proposal (or any other submissions) including, without limitation, records relating only to the Proponent.
- 21.3 The Proponent will not divulge or disclose to any third parties any information concerning the affairs of the City which may be communicated to the Proponent at any time (whether before or after the Closing Time). Recognizing the need for confidentiality of the City's data, files and other confidential information, the Proponent will not use, exploit or divulge or disclose to third parties any confidential or proprietary information of the City of which the Proponent may gain knowledge in connection with or in the course of discussions or negotiations with the City.
- 21.4 All material and information that has or will come into the Proponent's possession or knowledge in connection with this RFP process is confidential and may not be disclosed or utilized in any way except as expressly provided in the RFP.
- 21.5 The Proponent may not divulge any information respecting the RFP process to any third party without the prior written consent of the City, which consent may be arbitrarily withheld unless it is information which the City has already made public or has been required to disclose pursuant to the *Freedom of Information and Protection of Privacy Act* (British Columbia).

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**22.0 NO PROMOTION**

- 22.1 The successful Proponent must not disclose or promote its relationship with the City, including by means of any verbal declarations or announcements and by means of any sales, marketing or other literature, letters, client lists, press releases, brochures or other written materials, without the express prior written consent of the City (except as may be necessary for the successful Proponent to perform the successful Proponent's obligations under the terms of the Agreement).

**23.0 SURVIVAL/LEGAL EFFECT OF PROPOSAL CONTRACT**

- 23.1 All of the terms of this PART B - INSTRUCTIONS TO PROPONENTS which by their nature require performance or fulfillment following the conclusion of the Proposal process will survive such issuance and will remain legally enforceable by and against the Proponent and City.

**24.0 DEFINITIONS**

- 24.1 For greater certainty, and without limitation to any of this City's rights set out in this RFP, when the terms "must", "shall", "will", "is to" or "are to" precede a requirement regarding the content or format of a Proposal, such requirement is not mandatory but is strongly recommended.

- 24.2 In this RFP, the following terms have the following meanings:

- (a) **"Agreement"** means the contract entered into between the City and the successful Proponent following the conclusion of the RFP process;
- (b) **"City"** means the City of Vancouver, a municipal corporation continued pursuant to the Vancouver Charter;
- (c) **"Commercial Proposal"** means those portions of the Proposal to be submitted in Envelope One as set out in PART C - FORM OF PROPOSAL;
- (d) **"Form of Agreement"** means the sample Agreement included in PART D-FORM OF AGREEMENT;
- (e) **"Losses"** means in respect of any matter all:
  - (i) direct or indirect, as well as;
  - (ii) consequential,  
  
claims, demands, proceedings, losses, damages, liabilities, deficiencies, costs and expenses (including without limitation all legal and other professional fees and disbursements, interest, penalties and amounts paid in settlement whether from a third person or otherwise);
- (f) **"Management Proposal"** means those portions of the Proposal to be submitted in Envelope Two as set out in PART C - FORM OF PROPOSAL, which expressly excludes any pricing information;
- (g) **"Project"** means the project described in RFP No. PS20120743 The Supply and Delivery of Rear Loading Refuse Trucks;
- (h) **"Proponent"** means those entities eligible to participate in this RFP process;

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- (i) **"Proposal"** means a proposal submitted in response to the RFP;
- (j) **"Proposal Declaration Form"** means the form to be included in the Commercial Proposal substantially as set out in PART C-FORM OF PROPOSAL, or as otherwise acceptable to the City.
- (k) **"RFP"** means the documents issued by the City as Request for Proposal No. PS20120743 including all addenda; and
- (l) **"Sub-contractors"** means any or all sub-contractors identified in the Proponent's Proposal.

All other terms (capitalized or not) have the meanings given to them in the RFP.

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APPENDIX 1 - PART B  
DECLARATION OF SUPPLIER CODE OF CONDUCT COMPLIANCE

**Purpose:** All suppliers are to complete and submit this form with proposals to demonstrate compliance with the Supplier Code of Conduct.

The City of Vancouver expects each supplier of goods and services to the City to comply with the City's Supplier Code of Conduct (SCC) <[http://vancouver.ca/policy\\_pdf/AF01401P1.pdf](http://vancouver.ca/policy_pdf/AF01401P1.pdf)>. The SCC defines minimum social standards for City suppliers and their subcontractors based on the International Labour Organization (ILO) core labour conventions and compliance with national and other applicable law of the country of manufacture of products including those laws relating to labour, worker health and safety, and the environment.

Proponents/vendors must comply with these standards upon submitting a proposal or quotation to the City, or have a plan in place to comply within a specific period of time. The City reserves the right to determine an appropriate timeframe in which proponents/vendors must come into compliance with the SCC. To give effect to this requirement, an authorized signatory of the undersigned proponent/vendor must complete the following declaration and include this declaration with their submission/quotation:

"As an authorized signatory of <insert proponent/vendor name>, I declare that to the best of my knowledge, <insert proponent/vendor name> and our sub-contractors have not been and are not currently in violation of the SCC or convicted of an offence under national and other applicable laws of the country of manufacture, other than as noted in the table below (include all violations/convictions that have occurred in the past three years as well as plans for corrective action).

Section of SCC, Title of ILO convention/national law or other	Date of violation /conviction	Description of violation /conviction	Regulatory/ adjudication body and document file number	Corrective action plan

I understand that a false declaration and/or lack of a corrective action plan may result in disqualification of <insert proponent/vendor name>'s submission/quotation."

\_\_\_\_\_  
Corporate Name of Applicant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name and Title of Authorized Signatory

\_\_\_\_\_  
Signature

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APPENDIX 2 - PART B  
VENDOR SUSTAINABILITY LEADERSHIP QUESTIONNAIRE

**Purpose:** This document is designed to identify where suppliers are going above the minimum standards in the Supplier Code of Conduct and are demonstrating sustainability leadership in their own operations as part of the evaluation criteria of a bid process.

As part of the City's corporate Purchasing Policy and related Supplier Code of Conduct, all City vendors must meet minimum requirements related to ethical, social and environmental standards. Beyond these basic requirements, the City would also like to reward vendors that are demonstrating leadership and innovation in sustainability. In order to be able to do so, the City requires that all suppliers bidding on a City contract answer the following questions. The answers to the questionnaire will be evaluated as part of the bid evaluation process.

You will need to be able to verify all your answers to the City upon request. Please keep in mind that these questions relate to your company's internal operations and overall sustainability leadership.

***Section 1: Fair Workplace Practices***

1. Does your company know the locations of 100% of the facilities that produce your products?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. Does your company have a documented Supplier Code of Conduct or policy that sets internationally recognized minimum labour standards that you expect your suppliers to meet when manufacturing your products?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3. Tell us how your company verifies compliance to the standards in the Supplier Code of Conduct and/or Purchasing Policy.		
a) We conduct third party audits of factories we work with.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b) We conduct internal audits of our supply chain and work with our supply base to resolve issues.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c) We publicly disclose the names and locations of our factories.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d) We rely on a complaint-based system to identify supplier non-compliance.	<input type="checkbox"/> Yes	<input type="checkbox"/> No

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4. Tell us which memberships you hold with organizations that work to promote fair and reasonable employment conditions for workers.

a) We are a member of <a href="#">Fair Labour Association</a> or <a href="#">Social Accountability International</a> or <a href="#">Worker's Rights Consortium</a>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b) We are a member of <a href="#">Fair Factories Clearinghouse</a> or <a href="#">Sedex</a>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c) We are a member of another organization that promotes fair and reasonable employment conditions	Please specify _____	

***Section 2: Workplace Health & Safety, Wage Rates and Diversity***

5. Tell us how your company works to promote workplace health and safety.

a) We have a documented Health & Safety Policy and Program that is openly endorsed by senior management and is updated on an annual basis	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b) We have a Health & Safety Manual that includes safe work procedures, incident investigation process with the intent of prevention, workplace inspection process and emergency preparedness and response.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c) We conduct hazard assessments and job task-specific health & safety training on an annual basis	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d) We are registered with one or more of these Safety Management Systems/Programs:		
OHSAS 18001	<input type="checkbox"/> Yes	<input type="checkbox"/> No
CAN/CSA Z1000	<input type="checkbox"/> Yes	<input type="checkbox"/> No
ANSI Z10	<input type="checkbox"/> Yes	<input type="checkbox"/> No
e) We have a system registered, certified or recognized by another standard	Please specify _____	

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f) We adhere to one or more of the ILO health and safety resolutions	<input type="checkbox"/> Yes	<input type="checkbox"/> No
g) We have a non-registered audited health and safety management system	<input type="checkbox"/> Yes	<input type="checkbox"/> No

6. Tell us how you ensure fair wages and employee benefits

a) We pay all of our staff a minimum wage that meets the regional LICO (See <a href="http://www.statcan.gc.ca/pub/75f0002m/2009002/tbl/tbl-2-eng.htm">http://www.statcan.gc.ca/pub/75f0002m/2009002/tbl/tbl-2-eng.htm</a> for wage amounts)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b) We pay benefits to all of our full-time employees	<input type="checkbox"/> Yes	<input type="checkbox"/> No

7. Tell us about your strategy to address diversity in your workplace.

a) We have a policy or strategy to support hiring a diverse workforce	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b) We have a policy or strategy to purchase from diverse contractors / suppliers	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c) We participate in work/employment training programs for vulnerable/diverse populations (e.g. Social purchasing portal)	<input type="checkbox"/> Yes Please specify	<input type="checkbox"/> No

***Section 3: Environmental Management & Stewardship***

8. Tell us what policies and programs your company has in place to manage its environmental impact.

a) We have a documented Environmental or Sustainability Policy	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b) We have an environmental management system registered to ISO 14001	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c) We have a system registered, certified or recognized by another standard (e.g. EMAS)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Please specify _____		
d) We have a non-registered audited environmental management system	<input type="checkbox"/> Yes	<input type="checkbox"/> No



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e) We conduct compliance audits to health, safety and environmental legislation	<input type="checkbox"/> Yes	<input type="checkbox"/> No
f) We produce a publicly available annual environmental, CSR, sustainability or accountability report	<input type="checkbox"/> Yes	<input type="checkbox"/> No

9. Tell us how your company works to reduce its greenhouse gas (GHG) emissions.

a) We measure our GHG emissions and have developed a reduction strategy	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b) We publicly report our GHG emissions	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c) We have set publicly available GHG reduction targets	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d) We have set a target for the use of renewable or alternative forms of energy and have developed a strategy to reach this target	<input type="checkbox"/> Yes	<input type="checkbox"/> No
e) We have retrofitted our facilities, our fleet and/or made process improvements to decrease GHG emissions and energy use.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
f) We have an alternative transportation program for employees (e.g. public transit subsidy, cycling facilities, carpooling program)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
g) We purchase from shipping/delivery companies that have taken steps to reduce their GHG emissions.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
h) We operate in third party verified green buildings and have developed a plan to meet third party verified standards (such as LEED, BREEAM, etc) in as many of our facilities as possible.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Please specify the verification system _____:		

10. Tell us how your company works to reduce waste in its daily operations.

a) We conduct regular audits to measure the total amount of solid waste generated by our facilities and have a waste reduction strategy	<input type="checkbox"/> Yes	<input type="checkbox"/> No
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b) We have set publicly available waste reduction targets	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c) We have an office recycling program that includes office paper, beverage containers, batteries and printer cartridges	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d) We have other recycling programs in our operations	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Please specify additional materials recycled:		
<b>11. Tell us how your company works to reduce the use of toxins and properly manage hazardous substances.</b>		
a) We are not in violation with any local, national or international laws related to the use of toxins and management of hazardous substances	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d) We have a Toxic Reduction Strategy/Policy that aims to reduce toxins across all operations	<input type="checkbox"/> Yes	<input type="checkbox"/> No
e) We measure the implementation of our Toxic Reduction Strategy/Policy against a pre-determined set of performance metrics and verify performance with a third-party	<input type="checkbox"/> Yes	<input type="checkbox"/> No

***Back-up Documentation to Verify Responses***

The City reserves the right to verify responses on this questionnaire and may request some or all of the following documentation.

Section	Question	Back-up Documentation
Section 1 Fair Workplace Practices	Question 1	<ul style="list-style-type: none"> <li>Location details of factory locations</li> </ul>
	Question 2	<ul style="list-style-type: none"> <li>A copy of Supplier Code of Conduct or policy</li> </ul>
	Question 3	<ul style="list-style-type: none"> <li>A copy of third-party audit reports</li> <li>A list of publicly disclosed factories</li> </ul>
	Question 4	<ul style="list-style-type: none"> <li>Proof of membership</li> </ul>

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Section 2  Workplace Health and Safety	Question 5	<ul style="list-style-type: none"><li>• A copy of policy</li><li>• Proof of safety management system certification</li></ul>
	Question 6	<ul style="list-style-type: none"><li>• Documentation of employee benefit packages and a list of those who receive benefits</li></ul>
	Question 7	<ul style="list-style-type: none"><li>• A copy of policies</li></ul>
Section 3  Environmental Management and Stewardship	Question 8	<ul style="list-style-type: none"><li>• A copy of policy</li><li>• Proof of environmental management system certification</li><li>• A copy of public report</li></ul>
	Question 9	<ul style="list-style-type: none"><li>• Copy of public report</li><li>• A copy of reduction targets and related results</li><li>• Proof of LEED, BEEAMA, etc. certification</li></ul>
	Question 10	<ul style="list-style-type: none"><li>• Total tonnes of solid waste generated</li><li>• A copy of reduction targets</li></ul>
	Question 11	<ul style="list-style-type: none"><li>• Copy of strategy/policy</li><li>• A copy of reduction targets and related results</li><li>• Copy of third-party audit/verification</li></ul>

REQUEST FOR PROPOSAL NO. PS20120743  
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APPENDIX 3 - PART B  
CERTIFICATE OF EXISTING INSURANCE

[SEE ATTACHED]



**CERTIFICATE OF EXISTING INSURANCE  
TO BE COMPLETED AND APPENDED TO THE PROPOSAL/TENDER**

Section 2 through 8 – to be completed and executed by the Insurer or its Authorized Representative

1. **THIS CERTIFICATE IS ISSUED TO:** City of Vancouver, 453 W 12<sup>th</sup> Avenue, Vancouver, BC, V5Y 1V4  
and certifies that the insurance policy (policies) as listed herein has/have been issued to the Named Insured and is/are in full force and effect.

2. **NAMED INSURED** (must be the same name as the proponent/bidder and is either an individual or a legally incorporated company)

**BUSINESS TRADE NAME or DOING BUSINESS AS**

**BUSINESS ADDRESS**

**DESCRIPTION OF OPERATION**

3. **PROPERTY INSURANCE (All Risks Coverage including Earthquake and Flood)**

INSURER _____	<b>Insured Values (Replacement Cost) -</b>
TYPE OF COVERAGE _____	Building and Tenants' Improvements \$ _____
POLICY NUMBER _____	Contents and Equipment \$ _____
POLICY PERIOD From _____ to _____	Deductible Per Loss \$ _____

4. **COMMERCIAL GENERAL LIABILITY INSURANCE (Occurrence Form)**

Including the following extensions:	INSURER _____
✓ Personal Injury	POLICY NUMBER _____
✓ Property Damage including Loss of Use	POLICY PERIOD From _____ to _____
✓ Products and Completed Operations	<b>Limits of Liability (Bodily Injury and Property Damage Inclusive) -</b>
✓ Cross Liability or Severability of Interest	Per Occurrence \$ _____
✓ Employees as Additional Insureds	Aggregate \$ _____
✓ Blanket Contractual Liability	All Risk Tenants' Legal Liability \$ _____
✓ Non-Owned Auto Liability	Deductible Per Occurrence \$ _____

5. **AUTOMOBILE LIABILITY INSURANCE** for operation of owned and/or leased vehicles

INSURER _____	<b>Limits of Liability -</b>
POLICY NUMBER _____	Combined Single Limit \$ _____
POLICY PERIOD From _____ to _____	<i>If vehicles are insured by ICBC, complete and provide Form APV-47.</i>

6. ☐ **UMBRELLA OR** ☐ **EXCESS LIABILITY INSURANCE** **Limits of Liability (Bodily Injury and Property Damage Inclusive) -**

INSURER _____	Per Occurrence \$ _____
POLICY NUMBER _____	Aggregate \$ _____
POLICY PERIOD From _____ to _____	Self-Insured Retention \$ _____

7. **PROFESSIONAL LIABILITY INSURANCE**

INSURER _____	<b>Limits of Liability</b>
POLICY NUMBER _____	Per Occurrence/Claim \$ _____
POLICY PERIOD From _____ to _____	Aggregate \$ _____
	Deductible Per Occurrence/Claim \$ _____

*If the policy is in a "CLAIMS MADE" form, please specify the applicable Retroactive Date: \_\_\_\_\_*

8. **OTHER INSURANCE**

TYPE OF INSURANCE _____	<b>Limits of Liability</b>
INSURER _____	Per Occurrence \$ _____
POLICY NUMBER _____	Aggregate \$ _____
POLICY PERIOD From _____ to _____	Deductible Per Loss \$ _____
TYPE OF INSURANCE _____	<b>Limits of Liability</b>
INSURER _____	Per Occurrence \$ _____
POLICY NUMBER _____	Aggregate \$ _____
POLICY PERIOD From _____ to _____	Deductible Per Loss \$ _____

**SIGNED BY THE INSURER OR ITS AUTHORIZED REPRESENTATIVE**

\_\_\_\_\_  
PRINT NAME OF INSURER OR ITS AUTHORIZED REPRESENTATIVE, ADDRESS AND PHONE NUMBER

Dated \_\_\_\_\_

REQUEST FOR PROPOSAL NO. PS20120743  
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PART B - INSTRUCTIONS TO PROPONENTS

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APPENDIX 4 - PART B  
GENERAL CERTIFICATE OF INSURANCE

[SEE ATTACHED]

Section 8 b) – City staff to select the required # of days Written Notice before sending the certificate out for completion  
Section 2 through 8 – to be completed and executed by the Insurer or its Authorized Representative

1. **THIS CERTIFICATE IS ISSUED TO:** City of Vancouver, 453 W 12<sup>th</sup> Avenue, Vancouver, BC, V5Y 1V4  
*and certifies that the insurance policies as listed herein have been issued to the Named Insured(s) and are in full force and effect as of the effective date of the agreement described below.*
2. **NAMED INSURED:** *[must be the same name as the Permittee/Licensee or Party(ies) to Contract and is/are either an individual(s) or a legally incorporated company(ies)]*

**MAILING ADDRESS:**

**LOCATION ADDRESS:**

**DESCRIPTION OF OPERATION, CONTRACT, AGREEMENT, LEASE, PERMIT OR LICENSE:**

3. **PROPERTY INSURANCE** naming the City of Vancouver as a Named Insured and/or Loss Payee with respect to its interests and shall contain a waiver clause in favour of the City of Vancouver.

**(All Risks Coverage including Earthquake and Flood)**

**INSURED VALUES: (Replacement Cost)**

INSURER: \_\_\_\_\_

Building and Tenants' Improvements: \$ \_\_\_\_\_

TYPE OF COVERAGE: \_\_\_\_\_

Contents and Equipment: \$ \_\_\_\_\_

POLICY NUMBER: \_\_\_\_\_

Deductible Per Loss: \$ \_\_\_\_\_

POLICY PERIOD: From \_\_\_\_\_ to \_\_\_\_\_

4. **COMMERCIAL GENERAL LIABILITY INSURANCE (Occurrence Form)**

Including the following extensions:

**LIMITS OF LIABILITY: (Bodily Injury and Property Damage Inclusive)**

✓ Personal Injury

Per Occurrence: \$ \_\_\_\_\_

✓ Products and Completed Operations

Aggregate: \$ \_\_\_\_\_

✓ Cross Liability or Severability of Interest

All Risk Tenants' Legal Liability: \$ \_\_\_\_\_

✓ Employees as Additional Insureds

✓ Blanket Contractual Liability

✓ Non-Owned Auto Liability

INSURER: \_\_\_\_\_

Deductible Per Occurrence: \$ \_\_\_\_\_

POLICY NUMBER: \_\_\_\_\_

POLICY PERIOD: From \_\_\_\_\_ to \_\_\_\_\_

5. **AUTOMOBILE LIABILITY INSURANCE** for operation of owned and/or leased vehicles

INSURER: \_\_\_\_\_

**LIMITS OF LIABILITY:**

POLICY NUMBER: \_\_\_\_\_

Combined Single Limit: \$ \_\_\_\_\_

POLICY PERIOD: From \_\_\_\_\_ to \_\_\_\_\_

*If vehicles are insured by ICBC, complete and provide Form APV-47.*

6. ☐ **UMBRELLA OR** ☐ **EXCESS LIABILITY INSURANCE**

**LIMITS OF LIABILITY: (Bodily Injury and Property Damage Inclusive)**

INSURER: \_\_\_\_\_

Per Occurrence: \$ \_\_\_\_\_

POLICY NUMBER: \_\_\_\_\_

Aggregate: \$ \_\_\_\_\_

POLICY PERIOD: From \_\_\_\_\_ to \_\_\_\_\_

Self-Insured Retention: \$ \_\_\_\_\_

7. **OTHER INSURANCE** (e.g. Boiler & Machinery, Business Interruption, Crime, etc.) – Please specify Name of Insurer(s), Policy Number, Policy Period, and Limit

8. **POLICY PROVISIONS:**

*Where required by the governing contract, agreement, lease, permit or license, it is understood and agreed that:*

- a) *The City of Vancouver, its officials, officers, employees, servants and agents have been added as Additional Insureds with respect to liability arising out of the operation of the Named Insured pursuant to the governing contract, agreement, lease, permit or license;*
- b) *SIXTY (60) days written notice of cancellation or material change resulting in reduction of coverage with respect to any of the policies listed herein, either in part or in whole, will be given by the Insurer(s) to the Holder of this Certificate; the exception is cancellation for non-payment of premiums in which case the applicable statutory conditions will apply;*
- c) *The insurance policy (policies) listed herein shall be primary with respect to all claims arising out of the operation of the Named Insured. Any insurance or self-insurance maintained by the City of Vancouver shall be in excess of this insurance and shall not contribute to it.*

**SIGNED BY THE INSURER OR ITS AUTHORIZED REPRESENTATIVE**

PRINT NAME OF INSURER OR ITS AUTHORIZED REPRESENTATIVE, ADDRESS AND PHONE NUMBER \_\_\_\_\_ Dated: \_\_\_\_\_

**PART C - FORM OF PROPOSAL**

**1.0 INTRODUCTION**

- 1.1 This PART C - FORM OF PROPOSAL contains the format and information requested by the City to be contained in the Proponent's Proposal.
- 1.2 The Proponent's Proposal should be submitted in two (2) envelopes or packages:
- (a) Envelope One: Commercial Proposal, one (1) set only including the Proposal Declaration Form; and
  - (b) Envelope Two: Management Proposal, two (2) sets
  - (c) One (1) CD containing the Commercial and Management Proposals.
- 1.3 The Commercial Proposal should contain the following sections, as more particularly described in this PART C - FORM OF PROPOSAL under the heading "Submission Instructions for Envelope One - Commercial Proposal":
- (a) Proposal Declaration Form;
  - (b) Pricing (Schedule D);
  - (c) Certificate of Existing Insurance;
  - (d) WorkSafeBC clearance letter;
  - (e) Deviations and Variations.
  - (f) Declaration of Supplier Code of Conduct Compliance
  - (g) Vendor Sustainability Leadership Questionnaire; and
  - (h) Amendments and/or Addenda to the Request for Proposals (if any).
- 1.4 The Management Proposal should contain the following sections, as more particularly described in this PART C - FORM OF PROPOSAL under the heading "Submission Instructions for Envelope Two - Management Proposal":
- (a) Company Profile;
  - (b) Key Personnel
  - (c) References;
  - (d) Sub-Contractors;
  - (e) Requirements Overview, and;
  - (f) Environmental Responsibility;



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**PROPOSAL DECLARATION FORM**

[Proponent's Letterhead]

To: [Insert submission location]

Attention: [Insert contact person]

Capitalized terms have the definitions given them in the RFP.

In consideration of the City's agreement to consider Proposals in accordance with the terms of the RFP, the Proponent hereby submits its Proposal in accordance with the following:

**1.0 PROPOSAL**

The Proponent acknowledges that:

- (a) this Proposal Declaration Form has been duly authorized and validly executed;
- (b) the Proponent has received, read, examined and understood the entire RFP including all of the terms and conditions, all documents listed in the RFP "Table of Contents", and any and all Addenda; and
- (c) the City reserves the right to verify information in its Proposal and conduct any background investigations including criminal record investigations, verification of the Proposal, credit enquiries, litigation searches, bankruptcy registrations and taxpayer information investigations or other investigations on the Proponent, and by submitting a Proposal, the Proponent agrees that it consents to the conduct of all or any of those investigations by the City.

