

## AGREEMENT

fns-01

**THIS AGREEMENT** is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2010, by and between the **CITY AND COUNTY OF DENVER**, a municipal corporation of the State of Colorado (the "City" or "Customer") and **TRANSWEST FREIGHTLINER, LLC**, a Colorado limited liability company, whose address is 5100 East 78<sup>th</sup> Avenue, Commerce City, Colorado 80022 ("Contractor").

### RECITALS:

1. The City desires to obtain two thirty-seven foot Hybrid Aerial Bucket Trucks and one sixty foot Hybrid Aerial rear mount Bucket Truck and associated equipment, and Contractor desires to provide that equipment to the City.

2. Payment for the equipment shall be financed through a separate lease-purchase agreement (the "LPA") between the City and ALL AMERICAN INVESTMENT GROUP, LLC, a Delaware limited liability company ("Financier").

### AGREEMENT:

For and in consideration of the agreements contained, and subject to the terms and conditions stated, in this Agreement, the parties agree as follows:

1. **FORM OF AGREEMENT.** This Agreement shall consist of the terms and conditions stated in the following numbered Articles, together with those exhibits or attachments that are referenced and incorporated in such Articles. In the event that any conflict between the terms and conditions contained in this document and those contained in any exhibits or attachments shall occur, the terms and conditions of these numbered Articles shall be controlling.

2. **COORDINATION AND LIAISON:** Contractor agrees that during the term of this Agreement it shall fully coordinate the performance of this Agreement with the City, including the Manager of Public Works or as otherwise directed by the City. Contractor understands that the City's Manager of Public Works or designee (the "Manager") is the City's representative or Project Manager under this Agreement through whom Contractor obligations performed under this Agreement shall be coordinated.

3. **EQUIPMENT AND WARRANTIES TO BE PROVIDED.**

A. Contractor shall provide to the City the equipment and warranties listed and described on **Exhibit A** attached hereto (hereinafter referred to as the "Equipment" and "Warranties").

B. It is understood and agreed that the Equipment and Warranties associated with this Agreement that are being provided to the City hereunder are also routinely provided to nongovernmental customers on the same terms and conditions that were offered to the City and are agreed to by the City in this Agreement.

4. **SPECIAL PURCHASING TERMS AND CONDITIONS:** In addition to all other terms and conditions stated in this Agreement, Contractor shall comply with the following special purchasing terms and conditions:

A. Pricing is F.O.B. Denver, CO, delivered to the City facilities located at 5440 Roslyn Street, Denver, CO 80216 and unloaded. Delivery shall be on or before August 1, 2010.

B. Contractor agrees to bear all risk of loss, injury, or destruction of goods and materials ordered as a result of this Agreement which occur prior to delivery to the City; and such loss, injury or destruction shall not release Contractor from any obligation hereunder. Thereafter, risk of loss shall pass to the City and Financer as further described in the LPA.

C. Contractor agrees to furnish, upon the written request of the City, any additional information needed to substantiate or clarify the design and/or performance characteristics of the Equipment.

D. Contractor Invoices must include the following:

- (1) City contract control number.
- (2) Items listed individually.
- (3) Invoice number and date.
- (4) Requesting department name and "ship to" address.
- (5) Payment terms.

5. **TERM.** The term of this Agreement shall commence upon April 1, 2010, and expire on March 31, 2011.

6. **COMPENSATION.**

A. It is understood and agreed that the City has elected to lease purchase finance the Equipment and Warranties through the LPA. The City and Financer have also entered into an escrow agreement that together with the LPA provide for payment to the Contractor of the maximum amount stated herein subject to the procedure set out in the LPA. The Contractor's performance under this Agreement is expressly conditioned upon funding of the escrow agreement and proper payment as set out herein.

B. The total compensation payable to Contractor for acquiring and delivering the Equipment together with the Warranties shall not exceed the amount of **FIVE HUNDRED AND EIGHTEEN THOUSAND AND FOUR HUNDRED AND NINETY-FIVE DOLLARS** (\$518,495.00) (the "Maximum Purchase Amount"), payable directly to the Contractor by Financer. Title to the Equipment shall vest with Financer upon payment of the Maximum Purchase Amount to Contractor. Beneficial use of the Equipment and Warranties shall remain with the City.

C. The total compensation payable by the City to Contractor under this Agreement for the Equipment and Warranties shall not exceed Zero Dollars (\$0.00) (the "Maximum Contract Amount").

D. The total obligation of the City hereunder shall be limited to funds appropriated for the purposes of this Agreement by the Council of the City and County of Denver, paid into the Treasury of the City and encumbered for the purpose of this Agreement.

7. **TIME IS OF THE ESSENCE:** The parties agree that in the performance of the terms, conditions, and requirements of this Agreement by Contractor, time is of the essence.

8. **STATUS OF CONTRACTOR:** It is understood and agreed by and between the parties that the status of Contractor shall be that of an independent contractor and it is not intended, nor shall it be construed, that Contractor or any employee or subconsultant is an employee, officer, or agent of the City under Chapter 18 of the Denver Revised Municipal Code for purposes of unemployment compensation, workers' compensation, or for any purpose whatsoever.

9. **TERMINATION OF AGREEMENT:** The City may terminate this Agreement at any time on thirty (30) days' notice if Contractor is in breach or default of the Agreement or if the underlying project or activity is canceled. The City may also by written Notice of Default to Contractor terminate the whole or part of this Agreement in the event Contractor or any of its officers or employees are convicted, plead nolo contendere, enter into a formal agreement in which they admit guilt, enter a plea of guilty, or otherwise admit culpability to criminal offenses of bribery, kickbacks, collusive bidding, bid-rigging, antitrust, fraud, undue influence, theft, racketeering, extortion or any offense of a similar nature, in connection with Contractor's business. Contractor may terminate this Agreement upon ten (10) days prior written notice if (a) the City breaches this Agreement and the breach remains uncured for thirty (30) days after receipt of written notice of the breach, or (b) Financer fails to honor its obligations under the LPA.

10. **WHEN RIGHTS AND REMEDIES NOT WAIVED:** In no event shall any payment by the City hereunder constitute or be construed to be a waiver by the City of any breach of term, covenant, or condition or any default which may then exist on the part of Contractor, and the making of any such payment when any such breach or default shall exist shall not impair or prejudice any right or remedy available to the City with respect to such breach or default; and no assent, expressed or implied, to any breach of any one or more terms, covenants, or conditions of the Agreement shall be construed as a waiver of any succeeding or other breach.

11. **EXAMINATION OF RECORDS:** Contractor agrees that any duly authorized representative of the City, including the City Auditor or his representative, shall, until the expiration of three (3) years after the final payment under this Agreement, have access to and the right to examine any directly pertinent books, documents, papers and records of Contractor, involving transactions related to this Agreement.

12. **TAXES, PERMITS AND LICENSES:** Contractor agrees to pay promptly all taxes, excises, license fees and permit fees of whatever nature applicable to its operations, and to take out and keep current all required licenses or permits, whether municipal, state or federal, required for the conduct of its business hereunder, and further agrees not to permit any of said taxes, excises or license or permit fees to become delinquent. Contractor further agrees to furnish the City, upon request, duplicate receipts or other satisfactory evidence showing the prompt payment by Contractor of all required licenses and permits and all taxes. Contractor further agrees to pay promptly when due all bills, debts and obligations incurred by it in connection with its operations, and not to permit the same to become delinquent and to suffer no lien, mortgage, judgment or execution to be filed which will in any way impair the rights of the City under this Agreement.

13. **VENUE, GOVERNING LAW:** Each and every term, condition, or covenant herein is subject to and shall be construed in accordance with the provisions of Colorado law, any applicable federal law, the Charter of the City and County of Denver and the ordinances, regulations, and Executive Orders enacted and/or promulgated pursuant thereto. Such applicable law, together with the Charter, Revised Municipal Code, regulations and Executive Orders of the City and County of Denver, as the same may be amended from time to time, is hereby expressly

incorporated into this Agreement as if fully set out herein by this reference. Venue for any action arising hereunder shall be in the Denver County or Denver District Court in the City and County of Denver, Colorado.

**14. USE, POSSESSION OR SALE OF ALCOHOL OR DRUGS:** Contractor, its officers, agents, and employees shall cooperate and comply with the provisions of Executive Order 94 and Attachment A thereto concerning the use, possession or sale of alcohol or drugs. Violation of these provisions or refusal to cooperate with implementation of the policy can result in the City's barring Contractor from City facilities or participating in City operations.

**15. ASSIGNMENT AND SUBCONTRACTING:**

A. Provided that the City shall have accepted the Equipment, the City shall not have the right to and shall not assert against any assignee of Financer or other registered owner of the Equipment any claim, counterclaim or other right the City may have against the Contractor.

B. None of the City's right, title and interest in any portion of the Equipment may be assigned or encumbered by the City for any reason; except that the City may sublease all or part of such Equipment if (a) such sublease is to an agency or department of, or a political subdivision of, the State or (b) the City obtains the prior written consent of Financer and an opinion of nationally recognized counsel in the area of tax exempt municipal obligations satisfactory to Financer that such subleasing will not adversely affect the exclusion of the interest components of the rental payments made to Financer under the lease-purchase transaction referenced herein from gross income for federal income purposes. Any such sublease of all or part of any Equipment shall be subject to the lease-purchase transaction with Financer and the rights of Financer in, to and under such transaction with respect to the Equipment.

C. The City is otherwise not obligated or liable under this Agreement to any party other than the Contractor named herein. Contractor understands and agrees that it shall not assign or subcontract with respect to any of its rights, benefits, obligations or duties under this Agreement except upon prior written consent and approval of the City, which consent or approval may be withheld in the absolute discretion of the City; and in the event any such assignment or subcontracting shall occur, such action shall not be construed to create any contractual relationship between the City and such assignee or subcontractor, and Contractor herein named shall remain fully responsible to the City according to the terms of this Agreement.

**16. NO DISCRIMINATION IN EMPLOYMENT:** In connection with the performance of work under this Agreement, Contractor agrees not to refuse to hire, discharge, promote or demote, or to discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, marital status, or physical or mental disability; and Contractor further agrees to insert the foregoing provision in all subcontracts hereunder.

**17. INSURANCE:**

A. **General Conditions:** Contractor agrees to secure, at or before the time of execution of this Agreement, the following insurance covering all operations, goods or services provided pursuant to this Agreement. Contractor shall keep the required insurance coverage in force at all times during the term of the Agreement, or any extension thereof, during any warranty period, and for three (3) years after termination of the Agreement. The required

insurance shall be underwritten by an insurer licensed or authorized to do business in Colorado and rated by A.M. Best Company as "A"VIII or better. Each policy shall contain a valid provision or endorsement stating "Should any of the above-described policies be canceled or should any coverage be non-renewed before the expiration date thereof, the issuing company shall send written notice to Denver Risk Management, 201 West Colfax Avenue, Dept. 1105, Denver, Colorado 80202 by certified mail, return receipt requested. Such written notice shall be sent thirty (30) days prior to such cancellation or reduction unless due to non-payment of premiums for which notice shall be sent ten (10) days prior." If any policy is in excess of a deductible or self-insured retention, the City must be notified by the Contractor. Contractor shall be responsible for the payment of any deductible or self-insured retention. The insurance coverages specified in this Agreement are the minimum requirements, and these requirements do not lessen or limit the liability of the Contractor. The Contractor shall maintain, at its own expense, any additional kinds or amounts of insurance that it may deem necessary to cover its obligations and liabilities under this Agreement.

**B. Proof of Insurance:** Contractor shall provide a copy of this Agreement to its insurance agent or broker. Contractor certifies that the attached certificate of insurance (preferably an ACORD certificate of insurance) complies with all insurance requirements of this Agreement. The City's acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Contractor's breach of this Agreement or of any of the City's rights or remedies under this Agreement. The City's Risk Management Office may require additional proof of insurance, including but not limited to policies and endorsements.

**C. Additional Insureds:** For General Liability, Contractor's insurer shall name the City as an additional insured.

**D. Waiver of Subrogation:** For all coverages, Contractor's insurer shall waive subrogation rights against the City.

**E. Subcontractor:** All sub-consultants, subcontractors, independent contractors, suppliers or other entities providing goods or services required by this Agreement shall be subject to all of the requirements herein and shall procure and maintain the same coverages required of the Contractor. Contractor shall include all such sub-consultants, subcontractors, independent contractors, suppliers or other entities as insureds under its policies or shall ensure that all subconsultants maintain the required coverages. Contractor agrees to provide proof of insurance for all such subcontractors, independent contractors, suppliers or other entities upon request by the City.

**F. Workers' Compensation/Employer's Liability Insurance:** Contractor shall maintain the coverage as required by statute for each work location and shall maintain Employer's Liability insurance with limits of \$100,000 for each bodily injury occurrence claim, \$100,000 for each bodily injury caused by disease claim, and \$500,000 aggregate for all bodily injuries caused by disease claims. Contractor expressly represents to the City, as a material representation upon which the City is relying in entering into this Agreement, that none of the Contractor's officers or employees who may be eligible under any statute or law to reject Workers' Compensation Insurance shall effect such rejection during any part of the term of this Agreement, and that any such rejections previously effected, have been revoked as of the date Contractor executes this Agreement.

**G. Commercial General Liability:** Contractor shall maintain limits of \$1,000,000 for each occurrence, \$1,000,000 for each personal and advertising injury claim.

\$2,000,000 products and completed operations for each occurrence, and \$2,000,000 policy aggregate.

**H. Automobile Liability:** Contractor shall maintain minimum limits of \$1,000,000 combined single limit applicable to all vehicles used in performing services under this Agreement. Auto pollution liability coverage must be carried for any vehicle hauling cargo containing pollutants or contaminants.

**I. Additional Provisions:**

- (1) For all General Liability, the policies must provide the following:
  - (a) Unlimited defense costs in excess of policy limits;
  - (b) A severability of interests provision;
  - (c) Waiver of exclusion for lawsuits by one insured against another;
  - (d) A provision that coverage is primary; and
  - (e) A provision that coverage is non-contributory with other coverage or self-insurance provided by the City.

(2) For all General Liability, if the policy is a claims-made policy, then the retroactive date must be on or before the contract date or the first date when any goods or services were provided to the City, whichever is earlier.

18. **CITY'S INSURANCE.** The City is self-insured pursuant to the Colorado Governmental Immunity Act, C.R.S. §24-10-101 et seq., and shall not be required to obtain any liability, fire, casualty or other insurance as a result of this Agreement. Neither shall any contrary statement contained in any attachment or exhibit hereto be construed to shift the risk of loss or liability to the City.

