# DETAILED SPECIFICATIONS

## 1.1. SCOPE

The Contractor must furnish and deliver the new, current model, Electric Trucks as specified, F.O.B., City of Chicago, Department of Fleet and Facility Management, in accordance with all the terms and conditions of this specification.

The Contractor must also furnish and deliver F.O.B, Contractor's shop, all necessary labor, materials, parts, accessories, assemblies, and/or components either in conjunction with non-warranty repair services or separately for various City-owned Vehicles and Equipment purchased under this Contract, in accordance with the terms and conditions of this specification.

All specified requirements are minimum requirements unless stated otherwise.

## 1.2. LICENSED NEW VEHICLE DEALER

When required by the Illinois Motor Vehicle Code, Section 625 ILCS 5/5-101, the Bidder must be a licensed vehicle dealer in accordance with the Illinois Motor Vehicle Code, Section 625 ILCS 5/5-101. **Bidder must provide a copy of current Registration for Authority to Deal in Vehicles issued by the Illinois Secretary of State with the bid.** Failure to obtain the required licenses may cause the bids to be rejected as non-responsive.

Bidder must be licensed by the Illinois Secretary of State to deal in the specific make of vehicle proposed. If, at the time of the submission of its bid, the Bidder is not registered to deal in the specific make of vehicle proposed, Bidder has until 30 days after the bid opening date to obtain the required documentation and submit it to the City.

If the proposed unit is manufactured in stages, bidder either must be registered to deal in the specific make of vehicle proposed (as the incomplete vehicle portion of the proposed vehicle) or must be registered to deal in the specific make manufactured by the final-stage manufacturer. In cases where the bidder is registered to deal in the specific make of vehicle proposed (as the incomplete vehicle portion of the proposed vehicle), the bidder or bidder's subcontractor must be registered to deal in the specific make manufactured by the final-stage manufacturer. If the bidder is registered to deal in the specific make manufactured by the final-stage manufacturer, bidder or bidder's subcontractor must be registered to deal in the specific make of vehicle proposed (as the incomplete vehicle portion of the proposed vehicle). **In all cases, bidders must provide documentation of current Registration for Authority to Deal in Vehicles both specific to the make of vehicle proposed** (as the incomplete vehicle portion of the proposed vehicle) **and specific to the make manufactured by the final-stage manufacturer;** the required, current registration may be issued to and furnished by the bidder and its subcontractor or by the bidder alone, but not to subcontractor(s) alone. Bidder must provide documentation of current registration both for the specific make of vehicle proposed and for the proposed specific make manufactured by the final-stage manufacturer. If, at the time of the submission of its bid, the Bidder is not registered to deal for both the specific make of vehicle proposed and for the proposed specific make manufactured by the final-stage manufacturer, Bidder has until 30 days after the bid opening date to obtain the required documentation.

Bidders not located in Illinois must provide with their bid all such registration / license documentation from their state in lieu of documentation from the Illinois Secretary of State.

Bidders will not be required to be licensed vehicle dealers and will not be required to furnish Registration for Authority to Deal in Vehicles where not required by the Illinois Motor Vehicle Code, Section 625 ILCS 5/5-101, when proposing only units that are exempt from the requirements of the Illinois Motor Vehicle Code for dealer licensing and certificates of title.

## 1.3. MANUFACTURER, MANUFACTURER'S AUTHORIZED DEALER / DISTRIBUTOR

The Contractor must be the manufacturer or an authorized dealer or distributor of the proposed vehicles or equipment, provide documentation of same with its bid or upon the request of the Chief Procurement Officer, and be capable of providing genuine parts, assemblies and/or accessories as supplied by the original equipment manufacturer (OEM). Further, the Contractor must be capable of furnishing original product warranty and manufacturer's related services such as product information, product recall notices, etc. Proof of ability to transfer product warranties to the City of Chicago is to be submitted with bid documents, if applicable.

For vehicles manufactured in stages, bidders must be either the manufacturer or an authorized dealer or distributor of the specific make of vehicle proposed (as the incomplete vehicle portion of the proposed vehicle) or must be either the final-stage manufacturer or an authorized dealer or distributor for the final-stage manufacturer. If the bidder is the manufacturer, authorized dealer or authorized distributor of the specific make of vehicle proposed, bidder or bidder's subcontractor must be either the final-stage manufacturer or an authorized dealer or distributor for the final-stage manufacturer. If the bidder is the final-stage manufacturer or an authorized dealer or distributor for the final-stage manufacturer, bidder or bidder's subcontractor must be either the manufacturer or an authorized dealer or distributor of the specific make of vehicle proposed.

## 1.4. SUBSTITUTIONS AND EXCEPTIONS

Reference to a specific manufacturer or trade name in this solicitation is intended to be descriptive (but not restrictive) and to indicate to prospective bidders those product(s) that have been deemed by the City to be satisfactory. The bidder must, if awarded the Contract, provide the product(s) specified, unless equivalent alternatives have been proposed as described below and found acceptable to the City.

A bidder that chooses to respond to this solicitation for bids with alternate product(s) from those specified in the solicitation, must identify such alternate items with its bid with a detailed explanation and documentation in support of how the alternate items proposed by the bidder can perform as well as or better than those specified. Unless an alternate item is so identified, it is understood that the Bidder proposes, and will be required to provide, the specific item described in the specifications. No substitution of specified items will be allowed thereafter except as otherwise provided for in the specifications.

Documentation in support of alternate items includes:

Complete data substantiating compliance of proposed alternate items with requirements stated in the solicitation, including:

1. Product identification, including manufacturer's name and address
    a. Manufacturer's literature identifying:
    b. Product description
        i. Reference standards
        ii. Performance and test data
        iii. Samples, as applicable
    c. Name and address of similar projects on which the product has been used, and date of usage.
2. Itemized comparison of the proposed alternate item with product or service specified; listing significant variations.

A bidder warrants and represents that in making a formal request for substitution with alternate items that:

1. The proposed alternate item is equivalent to or superior in all respects to the product specified,
2. The same warranties and guarantees will be provided for the alternate item as for the product specified.

The Chief Procurement Officer may, in his or her sole discretion, accept an alternate item for a specified item, provided the alternate item so bid is, in the Chief Procurement Officer's sole opinion, the equivalent of the item specified in the solicitation. An alternate item that the Chief Procurement Officer determines not to be equivalent to the specified item shall render the bid non-responsive and the Chief Procurement Officer will reject the bid.

If a bidder takes exception to other provisions of the specification, the Chief Procurement Officer may reject the bid as non-responsive in the event that the Chief Procurement, in his or her sole opinion, determines such exception(s) to be material exception(s).

## 1.5. STANDARD PRODUCT

Experimental Electric Trucks are acceptable. Any Electric Trucks which are not produced by regular production methods and/or are not offered for sale to the fleets through accepted industry trade channels at the time of the offering of this bid, will be considered experimental.

Hybrids and/or combinations of two (2) or more standard production units are also acceptable. The Contractor must furnish evidence upon request that any Electric Trucks to be furnished has been fully engineered to the satisfaction of the Chief Procurement Officer.

## 1.6. GENERAL CONSTRUCTION

The Electric Trucks furnished will be the manufacturer's latest models. Appurtenance and/or accessories not herein mentioned, but necessary to furnish a complete unit ready for use upon delivery will be included. The Electric Trucks will conform to the best practices known to the trade in strength, quality of material and workmanship and be subject to this specification in full. The specification will be construed as minimum. Should the manufacturer's current published data or standard package exceed this, it will be considered minimum and will be furnished. The City reserves the right to waive or make exceptions to this requirement if it be to the City's best interest.

## 1.7. EQUIPMENT, COMPONENT AND DIMENSIONAL DATA

Under this agreement, the Contractor is required to assemble and furnish to the Department of Fleet and Facility Management a detailed list of information (approximately 250 data items) related to the specified Electric Trucks, the component parts and mounted equipment, for each year, model and configuration delivered, no later than fourteen calendar days prior to scheduled delivery date. Such information must be furnished by completing a “Tech. Spec. Form”, a copy of which may be obtained from the Department of Fleet and Facility Management, Technical Services Division; (312) 744-4300.

In addition, the Contractor is required to assemble and furnish to the Department of Fleet and Facility Management a detailed list of unit-specific (approximately 40 data items) related to the specified Electric Trucks, for each unit delivered, no later than two calendar days prior to scheduled delivery date. Such information must be furnished by completing a “Unit Items Form”, a copy of which may be obtained from the Department of Fleet and Facility Management, Technical Services Division; (312) 744-4300.

Any and all costs involved in providing the requested information must be anticipated by the Contractor, and incorporated into the bid pricing. The Contractor will not be entitled to any additional compensation from the City as a result of this provision.

## 1.8. WARRANTY

The specified Electric Trucks and all mounted/furnished equipment must be warranted against defective design, material or workmanship for the minimum periods listed in the Bid Data Pages Warranty Section or one year, whichever is greater.

Any repairs made by the Contractor during the respective warranty period must in turn be warranted for a period of three (3) months from the date of their completion, or until the end of the original coverage period, whichever is later.

Chronic defects in design, material and workmanship as warranted herein must be rectified in all units furnished under these specifications. Chronic defects, for purposes of this warranty, must be defined as defects of a similar nature which occur in more than three (3) [or ten percent (10%) of the quantity, whichever is greater] of the units furnished under these specifications.

The City may avail itself of the manufacturer's standard (or "no cost" incentive) warranty, or any provision thereof, in lieu of the warranty outlined herein, if deemed to be in the best interests of the City.

The Contractor must have factory warranty authorization, factory trained mechanics and adequate shop facilities, tools, parts and service facilities in the Chicago Metropolitan area (as determined by the City) to service the chassis in his own shop during the warranty period.

In addition, the manufacturer(s) or installer(s) of the mounted equipment and/or accessories furnished by the Contractor under this specification must employ sufficient trained personnel and maintain adequate shop facilities, service facilities and parts inventories within the Chicago Metropolitan area to service/repair the subject equipment/accessories throughout their warranty period.

For repair parts and services, the Contractor must warrant for a period of 90 days from the date of final acceptance (i.e. the date the unit is returned to the City) all parts and services, that it will, at its own expense and without any cost to the City of Chicago, replace all defective parts and make any repairs that may be required or made necessary by reason of defective design, material or workmanship, or by reason of non-compliance with these specifications. The Contractor must provide copies of standard warranties that will be used in the regular course of business for service repairs. Warranties will not commence until the vehicle is accepted by the

Department of Fleet and Facility Management and placed into service. The Contractor will be responsible for the warranty of all parts and labor, regardless of whether the parts/and/or labor was provided by subcontractors.

The Contractor must furnish a warranty for the items and services provided under this Contract in accordance with the standard warranty regularly supplied. Exceptions to this warranty will be damage or loss due to theft, vandalism, or accidental occurrences outside the Contractor=s control.

In the event that any such repair fails to endure this minimum period, the City may elect to repair the unit in-house on an emergency basis, and/or the Contractor will replace the subject part(s) and/or furnish the necessary labor to make good the subject repair at no additional cost to the City.

When only labor is furnished by the Contractor to complete a work order, the Contractor will warranty the work for a minimum period of 90 days.

Also, in the event that the repair(s) fail to endure this minimum warranty period, the Contractor will incur all costs in transporting the unit back to the maintenance location, and returning it to the City after the warranty repair is completed.

## 1.9. QUALITY CONTROL

The Contractor must utilize industry-recognized standards and procedures to assure that a satisfactory level of quality control are maintained in all stages of the manufacturing, assembly and installation process. Employees of the Department of Procurement Services and the DEPARTMENT OF FLEET AND FACILITY MANAGEMENT or agents acting on behalf of the City, accompanied by such City personnel will have open access to all areas/ facilities in order to ensure that proper quality control standards are being met.

## 1.10. DESIGN AND CONSTRUCTION PRACTICES

The Electric Trucks and any/all assemblies, subassemblies, component parts, etc., must be designed with a factor of safety that is equal to or greater than that which is considered standard and acceptable for this class of equipment. Where applicable, the vehicles or equipment must conform to the standards established by Military Specifications, the Society of Automotive Engineers, Federal Aviation Administration or the Federal Motor Safety Standards. Assemblies, sub-assemblies, component parts, etc., must be standard and interchangeable throughout the entire quantity of units purchased under this document. Assemblies, sub-assemblies, component parts, etc., that are obsolete or approaching obsolescence due to material, design changes or improvements will not be acceptable, and will be subject to replacement with current assemblies, sub-assemblies, component parts, etc.

The Electric Trucks furnished by the Contractor under this Specification must also comply with all applicable Federal OSHA, State of Illinois and local laws/acts, ordinances in effect at the time of delivery.

The Electric Trucks must be designed to function reliably and efficiently in sustained operation, under conditions which are typical for the intended application.

The Electric Trucks must be designed to permit accessibility to all major lubrication and maintenance points with minimal disturbance of other components or assemblies.

Where “heavy-duty” items are required by this Specification, the term will be understood to define items which exceed the quality, capacity, durability and/or quantity of those items normally supplied with a standard production unit.

No dealer advertising labels may be affixed to a unit when delivered to the City.

## 1.11. SPECIAL REQUIREMENTS FOR AUXILIARY ELECTRICAL EQUIPMENT

When any auxiliary electrical items are required by the specifications, a fuse or junction box suitable for connection of the auxiliary equipment required must be installed in a location subject to approval by the Department of Fleet and Facility Management, Automotive Engineering Section. Junction box must include fused circuits sufficient to accommodate the required auxiliary equipment. Fuses connected to constant power must be connected directly to the chassis battery with a continuous run of 8-gauge marine-rated wire. An appropriately sized waterproof circuit breaker with test button and swing-out reset switch must be installed in the main lead within 12” of the battery.

Each relay and fuse added to power auxiliary equipment must be clearly and permanently labeled with the function it controls. Each fuse must be sized as necessary to match circuit demands and component-manufacturer recommendations; each fuse must be rated to effectively protect its circuit.

All auxiliary equipment wiring, including wiring in the engine compartment and in the passenger compartment, must be enclosed in suitably sized wire loom. All wiring must be continuous lengths with soldered and heat-shrink-wrapped connections and must include service loops of slack wire, neatly stowed, at each end, in lengths sufficient to permit removal and service of all electronic equipment without cutting or disconnecting wires.
Any opening cut in metal must be appropriately sized and must be fitted with a grommet to protect wiring and filled with silicon to seal out weather and noise.

In all cases, installation of auxiliary equipment must be done in a professional manner, following the requirements and guidelines of all involved auxiliary-equipment manufacturers and, where more restrictive, applicable industry (NEMA and SAE) standards and best practices.

Installations must be consistent from vehicle to vehicle furnished by the Contractor under this Specification, including such details as operation, wire colors and wire routing. Readable, electronically printed wiring diagrams showing the consistent installation methods must be furnished at time of delivery for each model year and equipment configuration furnished by the Contractor under this Specification.

Wiring must not pass within 3" of exhaust system components. Wiring installed from 3" to 6" of exhaust system components must be heat shielded.

References to LED light-module part numbers as examples is intended to demonstrate the configuration, functionality and light output, including off-axis light output, required by this specification.

## 1.12. PARTS AND REPAIR SERVICES

1.12.1. The Contractor will furnish and deliver F.O.B, Contractor's shop, all necessary labor, materials, parts, accessories, assemblies, and/or components either in conjunction with non-warranty repair services or separately for various City-owned Vehicles and Equipment purchased under this Contract, in accordance with the terms and conditions of this specification.

## 1.13. REPAIR AND SERVICE CENTER QUALIFICATIONS

1.13.1. The Contractor or an authorized subcontractor must, at the time of bid submission, provide resources capable of servicing City owned equipment specifically listed within these Proposal Pages, as follows:

1.13.2. The Contractor or authorized subcontractor must operate an established automotive, truck or equipment service center located within thirty-five road miles of Fleet and Facility Management's facility at 1685 N. Throop Street, Chicago, IL 60642.

1.13.3. The Contractor or an authorized subcontractor must maintain during the term of this contract and any extension of it an adequate staff of competent personnel that are fully equipped, licensed as appropriate, available as needed, qualified and assigned to perform the contracted services.

1.13.4. All repairs performed under this contract must be performed by qualified technicians thoroughly trained and certified by an appropriate nationally recognized institution or organization. Repair services will be performed in a workmanlike manner; using industry accepted practices and established manufacturer procedures.

1.13.5. Contractor or an authorized subcontractor must possess the ability to transfer product warranties to the City of Chicago, if applicable.

1.13.6. The City of Chicago reserves the right to inspect any facility proposed to ensure that it meets the stated requirements. Certifications and other documents verifying compliance with requirements must be submitted with the bid. The Contractor's compliance with these requirements will be determined by the Chief Procurement Officer, whose decision will be binding.

## 1.14. SERVICE AND REPAIRS OF MAJOR COMPONENTS AND SUB-SYSTEMS

1.14.1. The City reserves the right to direct service and/or repair work to the Contractor for any major component or sub-system of a vehicle/unit (engine, transmission, hydraulics, etc.) for which the Contractor or subcontractor is qualified to service, regardless of the make of the vehicle/unit. Such service/repairs are to be billed at the contracted hourly rate.

## 1.15. INVENTORY/LEAD TIME

1.15.1. The Contractor or an Authorized Subcontractor must maintain an inventory of sufficient diversity and quantity as to ensure the delivery of any parts which are required for repairs of vehicles or equipment within seventy-two hours after receipt of a City department's order. In lieu of the inventory, the Contractor or an Authorized Subcontractor must be able to arrange such prompt delivery.

1.15.2. In addition, any vehicles delivered to the Contractor or an Authorized Subcontractor for repair services must be returned to the City within three (3) business days, unless otherwise authorized by the Commissioner of the Department of Fleet and Facility Management or his authorized representative.

1.15.3. Repeated failures of the Contractor or an Authorized Subcontractor to meet the stated delivery requirements may be used by the City as grounds for the termination of this contract, and may further affect the Contractor's eligibility for future contract awards.

1.15.4. The Contractor's compliance with these requirements will be determined by the Chief Procurement Officer, whose decision will be binding.