**2.0 NO CONFLICT OF INTEREST IN PROPOSAL EVALUATION**

The Proponent confirms that there is no officer, director, shareholder, partner or employee or other person related to the Proponent's or the Proponent's proposed Sub-contractor's organizations (a "person having an interest") or any spouse, business associate, friend or relative of a person having an interest who is:

- (a) an elected official or employee of the City; or
- (b) related to or has any business or family relationship with any elected official or employee of the City,

such that there would be any conflict of interest or any appearance of conflict of interest in the evaluation or consideration of this Proposal by the City, except as set out below:

*[The Proponent is conclusively deemed to have declared "none" unless the Proponent deletes this note and describes any or all relationships which might give rise to a conflict of interest or an appearance of a conflict of interest.]*

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**3.0 NO CONFLICT OF INTEREST IN PROJECT**

The Proponent confirms that neither the Proponent nor its proposed Sub-contractors are currently engaged in providing (or are proposing to provide) supply and delivery of a Multi-Purpose Command Vehicle of any kind to the Federal Government, Provincial Government, the Greater Vancouver Regional District (Metro Vancouver), or any member local governments of Metro Vancouver such that entering into the Agreement pursuant to this RFP would create a conflict of interest or the appearance of conflict of interest between the Proponent's duties to the City and the Proponent's duties of loyalty to these other governmental organizations, except as set out below:

*[The Proponent is conclusively deemed to have declared "none" unless the Proponent deletes this note and describes any or all relationships which might give rise to a conflict of interest or an appearance of a conflict of interest.]*

**4.0 NO COLLUSION OR FRAUD**

The Proponent now confirms that its Proposal is in all respects a fair Proposal made without collusion or fraud and confirms that the Proponent is not competing within this RFP process with any entity with which it is legally or financially associated or affiliated, except as set out below:

*[The Proponent is conclusively deemed to have declared "none" unless the Proponent deletes this note and describes any and all affiliations or relationships which might give rise to collusion or an appearance of collusion.]*

**5.0 NO LOBBY STATUS**

The Proponent now confirms that neither it nor any officers, directors, shareholders, partners, or employees of the Proponent or any of its proposed Sub-Contractors is registered as a lobbyist under any lobbyist legislation in any jurisdiction in Canada or in the United States of America, except as set out below:

*[The Proponent is conclusively deemed to have declared "none" unless the Proponent deletes this note and describes any or all lobbyist registrations of the type described above.]*

IN WITNESS TO THE ABOVE, the Proponent has executed this Proposal Declaration Form and submits same with the attached Proposal:

---

Authorized Signatory for the Proponent

---

Date

---

Name and Title (please print)

## SUBMISSION INSTRUCTIONS FOR ENVELOPE ONE - COMMERCIAL PROPOSAL

The following describes the format and information to be provided by the Proponent in its Commercial Proposal. The paragraph titles and numbers in the Commercial Proposal should correspond to the paragraph titles and numbers below.

### 1.0 PROPOSAL DECLARATION FORM

- 1.1 Each Proponent should submit with its Commercial Proposal a signed Proposal Declaration Form substantially as set out in this PART C - FORM OF PROPOSAL, or as otherwise acceptable to the City.

### 2.0 PRICING

- 2.1 The Proponent should copy the Pricing Table set out below in Schedule D - Pricing for inclusion in their RFP submission:

#### 2.2 Terms of Payment

The City's standard payment terms are net thirty (30) days after receipt of approved invoice, however discounts or more favourable terms offered by the Proponent will be taken into consideration in the financial evaluation. Please indicate in your response if other than Net thirty (30).

Describe if Electronic Fund Transfer (EFT) is available.

#### 2.3 Alternative Pricing Solutions - Intentionally Omitted

### 3.0 INSURANCE REQUIREMENTS

- 3.1 Proponents should submit with their Commercial Proposals

- a) a Certificate of Existing Insurance duly completed and signed by their insurance agent or broker as evidence of their existing insurance,
- b) a letter from their insurance broker or agent indicating whether or not (and if not then to what extent) they will be able to comply with the insurance requirements as set out in Section 19 of PART D - FORM OF AGREEMENT, should they be selected as the successful Proponent.

- 3.2 The successful Proponent will be required to file certificates of insurance with the City showing proof of all insurance requirements described utilizing the "General Certificate of Insurance" attached as Appendix 5 of Part B. These certificates must be received and reviewed and approved by the City prior to or concurrently with the City entering into any Contract with the successful Proponent.

### 4.0 WORKSAFEBC REQUIREMENTS

- 4.1 Proponents should submit with their Commercial Proposals proof of valid WorkSafeBC registration. Such registration should be maintained as specified in Section 18 of PART D - FORM OF AGREEMENT.

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PART C - FORM OF PROPOSAL

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**5.0 DEVIATIONS AND VARIATIONS**

- 5.1 In their Commercial Proposal Proponent(s) should detail any deviations and/or variations from the terms and conditions set out in this RFP and if applicable, detail proposed amendments.
- 5.2 Where the Proponent is proposing the use of contract language or clauses other than those set out in PART D - FORM OF AGREEMENT, including any and all Schedules, such revised language must be outlined in its Proposal. The City will assume such clauses are in addition to those in the Form of Agreement unless otherwise indicated by the Proponent.

**6.0 VENDOR SUSTAINABILITY LEADERSHIP AND SUPPLIER CODE OF CONDUCT COMPLIANCE**

- 6.1 The Proponent should complete and include with its Commercial Proposal Appendix 2 - Declaration of Supplier Code of Conduct Compliance and Appendix 3 - Vendor Sustainability Leadership Questionnaire.

**7.0 AMENDMENTS OR ADDENDA**

- 7.1 The Proponent should complete and include with its Commercial Proposal amendments, and/or addenda to the Request for Proposals that the City has issued (if any) pursuant to Section B - Part 2.1.

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**SUBMISSION INSTRUCTIONS FOR ENVELOPE TWO - MANAGEMENT PROPOSAL**

The following describes the format and information to be provided by the Proponent in its Management Proposal. The paragraph titles and numbers in the Management Proposal should correspond to the paragraph titles and numbers below.

The Proponent should note that the Management Proposal should contain no pricing information whatsoever.

**1.0 COMPANY PROFILE**

**1.1 Provide the following information:**

Proponent's Name: \_\_\_\_\_  
"Proponent"

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_

Cheque Payable/Remit to \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone No.: \_\_\_\_\_ Fax No.: \_\_\_\_\_

Key Contact Person: \_\_\_\_\_ E-mail: \_\_\_\_\_

GST/HST Registration No.: \_\_\_\_\_ Incorporation Date: \_\_\_\_\_

City of Vancouver Business License Number: \_\_\_\_\_  
(If your office is located in Vancouver or N/A if not applicable)

WorkSafeBC Account Number: \_\_\_\_\_

Dunn and Bradstreet Number: \_\_\_\_\_  
( or N/A if not applicable)

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- 1.2 Provide a description of the Proponent's company, purpose and history of successes including number of years in business, major projects, and what is most responsible for the Proponent's success to date. Include a company brochure or resume for each member of any consortium as well as each key personnel employed by any named proposed Sub-contractor to the Proponent.

**2.0 KEY PERSONNEL**

- 2.1 Identify key personnel to be assigned to this Contract, setting out their names, responsibilities and relevant experience.
- 2.2 Include an organization chart for the Proponent's proposed Project team, identifying the team leader or project manager, and all roles and areas of responsibility.

**3.0 REFERENCES**

- 3.1 The Proponent is to describe the Proponent's relevant experience with similar engagements for similar work over the last two (2) years as well as references for same by completing the table below. The Proponent may, at its own discretion, expand on the number of references and information that it deems necessary to support its Proposal. By submitting a Proposal, the Proponent consents to the City contacting these references, and consents to the City also contacting any other organization for the purposes of evaluating the Proponent's company and Proposal.

	Name and Address of Company	Contact Name and Telephone Number	Brief Description of Work and Date Performed
1			
2			
3			
4			
5			

**4.0 SUB-CONTRACTORS**

- 4.1 The Sub-contractors shown below are the Sub-contractors that the Proponent proposes to use to carry out the Requirements. The City expects that the Proponent will engage the listed Sub-contractors and no others in their stead without prior written authorization of the City. (For contractual requirements, Proponents should note the relevant sections of the Form of Agreement.)
- 4.2 The City reserves the right to object to any of the Sub-contractors listed in a Proposal. If the City objects to a listed Sub-contractor then the City will permit a Proponent to, within seven (7) calendar days, propose a substitute Sub-contractor acceptable to the City. A Proponent will not be required to make such a substitution and, if the City objects to a listed Sub-contractor, the Proponent may, rather than propose a

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substitute Sub-contractor, consider its Proposal rejected by the City and by written notice withdraw its Proposal.

- 4.3 If no Sub-contractors will be used, indicate "Not Applicable".

Company Name, Address	Contact Name and Telephone Number	Area of Responsibility

## 5.0 REQUIREMENTS OVERVIEW

- 5.1 Schedule B "Requirements - Detailed Equipment Specifications and Compliance Matrix", Schedule C - "PM Program and Maintenance" and Schedule D "Pricing" of PART D - FORM OF AGREEMENT provide details on the scope and requirements related to the work to be completed by the successful Proponent. In its Proposal the Proponent should respond to these schedules.
- 5.2 In their Management Proposal Proponent(s) should complete and include Schedule B - Requirements - Detailed Specifications and Compliance Matrix indicating compliance or deviations to specifications listed.
- 5.2 The City is interested in Proposals that will add value. Innovative ideas will be favorably considered in evaluating all Proposals.

## 6.0 PROJECT TIMELINE

- 6.1 The Proponent should provide a detailed schedule, in GNATT or PERT format, based on the following milestones. The working schedule should be of sufficient detail to demonstrate the Proponents understanding of the work:

No.	Key Date Description	Date
1	<i>Anticipated Award</i>	<i>December 1, 2012</i>
2		
3		
4	<i>Substantial Completion</i>	
5	<i>Final Completion</i>	

The final agreed to schedule should become the Contract Schedule for the successful Proponent.

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**7.0 ENVIRONMENTAL RESPONSIBILITY**

- 7.1 The City is committed to preserving the environment. Proponents should provide environmentally sensitive products or services wherever possible.
- 7.2 The Proponent is to advise the City of any known alternatives or substitutes for such materials that would mitigate the effects of any adverse conditions on the environment.

**8.0 PRIME CONTRACTOR REQUIREMENTS - Intentionally Omitted**



## FORM OF AGREEMENT

### SUPPLY AND DELIVERY OF REAR LOADING REFUSE TRUCKS

THIS AGREEMENT made as of \_\_\_\_\_, 20\_\_ (the "Effective Date")

BETWEEN:

CITY OF VANCOUVER, a municipal corporation continued under the *Vancouver Charter* and having an office at 453 West 12th Avenue, Vancouver, British Columbia, V5Y 1V4

(the "City")

AND:

[INSERT LEGAL NAME OF COMPANY], a company having an office at [INSERT ADDRESS]  
(the "Supplier")

WHEREAS:

- A. The City requires the supply and delivery [INSERT SERVICES] services described herein and wishes to engage the Supplier to perform said services.
- B. The Supplier has agreed to perform the said supply and delivery services in accordance with the terms and conditions of this Agreement.

NOW THEREFORE, in consideration for the mutual covenants and promises made by the parties and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

#### 1. DEFINITIONS AND INTERPRETATION

1.1 **Definitions.** In this Agreement, the following words and terms, unless the context otherwise requires, will have the meanings set out below:

- (a) "Additional Compensation" has the meaning set out in Section 5.1;
- (b) "Agreement" means this Supply and Delivery A Multi-Purpose Command Vehicle inclusive of all schedules, appendices or exhibits attached hereto, as may be amended from time to time;
- (c) "Applicable Laws" means all statutes, regulations, by-laws, codes, rules, notices, orders, directives, standards and requirements of every competent federal, provincial, regional, municipal and other statutory authority applicable to the Supplier, any Subcontractor and the Services, all as may be in force from time to time;
- (d) "Business Day" means a day other than a Saturday, Sunday or statutory holiday observed in British Columbia;

- (e) "Completion Date" has the meaning set out in Section 8.1;
- (f) "Contract Documents" means this Agreement, the Proposal, the RFP PS20120743 and such other documents as listed in this Agreement, including all amendments or addenda agreed to between the parties;
- (g) "Delivery Services" has the meaning set out in Section 2 of Schedule A;
- (h) "Delivery Date" has the meaning set out in Section 8.1;
- (i) "Effective Date" has the meaning set out above, and means the first day of the Term;
- (j) "Event of Default" has the meaning set out in Section 23.2 of this Agreement;
- (k) "Contractor or Supplier" means the proponent whose Proposal the City has accepted and to whom the Contract has been awarded;
- (l) "HST" means the tax payable and imposed pursuant to Part IX of the *Excise Tax Act* (Canada), as amended, including any provincial component collected by Canada on behalf of British Columbia, and any successor legislation thereto;
- (m) "Losses" means in respect of any matter all:
  - (i) direct or indirect, as well as
  - (ii) consequential,claims, demands, proceedings, losses, damages, liabilities, deficiencies, costs and expenses (including without limitation all legal and other professional fees and disbursements, interest, penalties and amounts paid in settlement whether from a third person or otherwise);
- (n) "Manufacturer" in respect of a particular Good means the manufacturer of that Good;
- (o) "Pre-Delivery Services" has the meaning set out in Section 1 of Schedule A;
- (p) "Premises" means [INSERT ADDRESS]
- (q) "Products" means the Multi-Purpose Command Vehicle and related items to be supplied to the City by the Supplier, as more particularly set out in Schedule B of this Agreement;
- (r) "Product Specifications" has the meaning set out in Section 6.1;
- (s) "Project" means the Supply and Delivery of Rear Loading Refuse Trucks;
- (t) "Project Manager" is the person designated by each of the parties to administer this Agreement on their behalf and is named in Section 25 of this Agreement, and is subject to change in accordance with Section 25.5 of this Agreement;
- (u) "Proposal" means the response to the RFP submitted by the Supplier on [INSERT DATE] together with all correspondence between the City and the Supplier related thereto;
- (v) "Purchase Order" has the meaning set out in Section 9.1;

- (w) “RFP” means Request for Proposals PS20120743 issued on August 7, 2012;
- (x) “Services” has the meaning set out in Section 4.1;
- (y) “Standard of Work” means the highest of:
  - (i) the standard imposed by law;
  - (ii) the standard prescribed by the professional and regulatory bodies in the applicable profession, field or discipline;
  - (iii) the standard set forth in the Proposal;
  - (iv) the standard set forth in the RFP; and
  - (v) the standard otherwise prescribed in this Agreement;
- (z) “Supplier’s Personnel” means the Supplier’s staff who are assigned to this Agreement to undertake the Services;
- (aa) “Supplier’s Facility” means the Supplier’s business premises;
- (bb) “Subcontractors” means the independent consultants, agents, associates, subcontractors and other third parties retained by the Supplier to assist in the performance of the Services;
- (cc) “Tax” means HST and any other similar tax;
- (dd) “Tax Legislation” includes the *Income Tax Act* (Canada), *Excise Tax Act* (Canada), and all other similar legislation in effect from time to time;
- (ee) “Term” has the meaning set out in Section 4.3; and
- (ff) “WorkSafeBC Legislation” means the *Workers Compensation Act* (British Columbia) and all regulations enacted pursuant to the *Workers Compensation Act* (British Columbia).

1.2 **Interpretation.** In this Agreement, including the recitals, Schedules and appendices to this Agreement, except as expressly stated to the contrary or the context otherwise requires:

- (a) the recitals and headings to Sections and Schedules are for convenience and reference only and will not affect the interpretation of this Agreement;
- (b) each reference in this Agreement to “Section” or “Schedule” is to a Section of and a Schedule to, this Agreement;
- (c) each reference to a statute is deemed to be a reference to that statute and any successor statute, and to any regulations, rules, policies and criteria made under that statute and any successor statute, each as amended or re-enacted from time to time;
- (d) each reference to a rule, guideline, policy, regulation or directive is deemed to be a reference to any successor or replacement of such rule, guideline, policy, regulation or directive;

- (e) words importing the singular include the plural and vice versa and words importing gender include all genders;
- (f) references to time of day or date mean the local date or time in Vancouver, British Columbia;
- (g) all references to money mean lawful currency of Canada;
- (h) the word "written" includes printed, typewritten, faxed, e-mailed or otherwise capable of being visibly reproduced at the point of reception and "in writing" has a corresponding meaning; and
- (i) the words "include" and "including" are to be construed as meaning "including, without limitation".

1.3 **Contract Documents.** The terms and conditions of the Contract Documents, whether or not attached to this Agreement, will be deemed to be incorporated into this Agreement. The Contract Documents are complementary, and what is called for by any one will be as binding as if called for by all. In the event of any inconsistency or conflict between or among any of the Contract Documents, the Contract Documents will be interpreted in the following order from highest to lowest:

- (a) this Agreement including any amendments to this Agreement;
- (b) the schedules and appendices attached hereto including any amendments to the schedules and appendices attached hereto;
- (c) the Proposal; and
- (d) the RFP.

## 2. SUPPLIER'S REPRESENTATIONS AND WARRANTIES

2.1 **Representations and Warranties.** The Supplier represents and warrants that:

- (a) the Supplier has the full right, power, and authority to enter into this Agreement and to perform the Services;
- (b) the Supplier is a corporation duly incorporated, organized, validly existing and in good standing under the laws of its jurisdiction of incorporation or continuance and is lawfully registered and licensed to do business in the Province of British Columbia;
- (c) the Supplier is not a party to or bound by any agreement (written or oral), indenture, instrument, licence, permit or understanding or other obligation or restriction under the terms of which the execution, delivery and/or performance of this Agreement does or will constitute or result in a violation or breach;
- (d) the Supplier has a valid City of Vancouver business licence and will maintain such business licence in good standing for the Term;
- (e) all statements made by the Supplier in its Proposal are true and accurate;
- (f) the Supplier is an authorized distributor of the Products;

- (g) the Supplier and the Supplier's Personnel and Subcontractors have the skills, training, experience and expertise which are necessary to complete the Services in accordance with the terms of this Agreement;
- (h) the Products meet or exceed the Product Specifications and the Supplier will install the Products in accordance with the Manufacturer's recommendations and requirements; and
- (i) all Products will be new and the model approved by the City and free from defects and/or imperfections in material, workmanship or design.

2.2 **Survival.** The representation and warranties in Section 2.1 will survive the expiry or earlier termination of this Agreement.

### 3. PURCHASE OF THE PRODUCTS

3.1 Subject to the terms and conditions of this Agreement, the City agrees to purchase and the Supplier agrees to sell the Products listed in Schedule B of this Agreement to the City at and for the unit prices stated in Schedule B.

### 4. SERVICES

4.1 **Description of Services.** In addition to selling the Products to the City, the Supplier will provide and be fully responsible for the following services (collectively, the "Services"), as may be modified or amended pursuant to the terms of this Agreement:

- (a) the Pre-Delivery Services and the Delivery Services described in Schedule A of this Agreement;
- (b) the services described elsewhere in this Agreement;
- (c) the services described in the RFP;
- (d) the services which the Supplier agreed to provide in the Proposal; and
- (e) any services not specifically covered in (a), (b), (c) or (d) above, but reasonably inferable therefrom, or reasonably necessary for the safe and efficient completion of the Services.

4.2 **Provision of Service Inputs and Personnel.** The Supplier will provide all labour, supervision, management, facilities, equipment, tools, supplies, fuel and materials necessary, appropriate or incidental to the proper and complete execution of the Services. Schedule A describes in general terms how the Supplier is to perform the Services. However, if there is any discrepancy in the description of the requirements or any omission of criteria, whether or not identified by the City, which would be detrimental to the benefits intended to be provided to the City by this Agreement then the Supplier will rectify such discrepancy or omission to the satisfaction of the City without further compensation.

4.3 **Term.** The Supplier will perform and complete the Services commencing on the Effective Date and in accordance with the City's timetable indicated herein and in the RFP, ending on the date that the Services are completed to the satisfaction of the City (the "Term").

4.4 **Standard of Care.** The Supplier will exercise such degree of care, skill, diligence and efficiency in the performance of the Services as is required by the Standard of Work. The Supplier represents and warrants that it has all the skills, qualifications, certifications and

experience necessary to perform the Services to the Standard of Work as contemplated by this Agreement and acknowledges that its skills, qualifications, certifications and experience were a major factor in the selection of the Supplier for the work set out in this Agreement. The parties will act with utmost good faith towards each other in connection with this Agreement.

- 4.5 **Remedy for Deficient Services.** Without limiting any other remedy which the City may have under this Agreement or at law, the Supplier at its sole cost upon written request of the City will rectify any of the Services which have not been performed in accordance with the care, skill, diligence and efficiency set out in Section 4.4 or which have not otherwise been performed in accordance with the terms of this Agreement, and will do all such things that may be reasonably required by the City to satisfy the City that the Services have been duly performed or rectified in accordance with the terms of this Agreement.
- 4.6 **Cooperation and Coordination Regarding Performance of Services.** The Supplier will cooperate, and coordinate the performance of the Services with the City's personnel and the City's contractors, subcontractors, consultants and suppliers including the General Contractor and all other tradespersons at the Premises, with a view to optimizing efficiency, achieving cost reductions, ensuring safety, and minimizing delays. Notwithstanding the foregoing, the Supplier will have no liability for the acts or omissions of any persons for whom it is not responsible under the terms of this Agreement or at law.

## 5. CHANGES TO SERVICES

- 5.1 **Right to Make Changes.** The City may request that the Supplier perform additional work beyond the scope contemplated by the Contract Documents in which case the City and the Supplier will agree, in writing, upon a reasonable estimate of the time the additional services will require and the cost of such services ("**Additional Compensation**"). Actual charges for the additional services will not exceed the amount of the Additional Compensation agreed upon between the City and the Supplier.
- 5.2 **Personnel.** The City may from time to time request reasonable changes to the Supplier's Personnel, and the Supplier will comply with any such request. The Supplier will not change any of the Supplier's Personnel without the prior written approval of the City, which approval will not be unreasonably withheld.

## 6. PRODUCT SPECIFICATIONS AND DRAWINGS

- 6.1 **Requirements.** All Products supplied to the City by the Supplier pursuant to this Agreement must comply with the specifications, requirements and drawings set out in the Contract Documents or as otherwise agreed in writing between the City and the Supplier (the "**Product Specifications**").

## 7. COMPENSATION

- 7.1 **Fees for Services.** Subject to the terms and conditions of this Agreement, and in consideration for the satisfactory performance of the Services, the City will pay the Supplier for the Delivery in accordance with Schedule B of this Agreement. Without limiting the Supplier's obligation to perform all Services, the Supplier acknowledges that it will not invoice the City separately for any Services other than the Delivery Services and the cost of performing the Pre-Delivery Services and all other Services are deemed to be included in the fees for the Delivery.
- 7.2 **Product Prices.** The prices for the Products are set out in Schedule B and will remain fixed for a period of one (1) year from the Effective Date. Prices may be adjusted by mutual agreement by both the Contractor and the City, subject to documented proof which can be verified with

an independent published source or mutually acceptable market index as related to the Product(s).

- 7.3 **Supplier's Costs.** The fees for the Delivery and the prices for the Products set out in Schedule B include all of the Supplier's profit and all of the Suppliers costs whatsoever, including storage, labour, supervision, management, facilities, overhead, office expenses, equipment, transportation, fuel, delivery, brokerage costs, import duties, taxes (except HST on the Products and the Services, as applicable) tools, supplies and materials.

- 7.4 **Manner of Payment.** The Supplier will be paid on the basis and at the times set out in Schedule B and Section 17 of this Agreement.

- 7.5 **No Additional Compensation unless Pre-Approved.** No Additional Compensation whatsoever will be payable by the City for work performed by the Supplier which has not been approved in accordance with Section 5.1 hereof.

## 8. SCHEDULE

- 8.1 **Delivery Date and Completion Date.** The Supplier will commence the Delivery on [INSERT DELIVERY DATE] (the "Delivery Date") and complete the Delivery to the satisfaction of the City by [INSERT COMPLETION DATE] (the "Completion Date").

- 8.2 **Changes to Schedule.** The City may change the Delivery Date to account for changes in the Project schedule generally. If the City changes the Delivery Date then the Completion Date will also change by a corresponding number of days and the City will give the Supplier written notice of such change. Notwithstanding the foregoing, the Delivery Date will not occur before [INSERT DATE].

## 9. ORDERING PRODUCTS

- 9.1 **Purchase Order.** The City will issue a purchase order (the "Purchase Order") for the Products that it wishes to purchase from the Supplier.

- 9.2 **Effect of Purchase Order.** In the event of any conflict between the terms of an individual Purchase Order and the terms of any other Contract Document, the terms of the other Contract Document will have priority.

## 10. TITLE AND RISK

- 10.1 **Risk.** The Products will be at the Supplier's sole risk for any loss or damage until the Supplier has completed the Delivery.

- 10.2 **Title.** Title to the Products will automatically pass to the City upon completion of the Delivery. The Supplier will deliver to the City any documentation, including a bill of sale, which the City may reasonably require to evidence the transfer of title in and to the Products to the City, free and clear of all liens, charges and encumbrances.

## 11. PRODUCT WARRANTY

- 11.1 **Warranty.** The Supplier will deliver to the City all such documentation as the City may reasonably require to evidence that the Products are subject to a Manufacturer's warranty and if applicable, a Supplier's extended warranty, on terms which are acceptable to the City. If any warranties are issued to the Supplier and not the City, the Supplier will take all such further steps and actions as may be required to assign the benefit of such warranties to the City.

11.2 **Warranty Effective Date.** The warranty period for a Product will not commence prior to the Delivery Date.

## 12. EXCLUSIVITY

12.1 **Not an Exclusive Supply Contract.** If the Supplier is not able to:

- (a) supply a particular Product to the City;
- (b) supply the quantities of a Product required by the City;
- (c) deliver a particular Product in accordance with the deadlines set out in Section 8;
- (d) supply a Product to the City which meets the Product Specifications for such Product;
- (e) perform any of the Services when and where required by the City, or

then in each such case, the City will be entitled, in its sole discretion, to purchase the particular Product or services from any other supplier.

## 13. SUBCONTRACTORS

13.1 **Use of Subcontractors.** The Supplier may retain Subcontractors to assist in the performance of the Services, provided that:

- (a) the Supplier will not subcontract all or substantially all of the Services to a Subcontractor;
- (b) the Supplier will require that the terms of this Agreement apply to the Subcontractors; and
- (c) the Supplier will be wholly responsible for the professional standards, performance, acts, defaults and neglects of such Subcontractors.