**19. INDEMNIFICATION:**

- A. Consultant hereby agrees to defend, indemnify, and hold harmless City, its appointed and elected officials, agents and employees against all liabilities, claims, judgments, suits or demands for damages to persons or property arising out of, resulting from, or relating to the work performed under this Agreement ("Claims"), unless and until such Claims have been specifically determined by the trier of fact to be due to the sole negligence or willful misconduct of the City. This indemnity shall be interpreted in the broadest possible manner to indemnify City for any acts or omissions of Consultant or its subcontractors either passive or active, irrespective of fault, including City's concurrent negligence whether active or passive, except for the sole negligence or willful misconduct of City.
- B. Consultant's duty to defend and indemnify City shall arise at the time written notice of the Claim is first provided to City regardless of whether Claimant has filed suit on the Claim. Consultant's duty to defend and indemnify City shall arise even if City is the only party sued by claimant and/or claimant alleges that City's negligence or willful misconduct was the sole cause of claimant's damages.
- C. Consultant will defend any and all Claims which may be brought or threatened against City and will pay on behalf of City any expenses incurred by reason of

such Claims including, but not limited to, court costs and attorney fees incurred in defending and investigating such Claims or seeking to enforce this indemnity obligation. Such payments on behalf of City shall be in addition to any other legal remedies available to City and shall not be considered City's exclusive remedy.

- D. Insurance coverage requirements specified in this Agreement shall in no way lessen or limit the liability of the Consultant under the terms of this indemnification obligation. The Consultant shall obtain, at its own expense, any additional insurance that it deems necessary for the City's protection.
- E. This defense and indemnification obligation shall survive the expiration or termination of this Agreement.

20. **CONFLICT OF INTEREST:** The parties agree that no official, officer or employee of the City shall have any personal or beneficial interest whatsoever in the services or property described herein and Contractor further agrees not to hire or contract for services any official, officer or employee of the City or any other person which would be in violation of the Denver Revised Municipal Code Chapter 2, Article IV, Code of Ethics, or Denver City Charter Sections 1.2.9 and 1.2.12.

21. **NO THIRD PARTY BENEFICIARY:** It is expressly understood and agreed that enforcement of the terms and conditions of this Agreement, and all rights of action relating to such enforcement, shall be strictly reserved to the City and Contractor, and nothing contained in this Agreement shall give or allow any such claim or right of action by any other or third person or entity on such Agreement, including but not limited to subcontractors and suppliers. It is otherwise the express intention of the City and Contractor that any person or entity other than the City or Contractor receiving services or benefits under this Agreement shall be deemed to be an incidental beneficiary only.

22. **TRADE SECRETS AND CONFIDENTIAL INFORMATION:**

A. Contractor shall not at any time or in any manner, either directly or indirectly, divulge, disclose or communicate to any person, firm or corporation in any manner whatsoever any information concerning any matters related to this Agreement which are not subject to public disclosure, including without limitation the trade secrets of businesses or entities doing business with the City and other privileged or confidential information.

B. In the event that this Agreement or any exhibit or attachment is the subject of an open records request by a third party under Colorado law, the City will notify Contractor of such request. If Contractor believes that any material furnished to the City under this Agreement is not subject to disclosure, it shall take whatever action it deems necessary or appropriate to obtain a court order from the Denver District Court to preclude such disclosure by the City.

23. **DISPUTES:** All disputes of whatsoever nature between the City and Contractor regarding this Agreement shall be resolved by administrative hearings pursuant to the procedure established by Denver Revised Municipal Code §56-106(b) et. seq. For the purposes of that procedure, the City official rendering a final determination shall be the City representative identified in Article 2 hereof.

24. **TAXES, CHARGES AND PENALTIES:** The City shall not pay or be liable for any claimed interest, late charges, fees, taxes or penalties of any nature, except as required by the City's Revised Municipal Code.

25. **PARAGRAPH HEADINGS:** The captions and headings set forth herein are for convenience of reference only, and shall not be construed so as to define or limit the terms and provisions hereof.

26. **SEVERABILITY:** It is understood and agreed by the parties hereto that if any part, term, or provision of this Agreement, except for the provisions of the Agreement requiring prior appropriation of funds and limiting the total amount payable by the City, is by the courts held to be illegal or in conflict with any law of the State of Colorado, the validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the particular part, term, or provision held to be invalid.

27. **SURVIVAL OF CERTAIN AGREEMENT PROVISIONS:** The parties understand and agree that all terms, conditions and covenants of this Agreement, together with the exhibits and attachments hereto, if any, any or all of which, by reasonable implication, contemplate continued performance or compliance beyond the expiration or termination of this Agreement (by expiration of the term or otherwise), shall survive such expiration or termination and shall continue to be enforceable as provided herein. Without limiting the generality of the foregoing, Contractor's obligations for the provision of insurance, for indemnity to the City and for preserving confidentiality of trade secrets and other information shall survive for a period equal to any and all relevant statutes of limitation, plus the time necessary to fully resolve any claims, matters, or actions begun within that period.

28. **AGREEMENT AS COMPLETE INTEGRATION - AMENDMENTS:** This Agreement, together with the LPA, are intended as the complete integration of all understandings between the parties as to the subject matter of this Agreement. No prior or contemporaneous addition, deletion, or other amendment hereto shall have any force or effect whatsoever, unless embodied herein in writing. No subsequent novation, renewal, addition, deletion, or other amendment hereto shall have any force or effect unless embodied in a written amendatory or other Agreement properly executed by the parties. No oral representation by any officer or employee of the City at variance with the terms and conditions of this Agreement or any written amendment to this Agreement shall have any force or effect or bind the City. Amendments to this Agreement will become effective when approved by both parties and executed in the same manner as this Agreement. This Agreement and any amendments shall be binding upon the parties, their successors and assigns.

29. **LEGAL AUTHORITY:**

A. Contractor assures and guarantees that it possesses the legal authority, pursuant to any proper, appropriate and official motion, resolution or action passed or taken, to enter into this Agreement.

B. The person or persons signing and executing this Agreement on behalf of Contractor, do hereby warrant and guarantee that he/she or they have been fully authorized by Contractor to execute this Agreement on behalf of Contractor and to validly and legally bind Contractor to all the terms, performances and provisions herein set forth.

C. The City shall have the right, at its option, to either temporarily suspend or permanently terminate this Agreement, if there is a dispute as to the legal authority of either Contractor or the person signing the Agreement to enter into this Agreement. The City shall not be

obligated to pay Contractor for any performance of the provisions of this Agreement after the City has suspended or terminated this Agreement as provided in this Article.

30. **COUNTERPARTS OF THIS AGREEMENT:** This Agreement shall be executed in two (2) counterparts, each of which shall be deemed to be an original of this Agreement.

[Signatures on following page]

The parties have executed this Agreement as of the day and year first above written.

**CITY AND COUNTY OF DENVER**

**ATTEST:**

STEPHANIE Y. O'MALLEY, Clerk and  
Recorder, Ex-Officio Clerk of the  
City and County of Denver

**APPROVED AS TO FORM:**

DAVID R. FINE, Attorney  
For the City and County of Denver

By: \_\_\_\_\_  
Assistant City Attorney

By: \_\_\_\_\_

JOHN W. HICKENLOOPER,  
Mayor

**RECOMMENDED AND APPROVED:**

By: Lesley B. Roman  
GUILLERMO VIDAL,  
Manager of Public Works

**REGISTERED AND COUNTERSIGNED:**

By: \_\_\_\_\_  
Manager of Finance  
Contract Control No. XC90679

By: \_\_\_\_\_  
DENNIS GALLAGHER, Auditor of the  
City and County of Denver

**"CITY"**

**TRANSWEST FREIGHTLINER, LLC,**

By: Kevin Wright  
**"CONTRACTOR"**

**EXHIBIT A**

**EQUIPMENT PURCHASED**

<u>Quantity</u>	<u>Item</u>	<u>Price</u>
2	Thirty-Seven Foot Hybrid Aerial Bucket Trucks	\$168,566.00 EACH
1	Sixty Foot Hybrid Aerial Rear Mount Bucket Truck	\$181,363.00
<b>TOTAL PURCHASE AMOUNT:</b>		<hr/> <b>\$518,495.00</b>

Specifications of equipment, training, and warranties to be provided by Contractor are set out on the attached pages, which together with this cover sheet constitute **Exhibit A**.

# Forestry

Reference No.: 09-187R1

**CITY AND COUNTY OF DENVER  
Technical Specifications and Bid Items  
For a  
Sixty-Foot Hybrid Aerial Rear Mount Bucket Truck**

04/14/09

- 1.0 General Description**  
A new current model year single axle, 33,000 lb GVWR (plate certified) electric hybrid rear mount aerial bucket truck. The truck shall be suitable for use by the City Forestry Department in maintaining and trimming/removal tree operations. The vehicle will be required to work without operating the truck engine and rely on the electric hybrid system for 55 minute out of 1 hour's service to operate the aerial bucket system and recharge the hybrid batteries with the truck engine running for 5 minutes suitable for another 55 minutes of hybrid power use. Battery life 5 years minimum. The truck may operate for long periods of time in all weather conditions performing Forestry maintenance duties.
- 1.1 Standard Factory Equipment**  
All standard factory equipment shall be included with the vehicle/equipment; no deletions of standard factory equipment will be permitted unless specifically superseded in these specifications. Accessories not specifically mentioned herein but necessary to furnish a complete unit ready for use shall also be included.
- 1.2 Government Requirements (where applicable)**  
The vehicle/equipment shall be built to, and perform in accordance with, all the requirements of the latest edition of the following standards and specifications:
- FHWA, Federal Highway Administration
  - SAE, Society of Automotive Engineers Specifications
  - FMVSS, Federal Motor Vehicle Safety Standards
  - DOT, Department of Transportation Regulations
  - AWS, American Welding Society Standards
  - PUC, Public Utilities Commission (Colorado)
- 1.3 Workmanship and Durability**  
Workmanship throughout the vehicle/equipment shall conform to the highest standards. Durability shall be sufficient to allow safe and efficient operation of the equipment/vehicle.
- 1.4 Completion of Bid Items and Alternates**  
Vendor shall complete each line item in "Offered Equipment" and "Cost" columns in the following manner:  
A. Provide vehicle/equipment technical information in "Offered Equipment" provide technical information as requested and provide cost of item in "Cost" column.  
B. Included Standard Equipment in "Offered Equipment" column provide technical information as requested for standard equipment in, "Cost" column write NC for "No Charge".

Reference No.: 09-187R1

- C. Differences in "RED" ink in "Offered Equipment" column adjacent to Description of Equipment provide information on the item being offered, in "Cost" column provide cost if there is a bid item cost.
- D. Vendors shall break out and list costs for each specification section. Failure to break out proposed costs may cause proposal to be non-responsive. Breakout costs will be used for comparisons clarifying cost issues and if deletions to the specifications need to be made.

## 2.0 Basic Requirements, or approved equal.

### 2.1 Basic Vehicle

	Description of Equipment	Offered Equipment	Cost
A.	Basic Truck: Standard Cab (3-Person) International 4300 SBA, straight single axle 4x2 truck with set back front axle and 33,000-lb. GVWR (plate certified, with a 60' rear mount aerial device and service body. 1. Wheelbase: 203". 2. Cab-to-Axle: 110" clean. 3. After frame: 75" minimum. Vendor shall verify that wheelbase & cab-axle are appropriate for application.	Make: <u>F T L</u> Model: <u>112-7106</u> Drive Wheels: <u>4X2</u> Axle Set Back: <u>41"</u> GVWR: <u>33,000</u> lbs Wheelbase: <u>115"</u> Cab-to-Axle: <u>111</u> After Frame: <u>75"</u>	\$ <u>52,934</u>
B.	Frame: 1. Rating 33,000-lbs. GVWR minimum. 2. Heavy-duty 120,000-psi full channel heat-treated steel, with main frame 900,000 in-lb. 3. RBM and deep frame section 18 in <sup>2</sup> minimum.	Frame Rating: <u>150,000</u> lbs Yield Strength: <u>120,000</u> psi Section Modulus/rail: <u>15,000</u> in <sup>3</sup> Frame RBM/rail: <u>150,000</u> lbf-in	\$ <u>2,112</u>
C.	Cab Type: 1. Conventional cab with sloped tilt hood. 2. The hood shall stop at least 10° from windshield cowl to the front of the hood for good visibility and safety in heavy traffic.	Cab Type: <u>112-7106</u> Hood Slope: <u>10°</u>	\$ <u>1,712</u>
D.	Regular Service Components: 1. All components that require regular servicing shall be easy to access and be located as much as possible to protect the components from road splash. 2. Access to rear engine mounts or transmission removal should not require the removal of electrical wiring, hydraulic hoses, air tanks or air dryers. 3. Air dryer to be installed on outside or the frame for easy and quick access for servicing.	(Yes) No (Yes) No	\$ <u>1,422</u>
E.	Towing Provisions: 1. Tow hooks, two front and two rear, frame mounted. 2. Air brake 3/8" female quick-connect hook up system on vehicle for	Location: <u>EXTENDABLE STICK</u> (Yes) No (Yes) No	\$ <u>677</u>

	Description of Equipment	Offered Equipment	Cost
	wrecker air brake connection. Quick-connectors shall be accessible and protected but shall not stick out where they could get damaged.		
	3. A check valve shall be provided at the vehicles air tank to prevent air loss.	(Yes) No	
F.	Keys, Ignition, Door, and Other, keyed alike 5 sets total.		
	1. Standard 2 sets;		
	2. Additional cost per 1 key set: \$ 15	Cost for 3 sets of keys: \$ 45	\$ 45
2.2	Engine		
	Description of Equipment	Offered Equipment	Cost
A.	International Maxx Force DT 466, I-6 cylinder, 8.7L, electronically controlled, turbo charged with after cooler diesel engine. Engine shall be rated at 255 hp @ 2,400 rpm. Torque 660 lb/ft @ 1,400 rpm. Governed Speed 2,600 rpm. The engine shall be electronically controlled meeting year of manufacturer EPA/CARB certifications with following components:	Make: <u>CUMMINS</u> Model: <u>I-6 B</u> HP: <u>255</u> @ <u>2,600</u> rpm Torque: <u>660</u> @ <u>1,400</u> rpm	\$ 1,425
	1. Engine shall meet EPA tier 3 emission standards.	Emissions Rating: <u>TIER 3</u>	
	2. Engine warning/shutdown system with to monitor low oil pressure, high coolant temperature and low coolant level with manual override on truck.	(Yes) No	
	3. Computer controlled fast idle and PTO protection.	(Yes) No	
	4. Computer controlled idle management set initially at 10-minutes to shut down.	(Yes) No	
	5. Thermos bottle stopper-type dipstick.	(Yes) No	
B.	Filtration:		
	1. Oil: Fleetguard LF3000 full flow/bypass oil filter.	Make: <u>FLEETGUARD</u> Model: <u>LF3000</u>	\$ 52
	2. Fuel: Racor 690RP12 fuel/water separator with thermostatically controlled heater.	Make: <u>RACOR</u> Model: <u>690RP12</u>	
	3. Air: dual element dry type with air inlet restriction indicator located in cab.	Make: <u>PANAVITRONIC</u> Model: <u>SATELLITE</u>	
C.	Exhaust:		
	1. Horizontal ground discharge behind the right side of the cab	Location: <u>1/2 BACK</u>	\$ 1,425
	2. Exhaust after treatment device horizontal mounted on right side of vehicle		
	3. Exhaust with heat shield and 90° elbow.	(Yes) No	
	4. Exhaust gases shall not discolor the body, burn or discomfort people working next to the truck or discharge to ground where dry vegetation could be ignited.	(Yes) No	