## 1.16. TURN AROUND TIME

1.16.1. Any vehicle which has been delivered to the Contractor or an Authorized Subcontractor for repairs will be returned within three business days, unless otherwise authorized by the Commissioner of the Department of Fleet and Facility Management or an authorized representative.

1.16.2. The Contractor will expedite repairs, to the equipment as required by the Department of Fleet and Facility Management in order to meet any reasonable time frames set forth by the Department of Fleet and Facility Management. If there are delays due to a lack of parts, insufficient manpower or other circumstances, then the Contractor will notify the Department of Fleet and Facility Management immediately of the delay.

## 1.17. IRREPARABLE EQUIPMENT

1.17.1. In the event that the vehicle is irreparable, the Contractor will provide a written explanation of the problems and the Department of Fleet and Facility Management will take necessary action with regard to the disposition of the vehicle.

## 1.18. WORK ITEMS

1.18.1. Charges for services will be performed by the Contractor or an Authorized Subcontractor only after receipt of an estimate approved by the Commissioner of the Department of Fleet and Facility Management or the Commissioner's authorized representative.

1.18.2. Estimates for parts and labor must be based on industry-recognized third party data, available from tractor-trailer.net, mitchellsupport.com, or another recognized third party estimating process, for types of equipment and repairs where such data are available.

1.18.3. In such cases the Contractor will submit to the Commissioner of the Department of Fleet and Facility Management or the Commissioner's authorized representative an estimate upon receipt of the vehicle as identified in Repair proposals. The Commissioner of the Department of Fleet and Facility Management or the Commissioner's authorized representative will either approve or disapprove of the estimate.

1.18.4. Where the estimate is approved, the Contractor or an Authorized Subcontractor will proceed with and complete the work and will invoice the Department of Fleet and Facility Management either in the amount of the original estimate, or the actual cost of parts and labor provided to complete the repair, whichever amount is lowest.

1.18.5. If the estimate is disapproved, the Commissioner of the Department of Fleet and Facility Management or the Commissioner's authorized representative may request a revised estimate from the Contractor, and/or have

the vehicle removed from the Contractor's or authorized subcontractor's shop. The City reserves the right to furnish Contractor or Authorized Subcontractor with the parts necessary for the required repairs. If the parts are provided by the City, the Contractor agrees to install any City-furnished parts at the labor rates provided in the contract, furnish the warranty required by the contract for the labor performed, and adjust the estimate for the repairs accordingly.

1.18.6. Where it is found by the Chief Procurement Officer that the work performed is not consistent with industry standard and market prices, the City reserves the right to order such repair work to be performed by other Contractors. The City maintains the right to remove from the premises of the Contractor or Authorized Subcontractor any vehicle delivered for repair estimates.

## 1.19. REPAIR ESTIMATE

1.19.1. Upon receipt of Vendor Estimate Form (VEF) from the Department of Fleet and Facility Management's Commissioner or authorized representative, the Contractor or Authorized Subcontractor must inspect the vehicle and complete and return the VEF. The VEF must include, but is not limited to the following information:

1. Purchase order (Contract) number
2. Name and phone number of City agent
3. City unit number of Vehicle
4. Detailed description of the problem and necessary repair needed
5. Parts cost breakdown
6. Labor cost breakdown
7. Estimated time required to complete repairs, etc
8. Anticipated completion date
9. Name and signature of the Contractor or Authorized Subcontractor's employees performing the estimate

1.19.2. The Contractor, upon receipt of an approved VEF and a purchase order blanket release from the Department of Fleet and Facility Management, can proceed with repairs.

1.19.3. The City reserves the right to add or delete various models and types of equipment during the term of the contract.

## 1.20. DIAGNOSTIC TESTING FEES

1.20.1. Contractor or Authorized Subcontractor must request authorization from the Department of Fleet and Facility Management to proceed with diagnostic testing. Upon approval, all diagnostic tests must be charged at the contracted labor rate, with no additional charges for the use of diagnostic equipment.

## 1.21. ACCEPTANCE OF PARTS AND REPAIRED EQUIPMENT

1.21.1. It is understood and agreed by the parties to this contract that any acceptance or inspection by the City of any part or repaired equipment provided pursuant to the terms and conditions of this contract does not constitute a waiver of these terms and conditions, and in no way relieves the Contractor of its obligation to comply with the terms and conditions of this contract, including any standard of performance and warranty requirement stated herein.

## 1.22. DELIVERY OF PARTS AND PERFORMANCE OF SERVICES

Deliveries of Parts required for repairs and performance of services will be made within seventy-two (72) hours of request, F.O.B., Contractor's shop, regardless of the purchase order release amount.

## 1.23. PRIORITY SERVICE

1.23.1. The Contractor and its subcontractors understand that the vehicles covered under this specification are critical to the City's Fleet operations. Therefore, the Contractor will give priority service to the City and proceed with authorized work in an expeditious manner to ensure that all work is completed within the agreed upon schedule and to ensure that vehicle downtime is kept to a minimum.

1.23.2. The City requires the Contractor to return calls for service within 24 hours.

## 1.24. REPORTING REQUIREMENTS

1.24.1. The Contractor must provide records of all vehicles serviced.

1.24.2. The Contractor must generate a quarterly report of all transactions with the City of Chicago, Department of Fleet and Facility Management. The report must be listed by City unit number, invoice numbers, purchase order number, date of service, nature of service performed, hours of service performed, detailed description of parts ordered with the repair services (catalog and part number).

1.24.3. Copies of invoices for parts may be requested at any time and must be provided within three (3) Business Days of the request. A faxed copy will initially be accepted, however if deemed necessary; the original must be produced for verification purposes.

## 1.25. DAMAGE OR LOSS OF EQUIPMENT

1.25.1. Contractor must assume full responsibility for damage to City owned vehicles, parts, equipment or accessories by accident or any loss by fire or theft of these vehicles while they are in his custody.

1.25.2. The Contractor must provide protection for all uncompleted work under this contract until the work has been completed and accepted by the Department of Fleet and Facility Management.

1.25.3. The Contractor will be responsible for and must repair any damaged vehicles where such work is directly due to services performed under this contract, or where such damage is the result of the negligence, or carelessness on the part of the contractor/employees. The contractor must first immediately notify the Commissioner of the Department of Fleet and Facility Management or his authorized representative regarding the nature and extent of the damages prior to making any such necessary repairs.

## 1.26. PUBLIC CONVENIENCE

All work performed under this Contract will be so conducted as to cause a minimum of dust, noise and inconvenience to the normal activities of the facility where the work is performed. The Contractor is responsible for conducting all work in such a manner as to minimize debris left in the public way and shall provide clean-up as required by the Commissioner. Whenever the Commissioner determines any type of operation constitutes a nuisance, the Contractor will immediately proceed to conduct it operations in an approved manner.

The Commissioner may at any time require additional provisions if such are deemed necessary for public safety or convenience.

## 1.27. CLEAN UP

The Contractor must, during the progress of the work, remove and dispose of all materials and the resultant dirt and debris on a daily basis and keep the work site(s) and adjacent premises in a clean condition satisfactory to the City. Upon completion of work, the Contractor must remove all materials, tools and machinery and restore the site to the same general condition that existed prior to the commencement of its operation.

## 1.28. PROTECTION OF WORK, DAMAGES AND REPAIRS

The Contractor must provide protection for all uncompleted work under this contract until the work has been completed and accepted by the City.

The Contractor will be responsible for and shall repair and pay for damages to new and existing structures, material, equipment, plant, stock and apparatus during the course of the work, where such damage is directly due to work under this contract, or where such damage is the result of the negligence, or carelessness on the part of the Contractor or of its employees, or on the part of the Contractors subcontractor or its employees. However, the Contractor must first immediately notify the Commissioner, or his authorized representative, and report the nature and extent of damages prior to making any such necessary repairs.

## 1.29. QUALITY OF WORKMANSHIP AND MATERIALS

Standards of Performance

The Contract will perform or cause to be performed, all Work required of it under the terms and conditions of this Contract with that degree of skill care and diligence normally exercised by experienced Contractors performing work in projects of a scope and magnitude comparable to this project. The Contractor will use reasonable efforts to assure timely and satisfactory completion of the Work. The Contractor will at all times, act in the best interest

of the City. The contractor will perform or cause to be performed, all Work in accordance with the terms and conditions of this Contract and to the reasonable satisfaction of the City.

Correction of Work
The Contractor when directed in writing by the Commissioner, will promptly remove, re-perform or correct all Work identified to be defective or as failing to conform to the standards set forth above or in the Contract Documents, whether observed before or after completion of the Contractor's Work and whether or not installed or completed. The Contractor will bear all costs of correcting such defective or nonconforming Work, including costs associated with removing any nonconforming Work and installing corrected Work and compensation for any additional services made necessary thereby.

Failure to Proceed with Directed Work
In case of failure on the part of the Contractor to execute Work ordered, in writing, by the Commissioner, the Commissioner may, at the expiration of a period of forty-eight (48) hours, request the Chief Procurement Officer to give notice, in writing, to the Contractor and proceed to execute such Work as may be deemed necessary and the cost thereof, will be deducted from compensation due or which may become due the Contractor under this Contract.

## 1.30. WORK PERFORMED AT CITY FACILITY

1. Employees
   The Contractor's personnel will exercise safe and sound business practices with the skill, care, and diligence normally shown by professional technicians employed in the type of work required under this contract.

2. Character of Workers
   The Contractor will employ only competent and efficient employees, and whenever, in the opinion of the Commissioner, any employee is careless, incompetent, obstructs the progress of the work, acts contrary to instructions or conducts themselves improperly, the Contractor will, upon the request of the Commissioner, remove the employee from the work and will not employ such employee again for the work under this Contract, except with the written consent of the Commissioner. The Contractor will not permit any person to enter any part of a City facility or property while under the influence of intoxicating liquors or controlled substances. The Contractor will not permit obnoxious behavior, or possession or consumption of alcoholic beverages or drugs anywhere on the site of any work to be performed under this Contract.

   The Commissioner has authority to request the Contractor to remove any worker who proves to be incompetent or negligent in his/her duties.

3. Uniforms
   The Contractor's employees or subcontractors are required to wear suitable uniforms, during the time they are on duty on any City property.

   The Contractor's employees or subcontractors must wear an identification badge at all times while on duty on any City property.

   The Contractor's employees must have proper identification on their person before they will be allowed on any City property.

4. Use of City Facilities
   The Contractor must inform the Commissioner of the Department of Fleet and Facility Management or authorized representative of the use of City facilities, such as telephones.

   Smoking is prohibited in all City of Chicago facilities.

   The Contractor will require that all employees refrain from disturbing papers on desks, opening desk drawers or cabinets.

   While on City premises, the Contractor will not store any equipment, tools or materials without prior written authorization from the Commissioner. The City will not be responsible for or liable to pay the

Contractor for any loss of equipment, tools or materials stored in unsecured areas without proper authorization.

Use of City telephones, equipment or other apparatus at City facilities is prohibited without the prior approval of the Commissioner of the Department of Fleet and Facility Management. While on City premises, the Contractor must not store any equipment, tools or materials without prior written authorization from the Commissioner. The City will not be responsible for or liable to pay the Contractor for any loss of equipment, tools or materials stored in unsecured areas.

## 1.31. WORK IN PROGRESS

Work in progress at the termination date of the contract will be completed by the Contractor in the most expedient method available. In no event will the Contractor vacate his/her obligations under this agreement until all work issued to him/her prior to the expiration of the Contract has been completed and accepted by the Department of Water Management.

## 1.32. MANUALS, CERTIFICATES, APPLICATIONS, ETC.

All manuals must be provided in English. One (1) operator's manual, hard copy, and one (1) set of maintenance manuals must be provided with each vehicle purchased. One (1) operator's manual, hard copy, for each installed aftermarket accessory must also be provided with each vehicle purchased.

For purposes of these specifications, a set of maintenance manuals must include one (1) complete parts manual, one (1) technical service manual, one (1) complete wiring schematic (if not included with in the service manual) and service and parts manuals for all auxiliary equipment

Technical Service Bulletins (TSBs) must be forwarded directly to the Department of Fleet and Facility Management as they are issued.

A minimum of forty-eight (48) hours prior to delivery, the Contractor must furnish the Department of Fleet and Facility Management, attention Kevin Campbell, 1685 N. Throop Street, Chicago, IL 60642 with the following items for each unit being delivered: Certificate of Origin and line-set sheet; Odometer Statement (in addition to odometer disclosure on Certificate of Origin), and applicable warranty certificate(s).

Completed Illinois Department of Revenue Form #ST556 (for Illinois suppliers) or RUT-25 (for out-of-state suppliers) must be provided a minimum of 48 hours prior to delivery. Forms can be obtained from the Illinois Department of Revenue by calling (800) 356-6302.

Completed Application for Vehicle Title and Registration Form #VSD-190 must be provided a minimum of 48 hours prior to delivery. Forms can be obtained from the Illinois Secretary of State by calling (217) 782-7132.

**NOTE:** The above listed documents must indicate the "CITY of CHICAGO" as the owner of the vehicle. The assigned unit number and the respective department name must also be indicated on all documents, in the appropriate places.

No vehicle / equipment deliveries will be accepted unless the Contractor has fulfilled all of the above listed requirements.

## 1.33. TRAINING/TECHNICAL ASSISTANCE

The Contractor must furnish professionally conducted training sessions to the extent described below. This training will be provided by the Contractor as a portion of the Contract, at no additional cost to the City.

For each unit delivered, the Contractor must train City personnel in the proper, safe operation of the unit and any auxiliary items for a minimum period of four hours. This training will be conducted by knowledgeable, experienced personnel, at the facility of the using department.

In addition, for each unit delivered, the Contractor must train City trades technicians in the most efficient methods of diagnosing, troubleshooting, maintaining and repairing the unit and any auxiliary items for a minimum period of eight hours. This training will be conducted by knowledgeable, experienced personnel, at the facility of Department of Fleet and Facility Management.

## 1.34. MEETINGS AND INSPECTIONS

A Pre-Construction meeting must be held at the facility of the Department of Fleet and Facility Management prior to construction of any units. This meeting must be attended by the Contractor's technical representatives to discuss construction techniques and particular component placement. The Contractor representatives must have the full authority to provide binding decisions on the Contractor's behalf.

A drivetrain demonstration and testing meeting must be held at the manufacturing facility prior to the first chassis from each Group being subjected to upfitting or the installation of any body. Two representatives from the using department and two representatives from the Department of Fleet and Facility Management will attend this inspection.

A pre-paint inspection must be held at the manufacturing facility prior to the first unit from each sub-order being completed and shipped. Two representatives from the using department and two representatives from the Department of Fleet and Facility Management will attend this inspection.

A meeting to demonstrate and test the complete unit and to conduct the operator training required herein must be held at an appropriate City of Chicago facility subsequent to the delivery of the first chassis from each Group. This meeting must be attended by the Contractor's technical representatives and training staff.

The expense of appropriate travel, lodging and meals for all meetings and inspections not held within the City of Chicago must be borne by the Contractor. For purposes of travel expenses, travel to and from the inspections by department personnel must be by automobile up to a maximum of 200 road miles from the Fleet and Facility Management Maintenance Facility at 1685 N. Throop Street, Chicago, Illinois. If travel is required in excess of 200 road miles, the Contractor must provide City employees with travel via commercial airlines with a 14 day notice of arrangements being provided prior to the inspection date. Travel arrangements must be made in accordance with City of Chicago Travel Guidelines, as shown in Exhibit 1, attached.

## 1.35. LITERATURE / DATA

The Contractor must submit one copy of each of the following informational items with the bid, or upon the request of the Chief Procurement Officer or a designee:

1. Detailed two-view drawing of the proposed cab/chassis, listing dimensions including BBC, WB, CA, OAH, etc.;
2. Manufacturer's literature for all pertinent drivetrain components, i.e., motor, battery and motor controller;
3. Detailed multiple-view drawings of the proposed body and auxiliary unit;
4. Detailed description of supplier team's plan for vehicle-electrical-system safety and mitigation of risk of contact with high-voltage electrical supply in the case of component failure, system failure, accident, abuse or misuse. (The plan should include redundant on-vehicle safety systems, the production of training materials to be provided to operators and maintenance personnel during the required training sessions, the production and widespread distribution of a first-responder guide and vehicle demonstrations for Chicago Fire Department academy personnel.)

## 1.36. BASE UNIT OVERALL DESIGN

1.36.1. All units must be Electric Trucks, consisting of two-wheel-drive, single- and dual-axle, electric-powered regular-cab/chassis, having various GVWRs, complete with various equipment bodies and all related componentry.

1.36.2. Each unit ordered under Groups A through J must meet the following Detailed Specifications except as augmented or superseded by requirements specific to the Group under which the unit is ordered.

1.36.3. Starting gradeability must be 13% minimum.

1.36.4. Maximum speed of vehicle on level pavement must be 40 MPH at minimum, unloaded and at minimum curb weight; vehicle must attain 40 MPH in fewer than thirty seconds from a complete stop. Maximum speed of vehicle on level pavement must be 30 MPH at minimum, fully loaded to GVWR; vehicle must attain 30 MPH in fewer than thirty seconds from a complete stop.

1.36.5. The overall height of the completed unit, including cab, body and any/all attachments, must be 12'6" maximum.

1.36.6. The completed unit must be designed and constructed for reliable year-round use in the range of weather conditions encountered in Chicago, including temperature extremes and precipitation events, and for use on city streets and roads for daily shifts of up to ten hours.

1.36.7. All proposed units must be fully equipped and authorized for use on all typical public streets in the City of Chicago and surrounding municipalities. (Limited top speed may prevent practical usage on certain roadways with speed limits of greater than 40 MPH.) Vehicles classified in FMVSS as Low Speed Vehicles or Non Road Vehicles are not acceptable.

## 1.37. FRAME

1.37.1. Frame must be steel or aluminum and must be heavy duty, designed for severe service at the specified GVWR.

1.37.2. Wheelbase must be of sufficient length and sufficient clear frame must be provided aft of the cab to provide for the mounting of various equipment bodies and related componentry as specified herein.