13.2 **Standard of Care of Subcontractors.** The Supplier represents to the City that all Subcontractors are competent and have the qualifications, designations, experience and capabilities necessary to carry out the Services to the Standard of Work. The Supplier will cause all Subcontractors to exercise the degree of care, skill, diligence and efficiency in the performance of the Services as is required by the Standard of Work.

13.3 **Subcontractor Approvals.** The Supplier will only retain Subcontractors approved by the City in writing.

13.4 **Subcontractor Changes.** The Supplier will not change any Subcontractor without the prior written approval of the City. The City may, from time to time, where it reasonably believes performance to the Standard of Work is not being met by any Subcontractor(s), request changes to the Supplier's Subcontractors, and the Supplier will comply with any such request.

## 14. COMPLIANCE WITH LAWS AND TAXES

14.1 **Compliance with Laws.** In carrying out its obligations hereunder, the Supplier will comply with, and will cause all Subcontractors to comply with, all Applicable Laws.

14.2 **Regulatory Compliance.** The Supplier will upon request by the City provide certificates of compliance from regulatory bodies or other evidence of compliance, including as pertaining to



any of the Subcontractors. The Supplier accepts full and exclusive responsibility and liability, and will cause all Subcontractors to accept full and exclusive responsibility and liability, for payment of federal and provincial payroll taxes and for contributions for employment insurance, old age pensions, retirement annuities, workers' compensation, health and hospitalization plans and other benefits expressed under any provision of any law or any agreement to which the Supplier and the Subcontractors are subject.

- 14.3 **Permits and Licenses.** The Supplier represents and warrants that it has obtained and is in compliance with all requisite permits, professional designations, authorizations and licenses necessary for the Supplier to supply the Products and provide the Services.

## 15. POLICIES, RULES AND REGULATIONS

- 15.1 **Rules and Procedures.** The City may prescribe, and the Supplier will comply with (and cause any person for whom it is responsible at law or pursuant to the provisions of this Agreement to comply with) all rules, regulations, policies and procedures from time to time for:

- (a) matters pertaining to safety and security, including data and network security and issuance of passes, vehicle operating permits, keys, badges, and like devices;
- (b) environmental matters;
- (c) accessibility matters;
- (d) sustainability matters;
- (e) the use of specific materials, goods or services;
- (f) public information and communications; and
- (g) such other matters as the City may from time to time deem necessary or desirable in its reasonable determination.

- 15.2 **Changes to Rules and Procedures.** The City may at any time upon notice to the Supplier amend the rules, regulations, policies and procedures relating to the Services, and may at any time prescribe specific stipulations regarding the Services applicable to the Supplier and its Subcontractors.

- 15.3 **Safety.** The Supplier acknowledges the City's commitment to a superior standard of workplace safety. In addition to complying with all of the Supplier's health and safety obligations specified in this Agreement or otherwise prescribed by Applicable Law, the Supplier agrees to provide support for the City's safety objectives by making efforts to elevate the priority it places on the creation of a safe work environment and embedding health and safety principles into its work.

## 16. RELATIONSHIP OF THE PARTIES

- 16.1 **Status.** The Supplier is engaged as an independent contractor to the City for the sole purpose of supplying the Products and providing the Services. Neither the Supplier nor any of the Supplier's personnel is engaged as an official, officer, employee, servant or agent of the City, and neither the Supplier nor any of the Supplier's personnel will enter into or purport to enter into any contract or subcontract on behalf of the City. All Subcontractors will be consultants, agents, associates or subcontractors, as the case may be, of the Supplier and will not be consultants, agents, associates or subcontractors of the City. It is understood and agreed that the Supplier will act as an independent contractor to the City and that no joint venture,

partnership or principal-and-agent relationship exists between them in connection with this Agreement or otherwise, and the parties covenant that they will not assert otherwise. It is further understood and agreed that the Supplier is entitled to no other benefits or payments whatsoever other than those specified in this Agreement.

- 16.2 **No Acceptance of Advantages or Benefits.** Neither the Supplier, nor any of its agents or employees (including any Subcontractors) will give or offer to give to the City or any official, officer, employee or agent of the City any gratuity, reward, advantage or benefit of any kind as consideration for doing or forbearing to do, or for having done or forborne to do, any act in connection with this Agreement or the Services. Contravention of this provision will be deemed an Event of Default (as defined in Section 23.2) and will permit the City to terminate this Agreement pursuant to Section 23.1(b).
- 16.3 **No Conflicts of Interest.** The Supplier declares that to the best of its knowledge the Supplier and its Subcontractors, and their respective directors, officers, employees and agents, have no pecuniary interest or any other current or past interest or dealings, including with any officials, officers or employees of the City, that would cause a conflict of interest or be seen to cause a conflict of interest in carrying out the Services. Should such a conflict or potential conflict arise during the term of this Agreement, the Supplier will declare it immediately in writing to the City. The City may direct the Supplier to resolve any conflict or potential conflict to the satisfaction of the City. The Supplier warrants that neither the Supplier nor any of its Subcontractors, or any of their respective directors, officers, employees or agents, has any predisposition, affinity or association with any third party which would impair or qualify the provision of the Services
- 16.4 **No Third Party Rights.** Except as expressly set forth herein, nothing in this Agreement will be construed to give any rights or benefits to anyone other than the City and the Supplier.

## 17. PAYMENT

- 17.1 **Invoicing.** The City will not be required to make any payment to the Supplier under this Agreement until the Supplier delivers the Products to the Premises and completes the Delivery Services to the satisfaction of the City. Upon the City confirming that a particular Product has been delivered to the Premises and that the Delivery Services for that Product have been completed to the satisfaction of the City, the Contractor will invoice the City in full for such Products and Delivery Services.
- 17.2 **Submission of Invoices.** Subject to Section 17.1, the Supplier will submit invoices to the City in respect of the Products and the completion of the Delivery Services by the Supplier in accordance with the prices set forth in Schedule B. Each invoice will be clearly itemized to show this contract number, the Delivery performed, amount of Products delivered, the HST, if applicable, and the Supplier's HST registration number.
- 17.3 **Address for Invoices.** All invoices will be directed to the following address:
- CITY OF VANCOUVER  
[INSERT APPLICABLE ADDRESS]  
Attention: [INSERT CONTACT].
- Or such other address as the City may communicate to the Supplier from time to time.
- 17.4 **Time for Payment.** Except for any amounts which the City is in good faith disputing, any set off which the City may claim, any amounts in respect of which the City has requested and not received supporting evidence under Section 17.5, and any holdback required to be made under

Applicable Law, the City will pay invoices submitted by the Supplier within 30 days of receipt thereof.

- 17.5 **Maintenance of Records.** The Supplier will keep, and will cause any Subcontractors to keep, books, records, documents, invoices, receipts and other evidence relevant to the purchase of the Products by the City and the provision of the Services in accordance with generally accepted accounting principles and practices consistently applied. The City and any of its duly authorized representatives will, for the purpose of audit and examination, have access to and be permitted, upon reasonable notice to the Supplier, to inspect such books, records, documents and other evidence for review, copying and audit at any time and from time to time while this Agreement is in effect and for a period of three years after the expiry or termination of this Agreement for any reason.

## 18. WORKSAFEBC COMPLIANCE

- 18.1 Prior to commencing the Services, the Supplier must provide evidence that it is in good standing with WorkSafeBC.

- 18.2 **Payment of WorkSafeBC Assessments** - The Supplier agrees that it will at its own expense procure and carry or cause to be procured and carried and paid for, full WorkSafeBC coverage for itself and all workers, employees, servants and others engaged in or upon the Services. The Supplier agrees that the City has the unfettered right to set off the amount of any unpaid premiums and assessments for such WorkSafeBC coverage against any monies owing by the City to the Supplier. The City will have the right to withhold payment under this Agreement until the WorkSafeBC premiums, assessments or penalties in respect of the Services have been paid in full.

- (a) ***Initial Proof of WorkSafeBC Registration/Good Standing*** - Within five (5) Business Days of the Effective Date, the Supplier will provide the City with the Supplier's and all Subcontractors WorkSafeBC registration numbers and with written confirmation from WorkSafeBC that the Supplier and all Subcontractors are registered and in good standing with WorkSafeBC and that all premiums, assessments and penalties have been paid to date.

- (b) ***Subsequent Proof of WorkSafeBC Registration/Good Standing*** - Within five (5) Business Days of a request by the City the Supplier will provide the City with written confirmation from WorkSafeBC that the Supplier and all Subcontractors are registered and in good standing with WorkSafeBC and that all premiums, assessments and penalties have been paid to date.

- (c) ***Special Indemnity Against WorkSafeBC Non-Compliance*** - The Supplier will indemnify and hold harmless the City from and against all manner of claims, demands, costs, losses, penalties and proceedings arising out of or in any way related to:

- (i) unpaid WorkSafeBC assessments of the Supplier or any other employer for whom the Supplier is responsible under this Agreement;
- (ii) the acts or omissions of any person engaged directly or indirectly by the Supplier in the performance of the Services, or for whom the Supplier is responsible at law and which acts or omissions are or are alleged by WorkSafeBC to constitute a breach of WorkSafeBC Legislation or any other failure to observe the safety rules, regulations and practices of WorkSafeBC, including any and all fines and penalties levied by WorkSafeBC, or
- (iii) any breach of this Section 18.

This indemnity will survive the expiry or earlier termination of this Agreement.

## 19. INSURANCE AND INDEMNITY

19.1 **Supplier's Insurance.** Without limiting any of its obligations or liabilities under this Agreement, the Supplier will obtain and continuously carry and will cause its Subcontractors to obtain and continuously carry during the term of the Agreement at its own expense and cost, the following insurance coverages with minimum limits of not less than those shown in the respective items set out below:

- (a) Commercial General Liability insurance in sufficient amounts and description to protect the Supplier, its Subcontractors, the City and their respective officers, officials, employees, and agents against claims for damages, personal injury including death, bodily injury and property damage which may arise under this Agreement.

The limit of commercial general liability insurance will be not less than \$5,000,000 per occurrence, or such higher amount as the City may require from time to time, inclusive for personal injury, death, bodily injury or property damage and in the aggregate with respect to products and complete operations. The deductible will not exceed \$5,000 per occurrence.

The policy of insurance will:

- (i) be on an occurrence form;
  - (ii) add the City of Vancouver and its officials, officers, employees and agents as additional insureds;
  - (iii) contain a cross-liability or severability of interest clause;
  - (iv) extend to cover non-owned automobile, contingent employer's liability, blanket contractual liability, contractor's protective liability, broad form property damage, broad form completed operations and operations of attached machinery.
- (b) Automobile insurance covering all vehicles owned, leased or operated by the Supplier in connection with this Agreement including Third Party Legal Liability Insurance in an amount not less than \$5,000,000 per occurrence, or such higher amount as the City may require from time to time.
- (c) All-Risks property insurance covering the Supplier's property of every description containing a provision in which the insurer waives all rights which it may acquire by payment of a claim to recover the paid amount from the City or its officials, officers, employees or agents (a "Waiver of Subrogation").

19.2 All insurance policies required by this Agreement will be in a form, in amounts and with insurers acceptable to the City's Director of Risk Management. All policies will provide that the insurer will provide the Manager, Facility Development with sixty (60) days prior written notice of any material change, lapse or cancellation of the policy. Notice must identify the contract title, number, policy holder, and scope of work.

19.3 The Supplier and each of its Subcontractors will provide at its own cost any additional insurance which it is required by law to provide or which it considers necessary.

- 19.4 Neither the providing of insurance by the Supplier in accordance with this Agreement, nor the insolvency, bankruptcy or the failure of any insurance company to pay any claim accruing will be held to relieve the Supplier from any other provisions of the Contract Documents with respect to liability of the Supplier or otherwise.
- 19.5 The insurance coverage will be primary insurance as respects the City. Any insurance or self-insurance maintained by or on behalf of the City or its officers, officials, employees, or agents will be excess of the Supplier's insurance and will not contribute with it.
- 19.6 Prior to the Effective Date, the Supplier will provide the City with evidence of all required insurance to be taken out in the form of a "Certificate of Insurance" (on the City's form) and supported by a certified copy(s) of the policy(s). The Certificate of Insurance will identify the contract title, number, policyholder and scope of work and must not contain any qualifications or disclaimers. The Supplier will provide proof of insurance, in the form of a Certificate of Insurance or certified copies of all insurance policies to the Manager, [INSERT DEPARTMENT NAME] at any time during the Term immediately upon request.
- 19.7 The Supplier will provide in its agreements with its Subcontractors clauses in the same form as in this Section 19. Upon request, the Supplier will deposit with the Manager, [INSERT DEPARTMENT NAME] detailed certificates of insurance for the policies it has obtained from its Subcontractors and a copy of the applicable insurance clauses from its sub-contract agreements.
- 19.8 The Supplier will ensure that the required insurance is provided only by a company duly registered and authorized to conduct insurance business in the Province of British Columbia.
- 19.9 **Responsibility and Liability.** The Supplier hereby assumes the entire responsibility and liability for all damage and injury of any kind and nature whatsoever, caused by, resulting from, arising out of, incidental to, or accruing in connection with any wilful misconduct or negligent act, error or omission of the Supplier or any person for whom the Supplier is responsible at law or pursuant to the terms of this Agreement.
- 19.10 **Indemnity.** The Supplier will defend, indemnify and hold harmless the City and all of its past and present directors, officers, officials, employees, agents and representatives from and against all Losses, of any nature or kind whatsoever, either before or after the expiration or termination of this Agreement, arising out of or in connection with:
- (a) the performance of the Services by the Supplier or the failure by the Supplier to perform the Services;
  - (b) any willful misconduct or any negligent act, error or omission of the Supplier or any person for whom the Supplier is responsible at law or pursuant to the provisions of this Agreement, including without limitation, injury or death to anyone, loss or damage to property of any person, any claim or matter in dispute between the Supplier and any Subcontractor, and any failure or deficiency by the Supplier or any Subcontractor in providing the Services;
  - (c) any infringement or alleged infringement of any copyright, patent, trademark, industrial design, trade secret or other intellectual property rights of any person, or of any obligation of confidentiality, in connection with the Services and or the sale of the Products to the City; and
  - (d) any claim which may be made for a lien or charge at law or in equity or to any claim or liability under the *Builders Lien Act*, or to any attachment for debt, garnishee process or otherwise.

This indemnity will survive the expiry or earlier termination of this Agreement.

19.11 **Discharge of Liens.** The Contractor will make all payments and take all other steps which may be necessary to insure that all monies payable under this Agreement, the Products and any land owned by the City, will be and remain at all times free from and not liable to any lien or charge at law or in equity, or to any claim of liability under the *Builders Lien Act*, or to any attachment for debt, garnishee process or otherwise, and the Supplier will fully defend, indemnify and hold harmless the City and all of its past and present directors, officers, officials, employees, agents and representatives from and against all Losses relating to such matters, and will, on demand, immediately cause any such lien, charge, claim or attachment to be removed or released from the records of the Land Title Office or court in which the same may appear.

19.12 **Rectification of Damage.** The Supplier will rectify any loss or damage caused by the Supplier in the performance of the Services at no charge to the City and to the satisfaction of the City. Alternatively, the City may repair the loss or damage and the Supplier will then pay to the City the costs of repairing the loss or damage promptly upon demand by the City. Where, in the opinion of the City it is not practical or desirable to repair the loss or damage, the City may estimate the cost of repairing the loss or damage and deduct such estimated amount from any amount owing to the Supplier.

## 20. FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY ACT

20.1 The Supplier acknowledges that the City is subject to the *Freedom of Information and Protection of Privacy Act* (British Columbia), which imposes significant obligations on the City's contractors to protect all personal information acquired from the City in the course of providing any service to the City.

## 21. NO PROMOTION

21.1 **No Promotion of Relationship.** The Supplier will not disclose or promote its relationship with the City, including by means of any verbal declarations, announcements, sales, marketing or other literature, letters, client lists, press releases, brochures or other written materials (the "Communications") without the express prior written consent of the City (except as may be necessary for the Supplier to perform the Supplier's obligations under the terms of this Agreement).

## 22. SUSTAINABILITY

22.1 The Supplier acknowledges the City's commitment to sustainability. The Supplier agrees that it will not use any products, supplies or chemicals in the course of performing the Services which have not been approved in writing by the City.

22.2 As the City Contractor, your performance during all contractual obligations will be critical to the City's sustainable and ethical commitments. As such, you must be aware of and follow the City of Vancouver's sustainable and ethical requirements set out in the Procurement Policy and related Supplier Code of Conduct at [http://vancouver.ca/policy\\_pdf/AF01401P1.pdf](http://vancouver.ca/policy_pdf/AF01401P1.pdf).

## 23. TERMINATION

23.1 **Rights of Termination.** This Agreement may be terminated before completion of the Services and before the expiry of the Term, anything to the contrary herein notwithstanding, as follows:

- (a) by the City, at its option and for any reason in its sole discretion, upon 15 Business Days' notice to the Supplier; or
- (b) by the City at its option, at any time after the happening of an Event of Default.

**23.2 Events of Default.** For the purposes hereof, an "Event of Default" will be deemed to occur if:

- (a) the Supplier is in breach of any covenant, obligation or representation hereunder and such breach persists unremedied for a period of ten (10) Business Days after the City has provided the Supplier with written notice of and particulars of the breach or alleged breach, provided that the City may terminate without providing a cure period with respect to actions of the Supplier that are part of a continuing course of conduct in respect of which prior written notice has been given;
- (b) any Product which the Supplier has agreed to supply to the City does not meet the Product Specifications for that Product as determined by the City;
- (c) the Supplier is not able to supply any Product by the Delivery Date or complete the Delivery Services by the Completion Date;
- (d) there occurs or, in the reasonable opinion of the City, there exists a threat of, a strike, lockout, work slowdown, labour disturbance, or refusal to work by the employees or Subcontractors of the Supplier;
- (e) the Supplier is adjudged bankrupt, becomes insolvent or unable to discharge its liabilities as they become due, makes an assignment for the benefit of its creditors, is subject to the appointment of a receiver, or a petition of bankruptcy is made against it; or
- (f) any Subcontractor becomes insolvent or unable to discharge its liabilities as they become due or makes an assignment for the benefit of its creditors or a petition of bankruptcy is made against it, and such situation will, in the City's reasonable determination, have an adverse impact on the delivery of the Services.

**23.3 Termination Payment.** Where this Agreement is terminated under Section 23.1, the City will pay to the Supplier such part of the compensation as the City, acting reasonably, determines has been earned by the Supplier to the date of termination less any amounts held by the City on account of damages, losses or costs resulting from an Event of Default. Payment pursuant to this Section will not include any amounts for lost revenue or lost profit of the Supplier. Upon the termination of this Agreement and payment as required hereunder, the City will have no further obligation or liability to the Supplier with respect to compensation payable to the Supplier hereunder and may as a condition of final payment under this Agreement require the Supplier to execute and deliver a release and discharge in favour of the City in relation to the compensation payable to the Supplier hereunder.

**23.4 Remedy for Default.** In the case of an Event of Default or if the Supplier fails to supply and provide the Services or any part thereof in accordance with this Agreement, the City may, without limiting any other rights it may have, remedy any deficiency and may engage others to do so, and may charge against the Supplier all extra costs and expenses in doing so. The City will be under no obligation to remedy any failure or deficiency on the part of the Supplier and will not incur any liability to the Supplier for any action or omission in the course of its remedying or attempting to remedy any such failure or deficiency.

23.5 **Effect of Termination.** Termination of this Agreement for any reason will not prejudice, limit or affect any claim or matter outstanding prior to termination or obligations consequent upon termination or which by their nature survive termination as provided for herein.

23.6 **Suspension of Services.** The City may, at any time and from time to time by delivery of notice in writing to the Supplier, suspend the performance of the Services for the period of time specified in such notice. In that event the City will pay to the Supplier such part of the compensation as can reasonably be considered to have been earned by the Supplier to the date of the suspension, and any costs or expenses directly incurred and not reasonably avoidable as a result of such suspension. The Supplier will have no claim against the City for any costs, expenses, damages or other liabilities suffered or incurred by the Supplier as a result of any suspension hereunder unless otherwise agreed by the City in writing.

## 24. ASSIGNMENT

24.1 **No Assignment by Supplier without Consent.** The Supplier will not assign this Agreement, in whole or in part, or any payments due or to become due under this Agreement, either voluntarily, involuntarily or by operation of law, without the express prior written consent of the City, which consent may be unreasonably or arbitrarily withheld.

24.2 **Change of Control.** If the Supplier is a company, then any change in the control of the company will be deemed to constitute an assignment for the purposes of Section 24.1.

24.3 **Effect of Assignment.** No assignment permitted by the City will relieve the Supplier from any obligation under this Agreement or impose any liability upon the City.

24.4 **Assignment by the City.** The City may at any time and from time to time assign this Agreement, in whole or in part, upon notice to (and without the consent of) the Supplier.

## 25. CONTRACT ADMINISTRATION

25.1 **City Project Manager.** For the purposes of this Agreement, the City designates [INSERT NAME] or their delegate as its Project Manager.

25.2 **Supplier Project Manager.** For the purposes of this Agreement, the Supplier designates [INSERT NAME] as its Project Manager.

25.3 The Project Manager will be the primary point of contact for each party in the administration of this Agreement.

25.4 The Supplier's Project Manager will meet with the City's Project Manager(s) on a regular basis and at the time and place requested by the City to address any issues which may arise under this Agreement.

25.5 **Changes in Project Manager.** Either party may change its Project Manager and/or its Project Manager's address, telephone and/or fax number by written notice to the other party given in accordance with Section 26.1 of this Agreement.

## 26. NOTICES

26.1 **Addresses for Notice.** Any notice required or permitted to be given by one party to another pursuant to this Agreement must be in writing and will be validly given if delivered, transmitted by facsimile or mailed in British Columbia by pre-paid registered post to the parties as follows:



**TO THE CITY:**

**CITY OF VANCOUVER**  
[INSERT DEPARTMENT NAME]  
[INSERT ADDRESS]

Attention: [INSERT NAME]  
Fax: [INSERT FAX]

**TO THE SUPPLIER:**

[INSERT NAME]  
[INSERT ADDRESS]

Attention: [INSERT NAME]  
Fax: [INSERT FAX]

or to such other person or address as one party may advise the other in writing from time to time. Any notice given in accordance with this or any other provision of this Agreement is deemed to be received on the day of delivery or transmission by facsimile if a Business Day and if not a Business Day then on the next Business Day or if mailed, on the third Business Day following the posting thereof, provided that if there is a postal strike, dispute or slowdown, notices will only be effective if delivered or transmitted by facsimile.

- 26.2 Notice of Actions against Supplier.** The Supplier will provide written notice to both the City's Project Manager at the address set out in Section 26.1 and the City of Vancouver's Director of Legal Services at:

**CITY OF VANCOUVER**  
453 West 12<sup>th</sup> Avenue  
Vancouver, British Columbia  
V5Y 1V4

Attention: Director of Legal Services  
Fax: (604) 873-7445

immediately upon the written threat or commencement of any actions brought against the Supplier or any of its Subcontractors or their respective affiliates, the outcome of which may affect the rights of the City or the ability of the Supplier to comply with its obligations under this Agreement.

**27. TIME FOR PERFORMANCE**

- 27.1 Time of the Essence.** Time will be of the essence of this Agreement.

- 27.2 Unavoidable Delay.** Notwithstanding Section 27.1, except for the performance of obligations to pay money, the time periods for the City and the Supplier's performance under this Agreement will be extended for periods of time during which their performance is delayed or prevented due to an Unavoidable Delay. For the purposes of this Section, an "Unavoidable Delay" means any circumstances beyond the reasonable control of the party trying to perform (such as, for example, acts of God, war or other strife or governmental action) but in the case of the Supplier, expressly excludes any and all delays caused by the Supplier's lack of financial resources or insolvency, strikes, lockouts or other withdrawals of services arising out of a labour dispute (including a strike, lockout, or other labour dispute involving the Vancouver Board of Parks and Recreation and/or the City of Vancouver and their respective employees) or

labour affiliations of the Supplier's employees or Subcontractors' employees, or governmental action taken in the enforcement of law specifically against the Supplier or its Subcontractors. If an Unavoidable Delay occurs, the non-performing party will, as soon as possible after the occurrence of the Unavoidable Delay, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of its obligations under this Agreement.

## 28. DISPUTE RESOLUTION

- 28.1 All claims, disputes or issues in dispute between the City and the Supplier in relation to this Agreement will be decided by mediation or arbitration, if the parties agree, or failing agreement, by the courts pursuant to Section 28.5.
- 28.2 Subject to Section 28.7, in the event that (i) the parties agree to arbitration pursuant to Section 28.1, the arbitration will be conducted pursuant to the *Commercial Arbitration Act* (British Columbia) and will be governed by the rules of the British Columbia International Commercial Arbitration Centre, except that the arbitrator or arbitrators will be agreed upon by the parties, and failing agreement by the parties, will be appointed by a court of competent jurisdiction within the Province of British Columbia. The parties will share equally the costs of the arbitration but will be responsible for their own separate costs and expenses in relation to the arbitration including legal fees and disbursements.
- 28.3 If the parties agree to arbitration, the arbitration will take place in Vancouver, British Columbia and will be governed by the laws of British Columbia.
- 28.4 The procedure set out in this section is not meant to preclude or discourage informal resolution of disagreements between the City and the Supplier.
- 28.5 The laws of British Columbia will govern all disputes under this Agreement and the courts of British Columbia will have exclusive jurisdiction to determine all disputes arising under this Agreement unless and until the parties agree in writing to mediate or arbitrate any specific dispute.
- 28.6 All provisions of the *International Sale of Goods Act* (British Columbia) are specifically excluded from application to this Agreement.
- 28.7 No arbitration pursuant to Section 28.2 will be binding on the City (but will, at the City's option be binding on the Supplier) until the Supplier has permitted the City to conduct an audit of the Supplier's records pursuant to generally accepted auditing standards.