	Description of Equipment	Offered Equipment	Cost
D.	Fuel Tank:		\$ 142.00
	1. Single 70-gallon minimum		
	2. Dynocraft 12v inline fuel heater with lighted on dash control.		
	3. Two steps shall be provided on the tank to assure easy ingress and egress.		
E.	Hoses:		\$ 12.00
	1. Silicone hoses		
	2. With constant torque hose clamps.		
F.	Fan:		\$ 27.00
	1. Horton Drivemaster fan clutch with automatic on/off fan control with normally closed temperature control.		
G.	Air Compressor:		\$ 147.00
	1. Bendix Tu-Flo 550 13.2-cfm with stainless steel/Teflon discharge hose minimum.		
H.	Cold weather starting aids on truck engine:		\$ 142.00
	1. Block heater Phillips "Zero-Start" 120vAC, 1500 Watt, engine coolant temperature controlled to:		
	a. Turn "on" at 40°F engine coolant temperature.		
	b. Turn "off" at 55°F engine coolant temperature.		
	2. The plug-in station shall have 2 LED indicator lights to:		
	a. Light when plugged into "hot line" to show "hot line is energized.		
	b. Light when engine coolant drops below 40°F.		
	3. Plug-in shall be mounted below driver's door, protected from mechanical and weather damage. Heater plug shall be a male standard grounded 15 amp rated plug.		
	4. A decal or information plate to be provided describing how the system functions. The decal/plate shall be heavy-duty UV protected and capable of withstanding pressure washing and other normal vehicle functions.		
	5. Cold weather starting assist (no ether allowed).		
		Type: ELLECE. CERKID	\$ 142.00
2.3	<b>Transmission and Drivetrain</b>		
	Description of Equipment	Offered Equipment	Cost
A.	Transmission:		\$ 475.00
	1. Eaton/Fuller E98E306A-UP, 6-speed hybrid drive, automated manual electronically shifted with automatic clutch.		
	2. PTO (power take-off) "electric".		
	3. Oil-to-water cooler.		

Description of Equipment		Offered Equipment	Cost
4.	Electronic push-button controls.	<input checked="" type="checkbox"/> Yes	
5.	Synthetic transmission oil.	<input checked="" type="checkbox"/> Yes	
6.	Magnetic drain plug.	<input checked="" type="checkbox"/> Yes	
B.	Eaton Corporation Electric Hybrid Power System:		
1.	The electric hybrid drive system shall be appropriate for effective and efficient for Denver's forestry bucket truck operations.	Make: <u>EATON</u>	Model: <u>30C</u> \$ <u>145,000</u>
2.	The electric hybrid system shall provide approximately 60 hp and 300 lb/ft of torque at 0 rpm to assist in vehicle acceleration and braking.	Horsepower: <u>60</u>	
3.	The electric motor shall provide auxiliary braking and starting torque through the transmission coupled to the vehicle's driveline.	Torque: <u>300</u>	
4.	During vehicle breaking up to 60 hp of braking/retardation assist shall be provided.		
5.	During vehicle acceleration the electric motor assist shall augment the vehicle's acceleration.	<input checked="" type="checkbox"/> Yes	Miles per hour: _____ mph
6.	Under normal conditions the breaking and acceleration assist process shall be repeated at every brake and acceleration cycle.	<input checked="" type="checkbox"/> Yes	
7.	The electric ePTO shall provide 13-hp continuous and 26-hp peak of hydraulic power to operate hydraulic equipment including the aerial bucket lift system and hydraulic tools.	<input checked="" type="checkbox"/> Yes	
8.	The electric hybrid system shall be capable of operating the aerial equipment for 55 minutes out of a 60 minute (1 hour) period without the truck's diesel engine starting to recharge the hybrid batteries. When the truck's diesel engine automatically starts and runs to recharge the hybrid batteries the engine shall only need to operate for 5 minutes to sufficiently recharge the hybrid batteries for another 55 minute hybrid electric work period.		Hybrid Electric System Work Period: <u>55</u> minutes Hybrid Recharge Time: <u>5</u> minutes
9.	The battery support system shall be 340-vDC lithium ion with a 5-year battery life minimum.		Battery Voltage: <u>340</u> @ <u>120</u> amps Battery Life: <u>5</u> to <u>8</u> years
C.	Rear Axle:		Make: <u>MERCK</u> Model: <u>RS-21</u> \$ <u>145,000</u>
1.	Single reduction, capacity 21,000-lbs. minimum.	Capacity: <u>21,000</u>	
2.	Driver controlled differential locking.	<input checked="" type="checkbox"/> Yes	
3.	Axle ratio for 65 mph top speed	No	
4.	Oil seals, with Union 76 Triton EP 75W-90 synthetic gear lubricant	Top Speed: <u>65</u> mph	
5.	Magnetic drain plug.	<input checked="" type="checkbox"/> Yes	
D.	Front Axle:		\$ <u>25,000</u>
1.	Capacity 12,000-lbs. minimum I-beam type.	Make: <u>F7L</u>	
2.	Oil seals, with Union 76 Triton EP 75W-90 synthetic gear	Model: <u>i2</u>	
		<input checked="" type="checkbox"/> Yes	
		No	

	Description of Equipment	Offered Equipment	Cost
	lubricant.		
E.	Springs: Taper leaf with graphite impregnated spring pin bushings. 1. Front: capacity 12,000-lbs. minimum. 2. Rear: capacity 23,500-lbs. minimum 4,500-lb rubber spring. Spring pins "Maintenance Free" Shock absorbers on all axles	Rating: <u>12,000</u> lbs Rating: <u>23,500</u> lbs <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes	\$ <u>225</u>
F.	Brakes: 1. S-cam, 16.5" dia. extended service brakes front 5" rear 7" width Outboard mounted cast iron drums, Dust shields, Non-asbestos brake block, Dual brake system	Make: <u>MERITOR</u> Model: <u>C35T</u> Size: Front <input checked="" type="checkbox"/> Yes Rear <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes	\$ <u>777</u>
G.	ABS/ATC system: 1. Anti-Lock Brake System (ABS): Meritor Wabco 4S/4M with ATC, 4-channel with (4 sensors & 4 modulators) and 5-9 psi crack pressure relay valve. 2. Automatic Traction Control (ATC) shall work in conjunction with the Meritor/Wabco ABS brake system in low traction situations limiting torque to least loaded tire allowing most loaded tire to receive torque and pull the vehicle.	Make: <u>WABCO</u> Model: <u>4S/4M</u>	\$ <u>777</u>
H.	Brake Chambers: 1. MGM, TR3030 Long Stroke.	Make: <u>MERITOR</u> Model: <u>DOORBELL</u>	\$ <u>725</u>
I.	Slack Adjusters: 1. Meritor self-adjusting.	Make: <u>MERITOR</u> Model: <u>SELECTOR</u>	\$ <u>725</u>
J.	Air Drier: "No Approved Equal" 1. Bendix AD-1S with heated steel reservoir, 2. Automatic moisture ejector heated 3. Cable operated air tank drain valves accessible from outside of vehicle.	Make: <u>BENDIX</u> Model: <u>AD-1S</u> <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes	\$ <u>225</u>
K.	DriveLine: 1. Permatube type U-joints.	Make: <u>DANH</u> Model: <u>SPLINED</u>	\$ <u>125</u>
L.	Power Steering: 1. Sheppard M-110 2. Reservoir 2-qt.	Make: <u>TKW</u> Model: <u>M110P</u> Capacity: <u>13.320</u> PTO Type: <u>ELC</u>	\$ <u>125</u>
M.	PTO "electric" electronic control from inside cab.		\$ <u>125</u>

## 2.4

**Electrical System**

Description of Equipment		Offered Equipment	Cost
A.	Alternator:		
1.	Heavy duty, 12-volt internally regulated, output 190 amp minimum.		
B.	Batteries:		
1.	Group 31 batteries 2 required		
2.	Total CCA of 1,300 minimum.		
C.	Jump start stud remote mounted in easy to access location.		
D.	Body builder's junction box shall be provided in cab to prevent corrosion from magnesium chloride. Terminal shall be marked for easy identification.		
E.	Circuit protection: circuit breakers with manual reset, no fuses.		
F.	Wiring shall be color coded with hot stamped wire numbers. All wiring shall be run in wiring looms		
G.	Back up alarm, 107 dB, SAE type B, fully sealed, back-up alarm system wired into vehicle's backup light system using OEM plug-in adapter. The alarm shall be mounted out of the vehicle's rear wheel splash area.		
H.	Cab and Chassis Lights:		
1.	Halogen sealed beam headlights, 12V.		
2.	Daytime running lights.		
3.	Wiring shall be sealed modular plug-in type.		
4.	Marker lights LED type.		
I.	Body Lights: See "Body Section" of the specification 3.9.H		
2.5		<b>Cooling System</b>	
Description of Equipment		Offered Equipment	Cost
A.	Cooling system with coolant recovery tank capable of maintaining engine manufacturer's recommended operating temperatures at an elevation of 6,800' in 120° F low humidity ambient conditions to be provided.		
B.	Coolant protection shall be -34° F.		
C.	Fleetguard coolant filter WF2071		
2.6		<b>Tires and Wheels</b>	
Description of Equipment		Offered Equipment	Cost

A.	Tires:	1. Size: 11R 22.5, tubeless. 2. Front: Michelin XZE2, load range G. 3. Rear dual: Michelin XDE, load range G.	Size: <u>11-22.5</u> Make: <u>Mich.</u> Model: <u>XZE 2</u> \$ <u>1244</u>
B.	Wheels:	1. Size: 8.25 x 22.5 2. Disc, 10-hole hub piloted, dual mounting, two-piece flange nuts Accuride, and "White" powder epoxy coated finish.	Size: <u>8.25 - 22.5</u> Finish Powder Coated: <u>Yes</u> No \$ <u>142</u>

## 2.7

## Interior

	Description of Equipment	Offered Equipment	Cost
A.	Steering controls left side:	<u>Yes</u> No <u>Yes</u> No	\$ <u>142</u> \$ <u>312</u>
B.	1. All critical controls required to operate the vehicle shall be easy to reach and operate from left seat. 2. Tilt and telescoping steering wheel easy to adjust, to accommodate operators with large variations in sizes		
C.	The cab shall be configured to be ergonomic, comfortable and with ample room to minimize operator fatigue and discomfort. The City has operators of varying statures and adjustable seating and controls will minimize on-the-job related physical problems and fatigue.	<u>Yes</u> No	
D.	Seats, 3 Person: 1. Drivers seat shall be air-suspension high back driver's seat, and gray vinyl. 2. Passenger 2 passenger seat non-suspension and vinyl. 3. Seat belts: 3-point for driver and outside passenger 2-point for center person.	Make: <u>Bosch</u> Type: <u>AIR</u> Make: <u>Bosch</u> Type: <u>2-PT</u>	\$ <u>275</u>
E.	Instrumentation: shall include Speedometer, engine hourmeter, tachometer, volt meter, coolant temperature, oil temperature, oil pressure, fuel level and air pressure with low pressure alarms (light, audible).	<u>Yes</u> No	\$ <u>122</u>
F.	Windows: Left and right side window shall be remote powered up/down.	<u>Yes</u> No	\$ <u>237</u>
G.	Floor covering shall be black rubber/vinyl flooring with under mat insulation.	<u>Yes</u> No	\$ <u>122</u>
H.	Weather Tech by Cannon, heavy-duty rubber floor mats with raised outer lip capable of holding water for passenger area.	<u>Yes</u> No	\$ <u>122</u>
	Power point, 12vDC power source for operating a computer inside the cab.	<u>Yes</u> No	\$ <u>122</u>

	Description of Equipment	Offered Equipment	Cost
	Yes	No	\$
I.	Radio. AM/FM stereo with two speakers.		175
J.	Intermittent wipers.	Yes	112
K.	Air Conditioning.		
L.	Fire extinguisher.		
M.	Grab handles.		

1. Factory installed cab R134A air conditioning  
 2. Cab shall be insulated to include floor, firewall, roof and walls.  
 3. Location labeled with 1" letters on outside of the cab.

1. One each side on exterior of cab for operator and passenger assist and one interior for passenger.  
 2. Grab handles shall provide adequate clearance to other objects to provide easy access and clearance to prevent pinch or other hazards.

	Description of Equipment	Offered Equipment	Cost
	Yes	No	\$
A.	Engine fully accessible and serviceable forward of firewall, no removable doghouses, which require removable of radio and other equipment.		112
B.	Cab design: steel body with air suspension.		330
C.	Mirrors:		

1. The hood shall have a 10" minimum slope for improved driver visibility.

2. Molded 1-piece fiberglass hood and fenders with painted hood mounted grill.

3. Rubber fender extensions.

4. Exterior sun visor full width.

5. Right lower door window.

6. Right and left hand electric windows.

7. Door and ignition keyed the same.

1. Rear view mirrors Moto Mirror Model 7-540 "Flat Back Traditional" 7" x 16" motor head, remote, heated, stainless steel left and right mounted on the cab. OR EQUIVALENT

2. Convex 8" stainless steel mirrors mounted under primary mirrors.

3. A right hand down mirror shall also be provided to cover front and

Make: F7L Model: L.C. Overall mirror full extended width: 102 inches  
 Make: F7L Model: S72E

D.	side blind spot for shorter drivers under 5'-6" tall. 4. Overall cab width including mirrors 112" maximum.	
Paint.	1. Polyurethane paint equal to DuPont Imron 5000, "Bright White", applied following manufacturer's procedures to include: 2. Color top coat, 2 coats, applied to all non-stainless steel components following manufacturer's procedures. 3. Removing all mill scale and slag. 4. Variprime 615S self-etching primer or approved equal. 5. Treating bare metal with manufacturer's conditioners and conversion coatings or approved equal.	Make: <u>D 4 P 2 &amp; T.</u> Color: <u>N H 172</u> Type: <u>E L 172</u> \$ <u>125.00</u>
E.	Undercoating: A pliable and durable asphaltic base protective undercoat shall be applied to all exposed undercarriage parts and components, which are subject to corrosion.	\$ <u>125.00</u> E L 172
		<u>VEHICLE SUB TOTAL COST \$ 107.00</u>

### 3.0 Dealer Provided Equipment: (where applicable)

#### 3.1 Electrical Systems:

- A. All non-factory wire connections (splices, connectors, etc.) shall be soldered and shrink tube insulated with adhesive/meltable sealant, thick wall polyolefin shrink tubing (3M EPS-300 or equal). No non-factory crimp connections allowed. No cutting or splicing into the factory wiring harnesses allowed.
- B. All accessories (stroke lights, operator controls, light bar, etc.) shall be wired through a 12-vDC constant-duty solenoid and controlled by bus bar mounted and permanently labeled auto-resetting circuit breakers. The solenoid shall be wired to the key switch.
- C. All dealer/vendor installed items, which require connecting into the vehicle's electrical system shall be done using an OEM factory modified wiring kit whenever possible.
- D. All non-factory wiring shall be encased in a totally sealed wiring harness (no plastic split loom) to prevent corrosion from magnesium chloride. The wiring harness shall be well secured to the truck with neoprene aircraft stainless steel tubing clamps. Rubber grommets shall be used at all areas where the wiring passes through areas that could damage the wiring. Unprotected wiring in any application is unacceptable.
- E. Electrical cables and wiring harnesses shall be neatly run and clamped with neoprene aircraft stainless steel tubing clamps. Clamp spacing shall not exceed 18-inches.
- F. Dielectric grease shall be applied to all electrical plug terminals and connections to reduce corrosion.