1.37.3. Heavy duty tow hooks must be mounted to the chassis frame rails (front and rear) in accessible locations.

## 1.38. AXLES/STEERING/SUSPENSION

1.38.1. Front and rear axle capacities must be sufficient to provide the specified GVWR.

1.38.2. Front and rear springs must be sufficient to provide the specified GVWR.

1.38.3. Rear axle ratio must be determined by requirements in "Overall Design" section.

1.38.4. Front axle must be equipped with oil hubs with transparent caps or greased bearings as necessary for the proposed GVWR.

1.38.5. Power steering must be of sufficient capacity to comply with the front axle capacity.

1.38.6. Power steering fluid reservoir must be the largest capacity available from the chassis manufacturer as a regular production option, if applicable (fluid-free electric power steering acceptable).

1.38.7. Front and rear tires must be of sufficient capacity to provide the specified GVWR and must match existing vehicles. (Contact the Department of Fleet and Facility Management, Automotive Engineering Section to view samples.)

1.38.8. Spare tires and wheels (mounted) must also be furnished for each vehicle ordered under these specifications. If front and rear tires and wheels are identical, one spare tire and wheel must be furnished for each vehicle ordered. If front and rear wheels are of different sizes or models, one each front and rear spare tire and wheel must be furnished for each vehicle ordered.

## 1.39. BRAKE SYSTEM

1.39.1. Vehicle must be equipped with a complete, power-assisted hydraulic, electric or air braking system, designed and constructed to meet all applicable requirements of the Federal Motor Vehicle Safety Standards.

1.39.2. The unit must have the manufacturer’s largest production and heaviest-duty brakes for the proposed model, but must match existing vehicles. (Contact the Department of Fleet and Facility Management, Automotive Engineering Section to view samples.)

## 1.40. DRIVE SYSTEM

1.40.1. The chassis must be powered by an electric motor.

1.40.2. No internal combustion engine must be present on the vehicle. The vehicle must not require any liquid, solid or gaseous fuel, but must be powered by the electricity gained by charging from the electric grid.

1.40.3. SAE gross horsepower rating and gross torque must provide the performance specified in "Overall Design" Section.

1.40.4. Transmission, if necessary to provide the performance specified in "Overall Design" Section, must be a fully automatic design. Manual transmissions are not acceptable.

1.40.5. Motor, including any air cooling system, must be designed and constructed for use in dirty and dust-filled environments and must be sealed or protected as necessary.

## 1.41. ENERGY STORAGE SYSTEM

1.41.1. The vehicle must be fitted with an energy storage system with sufficient energy-density and power to propel the vehicle and power its accessory system.

1.41.2. Energy storage system must be capable of propelling the vehicle for a range of 60 miles on level ground, unloaded, at an average speed of no less than 20 MPH, with required accessories (safety systems, power steering, power brakes, etc.) active but with body accessories and climate control deactivated. Use of climate control and body accessories and carrying of payload may commensurately reduce the driving range of the vehicle.

1.41.3. Energy storage system must be capable of being charged overnight – generally brought from a state of near-complete discharge to 90% state of charge within 12 hours using the charging system.

1.41.4. Energy storage system must be thermally suitable for continuous operation in the range of weather conditions encountered in Chicago.

1.41.5. Energy storage system must have no periodic maintenance requirements – charging aside and end-of-life replacement/refurbishment aside. Energy storage system must be designed and constructed to require no filling with fluids, balance of cell state-of-charge levels or other tasks involving technical maintenance.

1.41.6. Energy storage system, including any air cooling system, must be designed and constructed for use in dirty and dust-filled environments and must be sealed or protected as necessary.

## 1.42. CHARGING SYSTEM

1.42.1. Vehicle must be furnished complete with all on-board and off-board equipment required to allow for charging the vehicle's energy storage system when the vehicle is not in use.

1.42.2. Charging system must be capable of charging the energy storage overnight – generally bringing the energy storage system from a state of near-complete discharge to 90% state of charge within 12 hours.

1.42.3. 110-volt, single-phase chargers are not acceptable as a vehicle's sole charging mechanism due to slow charging speed and are not required. However, 110-volt charging capability may be included as a backup system, at no additional cost to the City, to provide for emergency 110-volt charging.

1.42.4. Standards-compliant on-board chargers are preferred. A standards-compliant on-board charger is defined as a charger compatible with a standard NEMA 208/220/230/240-volt outlet or SAE "Level 2" electric-vehicle charging infrastructure. A standards-compliant on-board charger is further defined as one that needs only one charging cable to facilitate its connection to a standard NEMA 208-, 220-, 230- or 240-volt outlet installed as part of a facility's electric grid; alternatively, it requires only a standard electric-vehicle charger with an SAE J1772-2009 plug to connect to standard charging infrastructure. Further, no off-board charger with battery-specific charging algorithm(s) is required with a standards-compliant on-board charger.

1.42.5. If a standards-compatible on-board charger is supplied with the vehicle, only the single on-board charger and any requisite charging cable, if intended for use with something other than SAE J1772-2009 infrastructure, are required to be furnished with each vehicle. It is understood that the City will be required to make available standard NEMA or SAE infrastructure to which the charging cable may be connected for charging.

1.42.6. If no standards-compliant on-board charger is furnished, two off-board chargers, manufacturer's standard, must be furnished with each vehicle ordered under these specifications, along with all cables necessary to connect the off-board charger to the vehicle for charging. It is understood that the City will be required to furnish the connection of off-board equipment to the electric grid at the vehicle's designated parking and maintenance locations, applying for any necessary permits and furnishing skilled labor to install the off-board chargers.

## 1.43. THERMAL MANAGEMENT SYSTEM

1.43.1. Vehicle must have sufficient cooling capacity to operate the drive system, energy storage system, charging system and accessories system continuously (subject to the range limitations of the energy storage system) in the range of weather conditions encountered in Chicago.

1.43.2. Vehicle must have warming capacity where necessary to provide for use of the drive system, energy storage system, charging system and accessories system continuously (subject to the range limitations of the energy storage system) in the range of weather conditions encountered in Chicago, including start-up from overnight winter parking.

1.43.3. Vehicle's thermal management system must provide for safe operation of the energy storage system and maintain optimal temperature conditions for all componentry related to the electric operation of the vehicle to facilitate long life of the energy storage system, controller(s), motor and accessories.

1.43.4. Thermal management system, including any air cooling system, must be designed and constructed for use in dirty and dust-filled environments and must be sealed or protected as necessary

## 1.44. CAB

1.44.1. Cab must be conventional, cab-over or integral-to-body type with accommodations for driver and one front-seat passenger.

1.44.2. The driver's seat must be an air- or mechanical-suspension type with heavy-duty upholstery. Passenger seat must be stationary, non-suspension type with upholstery to match driver's seat.

1.44.3. Cab must be provided with the following interior equipment, accessories and instrumentation:

1.44.4. Energy-storage gauge, electronic speedometer and odometer must be installed in the cab dash; indicator lights alone are not acceptable.

1.44.5. Tinted safety glass; all windows.

1.44.6. Dual sun visors.

1.44.7. Heavy-duty fresh-air heater / defroster with multi-speed blower; full cab circulation; manufacturer's largest available regular production option for the chassis model proposed.

1.44.8. Interior dome light.

1.44.9. Air or electric horn.

1.44.10. Outside rear view mirrors with heavy-duty bracing; adjustable right, left, fore and aft; all stainless steel or anodized aluminum.

1.44.11. Cab access handles, one at each door; stainless steel, anodized aluminum or molded composite handles. Any hardware utilized must be stainless steel or anodized aluminum.

1.44.12. Variable speed windshield wipers with intermittent capability, and washers with one-gallon capacity plastic reservoir.

1.44.13. "Ignition" or power key and door locks for each unit purchased under these specifications must be keyed individually; six copies of all keys must be provided for each unit delivered.

1.44.14. Steel or aluminum traction-type access steps must be provided below each door where necessary to maintain maximum step intervals; maximum unloaded step height 20". Where the placement of a tool box, battery box, etc. prohibits the use of an OEM cab access step, grip-strut step material must be utilized to facilitate cab access.

1.44.15. Full-floor solid rubber mat must be installed.

## 1.45. ACCESSORIES SYSTEM

1.45.1. Vehicle lighting and electrical accessories system must be 12-volt or 24-volt DC-powered. Regardless of system voltage, sufficient 12-volt DC supply must be available at a designated supply point to allow for the use of two-way communications equipment and any specified LED emergency lighting.

1.45.2. The vehicle must be equipped with all lights and reflectors necessary to comply with ICC, State of Illinois and Federal Motor Vehicle Requirements.

1.45.3. The unit must be equipped with two headlights; manufacturer's standard but LED preferred.

1.45.4. Cab identification and marker lights must be flush-mounted or low-profile type LED.

1.45.5. Two Truck-Lite sealed LED stop/tail/turn lamps with Diamond Shell protective hard coating and one sealed LED reverse lamp must be installed on each side at the rear of the body – six lamp modules total.

1.45.6. A Grote “Loudmouth” audible alarm must be integrally wired to the back-up lights. Mounting location must be approved by the Department of Fleet and Facility Management, Automotive Engineering Section, prior to construction.

1.45.7. All light sockets (OEM and auxiliary lighting) must be lubricated with corrosion preventive dielectric grease.

1.45.8. Each accessories circuit must be protected by a circuit breaker or fuse. All breakers and fuses must be installed in a panel, with each circuit identified by name. All wiring must be contained in loom.

1.45.9. Wiring installed in the undercarriage must be supported by insulated fasteners, spaced 18" apart. All undercarriage wiring must be in continuous lengths with sufficient slack at termination points; no "butt" splices or insulation-piercing connectors.

1.45.10. All wiring entrance holes to the cab must be protected with suitable grommets or bushings, and sealed with silicone caulk or by use of an OEM seal.

1.45.11. All auxiliary electrical items (i.e. non-OEM lighting) must be controlled by "Wired Rite" magnetic circuit breaker type switches, rated in accordance with the respective function. All switches must be installed in a single "Wired Rite" LED backlit to illuminate each switch. The panel must be mounted in a dash opening (if available) or attached to the dash. Panel backlighting must be activated when the vehicle's headlights are turned on. All cab-installed controls must be neatly and clearly identified with permanent labels/tags as to their functions. Alternatively, OEM-installed, designated “body upfitter” switches may be used if available in sufficient quantity.

1.45.12. NOTE: The exact mounting method and location of any necessary switch panel are subject to approval by the Department of Fleet and Facility Management, Automotive Engineering Section prior to final construction.

1.45.13. All LED emergency lighting and auxiliary electrical items must be wired to as to become “live” only when the vehicle is activated through the use of the “ignition” or power key.

1.45.14. A dedicated 20-amp circuit must be provided at a designated supply point to power/protect a two-way radio; radio will be furnished and installed by the City. From the two-way radio circuit, a continuous length of 12-gauge power and ground cable must be run to a suitable location in the center of the cab dashboard with 18” of slack and labeled for later radio installation.

## 1.46. PAINTING AND RUSTPROOFING

1.46.1. The vehicle must contain no dealer markings of any type, interior and exterior.

1.46.2. All metal services must be properly prepared for painting to insure removal of any/all surface rust, welding slag, soot, dirt, grease and water.

1.46.3. Units, including the cab/chassis and any installed body and other components, must be painted with DuPont Imron paint (local painting acceptable). Frame rails and wheels will be painted OEM black unless otherwise specified below. The paint color will be selected from the following list at the time that each unit is ordered:

1.46.4. #N0055HN “City Blue” (Streets & Sanitation) with #N3504HN “Sierra Tan” frame and wheels

1.46.5. #N2650HN “Lime Yellow” (Fleet / OEMC)

1.46.6. #N6179HN “Transportation Orange” (CDOT)

1.46.7. #N0127HN “Aviation Yellow” with #N0001HN flat black hood (Aviation)

1.46.8. #N0081HN “Super Blue” (Water Management)

1.46.9. The City reserves the right to choose another custom color or to designate custom colors for various components, at no additional charge, at the time each order is placed.

1.46.10. Any composite or fiberglass components with color impregnated throughout need not be painted but must be of a neutral color. Any aluminum hardware and surface intended by the OEM or body upfitter to remain unpainted may remain so but must be of a finished appearance and must be suitable for long life in its unpainted state.

1.46.11. The vehicle must be rust-proofed and undercoated using Ziebart brand or other Federal-QPL-listed corrosion protection material.

1.46.12. NOTE: Alternate corrosion protection materials will be considered only where such materials appear on the Federal QPL (qualified products list) and the Contractor provides sufficient proof of his knowledge of (and prior conformance with) the standards described. Bidder must provide this information with its bid or upon request.

Proposed rustproofing/undercoating material: _____

QPL #: _____

Work performed by: _____

Contact person: _____

Phone #: _____

1.46.13. Rustproofing MUST be applied in accordance with Federal Standard #297E, or most current revision thereof.

1.46.14. Applicable guarantee/warranty for rustproofing must be provided to the City.

## 1.47. GROUP “A” - LIGHT INCOMPLETE VEHICLE

## 1.48. BID LINE #1: LIGHT INCOMPLETE VEHICLE

1.48.1. Cab/chassis must be delivered as an Incomplete Vehicle, suitable for the City to provide to a second-stage vehicle manufacturer for completion with a body in accordance with all FMVSS regulations.

1.48.2. Cab/chassis must have a GVWR between 9,000 lbs and 15,999 pounds.

1.48.3. Vehicle must have two lockable cab doors.

## 1.49. ADDITIONAL ITEMS

1.49.1. The Contractor must provide quotes on the Proposal Page for the following additional items. Bid Lines #2 and #6 describe upgrades to the base unit described in Bid Line #1, and will be selected IN ADDITION TO Bid Line #1 when needed. Pricing for Bid Lines #2 and #6 are for upgrade pricing only, and must not include the base unit prices indicated on Bid Line #1.

1.49.2. Additional Item pricing must be a non-negative value. Quotes showing a credit or “no charge” will be assigned a price value of $0 for canvassing and contract award purposes.

1.49.3. The following Additional Items must be designed and constructed for use with the unit as specified, and be furnished complete with all necessary peripheral items required for proper/safe operation.

## 1.50. BID LINE #2: OEM OPTIONS

1.50.1. Orderable options selected at the time of the vehicle order and supplied by the Original Equipment Manufacturer (OEM), including models within the model series proposed and all available option codes, will be furnished and billed at the mark-up rate proposed on the Proposal Pages over the manufacturer’s published dealer invoice price. The Contractor must furnish documentation (manufacturer’s invoice price list, manufacturer’s invoice or printout of the vehicle order, etc.) of the manufacturer’s dealer invoice price at time of order to substantiate the charges; this documentation will accompany all invoices.

1.50.2. Where the presence of a selected OEM option increases or decreases the amount of fleet discount or options-package discount offered by the manufacturer, any difference in discount will be counted as part of the manufacturer’s invoice pricing for purposes of computing the billable cost of the OEM option. The Contractor must furnish manufacturer’s documentation of fleet discount and options-package discount at time of order to substantiate the charges; this documentation will accompany all invoices.

1.50.3. Where an OEM package is available that contains the selected OEM options at a price lower than that of the individual selected OEM options, the OEM package must be furnished and billed, with all equipment/accessory items within that OEM package furnished and included in the billed package price.

## 1.51. BID LINE #3: MECHANICAL AND ELECTRICAL REPAIR PARTS

1.51.1. Parts, accessories, assemblies and/or components furnished under this contract furnished must be compatible and interchangeable with vehicles and equipment purchased under this Contract.

1.51.2. Where the use of non-O.E.M. (generic) parts and/or “salvaged” parts will be used only when approved by the Department of Fleet and Facility Management. Parts will be furnished and billed at the mark-up rate established on the Proposal Pages. The Contractor will furnish documentation (manufacturer’s retail price list, manufacturer’s invoice or print of manufacturer’s list price, etc.) to substantiate the charges; this documentation will accompany all invoices.

1.51.3. Fabricated parts furnished by the Contractor or Authorized Subcontractor under this contract will conform to the specifications and tolerances of the original equipment manufacturer.

## 1.52. BID LINE #4: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, REGULAR BUSINESS HOURS

1.52.1. The unit cost for regular repair service labor performed at the location(s) specified by the Contractor will be billed as regular time, hourly rate, Monday through Friday, 7:00 a.m. to 3:00 pm., excluding Holidays, as

quoted on the Proposal Page(s), unless the Contractor or Authorized Subcontractor's regular service hours are longer, then the Contractor or Authorized Subcontractor's regular service hours will apply.

## 1.53. BID LINE #5: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, NON-REGULAR BUSINESS HOURS

1.53.1. In the event of an emergency (i.e. major snowstorm, etc.), the Contractor or Authorized Subcontractor must make available its facilities and services seven (7) days a week, twenty-four (24) hours per day and must be prepared to respond to Emergency Repair Service calls.

1.53.2. The Contractor will be notified by the Commissioner of the Department of Fleet and Facility Management or his authorized representative when emergency service is required.

1.53.3. The Contractor or Authorized Subcontractor must not perform any work outside the regular working hours without the prior authorization from the Commissioner of the Department of Fleet and Facility Management or his authorized representative.

1.53.4. The labor rates must include any and all peripheral costs.

## 1.54. BID LINE #6: TRANSPORTATION OF EQUIPMENT FOR SERVICE

1.54.1. The cost for transporting a vehicle purchased under this contract each way for service between a City of Chicago location and a Contractor's (or authorized Subcontractor's) location must include all peripheral costs, including but not limited to: providing a properly licensed driver or operator, any necessary tow or transport.

## 1.55. GROUP “B” - MEDIUM INCOMPLETE VEHICLE

## 1.56. BID LINE #7: MEDIUM INCOMPLETE VEHICLE

1.56.1. Cab/chassis must be delivered as an Incomplete Vehicle, suitable for the City to provide to a second-stage vehicle manufacturer for completion with a body in accordance with all FMVSS regulations.

1.56.2. Cab/chassis must have a GVWR between 16,000 lbs. and 25,999 lbs.

1.56.3. Vehicle must have two lockable cab doors.

## 1.57. ADDITIONAL ITEMS

1.57.1. The Contractor must provide quotes on the Proposal Page for the following additional items. Bid Lines #8 through #12 describe upgrades to the base unit described in Bid Line #7, and will be selected IN ADDITION TO Bid Line #7 when needed. Pricing for Bid Lines #8 through #12 are for upgrade pricing only, and must not include the base unit prices indicated on Bid Line #7.