## 29. GENERAL

- 29.1 **City Information/Approval.** No reviews, approvals or inspections carried out or information supplied by the City will derogate from the duties and obligations of the Supplier (with respect to designs, reviews, inspections, approvals or otherwise), and all responsibility related to the Services will be and remain with the Supplier. For greater certainty, any information provided by the City to the Supplier, whether under the RFP or under this Agreement, including any studies, reports, plans, drawings, or specifications, is provided to the Supplier for information purposes only and must be independently verified by the Supplier unless the City otherwise agrees in writing.
- 29.2 **No Waiver.** No action or failure to act by the City will constitute a waiver of any right or duty under this Agreement, or constitute an approval or acquiescence in any breach thereunder, except as may be specifically agreed in writing by the City.

- 29.3 **Severability.** The invalidity, illegality or unenforceability of any portion or provision of this Agreement or the occurrence of any event rendering any portion or provision of this Agreement void will in no way affect the validity or enforceability of any other portion or provision of this Agreement. Any void portion or provision will be deemed severed from this Agreement and the balance of this Agreement will be construed and enforced as if this Agreement did not contain the particular portion or provision held to be void. The parties further agree to amend this Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken position.
- 29.4 **Governing Law.** This Agreement will be construed under and according to the laws of the Province of British Columbia.
- 29.5 **Remedies Cumulative.** The remedies of the parties provided for in this Agreement are cumulative and are in addition to any remedies available to the parties at law or in equity. No remedy will be deemed to exclude or restrict the right of a party to any other remedies against the other party and a party may from time to time have recourse to one or more of the remedies specified in this Agreement or at law notwithstanding the termination of this Agreement.
- 29.6 **Further Assurances.** Each party will execute such further and other documents and instruments and do such further and other acts as may be necessary to implement and carry out the provisions and intent of this Agreement.
- 29.7 **Entire Agreement.** The Contract Documents constitute the entire agreement between the parties with respect to the subject matter hereof, and supersede all previous communications, representations and agreements, whether oral or written, with respect to the subject matter hereof.
- 29.8 **Amendment.** This Agreement will not be amended except as specifically agreed in writing by both the City and the Supplier.
- 29.9 **Joint and Several Liability of Joint Venture Participants.** If the Supplier is a joint venture of two or more entities, it is understood and agreed that the grants, covenants, provisos, claims, rights, powers, privileges and liabilities of the Supplier will be joint and several.
- 29.10 **Enurement.** This Agreement will enure to the benefit of and be binding upon the City and the Supplier and their respective heirs, executors, legal representatives, administrators, successors and permitted assigns.
- 29.11 **Schedules and Appendices.** The Schedules and appendices attached hereto are hereby incorporated by reference in and form an integral part of this Agreement.
- 29.12 **Representation.** By executing this Agreement, the Supplier represents that it has carefully examined this Agreement, acquainted itself with all conditions relevant to the Services including the site conditions at the Premises, made all evaluations and investigations necessary for a full understanding of any difficulties which may be encountered in performing the Services, and been given the opportunity to receive independent legal advice. The Supplier further acknowledges that this Agreement is sufficient for the proper and complete execution of the Services.
- 29.13 **Set-Off.** The City may at its option, withhold and set-off against any amount owing to the Supplier (whether under this Agreement or otherwise) any amounts payable by the Supplier to the City (whether under this Agreement or otherwise) and the amount of any damages suffered or claims made or to be made by the City as a result of any other claim it may have against the Supplier, whether such claim is at law or in equity or tort or on any other basis.

29.14 **Counterparts.** This Agreement may be executed in one or more counterparts, each of which will constitute an original and together will constitute one and the same Agreement.

IN WITNESS WHEREOF this Agreement has been executed as of the day and year first above written by and on behalf of the parties by their duly authorized officers.

CITY OF VANCOUVER,  
by its Authorized Signatory(ies)

\_\_\_\_\_  
Director of Legal Services

\_\_\_\_\_  
Director of Facilities and Design Management

[INSERT FULL LEGAL NAME OF CONTRACTOR]  
By its Authorized Signatory(ies)

\_\_\_\_\_  
Authorized Signatory

\_\_\_\_\_  
Authorized Signatory

This Agreement has been authorized by a resolution of Vancouver City Council dated [INSERT DATE]

**SCHEDULE A****SERVICES**

Without limiting the Supplier's obligations under the Agreement, the Supplier will provide the Services set out in this Schedule A during the Term:

**1. Pre-Delivery Services**

The Supplier will perform the following Services (the "Pre-Delivery Services"):

**(a) Shop Drawings and Product Literature**

Prior to the City placing an order for any Products, the Supplier will deliver shop drawings, product literature and such other documentation that the City may require to confirm that each Product meets the Product Specifications. The review of such documentation by the City will be to confirm conformity with the Product Specifications and such review will not relieve the Supplier of responsibility for errors or omissions in such documentation or to deliver the Products in accordance with the terms and conditions of the Contract Documents including the Product Specifications.

**(b) Samples**

The Supplier will deliver a samples of items requested to the City by such date to allow for adequate review time without impeding the project delivery schedule which meets the Product Specifications, for the City to test and approve prior to placing an order for all of the sampled items required for the Premises.

If the samples do not meet the Product Specifications and the City determines that the Supplier can rectify the problem without delaying the Project schedule then the Supplier will rectify the problem and deliver to the City a sample which meets the Product Specifications. Under no circumstances will the additional time granted to the Supplier pursuant to this Section affect the Supplier's obligation to meet the deadlines set out in Section 8 of the Agreement.

If the samples do not meet the Product Specifications and the City determines in its sole discretion that the Supplier is not capable of rectifying the problem then the City will be entitled to purchase these sampled items from another supplier pursuant to Section 12.1 of the Agreement or terminate the Agreement pursuant to 23.1(b) of the Agreement.

**(c) Site Meetings**

The Supplier will attend site meetings at the Premises or at another location requested by the City as requested by the City in order to follow the progress of the Project. The City anticipates that the Supplier will be required to attend at least two meetings per calendar month between the Effective Date and the Delivery Date.

**(d) Storage**

If the City is not ready for the Supplier to deliver the Products on the Delivery Date then the Supplier will store the Products at the Supplier's Facility, or a comparable

facility, at the Supplier's cost, until the City notifies the Supplier that it may commence delivery of the Product.

**2. Delivery**

The Supplier will perform the following Services (the "Delivery Services"):

**(a) Delivery**

The Supplier will deliver the Products to the Premises commencing on the Delivery Date. The Supplier will unload and temporarily store the Products as directed by the City.

**(b) Temporary Products**

If the Supplier is unable to deliver any Products to meet the deadlines set out in Section 8 of the Agreement then, without limiting the City's rights under Section 12.1 or 23.1(b) of the Agreement, the City may require the Supplier to provide temporary products (the "Temporary Products") at no cost to the City in order to enable the City to commence operations at the Premises. Under no circumstances will the delivery of Temporary Products by the Supplier relieve it of its obligations under this Agreement, including the obligation to deliver and install Products which meet the Products Specifications. Where following the delivery of Temporary Products by the Supplier the City determines, acting reasonably, that the Supplier will not be able to deliver and install Products which meet the Product Specifications, the City may immediately exercise its rights under Section 12.1 or 23.1(b) of the Agreement.

**(c) Clean-Up**

The Supplier will clean-up all dust, dirt, debris left in the Premises by the Supplier or its Subcontractors and leave the Premises in a condition acceptable to the City.

**(d) Disposal and Recycling**

The Supplier will remove from the Premises all debris, waste or packaging generated by the performance of the Services by the Supplier and will recycle all materials which are capable of being recycled. The Contractor will dispose of any materials which cannot be recycled in accordance with Applicable Laws.

**(e) Demonstration and Acceptance by City**

Upon completion of the Services set out in subsection (b) above, the Supplier will provide the City's Project Manager or other designated City personnel with a demonstration of the operation of each Products supplied by the Supplier and make any adjustments required by the City. If the City determines that any Product does not meet the Product Specifications, does not operate in accordance with the Manufacturer's specifications or is damaged in any way then the Supplier will take whatever steps are required to rectify the situation including, if necessary, replacing the Products.

**(f) Manuals and Warranty Documentation**

The Supplier will deliver all manuals, brochures and warranty documentation to the City's Project Manager on or before the date that the Supplier provides a demonstration of the Products pursuant to subsection (f) above.

(g) **Training**

The Supplier will provide the City's Project Manager or other designated City personnel with training on the proper use and care of all Products. The training will include instruction on operation, care, cleaning and preventative maintenance.

(h) **Warranty Services**

The Supplier will provide warranty service to the City on each Product supplied by the Supplier in accordance with the warranty terms and conditions specified by the City.

REQUIREMENTS  
DETAILED EQUIPMENT SPECIFICATIONS  
AND COMPLIANCE MATRIX

<p style="text-align: center;">Item 1</p> <p style="text-align: center;">Tandem Axle Cab and Chassis</p> <p style="text-align: center;">For 20-Yard Rear Loading Refuse Trucks</p> <p style="text-align: center;">Specifications</p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	Make:
	Model No.
	Year:
	Bidders to indicate compliance or deviations with specifications below
<p><b><u>OVERVIEW</u></b></p> <p>The City requires four (4) Rear Loading Refuse Trucks, with an option to purchase an additional five (5) units within a one (1) Year time frame. These units will be used in a tight urban environment and will need to navigate narrow city streets and alleys. These units are mostly used on specific routes where the City fleet of automated side loading refuse trucks cannot gain access. Manoeuvrability is of critical importance. The proposed truck will be driven almost entirely within the City of Vancouver on grades 6-8%. Operations require frequent stop and go driving, and longer, higher RPM idling period.</p> <p>The units will be operated by a crew of two (2) operators for collection of household refuse, yard trimmings, abandoned garbage and bags of leaves for the City's fall leaf collection program. These units will have a chassis that is left-hand drive, tandem axle and dual rear wheel drive.</p> <p>The rear loader packer bodies specified in Item 2 will be installed on these cab and chassis. The chassis must be capable of accommodating the refuse body and the associated payload requirements.</p> <p>Although listed as an option, the City of Vancouver is interested in pursuing alternative powerplant options for our refuse fleet. All proposed optional powerplants must achieve payload requirements while minimizing the turning radius, and be designed for the application described above.</p>	



**SCHEDULE B - REQUIREMENTS  
DETAILED EQUIPMENT SPECIFICATIONS  
AND COMPLIANCE MATRIX**

<p style="text-align: center;"><b>Item 1</b></p> <p style="text-align: center;"><b>Tandem Axle Cab and Chassis</b></p> <p style="text-align: center;"><b>For 20-Yard Rear Loading Refuse Trucks</b></p> <p style="text-align: center;"><b>Specifications</b></p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	Make:
	Model No.
	Year:
	Bidders to indicate compliance or deviations with specifications below
<p><b>A. CHASSIS</b></p> <p>1. <u>Chassis</u></p> <p>Vehicle should be cab-over-engine style chassis, left hand drive, tandem axle and dual rear wheel drive. Must comfortably accommodate one (1) driver and (1) passenger. The proposed vehicle will be driven almost entirely within the City of Vancouver on grades 6-8%. Operations require frequent stop and go driving, and longer, higher RPM idling period.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Style of chassis.</li> <li>3. Make and model of chassis.</li> <li>4. Year of chassis.</li> <li>5. If the proposed chassis is configured in accordance with the manufacturer's recommendations for the above conditions.</li> <li>6. Any operational limitations of the proposed machine in the intended application (as described above), in order to maintain a high up-time and to maintain warranties proposed by the Contractor.</li> </ol>	
<p>2. <u>Compliance</u></p> <p>Vehicle must be in full compliance of current B.C. Motor Vehicle Safety Act, Commercial Motor Vehicle Regulations and U.S. Federal Environmental Protection Agency current exhaust emissions standards. Vehicle must also comply with WorkSafe B.C. Regulations, Transport Canada Regulations, and Federal Government Motor Vehicle Safety Act and Regulations.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance in full.</li> </ol>	

SCHEDULE B - REQUIREMENTS  
DETAILED EQUIPMENT SPECIFICATIONS  
AND COMPLIANCE MATRIX

<p style="text-align: center;">Item 1</p> <p style="text-align: center;">Tandem Axle Cab and Chassis</p> <p style="text-align: center;">For 20-Yard Rear Loading Refuse Trucks</p> <p style="text-align: center;">Specifications</p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	Make:
	Model No.
	Year:
	Bidders to indicate compliance or deviations with specifications below
<p>3. <u>Vehicle Weights</u></p> <p>Completed vehicle must be able to haul a minimum refuse payload of not less than 9,500 kg (21,000 lb.). The Gross Vehicle Weight Rating (GVWR) must be sized to handle this payload.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. GVWR.</li> <li>3. Front GAWR.</li> <li>4. Rear GAWR.</li> <li>5. Curb weight of chassis with only full fuel, appropriate fluid levels and one (1) 100kg driver.</li> <li>6. Front curb weight of chassis with only full fuel, appropriate fluid levels and one (1) 100kg driver.</li> <li>7. Rear curb weight of chassis with only full fuel, appropriate fluid levels and one (1) 100kg driver.</li> </ol>	

**SCHEDULE B - REQUIREMENTS  
DETAILED EQUIPMENT SPECIFICATIONS  
AND COMPLIANCE MATRIX**

<p style="text-align: center;"><b>Item 1</b></p> <p style="text-align: center;"><b>Tandem Axle Cab and Chassis</b></p> <p style="text-align: center;"><b>For 20-Yard Rear Loading Refuse Trucks</b></p> <p style="text-align: center;"><b>Specifications</b></p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	Make:
	Model No.
	Year:
	Bidders to indicate compliance or deviations with specifications below
<p><b>4. <u>Dimensions</u></b></p> <p>Manoeuvrability is a key requirement of this vehicle. Chassis should have the shortest wheelbase and turning radius possible, while meeting the payload requirements stated above.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Wheelbase.</li> <li>3. Cab Trunnion</li> <li>4. Front bumper to front axle.</li> <li>5. Bumper to back of cab (BBC).</li> <li>6. Overall length.</li> <li>7. Overall width (mirror to mirror).</li> <li>8. Distance from ground to bottom step.</li> <li>9. Turning radius - curb to curb.</li> <li>10. Turning radius - wall to wall.</li> <li>11. Wheel cut.</li> <li>12. Cab to rear axle (CA).</li> <li>13. Height of top of cab from ground.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. One (1) set of scale drawings showing side elevation of body and chassis complete with all basic dimensions are to be submitted with the bid document.</li> </ol>	
<p><b>5. <u>Frame Rails</u></b></p> <p>Clean top frame rails from back of cab to end of frame are required for mounted equipment. Prefer huck-bolt connections, and black colour paint.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Size of frame rails (including any reinforcements).</li> <li>3. Type of frame rails (ie. Channel, I-beams).</li> <li>4. Resisting Bending Moment (including any reinforcements).</li> <li>5. Section modulus (including any reinforcement) per rail.</li> <li>6. Yield strength.</li> <li>7. Type of connection (i.e. huck-bolts, rivets, etc.).</li> <li>8. If a clean top of rail CA is provided.</li> </ol>	

**SCHEDULE B - REQUIREMENTS  
DETAILED EQUIPMENT SPECIFICATIONS  
AND COMPLIANCE MATRIX**

<p style="text-align: center;"><b>Item 1</b></p> <p style="text-align: center;"><b>Tandem Axle Cab and Chassis</b></p> <p style="text-align: center;"><b>For 20-Yard Rear Loading Refuse Trucks</b></p> <p style="text-align: center;"><b>Specifications</b></p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	Make:
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<p><b>6. <u>Front Tow Hooks</u></b></p> <p>Two (2) heavy-duty front tow hooks. Each hook should be mounted directly to the frame rails at either side.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered.</li> <li>3. Load rating.</li> </ol>	
<p><b>7. <u>Bumper</u></b></p> <p>A full width front bumper having either painted or plated materials complete with license place holder.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of bumper.</li> <li>3. Type of bumper corrosion proof coating.</li> <li>4. Colour of front bumper.</li> </ol>	
<p><b>B. CAB</b></p> <p><b>1. <u>Interior</u></b></p> <p>Prefer cab interior and trim to be dark grey colour, with easy care, easy clean materials. Prefer vinyl with moulded plastic trim. Should have matching rubber floor mats, sun visors, arm rests, door trim panels and overhead liners.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Interior colour and material.</li> <li>3. Flooring material.</li> <li>4. If cab comes with sun visors and arm rests for both seats.</li> <li>5. If floor mats are included.</li> </ol>	

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<p><b>2. <u>Seating</u></b></p> <p>Driver and passenger seat must be six (6) way adjustable air suspension seat - forward/rear, up/down and fully adjustable lumbar support. Individual bucket type seats are required. Seats must be fitted with occupant seat belts in compliance with the B.C. Motor Vehicle Act. Both seats should be constructed of good quality and wear resistant material. Cover material should be dark, heavy duty knitted cordura type vinyl fabric.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make and model of seats.</li> </ol>	
<p><b>3. <u>Steering</u></b></p> <p>Power steering. Steering wheel must be tilt and height adjustable.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered.</li> </ol>	
<p><b>4. <u>Mounting</u></b></p> <p>Air suspended cab. Include any mounting devices for heat and sound mitigation.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. If air suspended cab is provided.</li> <li>3. If other cab mounts are provided.</li> </ol>	

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<p><b>5. <u>Paint</u></b></p> <p>Cab should have corrosion proof material applied over entire cab base inner and outer skin.</p> <p>Finish paint should be white. Preferred paint is ZA/94 Dupont B8917A or equal.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance</li> <li>2. Type of corrosion proofing.</li> <li>3. Type of paint.</li> <li>4. Colour of cab.</li> </ol>	
<p><b>6. <u>Undercoating</u></b></p> <p>Heavy-duty rubber based undercoating for cab.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered.</li> </ol>	
<p><b>7. <u>Noise and Insulation</u></b></p> <p>Cab interior level not to exceed 83 dBA during operation. During the packing cycle, the noise level should not exceed 76 dBA at a distance of 7 metres (23 ft) from each of the four (4) faces of the completed truck. Cab should have sound insulation throughout, including the roof, doors and floor.</p> <p>Given the recent higher engine operating temperatures due to the imposed emissions regulations, vehicle cab and operator shall be effectively insulated from the heat from the engine and transmission.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Interior noise levels during operation.</li> <li>3. Exterior noise levels at 7 meters.</li> <li>4. What sound insulation is offered.</li> <li>5. What heat mitigation is offered.</li> </ol>	

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<p><b>8. <u>Door Windows</u></b></p> <p>Both driver's and passenger's door windows should be electric power windows. Windows should both be controlled individually and by the driver.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. If power windows are offered.</li> <li>3. If driver activated controls for both windows.</li> </ol>	
<p><b>9. <u>Windshield</u></b></p> <p>Safety windshield having capability for a minimum of 70% filtration for interior temperature control.</p> <p>Must meet CMVSS.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Windshield tint grade.</li> </ol>	
<p><b>10. <u>Rain Gutters</u></b></p> <p>Prefer rain gutters over each door.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered.</li> </ol>	
<p><b>11. <u>Cab Egress</u></b></p> <p>Access steps complete with full height grab handles on both sides of cab.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered.</li> <li>3. Stair heights from ground level.</li> </ol>	

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<p><b>12. <u>Mud Flaps</u></b></p> <p>Frame mounted mud flaps - rear of front axle, front and rear of rear axle.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered.</li> </ol>	
<p><b>13. <u>Outside Mirrors</u></b></p> <p>Stainless steel, break away type, as large as possible complete with separate convex mirrors, both sides.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered.</li> <li>3. Size of mirrors.</li> </ol>	
<p><b>14. <u>Heater/Defroster</u></b></p> <p>A heater/ventilation system complete with a multi-speed blower fan. Variably adjustable heating vents for operator comfort and window defrosting. The defrosting system must be capable of dealing with local conditions - cool temperatures with high humidity.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of blower control.</li> <li>3. System air movement capacity in CFM.</li> <li>4. Heater/defroster fan type and speed control.</li> <li>5. Heater output in BTU/hour.</li> </ol>	



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<p><b>15. <u>Windshield Wipers</u></b></p> <p>2-speed electric with intermittent wiper and washer system</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. If 2 speed electric intermittent wipers are available.</li> <li>2. If washer system is available.</li> <li>3. Mounting location.</li> </ol>	
<p><b>16. <u>Radio</u></b></p> <p>AM-FM type.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered.</li> </ol>	
<p><b>17. <u>Operators Console</u></b></p> <p>Operator warning system, both visual and audible. Low oil pressure and high engine temperature functions must be provided. Gauge cluster should consist of:</p> <ol style="list-style-type: none"> <li>a) odometer</li> <li>b) trip display</li> <li>c) engine hours</li> <li>d) speedometer</li> <li>e) tachometer</li> <li>f) oil pressure</li> <li>g) coolant temperature</li> <li>h) fuel level</li> <li>i) fault code display(s) as necessary</li> </ol> <p>Prefer to have an instantaneous I/100 kms (or mpg) fuel economy and trip I/100 kms (or mpg) fuel economy readout options, as well as hour meter in addition to odometer.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance with each item above.</li> <li>2. If fuel economy gauges are available.</li> </ol>	

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<p><b>C. POWERTRAIN</b></p> <p>1. <u>Engine</u></p> <p>An internal combustion diesel engine having the approximate minimum ratings of:</p> <ul style="list-style-type: none"> <li>a) SAE HP - 275 peak HP</li> <li>b) Peak Torque - 800 ft-lb</li> </ul> <p>Engine must be able to operate on B5 biodiesel fuel. Prefer engine to operate on B20 biodiesel fuel.</p> <p><u>State:</u></p> <ul style="list-style-type: none"> <li>1. Make and model of engine offered.</li> <li>2. SAE horsepower and rated RPM.</li> <li>3. Peak torque and rated RPM.</li> <li>4. Estimated fuel consumption: <ul style="list-style-type: none"> <li>- Litres/hour at max horsepower</li> <li>- Litres/hour at max torque</li> <li>- Litres/hour at idle</li> </ul> </li> <li>5. If engine will operate on B5 fuel.</li> <li>6. If engine will operate on B20 fuel.</li> <li>7. If warranty is valid with operation on B5 fuel.</li> <li>8. If warranty is valid with operation on B20 fuel.</li> </ul> <p><u>Provide:</u></p> <ul style="list-style-type: none"> <li>1. Torque curve chart.</li> </ul>	

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<p><b>2. Diesel Exhaust Pollution Reduction Technologies</b></p> <p>The City of Vancouver is committed to greenhouse gas and exhaust emissions reduction. Engine and transmission selection will take into account emissions and fuel consumption information.</p> <p>Diesel exhaust pollution reduction technology required using Selective Catalytic Reduction (SCR). Reduction technology must meet US Environmental Protection Agency 2010 standards to reduce diesel exhaust pollution.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Technology used.</li> <li>2. What components the exhaust after treatment device(s) are comprised of.</li> <li>3. Size of diesel emission fluid (DEF) tank. State expected refill rate of DEF. State any components that need to be changed or refilled.</li> <li>4. Describe ideal duty cycle for automatic or passive engine regeneration.</li> <li>5. Describe steps to initiate forced or stationary regeneration and any limitations to the regeneration process.</li> <li>6. If diesel particulate filter (DPF) is used, state make and model and describe if the filter can be cleaned and if any equipment is required to be able to clean filter.</li> <li>7. If DPF is used please provide length of time for regeneration.</li> <li>8. If there are any additional distinguishing features of the exhaust system.</li> <li>9. Any exhaust systems concerns with this vehicle being operated for short trips at low speeds and high idling.</li> <li>10. EPA certified PM, NO<sub>x</sub>, HC, CO and if available, CO<sub>2</sub> emissions levels in grams per brake-horsepower.</li> <li>11. Compliance with latest EPA emissions standards.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. California EPA Air Resources Board Certificate.</li> </ol>	

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<p>3. <u>Air Induction</u></p> <p>The air induction system composed of a primary and secondary element including an air restriction indicator for timely and effective maintenance. Secondary unit to be "Donaldson" in-line type or equal dry element with in-cab restriction gauge, reset type.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance</li> <li>2. Type of filtration and location.</li> <li>3. If air restriction indicator is provided.</li> </ol>	
<p>4. <u>Engine Throttle Control</u></p> <p>Engine functions should be electrically controlled and monitored to optimize fuel economy, minimize regulated exhaust emissions, load sensing and related vehicle tasks.</p> <p>Electronic throttle control for PTO driven equipment should be provided.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of engine control.</li> <li>3. Electronic variable engine speed control.</li> <li>4. If electronic control for PTO provided.</li> </ol>	
<p>5. <u>Exhaust System</u></p> <p>Unit should have a vertical exhaust pipe stack on the passenger side of the cab, complete with protective full length heat shielding and constructed with corrosion resistant/proof materials.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Vertical exhaust stack location</li> <li>3. Muffler type and location.</li> <li>4. Heat shield and material.</li> </ol>	

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<p><b>6. <u>Fuel System</u></b></p> <p>Electronically governed fuel delivery system. Fuel system, in addition to supplied filtration, should include a Racor fuel/water separator having 10 micron media. Filter should be easily accessible/visible.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of injection.</li> <li>3. If Racor fuel/water separation is provided.</li> <li>4. If filter is visible and easily accessible.</li> <li>5. Type, make, and model of fuel pump.</li> </ol>	
<p><b>7. <u>Fuel Tanks</u></b></p> <p>Minimum 170 litre (45 gallon) diesel tank full on delivery, filler on driver's side. Fill spout to be located for quick and easy refill. Tanks to be aluminium and frame mounted.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of diesel tank.</li> <li>3. Tank capacity.</li> <li>4. Location of diesel tank.</li> </ol>	
<p><b>8. <u>Coolant System</u></b></p> <p>The coolant system shall have sufficient capacity for stop and go refuse application. It should comprise of silicone hoses (or equivalent), filter/conditioner and anti-freeze solution having minimum cold weather protection to -25 °C.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of hoses.</li> <li>3. Type of filtration.</li> <li>4. Type of anti-freeze solution.</li> <li>5. Frequency of solution replacement.</li> </ol>	