#### 3.2 Fasteners:

- A. Grade 5 (SAE or USS) or 8.8 (metric) minimum, bolts, nuts, washers minimum. Vendor shall use Grade 8 or 10.9 for all critical areas or where good engineering practice suggests.
- B. All fasteners shall be zinc plated to prevent corrosion.

- C. Anti-Seize, all fasteners shall have Fel Pro C5A Anti-Seize compound applied before assembly to prevent corrosion, rusting, galling and aid in equipment servicing and repair.
- D. All fasteners shall be of appropriate length, diameter and strength (grade) for the application.
- E. Bolts and screws shall extend a minimum of 1-1/2 threads beyond the nut and maximum of 6 threads past the nut.
- F. Flat washers shall be used under bolt heads and nuts.
- G. Lock nuts (nylon insert, metal, slotted, castle nuts) shall be used lock-washers are not acceptable.

### 3.3

#### Hydraulic Systems:

- A. All hydraulic circuits shall be pressure relief protected.
- B. Hydraulic hoses shall be Parker 451-ST (tight bend radius) 2-wire braid hose meeting SAE-100R17 specifications where the hose meets operational criteria or approved equal.
- C. Hydraulic hoses shall have swivel fittings on both ends. Hose ends shall be located to facilitate easy component replacement.
- D. High-pressure hydraulic hose shall not be used for suction lines.
- E. Close/tight radius 90° elbow fittings shall not be used if short, medium or long drop steel stem 90° elbow fittings can be used. Over use of 90° elbows shall not be permitted.
- F. Hydraulic hoses and rigid lines shall be run parallel where possible; routing shall look neat and well planned.
- G. Rubber cushioned metal hydraulic clamps shall be used on all hydraulic ridged lines and hoses at proper intervals for supporting the line/hose 36" maximum distance. Clamps shall be securely mounted to the equipment.
- H. Hydraulic hoses and lines shall not be routed near exhaust, close to rotating components or over, around or through sharp edges. Rubber grommets shall be used at all areas where the hydraulic lines through areas that could damage the lines.
- I. Galvanized fittings and thread tape shall not be used.
- J. Hydraulic hoses shall be covered with protective spiral nylon anti-chafing wrap or sock type protective sleeves at all areas where chafing/scrubbing could cause premature wear/failure.
- K. Hydraulic oil tanks shall magnetic drain plug, oil level and temperature gauge.
- L. Shut off valves  $\frac{1}{4}$  turn on each side of filter.

### 3.4

- All fabricated parts, brackets etc. shall have all sharp corners, edges etc. radiused or rounded for safety.

### 3.5

#### Welds:

- A. All welds shall meet AWS (American Welding Society) standards for the type weld, material joined and welding method.
- B. Weld joints shall have proper design and fit for the application.
- C. Welds joints shall have proper penetration and be smooth in appearance with no undercuts or overlaps at edge of weld.
- D. Weld joints shall be properly prepared with cut ends ground to remove all slag, create a smooth surface and beveled end.

# Layton

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### 3.6 Fifty Foot Aerial Bucket and Service Body or Approved Equal

Description of Equipment	Offered Equipment	Cost
A. Versalift VO-255-I Over-Center, rear of truck frame mounted, insulated, bucket end mounted, 60-ft working height, 2-section non-telescopic aerial platform lift and 1½ man bucket (24" W x 30" L x 42" T) (based on a 36 in. frame height) or approved equal. The aerial device to be rear mounted for maximum tree access and suitable for use by the City's Forestry Department in trimming, removing and maintaining trees.	Make: <u>VERSALIFT</u> Model: <u>VO 255 I</u> Working Height: <u>60</u> ft Number of Sections: <u>2</u> Bucket Size: <u>24" x 30" x 42"</u> Bucket Capacity: <u>400 lbs</u> Mounting Location: <u>REAR</u>	\$ <u>52,271.00</u>
B. Basic requirements:	Boom Type: <u>Rectangular</u>	\$ <u>-</u>
1. Platform side mounted on end of boom. 2. The upper boom shall be rectangular insulated fiberglass and the lower boom shall be a rectangular insulated high-strength steel with 24" fiberglass insulation gap insert. 3. Platform automatic self leveling. 4. Manual tilting platform for clean-out and rescuing. 5. Platform mounted full pressure single pistol-grip lever control with safety trigger and emergency stop. Lift movement shall correspond with control handle movement. 6. Platform hydraulic tool circuit. 7. Continuous rotation 360°. 8. Multi link hose carrier through booms. 9. Non-lubrication bearings used at all pivot points. 10. Periodic lubrication on rotation bearings and extension chains.	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	No No No No
C. Insulation gap:		\$ <u>-</u>
1. Meet ANSI A92.2-1992 requirements for Category C, 46-kV and below. 2. Upper boom insulation gap: 21 ¼". 3. Lower boom insulation gap: 24". D. ANSI A92.2-1992 data plate.	Yes Yes Yes	No No No
E. Boom Rest:	Type: <u>Strap with support</u>	\$ <u>-</u>
1. Boom rest support shall be a strapless design with U-cradle rubber padded for boom protection	<u>Strap with support</u>	\$ <u>-</u>
F. Performance:		\$ <u>-</u>
1. Upper boom articulation: total 270°. 2. Lower arm articulation travel: 0° to +125°. 3. Boom continuous rotation 360°. 4. Hydraulic platform leveling system	Articulation Total: <u>0°</u> to <u>270°</u> Travel Range: <u>0°</u> to <u>+125°</u> Rotation: <u>continuous</u> Yes No	\$ <u>-</u>

Reference No.: 09-187R1

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Vendor/ Sub Vendor: \_\_\_\_\_

	Description of Equipment	Offered Equipment	Platform Capacity	lbs	Cost
	5. Platform capacity 350-lbs.				
	6. Horizontal reach				
	a. Over Center: 46-feet.				
	b. Non-Over Center: 41-feet				
G.	Controls:				
	1. Low pressure turret mounted and lower controls including override.	<input checked="" type="checkbox"/>	No		
	2. Engine start/stop from platform and lower controls.	<input checked="" type="checkbox"/>	No		
	3. Truck ignition must be in run position for aerial lift to operate.	<input checked="" type="checkbox"/>	No		
	4. Automatic 2-speed throttle control.	<input checked="" type="checkbox"/>	No		
	5. Emergency pump 12vDC.	<input checked="" type="checkbox"/>	No		
	6. Boom stow protection to prevent excessive down pressure when stowing.	<input checked="" type="checkbox"/>	No		
	7. Upper platform single lever pistol-grip control providing fine modulated movement with multiple simultaneous boom movements.	<input checked="" type="checkbox"/>	No		
	c. Lower boom up/down.				
	d. Rotation right/left and.				
	e. Upper boom fold/unfold.				
	8. Ground controls shall have positive upper control over-ride.	<input checked="" type="checkbox"/>	No		
H.	Hydraulic system.				
	1. The hydraulic load on the electric hybrid transmission PTO shall not exceed 13 hp continuous and 26 hp peak for efficient use of the hybrid ePTO feature and maximize battery usage.	<input checked="" type="checkbox"/>	No		
	2. PTO SAE heavy-duty, "hot shift" power take-off with married hydraulic pump. Pump shall have sufficient capacity to operate the aerial lift and all auxiliary hydraulic circuits simultaneously at "low engine idle" or accelerate the engine only when required.	<input checked="" type="checkbox"/>	No		
	3. Hydraulic System shall be "load sensing" open-center, providing required flow and pressure on demand.	<input checked="" type="checkbox"/>	No		
	4. Reservoir.				
	a. Capacity: 25-gallon.	<input checked="" type="checkbox"/>			
	b. Integral in pedestal with anti-splash baffles.	<input checked="" type="checkbox"/>			
	c. Valves to prevent draining tank when servicing.	<input checked="" type="checkbox"/>			
	d. Sight and temperature gauge.	<input checked="" type="checkbox"/>			
	e. Magnetic drain plug extending 2" into tank.	<input checked="" type="checkbox"/>			
	5. Purging system for purging air or changing oil when servicing.				
	6. Diagnostic pressure quick couplings test ports to allow fast checking of tool and system pressures.				
	7. Filtration.				
			Capacity:	25 gallons	
			Size:	310"	
			Size:	3 1/2"	
			Capacity:	gpm @ 2900 psig	

	Description of Equipment	Offered Equipment	Cost
		Yes No	\$
	a. Return line 10 micron with pressure gauge. b. Suction strainer 100 mesh.		
8.	Open-center, 7-gpm, operating pressure 2,900 psig.		
9.	All hydraulic cylinders shall be equipped with pilot-operated holding valves.	Yes Yes No No	
10.	Hydraulic hoses shall be: a. High-pressure non-conductive. b. Hoses shall be separated to prevent chaffing. c. Nylon covers shall be installed at movement points to prevent chaffing.	Yes Yes No No Yes	
11.	Emergency hydraulic pump system. a. Motor powered 12vDC from truck batteries. b. E-pump to be in parallel with main pump. c. Emergency system to be operable from either the aerial platform or the lower control.		
12.	Hydraulic tool circuit. a. A flow control valve to limit flow to hydraulic tools preset at 5 gpm @ 2,000 psig with adjustment range from 4 gpm to 6 gpm. b. Designed to operate open center tools. c. Power tool quick connect ports at aerial platform and at ground rear.	Yes Yes No No	Capacity: <u>5</u> gpm @ <u>2,000</u> psig Adjustment Range: <u>4</u> gpm to <u>6</u> gpm
I.	Platform		
1.	Occupancy: (1) Man with gear and tools. 2. Fiberglass 24" W x 30" L x 42" T with 2 outside mounted curbside steps. 3. Capacity 350-lbs.		Number of Persons: <u>1</u> Size: <u>24</u> x <u>30</u> x <u>42</u> Capacity: <u>350</u> lbs
4.	Platform shall have 2 outside steps on curbside of the bucket.	Yes No	
5.	Platform polyethylene liner 50-kV rated with scuff pad and inside step.	Yes No	
6.	Bucket leveling system to maintain bucket in level position.	Yes No	
7.	Manual tilt for clean out or rescue.	Yes No	
8.	Built-in "D" ring lanyard attachment; 2 required.	Yes No	
9.	Chainsaw fiberglass scabbard type holder to hang a 36" chainsaw on either inside or outside of bucket.	Yes No	
10.	Platform cover, vinyl waterproof cover with elastic cord around edge to hold cover in place during storage and travel.	Yes No	
J.	Outriggers/Stabilizers: 1. Outrigger interlock system to prevent aerial device operation until	Yes No	

Description of Equipment	Offered Equipment	Cost
Outriggers are deployed.	Type: <u>A</u> FRAME Yes No Yes No	
2. Rear outriggers shall be "A" frame type. a. Outriggers location on crane frame at base. b. Outriggers shall operate out/in and down/up independently from each other. c. Outrigger span: 12'-4". d. Outrigger ground penetration based on 36" frame height: 9". e. Outrigger pads: floating type, 144 in <sup>2</sup> surface area. 3. Front outriggers shall be "A" frame type a. Outriggers location in between the truck cab and the service body. b. Outrigger span: 12'-8". c. Outrigger pads: floating type, 144 in <sup>2</sup> surface area. 4. Outrigger controls shall be located at rear of unit and activate back-up alarm when outriggers are in motion. 5. Stabilizer cylinders shall be located inside the stabilizer frames to protect and prevent debris build-up. 6. Outrigger/boom interlock to prevent lift operation until: a. Outriggers are deployed. b. Outriggers are retracted before boom is stored. 7. Outrigger pads Dica P/N D2424 polyurethane with rope 8. Outrigger pad storage location to be mutually determined at delivery inspection	Span: <u>12' 4"</u> Ground Penetration: <u>9"</u> Pad Size: <u>144 in<sup>2</sup></u> Yes No Yes No Span: <u>12' 8"</u> Pad Size: <u>144 in<sup>2</sup></u> Yes No Location: <u>MIDDLE FRAME</u> Yes No Make: <u>DICA</u> Model: <u>D2424</u> Yes No	
K. Lanyard Anchor Point:	Rating: <u>5000</u> lbs	\$ <u>—</u>
L. Safety Harnesses:	Make: <u>Buckles 44m</u> Model: <u>b393700G1</u> Make: <u>Buckles 44m</u> Model: <u>b4U716</u>	\$ <u>—</u>
M. Paint:	Make: <u>DuPont</u> Type: <u>Taklon</u> Color: <u>White</u>	\$ <u>—</u>
	1. Polyurethane paint equal to DuPont Imron 5000, "Bright White", applied following manufacturer's procedures to include: 2. Color top coat, 2 coats, applied to all non-stainless steel components following manufacturer's procedures. 3. Removing all mill scale and slag. 4. Variprime 615S self-etching primer or approved equal. 5. Treating bare metal with manufacturer's conditioners and conversion coatings or approved equal.	