1.57.2. Additional Item pricing must be a non-negative value. Quotes showing a credit or “no charge” will be assigned a price value of $0 for canvassing and contract award purposes.

1.57.3. The following Additional Items must be designed and constructed for use with the unit as specified, and be furnished complete with all necessary peripheral items required for proper/safe operation.

## 1.58. BID LINE #8: OEM OPTIONS

1.58.1. Orderable options selected at the time of the vehicle order and supplied by the Original Equipment Manufacturer (OEM), including models within the model series proposed and all available option codes, will be furnished and billed at the mark-up rate proposed on the Proposal Pages over the manufacturer’s published dealer invoice price. The Contractor must furnish documentation (manufacturer’s invoice price list, manufacturer’s invoice or printout of the vehicle order, etc.) of the manufacturer’s dealer invoice price at time of order to substantiate the charges; this documentation will accompany all invoices.

1.58.2. Where the presence of a selected OEM option increases or decreases the amount of fleet discount or options-package discount offered by the manufacturer, any difference in discount will be counted as part of the manufacturer’s invoice pricing for purposes of computing the billable cost of the OEM option. The Contractor must furnish manufacturer’s documentation of fleet discount and options-package discount at time of order to substantiate the charges; this documentation will accompany all invoices.

1.58.3. Where an OEM package is available that contains the selected OEM options at a price lower than that of the individual selected OEM options, the OEM package must be furnished and billed, with all equipment/accessory items within that OEM package furnished and included in the billed package price.

## 1.59. BID LINE #9: MECHANICAL AND ELECTRICAL REPAIR PARTS

1.59.1. Parts, accessories, assemblies and/or components furnished under this contract furnished must be compatible and interchangeable with vehicles and equipment purchased under this Contract.

1.59.2. Where the use of non-O.E.M. (generic) parts and/or “salvaged” parts will be used only when approved by the Department of Fleet and Facility Management. Parts will be furnished and billed at the mark-up rate established on the Proposal Pages. The Contractor will furnish documentation (manufacturer’s retail price list, manufacturer’s invoice or print of manufacturer’s list price, etc.) to substantiate the charges; this documentation will accompany all invoices.

1.59.3. Fabricated parts furnished by the Contractor or Authorized Subcontractor under this contract will conform to the specifications and tolerances of the original equipment manufacturer.

## 1.60. BID LINE #10: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, REGULAR BUSINESS HOURS

1.60.1. The unit cost for regular repair service labor performed at the location(s) specified by the Contractor will be billed as regular time, hourly rate, Monday through Friday, 7:00 a.m. to 3:00 pm., excluding Holidays, as

quoted on the Proposal Page(s), unless the Contractor or Authorized Subcontractor's regular service hours are longer, then the Contractor or Authorized Subcontractor's regular service hours will apply.

## 1.61. BID LINE #11: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, NON-REGULAR BUSINESS HOURS

1.61.1. In the event of an emergency (i.e. major snowstorm, etc.), the Contractor or Authorized Subcontractor must make available its facilities and services seven (7) days a week, twenty-four (24) hours per day and must be prepared to respond to Emergency Repair Service calls.

1.61.2. The Contractor will be notified by the Commissioner of the Department of Fleet and Facility Management or his authorized representative when emergency service is required.

1.61.3. The Contractor or Authorized Subcontractor must not perform any work outside the regular working hours without the prior authorization from the Commissioner of the Department of Fleet and Facility Management or his authorized representative.

1.61.4. The labor rates must include any and all peripheral costs.

## 1.62. BID LINE #12: TRANSPORTATION OF EQUIPMENT FOR SERVICE

1.62.1. The cost for transporting a vehicle purchased under this contract each way for service between a City of Chicago location and a Contractor's (or authorized Subcontractor's) location must include all peripheral costs, including but not limited to: providing a properly licensed driver or operator, any necessary tow or transport.

## 1.63. GROUP "C" – HEAVY INCOMPLETE VEHICLE

## 1.64. BID LINE #13: HEAVY INCOMPLETE VEHICLE

1.64.1. Cab/chassis must be delivered as an Incomplete Vehicle, suitable for the City to provide to a second-stage vehicle manufacturer for completion with a body in accordance with all FMVSS regulations.

1.64.2. Cab/chassis must have a GVWR of 26,000 lbs. minimum.

1.64.3. Vehicle must have two lockable cab doors.

## 1.65. ADDITIONAL ITEMS

1.65.1. The Contractor must provide quotes on the Proposal Page for the following additional items. Bid Lines #14 through #18 describe upgrades to the base unit described in Bid Line #13, and will be selected IN ADDITION TO Bid Line #13 when needed. Pricing for Bid Lines #14 through #18 are for upgrade pricing only, and must not include the base unit prices indicated on Bid Line #13.

1.65.2. Additional Item pricing must be a non-negative value. Quotes showing a credit or "no charge" will be assigned a price value of $0 for canvassing and contract award purposes.

1.65.3. The following Additional Items must be designed and constructed for use with the unit as specified, and be furnished complete with all necessary peripheral items required for proper/safe operation.

## 1.66. BID LINE #14: OEM OPTIONS

1.66.1. Orderable options selected at the time of the vehicle order and supplied by the Original Equipment Manufacturer (OEM), including models within the model series proposed and all available option codes, will be furnished and billed at the mark-up rate proposed on the Proposal Pages over the manufacturer's published dealer invoice price. The Contractor must furnish documentation (manufacturer's invoice price list, manufacturer's invoice or printout of the vehicle order, etc.) of the manufacturer's dealer invoice price at time of order to substantiate the charges; this documentation will accompany all invoices.

1.66.2. Where the presence of a selected OEM option increases or decreases the amount of fleet discount or options-package discount offered by the manufacturer, any difference in discount will be counted as part of the manufacturer's invoice pricing for purposes of computing the billable cost of the OEM option. The Contractor must furnish manufacturer's documentation of fleet discount and options-package discount at time of order to substantiate the charges; this documentation will accompany all invoices.

1.66.3. Where an OEM package is available that contains the selected OEM options at a price lower than that of the individual selected OEM options, the OEM package must be furnished and billed, with all equipment/accessory items within that OEM package furnished and included in the billed package price.

## 1.67. BID LINE #15: MECHANICAL AND ELECTRICAL REPAIR PARTS

1.67.1. Parts, accessories, assemblies and/or components furnished under this contract furnished must be compatible and interchangeable with vehicles and equipment purchased under this Contract.

1.67.2. Where the use of non-O.E.M. (generic) parts and/or "salvaged" parts will be used only when approved by the Department of Fleet and Facility Management. Parts will be furnished and billed at the mark-up rate established on the Proposal Pages. The Contractor will furnish documentation (manufacturer's retail price list, manufacturer's invoice or print of manufacturer's list price, etc.) to substantiate the charges; this documentation will accompany all invoices.

1.67.3. Fabricated parts furnished by the Contractor or Authorized Subcontractor under this contract will conform to the specifications and tolerances of the original equipment manufacturer.

## 1.68. BID LINE #16: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, REGULAR BUSINESS HOURS

1.68.1. The unit cost for regular repair service labor performed at the location(s) specified by the Contractor will be billed as regular time, hourly rate, Monday through Friday, 7:00 a.m. to 3:00 pm., excluding Holidays, as

quoted on the Proposal Page(s), unless the Contractor or Authorized Subcontractor's regular service hours are longer, then the Contractor or Authorized Subcontractor's regular service hours will apply.

## 1.69. BID LINE #17: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, NON-REGULAR BUSINESS HOURS

1.69.1. In the event of an emergency (i.e. major snowstorm, etc.), the Contractor or Authorized Subcontractor must make available its facilities and services seven (7) days a week, twenty-four (24) hours per day and must be prepared to respond to Emergency Repair Service calls.

1.69.2. The Contractor will be notified by the Commissioner of the Department of Fleet and Facility Management or his authorized representative when emergency service is required.

1.69.3. The Contractor or Authorized Subcontractor must not perform any work outside the regular working hours without the prior authorization from the Commissioner of the Department of Fleet and Facility Management or his authorized representative.

1.69.4. The labor rates must include any and all peripheral costs.

## 1.70. BID LINE #18: TRANSPORTATION OF EQUIPMENT FOR SERVICE

1.70.1. The cost for transporting a vehicle purchased under this contract each way for service between a City of Chicago location and a Contractor's (or authorized Subcontractor's) location must include all peripheral costs, including but not limited to: providing a properly licensed driver or operator, any necessary tow or transport.

## 1.71. GROUP “D” – STEP VAN

## 1.72. BID LINE #19: STEP VAN

1.72.1. Cab/chassis must be delivered as a Complete Vehicle, outfitted with an enclosed cargo body that is accessible from the cab by the driver and front passenger.

1.72.2. Cab/chassis must have a GVWR between 10,000 lbs and 15,999 pounds.

1.72.3. Payload capacity must be a minimum of 2,500 pounds.

1.72.4. Vehicle must have a lockable rear roll-up door with cable-spring assist and a lockable side door for quick cab access.

1.72.5. The cargo body must be a 12' heavy-duty dry-freight type.

1.72.6. The cargo body must conform to the following dimensions:

1.72.7. Length: 12' (minimum);

1.72.8. Exterior width: 7’ or 8' (nominal);

1.72.9. Interior Width: 6’ or 7’ (nominal);

1.72.10. Interior Height: 75" (minimum under open rear door); and

1.72.11. Wheelbase: 12.5’ (approximately).

1.72.12. Rear door frame and floor supports must be all-welded construction. Door frame and threshold must be reinforced where necessary.

1.72.13. Roof must be fabricated from a single piece of .060" translucent fiberglass or composite roof panel.

1.72.14. Interior walls must be full height fiberglass, composite or AD grade plywood with exterior-type glue. The lower 36" of the walls must be covered with aluminum diamond plate.

1.72.15. Floor must be constructed from 1/8" minimum thickness edge grain laminated oak and covered with aluminum diamond plate. Floor may be constructed without underlying oak if sufficient fully welded aluminum understructure is present and welded to the floor to carry entire payload in heavy usage.

1.72.16. A grab handle must be provided at each side of the cargo door jamb to facilitate access from ground level.

1.72.17. The rear door must be a sectional overhead door. The door must be equipped with torsion spring suspension, a lock and pull strap.

1.72.18. The inside of the body must have two "E" tracks mounted horizontally on each of the three walls as follows: The center of the first track must be mounted 24" above the floor; the center of the second track must be mounted 48" from the floor. Both tracks must wrap around the three inside walls of the body.

1.72.19. In addition to the lighting required above, body rear and sides must be equipped with amber LED marker lights. Body interior must be illuminated by four 6" LED dome lights, actuated by a switch located within the body.

## 1.73. ADDITIONAL ITEMS

1.73.1. The Contractor must provide quotes on the Proposal Page for the following additional items. Bid Lines #20 through #25 describe upgrades to the base unit described in Bid Line #19, and will be selected IN ADDITION TO Bid Line #19 when needed. Pricing for Bid Lines #20 through #25 are for upgrade pricing only, and must not include the base unit prices indicated on Bid Line #19.

1.73.2. Additional Item pricing must be a non-negative value. Quotes showing a credit or “no charge” will be assigned a price value of $0 for canvassing and contract award purposes.

1.73.3. The following Additional Items must be designed and constructed for use with the unit as specified, and be furnished complete with all necessary peripheral items required for proper/safe operation.

## 1.74. BID LINE #20: LIFTGATE FOR STEP VAN

1.74.1. Units ordered with Bid Line #11 must include fitting the step van’s enclosed cargo body with an electric, full-width, folding liftgate with a capacity of 1,000 lbs. for use through the rear roll-up door.

1.74.2. In lieu of a liftgate, the van’s enclosed cargo body may be fitted with a sub-floor or false floor providing a longitudinal storage area for a slide-out ramp. Ramp must be a minimum of 30” wide, must have a capacity of 1,000 lbs. Ramp must be designed with a grip-type, traction surface and must be fitted with side rails. Ramp must be held securely in the storage position during transport but must slide easily out of the storage position and hook into heavy-duty retaining holes for usage through the rear-roll-up door. Ramp must be designed so that its upper interface with the cargo body floor and its lower interface with the road surface allow for smooth loading of wheeled loads, and it must be of sufficient length to provide an effective loading angle. Ramp must be designed for the safe loading of heavy, wheeled loads.

## 1.75. BID LINE #21: OEM OPTIONS

1.75.1. Orderable options selected at the time of the vehicle order and supplied by the Original Equipment Manufacturer (OEM), including models within the model series proposed and all available option codes, will be furnished and billed at the mark-up rate proposed on the Proposal Pages over the manufacturer’s published dealer invoice price. The Contractor must furnish documentation (manufacturer’s invoice price list, manufacturer’s invoice or printout of the vehicle order, etc.) of the manufacturer’s dealer invoice price at time of order to substantiate the charges; this documentation will accompany all invoices.

1.75.2. Where the presence of a selected OEM option increases or decreases the amount of fleet discount or options-package discount offered by the manufacturer, any difference in discount will be counted as part of the manufacturer’s invoice pricing for purposes of computing the billable cost of the OEM option. The Contractor must furnish manufacturer’s documentation of fleet discount and options-package discount at time of order to substantiate the charges; this documentation will accompany all invoices.

1.75.3. Where an OEM package is available that contains the selected OEM options at a price lower than that of the individual selected OEM options, the OEM package must be furnished and billed, with all equipment/accessory items within that OEM package furnished and included in the billed package price.

## 1.76. BID LINE #22: MECHANICAL AND ELECTRICAL REPAIR PARTS

1.76.1. Parts, accessories, assemblies and/or components furnished under this contract furnished must be compatible and interchangeable with vehicles and equipment purchased under this Contract.

1.76.2. Where the use of non-O.E.M. (generic) parts and/or “salvaged” parts will be used only when approved by the Department of Fleet and Facility Management. Parts will be furnished and billed at the mark-up rate established on the Proposal Pages. The Contractor will furnish documentation (manufacturer’s retail price list, manufacturer’s invoice or print of manufacturer’s list price, etc.) to substantiate the charges; this documentation will accompany all invoices.

1.76.3. Fabricated parts furnished by the Contractor or Authorized Subcontractor under this contract will conform to the specifications and tolerances of the original equipment manufacturer.

## 1.77. BID LINE #23: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, REGULAR BUSINESS HOURS

1.77.1. The unit cost for regular repair service labor performed at the location(s) specified by the Contractor will be billed as regular time, hourly rate, Monday through Friday, 7:00 a.m. to 3:00 pm., excluding Holidays, as quoted on the Proposal Page(s), unless the Contractor or Authorized Subcontractor’s regular service hours are longer, then the Contractor or Authorized Subcontractor’s regular service hours will apply.

## 1.78. BID LINE #24: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, NON-REGULAR BUSINESS HOURS

1.78.1. In the event of an emergency (i.e. major snowstorm, etc.), the Contractor or Authorized Subcontractor must make available its facilities and services seven (7) days a week, twenty-four (24) hours per day and must be prepared to respond to Emergency Repair Service calls.

1.78.2. The Contractor will be notified by the Commissioner of the Department of Fleet and Facility Management or his authorized representative when emergency service is required.

1.78.3. The Contractor or Authorized Subcontractor must not perform any work outside the regular working hours without the prior authorization from the Commissioner of the Department of Fleet and Facility Management or his authorized representative.

1.78.4. The labor rates must include any and all peripheral costs.

## 1.79. BID LINE #25: TRANSPORTATION OF EQUIPMENT FOR SERVICE

1.79.1. The cost for transporting a vehicle purchased under this contract each way for service between a City of Chicago location and a Contractor’s (or authorized Subcontractor’s) location must include all peripheral costs, including but not limited to: providing a properly licensed driver or operator, any necessary tow or transport.

## 1.80. GROUP “E” – BOX TRUCK

## 1.81. BID LINE #26: BOX TRUCK

1.81.1. Cab/chassis must be delivered as a Complete Vehicle, outfitted with an enclosed cargo body.

1.81.2. Box truck must have a GVWR between 16,000 lbs. and 25,999 lbs.

1.81.3. Payload capacity must be a minimum of 10,000 pounds.

1.81.4. Vehicle must have a lockable rear roll-up door with cable-spring assist and two lockable cab doors.

1.81.5. The body must be a 16' heavy-duty dry-freight type, with overhead rear cargo door and flat floor.

1.81.6. The body must conform to the following dimensions:

1.81.7. Length: 16' (nominal);

1.81.8. Exterior width: 8' (nominal);

1.81.9. Interior Width: 87" (approximately);

1.81.10. Interior Height: 75" (minimum under open rear door); and

1.81.11. Overall Exterior Height of body: 86".

1.81.12. Vertical posts must be produced from extruded aluminum; H-beams or Z-channels are acceptable.

1.81.13. Vertical posts must be 16" on center, with a minimum of five posts in the front wall.

1.81.14. Roof bows must be aluminum or galvanized steel; separation must be 24" on center maximum.

1.81.15. Floor crossmembers must be 3" aluminum or steel I-beams; separation must be 12" on center maximum.

1.81.16. Rear door frame and floor supports must be all-welded construction; 10 gauge steel or aluminum minimum. Door frame and threshold must be reinforced where necessary.

1.81.17. Roof must be fabricated from a single piece of .060" translucent fiberglass or composite roof panel.

1.81.18. Roof rails must be extruded aluminum with integral cavity for the mounting of clearance lights.

1.81.19. Top front corner must be extruded or formed aluminum.

1.81.20. Exterior front and side panels must be produced from .040" aluminum sheet, vertically installed.

1.81.21. Panels must be riveted on 2" centers.

1.81.22. Interior walls must be full height AD grade plywood with exterior type glue. Front wall 3/4" thickness; side wall ¼" thickness. The lower 48" of the walls must be covered with aluminum diamond plate.

1.81.23. Floor must be constructed from 1/8" minimum thickness edge grain laminated oak and covered with aluminum diamond plate.