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<p><b>9. <u>Radiator</u></b></p> <p>A long life heavy-duty radiator having sufficient cooling capacity for the engine and transmission is required. Operating conditions require frequent stop and go driving. Vehicle shall be capable of operating fully in this environment.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Radiator type and capacity.</li> <li>3. Radiator surface area.</li> </ol>	
<p><b>10. <u>Transmission</u></b></p> <p>Allison automatic transmission complete with PTO provision. Should have at least 20% startability. See Item 2, Section C.1 for more information about PTO requirements.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make and model of transmission.</li> <li>3. If equipped with constant drive PTO provision.</li> <li>4. Provide shift diagram analysis and options for consideration.</li> <li>5. Top speed.</li> <li>6. Maximum grade at 50 kph.</li> <li>7. Maximum speed on 6-8% grade.</li> <li>8. Startability.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. Alison SCAAN Analysis for recommended transmission.</li> </ol>	
<p><b>11. <u>Magnetic Drain Plugs</u></b></p> <p>For transmission, rear axle and crankcase.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered</li> </ol>	

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<p><b>D. WHEELS AND SUSPENSION</b></p> <p>1. <u>Suspension</u></p> <p>Suspension to be sized for heavy-duty refuse application.</p> <p>Front Suspension should have standard tapered variable rate leaf spring suspension complete with matched shock absorbers. Capacity should match front axle rating.</p> <p>Rear suspension can be air or rubber block style. Capacity should match rear axle rating. Suspension to include torque rods as required. Prefer rear suspension that does not have eccentric-style adjustments.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of front suspension.</li> <li>3. Front suspension capacity.</li> <li>4. Front suspension make and model.</li> <li>5. Shock absorber make and model.</li> <li>6. Whether shock absorbers meet suspension capacity.</li> <li>7. Type of rear suspension (air or rubber block).</li> <li>8. Rear suspension capacity.</li> <li>9. Rear suspension make and model.</li> <li>10. What is provided for torque rods.</li> </ol>	
<p>2. <u>Front Axle and Tires</u></p> <p>Front axle should allow for ease of manoeuvrability and minimum turning radius while maximizing payload and weight distribution. Front axle to be sized for maximum loading under B.C. Regulations. Prefer Michelin XZY-3 tires. Tires to be sized to match axle capacity and for allowable B.C. ground pressure limits.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Front axle capacity.</li> <li>3. Make and model of front axle.</li> <li>4. Make, size and type of front tires.</li> <li>5. Loading capacity of tires.</li> </ol>	

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<p><b>3. <u>Rear Axle and Tires</u></b></p> <p>The differential ratio shall be matched with the engine and transmission to maximize fuel efficiency under service conditions outlined in overview. Rear axle should be geared to optimize fuel efficiency under low speed stop-and-go conditions described in the Overview and should allow for a maximum speed of 90 km/hour (55 mph). Rear axle to be sized for maximum possible loading under B.C. Regulations. Prefer 11R22.5 Michelin XZY-3 tires.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make and model of rear axle.</li> <li>3. Rear axle capacity.</li> <li>4. Rear end ratio to meet requirements.</li> <li>5. Recommended rear end ratio.</li> <li>6. Make, size and type of rear tires.</li> <li>7. Capacity of tires.</li> </ol>	
<p><b>4. <u>Wheel Rims</u></b></p> <p>Hub piloted, ten (10)-hole, disc type steel wheels. Prefer black wheels.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make and type of front and rear wheels.</li> <li>3. Dimensions of front and rear wheels.</li> <li>4. Colour of wheels.</li> </ol>	



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<p><b>BRAKES</b></p> <p>1. <u>Air Brakes</u></p> <p>The air brake system must be capable of applying adequate braking power for a fully loaded chassis. Air brake system must be fully in compliance with the B.C. Motor Vehicle Safety Act and B.C. Commercial Vehicle Act.</p> <p>The unit brake system shall incorporate anti-wheel lock technology known as "ABS". The ABS unit, made up of controller, wheel speed sensors and modulators, shall be secured within safe areas of the frame and drive components and easily accessible for servicing as required. A visual and audible alarm to signal the operator of a malfunction shall be provided within the cab dash cluster area.</p> <p>Standard air brake system of drum and shoe S-cam type. Extended service brake shoes are required. Non-asbestos type brakes are required.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. If in full compliance with above Acts and Regulations.</li> <li>2. If "ABS" provided or if available.</li> <li>3. Make and model of ABS.</li> <li>4. Describe alarm available and location.</li> <li>5. Make and type of brake shoes and drum.</li> <li>6. Specification measurements of each.</li> <li>7. If non-asbestos type brakes are used.</li> </ol>	
<p>2. <u>Air Compressor</u></p> <p>Air compressor having sufficient capacity, including safety margin, to operate air brake system and manufacturer installed air operated equipment. Compressor air intake and supply shall be through a clean air source.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make, model and capacity of air compressor.</li> </ol>	

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<p style="text-align: center;"><b>Item 1</b></p> <p style="text-align: center;"><b>Tandem Axle Cab and Chassis</b></p> <p style="text-align: center;"><b>For 20-Yard Rear Loading Refuse Trucks</b></p> <p style="text-align: center;"><b>Specifications</b></p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	<b>Make:</b>
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<p><b>3. <u>Air Dryer</u></b></p> <p>A replaceable air dryer capable of removing accumulated brake system debris and water. Meritor, Wabco or equivalent cartridge-type, spin-on dryer, complete with desiccating filter and alloy debris filter should be supplied.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make, model and capacity of air dryer.</li> </ol>	
<p><b>4. <u>Slack Adjusters</u></b></p> <p>Should have automatic slack adjusters, either Meritor long stroke or City of Vancouver acceptable equivalent.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make and type of adjuster.</li> </ol>	
<p><b>5. <u>Air Brake Chambers</u></b></p> <p>Unit to come complete with long stroke chambers. Rear "parking" spring chambers activated from dash mounted control valve and complete with anti-compounding control. Brakes chambers should be high mount for maximum ground clearance.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make and model of chambers.</li> <li>3. Size specifications for chambers.</li> <li>4. If chambers are long stroke.</li> <li>5. Ground clearance for brake chambers.</li> </ol>	

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<p><b>6. <u>Low Air Warning</u></b></p> <p>Both audible and visual brake system low air warning devices inside the cab for operators visual acuity and safety. Easily read air pressure gauge within the dash cluster must be provided.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of low air warning.</li> </ol>	
<p><b>7. <u>Drain Valves</u></b></p> <p>Pull chain drain valves for all tanks including air dryer. Chains to be easily accessible to driver.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered.</li> </ol>	
<p><b>8. <u>Air Lines</u></b></p> <p>Air lines should be "synflex" nylon type tubing material, colour coded for ease of serviceability and routed to minimize exposure to damage. Line materials should meet SAE J-1402 at articulation points. Stainless steel braided tube should be used for air compressor discharge.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of airlines offered.</li> </ol>	
<p><b>9. <u>Dust Shields</u></b></p> <p>Wheels should be equipped with split dust shields on both front and rear axles.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered.</li> </ol>	

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<p><b>E. ELECTRICAL</b></p> <p><b>1. <u>Electrical System</u></b></p> <p>The charging system must have full capability to maintain battery cranking capacity, chassis electrical equipment, and refuse body load. Prefer wiring to be colour coded, continuously numbered, encased in plastic "loom" to maximize protection from corrosion and supplied with sealed connectors.</p> <p>Automotive style waterproof reset-able circuit breakers should be included. Power distribution system(s) should utilize, where possible, reset-able manual circuit breakers. The electrical system must incorporate SAE blade type fuses as standard equipment where reset-able circuits are not provided.</p> <p>Where applicable, a "multiplex" system having pre-programmed functions should be discussed with the City prior to ordering.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. If wiring is colour coded, numbered and encased in plastic loom with sealed connectors.</li> <li>3. If multiplex system is used. If yes, how many functions does it have (for extra mounted equipment)?</li> <li>4. Signal for vehicle speed provided.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. Full electrical schematics for electronic control module(s) at the time of delivery including pin numbers and functionality.</li> </ol>	

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<p>2. <u>Alternator</u></p> <p>Should be a low RPM turn on, 12 volt, self regulating, minimum 130 amp heavy-duty alternator. Alternator should feature enhancements with coated system to mitigate failures due to corrosion and provide extended service life.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make and model.</li> <li>3. Output.</li> </ol>	
<p>3. <u>Battery(s)</u></p> <p>Batteries maintenance free type, of sufficient capacity to power the starter at the lowest ambient temperature range encountered within the Lower Mainland. Battery box to be parallel with and tight to the frame to reduce vibrations.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Reserve capacity cold cranking amperes.</li> <li>3. Make and model.</li> <li>4. Number of batteries.</li> </ol>	
<p>4. <u>Starter Motor</u></p> <p>Starter capable of providing and maintaining cranking power required in the Vancouver area ambient temperature ranges for winters. Thermal overcrank protection required to prevent overheating due to excessive cranking durations and extended service life.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make and model.</li> </ol>	

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<p>5. <u>Disconnect Switch/Boost Stud</u></p> <p>Unit electrical/battery system should incorporate a means of disconnecting the electrical systems. Unit to come with remote jump terminals.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. If battery disconnect switch is provided, and if so, the location of the switch.</li> <li>3. Location of remote jump terminals.</li> </ol>	
<p>6. <u>Lighting</u></p> <p>All CMVSS required lighting should be supplied and installed. LED preferred. All lighting to meet requirements of all applicable Provincial and Federal regulations. Two interior lights to be door actuated if available</p> <p>Heavy-duty type 4 way flasher. LED type stop/tail, amber, turn marker(s), backup and accessory power lights.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered for lights.</li> <li>3. If lighting meets all relevant regulations in B.C.</li> <li>4. If lights are LED.</li> </ol>	
<p>7. <u>Horn</u></p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered</li> </ol>	

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<p><b>8. <u>Back-up Alarm</u></b></p> <p>Heavy duty, white noise, self adjusting 107 dBA electric back up warning alarm device. Model must be Brigade BBS-107 or City approved equivalent.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make and model.</li> <li>3. dBA rating.</li> </ol>	
<p><b>F. SERVICE AND SUPPORT</b></p> <p><b>1. <u>Demonstration</u></b></p> <p>A demonstration for four (4) working days in the City of Vancouver is required of a complete chassis and body similar to what is specified herein, commencing no later than <b>twenty-one (21) calendar days</b> after request of the Equipment Services Branch. Capacity, manoeuvrability, noise emissions, ease of operation and maintenance will be evaluated in the demonstration. Demo unit should be equipped with all proposed options.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Earliest possible date for demonstration after close of RFP.</li> </ol>	
<p><b>2. <u>Delivery</u></b></p> <p>Four (4) full sets of functional keys provided at vehicle delivery. Delivery F.O.B. City of Vancouver, Manitoba Yard or site designated. Fuel tank must be full upon delivery. Require all insurance and ownership transfer documentation upon delivery.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance</li> <li>2. The delivery lead-time from time of purchase order.</li> <li>3. Method of delivery from Factory to City of Vancouver (i.e. shipped by train, driven, etc.).</li> </ol>	

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<p>3. <u>Warranty</u></p> <p>Chassis, engine and driveline must have at least one (1) year of warranty. Warranty must start from the in service date.</p> <p><u>State:</u></p> <p>1. Warranty offered.</p> <p><u>Provide:</u></p> <p>1. Details concerning the standard applicable vehicle warranty.</p> <p>2. Warranty and terms with components and parts not covered within the standard vehicle manufacture warranty.</p>	
<p>4. <u>In-House Warranty Work</u></p> <p>The City prefers to have a warranty agreement with the cab and chassis manufacturer whereby much of this work is completed by the City Equipment Services shop and for which the City is reimbursed.</p> <p><u>State:</u></p> <p>1. If manufacturer in-house warranty agreement is offered.</p> <p><u>Provide:</u></p> <p>1. Manufacturer's in-house warranty agreement document.</p>	



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<p>5. <u>Training</u> Provide training to the City of Vancouver garage technicians in the factory prescribed maintenance, diagnostics and repairs procedures for:</p> <ul style="list-style-type: none"> <li>• Engine.</li> <li>• Transmission.</li> <li>• ABS System.</li> <li>• Chassis and multiplex system.</li> </ul> <p>Training to be carried out by factory or factory trained personnel. Two (2) initial training sessions to be scheduled upon delivery:</p> <ul style="list-style-type: none"> <li>• One (1) session to take place between hours of 7:00 am and 3:00 pm.</li> <li>• One (1) session to take place between the hours of 3:00 pm and 11:00 pm.</li> </ul> <p>Two (2) follow-up training sessions are to be scheduled two (2) months prior to the expiration of the chassis warranty:</p> <ul style="list-style-type: none"> <li>• One (1) session to take place between hours of 7:00 am and 3:00 pm.</li> <li>• One (1) session to take place between the hours of 3:00 pm and 11:00 pm.</li> </ul> <p>All training sessions must include the following:</p> <ul style="list-style-type: none"> <li>• Classroom session using appropriate visual and teaching aids giving an overview of the machine's systems and diagnostic tools/procedures.</li> <li>• On-chassis session detailing the locations of components and good practices for the preventative maintenance items to be checked during 20,000 km, or one year of service.</li> <li>• On-chassis session demonstrating and practicing the use of the provided fault detection and diagnostics. City mechanics shall have the opportunity to work through examples provided by the contractor's instructor(s).</li> </ul> <p><u>State:</u></p> <p>1. Compliance with each item above.</p>	

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<p><b>6. <u>Maintenance and Operating Documentation</u></b></p> <p>The following is required of the successful bidder at the time of delivery:</p> <ul style="list-style-type: none"> <li>a. A complete check-off style preventative maintenance schedule as recommended by the manufacturer to ensure satisfactory service and long life for the intended application and environment.</li> <li>b. A detailed lubrication chart showing all lube points and greasing frequency for intended application and environment.</li> <li>c. Three (3) copies of parts manuals in both electronic and book form required.</li> <li>d. Three (3) copies of service and repair manuals in electronic and book form required.</li> <li>e. Electrical and hydraulic schematics.</li> <li>f. Three (3) sets of operator manuals.</li> <li>g. Listing of special service tools/diagnostic equipment and diagnostic software requirements.</li> <li>h. A list of general maintenance parts recommended, with part numbers.</li> <li>i. List of serial numbers of engine, transmission, differential and auxiliary engine (if applicable) for each unit as shown in attached appendix (PM Program and Maintenance Data Requirements Review).</li> </ul> <p><u>State:</u></p> <p>1. Compliance with each item above.</p>	

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<p><b>G. OPTIONS</b></p> <p>1. <u>CNG Engine</u></p> <p>Compressed Natural Gas (CNG) fuelled engine. Require Canadian Safety Approval for all CNG systems. Prefer roof mounted fuel tanks to minimize wheelbase. Unit to comply with payload and dimensional requirements as outlined above.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Make and model of engine offered</li> <li>2. SAE horsepower and rated RPM.</li> <li>3. Peak torque and rated RPM.</li> <li>4. If any silencing included.</li> <li>5. EPA certified PM, Nox, HC, CO and if available CO<sub>2</sub> emission levels in grams per brake horsepower. These emission levels should be actual engine emissions and not the EPA Certification Levels.</li> <li>6. Estimated Fuel Consumption             <ol style="list-style-type: none"> <li>a. Litres/hr at max horsepower</li> <li>b. Litres/hr at max torque.</li> </ol> </li> <li>7. Location, material, style and size of fuel tank.</li> <li>8. Location of fueling port.</li> <li>9. Wheelbase of unit.</li> <li>10. Turning radius - curb to curb.</li> <li>11. Turning radius - wall to wall.</li> <li>12. Any payload reductions or changes in tare weight.</li> <li>13. Whether system has safety approval in Canada.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. Engine warranty information.</li> </ol>	

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<p><b>2. <u>Alternative Fueled Engines</u></b></p> <p>Alternative chassis that reduce fuel consumption or contribute to low or zero emissions with engine capable of meeting power and torque demand listed in section D.1 of these specifications. Examples include hybrid electric, hydraulic hybrid, or electric chassis. Unit to comply with payload and dimensional requirements as outlined above.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Type of technology proposed.</li> <li>2. Make and model of engine offered</li> <li>3. SAE horsepower and rated RPM.</li> <li>4. Peak torque and rated RPM.</li> <li>5. If any silencing included.</li> <li>6. EPA certified PM, Nox, HC, CO and if available CO<sub>2</sub> emission levels in grams per brake horsepower. These emission levels should be actual engine emissions and not the EPA Certification Levels.</li> <li>7. Estimated Fuel Consumption             <ol style="list-style-type: none"> <li>a. Litres/hr at max horsepower</li> <li>b. Litres/hr at max torque.</li> </ol> </li> <li>8. Location of fuel tank.</li> <li>9. Wheelbase of unit.</li> <li>10. Turning radius - curb to curb.</li> <li>11. Turning radius - wall to wall.</li> <li>12. Any payload reductions or changes in tare weight.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. Engine warranty information.</li> </ol>	
<p><b>3. <u>Fuel Tank</u></b></p> <p>Right side fuel tank in addition to fuel tank specified in C.5.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered.</li> </ol>	

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<p>4. <u>Aluminum Wheels</u></p> <p>Aluminum wheels in a dull (non-polished) finish.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>What is offered.</li> <li>Size of front and rear wheels.</li> <li>Colour of front and rear wheels.</li> <li>Weight savings over steel wheels.</li> </ol>	
<p>5. <u>Suspension</u></p> <p>Other suspension options to those offered in item D.1.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>What is offered.</li> </ol>	
<p>6. <u>Disc Brakes</u></p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>What is offered.</li> </ol>	
<p>7. <u>Diesel Fuelled Cab Heater</u></p> <p>Diesel Fuelled, operator controlled cab heater. Prefer Webasto 5001151A.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>What is offered.</li> </ol>	

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<p>8. <u>Maintenance and Diagnostic Equipment/Software</u></p> <p>Diagnostic software, documentation, equipment and connectors must be supplied for:</p> <ol style="list-style-type: none"> <li>a. All installed multiplexed systems.</li> <li>b. Engine.</li> <li>c. Transmission.</li> <li>d. ABS.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. List of equipment, connectors, software and instruction manuals as required above.</li> </ol>	
<p>9. <u>Extended Cab</u></p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered.</li> </ol>	
<p>10. <u>Power Mirrors</u></p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered.</li> </ol>	
<p>11. <u>Any other Suggested Options</u></p> <p>Suggested options for intended application.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered.</li> </ol>	

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<p style="text-align: center;">Item 2</p> <p style="text-align: center;">Rear Packer Body</p> <p style="text-align: center;">For 20 Yard Rear Loading Refuse Trucks</p> <p style="text-align: center;">Specifications</p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	Make:
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	Year:
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<p><b>A. BODY DESIGN</b></p> <p>1. <u>Style</u></p> <p>Smooth walled, non-rib type body to be designed for mounting on a tandem axle chassis. Body to be mounted to chassis specified in Item 1 of this RFP. Body to be sealed to prevent leakage of liquid refuse.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance</li> <li>2. Make and model of body.</li> <li>3. If chassis specified in Item 1 is suitable for this body in all respects.</li> <li>4. Height and method of sealing.</li> </ol>	
<p>2. <u>Body Capacity</u></p> <p>Body is to have a payload volume of no less than 15.3 cubic metres (20 cubic yards), excluding hopper. Body should be sized to optimize payload for specified chassis size.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Maximum payload volume of body, excluding hopper.</li> </ol>	
<p>3. <u>Hopper Capacity</u></p> <p>Hopper to have a payload volume of no less than 2 cubic metres (2.7 cubic yards).</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Maximum payload volume of hopper, considering loading sill height requirements.</li> </ol>	

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<p style="text-align: center;"><b>Item 2</b></p> <p style="text-align: center;"><b>Rear Packer Body</b></p> <p style="text-align: center;"><b>For 20 Yard Rear Loading Refuse Trucks</b></p> <p style="text-align: center;"><b>Specifications</b></p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	Make:
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<p><b>4. <u>Payload and Weights</u></b></p> <p>Minimum payload of 9,500 kg (21,000 lb.) is required without exceeding chassis GVW or legal axle loading. All weights should be stated with chassis proposed in Item 1.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Tare weight of packer body complete with all hydraulics and fittings.</li> <li>2. What chassis weight is being utilized for the payload calculation.</li> <li>3. Payload of completed unit with full fuel, appropriate fluid levels and one (1) 100 kg driver.</li> <li>4. Weight distribution of completed unit (body and chassis) with only full fuel, appropriate fluid levels and one (1) 100 kg driver.</li> <li>5. Weight distribution of completed unit (body and chassis) with full fuel, appropriate fluid levels, one (1) 100 kg driver and maximum payload.</li> </ol>	
<p><b>5. <u>Dimensions</u></b></p> <p>Prefer finished unit to be of minimum width, length and height. Completed unit should have a travelling height of no more than 3.66 m (144 in) and a width of no more than 2.59 m (102 in) (excluding mirrors).</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Maximum length of body.</li> <li>2. Maximum length of completed vehicle.</li> <li>3. Maximum height above chassis frame.</li> <li>4. Maximum height above chassis frame with hopper raised.</li> <li>5. Travelling height of completed vehicle.</li> <li>6. Width of body.</li> <li>7. Maximum width of completed vehicle (excluding mirrors).</li> <li>8. Maximum width of completed vehicle (including mirrors).</li> <li>9. Turning radius of completed unit - curb to curb.</li> <li>10. Turning radius of completed unit - wall to wall.</li> </ol>	



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<p><b>6. <u>Mounting Dimensions</u></b></p> <p>Body to be mounted as far forward as possible to minimize rear overhang.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Minimum cab trunnion dimension allowable for packer body.</li> <li>2. The hopper to rear tire clearance.</li> <li>3. Distance from the front of the body to centre of gravity for the body and hopper with ejector plate in retracted position.</li> <li>4. Distance from the front of the body to centre of gravity for the payload.</li> <li>5. Distance from trunnion to front of body.</li> <li>6. Overhang distance relative to centre of rear axles.</li> <li>7. Departure angle of completed unit.</li> </ol>	
<p><b>7. <u>Loading Sill Height</u></b></p> <p>Prefer minimum loading sill height at rear of body. Assuming frame height of 1015 mm (40"), prefer loading sill height to be no more than 838 mm (33") on unladen unit.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Unladen and laden loading sill height relative to truck frame height.</li> <li>2. Unladen and laden Loading sill height from grade.</li> </ol>	

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<p>8. <u>Packer Body Material</u></p> <p>Body should be built of abrasion resistant steel as follows:</p> <ul style="list-style-type: none"> <li>• Floor - Minimum 3/16" 100,000 psi</li> <li>• Sides - Front - Minimum 3/16"</li> <li>• Sides - Rear - Minimum 1/8" AR500</li> <li>• Hopper Floor - Minimum 1/4" AR500</li> <li>• Ejection Plate - Minimum 1/8" AR500</li> <li>• Packer Plate - Minimum 1/4" 100,000 psi</li> </ul> <p><u>State:</u></p> <p>Type and gauge of material used for:</p> <ol style="list-style-type: none"> <li>1. Body floor.</li> <li>2. Body sides front.</li> <li>3. Body sides rear.</li> <li>4. Hopper floor.</li> <li>5. Ejection plate.</li> <li>6. Packer plate.</li> </ol>	
<p>9. <u>Body Construction</u></p> <p>Body walls are to be designed and built to withstand the static pressure loads of the packing mechanism without deforming. All stiffeners, floor-wall joints, packer plate slide rail, etc. are to be 100% welded. Welds to be inspected at factory for penetration. Body to have adequate reinforcing in area of suspensions (i.e. side rails and cross members).</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Material, size and shape of side wall reinforcements.</li> <li>2. Number of side stiffeners and location.</li> <li>3. If continuous or stitch welded.</li> <li>4. What kind of structural reinforcement is provided in area of rear suspension.</li> </ol>	

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<p><b>10. <u>Side Access Door</u></b></p> <p>Side access door to be located at front to provide access in to packer body. Prefer access to be located on right side. A ladder or step is to be installed for operator access to the side door. Door must be a minimum of 1/8" thick.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>Where access door is to be located.</li> <li>How access door is secured.</li> <li>If ladder or step is provided.</li> <li>Side door material and thickness.</li> </ol>	
<p><b>11. <u>Hopper Locks</u></b></p> <p>Hopper is to be hydraulically locked with no requirement for the operator to access the rear.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>Compliance.</li> <li>What is offered.</li> </ol>	
<p><b>12. <u>Rear Steps</u></b></p> <p>One step on each side, maximum 50 cm. (20") above ground level. Grab handle on side of body as well as on rear of body, positioned such that the operator can hang on to both grab handles at the same time while standing on the rear step.</p> <p>Material to be "Gripstrut" or equivalent. The design, bracing and size of the step is to be approved by a City of Vancouver Equipment Services Engineer prior to fabrication.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>Compliance.</li> <li>Material of steps.</li> </ol>	