Sixty Foot Aerial Bucket SUB TOTAL COST \$ 54,291.89		
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## 3.9

## Service Body for Aerial Lift

	Description of Equipment	Offered Equipment	Cost
A.	Required: A Service body appropriate for the trucks cab to axle measurement. Vendor is to provide correct body for specified cab and chassis.	Knapheide 641HC	\$ 13,727.00
B.	Dimensions: for a 110" Clean CA 1. Body length overall: 142". 2. Body width overall: 94". 3. Body height: 50". 4. Bed load space width: 58". 5. Compartment depth: 18". 6. Compartment height overall floor to top of compartment: 29". 7. Tailgate height: 12".	Body Length: <u>141 1/4</u> inches OA Width: <u>94</u> inches Body Height: <u>50</u> inches Load Width: <u>58</u> inches Depth: <u>18</u> inches Height: <u>29</u> inches Height: <u>12</u> inches	\$ - \$ -
C.	Service Body Construction: 1. Body: 14 gauge, A40 galvanneal steel. 2. Wheel wells A40 galvanneal steel lined with rubber crown aprons. 3. Tool Compartment Doors: a. Doors shall be 2 panel with reinforcing between panels, 18 gauge outside and 20 gauge inside, A40-A60 galvanneal steel. b. Automotive bulb type neoprene seals. c. Adjustable strikers. d. Nitrogen strut door holders. Doors shall be held 95° open. e. Door Locks: stainless steel non-corrosive paddle slam-latchable keyed alike latches. 4. Floor: 12-gauge treadplate steel with 1-3/8" return flange with back panel overlapping and interlocking to floor. 5. Compartment hooks 2-per compartment, 1-per side.	Type Steel: <u>A40 Galv.</u> Gauge: <u>14</u> Type Steel: <u>A40 Galv.</u> Gauge: <u>14</u> Type Steel: <u>A40 Galv.</u> Gauge: <u>18</u> <i>Yes</i> No <i>Yes</i> No <i>Yes</i> No <i>Yes</i> No	\$ - \$ -
D.	Street Side Compartment Configuration: 1. Front 1 <sup>st</sup> Vertical Compartment a. Compartment width 24". b. Shelves, 24" wide, 3 adjustable shelves with dividers on 4" centers. 2. 2 <sup>nd</sup> Vertical Compartment a. Compartment width 21" b. 6 adjustable locking swivel hooks 3. 3rd Vertical Compartment: a. Compartment width 21"	Type Street <u>Tread Plate</u> Gauge: <u>316</u> " Type Street <u>Tread Plate</u> Gauge: <u>316</u> " <i>Yes</i> No <i>Yes</i> No <i>Yes</i> No <i>Yes</i> No	\$ - \$ -

	d. 6 adjustable locking swivel hooks	Hook Configuration: <u>T.B.D.</u>	\$ <u>—</u>
4.	a. Horizontal Compartment: b. Shelf with dividers in 4" centers. c. Bottom of compartment on 4" centers in bottom of compartment.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ <u>—</u>
	d. Dividers shall be easily movable (slip in/out) so sizes can be easily adjusted	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ <u>—</u>
5.	Rear Vertical Compartment: a. Compartment Width 21"	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ <u>—</u>
	b. Hooks (7) adjustable type shall be provided with 2 on front wall, 3 on inside wall and 2 on rear wall.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ <u>—</u>
6.	Hot Stick/pole saw storage with rear access door extending forward to 2 <sup>nd</sup> compartment.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ <u>—</u>
E.	Curbside Compartment Configuration: 1. Front 1st Vertical Compartment c. Compartment width 24". d. Shelves, 24" wide, 3 adjustable shelves with dividers on 4" centers.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ <u>—</u>
	2. 2nd Vertical Compartment c. Compartment width 21" d. Hooks 6 adjustable locking swivel type	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ <u>—</u>
	3. 3rd Side Service Body Access a. Width 21" ingress/egress steps. b. Steps shall be evenly spaced for safety, 3 required. c. All steps shall be open mesh grip-strut. d. The lower step shall be 20" above the ground. e. Grab handles, 2 required 1 each side of the body, painted "safety yellow" to provide safe and easy access to the inside of the service body	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ <u>—</u>
4.	Horizontal Compartment: a. Compartment width 52" b. Shelf with dividers in 4" centers. c. Bottom of compartment on 4" centers in bottom of compartment.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ <u>—</u>
	d. Dividers shall be easily movable (slip in/out) so sizes can be easily adjusted	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ <u>—</u>
5.	Rear Vertical Compartment: a. Compartment Width 21" b. Hooks (7) adjustable type shall be provided with 2 on front	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ <u>—</u>

F.	Basket Access Steps and Walkway:						
6.	Chain Saw Storage Box:						
a.	Located above the 1 <sup>st</sup> and 2 <sup>nd</sup> curbside compartments.						
b.	Size, 48" L x 18" W x 18" T with stainless steel hinge.						
c.	Access for loading/unloading the saw from inside the service body, hinge on outside/curbside.						
d.	Box Lock: stainless steel non-corrosive paddle slam-latchable keyed like tool compartment.						
G.	Cab and Hood Protector:						
H.	Vehicle Rear Lights: (No Approved Equals)						

	Yes	No	
2. Integral Stop/Turn/Tail/lights mounted in the rear corner post of the service body model Super 44 P/N 44302R or model 60 P/N 60250R.	Yes	No	\$ <u>165.00</u>
3. Back up lights Truck-Lite LED, flush mount, sealed lexan body, grommet insulated, multi-pin units model 44 P/N 44206C.	Yes	No	\$ <u>198.00</u>
4. Marker lights Truck-Lite LED 2 per side model 10 P/N 10250R or 10250Y or model 30 P/N 30250R or 30250Y.	Yes	No	\$ <u>19.00</u>
5. Rear ID bar Truck-Lite LED model 35 P/N 35741R or 35740R.	Yes	No	\$ <u>44.00</u>
6. License plate light, Truck-Lite model 15 P/N 15040	Yes	No	\$ <u>34.00</u>
7. Wiring shall be sealed Fit' N Forget modular plug-in type where possible.	Yes	No	\$ <u>—</u>
8. Dielectric grease shall be applied to all plug connections and terminals to prevent corrosion.	Yes	No	\$ <u>—</u>
I. Circuit protection, circuit breakers with manual reset, no fuses.	Yes	No	\$ <u>—</u>
J. Wiring shall be color coded with hot stamped wire numbers. All wiring shall be run in wiring looms	Yes	No	\$ <u>—</u>
K. Rear Deck Extension:			\$ <u>928.00</u>
1. Heavy-duty tread plate with "Non-Slip" coating rear deck extension.	Yes	No	\$ <u>—</u>
2. Rear deck shall be 24" wide minimum.	Yes	No	\$ <u>—</u>
L. Mud Flaps			
1. Heavy-duty anti-sail type	Yes	No	\$ <u>92.00</u>
2. Installed front and rear on rear wheels.	Yes	No	\$ <u>—</u>
M. Safety chocks.			
1. Chock blocks and holders, 2 required.	Yes	No	\$ <u>40.00</u>
2. Chock storage shall be above and/or behind or in front of the rear wheels.	Yes	No	\$ <u>—</u>
N. Cone Holders:			
1. Capacity 6 traffic cones each holder minimum.	Yes	No	\$ <u>125.00</u>
2. Two holders.	Yes	No	\$ <u>—</u>
3. Cone holder location will be mutually determined at pre-inspection.	Yes	No	\$ <u>—</u>
O. Conspicuity Tape.			
1. DOT-C2 Standard No. 108 reflective conspicuity tape	Brand: <u>3M</u>	Type: <u>—</u>	\$ <u>450.00</u>
2. The tape shall be symmetrically and esthetically applied full length to rear and sides of the body and horizontal stripes around the top and bottom of the platform.	Yes	No	\$ <u>—</u>
P. Back Up Alarm:			
1. Back up alarm, 97 dB, SAE type C, fully sealed, back-up alarm system wired into vehicle's backup light system using OEM plug-in adapter.	Make: <u>Presto</u>	Model: <u>—</u>	\$ <u>35.00</u>

	2. The alarm shall be mounted out of the vehicle's rear wheel splash area.	
Q. Paint,	1. Polyurethane paint equal to DuPont Imron 5000, "Bright White", applied following manufacturer's procedures to include: 2. Color top coat, 2 coats, applied to all non-stainless steel components following manufacturer's procedures. 3. Removing all mill scale and slag. 4. Variprime 615S self-etching primer or approved equal. 5. Treating bare metal with manufacturer's conditioners and conversion coatings or approved equal.	Make: <u>DuPont</u> Type: <u>Imron</u> Color: <u>BRIGHT WHITE</u> <u>\$ 1700.00</u>

Sundries Equipment		Service Body SUBTOTAL COST \$ 29,919
A. Rotating Beacon Warning Light with brush guard (2 required):	Offered Equipment	Offered Equipment

A. Rotating Beacon Warning Light with brush guard (2 required):	Offered Equipment	Offered Equipment
1. Meeting SAE Class-1 requirements.	Make: <u>FED. SIGNAL</u> Model: <u>443112-02</u>	Cost: <u>\$ 246.00</u>
2. Federal Signal Corporation, model 100 P/N 443112-02 amber rotating halogen beacon light "No Approved Equals".	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ 82.00
3. Brush guard heavy-duty model 447303.		\$ 45.00
4. One light post mounted on the left rear of the service body approximately 12" above the body.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ 38.00
5. One light post mounted on the left front corner of the truck body shield approximately 6" above the body.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ -
6. A dash-mounted switch with light to indicate the beacon is on shall be provided. The switch shall be installed in an easy to see and access position, but not in a location that interferes or could interfere with the driver or passenger during operation or while entering and exiting the vehicle.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$ 65.00
B. Trailer Hitch:		
1. Class V receiving hitch.		\$ 189.00
2. Redneck combination pintle hook/2" ball hitch DPH-2000 with redneck PM69903-12" drop/rise adapter receiver tube.	Class Rating: <u>15,000 LB</u> Make: <u>REDNECK</u> Model: <u>DPH-2000</u>	
3. D-rings: two required for safety chains attached to the 2" steel plate.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
C. Backup Alarm: (No Approved Equal)		
1. Preco 230LV light duty 97 dB SAE J994 type C back-up alarm with low-voltage warning at 10.5 vDC system wired into vehicle's backup light system using OEM plug-in adapter	Make: <u>PRECO</u> Model: <u>230LV</u>	/

	<u>Req</u>	No	
D.	2. The alarm shall be mounted out of the vehicle's rear wheel splash area. Brake Controller: (No Approved Equal) 1. Trailer Brake Controller: Draw-Tite Activator 20187 digital plus inertia 2. The brake activator shall be installed in an easy to see and access position, but not in a location that interferes or could interfere with the driver or passenger during operation or while entering and exiting the vehicle.	<u>Yes</u>	Make: <u>Draw-Tite</u> Model: <u>20187</u> \$ <u>150.00</u>
E.	Trailer Connection: (No Approved Equal) 1. OEM 7-pin RV type plug-in trailer wiring harness. 2. Connector shall be fully sealed and be installed out of the road splash to prevent corrosion from snow fighting chemicals.	<u>Yes</u>	\$ <u>27.00</u>
F.	Driver Height Warning Sign 1. Installed on truck dash providing the travel height of the vehicle. 2. Sign shall be in 1" *white* block letters.	<u>Yes</u>	\$ <u>20.00</u>
G.	Floor Mats: 1. Weather Tech by Cannon, (1-800-441-6287) heavy-duty rubber floor mats with raised outer lip capable of holding water for passenger area.	<u>Yes</u>	\$ <u>45.00</u>
H.	Fire Extinguisher 1. Fire extinguisher 5-lb ABC type 2. The extinguisher shall be mounted on front side of the street side step behind the driver's door.	<u>Yes</u>	\$ <u>24.00</u>
		Sundries Equipment SUB TOTAL COST	\$ <u>991.00</u>

- 3.11 Optional Equipment**  
**Do not include Optional Equipment in the total price of the vehicle, however an equipment price must be provided. The City will determine if the equipment is to be purchased.**

Description of Equipment		Offered Equipment	Cost
A.	Hybrid Plug-In Rechargeable Battery System:		\$ <u>1114</u>
1.	The system shall provide for a minimum of 100 mile vehicle range conducting City business or 8 hours of normal vehicle work.	Battery Type: _____ miles	
2.	Provide a vehicle battery system that can be recharged off the City electric grid in less than 8 hours.	Battery Life: _____ hours	
3.	The recharge system shall plug-in to either/both a 120vAC or 220vAC electrical outlet.	Recharge Time: _____ 100% discharge Recharge Voltage: _____ 50% discharge vAC	
4.	The battery system shall also recharge during the regular driving cycle using dynamic braking to recharge the batteries and provide vehicle braking.	Yes      No	
5.	The batteries shall have at minimum a 5-year life cycle in the City's application.	Battery Life: _____ years Battery Pack Voltage: _____ Amps:	

Manuals/Equipment:		Offered Equipment	Cost
Item	Description of Equipment		
Training Tape	One VHS tape, DVD or CD demonstrating and explaining the safe and proper use of the vehicle/equipment.	Yes <u>No</u> <u>No</u> <u>N/C</u>	\$ <u>N/C</u>
Operators Manual	One book per vehicle/equipment with "safe equipment operation" section for each component.	Yes <u>No</u> <u>No</u> <u>N/C</u>	\$ <u>N/C</u>
Service/ Maintenance Manual	Two complete sets per Procurement (not per vehicle); binder required. A. Manuals shall be provided for: A. Vehicle B. Body/Aerial Equipment C. Sundries Equipment	Yes <u>No</u> <u>No</u> <u>N/C</u>	\$ <u>N/C</u>