1.81.24. A grab handle must be provided at each side of the cargo door jamb to facilitate access from ground level.

1.81.25. The rear door must be a sectional overhead door. The door must be equipped with torsion spring suspension, a lock and pull strap.

1.81.26. The inside of the body must have two "E" tracks mounted horizontally on each of the three walls as follows: The center of the first track must be mounted 24" above the floor; the center of the second track must be mounted 48" from the floor. Both tracks must wrap around the three inside walls of the body.

1.81.27. In addition to the lighting required above, body rear and sides must be equipped with amber LED marker lights. Body interior must be illuminated by six 6" LED dome lights, actuated by a switch located within the body.

## 1.82. ADDITIONAL ITEMS

1.82.1. The Contractor must provide quotes on the Proposal Page for the following additional items. Bid Lines #27 through #32 describe upgrades to the base unit described in Bid Line #26, and will be selected IN ADDITION TO Bid Line #26 when needed. Pricing for Bid Lines #27 through #32 are for upgrade pricing only, and must not include the base unit prices indicated on Bid Line #26.

1.82.2. Additional Item pricing must be a non-negative value. Quotes showing a credit or “no charge” will be assigned a price value of $0 for canvassing and contract award purposes.

1.82.3. The following Additional Items must be designed and constructed for use with the unit as specified, and be furnished complete with all necessary peripheral items required for proper/safe operation.

## 1.83. BID LINE #27: LIFTGATE FOR BOX TRUCK

1.83.1. Units ordered with Bid Line #15 must include fitting the box truck’s enclosed cargo body with an electric, full-width, folding liftgate with a capacity of 3,000 lbs. for use through the rear roll-up door.

## 1.84. BID LINE #28: OEM OPTIONS

1.84.1. Orderable options selected at the time of the vehicle order and supplied by the Original Equipment Manufacturer (OEM), including models within the model series proposed and all available option codes, will be furnished and billed at the mark-up rate proposed on the Proposal Pages over the manufacturer’s published dealer invoice price. The Contractor must furnish documentation (manufacturer’s invoice price list, manufacturer’s invoice or printout of the vehicle order, etc.) of the manufacturer’s dealer invoice price at time of order to substantiate the charges; this documentation will accompany all invoices.

1.84.2. Where the presence of a selected OEM option increases or decreases the amount of fleet discount or options-package discount offered by the manufacturer, any difference in discount will be counted as part of the manufacturer’s invoice pricing for purposes of computing the billable cost of the OEM option. The Contractor must furnish manufacturer’s documentation of fleet discount and options-package discount at time of order to substantiate the charges; this documentation will accompany all invoices.

1.84.3. Where an OEM package is available that contains the selected OEM options at a price lower than that of the individual selected OEM options, the OEM package must be furnished and billed, with all equipment/accessory items within that OEM package furnished and included in the billed package price.

## 1.85. BID LINE #29: MECHANICAL AND ELECTRICAL REPAIR PARTS

1.85.1. Parts, accessories, assemblies and/or components furnished under this contract furnished must be compatible and interchangeable with vehicles and equipment purchased under this Contract.

1.85.2. Where the use of non-O.E.M. (generic) parts and/or “salvaged” parts will be used only when approved by the Department of Fleet and Facility Management. Parts will be furnished and billed at the mark-up rate established on the Proposal Pages. The Contractor will furnish documentation (manufacturer’s retail price list, manufacturer’s invoice or print of manufacturer’s list price, etc.) to substantiate the charges; this documentation will accompany all invoices.

1.85.3. Fabricated parts furnished by the Contractor or Authorized Subcontractor under this contract will conform to the specifications and tolerances of the original equipment manufacturer.

## 1.86. BID LINE #30: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, REGULAR BUSINESS HOURS

1.86.1. The unit cost for regular repair service labor performed at the location(s) specified by the Contractor will be billed as regular time, hourly rate, Monday through Friday, 7:00 a.m. to 3:00 pm., excluding Holidays, as

quoted on the Proposal Page(s), unless the Contractor or Authorized Subcontractor's regular service hours are longer, then the Contractor or Authorized Subcontractor's regular service hours will apply.

## 1.87. BID LINE #31: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, NON-REGULAR BUSINESS HOURS

1.87.1. In the event of an emergency (i.e. major snowstorm, etc.), the Contractor or Authorized Subcontractor must make available its facilities and services seven (7) days a week, twenty-four (24) hours per day and must be prepared to respond to Emergency Repair Service calls.

1.87.2. The Contractor will be notified by the Commissioner of the Department of Fleet and Facility Management or his authorized representative when emergency service is required.

1.87.3. The Contractor or Authorized Subcontractor must not perform any work outside the regular working hours without the prior authorization from the Commissioner of the Department of Fleet and Facility Management or his authorized representative.

1.87.4. The labor rates must include any and all peripheral costs.

## 1.88. BID LINE #32: TRANSPORTATION OF EQUIPMENT FOR SERVICE

1.88.1. The cost for transporting a vehicle purchased under this contract each way for service between a City of Chicago location and a Contractor's (or authorized Subcontractor's) location must include all peripheral costs, including but not limited to: providing a properly licensed driver or operator, any necessary tow or transport.

## 1.89. GROUP “F” – STAKE BODY TRUCK

## 1.90. BID LINE #33: STAKE BODY TRUCK

1.90.1. Cab/chassis must be delivered as a Complete Vehicle, outfitted with an open, flatbed body with stake pockets and removable stake sides.

1.90.2. Stake body truck must have a GVWR between 16,000 lbs. and 25,999 lbs.

1.90.3. Payload capacity must be a minimum of 10,000 pounds.

1.90.4. Vehicle must have two lockable cab doors.

1.90.5. The construction of the flatbed body must be heavy duty steel or aluminum welded design.

1.90.6. The platform must be 16' overall length and 96" overall width.

1.90.7. Side and rear stake sides must be 42" high.

1.90.8. Inside body width must be a minimum of 88".

1.90.9. Rub rail width must be 4", with stake pockets.

1.90.10. A 48" high solid metal permanent bulkhead with window punch-out for rear view must be provided.

1.90.11. In addition to lights required above, body rear and sides must be equipped with amber LED marker lights.

## 1.91. ADDITIONAL ITEMS

1.91.1. The Contractor must provide quotes on the Proposal Page for the following additional items. Bid Lines #34 through #39 describe upgrades to the base unit described in Bid Line #33, and will be selected IN ADDITION TO Bid Line #33 when needed. Pricing for Bid Lines #34 through #39 are for upgrade pricing only, and must not include the base unit prices indicated on Bid Line #33.

1.91.2. Additional Item pricing must be a non-negative value. Quotes showing a credit or “no charge” will be assigned a price value of $0 for canvassing and contract award purposes.

1.91.3. The following Additional Items must be designed and constructed for use with the unit as specified, and be furnished complete with all necessary peripheral items required for proper/safe operation.

## 1.92. BID LINE #34: LIFTGATE FOR STAKE BODY TRUCK

1.92.1. Units ordered with Bid Line #19 must include fitting the flatbed body with an electric, full-width, folding liftgate with a capacity of 3,000 lbs. for use through the rear section of removable stake sides. The affected rear section of removable stake sides may be omitted if the folded liftgate effectively closes the rear of the body to approximately the same height as the stake sides.

## 1.93. BID LINE #35: OEM OPTIONS

1.93.1. Orderable options selected at the time of the vehicle order and supplied by the Original Equipment Manufacturer (OEM), including models within the model series proposed and all available option codes, will be furnished and billed at the mark-up rate proposed on the Proposal Pages over the manufacturer’s published dealer invoice price. The Contractor must furnish documentation (manufacturer’s invoice price list, manufacturer’s invoice or printout of the vehicle order, etc.) of the manufacturer’s dealer invoice price at time of order to substantiate the charges; this documentation will accompany all invoices.

1.93.2. Where the presence of a selected OEM option increases or decreases the amount of fleet discount or options-package discount offered by the manufacturer, any difference in discount will be counted as part of the manufacturer’s invoice pricing for purposes of computing the billable cost of the OEM option. The Contractor must furnish manufacturer’s documentation of fleet discount and options-package discount at time of order to substantiate the charges; this documentation will accompany all invoices.

1.93.3. Where an OEM package is available that contains the selected OEM options at a price lower than that of the individual selected OEM options, the OEM package must be furnished and billed, with all equipment/accessory items within that OEM package furnished and included in the billed package price.

## 1.94. BID LINE #36: MECHANICAL AND ELECTRICAL REPAIR PARTS

1.94.1. Parts, accessories, assemblies and/or components furnished under this contract furnished must be compatible and interchangeable with vehicles and equipment purchased under this Contract.

1.94.2. Where the use of non-O.E.M. (generic) parts and/or "salvaged" parts will be used only when approved by the Department of Fleet and Facility Management. Parts will be furnished and billed at the mark-up rate established on the Proposal Pages. The Contractor will furnish documentation (manufacturer's retail price list, manufacturer's invoice or print of manufacturer's list price, etc.) to substantiate the charges; this documentation will accompany all invoices.

1.94.3. Fabricated parts furnished by the Contractor or Authorized Subcontractor under this contract will conform to the specifications and tolerances of the original equipment manufacturer.

## 1.95. BID LINE #37: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, REGULAR BUSINESS HOURS

1.95.1. The unit cost for regular repair service labor performed at the location(s) specified by the Contractor will be billed as regular time, hourly rate, Monday through Friday, 7:00 a.m. to 3:00 pm., excluding Holidays, as quoted on the Proposal Page(s), unless the Contractor or Authorized Subcontractor's regular service hours are longer, then the Contractor or Authorized Subcontractor's regular service hours will apply.

## 1.96. BID LINE #38: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, NON-REGULAR BUSINESS HOURS

1.96.1. In the event of an emergency (i.e. major snowstorm, etc.), the Contractor or Authorized Subcontractor must make available its facilities and services seven (7) days a week, twenty-four (24) hours per day and must be prepared to respond to Emergency Repair Service calls.

1.96.2. The Contractor will be notified by the Commissioner of the Department of Fleet and Facility Management or his authorized representative when emergency service is required.

1.96.3. The Contractor or Authorized Subcontractor must not perform any work outside the regular working hours without the prior authorization from the Commissioner of the Department of Fleet and Facility Management or his authorized representative.

1.96.4. The labor rates must include any and all peripheral costs.

## 1.97. BID LINE #39: TRANSPORTATION OF EQUIPMENT FOR SERVICE

1.97.1. The cost for transporting a vehicle purchased under this contract each way for service between a City of Chicago location and a Contractor's (or authorized Subcontractor's) location must include all peripheral costs, including but not limited to: providing a properly licensed driver or operator, any necessary tow or transport.

## 1.98. GROUP “G” – AERIAL SERVICE TRUCK

## 1.99. BID LINE #40: AERIAL SERVICE TRUCK

1.99.1. Cab/chassis must be delivered as a Complete Vehicle, outfitted with service/utility body, aerial device and associated electric-hydraulic accessory system.

1.99.2. Aerial service truck must have a GVWR between 16,000 lbs. and 25,999 lbs.

1.99.3. Payload capacity must be sufficient to allow loading of the service/utility body with standard tools and supplies.

1.99.4. Vehicle must have two lockable cab doors.

1.99.5. Aerial tower must be an articulating and telescoping type aerial tower with an end-mounted, self leveling platform. The unit proposed must comply with all applicable OSHA and ANSI requirements.

1.99.6. The safe loaded operating capacity of the aerial platform must be 350 pounds in all positions, without the use of outriggers.

1.99.7. When mounted to the proposed chassis, the fully extended vertical reach of the unit must be 30 feet from the underside of the platform to ground level.

1.99.8. The fully extended horizontal reach of the unit @ 15’ height must be 21‘. Tipping load at full side reach must be a minimum of 500 pounds on level pavement and 400 pounds on a 5° slope.

1.99.9. The tower must be configured to position the platform at the rear of the body when the booms are in the stored position. The turret must be constructed from ½" thick steel plate. A steel ring must be welded to the bottom plate to provide adequate stiffness and protect the rotation bearing.

1.99.10. The turret plate must be machined flat to support the rotation bearing. A bearing cover must be provided to prevent foreign material from interfering with rotation.

1.99.11. Rotation must be approximately 370°, non-continuous, with a mechanical limit to prevent hose and wiring damage.

1.99.12. Rotation must be accomplished by a hydraulically driven worm and spur gear and a shear-ball rotation bearing rotation gear. An adjustment screw must be provided to adjust pinion and rotation gear clearances. An extended shaft must be provided for manual rotation, driving a shear ball bearing rotation gear. The fully adjustable rotation drive assembly must include an external eccentric ring adjustment of the gearbox pinion gear to the main rotation bearing, permitting the ability to adjust backlash, reduce boom side play and ensure proper tooth contact over the life of the unit.

1.99.13. The critical bolts holding the lift to the rotation bearing and the rotation bearing to the pedestal must meet SAE grade 8 specifications.

1.99.14. Pedestal must consist of fixture welded steel tubing. A 1" pedestal top plate must be machined after welding to provide a rigid, flat mounting surface for the rotation bearing.

1.99.15. The turntable must be constructed with a 1" thick steel turret plate. A reinforced tubular steel subframe must fully support the upper and lower booms.

1.99.16. Turntable must be a steel fixture-welded structure with a 1" steel bottom plate. The bottom plate of the turntable must be machined after welding to ensure a flat mounting surface for the rotation bearing. A steel ring must be welded to the bottom plate to stiffen the plate and to protect the rotation bearing. Hydraulic valves must be located on the side of the turntable, protected by a metal guard.

1.99.17. Rotation of the turntable must be powered by a hydraulic motor. Motor pressure and displacement ratings must be adequate for the intended application.

1.99.18. Rotation of the turntable must not restrict the flow of hydraulic oil to any portion of the boom.

1.99.19. The aerial tower must utilize a side-by-side boom configuration.

1.99.20. The articulating arm must be constructed of steel.

1.99.21. The lift cylinder rod eye must be welded to the rod. The blind end of the cylinder must be constructed of cast steel, one piece design, utilizing cartridge-type, bi-directional counter-balance holding valves.

1.99.22. The upper boom must consist of a 4" x 6" fixture-welded rectangular structure fabricated from high strength steel, 70,000 PSI minimum yield strength. All wiring and hydraulic hoses must be totally enclosed within the boom.

1.99.23. Telescopic Boom must be capable of articulating through a range of 0° (horizontal) to 70° above horizontal.

1.99.24. The lower boom must be utilize parallelogram compensation linkage to maintain the knuckle and upper boom at a constant angle to the turret.

1.99.25. The lower boom must be fabricated from high-strength low-alloy steel.

1.99.26. The boom lifting and extending operations must be powered by double-acting hydraulic cylinders, with dual holding valves to lock the cylinders in position. A provision must be made to allow cylinders to be "bled" in order to lower the tower in an emergency.

1.99.27. All materials used in the construction of the turntable, lower and upper booms must be of sufficient strength and size to enable the aerial tower (exclusive of the platform) to safely support 200% of its rated capacity.

1.99.28. The lower boom must articulate throughout a range of 0° (horizontal) to 78° above horizontal.

1.99.29. Reinforced bushings must be installed at all boom pivot points.

1.99.30. The upper boom must be outfitted with an end-mounted, hydraulically leveling splicer platform, 24" x 24" x 39" deep. Platform must have a side access opening with a door or steps that allow the operator to enter and exit the platform.

1.99.31. The platform leveling system utilized must maintain the platform floor parallel with the chassis frame in all operating positions.

1.99.32. A safety belt eye must be secured to the end of the upper boom. The eye must be readily accessible to the operator and must be sufficiently durable in construction and mounting to stop and hold the full weight rating of the platform in the event of an accident.

1.99.33. A rubber-cushioned platform stow support must be installed on the platform rest to minimize the effects of platform vibration during transit.

1.99.34. The aerial unit must be capable of being operated at any position (rotation angle, elevation and extension) without the use of outriggers.

1.99.35. The vehicle must be stabilized by means of a torsion bar assembly. The torsion bar must utilize rubber bushings at all points of movement, with no lubrication required.

1.99.36. Ballast must be installed as necessary to ensure maximum vehicle stability.

1.99.37. The movements of the turntable, lower and upper booms must be controlled through the use of electrical controls, which activate a solenoid-operated hydraulic control valve. A separate "push to operate" button must be actuated at the platform controls as a safety interlock.

1.99.38. Controls must be provided at the platform and on the pedestal.

1.99.39. The tower must be provided with a "fail safe" system to ensure that raised booms remain in position in the event of a hydraulic hose or power failure.

1.99.40. Two sets of wheel chocks must be provided with each unit purchased.

1.99.41. A triangle reflector kit and five-pound fire extinguisher, with mounting bracket, must be provided with each unit.

1.99.42. The vehicle must be equipped with a complete electrically driven central hydraulic system, capable of powering the aerial tower throughout the range of temperature/weather conditions encountered in Chicago. Electrically driven hydraulic system must be equipped with sufficient electrical storage to enable operation for an entire eight-hour work shift of intermittent use, demonstrated on a standard duty cycle, before requiring recharging from the electrical grid.

1.99.43. The upper boom section must be extended and retracted by a double acting hydraulic cylinder installed within the booms. The boom must extend and retract over slide pads located in the end of the lower boom section.

1.99.44. Platform must be leveled hydraulically. Leveling for the platform must include two double acting cylinders incorporating counterbalance load holding valves to lock the platform in the event of hydraulic line failure. Cylinders must be located at the platform and at the riser structure between the articulating arm and telescopic boom. The action of the cylinders must maintain a level platform throughout the full range of boom articulation.

1.99.45. Electrically driven central hydraulic system must disengage when the transmission is shifted out of neutral.

1.99.46. A hydraulic pump must be provided, sized to deliver the required flow and pressure to operate the aerial tower efficiently and effectively.

1.99.47. A baffled hydraulic oil reservoir must be provided, equipped with a #100 mesh suction strainer (accessible for service), magnetic drain plug, capped filler pipe and oil level/temperature sight gauge. Capacity must be minimum 7 gallons. Reservoir must be equipped with gate valves at feed and return ports, and a sight gauge.

1.99.48. A removable full-flow spin-off filter must be provided, with internal bypass (10 micron), installed in the return line near the reservoir. Filter must be accessible for service.