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<p><b>13. <u>Paint</u></b></p> <p>Body to be sand or grit blasted and epoxy primer coated. Top coat to be white acrylic enamel Dulux B8917A or equal, to match chassis.</p> <p><u>State:</u></p> <p>1. What is offered.</p>	
<p><b>14. <u>Attachment of Body to Chassis</u></b></p> <p>Contractor is responsible for permanently mounting body to chassis as well as all other necessary components to create a complete unit to the satisfaction of the City of Vancouver Equipment Engineer. Any relocation of fuel tanks, battery boxes, exhaust pipes, etc. to be contractor's responsibility. The front and midpoint of the body should be fastened to the truck frame using suitable spring type mounts.</p> <p><u>State:</u></p> <p>1. Where body will be installed and by whom.</p> <p>2. Any modification requirements to chassis component locations.</p> <p>3. If spring type mounts will be used for fastening.</p>	
<p><b>B. PACKING AND EJECTION</b></p> <p><b>1. <u>Packing Plate</u></b></p> <p>The pinch point opening should be not less than 150mm (6 in.). Prefer pinch point opening to be approximately 254 mm (10 in.).</p> <p>Packing plate to include a bolt-on, replaceable rubber extension which will wipe the hopper floor during cycling to contain any liquid ejections or breaking glass.</p> <p><u>State:</u></p> <p>1. Pinch point opening.</p> <p>2. Width of rubber extension.</p>	

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<p><b>2. <u>Packing Controls</u></b></p> <p>Left and right side mounted controls at rear of hopper. Packing cycle is to stop automatically before the packer plate hopper edge pinch point and require reactivation to complete the cycle. Packing cycle is to be stoppable and reversible at any time by the operator.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Type of controls.</li> <li>2. Number of manual controls and function of each control for one complete cycle.</li> <li>3. How the mechanism is stopped during packing cycle.</li> <li>4. How the mechanism is reversed, both in the first half and second half of cycle.</li> <li>5. If left and right controls are provided.</li> </ol>	
<p><b>3. <u>Loading Mechanism</u></b></p> <p>Hopper mechanism is to be capable of meeting set packing pressure and of crushing a hopper full of bulky materials without stalling.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Type of loading mechanism offered.</li> <li>2. Packing pressure.</li> </ol>	
<p><b>4. <u>Packing Cycle</u></b></p> <p>Packing must occur against the ejection plate. Plate is to automatically move forward in the body during compaction cycle via control of a relief valve.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Relief pressure of relief valve.</li> </ol>	

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<p>5. <u>Unloading Mechanism</u></p> <p>Dumping is to be accomplished by an ejection plate.</p> <p><u>State:</u></p> <p>1. Compliance.</p>	
<p>6. <u>Unloading Time</u></p> <p><u>State:</u></p> <p>1. Time required to eject the full load, in seconds.</p>	
<p>7. <u>Hopper Reloading Time</u></p> <p>Total hopper cycle time to be not more than 30 seconds. First stage of hopper cycle time to be not more than 10 seconds.</p> <p><u>State:</u></p> <p>1. Total time required for the mechanism to complete one full packing cycle with a loaded hopper, in seconds.</p> <p>2. Total time required for the first stage of packing cycle with a loaded hopper, in seconds.</p>	
<p>8. <u>Ejection Controls</u></p> <p>Separate hopper lift and ejection controls complete with a throttle switch to be located at the left front of the body. Complete with access door.</p> <p><u>State:</u></p> <p>1. What is offered.</p>	

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<p><b>C. HYDRAULIC SYSTEM</b></p> <p>1. <u>Power Take-Off System</u></p> <p>Heavy-duty, "Chelsea Hotshift" or City of Vancouver approved equivalent transmission mounted, power take-off (PTO) system capable of providing hydraulic power at any time.</p> <p>If hydraulic power is required while the truck is being moved, then the available engine RPM will determine the pump speed. If an automated throttle is installed, then PTO should not engage unless the park brake is on and the transmission is in neutral.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Make and model of power take-off system.</li> <li>2. How system is engaged.</li> <li>3. Whether PTO and pump run continuously.</li> <li>4. Engine RPM required for optimum loading cycle.</li> </ol>	
<p>2. <u>Hydraulic Cylinders</u></p> <p>High quality, rebuildable type hydraulic cylinders. Packing plate and slide mechanism cylinders must be interchangeable.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. If packing plate and slide mechanism cylinders are interchangeable.</li> <li>2. If cylinders are rebuildable.</li> <li>3. Bore, stroke and quantity of cylinders for: <ol style="list-style-type: none"> <li>a. Ejection</li> <li>b. Packer</li> <li>c. Tailgate</li> </ol> </li> </ol>	

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<p>3. <u>Hydraulic Pump</u></p> <p>Hydraulic pump must deliver the flow rate and pressure necessary to operate the packing mechanism satisfactorily. Relief valve located on the pressure line of the pump as close to the pump as possible and capable of passing full pump flow at rated pressure. Pump to be "Commercial Shearing" or City of Vancouver approved equivalent. Prefer gear type pump.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance</li> <li>2. Make, model and type of pump.</li> <li>3. Outlet and inlet port size.</li> <li>4. Operating pressure and flow rate.</li> <li>5. Recommended RPM.</li> </ol>	
<p>4. <u>Hydraulic Reservoir</u></p> <p>Hydraulic reservoir complete with shut-off valve capable of being locked in the open position. Glass oil level gauge visible from the ground. Reservoir to be pressurized or mounted above suction of pump. Prefer reservoir mounting location outside of body.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Location.</li> <li>3. Capacity.</li> <li>4. If pressurized.</li> </ol>	
<p>5. <u>Hydraulic Oil</u></p> <p>Compatibility with "Shell-Tellus S2 V68".</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> </ol>	



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<p><b>6. <u>Control Valves</u></b></p> <p>Control valves must be located in an easily accessible location. Control valves are not to be mounted under body of packer.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Mounting location.</li> <li>2. Make and model.</li> </ol>	
<p><b>7. <u>Filters</u></b></p> <p>Spin-on type filter complete with visual indicator. Filtration to 10 microns is preferred. Filter to be located to provide for minimum oil spill when changing.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Make and model.</li> <li>2. Level of filtration.</li> <li>3. Location.</li> </ol>	
<p><b>D. MISCELLANEOUS</b></p> <p><b>1. <u>LED Lights and Reflectors</u></b></p> <p>Two (2), tail, two (2) brake, two (2) signal, two (2) backup and all other necessary lights to conform with B.C. and Federal Motor Vehicle Regulations must be supplied and installed. Prefer LED type lights.</p> <p>One (1) rotating beacon mounted below the top of the body and above the hopper opening and to be guarded from brush and tree branches.</p> <p>Two (2) rear flood lights, high mounted to illuminate the working area around the hopper.</p> <p>Two (2) high mounted 6" (15cm) amber warning lights, alternately flashing.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered.</li> </ol>	

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<p><b>2. <u>Shovel Holder</u></b></p> <p>One (1) shovel holder per side, mounted at the rear on hopper assembly.</p> <p><u>State:</u></p> <p>1. What is offered.</p>	
<p><b>3. <u>Noise Levels</u></b></p> <p>During the packing cycle, the noise level should not exceed 76 dbA at a distance of 7 metres (23 ft) from each of the four (4) faces of the completed truck or inside the truck cab with the windows closed.</p> <p><u>State:</u></p> <p>1. Sound levels, measured as stated above.</p>	
<p><b>4. <u>Automated Lube System</u></b></p> <p>Prefer Groeneveld automated lube system.</p> <p><u>State:</u></p> <p>1. Compliance. 2. Make and model of lube system. 3. Components serviced by automated lube system.</p>	
<p><b>E. SERVICE AND SUPPORT</b></p> <p><b>1. <u>Demonstration</u></b></p> <p>As per item 1, Section G.1.</p> <p><u>State:</u></p> <p>1. Compliance.</p>	

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<p>2. <u>Delivery</u></p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Number of days from date of order until bodies will be available for installation.</li> <li>2. Number of days needed for install from the day of receiving chassis.</li> </ol>	
<p>3. <u>Warranty</u></p> <p>Provide details concerning the full standard applicable vehicle body warranty. Additionally, parts of components, which may not be covered with standard warranty, shall be listed separately. Warranty shall commence when the unit is put into service.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Warranty period.</li> <li>2. Warranty terms provided.</li> </ol>	
<p>4. <u>In-House Warranty Work</u></p> <p>The City prefers to have a warranty agreement with the body manufacturer whereby much of this work is completed by the City Equipment Services shop and for which the City is reimbursed.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. If manufacturer in-house warranty agreement is offered.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. Manufacturer's in-house warranty agreement document.</li> </ol>	

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<p><b>5. <u>Training</u></b></p> <p>Training should be provided on the operation and maintenance of each body. Training must be performed by factory trained personnel with at least one (1) year of operation/repair/service experience with the unit being supplied. All training sessions are to take place at the delivery site and technician and operator training are to be carried out separately.</p> <p>Maintenance training to include:</p> <ul style="list-style-type: none"> <li>a. Four (4), four (4) hour on-machine sessions covering 2,000 hour preventative maintenance, diagnostics, control systems, electronics and fault detection.</li> <li>b. Two (2) technician training sessions to take place upon delivery of the equipment. One (1) technician training sessions to take place between hours of 7:00 am and 3:00 pm and another one (1) between the hours of 3:00 pm and 11:00 pm.</li> <li>c. Two (2) technician training sessions to take place two (2) months prior to the expiration of warranty. One (1) session to take place between the hours of 7:00 am and 3:00 pm and one (1) session to take place between the hours of 3:00 pm and 11:00 pm.</li> </ul> <p>Operator training to include:</p> <ul style="list-style-type: none"> <li>a. Two (2) four (4) hour sessions of training covering all information necessary safely and efficiently operate the unit.</li> <li>b. Training sessions to be scheduled during the hours of 7:00 am and 3:00 pm, on separate days.</li> </ul> <p><u>State:</u></p> <p>1. Compliance with each item above.</p>	

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<p><b>6. <u>Maintenance and Operating Documentation</u></b></p> <p>The following is to be provided by the successful bidder at the time of delivery:</p> <ol style="list-style-type: none"> <li>a. A complete check-off style preventative maintenance schedule as recommended by the manufacturer to ensure satisfactory service and long life for the intended application and environment.</li> <li>b. A detailed lubrication chart showing all lube points and greasing frequency for intended application and environment.</li> <li>c. Three (3) copies of parts manuals in both electronic and book form required.</li> <li>d. Three (3) copies of service and repair manuals in electronic and book form required.</li> <li>e. Electrical and hydraulic schematics.</li> <li>f. Three (3) sets of operator manuals.</li> <li>g. Listing of special service tools/diagnostic equipment and diagnostic software requirements.</li> <li>h. A list of general maintenance parts recommended, with part numbers.</li> <li>i. List of serial numbers of engine, transmission, differential and auxiliary engine (if applicable) for each unit as shown in attached appendix (PM Program and Maintenance Data Requirements Review).</li> </ol> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance with each item above.</li> </ol>	
<p><b>F. OPTIONS</b></p> <p><b>1. <u>Weigh Scales</u></b></p> <p>Electronic weigh scales with dash-mounted readout and alarm to notify driver when maximum allowable weight has been reached.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Make and model of scale.</li> <li>2. Describe read-out and alarm system.</li> </ol>	

**SCHEDULE B - REQUIREMENTS  
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<p style="text-align: center;"><b>Item 2</b></p> <p style="text-align: center;"><b>Rear Packer Body</b></p> <p style="text-align: center;"><b>For 20 Yard Rear Loading Refuse Trucks</b></p> <p style="text-align: center;"><b>Specifications</b></p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	Make:
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<p>2. <u>Extended Warranty</u></p> <p><u>State:</u></p> <p>1. <u>What is offered.</u></p>	
<p>3. <u>Cart Tipper</u></p> <p>Fully adjustable, semi-automated, rear street side mounted, one (1) bin tipper system, complete with controls and all accessories. To be compatible with containers that have 35 to 95 US gallon capacity (132 to 360 litres). Containers are of a standard Universal, or North American, design where the container is lifted using an integrated upper lift sleeve and horizontal lock bar in the container face.</p> <p>Area where tipper is mounted may have higher sill height to accommodate tipper. Remaining rear opening must meet minimum loading sill height requirements. Minimum hopper capacity requirements must be maintained. It is recommended that the bidder submit alternative tipper design solutions as this option will be evaluated on design and ease of maintenance.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Special requirements for tipper system.</li> <li>3. Alternative cart tipping solutions/designs.</li> <li>4. If the cart tipping mechanism presents any issues regarding the load height or possible interference opportunities.</li> <li>5. Laden and unladen loading sill height of non-tipper opening.</li> <li>6. Width of tipper system.</li> <li>7. Ground clearance of system in transport situation.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. Literature and drawings/schematics of tipper system.</li> </ol>	

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<p>4. <u>Rear Mounted Camera</u></p> <p><u>State:</u></p> <p>1. What is offered.</p>	
<p>5. <u>Any other Suggested Options</u></p> <p>Suggested options for intended application.</p> <p><u>State:</u></p> <p>1. What is offered.</p>	

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<p><b><u>OVERVIEW</u></b></p> <p>The City requires two (2) 8-Yard Rear Loading Refuse Trucks. These units will be used in a tight urban environment and will need to navigate narrow city streets, alleys and park laneways. These units are mostly used for collection of refuse within city parks. Size and manoeuvrability is of critical importance. The proposed truck will be driven almost entirely within the City of Vancouver on grades 6-8%. Operations require frequent stop and go driving, and longer, higher RPM idling period.</p> <p>The units will be operated by a crew of two (2) operators for collection of park refuse. These units will have a chassis that is left-hand drive with a single rear axle.</p> <p>The rear loader packer bodies specified in Item 2 will be installed on these cab and chassis. The chassis must be capable of accommodating the refuse body and the associated payload requirements.</p> <p>Although listed as an option, the City of Vancouver is interested in pursuing alternative powerplant options for our refuse fleet. All proposed optional powerplants must achieve payload requirements while minimizing the turning radius, and be designed for the application described above.</p>	



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<p><b>A. CHASSIS</b></p> <p>1. <u>Chassis</u></p> <p>Vehicle should be cab-over-engine style chassis, left hand drive and a single rear axle. Must comfortably accommodate one (1) driver and (1) passenger. The proposed vehicle will be driven almost entirely within the City of Vancouver on grades 6-8%. Operations require frequent stop and go driving, and longer, higher RPM idling period.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Style of chassis.</li> <li>3. Make and model of chassis.</li> <li>4. Year of chassis.</li> <li>5. If the proposed chassis is configured in accordance with the manufacturer's recommendations for the above conditions.</li> <li>6. Any operational limitations of the proposed machine in the intended application (as described above), in order to maintain a high up-time and to maintain warranties proposed by the Contractor.</li> </ol>	
<p>2. <u>Compliance</u></p> <p>Vehicle must be in full compliance of current B.C. Motor Vehicle Safety Act, Commercial Motor Vehicle Regulations and U.S. Federal Environmental Protection Agency current exhaust emissions standards. Vehicle must also comply with WorkSafe B.C. Regulations, Transport Canada Regulations, and Federal Government Motor Vehicle Safety Act and Regulations.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance in full.</li> </ol>	

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<p><b>3. <u>Vehicle Weights</u></b></p> <p>Completed vehicle must be able to haul a minimum refuse payload of not less than 2,700 kg (5,952 lb.). The Gross Vehicle Weight Rating (GVWR) must be sized to handle this payload.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. GVWR.</li> <li>3. Front GAWR.</li> <li>4. Rear GAWR.</li> <li>5. Curb weight of chassis with only full fuel, appropriate fluid levels and one (1) 100kg driver.</li> <li>6. Front curb weight of chassis with only full fuel, appropriate fluid levels and one (1) 100kg driver.</li> <li>7. Rear curb weight of chassis with only full fuel, appropriate fluid levels and one (1) 100kg driver.</li> </ol>	

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<p><b>4. <u>Dimensions</u></b></p> <p>Manoeuvrability is a key requirement of this vehicle. Chassis should have the shortest wheelbase, turning radius and width possible, while meeting the payload requirements stated above.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Wheelbase.</li> <li>3. Cab Trunnion</li> <li>4. Front bumper to front axle.</li> <li>5. Bumper to back of cab (BBC).</li> <li>6. Overall length.</li> <li>7. Overall width (mirror to mirror).</li> <li>8. Distance from ground to bottom step.</li> <li>9. Turning radius - curb to curb.</li> <li>10. Turning radius - wall to wall.</li> <li>11. Wheel cut.</li> <li>12. Cab to rear axle (CA).</li> <li>13. Height of top of cab from ground.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. One (1) set of scale drawings showing side elevation of body and chassis complete with all basic dimensions are to be submitted with the bid document.</li> </ol>	
<p><b>5. <u>Frame Rails</u></b></p> <p>Clean top frame rails from back of cab to end of frame are required for mounted equipment. Prefer huck-bolt connections, and black colour paint.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Size of frame rails (including any reinforcements).</li> <li>3. Type of frame rails (ie. Channel, I-beams).</li> <li>4. Resisting Bending Moment (including any reinforcements).</li> <li>5. Section modulus (including any reinforcement) per rail.</li> <li>6. Yield strength.</li> <li>7. Type of connection (i.e. huck-bolts, rivets, etc.).</li> <li>8. If a clean top of rail CA is provided.</li> </ol>	

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<p><b>6. <u>Front Tow Hooks</u></b></p> <p>Two (2) heavy-duty front tow hooks. Each hook should be mounted directly to the frame rails at either side.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered.</li> <li>3. Load rating.</li> </ol>	
<p><b>7. <u>Bumper</u></b></p> <p>A full width front bumper having either painted or plated materials complete with license place holder.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of bumper.</li> <li>3. Type of bumper corrosion proof coating.</li> <li>4. Colour of front bumper.</li> </ol>	
<p><b>B. CAB</b></p> <p><b>1. <u>Interior</u></b></p> <p>Prefer cab interior and trim to be dark grey colour, with easy care, easy clean materials. Prefer vinyl with moulded plastic trim. Should have matching rubber floor mats, sun visors, arm rests, door trim panels and overhead liners.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Interior colour and material.</li> <li>3. Flooring material.</li> <li>4. If cab comes with sun visors and arm rests for both seats.</li> <li>5. If floor mats are included.</li> </ol>	

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<p><b>2. <u>Seating</u></b></p> <p>Driver and passenger seat must be six (6) way adjustable air suspension seat - forward/rear, up/down and fully adjustable lumbar support. Individual bucket type seats are required. Seats must be fitted with occupant seat belts in compliance with the B.C. Motor Vehicle Act. Both seats should be constructed of good quality and wear resistant material. Cover material should be dark, heavy duty knitted cordura type vinyl fabric.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make and model of seats.</li> </ol>	
<p><b>3. <u>Steering</u></b></p> <p>Power steering. Steering wheel must be tilt and height adjustable.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered.</li> </ol>	
<p><b>4. <u>Mounting</u></b></p> <p>Air suspended cab. Include any mounting devices for heat and sound mitigation.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. If air suspended cab is provided.</li> <li>3. If other cab mounts are provided.</li> </ol>	

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<p><b>5. <u>Paint</u></b></p> <p>Cab should have corrosion proof material applied over entire cab base inner and outer skin.</p> <p>Finish paint should be white. Preferred paint is ZA/94 Dupont B8917A or equal.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance</li> <li>2. Type of corrosion proofing.</li> <li>3. Type of paint.</li> <li>4. Colour of cab.</li> </ol>	
<p><b>6. <u>Undercoating</u></b></p> <p>Heavy-duty rubber based undercoating for cab.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered.</li> </ol>	
<p><b>7. <u>Noise and Insulation</u></b></p> <p>Cab interior level not to exceed 83 dBA during operation. During the packing cycle, the noise level should not exceed 76 dBA at a distance of 7 metres (23 ft) from each of the four (4) faces of the completed truck. Cab should have sound insulation throughout, including the roof, doors and floor.</p> <p>Given the recent higher engine operating temperatures due to the imposed emissions regulations, vehicle cab and operator shall be effectively insulated from the heat from the engine and transmission.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Interior noise levels during operation.</li> <li>3. Exterior noise levels at 7 meters.</li> <li>4. What sound insulation is offered.</li> <li>5. What heat mitigation is offered.</li> </ol>	

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<p><b>8. <u>Door Windows</u></b></p> <p>Both driver's and passenger's door windows should be electric power windows. Windows should both be controlled individually and by the driver.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. If power windows are offered.</li> <li>3. If driver activated controls for both windows.</li> </ol>	
<p><b>9. <u>Windshield</u></b></p> <p>Safety windshield having capability for a minimum of 70% filtration for interior temperature control.</p> <p>Must meet CMVSS.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Windshield tint grade.</li> </ol>	
<p><b>10. <u>Rain Gutters</u></b></p> <p>Prefer rain gutters over each door.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered.</li> </ol>	
<p><b>11. <u>Cab Egress</u></b></p> <p>Access steps complete with full height grab handles on both sides of cab.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered.</li> <li>3. Stair heights from ground level.</li> </ol>	

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<p><b>12. <u>Mud Flaps</u></b></p> <p>Frame mounted mud flaps - rear of front axle, front and rear of rear axle.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered.</li> </ol>	
<p><b>13. <u>Outside Mirrors</u></b></p> <p>Stainless steel, break away type, as large as possible complete with separate convex mirrors, both sides.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered.</li> <li>3. Size of mirrors.</li> </ol>	
<p><b>14. <u>Heater/Defroster</u></b></p> <p>A heater/ventilation system complete with a multi-speed blower fan. Variably adjustable heating vents for operator comfort and window defrosting. The defrosting system must be capable of dealing with local conditions - cool temperatures with high humidity.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of blower control.</li> <li>3. System air movement capacity in CFM.</li> <li>4. Heater/defroster fan type and speed control.</li> <li>5. Heater output in BTU/hour.</li> </ol>	



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<p><b>15. <u>Windshield Wipers</u></b></p> <p>2-speed electric with intermittent wiper and washer system</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. If 2 speed electric intermittent wipers are available.</li> <li>2. If washer system is available.</li> <li>3. Mounting location.</li> </ol>	
<p><b>16. <u>Radio</u></b></p> <p>AM-FM type.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered.</li> </ol>	
<p><b>17. <u>Operators Console</u></b></p> <p>Operator warning system, both visual and audible. Low oil pressure and high engine temperature functions must be provided. Gauge cluster should consist of:</p> <ol style="list-style-type: none"> <li>a) odometer</li> <li>b) trip display</li> <li>c) engine hours</li> <li>d) speedometer</li> <li>e) tachometer</li> <li>f) oil pressure</li> <li>g) coolant temperature</li> <li>h) fuel level</li> <li>i) fault code display(s) as necessary</li> </ol> <p>Prefer to have an instantaneous I/100 kms (or mpg) fuel economy and trip I/100 kms (or mpg) fuel economy readout options, as well as hour meter in addition to odometer.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance with each item above.</li> <li>2. If fuel economy gauges are available.</li> </ol>	

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<p><b>C. POWERTRAIN</b></p> <p>1. <u>Engine</u></p> <p>An internal combustion diesel engine having the approximate minimum ratings of:</p> <ul style="list-style-type: none"> <li>a) SAE HP - 170 peak HP</li> <li>b) Peak Torque - 420 ft-lb</li> </ul> <p>Engine must be able to operate on B5 biodiesel fuel. Prefer engine to operate on B20 biodiesel fuel.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Make and model of engine offered.</li> <li>2. SAE horsepower and rated RPM.</li> <li>3. Peak torque and rated RPM.</li> <li>4. Estimated fuel consumption: <ul style="list-style-type: none"> <li>- Litres/hour at max horsepower</li> <li>- Litres/hour at max torque</li> <li>- Litres/hour at idle</li> </ul> </li> <li>5. If engine will operate on B5 fuel.</li> <li>6. If engine will operate on B20 fuel.</li> <li>7. If warranty is valid with operation on B5 fuel.</li> <li>8. If warranty is valid with operation on B20 fuel.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. Torque curve chart.</li> </ol>	

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<p><b>2. Diesel Exhaust Pollution Reduction Technologies</b></p> <p>The City of Vancouver is committed to greenhouse gas and exhaust emissions reduction. Engine and transmission selection will take into account emissions and fuel consumption information.</p> <p>Diesel exhaust pollution reduction technology required using Selective Catalytic Reduction (SCR). Reduction technology must meet US Environmental Protection Agency 2010 standards to reduce diesel exhaust pollution.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Technology used.</li> <li>2. What components the exhaust after treatment device(s) are comprised of.</li> <li>3. Size of diesel emission fluid (DEF) tank. State expected refill rate of DEF. State any components that need to be changed or refilled.</li> <li>4. Describe ideal duty cycle for automatic or passive engine regeneration.</li> <li>5. Describe steps to initiate forced or stationary regeneration and any limitations to the regeneration process.</li> <li>6. If diesel particulate filter (DPF) is used, state make and model and describe if the filter can be cleaned and if any equipment is required to be able to clean filter.</li> <li>7. If DPF is used please provide length of time for regeneration.</li> <li>8. If there are any additional distinguishing features of the exhaust system.</li> <li>9. Any exhaust systems concerns with this vehicle being operated for short trips at low speeds and high idling.</li> <li>10. EPA certified PM, NO<sub>x</sub>, HC, CO and if available, CO<sub>2</sub> emissions levels in grams per brake-horsepower.</li> <li>11. Compliance with latest EPA emissions standards.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. California EPA Air Resources Board Certificate.</li> </ol>	