	B. Manuals shall include complete and detailed information for maintenance of the equipment, including general information, specifications, troubleshooting guide, lubrication and required adjustments.	<input checked="" type="checkbox"/> Yes	No	\$ _____
	C. The hydraulic and electrical sections of the manuals shall be provided in a separate electrical/hydraulic binder. Both the hydraulic and electrical circuits shall have separate color coded schematics for each equipment function to show the flow of both electrical current and hydraulic oil.	<input checked="" type="checkbox"/> Yes	No	\$ _____
<b>Service/ Maintenance Manual on CD rom or DVD</b>	One complete set; per Procurement (not per vehicle) <ol style="list-style-type: none"> <li>1. Manuals shall be provided for:               <ol style="list-style-type: none"> <li>A. Vehicle</li> <li>B. Body/Aerial Equipment</li> <li>C. Sundries Equipment</li> </ol> </li> <li>2. Manuals shall include complete and detailed information for maintenance of the equipment, including general information, specifications, troubleshooting guide, lubrication and required adjustments.</li> <li>3. The hydraulic and electrical sections of the manuals shall be provided in a separate electrical/hydraulic binder. Both the hydraulic and electrical circuits shall have separate color coded schematics for each equipment function to show the flow of both electrical current and hydraulic oil.</li> <li>4. New CD roms or DVDs shall be provided when information is updated, superseded or changed.</li> </ol>	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> No	\$ _____
<b>Service/ Maintenance Manual on Internet Access, or Other Electronic Media</b>	One complete set; per Procurement (not per vehicle) <ol style="list-style-type: none"> <li>1. Vendor shall provide access to the site for the length of time that the City owns the vehicle/equipment at a one time up front cost to the City.</li> <li>2. Internet information shall include complete and if other specify _____</li> </ol>	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> No If other specify: _____	\$ _____

	detailed information for maintenance of the equipment, including general information, specifications, troubleshooting guide, lubrication and required adjustments.	Yes <input checked="" type="radio"/> No <input type="radio"/>	
	3. The hydraulic and electrical sections of the manuals shall be provided in a separate electrical/hydraulic binder. Both the hydraulic and electrical circuits shall have separate color-coded schematics for each equipment function to show the flow of both electrical current and hydraulic oil.		
Parts Manual Paper	Two complete sets, per Procurement (not per vehicle) binders required. 1. Manuals shall be provided for: A. Vehicle B. Body/Aerial Equipment C. Sundries Equipment 2. Illustrated parts book shall be furnished containing data so that part numbers can be readily found for each system.	Yes <input checked="" type="radio"/> No <input type="radio"/> <input checked="" type="radio"/> Yes <input type="radio"/>	\$ \$ \$
Parts Manual on CD rom or DVD	One complete set, per Procurement (not per vehicle) illustrated parts book shall be furnished containing data so that part numbers can be readily found for each system. 1. Information shall be provided for: A. Vehicle B. Body/Aerial Equipment C. Sundries Equipment 2. Parts manuals shall include complete and detailed information for replacement parts for the equipment, including general information, specifications ordering guide lines and superseded parts information. 3. New CD roms or DVDs shall be provided when information is updated, superseded or changed.	Yes <input checked="" type="radio"/> No <input type="radio"/> <input checked="" type="radio"/> Yes <input type="radio"/> Yes <input type="radio"/>	\$ \$ \$
Parts Manual on Internet Access, or Other Electronic	One complete subscription, per Procurement (not per vehicle) 1. Internet information shall allow the City 24 hour 7 days/week including holidays access from its	Access Information: 7 days/week including holidays <input checked="" type="radio"/> Yes <input type="radio"/> No	

<b>Media</b>	main maintenance facility and all its satellite maintenance facilities.		
	2. Internet information shall include complete and detailed information for parts for the:	Yes Yes No Yes	\$ _____ \$ _____ \$ _____
	A. Vehicle. B. Body/Aerial Equipment. C. Sundries Equipment	No No No No	
	3. Internet information shall cover vehicle/equipment, shall include general parts information, parts specifications, ordering guide lines and superseded parts information.	Yes Yes	
	4. Vendor shall provide access to the site for the length of time that the City owns the vehicle/equipment at a one time up front cost to the City.	Yes If other Specify: _____	\$ _____
	5. Parts manuals shall include complete and detailed information for replacement parts for the equipment, including general information, specifications ordering guide lines and superseded parts information.	Yes No	
<b>New Equipment Check-in Form:</b>	The successful vendor shall complete the City's "New Equipment Check-in Form" completely and accurately with all requested information.		\$ 100

**5.0**  
**5.1** **Warranty Requirement**

**TABLE 1**  
**WARRANTY (CLASS 7 THROUGH CLASS 8 VEHICLES)**

	<b>Complies (Y or N/A)</b>
A. Express warranty is to be a minimum of twelve (12) months on the vehicle and aerial equipment. The standard factory warranty plan shall be provided as an attachment to your bid proposal.	Y
B. The Warranty is to include, at no cost to the City of Denver, all parts and labor, and no charge for work performed at the vendors facility.	Y
C. Warranty shall start when the City places the vehicle into service <b>NOT</b> on the delivery date.	Y
D. Taking an exception may make bid non compliant.	Y
E. Warranty plans shall consist of the total unit and be broken out to a separate plan for each warranty item if applicable, such as engine warranty plan, transmission warranty plan, electrical, etc.	Y
F. Options listed shall be bid and provided as factory installed under the terms of the full factory-backed warranty. This includes, but is not limited to: air conditioning, radios, cruise control, bumpers, towing packages etc. Dealer-installed options will not be	Y

	permitted unless pre-approved by the City in writing and, where applicable, indicated on bid sheet as a "dealer installed" non-factory item.	
F.	Bidder will be responsible for warranty repair of all installed options/auxiliary equipment included in the bid that has a standard warranty that is less than the standard warranty for the base vehicle/equipment	Y
G.	Bidder shall use a single, local factory authorized dealership that will accomplish or coordinate required warranty work. The dealership must have a minimum of 1-year experience as a factory authorized vendor for like equipment being bid. Warranty parts shall be available and supplied within 24 hours	Y
H.	If applicable, bidder shall provide a plan for the City to be reimbursed if the work can be done by the City on site. The current shop rate is \$65.00/hour, not to exceed \$75.00/hour. (Enter a response of N/A if not available)	N/A
I.	The bidder shall respond to request for warranty assistance within twenty-four (24) hours.	Y
J.	Warranty work shall be accomplished within an appropriate length of time (generally less than 3 working days for everything other than major component repair such as a transmission rebuild) and shall be coordinated with an authorized City representative	Y
K.	During the entire warranty period, if the unit requires transportation to a repair facility, the vendor/sub-vendors shall be responsible for all transportation at "NO COST" to the City and County of Denver. This includes transporting the unit back to the City's domicile location after repairs are complete. If an alternate is bid, charges to the City of Denver shall be listed (e.g. mileage, travel, labor, etc.). Even if an alternate is bid, in NO CIRCUMSTANCES will the City and County of Denver be responsible for transporting a unit greater than 25 miles from the center of Denver. For purposes of these warranty provisions, the center of Denver is defined as the City and County Building located on the corner of Colfax and Bannock Street.	Y
L.	The item(s) procured by the City pursuant to this Bid Proposal shall, in addition to being subject to the express warranties referenced above, be subject to all implied warranties arising by operation of law under State of Colorado and federal law, including but not limited to the implied warranty of merchantability and, to the extent applicable, the implied warranty of fitness for a particular purpose arising under the Colorado Uniform Commercial Code, Title 4, Colorado Revised Statutes. The bidder shall in no event attempt to limit or disclaim any of such implied warranties under this Bid Proposal, and any attempt to do so will render the bidder's bid non-responsive under this Bid Proposal.	Y
M.	This warranty in Table 1 and Table 2, is IN ADDITION to factory warranties on the vehicle and components	

## 5.2 Fleet Defects

**TABLE 2**  
**WARRANTY - (Table 2) Fleet Defect Clause, Class 7 & 8 Vehicles**

- A. **Definition:** If during the warranty period, thirty percent (30%) of the total number of units delivered have the same part(s) and/or components "Clause" goes into effect.
- B. **Remedy:** Following notification of a Fleet Defect, the vendor shall develop and implement a plan that either reengines, modifies, or replaces the defective parts/ systems, such that the identified problem is cured and the operation of the vehicle/equipment is not altered. When alterations are required to cure the defect, those alterations that change or modify the original bid specifications must be approved by the City and County of Denver prior to execution. The vendor will pay for all necessary labor and materials to repair, modify, and/or "update" all vehicles/units in this group. The vendor shall also propose a work schedule that is mutually agreed upon by the City of Denver that corrects the fleet deficiency within

	30 days or a mutual agreed upon schedule.
C.	<b>Exceptions:</b> Fleet defects will not apply to minor aftermarket accessories specified by the City of Denver and installed per instructions/specifications. Examples include: toolboxes, spotlights, bed-liners, etc.
D.	<b>Mitigation:</b> Should the vendor become non responsive to the City's notification of a Fleet Defect, the City may employ several options. (1) After notifying the vendor in writing of The City's intent to mitigate its circumstances, the City may chose to perform its own warranty work and seek reimbursement for both parts and labor. (2) On major components, such as engine, transmission, air conditioning, etc., the City may chose to have the repairs performed by an authorized dealer and vendor shall reimburse the City for any parts or labor not covered by other warranty.
E.	<b>Outside Metro-Denver:</b> Vendor will pay for all transportation costs if unit(s) must be sent out of the Denver area for repairs. The City and County of Denver reserves the right to inspect unit(s) before returning back to Denver. The City and County of Denver also reserves the right to send at least one employee, without cost to the City, to inspect the repair(s) before unit is released back to the City.
F.	<b>Expired Warranties:</b> Units that have mutually agreed upon warranty defects during the warranty period will continue to be repaired until completed. If an on-going remedy continues past the warranty date the repairs will continue under warranty until completed or cease at a time agreed upon by the vendor and City and County of Denver.

### 5.3 Warranty Options

**TABLE 3  
(CLASS 7 THROUGH CLASS 8 VEHICLES)**  
**Cost of Factory Extended Warranties**  
Please indicate in the columns below the additional cost of an extended warranty for all applicable components listed in the left hand column.

Inc = Included  
N/A = Not available

		Two Years	Three Years	Five Years
A.	Cab and Chassis			
B.	Engine			
C.	Transmission			
D.	Drive Train			
E.	Suspension			
F.	Air Conditioning			
G.	Hydraulics			
	a. Pumps			
	b. Cylinders			
	c. Tanks			

CONFIGURATION #1:  
AERIAL TRUCK-FORESTRY  
REFERENCE NUMBER(S): 09-187.  
Vendor: Sub-Vendor \_\_\_\_\_

Formal Proposal No. 6549  
Aerial Trucks

### 5.3 Warranty Options

WARRANTY Options		(CLASS 7 THROUGH CLASS 8 VEHICLES)		
Cost of Factory Extended Warranties		Please indicate in the columns below the additional cost of an extended warranty for all applicable components listed in the left hand column.		
		Inc = Included      N/A = Not available		
A.	Cab and Chassis	Two Years	Three Years	Five Years
B.	Engine			
C.	Transmission			
WARRANTY Options		(CLASS 7 THROUGH CLASS 8 VEHICLES)		
Cost of Factory Extended Warranties		Please indicate in the columns below the additional cost of an extended warranty for all applicable components listed in the left hand column.		
		Inc = Included      N/A = Not available		
D.	Drive Train	Two Years	Three Years	Five Years
E.	Suspension			
F.	Air Conditioning			
G.	Hydraulics			
	a. Pumps			
	b. Cylinders			
	c. Tanks			
	d. Valves			
	e. Controls			
H.	Attached Body	One Year	Two Years	Five Years
I.	Aerial System	One Year	Two Years	Five Years
J.	Electrical Components	One Year	Two Years	Five Years

	d. Valves	n/a	n/a	n/a
e. Controls				
H. Attached Body				
I. Aerial System	1929.00	6 years	6 years	6 years
J. Electrical Components		4071.00		
K. Operator Controls	n/a	n/a	n/a	n/a
L. Other	n/a	n/a	n/a	n/a
Notes:				

5.4 **Warranty Service Locations:** Warranty repair parts and service shall be available locally at an established factory authorized dealership meeting requirements of Table 1 Section 7.

Vehicle:	Dealership Name: _____ Street Address: _____ City: _____	Telephone #: _____ City: _____
Aerial Equipment:	Dealership Name: <u>Jefferson Truck Equipment</u> Street Address: <u>11951 EAST 33rd Ave</u> City: _____	Telephone # <u>303-365-0828</u> City: <u>Aurora CO 80010</u>
Service Body:	Dealership Name: _____ Street Address: _____ City: _____	Telephone #: _____ City: _____
Sundries:	Dealership Name: _____ Street Address: _____ City: _____	Telephone #: _____ City: _____
6.0 Vehicle Delivery	PROVIDE NUMBER OF DAYS REQUIRED FOR DELIVERY OF CAB AND CHASSIS AFTER PURCHASE ORDER IS ISSUED TO BODY VENDOR   ____ DAYS	
6.1 Delivery of Cab and Chassis to Body Vendor	____	
6.2 Delivery of Completed Truck with Body Installed to City and County of Denver	____	

04/14/09

PROVIDE NUMBER OF DAYS REQUIRED FOR DELIVERY OF COMPLETE VEHICLE AFTER CAB AND CHASSIS IS DELIVERED	<u>240</u> DAYS
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8.0

Complete Vehicle Cost

Include:

- Vehicle Sub Total Cost
  - Aerial Sub Total Cost
  - Body Sub Total Cost
  - Sundries Sub Total Cost
- Do Not Include:
- Optional Equipment
  - Manual Cost (s)
  - Warranty Cost (s)

ONE COMPLETE VEHICLE TOTAL COST	\$ _____

*Traffic*

Reference Nos.: 09-148R1, 09-149R1

CITY AND COUNTY OF DENVER  
Technical Specifications and Bid Items  
For a  
Thirty-Seven Foot Hybrid Aerial Bucket Truck

04/14/09

**1.0 General Description**

A new current model year, appropriate GVWR for application, 2-wheel drive cab and chassis truck. The truck shall be electric hybrid drive/diesel powered with a 37-foot telescopic and articulating aerial bucket lift. The truck shall be suitable for field repair, installation of City traffic control equipment and emergency electric power for traffic signals (3,000 Watt 120vAC) or an approved equal. The vehicle will be required to work without operating the truck engine and rely on the electric hybrid system for 55 minute out of 1 hour's service to operate the aerial bucket system and recharge the hybrid batteries with the truck engine running for 5 minutes suitable for another 55 minutes of hybrid power use. Battery life 5 years minimum. The truck may operate for long periods of time in all weather conditions performing traffic operations maintenance duties.

**1.1 Standard Factory Equipment**

All standard factory equipment shall be included with the vehicle/equipment; no deletions of standard factory equipment will be permitted unless specifically superseded in these specifications. Accessories not specifically mentioned herein but necessary to furnish a complete unit ready for use shall also be included.

**1.2 Government Requirements (where applicable)**

The vehicle/equipment shall be built to, and perform in accordance with, all the requirements of the latest edition of the following standards and specifications:

- FHWA, Federal Highway Administration
- SAE, Society of Automotive Engineers Specifications
- FMVSS, Federal Motor Vehicle Safety Standards
- DOT, Department of Transportation Regulations
- AWS, American Welding Society Standards
- PUC, Public Utilities Commission (Colorado)

**1.3 Workmanship and Durability**

Workmanship throughout the vehicle/equipment shall conform to the highest standards. Durability shall be sufficient to allow safe and efficient operation of the equipment/vehicle.

**1.4 Completion of Bid Items and Alternates**

- Vendor shall complete each line item in "Offered Equipment" and "Cost" columns in the following manner:
- A. Provide vehicle/equipments technical information in "Offered Equipment" provide technical information as requested and provide cost of item in "Cost" column.
  - B. Included Standard Equipment: in "Offered Equipment" column provide technical information as requested for standard equipment in, "Cost" column write NC for "No Charge".