1.99.49. All necessary relief valves, lines, hoses and fittings necessary for safe and efficient operation must be installed. All connection threads must be sealed using material which is designed for use in hydraulic systems.

1.99.50. Hydraulic fluid must comply with all requirements of MIL-H-5606A.

1.99.51. Where hoses are routed through cab, body or frame members, they must be protected from abrasion with rubber grommets.

1.99.52. Flexible hose must be provided at all connections to cylinders and at all critical flexing points. Hoses, lines and fittings must be high pressure, hydraulic type; suction line excluded.

1.99.53. The suction line must have a 1½" minimum ID.

1.99.54. The body must be a steel, aluminum or fiberglass service/utility-type unit, designed and constructed for heavy duty service. The body must be compatible with the hydraulic articulated aerial tower specified. Body must be essentially a single built-up unit. All welds and seams must be sanded smooth.

1.99.55. The body must be suitably constructed and reinforced as necessary to provide a strong and rigid unit capable of withstanding the strains of services for its intended use. The body must extend both above and below the floor line on both sides of the truck frame to provide storage compartment space which is functional and readily accessible.

1.99.56. Overall body length must be approximately 107", exclusive of the rear platform extension. Overall width must be approximately 93". Overall height must be approximately 39". Inside width must be approximately 54".

1.99.57. Body must be constructed with wheel housings to allow mounting body as low as possible. Height of body floor at rear must be approximately 48" when mounted on truck chassis (empty body).

1.99.58. Floor must be 3/16" steel or aluminum tread plate. Tread plate must extend 12” up the sides and front of the cargo area.

1.99.59. A platform extension must be provided at the rear of the body of sufficient length to accommodate the aerial tower platform when stowed. Extension must be equipped with an access ladder and grab handle to facilitate entering and exiting the platform. Cable steps must be provided to access the platform extension from street level. Platform extension must be equipped with dock bumpers and platform access steps.

1.99.60. Plated chain supports must be provided on all horizontal doors.

1.99.61. Body must have rubber roll crown fenders and rear "anti-sail" mud flaps.

1.99.62. Three compartments must be provided on each side of the body. Body compartments must be minimum 16" in depth. Steel or aluminum treadplate must be installed along the entire top surfaces of the storage compartments.

1.99.63. All compartments must be enclosed by weather-tight doors, of double panel, internally braced construction. Doors must be self-sealing, with built-in drainage, and must be equipped with recessed handles and two-stage strikers.

1.99.64. All compartment doors must be equipped with heavy-duty double-acting spring-style positive mechanical devices to hold doors in the open position at 90 degrees.

1.99.65. One vertical compartment must be located ahead of the rear wheels, passing through from the left side to the right side of the body. This compartment must be a pass through, minimum 20" wide x 30" high, equipped with a single door, hinged to the front.

1.99.66. Horizontal compartments must be provided over the rear axle, one right side and one left side. These compartments must be 48" wide, with two swing-out doors each. Each compartment must be equipped with one slide-out shelf with removable dividers on 8" centers.

1.99.67. Vertical compartments must be provided behind the rear wheels, one right side and one left side. These compartments must be minimum 20" wide, with a single door hinged to the front. One rear vertical compartment must be equipped with three swivel hooks on the rear wall and one on each side of the compartment; hooks must be installed onto mounting plates. Rear panel of both rear vertical compartments must be equipped with ventilation louvers.

1.99.68. A heavy-duty, padded boom rest must be provided to support the weight of the boom assembly in the stowed position. Boom rest must be located at the streetside of the platform extension. In addition, a cloth strap with ratchet must be provided to secure the boom.

1.99.69. A warning light, located on the cab dash, must be activated when the boom is lifted from its rest position.

1.99.70. Grab handles must be provided at the rear of the body to facilitate access from the ground. Handles must not be positioned to restrict access to the body.

1.99.71. A traffic cone post must be installed on the rear of the platform extension.

## 1.100. ADDITIONAL ITEMS

1.100.1. The Contractor must provide quotes on the Proposal Page for the following additional items. Bid Lines #41 through #45 describe upgrades to the base unit described in Bid Line #40, and will be selected IN ADDITION TO Bid Line #40 when needed. Pricing for Bid Lines #41 through #45 are for upgrade pricing only, and must not include the base unit prices indicated on Bid Line #40.

1.100.2. Additional Item pricing must be a non-negative value. Quotes showing a credit or “no charge” will be assigned a price value of $0 for canvassing and contract award purposes.

1.100.3. The following Additional Items must be designed and constructed for use with the unit as specified, and be furnished complete with all necessary peripheral items required for proper/safe operation.

## 1.101. BID LINE #41: OEM OPTIONS

1.101.1. Orderable options selected at the time of the vehicle order and supplied by the Original Equipment Manufacturer (OEM), including models within the model series proposed and all available option codes, will be furnished and billed at the mark-up rate proposed on the Proposal Pages over the manufacturer’s published dealer invoice price. The Contractor must furnish documentation (manufacturer’s invoice price list, manufacturer’s invoice or printout of the vehicle order, etc.) of the manufacturer’s dealer invoice price at time of order to substantiate the charges; this documentation will accompany all invoices.

1.101.2. Where the presence of a selected OEM option increases or decreases the amount of fleet discount or options-package discount offered by the manufacturer, any difference in discount will be counted as part of the manufacturer’s invoice pricing for purposes of computing the billable cost of the OEM option. The Contractor must furnish manufacturer’s documentation of fleet discount and options-package discount at time of order to substantiate the charges; this documentation will accompany all invoices.

1.101.3. Where an OEM package is available that contains the selected OEM options at a price lower than that of the individual selected OEM options, the OEM package must be furnished and billed, with all equipment/accessory items within that OEM package furnished and included in the billed package price.

## 1.102. BID LINE #42: MECHANICAL AND ELECTRICAL REPAIR PARTS

1.102.1. Parts, accessories, assemblies and/or components furnished under this contract furnished must be compatible and interchangeable with vehicles and equipment purchased under this Contract.

1.102.2. Where the use of non-O.E.M. (generic) parts and/or “salvaged” parts will be used only when approved by the Department of Fleet and Facility Management. Parts will be furnished and billed at the mark-up rate established on the Proposal Pages. The Contractor will furnish documentation (manufacturer’s retail price list, manufacturer’s invoice or print of manufacturer’s list price, etc.) to substantiate the charges; this documentation will accompany all invoices.

1.102.3. Fabricated parts furnished by the Contractor or Authorized Subcontractor under this contract will conform to the specifications and tolerances of the original equipment manufacturer.

## 1.103. BID LINE #43: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, REGULAR BUSINESS HOURS

1.103.1. The unit cost for regular repair service labor performed at the location(s) specified by the Contractor will be billed as regular time, hourly rate, Monday through Friday, 7:00 a.m. to 3:00 pm., excluding Holidays, as quoted on the Proposal Page(s), unless the Contractor or Authorized Subcontractor’s regular service hours are longer, then the Contractor or Authorized Subcontractor’s regular service hours will apply.

## 1.104. BID LINE #44: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, NON-REGULAR BUSINESS HOURS

1.104.1. In the event of an emergency (i.e. major snowstorm, etc.), the Contractor or Authorized Subcontractor must make available its facilities and services seven (7) days a week, twenty-four (24) hours per day and must be prepared to respond to Emergency Repair Service calls.

1.104.2. The Contractor will be notified by the Commissioner of the Department of Fleet and Facility Management or his authorized representative when emergency service is required.

1.104.3. The Contractor or Authorized Subcontractor must not perform any work outside the regular working hours without the prior authorization from the Commissioner of the Department of Fleet and Facility Management or his authorized representative.

1.104.4. The labor rates must include any and all peripheral costs.

## 1.105. BID LINE #45: TRANSPORTATION OF EQUIPMENT FOR SERVICE

1.105.1. The cost for transporting a vehicle purchased under this contract each way for service between a City of Chicago location and a Contractor's (or authorized Subcontractor's) location must include all peripheral costs, including but not limited to: providing a properly licensed driver or operator, any necessary tow or transport.

## 1.106. GROUP “H” – REFUSE TRUCK

1.106.1. Cab/chassis must be delivered as a Complete Vehicle, outfitted with a hydraulically and electrically powered and controlled rear-loading refuse body with 20 cubic-yard capacity (not including the hopper volume or unusable space within the body). Body compaction must be capable of producing load densities of 1000 pounds per cubic yard of normal residential refuse. Body must also be suitable for the compaction of commercial refuse and bulk/white goods.

1.106.2. In lieu of an all-electric drive and body-hydraulics system, the vehicle may be fitted with a small range-extending engine powered by gasoline or diesel fuel and coupled to a generator to provide supplemental electrical power to the vehicle’s energy storage system or directly to the vehicle’s drive system, enhancing the vehicle’s range and allowing it to meet the minimum range requirement. If included, the range-extending engine must be no greater than 2.0L in displacement. If the proposed vehicle must utilize the range-extending engine to meet the minimum range requirement, the vehicle must be able to operate with the range-extending engine disabled for half of the required range using only the vehicle’s energy storage system.

1.106.3. Refuse truck must have a GVWR of 52,000 lbs. minimum.

1.106.4. Payload capacity must be a minimum of 18,000 pounds.

1.106.5. Cab must be standard entry, left-hand driven tilt configuration. Cab width must not exceed 96". Fender extensions beyond the 96" cab width must be constructed from flexible material.

1.106.6. The driver's seat must be a Sears "C2" air-suspension type with heavy-duty "Fabriform" upholstery. Passenger seat must be stationary, non-suspension type with upholstery to match driver's seat.

1.106.7. A separate fresh air fan, keyed to the ignition, must be installed for cab circulation, mounted within drivers reach. Location must be approved by Department of Fleet and Facility Management, Automotive Engineering Section.

1.106.8. Ignition and door locks for all units must be keyed alike, three keys per unit. Keys must also match existing vehicles. (Contact the Department of Fleet and Facility Management, Automotive Engineering Section for key code.)

1.106.9. Cab must be fitted with steel steps, both sides; traction design, with serrated step edges for increased slip resistance.

1.106.10. Front fenders must be of sufficient length to protect the body and chassis against front wheel road splash; extensions provided if necessary.

1.106.11. The body must be capable of loading and compacting bulk items, e.g. refrigerators, stoves, furniture, lumber and plumbing fixtures, without significant damage to the hopper, packer blade, body, ejector blade, tail gate or other body components or mechanisms.

1.106.12. All operations of the body, including load ejection, must be hydraulically or electrically powered. All hydraulic, electric systems, including cart tipping mechanisms, must be capable of proper operation within an ambient temperature range of -30°F to +120°F.

1.106.13. The body hopper must have a minimum water level capacity of 250 gallons.

1.106.14. Overall body width must be 96" maximum.

1.106.15. Hopper sill height must be 40" ±1" from the ground.

1.106.16. The body height, when mounted on the chassis, must not exceed 11' 9", as measured from the ground to the highest point on the body.

1.106.17. The packer cycle time must not exceed 30 seconds at the body manufacturer’s recommended pump GPM.

1.106.18. The body must be equipped with a 2 rung ladder fastened to the body directly underneath the body side access door. The ladder must be designed and constructed to allow the ladder assembly to be moved in order to gain access to other components.

1.106.19. A suitably sized door must be provided to allow access through the body wall at the left front corner of body. The door must be equipped with a bolt type or sliding bar latch and appropriate length safety chain or stop.

1.106.20. One set of metal splash guards must be mounted ahead of rear tandem wheels. Mounting location will be determined by the Department of Fleet and Facility Management, Automotive Engineering Section. One set of guards must be welded at the body front to protect the underbody from tire spray, unless sufficient protection is provided by the front wheel fenders. Splash guards must not extend beyond body width.

1.106.21. Two "J"-channel extruded aluminum card frames must be mounted to each side of the body. One frame must accept poster material measuring 28" high by 44" wide. One frame must accept poster cards measuring 28" high by 22" wide. Design and location are subject to approval by the Department of Fleet and Facility Management, Automotive Engineering Section prior to construction.

1.106.22. All hydraulic lines must be rigid tubing, unless component movement requires the use of flexible hose.

1.106.23. Body sides and roof must be fabricated from SAE low alloy high tensile 11 GA sheet steel. Material yield strength for the body must be 75,000 PSI.

1.106.24. Body floor, hopper floor and sides below roller / shoe track must be fabricated from .25” thick AR400 abrasion resistant steel plate, 140,000 PSI yield strength. Laminates are not acceptable. Steel plate must extend up the side walls a distance of 2" above the floor. If floor-to-wall seam is welded, it must continuous and must protected by a 4" "L" channel fabricated from .25” thick AR400 abrasion resistant steel plate, 140,000 PSI yield strength.

1.106.25. Body sidewall and roof strength must be accomplished through the use of brake / roll formed stiffening.

1.106.26. The ejector plate must be fabricated from 50,000 PSI yield strength, 3/16" thick steel.

1.106.27. All exterior panels must be fully welded, using a compatible alloy for maximum penetration and strength.

1.106.28. The tailgate assembly must be designed and constructed to safely and efficiently compact all types of refuse (including bulk items) into the body; minimize debris “fall out”; stop and/or reverse at any point during the compaction cycle; withstand the stresses of standard City of Chicago refuse collection operations; and hydraulically raise to facilitate load ejection.

1.106.29. The hopper must cleanly shed itself of carried debris when in the raised position.

1.106.30. The tailgate must be equipped with a current City of Chicago hopper sill. Sill location and installation must be approved by Department of Streets and Sanitation and Department and Fleet and Facility Management personnel. Contact Department of Fleet and Facility Management, Automotive Engineering Section to view a sample.

1.106.31. The carrier plate must travel within a track on each side of the tailgate, guided by either shoes or rollers.

1.106.32. The carrier plate cylinders must be a minimum of 4.5” in diameter. All carrier plate and packer cylinders must be located inside the tailgate.

1.106.33. Two hinged screw-type clamps or auto locking hinges must be provided to secure the tailgate assembly when in the lowered position.

1.106.34. Each container tipping mechanism must tuck under the hopper, and must be engineered for mounting and use on the proposed refuse truck. Two container tipping mechanisms (“tippers”) must be mounted to each refuse body, one right, one left.

1.106.35. Each tipper must be hydraulically powered but may be controlled by electrically or hydraulically.

1.106.36. Each tipper must be designed to accommodate 95 gallon and 60 gallon capacity refuse containers currently used by the City of Chicago, Department of Streets and Sanitation, regardless of container manufacturer. Each tipper must have a net lifting capacity of not less than 400 pounds as installed and operated by the body electrical and/or hydraulic systems.

1.106.37. The tippers must be engineered for mounting on the proposed refuse truck and must allow for the lift plate to rotate or retract underneath the hopper after disengaging the container, to allow for commercial containers to be picked up over the tipper without interference.

1.106.38. Each tipper must engage the container without the need of lifting the container onto the tipper. The tipper must rotate the container to a point at least 45° above horizontal and must empty the contents of the container into the refuse body hopper. Tipper must return to vertical and must be capable of continuing its movement through the disengagement position to the storage position under the body hopper.

1.106.39. The tippers must engage and disengage and positively hold the container automatically throughout the dump cycle without having to manually hold the container onto the tippers.

1.106.40. The tippers must be simple and safe to operate. The time required to completely cycle each tipper and return must be no less than 6 seconds and no more than 10 seconds from vertical to dump and return to vertical. Both lifting and lowering movements must be at identical speeds.

1.106.41. The tippers, when mounted, must provide a minimum of 20" of vertical clearance between the bottom of the tippers and the ground to prevent contact under the conditions of loading and transporting that are experienced in the City of Chicago.

1.106.42. The design and mounting of the tippers must provide reasonable protection from damage as a result of incidental contact between trucks during normal front-to-rear parking operations.

1.106.43. The design and mounting of the tippers and hopper sill must allow full and safe access to the hopper sill during manual loading of bulk items.

1.106.44. The tippers must be powered and controlled so that they may both be operated simultaneously. In addition, both tippers must be capable of operation regardless of the movement of the refuse body packer blade.

1.106.45. The tippers must be simple in design, and must not require adjustment or calibration within intervals of less than 6 months to maintain proper operation.

1.106.46. The design, construction, mounting of the tipping mechanisms must provide the maximum possible safety for the operator.

1.106.47. The tipper must be constructed to safely lift, empty and lower containers without deforming, marking, scratching, wearing or otherwise damaging them, or rendering them partially / wholly unserviceable. The tipper must operate quietly and safely, and must facilitate the quick, easy engagement / disengagement of containers under the range of operating conditions experienced in Chicago, e.g. snow, pot holes, uneven pavement, etc.

1.106.48. The tipper must positively grasp the container from the initial point of lifting and retain it throughout the dumping cycle.

1.106.49. The tipper must consist of the following components, at a minimum: a lifting hook, a pivot assembly, a locking hook mechanism, an integral hopper sill extension, structural members, hydraulic actuator(s) and hydraulic controls, valves, and hydraulic lines.

1.106.50. The face plate must be a minimum of 18" wide x 13" long x ¼” thick. Surface must be hot rolled steel, and must provide proper container support throughout the container dumping cycle.

1.106.51. The upper lift hook must be a minimum of 8" wide to provide proper container support throughout the dump cycle. Hook must be free from rough or sharp edges, must be coated with urethane to minimize the risk of damage to containers, and must be bolted to the lifting plate.

1.106.52. The lower locking hook mechanism must be provided with all necessary linkages, pivots, etc. The locking hook mechanism must be designed and constructed to provide secure attachment of the cart to the lifting plate.

1.106.53. The linkage must incorporate an assembly to allow the locking hook to totally encompass the container lower bar during the dump cycle, while allowing the hook to “give” if it contacts the front of the container, thus allowing the container to rest fully on the faceplate. All linkage pivot points must be provided with greaseable or no maintenance bearings and bushings.

1.106.54. An integral extension, or hopper sill, must be mounted to the existing refuse body to increase the useable hopper capacity and facilitate the mounting of the tipping mechanisms.

1.106.55. The structural components of the tipping units must be constructed from .375” minimum thickness hot rolled steel, fully welded.