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<p style="text-align: center;"><b>Item 3</b></p> <p style="text-align: center;"><b>Single Axle Cab and Chassis</b></p> <p style="text-align: center;"><b>For 8 Yard Rear Loading Refuse Trucks</b></p> <p style="text-align: center;"><b>Specifications</b></p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	Make:
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<p>3. <u>Air Induction</u></p> <p>The air induction system composed of a primary and secondary element including an air restriction indicator for timely and effective maintenance. Secondary unit to be "Donaldson" in-line type or equal dry element with in-cab restriction gauge, reset type.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance</li> <li>2. Type of filtration and location.</li> <li>3. If air restriction indicator is provided.</li> </ol>	
<p>4. <u>Engine Throttle Control</u></p> <p>Engine functions should be electrically controlled and monitored to optimize fuel economy, minimize regulated exhaust emissions, load sensing and related vehicle tasks.</p> <p>Electronic throttle control for PTO driven equipment should be provided.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of engine control.</li> <li>3. Electronic variable engine speed control.</li> <li>4. If electronic control for PTO provided.</li> </ol>	
<p>5. <u>Exhaust System</u></p> <p>Unit should have a vertical exhaust pipe stack on the passenger side of the cab, complete with protective full length heat shielding and constructed with corrosion resistant/proof materials.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Vertical exhaust stack location</li> <li>3. Muffler type and location.</li> <li>4. Heat shield and material.</li> </ol>	

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<p><b>6. <u>Fuel System</u></b></p> <p>Electronically governed fuel delivery system. Fuel system, in addition to supplied filtration, should include a Racor fuel/water separator having 10 micron media. Filter should be easily accessible/visible.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of injection.</li> <li>3. If Racor fuel/water separation is provided.</li> <li>4. If filter is visible and easily accessible.</li> <li>5. Type, make, and model of fuel pump.</li> </ol>	
<p><b>7. <u>Fuel Tanks</u></b></p> <p>Minimum 170 litre (45 gallon) diesel tank full on delivery, filler on driver's side. Fill spout to be located for quick and easy refill. Tanks to be aluminium and frame mounted.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of diesel tank.</li> <li>3. Tank capacity.</li> <li>4. Location of diesel tank.</li> </ol>	
<p><b>8. <u>Coolant System</u></b></p> <p>The coolant system shall have sufficient capacity for stop and go refuse application. It should comprise of silicone hoses (or equivalent), filter/conditioner and anti-freeze solution having minimum cold weather protection to -25 °C.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of hoses.</li> <li>3. Type of filtration.</li> <li>4. Type of anti-freeze solution.</li> <li>5. Frequency of solution replacement.</li> </ol>	

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<p><b>9. <u>Radiator</u></b></p> <p>A long life heavy-duty radiator having sufficient cooling capacity for the engine and transmission is required. Operating conditions require frequent stop and go driving. Vehicle shall be capable of operating fully in this environment.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Radiator type and capacity.</li> <li>3. Radiator surface area.</li> </ol>	
<p><b>10. <u>Transmission</u></b></p> <p>Allison automatic transmission complete with PTO provision. Should have at least 20% startability. See Item 2, Section C.1 for more information about PTO requirements.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make and model of transmission.</li> <li>3. If equipped with constant drive PTO provision.</li> <li>4. Provide shift diagram analysis and options for consideration.</li> <li>5. Top speed.</li> <li>6. Maximum grade at 50 kph.</li> <li>7. Maximum speed on 6-8% grade.</li> <li>8. Startability.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. Alison SCAAN Analysis for recommended transmission.</li> </ol>	
<p><b>11. <u>Magnetic Drain Plugs</u></b></p> <p>For transmission, rear axle and crankcase.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered</li> </ol>	

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<p><b>D. WHEELS AND SUSPENSION</b></p> <p>1. <u>Suspension</u></p> <p>Suspension to be sized for heavy-duty refuse application.</p> <p>Front Suspension should have standard tapered variable rate leaf spring suspension complete with matched shock absorbers. Capacity should match front axle rating.</p> <p>Rear suspension can be tapered leaf spring, air or rubber block style. Capacity should match rear axle rating. Suspension to include torque rods as required. Prefer rear suspension that does not have eccentric-style adjustments.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Type of front suspension.</li> <li>3. Front suspension capacity.</li> <li>4. Front suspension make and model.</li> <li>5. Shock absorber make and model.</li> <li>6. Whether shock absorbers meet suspension capacity.</li> <li>7. Type of rear suspension (air or rubber block).</li> <li>8. Rear suspension capacity.</li> <li>9. Rear suspension make and model.</li> <li>10. What is provided for torque rods.</li> </ol>	
<p>2. <u>Front Axle and Tires</u></p> <p>Front axle should allow for ease of manoeuvrability and minimum turning radius while maximizing payload and weight distribution. Front axle to be sized for maximum loading under B.C. Regulations. Prefer Michelin XZY-3 tires. Tires to be sized to match axle capacity and for allowable B.C. ground pressure limits.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Front axle capacity.</li> <li>3. Make and model of front axle.</li> <li>4. Make, size and type of front tires.</li> <li>5. Loading capacity of tires.</li> </ol>	

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<p><b>3. <u>Rear Axle and Tires</u></b></p> <p>The differential ratio shall be matched with the engine and transmission to maximize fuel efficiency under service conditions outlined in overview. Rear axle should be geared to optimize fuel efficiency under low speed stop-and-go conditions described in the Overview and should allow for a maximum speed of 90 km/hour (55 mph). Rear axle to be sized for maximum possible loading under B.C. Regulations. Prefer Michelin XZY-3 tires.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make and model of rear axle.</li> <li>3. Rear axle capacity.</li> <li>4. Rear end ratio to meet requirements.</li> <li>5. Recommended rear end ratio.</li> <li>6. Make, size and type of rear tires.</li> <li>7. Capacity of tires.</li> </ol>	
<p><b>4. <u>Wheel Rims</u></b></p> <p>Hub piloted, ten (10)-hole, disc type steel wheels. Prefer black wheels.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make and type of front and rear wheels.</li> <li>3. Dimensions of front and rear wheels.</li> <li>4. Colour of wheels.</li> </ol>	



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<p><b>BRAKES</b></p> <p>1. <u>Service Brakes</u></p> <p>Power assisted 4-wheel disc brakes complete with dust/splash shields.</p> <p>The unit brake system shall incorporate anti-wheel lock technology known as "ABS". The ABS unit, made up of controller, wheel speed sensors and modulators, shall be secured within safe areas of the frame and drive components and easily accessible for servicing as required. A visual and audible alarm to signal the operator of a malfunction shall be provided within the cab dash cluster area.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Front brake type.</li> <li>3. Rear brake type.</li> <li>4. If "ABS" provided or if available.</li> <li>5. Make and model of ABS.</li> </ol>	
<p>2. <u>Parking Brake</u></p> <p>Prefer cable to rear wheels.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is available.</li> </ol>	

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<p><b>E. ELECTRICAL</b></p> <p>1. <u>Electrical System</u></p> <p>The charging system must have full capability to maintain battery cranking capacity, chassis electrical equipment, and refuse body load. Prefer wiring to be colour coded, continuously numbered, encased in plastic "loom" to maximize protection from corrosion and supplied with sealed connectors.</p> <p>Automotive style waterproof reset-able circuit breakers should be included. Power distribution system(s) should utilize, where possible, reset-able manual circuit breakers. The electrical system must incorporate SAE blade type fuses as standard equipment where reset-able circuits are not provided.</p> <p>Where applicable, a "multiplex" system having pre-programmed functions should be discussed with the City prior to ordering.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. If wiring is colour coded, numbered and encased in plastic loom with sealed connectors.</li> <li>3. If multiplex system is used. If yes, how many functions does it have (for extra mounted equipment)?</li> <li>4. Signal for vehicle speed provided.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. Full electrical schematics for electronic control module(s) at the time of delivery including pin numbers and functionality.</li> </ol>	

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<b>2. <u>Alternator</u></b>  Should be a low RPM turn on, 12 volt, self regulating, minimum 130 amp heavy-duty alternator. Alternator should feature enhancements with coated system to mitigate failures due to corrosion and provide extended service life.  <u>State:</u> 1. Compliance. 2. Make and model. 3. Output.	
<b>3. <u>Battery(s)</u></b>  Batteries maintenance free type, of sufficient capacity to power the starter at the lowest ambient temperature range encountered within the Lower Mainland. Battery box to be parallel with and tight to the frame to reduce vibrations.  <u>State:</u> 1. Compliance. 2. Reserve capacity cold cranking amperes. 3. Make and model. 4. Number of batteries.	
<b>4. <u>Starter Motor</u></b>  Starter capable of providing and maintaining cranking power required in the Vancouver area ambient temperature ranges for winters. Thermal overcrank protection required to prevent overheating due to excessive cranking durations and extended service life.  <u>State:</u> 1. Compliance. 2. Make and model.	

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<p>5. <u>Disconnect Switch/Boost Stud</u></p> <p>Unit electrical/battery system should incorporate a means of disconnecting the electrical systems. Unit to come with remote jump terminals.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. If battery disconnect switch is provided, and if so, the location of the switch.</li> <li>3. Location of remote jump terminals.</li> </ol>	
<p>6. <u>Lighting</u></p> <p>All CMVSS required lighting should be supplied and installed. LED preferred. All lighting to meet requirements of all applicable Provincial and Federal regulations. Two interior lights to be door actuated if available</p> <p>Heavy-duty type 4 way flasher. LED type stop/tail, amber, turn marker(s), backup and accessory power lights.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. What is offered for lights.</li> <li>3. If lighting meets all relevant regulations in B.C.</li> <li>4. If lights are LED.</li> </ol>	
<p>7. <u>Horn</u></p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered</li> </ol>	

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<p><b>8. <u>Back-up Alarm</u></b></p> <p>Heavy duty, white noise, self adjusting 107 dBA electric back up warning alarm device. Model must be Brigade BBS-107 or City approved equivalent.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Make and model.</li> <li>3. dBA rating.</li> </ol>	
<p><b>F. SERVICE AND SUPPORT</b></p> <p><b>1. <u>Demonstration</u></b></p> <p>A demonstration for four (4) working days in the City of Vancouver is required of a complete chassis and body similar to what is specified herein, commencing no later than twenty-one (21) calendar days after request of the Equipment Services Branch. Capacity, manoeuvrability, noise emissions, ease of operation and maintenance will be evaluated in the demonstration. Demo unit should be equipped with all proposed options.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Earliest possible date for demonstration after close of RFP.</li> </ol>	
<p><b>2. <u>Delivery</u></b></p> <p>Four (4) full sets of functional keys provided at vehicle delivery. Delivery F.O.B. City of Vancouver, Manitoba Yard or site designated. Fuel tank must be full upon delivery. Require all insurance and ownership transfer documentation upon delivery.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance</li> <li>2. The delivery lead-time from time of purchase order.</li> <li>3. Method of delivery from Factory to City of Vancouver (i.e. shipped by train, driven, etc.).</li> </ol>	

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<p>3. <u>Warranty</u></p> <p>Chassis, engine and driveline must have at least one year of warranty. Warranty must start from the in service date.</p> <p><u>State:</u></p> <p>1. Warranty offered.</p> <p><u>Provide:</u></p> <p>1. Details concerning the standard applicable vehicle warranty.</p> <p>2. Warranty and terms with components and parts not covered within the standard vehicle manufacture warranty.</p>	
<p>4. <u>In-House Warranty Work</u></p> <p>The City prefers to have a warranty agreement with the cab and chassis manufacturer whereby much of this work is completed by the City Equipment Services shop and for which the City is reimbursed.</p> <p><u>State:</u></p> <p>1. If manufacturer in-house warranty agreement is offered.</p> <p><u>Provide:</u></p> <p>1. Manufacturer's in-house warranty agreement document.</p>	

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<p>5. <u>Training</u></p> <ul style="list-style-type: none"> <li>a. Provide training to the City of Vancouver garage technicians in the factory prescribed maintenance, diagnostics and repairs procedures for: <ul style="list-style-type: none"> <li>• Engine.</li> <li>• Transmission.</li> <li>• ABS System.</li> <li>• Chassis and multiplex system.</li> </ul> </li> <li>b. Training to be carried out by factory or factory trained personnel.</li> <li>c. Two (2) initial training sessions to be scheduled upon delivery: <ul style="list-style-type: none"> <li>• One (1) session to take place between hours of 7:00 am and 3:00 pm.</li> <li>• One (1) session to take place between the hours of 3:00 pm and 11:00 pm.</li> </ul> </li> <li>d. Two (2) follow-up training sessions are to be scheduled two (2) months prior to the expiration of the chassis warranty: <ul style="list-style-type: none"> <li>• One (1) session to take place between hours of 7:00 am and 3:00 pm.</li> <li>• One (1) session to take place between the hours of 3:00 pm and 11:00 pm.</li> </ul> </li> <li>e. All training sessions must include the following: <ul style="list-style-type: none"> <li>• Classroom session using appropriate visual and teaching aids giving an overview of the machine's systems and diagnostic tools/procedures.</li> <li>• On-chassis session detailing the locations of components and good practices for the preventative maintenance items to be checked during 20,000 km, or one year of service.</li> <li>• On-chassis session demonstrating and practicing the use of the provided fault detection and diagnostics. City mechanics shall have the opportunity to work through examples provided by the contractor's instructor(s).</li> </ul> </li> </ul> <p><u>State:</u></p> <p>1. Compliance with each item above.</p>	

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<p><b>6. <u>Maintenance and Operating Documentation</u></b></p> <p>The following is required of the successful bidder at the time of delivery:</p> <ul style="list-style-type: none"> <li>a. A complete check-off style preventative maintenance schedule as recommended by the manufacturer to ensure satisfactory service and long life for the intended application and environment.</li> <li>b. A detailed lubrication chart showing all lube points and greasing frequency for intended application and environment.</li> <li>c. Three (3) copies of parts manuals in both electronic and book form required.</li> <li>d. Three (3) copies of service and repair manuals in electronic and book form required.</li> <li>e. Electrical and hydraulic schematics.</li> <li>f. Three (3) sets of operator manuals.</li> <li>g. Listing of special service tools/diagnostic equipment and diagnostic software requirements.</li> <li>h. A list of general maintenance parts recommended, with part numbers.</li> <li>i. List of serial numbers of engine, transmission, differential and auxiliary engine (if applicable) for each unit as shown in attached appendix (PM Program and Maintenance Data Requirements Review).</li> </ul> <p><u>State:</u></p> <p>1. Compliance with each item above.</p>	



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<p><b>G. OPTIONS</b></p> <p>1. <u>CNG Engine</u></p> <p>Compressed Natural Gas (CNG) fuelled engine. Require Canadian Safety Approval for all CNG systems. Prefer roof mounted fuel tanks to minimize wheelbase. Unit to comply with payload and dimensional requirements as outlined above.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Make and model of engine offered</li> <li>2. SAE horsepower and rated RPM.</li> <li>3. Peak torque and rated RPM.</li> <li>4. If any silencing included.</li> <li>5. EPA certified PM, Nox, HC, CO and if available CO<sub>2</sub> emission levels in grams per brake horsepower. These emission levels should be actual engine emissions and not the EPA Certification Levels.</li> <li>6. Estimated Fuel Consumption             <ol style="list-style-type: none"> <li>a. Litres/hr at max horsepower</li> <li>b. Litres/hr at max torque.</li> </ol> </li> <li>7. Location, material, style and size of fuel tank.</li> <li>8. Location of fueling port.</li> <li>9. Wheelbase of unit.</li> <li>10. Turning radius - curb to curb.</li> <li>11. Turning radius - wall to wall.</li> <li>12. Any payload reductions or changes in tare weight.</li> <li>13. Whether system has safety approval in Canada.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. Engine warranty information.</li> </ol>	

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<p style="text-align: center;"><b>Item 3</b></p> <p style="text-align: center;"><b>Single Axle Cab and Chassis</b></p> <p style="text-align: center;"><b>For 8 Yard Rear Loading Refuse Trucks</b></p> <p style="text-align: center;"><b>Specifications</b></p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	Make:
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<p><u>2. Alternative Fueled Engines</u></p> <p>Alternative chassis that reduce fuel consumption or contribute to low or zero emissions with engine capable of meeting power and torque demand listed in section D.1 of these specifications. Examples include hybrid electric, hydraulic hybrid, or electric chassis. Unit to comply with payload and dimensional requirements as outlined above.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Type of technology proposed.</li> <li>2. Make and model of engine offered</li> <li>3. SAE horsepower and rated RPM.</li> <li>4. Peak torque and rated RPM.</li> <li>5. If any silencing included.</li> <li>6. EPA certified PM, Nox, HC, CO and if available CO<sub>2</sub> emission levels in grams per brake horsepower. These emission levels should be actual engine emissions and not the EPA Certification Levels.</li> <li>7. Estimated Fuel Consumption             <ol style="list-style-type: none"> <li>a. Litres/hr at max horsepower</li> <li>b. Litres/hr at max torque.</li> </ol> </li> <li>8. Location of fuel tank.</li> <li>9. Wheelbase of unit.</li> <li>10. Turning radius - curb to curb.</li> <li>11. Turning radius - wall to wall.</li> <li>12. Any payload reductions or changes in tare weight.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. Engine warranty information.</li> </ol>	
<p><u>3. Fuel Tank</u></p> <p>Right side fuel tank in addition to fuel tank specified in C.5.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered.</li> </ol>	

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<p><u>4. Aluminum Wheels</u></p> <p>Aluminum wheels in a dull (non-polished) finish.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>What is offered.</li> <li>Size of front and rear wheels.</li> <li>Colour of front and rear wheels.</li> <li>Weight savings over steel wheels.</li> </ol>	
<p><u>5. Suspension</u></p> <p>Other suspension options to those offered in item D.1.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>What is offered.</li> </ol>	
<p><u>6. Diesel Fuelled Cab Heater</u></p> <p>Diesel Fuelled, operator controlled cab heater. Prefer Webasto 5001151A.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>What is offered.</li> </ol>	
<p><u>7. Maintenance and Diagnostic Equipment/Software</u></p> <p>Diagnostic software, documentation, equipment and connectors must be supplied for:</p> <ul style="list-style-type: none"> <li>All installed multiplexed systems.</li> <li>Engine.</li> <li>Transmission.</li> <li>ABS.</li> </ul> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>List of equipment, connectors, software and instruction manuals as required above.</li> </ol>	

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<p>8. <u>Extended Cab</u></p> <p><u>State:</u></p> <p>1. What is offered.</p>	
<p>9. <u>Power Mirrors</u></p> <p><u>State:</u></p> <p>1. What is offered.</p>	
<p>10. <u>Any other Suggested Options</u></p> <p>Suggested options for intended application.</p> <p><u>State:</u></p> <p>1. What is offered.</p>	

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<p style="text-align: center;">Item 4</p> <p style="text-align: center;">Rear Packer Body</p> <p style="text-align: center;">For 8 Yard Rear Loading Refuse Trucks</p> <p style="text-align: center;">Specifications</p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	Make:
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<p><b>A. BODY DESIGN</b></p> <p>1. <u>Style</u></p> <p>Smooth walled, non-rib type body to be designed for mounting on a tandem axle chassis. Body to be mounted to chassis specified in Item 1 of this RFP. Body to be sealed to prevent leakage of liquid refuse.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance</li> <li>2. Make and model of body.</li> <li>3. If chassis specified in Item 1 is suitable for this body in all respects.</li> <li>4. Height and method of sealing.</li> </ol>	
<p>2. <u>Body Capacity</u></p> <p>Body is to have a payload volume of no less than 6 cubic metres (8 cubic yards), excluding hopper. Body should be sized to optimize payload for specified chassis size.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Maximum payload volume of body, excluding hopper.</li> </ol>	
<p>3. <u>Hopper Capacity</u></p> <p>Hopper to have a payload volume of no less than 0.75 cubic metres (1 cubic yard).</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Maximum payload volume of hopper, considering loading sill height requirements.</li> </ol>	

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<p><b>4. <u>Payload and Weights</u></b></p> <p>Minimum payload of 2,700 kg (5,952 lb.) is required without exceeding chassis GVW or legal axle loading. All weights should be stated with chassis proposed in Item 1.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Tare weight of packer body complete with all hydraulics and fittings.</li> <li>2. What chassis weight is being utilized for the payload calculation.</li> <li>3. Payload of completed unit with full fuel, appropriate fluid levels and one (1) 100 kg driver.</li> <li>4. Weight distribution of completed unit (body and chassis) with only full fuel, appropriate fluid levels and one (1) 100 kg driver.</li> <li>5. Weight distribution of completed unit (body and chassis) with full fuel, appropriate fluid levels, one (1) 100 kg driver and maximum payload.</li> </ol>	
<p><b>5. <u>Dimensions</u></b></p> <p>Prefer finished unit to be of minimum width, length and height. Completed unit should have a travelling height of no more than 3.66 m (144 in) and a width of no more than 2.74 m (108 in).</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Maximum length of body.</li> <li>2. Maximum length of completed vehicle.</li> <li>3. Maximum height above chassis frame.</li> <li>4. Maximum height above chassis frame with hopper raised.</li> <li>5. Travelling height of completed vehicle.</li> <li>6. Width of body.</li> <li>7. Maximum width of completed vehicle (excluding mirrors).</li> <li>8. Maximum width of completed vehicle (including mirrors).</li> <li>9. Turning radius of completed unit - curb to curb.</li> <li>10. Turning radius of completed unit - wall to wall.</li> </ol>	

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<p><b>6. <u>Mounting Dimensions</u></b></p> <p>Body to be mounted as far forward as possible to minimize rear overhang.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Minimum cab trunnion dimension allowable for packer body.</li> <li>2. The hopper to rear tire clearance.</li> <li>3. Distance from the front of the body to centre of gravity for the body and hopper with ejector plate in retracted position.</li> <li>4. Distance from the front of the body to centre of gravity for the payload.</li> <li>5. Distance from trunnion to front of body.</li> <li>6. Overhang distance relative to centre of rear axles.</li> <li>7. Departure angle of completed unit.</li> </ol>	
<p><b>7. <u>Loading Sill Height</u></b></p> <p>Prefer minimum loading sill height at rear of body. Assuming frame height of 1015 mm (40"), prefer loading sill height to be no more than 838 mm (33") on unladen unit.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Unladen and laden loading sill height relative to truck frame height.</li> <li>2. Unladen and laden Loading sill height from grade.</li> </ol>	

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<p>8. <u>Packer Body Material</u></p> <p>Body should be built of abrasion resistant steel as follows:</p> <ul style="list-style-type: none"> <li>• Floor - Minimum 3/16" 100,000 psi</li> <li>• Sides - Front - Minimum 3/16"</li> <li>• Sides - Rear - Minimum 1/8" AR500</li> <li>• Hopper Floor - Minimum 1/4" AR500</li> <li>• Ejection Plate - Minimum 1/8" AR500</li> <li>• Packer Plate - Minimum 1/4" 100,000 psi</li> </ul> <p><u>State:</u></p> <p>Type and gauge of material used for:</p> <ol style="list-style-type: none"> <li>1. Body floor.</li> <li>2. Body sides front.</li> <li>3. Body sides rear.</li> <li>4. Hopper floor.</li> <li>5. Ejection plate.</li> <li>6. Packer plate.</li> </ol>	
<p>9. <u>Body Construction</u></p> <p>Body walls are to be designed and built to withstand the static pressure loads of the packing mechanism without deforming. All stiffeners, floor-wall joints, packer plate slide rail, etc. are to be 100% welded. Welds to be inspected at factory for penetration. Body to have adequate reinforcing in area of suspensions (i.e. side rails and cross members).</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Material, size and shape of side wall reinforcements.</li> <li>2. Number of side stiffeners and location.</li> <li>3. If continuous or stitch welded.</li> <li>4. What kind of structural reinforcement is provided in area of rear suspension.</li> </ol>	



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<p><b>10. <u>Side Access Door</u></b></p> <p>Side access door to be located at front to provide access in to packer body. Prefer access to be located on right side. A ladder or step is to be installed for operator access to the side door. Door must be a minimum of 1/8" thick.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>Where access door is to be located.</li> <li>How access door is secured.</li> <li>If ladder or step is provided.</li> <li>Side door material and thickness.</li> </ol>	
<p><b>11. <u>Hopper Locks</u></b></p> <p>Hopper is to be hydraulically locked with no requirement for the operator to access the rear.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>Compliance.</li> <li>What is offered.</li> </ol>	
<p><b>12. <u>Rear Steps</u></b></p> <p>One step on each side, maximum 50 cm. (20") above ground level. Grab handle on side of body as well as on rear of body, positioned such that the operator can hang on to both grab handles at the same time while standing on the rear step.</p> <p>Material to be "Gripstrut" or equivalent. The design, bracing and size of the step is to be approved by a City of Vancouver Equipment Services Engineer prior to fabrication.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>Compliance.</li> <li>Material of steps.</li> </ol>	

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<p><b>13. <u>Paint</u></b></p> <p>Body to be sand or grit blasted and epoxy primer coated. Top coat to be white acrylic enamel Dulux B8917A or equal, to match chassis.</p> <p><u>State:</u></p> <p>1. What is offered.</p>	
<p><b>14. <u>Attachment of Body to Chassis</u></b></p> <p>Contractor is responsible for permanently mounting body to chassis as well as all other necessary components to create a complete unit to the satisfaction of the City of Vancouver Equipment Engineer. Any relocation of fuel tanks, battery boxes, exhaust pipes, etc. to be contractor's responsibility. The front and midpoint of the body should be fastened to the truck frame using suitable spring type mounts.</p> <p><u>State:</u></p> <p>1. Where body will be installed and by whom.</p> <p>2. Any modification requirements to chassis component locations.</p> <p>3. If spring type mounts will be used for fastening.</p>	
<p><b>B. PACKING AND EJECTION</b></p> <p><b>1. <u>Packing Plate</u></b></p> <p>The pinch point opening should be not less than 150mm (6 in.). Prefer pinch point opening to be approximately 254 mm (10 in.).</p> <p>Packing plate to include a bolt-on, replaceable rubber extension which will wipe the hopper floor during cycling to contain any liquid ejections or breaking glass.</p> <p><u>State:</u></p> <p>1. Pinch point opening.</p> <p>2. Width of rubber extension.</p>	