Reference Nos.: 09-148R1, 09-149R1

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Vendor/Sub Vendor J. M. B.

- C. Differences in "RED" ink in "Offered Equipment" column adjacent to Description of Equipment provide information on the item being offered, in "Cost" column provide cost if there is a bid item cost.
- D. Vendors shall break out and list costs for each specification section. Failure to break out proposed costs may cause proposal to be non-responsive. Breakout costs will be used for comparisons clarifying cost issues and if deletions to the specifications need to be made.

## 2.0 Basic Requirements or Approved Equal.

Truck shall be configured in similar manner as City vehicle KA14 and KA15. The truck can be viewed at the City's Traffic Operations Division, 5440 Roslyn Street Building E, Denver CO 80216. To coordinate the reviews of KA18 and KA19 contact Mr. Chris Lilly at 720.865.4066, M-F 7AM to 2PM.

### 2.1 Basic Vehicle or Approved Equal

	Description of Equipment	Offered Equipment	Cost
A.	Conventional regular cab, 2-wheel drive, dual rear wheel cab and chassis. Standard Cab (3-Person)	Make: <u>F7L</u> Model: <u>128</u>	\$ <u>46,973</u>
	1. Wheelbase: 165"	Wheelbase: <u>158</u>	
	2. Cab-to-Axle: 84" clean.	Cab to Axle: <u>89</u>	
	3. After frame: 75" minimum.	After Frame: <u>75</u>	
	The cab and chassis is to be correct for application; vendor shall verify all specification and components are proper for City's intended use.	(Yes) No	
B.	Cab Type:	Cab Type: <u>Flat deck cab</u> Hood Slope: <u>10</u>	
	1. Conventional cab with sloped tilt hood.		
	2. The hood shall slope at least 10" from windshield cowl to the front of the hood for good visibility and safety in heavy traffic.		
C.	GVWR	GVWR: <u>25,500</u> Payload: <u>15,000</u>	\$ <u>1,227</u>
	1. Range 19,500-lbs to 26,000 with 10,703-lbs minimum payload.	Front: <u>3,500</u> lbs	
	2. Axle Ratings and GVWR proper for application	Rear: <u>17,500</u> lbs	
D.	Frame:	Frame Rating: <u>9,864</u> lbs Yield Strength: <u>33,600</u> psi Section Modulus/rail: <u>12.33</u> in <sup>3</sup> Frame RBM/rail: <u>43.40</u> lbf-in	\$ <u>677</u>
	1. Rating proper for GVWR. 2. Heavy-duty full channel heat-treated steel. 3. RBM and deep frame section proper for application.	(Yes) No (Yes) No	
E.	Towing Provisions:		
	1. Tow hooks, two front and two rear, frame mounted. 2. Air brake 3/8" female quick-connect hook up system on vehicle for wrecker air brake connection. Quick-connectors shall be accessible and protected but shall not stick out where they could get damaged. 3. A check valve shall be provided at the vehicles air tank to prevent	(Yes) No (Yes) No (Yes) No	

	Description of Equipment	Offered Equipment	Cost
F.	air loss.		
F.	Keys, Ignition, Door, and Other, 5 sets.		
1.	Standard 2 sets.		
2.	Additional cost per 1 key set: \$ <u>15</u>	Cost for 3 sets of keys: \$ <u>45</u>	\$ <u>45</u>
<b>2.2</b>	<b>Engine or Approved Equal</b>		
	Description of Equipment	Offered Equipment	Cost
A.	Engine:		
1.	Diesel engine, 6.0L, 6 cylinder, turbo charged, electronically controlled	Make: <u>CATERPILLAR</u> Model: <u>7.2</u> Engine Type: <u>6 - C7.2</u> HP: <u>260</u> @ <u>2400</u> rpm Torque: <u>620</u> @ <u>1600</u> rpm EPA Emissions: <u>Tier 3</u>	\$ <u>1752</u>
2.	Horsepower 260-hp @ 2,400 rpm.		
3.	Torque 600 ft/lb @ 1,600 rpm.		
4.	Engine shall meet EPA tier 3 emission standards.		
5.	Engine warning/shutdown system with to monitor low oil pressure, high coolant temperature and low coolant level with manual over-ride on truck.	(Yes) No	
B.	Filtration:		
1.	Oil: Fleetguard LF3000 full flow/bypass oil filter.	Make: <u>FLEETGUARD</u> Model: <u>3000</u>	\$ <u>25</u>
2.	Fuel: Racor 690RP12 fuel/water separator with thermostatically controlled heater.	Make: <u>RACOR</u> Model: <u>145728</u>	
3.	Air: dual element dry type with air inlet restriction indicator located in cab.	Make: <u>DEAERATOR</u> Model: <u>54FETY</u>	
C.	Exhaust:		
1.	Horizontal ground discharge behind the right side of the cab controlled after treatment device horizontal mounted on right side of vehicle	Location: <u>RHS INBOARD</u>	\$ <u>125</u>
2.	Exhaust with heat shield and 90° elbow.		
3.	Exhaust gases shall not discolor the body, burn or discomfort people working next to the truck or discharge to ground where dry vegetation could be ignited.	(Yes) No (Yes) No	
D.	Fuel Tank:		
1.	Single 50-gallon minimum	Capacity: <u>50</u>	\$ <u>125</u>
2.	Dynocraft 12v-inline fuel heater with lighted on dash control.	Make: <u>DYNOCRAFT</u> Location: <u>R.S.</u> Model: <u>12V</u>	
3.	Two steps to be provided on the tank to assure easy ingress and egress.	Yes No	
E.	Hoses:		
1.	Silicone hoses	Type: <u>SILICONE</u> <u>BLUETACK</u>	\$ <u>45</u>
2.	With constant torque hose clamps.	(Yes) No	
F.	Fan:		\$ <u>245</u>

Description of Equipment		Offered Equipment	Cost
		Make: <u>WA RLE</u> Model: <u>ELE</u>	
G.	1. Horton Drivemaster fan clutch with automatic on/off fan control with normally closed temperature control. 1. Block heater, Phillips "Zero-Start" 120vAC, 1500 Watt, engine coolant temperature controlled to: a. Turn "on" at 40°F engine coolant temperature. b. Turn "off" at 55°F engine coolant temperature. 2. The plug-in station shall have 2 LED indicator lights to: a. Light when plugged into "hot line" to show "hot line is energized. b. Light when engine coolant drops below 40°F. 3. Plug-in shall be mounted below driver's door, protected from mechanical and weather damage. Heater plug shall be a male standard grounded 15 amp rated plug. 4. A decal or information plate shall be provided describing how the system functions. The decal/plate shall be heavy-duty UV protected and capable of withstanding pressure washing and other normal vehicle functions. 5. Cold weather starting assist (no ether allowed).	Make: <u>SAUER</u> Model: <u>ZER</u> On Temperature: <u>40°</u> Off Temperature: <u>55°</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Location: <u>U.S. &amp; OVERSEAS</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Type: <u>ELEC G.R.D.</u>	\$ <u>325</u>
A.	Transmission	Offered Equipment	Cost
A.	1. Eaton/Fuller EH8E306A-JP, 6-speed hybrid drive, automated manual electronically shifted with automatic clutch; 2. PTO (power take-off) "electric" oil-to-water cooler. 3. Oil-to-water cooler. 4. Electronic push-button controls. 5. Synthetic transmission oil. 6. Magnetic drain plug.	Make: <u>EATON</u> Model: <u>EH 306 A</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes	\$ <u>47925</u>
B.	Eaton Corporation Electric Hybrid Power System	Offered Equipment	Cost
B.	1. The electric hybrid drive system shall be appropriate for effective and efficient for Denver's forestry bucket truck operations. 2. The electric hybrid system shall provide approximately 60 hp and 300 lb/ft of torque at 0 rpm to assist in vehicle acceleration and braking. 3. The electric motor shall provide auxiliary braking and starting torque through the transmission coupled to the vehicle's driveline. 4. During vehicle breaking up to 60 hp of braking/retardation assist.	Make: <u>EATON</u> Model: <u>853C6</u> Horsepower: <u>60</u> Torque: <u>300</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Retardation Amount: <u>14000-15000 ft-lbs</u>	\$ <u>22000</u>

## 2.3

Description of Equipment	Offered Equipment	Cost
shall be provided.		
5. During vehicle acceleration the electric motor assist shall augment the vehicle's acceleration.	Miles per hour: <u>17.5</u>	
6. Under normal conditions the breaking and acceleration assist process shall be repeated at every brake and acceleration cycle.	<input checked="" type="checkbox"/> Yes No	
7. The electric ePTO shall provide 13-hp continuous and 26-hp peak of hydraulic power to operate hydraulic equipment including the aerial bucket lift system and hydraulic tools.	<input checked="" type="checkbox"/> Yes	<u>Hybrid Electric System Work Period: 12 hours</u> <u>Hybrid Recharge Time: 6 minutes</u>
8. The electric hybrid system shall be capable of operating the aerial equipment for 55 minutes out of a 60 minute (1 hour) period without the truck's diesel engine starting to recharge the hybrid batteries.		
When the truck's diesel engine automatically starts and runs to recharge the hybrid batteries the engine shall only need to operate for 5 minutes to sufficiently recharge the hybrid batteries for another 55 minute hybrid electric work period.		
9. The battery support system shall be 340-vDC lithium ion with a 5-year battery life minimum.	Battery Voltage: <u>340</u> @ <u>12.7</u> amps Battery Life: <u>5</u> years	
C. Rear Axle:	Make: <u>MANITOU</u> Model: <u>R3 144</u> Capacity: <u>1750</u> lbs Top Speed: <u>68</u> mph	\$ <u>189</u>
1. Single reduction, capacity 18,000-lbs, or appropriate for application.	<input checked="" type="checkbox"/> Yes No	
2. Driver controlled differential locking.	<input checked="" type="checkbox"/> Yes No	
3. Axle ratio for 65 mph top speed.	<input checked="" type="checkbox"/> Yes No	
4. Oil seals, with Union 76 Triton EP 75W-90 synthetic gear lubricant.	<input checked="" type="checkbox"/> Yes No	
5. Magnetic drain plug.		
D. Front Axle:	Make: <u>FATIGUE</u> Model: <u>A F 500</u> Capacity: <u>3000</u> lbs	\$ <u>120</u>
1. Capacity 8,000-lbs, I-beam type or appropriate for application.	<input checked="" type="checkbox"/> Yes No	
2. Oil seals, with Union 76 Triton EP 75W-90 synthetic gear lubricant.	<input checked="" type="checkbox"/> Yes No	
E. Springs: Taper leaf with graphite impregnated spring pin bushings.	Rating: <u>8000</u> lbs	\$ <u>75</u>
1. Front: capacity 8,000-lbs, or appropriate for application.	<input checked="" type="checkbox"/> Yes No	
2. Rear: capacity 18,500-lbs, variable rate or appropriate for application.	<input checked="" type="checkbox"/> Yes No	
3. Spring pins "Maintenance Free".	<input checked="" type="checkbox"/> Yes No	
4. Shock absorbers on all axles. <u>Tire &amp; Fatigue Only</u>		
F. Brakes:	Make: <u>MANITOU</u> Model: <u>C 100</u> Size: Front <u>15 x 5</u> Rear <u>15 x 8.62</u>	\$ <u>140</u>
1. Hydraulic power assist heavy-duty extended service brakes.	<input checked="" type="checkbox"/> Yes No	
2. Air Brakes are acceptable with manufacturer's endorsement.	<input checked="" type="checkbox"/> Yes No	
2. Outboard mounted cast iron drums.		

Description of Equipment		Offered Equipment		Cost
		Yes	No	
G.	Dust shields, Non-asbestos brake block, Dual brake system ABS/ATC system.	Yes (Yes)	No (Yes)	
G.	1. Anti-Lock Brake System (ABS); 4S/4M with ATC, 4-channel with (4 sensors & 4 modulators). 2. Automatic Traction Control (ATC) shall work in conjunction with the ABS brake system in low traction situations limiting torque to least loaded tire allowing most loaded tire to receive torque and pull the vehicle.	Make: <u>WABCO</u>	Model: <u>Y5-4-ATC</u>	\$ <u>140</u>
H.	Air Dryer: "No Approved Equal" 1. Bendix AD-1S with heated steel reservoir. 2. Automatic moisture ejector heated 3. Cable operated air tank drain valves accessible from outside of vehicle.	Make: <u>B. W.</u> (Yes)	Model: <u>AD-1S</u> (Yes)	\$ <u>225</u>
I.	Driveline: 1. Permalube type U-joints.	Make: <u>DAVA</u> (Yes)	Model: <u>59</u> (Yes)	\$ <u>125</u>
J.	Power Steering: 1. Sheppard M-110 2. Reservoir 2-qt.	Make: <u>TRENTON</u> Capacity: <u>13.30G</u>	Model: <u>TTF660</u>	\$ <u>125</u>
K.	PTO 1. Eaton e-PTO hybrid controlled from inside cab.	PTO Type: <u>mechanical</u> <u>electric</u> . <u>motor</u> .		
<b>2.4 Electrical System or Approved Equal</b>				
	Description of Equipment	Offered Equipment		Cost
A.	Alternator:			\$ <u>137</u>
A.	1. Heavy duty, 12-volt internally regulated, output 190 amp minimum.	Output: <u>200</u> -amps		
B.	Batteries:	Make: <u>ELLIOTT</u>	Model: <u>9731</u>	\$ <u>100</u>
B.	1. Battery box under the cab steps with non-slip treads 2. Group 31 batteries 2 required 3. Total CCA of 1,800 minimum.	Location: <u>cab</u> . <u>Model</u> <u>7</u>	Quantity: <u>2</u>	
C.	Jump Start Stud:	CCA: <u>1850</u>	Yes (Yes)	\$ <u>75</u>
C.	1. Remote mounted in easy to access location.	No	Location: <u>cab</u>	\$ <u>75</u>
D.	Body builder's Junction Box:	Yes (Yes)	Location: <u>cab</u>	\$ <u>100</u>
D.	1. A body builder's junction box to be provided in cab to prevent corrosion from magnesium chloride. 2. Terminal shall be marked for easy identification.			
E.	Circuit protection:	(Yes)	No	\$ <u>100</u>