1.106.56. Tipper must be constructed of steel, and must be bolted together for easy access and quick maintenance.

1.106.57. The tipper must be activated using either hydraulic actuator(s) or pistons through all positions.

1.106.58. The hydraulic actuator(s) must be commercially available, rebuildable units rated for operating pressures of up to 3000 PSI. Actuator(s) must be suitable for use with standard hydraulic oils.

1.106.59. All fasteners used to secure the tippers to the refuse body hopper must be “Grade 8" for high strength and durability.

1.106.60. The refuse body hopper must be equipped with an extended hopper sill, fabricated from minimum ¼” thick hot-rolled sheet steel. The cart tipping mechanisms must be mounted to the sill, 1 on the right side and 1 on the left side. Sill must protrude beyond the hoppers when they are in the stowed position, to protect them from damage.

1.106.61. At the maximum dumping angle, the lower front edge of the container must be high enough above the hopper to enable the entire contents of 2 containers each side to be emptied without contacting the loaded refuse or damaging the container, without the need of cycling the packer blade.

1.106.62. The uppermost point of the extended sill must be positioned 39" to 40" above the ground. The rear face of the sill extension must be tapered to aid in the hand loading of bulk materials. Contact the Department of Fleet and Facility Management, Automotive Engineering Section, to view sample.

1.106.63. The tipper units must be mounted in positions that will enable the specified dumping angle to be achieved and allow the containers to be rotated into / above the hopper. At no point during the cycle must a rotating container come into contact with the hopper walls or other body components with the packer blade fully retracted.

1.106.64. The tipping units must be capable of being dismounted from the hopper sill through the removal of bolts and / or pins. Welding or cutting must not be necessary to replace a tipping mechanism. The construction and strength of the mounting bracketry / framework and the attaching bolts must be sufficient to support the combined weight of the tipper, container and a net load of 400 pounds.

1.106.65. Hydraulic hoses must be secured to packer body for safety and to prevent interference with the packer operation.

1.106.66. NOTE: The City reserves the right to approve, prior to construction, the exact positioning and mounting methods that are utilized by the Contractor, as well as any modifications that must be made to any portion of the truck in order to accommodate mounting of the tippers. The suitability of such locations must be approved by the Department of Fleet and Facility Management, Automotive Engineering Section, prior to construction. All installations performed subsequent to approval must be identical to the approved installation in all respects.

1.106.67. Each tipping unit must operate independently. All movements of the tipping mechanisms must be controlled through separate hydraulic valves, each mounted to a plate on the respective sides of hopper wall. These valves must be equipped with control levers, fabricated from .375" x 1.25" x 9.5" steel bar stock, and provided with suitable linkage.

1.106.68. The tipping units must be situated to allow the operator the ability to reach a mounted container and the control lever simultaneously.

1.106.69. All aspects of the tippers and their controls must be designed and constructed to provide the maximum ease of operation and safety for the operator. Care must be taken by the Contractor to ensure corners are rounded and all prospective pinch / shear points are protected.

1.106.70. All hand controls must be constructed so that releasing the hand control in any position stops all motion of the tipper.

1.106.71. The tipping unit must be designed to require minimal periodic maintenance.

1.106.72. The design and mounting method must allow for ready access to all points requiring lubrication.

1.106.73. All points requiring lubrication must be equipped with "Zerk" type threaded fittings.

1.106.74. All hydraulic lines must be rigid tubing, unless component movement requires the use of flexible hose.

1.106.75. The central hydraulic system must be designed and plumbed to provide the flow, pressure and control necessary to operate the plow, body and dumping unit sub-systems at their maximum efficiency, capacity and safety.

1.106.76. The system must have sufficient cooling capability to maintain fluid operating temperatures of 120°F to 130°F in an ambient temperature of 90°F.

1.106.77. Where hydraulic lines/hoses are routed through frame or body members, they must be protected from abrasion with rubber grommets.

1.106.78. Flexible hose must be provided at all connections to cylinders and at all critical flexing points. Flexible hose must be protected with sheathing. All hoses, lines and fittings must be high pressure, hydraulic type, conforming to SAE standards for designed pressure (suction / feed lines excluded).

1.106.79. The reservoir and system must be filled with first quality virgin hydraulic oil, compatible with all system components.

1.106.80. All hydraulic lines that run from the front to the rear of the body must be routed either above or below the body, roof mounting preferred. Limb guards must be installed at the top front of the body to protect any exposed hydraulic lines and conduit. The guards must be fabricated from heavy wall steel tubing, formed to deflect branches over the lines and conduit. Guard construction and mounting must be approved by the Department of Fleet and Facility Management, Automotive Engineering Section, prior to construction. Where lines are routed underneath the body, they must be accessible from the body sides and must be suitably protected from damage and corrosion by a protective channel or sheath. Hydraulic line routing and protection must be approved by the Department of Fleet and Facility Management, Automotive Engineering Section, prior to installation.

1.106.81. The hydraulic system must be powered by a hydraulic pump driven by the electric PTO system. The hydraulic pump may be driven through a chassis transmission PTO port or by a directly coupled auxiliary electric motor.

1.106.82. Hydraulic and electric body controls must activate / de-activate hydraulic flow.

1.106.83. Displacement of the pump must be adequate to produce the flow and pressure required for efficient operation of the refuse body and cart dumpers at the shaft speed necessary to allow for an efficient and effective electrically driven hydraulic system.

1.106.84. The suction line must be sized to accommodate the flow produced by the pump at its maximum operational speed without exceeding an oil velocity of 3 feet per second.

1.106.85. Suction line must be plumbed directly to the hydraulic reservoir.

1.106.86. The central hydraulic system must be fed from the refuse body's hydraulic oil reservoir, located in the front portion of the body, with easy access, sized appropriate to meet the operational requirements herein.

1.106.87. The reservoir must be equipped with a 4" diameter "clean-out", a spin-on breather filter, magnetic drain plug, capped filter pipe, removable suction line strainer, and oil level/temperature sight gauge. A suitably sized ball-type valve must be installed in the pump feed port of the tank to shut off oil flow during servicing.

1.106.88. A removable full-flow cartridge type filter (with integral by-pass) must be provided in the return line of the system; in-tank mounting preferred. Filter must be rated at 20 microns maximum.

1.106.89. The hydraulic system of the refuse body must incorporate any/all control valves, lines, hoses, fittings, pressure relief valves, switches, controls, etc., normally required for safe/efficient operation, except where such items are superseded elsewhere in this specification.

1.106.90. Sufficient provision must be made to provide adequate power, hydraulic or electric, to the cart tipper system to ensure consistency in tipper weight capacity and cycle times regardless of the operation of other vehicle components.

1.106.91. Steps and grab handles must be mounted to the tailgate on each side and at the rear. Steps must be produced from “grip strut” material and 1.5" square structural steel tubing, with serrated step edges for increased slip resistance. Design and location must be approved by the Department of Fleet and Facility Management, Automotive Engineering Section, prior to construction.

1.106.92. Steps must be bolted to tailgate for easy removal.

1.106.93. The body must eject its compacted load by means of a hydraulically operated ejector plate. The ejector plate must be designed and constructed to discharge a fully packed load cleanly, without assistance of manual labor; operate without the use of cables, chains, gear racks or similar mechanical means of power transmission; prohibit the by-pass or wedging of refuse between the plate and the body walls, roof and floor; and cleanly shed itself of refuse during ejection.

1.106.94. NOTE: If a hydraulic cylinder housing protrudes from the plate face, the surfaces of the housing must be sloped to facilitate the clean shedding of debris.

1.106.95. Ejector plate and tailgate raise controls must be mounted outside the cab on the left side of the body front wall, or inside the front of the left body wall, or below the front of the left body wall. If controls are mounted inside the front of the left body wall, the control handles must not extend outside of the body.

1.106.96. Dual packer controls must be provided at the right rear of the tailgate, within safe and easy reach of the operator. The handles must connect to linkages which operate the hydraulic control valve.

1.106.97. "Panic Stop" push buttons must be furnished on the right rear and left rear of the tailgate to turn off the electric PTO in an emergency situation.

1.106.98. The operation of controls handles must engage the electric PTO system to provide for hydraulic force to be generated. If proximity switches are utilized in the control system, all such switches must be weather-proofed.

1.106.99. All wiring of the packer body must be run in loom and must be enclosed in rigid conduit terminating in City-approved electrical boxes. Alternately, aircraft- or automotive-type sealed connectors may be used.

1.106.100. All tailgate wiring must be sufficiently protected from damage. Wiring must terminate inside weather-proof junction boxes, equipped with suitable fittings. Alternately, aircraft- or automotive-type sealed connectors may be used.

1.106.101. All switches, wires, connectors and terminal blocks must be weatherproofed and shielded. All wires must be individual conductors, color coded. Trailer cable (multiple conductors in a single jacketed cable) is not acceptable.

1.106.102. In addition to the lighting required above, the body must be equipped with recessed LED clearance lights on the front, sides and rear of the body. Two amber lights must be mounted at the front, two amber lights at mid-section, and two red marker lights at the rear. There must be three red identification lights above the hopper in rear. All lighting must be in accordance with applicable ICC, State of Illinois and Federal requirements.

1.106.103. An LED lighted license plate bracket must be provided at the rear of the body above the hopper.

1.106.104. Four 4” shock-mount LED stop / tail / turn lights, 2 each side, must be installed, in addition to standard lighting package, in “City of Chicago” design light housings, mounted to the tailgate. Housing construction and mounting must be approved by the Department of Fleet and Facility Management, Automotive Engineering Section, prior to construction. Contact Department of Fleet and Facility Management, Automotive Engineering Section to view a sample.

1.106.105. A weatherproof push button switch, enclosed in the electrical box, must be mounted to each side of the tailgate. These switches must be wired to actuate a "Cole Hersee #4099" buzzer located inside the cab. Buzzer mounting enclosure must not interfere with transmission of buzzer sound to driver.

1.106.106. Two oval amber LED flashers must be installed at the top of the front of the body. Flashers must be wired to the ignition system, to only operate with the key in the “on” position. These lights must turn off automatically when the turn signals are activated.

1.106.107. Three amber LED flashers must be installed at the top of the rear of the body. Flashers must be wired to the ignition system, to only operate with the key in the “on” position. These lights must turn off automatically when the turn signals are activated.

1.106.108. One set of shovel brackets must be welded to the tailgate in an accessible location. The brackets must accommodate the D-handle scoop shovels currently utilized by the Department of Streets and Sanitation loading crews. Bracket construction and mounting must be approved by the Department of Fleet and Facility Management, Automotive Engineering Section, prior to construction.

1.106.109. The body must be mounted onto the chassis using spring-mounted brackets. If a sill is utilized between the body and the frame rails, the sill must be fabricated from "Rumber" recycled rubber material.

1.106.110. Holes must not be drilled into frame flanges. Welding of brackets, etc. to the frame is not acceptable.

1.106.111. Any modification of the chassis frame to accommodate the body mounting must be approved by the Department of Fleet and Facility Management, Automotive Engineering Section, prior to Construction.

## 1.107. BID LINE #46: REFUSE TRUCK: FIRST UNIT

1.107.1. Price for the first unit delivered and accepted by the City of Chicago over the life of the Contract including time extensions (if any).

## 1.108. BID LINE #47: REFUSE TRUCK: UNITS TWO THROUGH FIVE

1.108.1. Price per unit for the second, third, fourth and fifth units delivered and accepted by the City of Chicago over the life of the Contract including time extensions (if any).

## 1.109. BID LINE #48: REFUSE TRUCK: UNITS SIX THROUGH TEN

1.109.1. Price per unit for the sixth, seventh, eighth, ninth and tenth units delivered and accepted by the City of Chicago over the life of the Contract including time extensions (if any).

## 1.110. BID LINE #49: REFUSE TRUCK: ADDITIONAL UNITS

1.110.1. Price per unit for eleventh and all additional units delivered and accepted by the City of Chicago over the life of the Contract including time extensions (if any).

## 1.111. ADDITIONAL ITEMS

1.111.1. The Contractor must provide quotes on the Proposal Page for the following additional items. Bid Lines #50 through #54 describe upgrades to the base unit described in Bid Lines #46 through #49, and will be selected IN ADDITION TO Bid Lines #46 through #49 when needed. Pricing for Bid Lines #50 through #54 are for upgrade pricing only, and must not include the base unit prices indicated on Bid Lines #46 through #49.

1.111.2. Additional Item pricing must be a non-negative value. Quotes showing a credit or "no charge" will be assigned a price value of $0 for canvassing and contract award purposes.

1.111.3. The following Additional Items must be designed and constructed for use with the unit as specified, and be furnished complete with all necessary peripheral items required for proper/safe operation.

## 1.112. BID LINE #50: OEM OPTIONS

1.112.1. Orderable options selected at the time of the vehicle order and supplied by the Original Equipment Manufacturer (OEM), including models within the model series proposed and all available option codes, will be furnished and billed at the mark-up rate proposed on the Proposal Pages over the manufacturer's published dealer invoice price. The Contractor must furnish documentation (manufacturer's invoice price list, manufacturer's invoice or printout of the vehicle order, etc.) of the manufacturer's dealer invoice price at time of order to substantiate the charges; this documentation will accompany all invoices.

1.112.2. Where the presence of a selected OEM option increases or decreases the amount of fleet discount or options-package discount offered by the manufacturer, any difference in discount will be counted as part of the manufacturer's invoice pricing for purposes of computing the billable cost of the OEM option. The Contractor must furnish manufacturer's documentation of fleet discount and options-package discount at time of order to substantiate the charges; this documentation will accompany all invoices.

1.112.3. Where an OEM package is available that contains the selected OEM options at a price lower than that of the individual selected OEM options, the OEM package must be furnished and billed, with all equipment/accessory items within that OEM package furnished and included in the billed package price.

## 1.113. BID LINE #51: MECHANICAL AND ELECTRICAL REPAIR PARTS

1.113.1. Parts, accessories, assemblies and/or components furnished under this contract furnished must be compatible and interchangeable with vehicles and equipment purchased under this Contract.

1.113.2. Where the use of non-O.E.M. (generic) parts and/or "salvaged" parts will be used only when approved by the Department of Fleet and Facility Management. Parts will be furnished and billed at the mark-up rate established on the Proposal Pages. The Contractor will furnish documentation (manufacturer's retail price list, manufacturer's invoice or print of manufacturer's list price, etc.) to substantiate the charges; this documentation will accompany all invoices.

1.113.3. Fabricated parts furnished by the Contractor or Authorized Subcontractor under this contract will conform to the specifications and tolerances of the original equipment manufacturer.

## 1.114. BID LINE #52: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, REGULAR BUSINESS HOURS

1.114.1. The unit cost for regular repair service labor performed at the location(s) specified by the Contractor will be billed as regular time, hourly rate, Monday through Friday, 7:00 a.m. to 3:00 pm., excluding Holidays, as quoted on the Proposal Page(s), unless the Contractor or Authorized Subcontractor's regular service hours are longer, then the Contractor or Authorized Subcontractor's regular service hours will apply.

## 1.115. BID LINE #53: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, NON-REGULAR BUSINESS HOURS

1.115.1. In the event of an emergency (i.e. major snowstorm, etc.), the Contractor or Authorized Subcontractor must make available its facilities and services seven (7) days a week, twenty-four (24) hours per day and must be prepared to respond to Emergency Repair Service calls.

1.115.2. The Contractor will be notified by the Commissioner of the Department of Fleet and Facility Management or his authorized representative when emergency service is required.

1.115.3. The Contractor or Authorized Subcontractor must not perform any work outside the regular working hours without the prior authorization from the Commissioner of the Department of Fleet and Facility Management or his authorized representative.

1.115.4. The labor rates must include any and all peripheral costs.

## 1.116. BID LINE #54: TRANSPORTATION OF EQUIPMENT FOR SERVICE

1.116.1. The cost for transporting a vehicle purchased under this contract each way for service between a City of Chicago location and a Contractor's (or authorized Subcontractor's) location must include all peripheral costs, including but not limited to: providing a properly licensed driver or operator, any necessary tow or transport.

## 1.117. GROUP “I” – SEMI TRACTOR

## 1.118. BID LINE #55: SEMI TRACTOR

1.118.1. Cab/chassis must be delivered as a Complete Vehicle, outfitted with a fifth-wheel hitch and associated systems for the towing of full-size semi trailers.

1.118.2. Semi tractor must have a GVWR of 52,000 lbs. minimum and a GCWR of 80,000 lbs. minimum.

1.118.3. Vehicle must have two lockable cab doors.

1.118.4. Cab must be standard entry, left-hand driven tilt configuration. Cab width must not exceed 96". Fender extensions beyond the 96" cab width must be constructed from flexible material.

1.118.5. Wheelbase must be the shortest dimension necessary to properly mount, provide necessary turning radius for the trailer and distribute the weight of the payload and mounted equipment.

1.118.6. The Contractor must provide the shortest cab to axle dimension necessary to provide adequate turning radius for a 40’ trailer and to properly distribute the weight of all mounted equipment items and the payload.

1.118.7. The rear axle must be tandem, Meritor RT40-145, with 40,000 pound minimum rated capacity. Ratio must be chosen to meet criteria outlined in “OVERALL DESIGN” section.

1.118.8. Tandem rear axle must have driver-controlled traction differential.

1.118.9. The rear axle must be equipped with "Stemco" oil hubs with transparent caps.

1.118.10. The rear axle must have automatic slack adjusters.

1.118.11. Rear suspension must be Hendrickson leaf spring suspension, compatible with rated GVWR capacity.

1.118.12. Dual air brake system with anti-lock for tractor application must be provided.

1.118.13. Brakes must be cam actuated, front and rear. Brakes shoes must be “Q-PLUS” series. Minimum brake shoe size must be 16.5" x 5" front, 16.5" x 7" rear.

1.118.14. The air compressor (Bendix / Westinghouse, Midland or Cummins) must have a minimum capacity of 13.2 cubic feet per minute.