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<p>2. <u>Packing Controls</u></p> <p>Left and right side mounted controls at rear of hopper. Packing cycle is to stop automatically before the packer plate hopper edge pinch point and require reactivation to complete the cycle. Packing cycle is to be stoppable and reversible at any time by the operator.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Type of controls.</li> <li>2. Number of manual controls and function of each control for one complete cycle.</li> <li>3. How the mechanism is stopped during packing cycle.</li> <li>4. How the mechanism is reversed, both in the first half and second half of cycle.</li> <li>5. If left and right controls are provided.</li> </ol>	
<p>3. <u>Loading Mechanism</u></p> <p>Hopper mechanism is to be capable of meeting set packing pressure and of crushing a hopper full of bulky materials without stalling.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Type of loading mechanism offered.</li> <li>2. Packing pressure.</li> </ol>	
<p>4. <u>Packing Cycle</u></p> <p>Packing must occur against the ejection plate. Plate is to automatically move forward in the body during compaction cycle via control of a relief valve.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Relief pressure of relief valve.</li> </ol>	

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<p>5. <u>Unloading Mechanism</u></p> <p>Dumping is to be accomplished by an ejection plate.</p> <p><u>State:</u></p> <p>1. Compliance.</p>	
<p>6. <u>Unloading Time</u></p> <p><u>State:</u></p> <p>1. Time required to eject the full load, in seconds.</p>	
<p>7. <u>Hopper Reloading Time</u></p> <p>Total hopper cycle time to be not more than 30 seconds. First stage of hopper cycle time to be not more than 10 seconds.</p> <p><u>State:</u></p> <p>1. Total time required for the mechanism to complete one full packing cycle with a loaded hopper, in seconds.</p> <p>2. Total time required for the first stage of packing cycle with a loaded hopper, in seconds.</p>	
<p>8. <u>Ejection Controls</u></p> <p>Separate hopper lift and ejection controls complete with a throttle switch to be located at the left front of the body. Complete with access door.</p> <p><u>State:</u></p> <p>1. What is offered.</p>	

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<p><b>C. HYDRAULIC SYSTEM</b></p> <p>1. <u>Power Take-Off System</u></p> <p>Heavy-duty, "Chelsea Hotshift" or City of Vancouver approved equivalent transmission mounted, power take-off (PTO) system capable of providing hydraulic power at any time.</p> <p>If hydraulic power is required while the truck is being moved, then the available engine RPM will determine the pump speed. If an automated throttle is installed, then PTO should not engage unless the park brake is on and the transmission is in neutral.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Make and model of power take-off system.</li> <li>2. How system is engaged.</li> <li>3. Whether PTO and pump run continuously.</li> <li>4. Engine RPM required for optimum loading cycle.</li> </ol>	
<p>2. <u>Hydraulic Cylinders</u></p> <p>High quality, rebuildable type hydraulic cylinders. Packing plate and slide mechanism cylinders must be interchangeable.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. If packing plate and slide mechanism cylinders are interchangeable.</li> <li>2. If cylinders are rebuildable.</li> <li>3. Bore, stroke and quantity of cylinders for: <ol style="list-style-type: none"> <li>d. Ejection</li> <li>e. Packer</li> <li>f. Tailgate</li> </ol> </li> </ol>	

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<p>3. <u>Hydraulic Pump</u></p> <p>Hydraulic pump must deliver the flow rate and pressure necessary to operate the packing mechanism satisfactorily. Relief valve located on the pressure line of the pump as close to the pump as possible and capable of passing full pump flow at rated pressure. Pump to be "Commercial Shearing" or City of Vancouver approved equivalent. Prefer gear type pump.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance</li> <li>2. Make, model and type of pump.</li> <li>3. Outlet and inlet port size.</li> <li>4. Operating pressure and flow rate.</li> <li>5. Recommended RPM.</li> </ol>	
<p>4. <u>Hydraulic Reservoir</u></p> <p>Hydraulic reservoir complete with shut-off valve capable of being locked in the open position. Glass oil level gauge visible from the ground. Reservoir to be pressurized or mounted above suction of pump. Prefer reservoir mounting location outside of body.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Location.</li> <li>3. Capacity.</li> <li>4. If pressurized.</li> </ol>	
<p>5. <u>Hydraulic Oil</u></p> <p>Compatibility with "Shell-Tellus S2 V68".</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> </ol>	

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	Bidders to indicate compliance or deviations with specifications below
<p><b>6. <u>Control Valves</u></b></p> <p>Control valves must be located in an easily accessible location. Control valves are not to be mounted under body of packer.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Mounting location.</li> <li>2. Make and model.</li> </ol>	
<p><b>7. <u>Filters</u></b></p> <p>Spin-on type filter complete with visual indicator. Filtration to 10 microns is preferred. Filter to be located to provide for minimum oil spill when changing.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Make and model.</li> <li>2. Level of filtration.</li> <li>3. Location.</li> </ol>	
<p><b>D. MISCELLANEOUS</b></p> <p><b>1. <u>LED Lights and Reflectors</u></b></p> <p>Two (2), tail, two (2) brake, two (2) signal, two (2) backup and all other necessary lights to conform with B.C. and Federal Motor Vehicle Regulations must be supplied and installed. Prefer LED type lights.</p> <p>One (1) rotating beacon mounted below the top of the body and above the hopper opening and to be guarded from brush and tree branches.</p> <p>Two (2) rear flood lights, high mounted to illuminate the working area around the hopper.</p> <p>Two (2) high mounted 6" (15cm) amber warning lights, alternately flashing.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. What is offered.</li> </ol>	

**SCHEDULE B - REQUIREMENTS  
DETAILED EQUIPMENT SPECIFICATIONS  
AND COMPLIANCE MATRIX**

<p style="text-align: center;"><b>Item 4</b></p> <p style="text-align: center;"><b>Rear Packer Body</b></p> <p style="text-align: center;"><b>For 8 Yard Rear Loading Refuse Trucks</b></p> <p style="text-align: center;"><b>Specifications</b></p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	<b>Make:</b>
	<b>Model No.</b>
	<b>Year:</b>
	<b>Bidders to indicate compliance or deviations with specifications below</b>
<p><b>2. <u>Shovel Holder</u></b></p> <p>One (1) shovel holder per side, mounted at the rear on hopper assembly.</p> <p><u>State:</u></p> <p>1. What is offered.</p>	
<p><b>3. <u>Noise Levels</u></b></p> <p>During the packing cycle, the noise level should not exceed 76 dbA at a distance of 7 metres (23 ft) from each of the four (4) faces of the completed truck or inside the truck cab with the windows closed.</p> <p><u>State:</u></p> <p>1. Sound levels, measured as stated above.</p>	
<p><b>4. <u>Automated Lube System</u></b></p> <p>Prefer Groeneveld automated lube system.</p> <p><u>State:</u></p> <p>1. Compliance. 2. Make and model of lube system. 3. Components serviced by automated lube system.</p>	
<p><b>E. SERVICE AND SUPPORT</b></p> <p><b>1. <u>Demonstration</u></b></p> <p>As per item 1, Section G.1.</p> <p><u>State:</u></p> <p>1. Compliance.</p>	



**SCHEDULE B - REQUIREMENTS  
DETAILED EQUIPMENT SPECIFICATIONS  
AND COMPLIANCE MATRIX**

<p style="text-align: center;"><b>Item 4</b></p> <p style="text-align: center;"><b>Rear Packer Body</b></p> <p style="text-align: center;"><b>For 8 Yard Rear Loading Refuse Trucks</b></p> <p style="text-align: center;"><b>Specifications</b></p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	<b>Make:</b>
	<b>Model No.</b>
	<b>Year:</b>
	<b>Bidders to indicate compliance or deviations with specifications below</b>
<p><b>2. <u>Delivery</u></b></p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>Number of days from date of order until bodies will be available for installation.</li> <li>Number of days needed for install from the day of receiving chassis.</li> </ol>	
<p><b>3. <u>Warranty</u></b></p> <p>Provide details concerning the full standard applicable vehicle body warranty. Additionally, parts of components, which may not be covered with standard warranty, shall be listed separately. Warranty shall commence when the unit is put into service.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>Warranty period.</li> <li>Warranty terms provided.</li> </ol>	
<p><b>4. <u>In-House Warranty Work</u></b></p> <p>The City prefers to have a warranty agreement with the body manufacturer whereby much of this work is completed by the City Equipment Services shop and for which the City is reimbursed.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>If manufacturer in-house warranty agreement is offered.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>Manufacturer's in-house warranty agreement document.</li> </ol>	

**SCHEDULE B - REQUIREMENTS  
DETAILED EQUIPMENT SPECIFICATIONS  
AND COMPLIANCE MATRIX**

<p style="text-align: center;"><b>Item 4</b></p> <p style="text-align: center;"><b>Rear Packer Body</b></p> <p style="text-align: center;"><b>For 8 Yard Rear Loading Refuse Trucks</b></p> <p style="text-align: center;"><b>Specifications</b></p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	<b>Make:</b>
	<b>Model No.</b>
	<b>Year:</b>
	<b>Bidders to indicate compliance or deviations with specifications below</b>
<p><b>5. <u>Training</u></b></p> <p>Training should be provided on the operation and maintenance of each body. Training must be performed by factory trained personnel with at least one (1) year of operation/repair/service experience with the unit being supplied. All training sessions are to take place at the delivery site and technician and operator training are to be carried out separately.</p> <p>Maintenance training to include:</p> <ol style="list-style-type: none"> <li>a. Four (4), four (4) hour on-machine sessions covering 2,000 hour preventative maintenance, diagnostics, control systems, electronics and fault detection.</li> <li>b. Two (2) technician training sessions to take place upon delivery of the equipment. One (1) technician training sessions to take place between hours of 7:00 am and 3:00 pm and another one (1) between the hours of 3:00 pm and 11:00 pm.</li> <li>c. Two (2) technician training sessions to take place two (2) months prior to the expiration of warranty. One (1) session to take place between the hours of 7:00 am and 3:00 pm and one (1) session to take place between the hours of 3:00 pm and 11:00 pm.</li> </ol> <p>Operator training to include:</p> <ol style="list-style-type: none"> <li>a. Two (2) four (4) hour sessions of training covering all information necessary safely and efficiently operate the unit.</li> <li>b. Training sessions to be scheduled during the hours of 7:00 am and 3:00 pm, on separate days.</li> </ol> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance with each item above.</li> </ol>	

**SCHEDULE B - REQUIREMENTS  
DETAILED EQUIPMENT SPECIFICATIONS  
AND COMPLIANCE MATRIX**

<p style="text-align: center;"><b>Item 4</b></p> <p style="text-align: center;"><b>Rear Packer Body</b></p> <p style="text-align: center;"><b>For 8 Yard Rear Loading Refuse Trucks</b></p> <p style="text-align: center;"><b>Specifications</b></p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	Make:
	Model No.
	Year:
	Bidders to indicate compliance or deviations with specifications below
<p><b>6. <u>Maintenance and Operating Documentation</u></b></p> <p>The following is to be provided by the successful bidder at the time of delivery:</p> <ol style="list-style-type: none"> <li>a. A complete check-off style preventative maintenance schedule as recommended by the manufacturer to ensure satisfactory service and long life for the intended application and environment.</li> <li>b. A detailed lubrication chart showing all lube points and greasing frequency for intended application and environment.</li> <li>c. Three (3) copies of parts manuals in both electronic and book form required.</li> <li>d. Three (3) copies of service and repair manuals in electronic and book form required.</li> <li>e. Electrical and hydraulic schematics.</li> <li>f. Three (3) sets of operator manuals.</li> <li>g. Listing of special service tools/diagnostic equipment and diagnostic software requirements.</li> <li>h. A list of general maintenance parts recommended, with part numbers.</li> <li>i. List of serial numbers of engine, transmission, differential and auxiliary engine (if applicable) for each unit as shown in attached appendix (PM Program and Maintenance Data Requirements Review).</li> </ol> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance with each item above.</li> </ol>	
<p><b>F. OPTIONS</b></p> <p><b>1. <u>Weigh Scales</u></b></p> <p>Electronic weigh scales with dash-mounted readout and alarm to notify driver when maximum allowable weight has been reached.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Make and model of scale.</li> <li>2. Describe read-out and alarm system.</li> </ol>	

**SCHEDULE B - REQUIREMENTS  
DETAILED EQUIPMENT SPECIFICATIONS  
AND COMPLIANCE MATRIX**

<p style="text-align: center;"><b>Item 4</b></p> <p style="text-align: center;"><b>Rear Packer Body</b></p> <p style="text-align: center;"><b>For 8 Yard Rear Loading Refuse Trucks</b></p> <p style="text-align: center;"><b>Specifications</b></p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	Make:
	Model No.
	Year:
	Bidders to indicate compliance or deviations with specifications below
<p>2. <u>Extended Warranty</u></p> <p><u>State:</u></p> <p>1. <u>What is offered.</u></p>	
<p>3. <u>Cart Tipper</u></p> <p>Fully adjustable, semi-automated, rear street side mounted, one (1) bin tipper system, complete with controls and all accessories. To be compatible with containers that have 35 to 95 US gallon capacity (132 to 360 litres). Containers are of a standard Universal, or North American, design where the container is lifted using an integrated upper lift sleeve and horizontal lock bar in the container face.</p> <p>Area where tipper is mounted may have higher sill height to accommodate tipper. Remaining rear opening must meet minimum loading sill height requirements. Minimum hopper capacity requirements must be maintained. It is recommended that the bidder submit alternative tipper design solutions as this option will be evaluated on design and ease of maintenance.</p> <p><u>State:</u></p> <ol style="list-style-type: none"> <li>1. Compliance.</li> <li>2. Special requirements for tipper system.</li> <li>3. Alternative cart tipping solutions/designs.</li> <li>4. If the cart tipping mechanism presents any issues regarding the load height or possible interference opportunities.</li> <li>5. Laden and unladen loading sill height of non-tipper opening.</li> <li>6. Width of tipper system.</li> <li>7. Ground clearance of system in transport situation.</li> </ol> <p><u>Provide:</u></p> <ol style="list-style-type: none"> <li>1. Literature and drawings/schematics of tipper system.</li> </ol>	

SCHEDULE B - REQUIREMENTS  
DETAILED EQUIPMENT SPECIFICATIONS  
AND COMPLIANCE MATRIX

<p style="text-align: center;">Item 4</p> <p style="text-align: center;">Rear Packer Body</p> <p style="text-align: center;">For 8 Yard Rear Loading Refuse Trucks</p> <p style="text-align: center;">Specifications</p> <p style="text-align: center;"><i>(Bidders: do not write in this section)</i></p>	Make:
	Model No.
	Year:
	Bidders to indicate compliance or deviations with specifications below
<p>4. <u>Rear Mounted Camera</u></p> <p><u>State:</u></p> <p>1. What is offered.</p>	
<p>5. <u>Any other Suggested Options</u></p> <p>Suggested options for intended application.</p> <p><u>State:</u></p> <p>1. What is offered.</p>	

## PM Program and Maintenance Data Requirements Review

### Review

Upon review of the City of Vancouver's fleet system and Preventative Maintenance Program, it has been noted that detailed information pertaining to each specific equipment / vehicle is not being entered into the fleet system. This also includes maintenance information such as parts, task and fluid lists.

### Best Practices

Best practice is to enter all vehicle / equipment data and maintenance information into the fleet system. This will minimize the downtime searching for equipment information when ordering parts and PM information before servicing the unit.

### Deficiencies

- Mounted or auxiliary equipment installed without unit numbers. Without a unit number or a reference of unit, equipment is neglected or goes by unnoticed.
- Lack of information on auxiliary or mounted equipment in procurement folders (i.e. specification sheets).
- Vehicle or equipment data and PM information are not getting entered in the fleet system.
- Incorrect or missing information on "Equipment Inventory" tab in fleet system program.
- Incorrect PM repair types assigned to equipment.
- Repetitive use of PM repair types for different equipment which require different repairs.
- Too many PM repair types (some repairs can be amalgamated into the PM task lists, i.e. coolant change / check and fire suppression spring / fall service).
- No maintenance schedules entered for some small equipment (numbered units).
- No task list entered in the fleet system for some equipment.
- No parts list entered in the fleet system for some equipment.

### Recommendations

The following recommendations should be considered in maintaining the fleet and assuring that all vehicles / equipment that are being serviced and repaired meet manufacturers' requirements and applicable safety regulations.

1. Assigning all auxiliary equipment with unit numbers and linking equipment to the main unit in the "Components" tab in "Equipment Inventory" or including the components in the PM task lists. In either case this information must be noted prior to the unit going into service. This will ensure the appropriate maintenance is performed at scheduled intervals.
2. Re-designation of some repetitious repair type codes such as PMN & PMO. This will eliminate the confusion between different repairs required for same PM designation. Some of the repetitious repair codes can be integrated with the task list at the recommended service.
3. All new equipment shall include service, parts and operator/maintenance manuals in either hard copy or electronic copy and if available, access to manufacturers online support and electronic diagnostic software. A record of receipt of this information is required.

4. New vehicle data entry.
  - The following information must be collected and entered into the fleet system prior to the unit going into service:
    - Year, make & model
    - Vehicle Identification Number (VIN)
    - Engine size
    - Fuel type
    - Tire sizes
    - Classification
    - Fluid requirements as per Original Equipment Manufacturers (OEM) recommendations
    - For units greater than 3 tones, serial numbers for individual components (engine, rear differentials, transmission etc.).
  - The additional information listed in Schedule A, B or C must be entered for specialty equipment.
  - Vehicle / equipment data can be collected by either Engineering Assistant / Operations Support staff or by Outfitting staff while unit is getting "outfitted";
5. Task list entry into the fleet system.
  - Task list to be entered by a designated Equipment Services, Service Center employee;
  - Task list information should be edited prior to entry into the fleet system by a Working Trade Foreman in the area the vehicle / equipment is assigned to.
6. Parts list entry into the fleet system.
  - Parts list to be entered by a designated Equipment Services, Service Center employee;
  - Original Equipment Manufacturer (OEM) part numbers can be cross-referenced to aftermarket filters / components, usually after unit is no longer under warranty.
7. Fluid list entry into the fleet system.
  - Fluid list to be entered by a designated Equipment Services, Service Center employee;
  - Original Equipment Manufacturer (OEM) fluid requirements shall be cross-referenced to current oil supplier (Shell) products, when applicable.
8. PM schedules for auxiliary or small equipment.
  - Units must be serviced / maintained at minimum once every 6 months.

#### PM Schedules - Revised

##### Small Equipment (Turf Equipment)

- B service - every 200 hours
- C service - every 400 hours
- D service - every 1500 hours

##### Small Equipment (Auxiliary)

- C service - every 6 months
- D service - every 1 year
- 

##### Light Duty (automobile to 1 ton truck)

- B service - every 6 months or 12,000 km, whichever comes first

- C service - every 1 year
- W service - every 6 months - brake check (if applicable)

#### Heavy Trucks (3 ton truck to Class 8 truck)

- A service - every 250 hours (Fuel filter change due to Bio Diesel use)
- B service - every 6 months
- C service - every 6 months , includes B service
- D service - every 1 year (CVIP) includes B service
- W service - every 6 months - brake check (if applicable)
- N service - every 1 year - NDT test for crane or aerial device

#### Heavy Equipment

- B service - every 250 hours
- C service - every 500 hours
- D service - every 1000 hours (or every 6 months, whichever comes first)
- E service - every 2000 hours (or every 1 year, whichever comes first)
- F service - every 6000 hours
- N service - every 1 year - NDT test for crane or aerial device

Coolant check and changes are to be added to PM task lists. Current use of extended life coolant requires change intervals of 5 years or as indicated from test strips.

Fire Suppression is to be added to PM task lists. (I.e. spring inspection added to PMD and fall inspection added to PME)

Change "Brake Check" to new unused designated letter. "W" used as an example.

#### Equipment Checklist

Schedule A - Heavy Equipment / Trucks

Schedule B - Mounted / Auxiliary Equipment

Schedule C - Trailer Equipment



## Schedule A - Heavy Equipment / Trucks

Engine	
Make	
Model	
Serial #	
Arrangement #	
Transmission	
Make	
Model	
Serial #	
2 <sup>nd</sup> Axle	
Make	
Model	
Serial #	
3rd Axle	
Make	
Model	
Serial #	
Aux Engine	
Make	
Model	
Serial #	
Arrangement #	
Fuel Type	
Parts	
Oil Filter(s)	
Air Filter (inner)	

Air Filter (outer)	
Fuel Filter (primary)	
Fuel Filter (secondary)	
Coolant Filter	
2 <sup>nd</sup> Axle Filter	
3 <sup>rd</sup> Axle Filter	
Power steering Filter	
Hydraulic Filter(s)	
Alternator	
Battery	
Starter	
Water Pump	
Drive Belt	

### Schedule B - Mounted / Auxiliary Equipment

(Truck Body, Garbage/Recycling Bodies, Aerial/Crane and Dump Body)

[illegible]

Schedule C - Trailer Equipment  
(Compressor, Generator, Pumps)

Engine	
Year	
Make	
Model	
Serial #	
Arrangement #	
Gen/Comp/Pump	
Year	
Make	
Model	
Serial #	
Parts	
Oil Filter(s)	
Air Filter (inner)	
Air Filter (outer)	
Fuel Filter (primary)	
Fuel Filter (secondary)	
Coolant Filter	
Hydraulic Filter(s)	
Alternator	
Battery	
Starter	
Water Pump	
Drive Belt	
Wheel Seals	

**SCHEDULE D - PRICING****2.0 Terms of Payment**

- 2.1 The City's standard payment terms are Net 30 days after receipt of an approved invoice, however discounts or more favourable terms which may be offered by the Proponent will be taken into consideration in the financial evaluation. Please indicate below if other than Net 30.

Payment Terms	
Alternate Terms	Describe Additional Discount

- 2.2 Describe in detail any other discount method offered.

**3.0 Product Price Schedule**

Refer to Schedule B - Requirements - Detailed Equipment Specifications and Compliance Matrix

Item	Qty	Description	Unit Price	Total
1.	4	Tandem Axle Cab and Chassis for 20-Yard Body as per the specifications in Schedule B.	\$	\$
2.	4	20-Yard Rear Loading Refuse Body as per the specifications in Schedule B.	\$	\$
3.	2	Single Axle Cab and Chassis for 8-Yard Body as per the specifications in Schedule B.	\$	\$
4.	2	8-Yard Rear Loading Refuse Body as per the specifications in Schedule B.	\$	\$
HST SHOULD NOT BE INCLUDED IN PRICE				\$
DELIVERY COSTS SHOULD BE INCLUDED IN PRICES				

## 4.0 Options

## Item 1

Item	Qty.	Description	Reference	Unit Price	Total Price
1	4	CNG Engine	Section H. Options	\$	\$
2	4	Alternative Fuelled Engine	Section H. Options	\$	\$
3	4	Fuel Tank	Section H. Options	\$	\$
4	4	Aluminum Wheels	Section H. Options	\$	\$
5	4	Suspension	Section H. Options	\$	\$
6	4	Disc Brakes	Section H. Options	\$	\$
7	4	Diesel Fuelled Cab Heater	Section H. Options	\$	\$
8	4	Maintenance and Diagnostic Equipment/Software	Section H. Options	\$	\$
9	4	Extended Cab	Section H. Options	\$	\$
10	4	Power Mirrors	Section H. Options	\$	\$
11	4	Any other suggested options	Section H. Options	\$	\$
		HST SHOULD NOT BE INCLUDED IN PRICE	TOTAL	\$ _____	\$ _____
		DELIVERY COSTS SHOULD BE INCLUDED IN PRICES			

## Item 2

Item	Qty.	Description	Reference	Unit Price	Total Price
1	4	Weigh Scales	Section F. Options	\$	\$
2	4	Extended Warranty	Section F. Options	\$	\$
3	4	Cart Tipper	Section F. Options	\$	\$
4	4	Rear Mounted Camera	Section F. Options	\$	\$
5	4	Any Other Suggested Options	Section F. Options	\$	\$
		HST SHOULD NOT BE INCLUDED IN PRICE	TOTAL	\$ _____	\$ _____
		DELIVERY COSTS SHOULD BE INCLUDED IN PRICES			

## Item 3

Item	Qty.	Description	Reference	Unit Price	Total Price
1	2	CNG Engine	Section H. Options	\$	\$
2	2	Alternative Fuelled Engine	Section H. Options	\$	\$
3	2	Fuel Tank	Section H. Options	\$	\$
4	2	Aluminum Wheels	Section H. Options	\$	\$
5	2	Suspension	Section H. Options	\$	\$
6	2	Diesel Fuelled Cab Heater	Section H. Options	\$	\$
7	2	Maintenance and Diagnostic Equipment/Software	Section H. Options	\$	\$
8	2	Extended Cab	Section H. Options	\$	\$
9	2	Power Mirrors	Section H. Options	\$	\$
10	2	Any other suggested options	Section H. Options	\$	\$
		HST SHOULD NOT BE INCLUDED IN PRICE	TOTAL	\$ _____	\$ _____
		DELIVERY COSTS SHOULD BE INCLUDED IN PRICES			



## Item 4

Item	Qty.	Description	Reference	Unit Price	Total Price
1	2	Weigh Scales	Section F. Options	\$	\$
2	2	Extended Warranty	Section F. Options	\$	\$
3	2	Cart Tipper	Section F. Options	\$	\$
4	2	Rear Mounted Camera	Section F. Options	\$	\$
5	2	Any Other Suggested Options	Section F. Options	\$	\$
		HST SHOULD NOT BE INCLUDED IN PRICE	TOTAL	\$ _____	\$ _____
		DELIVERY COSTS SHOULD BE INCLUDED IN PRICES			

SCHEDULE E  
INSURANCE CERTIFICATE

SCHEDULE F  
WORKSAFE BC CLEARANCE LETTER

SCHEDULE G

RFP

SAMPLE