1.118.15. An air dryer, Bendix AD-IP with heater must be provided.

1.118.16. Bendix DV-2 automatic moisture ejectors with heater (all tanks) must be provided.

1.118.17. Emergency brake must be manufacturer’s standard for air brake system.

1.118.18. All brakes must be provided with suitable dust shields

1.118.19. All brake pins must be sprayed with “Never Seize” prior to assembly.

1.118.20. The brake system must be anti-lock (Meritor/Wabco 4 sensor/ 4 modulator).

1.118.21. The chassis air- lines must be reinforced nylon, fabric braid, and wire braid chassis air line.

1.118.22. An inversion valve and double check valve for tractor application must be included.

1.118.23. A transmission oil cooler, including oil pump, must be furnished.

1.118.24. The transmission must be calibrated for the overall intent of this specification. The vocation option package will be determined at the Pre-Construction meeting.

1.118.25. The vehicle must be equipped with a roof mounted 96" LED amber emergency light. The LED bar must be populated with 8 amber LED modules at each end, with 4 Halogen spotlights in the center. The mounting of the roof light must be approved by the Department of Fleet and Facility Management, Automotive Engineering section.

1.118.26. An aimable pedestal mounted work light, mounted on the rear of cab to illuminate the fifth wheel area. All lights must be controlled from within the cab by means of electric switches.

1.118.27. 14' coiled trailer hose connectors and trailer lighting cable with 6-way connector must be provided, compatible with "male" sockets on City trailers.

1.118.28. The air hose hanger must be mounted at the back of the cab with the bracket extended rearward.

1.118.29. Individual air suspension, high back driver seat and medium back passenger seat must be provided, with heavy-duty vinyl covering.

1.118.30. The unit must have back-of-cab access steps left hand side mounted.

1.118.31. Deck plates must be provide with grab handle included. There must be a vertical exhaust grab handle mounted.

1.118.32. Cab steps must be provided on both sides; traction design.

1.118.33. The tractor must have reflective material on the rear of the cab and on two "Anti-sail" mud flaps. The placement of the reflective material must meet or exceed FMVSS 108.

1.118.34. A 24" air slide fifth wheel must be provided, 36" diameter, "Fontaine 5000" series or American Steel Foundries No. 400-C36". Fifth wheel height must be maximum of 50" from ground.

1.118.35. Diamond plate steel, full – fenders must be installed over rear wheels.

## 1.119. ADDITIONAL ITEMS

1.119.1. The Contractor must provide quotes on the Proposal Page for the following additional item. Bid Lines #56 through #60 describe upgrades to the base unit described in Bid Line #55 and will be selected IN ADDITION TO Bid Line #55 when needed. Pricing for Bid Lines #56 through #60 are for upgrade pricing only, and must not include the base unit price indicated on Bid Line #55.

1.119.2. Additional Item pricing must be a non-negative value. Quotes showing a credit or "no charge" will be assigned a price value of $0 for canvassing and contract award purposes.

1.119.3. The following Additional Items must be designed and constructed for use with the unit as specified, and be furnished complete with all necessary peripheral items required for proper/safe operation.

## 1.120. BID LINE #56: OEM OPTIONS

1.120.1. Orderable options selected at the time of the vehicle order and supplied by the Original Equipment Manufacturer (OEM), including models within the model series proposed and all available option codes, will be furnished and billed at the mark-up rate proposed on the Proposal Pages over the manufacturer's published dealer invoice price. The Contractor must furnish documentation (manufacturer's invoice price list, manufacturer's invoice or printout of the vehicle order, etc.) of the manufacturer's dealer invoice price at time of order to substantiate the charges; this documentation will accompany all invoices.

1.120.2. Where the presence of a selected OEM option increases or decreases the amount of fleet discount or options-package discount offered by the manufacturer, any difference in discount will be counted as part of the manufacturer's invoice pricing for purposes of computing the billable cost of the OEM option. The Contractor must furnish manufacturer's documentation of fleet discount and options-package discount at time of order to substantiate the charges; this documentation will accompany all invoices.

1.120.3. Where an OEM package is available that contains the selected OEM options at a price lower than that of the individual selected OEM options, the OEM package must be furnished and billed, with all equipment/accessory items within that OEM package furnished and included in the billed package price.

## 1.121. BID LINE #57: MECHANICAL AND ELECTRICAL REPAIR PARTS

1.121.1. Parts, accessories, assemblies and/or components furnished under this contract furnished must be compatible and interchangeable with vehicles and equipment purchased under this Contract.

1.121.2. Where the use of non-O.E.M. (generic) parts and/or "salvaged" parts will be used only when approved by the Department of Fleet and Facility Management. Parts will be furnished and billed at the mark-up rate established on the Proposal Pages. The Contractor will furnish documentation (manufacturer's retail price list, manufacturer's invoice or print of manufacturer's list price, etc.) to substantiate the charges; this documentation will accompany all invoices.

1.121.3. Fabricated parts furnished by the Contractor or Authorized Subcontractor under this contract will conform to the specifications and tolerances of the original equipment manufacturer.

## 1.122. BID LINE #58: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, REGULAR BUSINESS HOURS

1.122.1. The unit cost for regular repair service labor performed at the location(s) specified by the Contractor will be billed as regular time, hourly rate, Monday through Friday, 7:00 a.m. to 3:00 pm., excluding Holidays, as quoted on the Proposal Page(s), unless the Contractor or Authorized Subcontractor's regular service hours are longer, then the Contractor or Authorized Subcontractor's regular service hours will apply.

## 1.123. BID LINE #59: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, NON-REGULAR BUSINESS HOURS

1.123.1. In the event of an emergency (i.e. major snowstorm, etc.), the Contractor or Authorized Subcontractor must make available its facilities and services seven (7) days a week, twenty-four (24) hours per day and must be prepared to respond to Emergency Repair Service calls.

1.123.2. The Contractor will be notified by the Commissioner of the Department of Fleet and Facility Management or his authorized representative when emergency service is required.

1.123.3. The Contractor or Authorized Subcontractor must not perform any work outside the regular working hours without the prior authorization from the Commissioner of the Department of Fleet and Facility Management or his authorized representative.

1.123.4. The labor rates must include any and all peripheral costs.

## 1.124. BID LINE #60: TRANSPORTATION OF EQUIPMENT FOR SERVICE

1.124.1. The cost for transporting a vehicle purchased under this contract each way for service between a City of Chicago location and a Contractor's (or authorized Subcontractor's) location must include all peripheral costs, including but not limited to: providing a properly licensed driver or operator, any necessary tow or transport.

## 1.125. GROUP “J” – PICKUP TRUCK

## 1.126. BID LINE #61: PICKUP TRUCK

1.126.1. The unit must be a two-door, rear-wheel-drive pickup truck with six-foot bed.

1.126.2. Cab must be a conventional-type two-door design. Pickup bed must be of a straight-sided design, nominally six feet in length and approximately 50” in interior width.

1.126.3. Overall vehicle length must be 205" at minimum. The wheelbase must be 119” at minimum.

1.126.4. Vehicle width must be 78” to 81”.

1.126.5. The vehicle must have four all-season black-sidewall radial 17” tires mounted on four steel 17” wheels. In addition, vehicle must be provided with a fullsize spare tire mounted on a rim and a wheel wrench and jack.

1.126.6. Mudflaps must be installed behind the rear tires (local installation acceptable).

1.126.7. Cab must be fitted with a three-person vinyl bench or split-bench seat, solar-tinted glass on all windows, and climate control with heat and air conditioning integrated into the factory climate controls.

1.126.8. Cab must have front airbags and side-impact airbags for the driver and outboard passenger.

1.126.9. Windows and door locks must be powered.

1.126.10. Vehicle must have a tilt steering wheel.

1.126.11. Vehicle must have an AM/FM stereo radio with clock.

## 1.127. ADDITIONAL ITEMS

1.127.1. The Contractor must provide quotes on the Proposal Page for the following additional items. Bid Lines #62 through #66 describe upgrades to the base unit described in Bid Line #61, and will be selected IN ADDITION TO Bid Line #61 when needed. Pricing for Bid Lines #62 through #66 are for upgrade pricing only, and must not include the base unit prices indicated on Bid Line #61.

1.127.2. Additional Item pricing must be a non-negative value. Quotes showing a credit or “no charge” will be assigned a price value of $0 for canvassing and contract award purposes.

1.127.3. The following Additional Items must be designed and constructed for use with the unit as specified, and be furnished complete with all necessary peripheral items required for proper/safe operation.

## 1.128. BID LINE #62: OEM OPTIONS

1.128.1. Orderable options selected at the time of the vehicle order and supplied by the Original Equipment Manufacturer (OEM), including models within the model series proposed and all available option codes, will be furnished and billed at the mark-up rate proposed on the Proposal Pages over the manufacturer’s published dealer invoice price. The Contractor must furnish documentation (manufacturer’s invoice price list, manufacturer’s invoice or printout of the vehicle order, etc.) of the manufacturer’s dealer invoice price at time of order to substantiate the charges; this documentation will accompany all invoices.

1.128.2. Where the presence of a selected OEM option increases or decreases the amount of fleet discount or options-package discount offered by the manufacturer, any difference in discount will be counted as part of the manufacturer’s invoice pricing for purposes of computing the billable cost of the OEM option. The Contractor must furnish manufacturer’s documentation of fleet discount and options-package discount at time of order to substantiate the charges; this documentation will accompany all invoices.

1.128.3. Where an OEM package is available that contains the selected OEM options at a price lower than that of the individual selected OEM options, the OEM package must be furnished and billed, with all equipment/accessory items within that OEM package furnished and included in the billed package price.

## 1.129. BID LINE #63: MECHANICAL AND ELECTRICAL REPAIR PARTS

1.129.1. Parts, accessories, assemblies and/or components furnished under this contract furnished must be compatible and interchangeable with vehicles and equipment purchased under this Contract.

1.129.2. Where the use of non-O.E.M. (generic) parts and/or "salvaged" parts will be used only when approved by the Department of Fleet and Facility Management. Parts will be furnished and billed at the mark-up rate established on the Proposal Pages. The Contractor will furnish documentation (manufacturer's retail price list, manufacturer's invoice or print of manufacturer's list price, etc.) to substantiate the charges; this documentation will accompany all invoices.

1.129.3. Fabricated parts furnished by the Contractor or Authorized Subcontractor under this contract will conform to the specifications and tolerances of the original equipment manufacturer.

## 1.130. BID LINE #64: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, REGULAR BUSINESS HOURS

1.130.1. The unit cost for regular repair service labor performed at the location(s) specified by the Contractor will be billed as regular time, hourly rate, Monday through Friday, 7:00 a.m. to 3:00 pm., excluding Holidays, as quoted on the Proposal Page(s), unless the Contractor or Authorized Subcontractor's regular service hours are longer, then the Contractor or Authorized Subcontractor's regular service hours will apply.

## 1.131. BID LINE #65: LABOR TO PERFORM MECHANICAL AND ELECTRICAL REPAIR SERVICES IN CONTRACTOR'S SHOP, NON-REGULAR BUSINESS HOURS

1.131.1. In the event of an emergency (i.e. major snowstorm, etc.), the Contractor or Authorized Subcontractor must make available its facilities and services seven (7) days a week, twenty-four (24) hours per day and must be prepared to respond to Emergency Repair Service calls.

1.131.2. The Contractor will be notified by the Commissioner of the Department of Fleet and Facility Management or his authorized representative when emergency service is required.

1.131.3. The Contractor or Authorized Subcontractor must not perform any work outside the regular working hours without the prior authorization from the Commissioner of the Department of Fleet and Facility Management or his authorized representative.

1.131.4. The labor rates must include any and all peripheral costs.

## 1.132. BID LINE #66: TRANSPORTATION OF EQUIPMENT FOR SERVICE

1.132.1. The cost for transporting a vehicle purchased under this contract each way for service between a City of Chicago location and a Contractor's (or authorized Subcontractor's) location must include all peripheral costs, including but not limited to: providing a properly licensed driver or operator, any necessary tow or transport.

1.132.2. The cost for transporting a vehicle purchased under this contract each way for service between a City of Chicago location and a Contractor's (or authorized Subcontractor's) location must include all peripheral costs, including but not limited to: providing a properly licensed driver or operator, any necessary tow or transport.

## 1.133. EXCEPTIONS

Any deviations from these specifications must be noted on the Proposal Page or Pages attached thereto, with the exact nature of the change outlined in sufficient detail. The reason for which deviations were made must be submitted with the bid if not self-explanatory. Failure of a bidder to comply with the terms of this paragraph may be cause for rejection.

The City reserves the right to disqualify bids which do not completely meet outlined specifications. The impact of exceptions to the specification will be evaluated by the City in determining its need.

## BID DATA PAGES

Bidder is required to complete the appropriate information for the Electric Trucks proposed herein, on the bid data pages. Failure to fill out all of the information requested may, at the discretion of the Chief Procurement Officer, result in the bidder being deemed non-responsive. The City will use the information contained in the bid data sheets, and elsewhere in the bid, to evaluate the responsiveness of the bidder.

NOTE: WHERE ITEM IS NOT APPLICABLE, INDICATE WITH "N/A". ATTACH ADDITIONAL SHEETS FOR EACH GROUP AS NEEDED.

### 1.134. PERSON TO CONTACT REGARDING THIS BID

NAME: _____ PHONE: _____

TITLE: _____ FAX: _____

COMPANY: _____ E-MAIL: _____

ADDRESS: _____

_____

_____

### 1.135. MAKES AND MODELS PROPOSED (CHASSIS AND ELECTRIC DRIVETRAIN, IF SEPARATE, AND BODY). ATTACH ADDITIONAL SHEETS FOR EACH GROUP AS NEEDED:

_____

_____

_____

_____

_____

_____

_____

_____

### 1.136. MANUFACTURER, MANUFACTUER'S DISTRIBUTOR/SERVICE REPRESENTATIVE

ATTACH ADDITIONAL SHEETS FOR EACH GROUP AS NEEDED. INDICATE IF YOU ARE:

| | | |
|---|---|---|
| MANUFACTURER | YES: _____ | NO: _____ |
| MANUFACTURER'S EXCLUSIVE DISTRIBUTOR* | YES: _____ | NO: _____ |
| MANUFACTURER'S AUTHORIZED DISTRIBUTOR* | YES: _____ | NO: _____ |
| MANUFACTURER'S AUTHORIZED SERVICE REPRESENTATIVE* | YES: _____ | NO: _____ |

* If an exclusive or authorized manufacturer's distributor, manufacture's service representative, or manufacturer's authorized service representative; bidder is to provide the name, address and phone number of manufacturer, and written documentation from the manufacturer verifying status, with the bid.

## 1.137. LICENSED NEW VEHICLE DEALER

ATTACH ADDITIONAL SHEETS FOR EACH GROUP AS NEEDED. INDICATE IF YOU ARE:

LICENSED NEW VEHICLE DEALER ** YES: _____ NO: _____

** If a licensed new vehicle dealer, bidder is to provide a copy of their current Registration for Authority to Deal in Vehicles, as Issued by the Illinois Secretary of State, with the bid.

## 1.138. WARRANTY

At a minimum, the specified unit(s) and all mounted/furnished equipment must be warranted against defective design, material or workmanship to the full extent of the respective Original Equipment Manufacturer's standard published warranty.

The bidder will indicate, below, the length of warranty coverage offered for each item and/or components furnished under this specification. In the event of conflict between the warranty information specified by the Contractor and the respective Original Equipment Manufacturers standard warranty, the warranties deemed most advantageous to the City will control.

NOTE: WHERE ITEM IS NOT APPLICABLE, INDICATE WITH "N/A".

| Component/Feature | Minimum Acceptable Coverage | Proposed Coverage |
|---|---|---|
| Complete base unit | Full 2 years/36,000 miles parts & labor | _____ |
| Drivetrain | Full 3 years/36,000 miles parts & labor | _____ |
| Chassis rust-through | Full 5 years/100,000 miles parts & labor | _____ |
| Body | Full 2 years/36,000 miles parts & labor | _____ |
| LED lighting | Full 5 years parts & labor | _____ |
| Non-OEM accessories | Full 1 year parts & labor | _____ |
| Other | Full 1 year parts & labor | _____ |

## 1.139. TRAINING OFFERED:

_____

_____

_____

## 1.140. LOCATION OF REPAIR AND MAINTENANCE SHOP(S)

_____

_____

_____

## 1.141. REFERENCES:

Bidder must be in the business of selling new vehicles and demonstrate sufficient capacity to furnish the Electric Trucks as specified herein. Therefore, upon request of the Chief Procurement Officer or authorized representative, the Bidder, must submit a listing of previous and current contracts similar in size and scope as the required services. At a minimum, the list must include the following information:

1. COMPANY: _____
   ADDRESS: _____
   CONTACT: _____
   CONTACT PHONE ( ) _____
   DESCRIPTION OF WORK: _____
   _____
   DATE(S) WORK PERFORMED: _____
   DOLLAR VALUE OF WORK: $_____

2. COMPANY: _____
   ADDRESS: _____
   CONTACT: _____
   CONTACT PHONE ( ) _____
   DESCRIPTION OF WORK: _____
   _____
   DATE(S) WORK PERFORMED: _____
   DOLLAR VALUE OF WORK: $_____

3. COMPANY: _____
   ADDRESS: _____
   CONTACT: _____
   CONTACT PHONE ( ) _____
   DESCRIPTION OF WORK: _____
   _____
   DATE(S) WORK PERFORMED: _____
   DOLLAR VALUE OF WORK: $_____

The City may solicit from previous clients, including the City of Chicago, or any available sources, relevant information concerning bidder's record of past performance.

The Bidder's failure to furnish the above information, upon request, will result in the disqualification of the Bidder.

**1.142. COMMENTS, IF ANY, TO PROVISION(S) OF THE GENERAL CONDITIONS:**

Section No.: _____ Description:_____

_____

_____

_____

Section No.: _____ Description:_____

_____

_____

_____

**1.143. COMMENTS, IF ANY, TO PROVISION(S) OF THE SPECIAL CONDITIONS:**

Section No.: _____ Description:_____

_____

_____

_____

Section No.: _____ Description:_____

_____

_____

_____

**1.144. COMMENTS, IF ANY, TO PROVISION(S) OF THE DETAILED SPECIFICATIONS:**

Section No.: _____ Description:_____

_____

_____

_____

Section No.: _____ Description:_____

_____

_____

_____