	Description of Equipment	Offered Equipment	Cost
F.	1. Circuit breakers with manual reset, no fuses. Wiring: 1. Wiring shall be color coded with hot stamped wire numbers. All wiring shall be run in wiring looms.	Yes No	\$ / <del>C</del>
G.	Back up alarm, 107 dB, SAE type B, fully sealed, back-up alarm system wired into vehicle's backup light system using OEM plug-in adapter. The alarm shall be mounted out of the vehicle's rear wheel splash area.	Yes No	\$ 42.00
H.	Chassis Lights: 1. Halogen sealed beam headlights, 12v. 2. Daytime running lights. 3. Wiring shall be sealed modular plug-in type. 4. Marker lights LED type.	Yes No Yes No Yes No	\$ 16.00 \$ 16.00
I.	Body Lights: See "Body Section" of the specification 3.7.G	Make: Michelin Model: L-E5	\$ / <del>D</del>
<b>2.5 Cooling System or Approved Equal</b>			
A.	Description of Equipment	Offered Equipment	Cost
B.	Cooling system with coolant recovery tank capable of maintaining engine manufacturer's recommended operating temperatures at an elevation of 6,800' in 120° F low humidity ambient conditions to be provided.		\$ / <del>C</del>
C.	Coolant protection shall be -34° F.		\$ / <del>D</del>
<b>2.6 Tires and Wheels</b>			
A.	Description of Equipment	Offered Equipment	Cost
B.	Tires: Appropriate for Application, 19.5" + 1. Size: 245/70R19.5, tubeless, 2. Front: Michelin XZE2, load range F. 3. Rear dual: Michelin XDE, load range F.  Wheels: 19.5" + 1. Size: 7.5 x 19.5 2. Disc, 10-hole hub piloted, dual mounting, two-piece flange nuts Accuride, and "White" powder epoxy coated finish.	Size: 245/70R19.5 Make: Michelin Model: XZE2 Make: Michelin Model: XDE  Size: 7.5 Finish Powder Coated: Yes No	\$ <del>L</del> <del>C</del>
C.	Spare Tire and Wheel: 19.5" + 1. Michelin XZE2 245/70R19.5, tubeless		\$ 157.00

## 2.7

Interior	Description of Equipment	Offered Equipment	Cost
A.	Steering controls left side.		
	1. All critical controls required to operate the vehicle shall be easy to reach and operate from left seat.	Yes No	\$ 142
	2. Tilt and telescoping steering wheel easy to adjust, to accommodate operators with large variations in sizes	Yes No	\$ 372
B.	The cab is to be configured to be ergonomic, comfortable and with ample room to minimize operator fatigue and discomfort. Note: The City has operators of varying statures and adjustable seating and controls will minimize on-the-job related physical problems and fatigue.		
C.	Seats, 3 Person:		
	1. Drivers seat shall be air-suspension high back driver's seat, and gray vinyl		
	2. Passenger 2 passenger seat non-suspension and vinyl.		
	3. Seat belts: 3-point for driver and outside passenger 2-point for center person		
D.	Instrumentation: shall include Speedometer, engine hourmeter, tachometer, volt meter, coolant temperature, oil pressure, fuel level and air pressure with low pressure alarms (light, audible).		
E.	Windows:		
	Left and right side window shall be remote powered up/down.	Yes No	\$ 234
F.	Floor covering shall be black rubber/vinyl flooring with under mat insulation.	Yes No	\$ 142
G.	Weathertech by Cannon, heavy-duty rubber floor mats with raised outer lip capable of holding water for passenger area.	Yes No	\$ 142
H.	Power point, 12vDC power source for operating a computer inside the cab.	Yes No	\$ 122
I.	Radio: AM/FM stereo with two speakers.	Yes No	\$ 142
J.	Intermittent wipers.	Yes No	\$ 142
K.	Air Conditioning:		
	1. Factory installed cab R134A air conditioning		\$ 142
	2. Cab shall be insulated to include floor, firewall, roof and walls.		\$ 477
L.	Fire extinguisher.		\$ 30

	Description of Equipment	Offered Equipment	Cost
	Type:		
M.	1. Extinguisher ABC, 5-lb. dry type rechargeable 2. Installed on outside of the cab. 3. Location labelled with 1" letters on outside of the cab.  M. Grab handles: 1. One each side on exterior of cab for operator and passenger assist and one interior for passenger. 2. Grab handles shall provide adequate clearance to other objects to provide easy access and clearance to prevent pinch or other hazards.	Type: <u>DK</u>  <u>Yes</u> No <u>Yes</u> No	\$ <u>87</u>
Exterior:	Description of Equipment	Offered Equipment	Cost
A.	Engine fully accessible and serviceable forward of firewall, no removable doghouses, which require removable of radio and other equipment.		\$ <u>725</u>
B.	Cap design: steel body with air suspension: 1. The hood shall have a 10" minimum slope for improved driver visibility. 2. Molded 1-piece fiberglass hood and fenders with painted hood mounted grill. 3. Rubber fender extensions. 4. Exterior sun visor full width. 5. Right lower door window. 6. Right and left hand electric windows. 7. Door and ignition keyed the same.	Air Suspension: <u>Yes</u> No Hood Slope: <u>Yes</u> No <u>Yes</u> No <u>Yes</u> No <u>Yes</u> No <u>Yes</u> No <u>Yes</u> No	\$ <u>676</u>
C.	Mirrors: 1. Rear view mirrors Moto Mirror Model 7-5400 "Flat Back Traditional" 7" x 16" motor head, remote, heated, stainless steel left and right mounted on the cab. OR EQUIVALENT 2. Convex 8" stainless steel mirrors mounted under primary mirrors. 3. A right hand down mirror shall also be provided to cover front and side blind spot for shorter drivers under 5'6" tall. 4. Overall cab width including mirrors 112" maximum.	Make: <u>F7L</u> Model: <u>145AT</u> Overall mirror full extended width: <u>14 2</u> inches Make: <u>F7L</u> Model: <u>14 2</u>	\$ <u>221</u>
D.	Paint: 1. Polyurethane paint equal to DuPont Imron 5000 "Bright White", applied following manufacturer's procedures to include: 2. Color top coat, 2 coats, applied to all non-stainless steel components following manufacturers procedures. 3. Removing all mill scale and slag.	Make: <u>DUPONT</u> Model: <u>145AT</u> Color: <u>bright white</u> Type: <u>145AT</u>	\$ <u>125</u>

	4. Variprime 615S self-etching primer or approved equal.		
	5. Treating bare metal with manufacturer's conditioners and conversion coatings or approved equal.		
E. Undercoating:	1. A pliable and durable asphaltic base protective undercoat shall be applied to all exposed undercarriage parts and components, which are subject to corrosion.	\$ 12.447	
			VEHICLE SUB TOTAL COST \$ 102,462

### 3.0 Dealer Provided Equipment

#### 3.1 Electrical Systems:

- A. All non-factory wire connections (splices, connectors, etc.) shall be soldered and shrink tube insulated with adhesive/melttable sealant, thick wall polyolefin shrink tubing (3M EPS-300 or equal). No non-factory crimp connections allowed. No cutting or splicing into the factory wiring harnesses allowed.
- B. All accessories (strobe lights, operator controls, light bar, etc.) shall be wired through a 12-vDC constant-duty solenoid and controlled by bus bar mounted and permanently labeled auto-resetting circuit breakers. The solenoid shall be wired to the key switch.
- C. All dealer/vendor installed items, which require connecting into the vehicle's electrical system shall be done using an OEM factory modified wiring kit whenever possible.
- D. All non-factory wiring shall be encased in a totally sealed wiring harness (no plastic split loom) to prevent corrosion from magnesium chloride.
- E. The wiring harness shall be well secured to the truck with neoprene aircraft stainless steel tubing clamps. Rubber grommets shall be used at all areas where the wiring passes through areas that could damage the wiring. Unprotected wiring in any application is unacceptable.
- F. Electrical cables and wiring harnesses shall be neatly run and clamped with neoprene aircraft stainless steel tubing clamps. Clamp spacing shall not exceed 18-inches.
- F. Dielectric grease shall be applied to all electrical plug terminals and connections to reduce corrosion.

#### 3.2 Fasteners:

- A. Grade 5 (SAE or USS) or 8.8 (metric) minimum, bolts, nuts, washers minimum. Vendor shall use Grade 8 or 10.9 for all critical areas or where good engineering practice suggests.
- B. All fasteners shall be zinc plated to prevent corrosion.
- C. Anti-Seize: all fasteners shall have Fel Pro C5A Anti-Seize compound applied before assembly to prevent corrosion, rusting, galling and aid in equipment servicing and repair.
- D. All fasteners shall be of appropriate length, diameter and strength (grade) for the application.
- E. Bolts and screws shall extend a minimum of 1-1/2 threads beyond the nut and maximum of 6 threads past the nut.
- F. Flat washers shall be used under bolt heads and nuts.
- G. Lock nuts (nylon insert, metal, slotted, castle nuts) shall be used lock-washers are not acceptable.

#### 3.3 Hydraulic Systems:

# Layton

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04/14/09

- A. All hydraulic circuits shall be pressure relief protected.
  - B. Hydraulic hoses shall be Parker ST 451 (tight bend radius) 2-wire braid hose meeting SAE-100R17 specifications where the hose meets operational criteria or approved equal.
  - C. Hydraulic hoses shall have swivel fittings on both ends. Hose ends shall be located to facilitate easy component replacement.
  - D. High-pressure hydraulic hose shall not be used for suction lines.
  - E. Close/tight radius 90° elbow fittings shall not be used if short, medium or long drop steel stem 90° elbow fittings can be used. Over use of 90° elbows shall not be permitted.
  - F. Hydraulic hoses and rigid lines shall be run parallel where possible; routing shall look neat and well planned.
  - G. Rubber cushioned metal hydraulic clamps shall be used on all hydraulic ridged lines and hoses at proper intervals for supporting the line/hose 36" maximum distance. Clamps shall be securely mounted to the equipment.
  - H. Hydraulic hoses and lines shall not be routed near exhaust, close to rotating components or over, around or through sharp edges. . Rubber grommets shall be used at all areas where the hydraulic lines through areas that could damage the lines.
  - I. Galvanized fittings and thread tape shall not be used.
  - J. Hydraulic hoses shall be covered with protective spiral nylon anti-chaffing wrap or sock type protective sleeves at all areas where chafing/fouling could cause premature wear/failure.
  - K. Hydraulic oil tanks shall magnetic drain plug, oil level and temperature gauge.
  - L. Shut off valves  $\frac{1}{4}$ -turn on each side of filter.
- 3.4 All fabricated parts, brackets etc. shall have all sharp corners, edges etc. radiused or rounded for safety.

3.5 **Welds:**

- A. All welds shall meet AWS (American Welding Society) standards for the type weld, material joined and welding method.
- B. Weld joints shall have proper design and fit for the application.
- C. Welds joints shall have proper penetration and be smooth in appearance with no undercuts or overlaps at edge of weld.
- D. Weld joints shall be properly prepared with cut ends ground to remove all slag, create a smooth surface and bevelled end.

3.6 **Thirty-Seven Foot Aerial Bucket and Service Body or Approved Equal**

Description of Equipment	Offered Equipment	Cost
A. Versalift SST37EIH, Insulated, End Mounted 37 ft. (11.0 m) Telescopic Aerial Platform lift with a 42 ft. (12.3 m) working height (based on a 36 in. frame height) and includes the following items: 1. Lower boom articulation: -7° to vertical° 2. Articulated arm articulation: -14° to +74° lower boom to be compensating. 3. Platform capacity 350-lbs. 4. Platform rotation: 180° 5. Platform mounted full pressure single lever control with safety trigger and emergency stop. Rated and tested for dielectric safety (provide rating and test procedures) 6. Platform shall store behind the body/canopy just above the rear	Make: <u>Versalift</u> Model: <u>SST37EIH</u> Working Height: <u>42</u> ft Lower Boom Articulation: <u>-7 to vertical</u> Arm Articulation: <u>-14 to +74</u> Platform Capacity: <u>350</u> lbs Platform Rotation: <u>180</u> ° Yes No <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Cost: <u>\$38145.00</u>

Reference Nos.: 09-148R1, 09-149R1

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Vendor/Sub Vendor: \_\_\_\_\_

	Description of Equipment	Offered Equipment	Cost
	deck.		
7.	Platform mounted full pressure single lever pistol grip control with safety trigger and emergency stop. Rated and tested to OSHA and ANSI standards.	Yes No	\$ -
8.	Manual 2-speed throttle control.	Yes No	\$ -
9.	Engine start/stop from platform and lower controls.	Yes No	\$ -
10.	Emergency pump 12vDC.	Yes No	\$ -
11.	Continuous rotation 360°.	Yes No	\$ -
12.	Hydraulic system open center, 3.5-gpm, operating pressure 2,000 psig, powered by the hybrid e-PTO system clutched pump. System shall operate aerial lift and hydraulic tool circuit.	Yes No	\$1500.00
13.	Multi link hose carrier through booms.	Yes No	\$ -
14.	Fiberglass inner boom with 42-inch insulation gap fully retracted meeting ANSI A92.2-2001 requirements for Category C, KV and below.	Yes Insulation Gap: 42" ANSI Certification: A92.2 - 2001	\$ -
15.	Non-lubrication bearings used at all pivot points.	Yes No	\$ -
16.	Integral hydraulic oil reservoir with dual sight gauges, 12-gallon capacity.	Reservoir Size: 12-GAL Location: Intergal	\$ -
17.	Platform fiberglass 24" x 30" x 42" with weather cover and two outside curbside steps stored for best access to bucket and rear door	Platform Size: _____	\$ -
18.	Platform inner liner with corner step to fit 24" x 30" x 42" platform.	Yes No	\$ -
19.	Master/slave hydraulic leveling with upper control to tilt for clean out or rescue.	Yes No	\$ -
20.	Stable ride front and rear torsion bar stabilizers two required.	Yes No	\$ -
21.	Boom rest support shall be a strapless design with U-craddle rubber padded for boom protection.	Yes No	\$ -
22.	Lanyard tie-off/anchor point 5,000 lb rated.	Yes No	\$ -
23.	ANSI A92.2-2001 data plate.	Yes No	\$ -
B.	Safety harness:		
1.	Buckingham Inc. harness model 6393700G1 and	Make: Buckingham Model: 6393700G1	\$ -
2.	Lanyard model 84U716 with 6' long deceleration style.	Make: Buckle Master Model: 84U716	\$ -
C.	Paint:		
1.	Non-stainless steel or fiberglass components subject to corrosion shall be protected using "Bright White" urethane epoxy painted, applied following recommended procedures to include:	Paint Type: Urethane Epoxy Paint	\$ -
2.	Painted prior to assembly.	Brand: DuPont Model: Tector	\$ -
3.	Urethane epoxy paint shall be a minimum of 2-mils thick.	Paint Thickness: 2 mils	\$ -
4.	Removal of all surface contaminations (grease, welding and	Yes No	\$ -

Description of Equipment		Offered Equipment		Cost
		Yes	No	
<b>Aerial Bucket SUB TOTAL COST</b>				<u>\$39675.00</u>
<b>3.7 Service Body for Aerial Lift</b>	Description of Equipment	Offered Equipment	Make: <u>Knapheide</u> Model: <u>6132-DSY-T</u>	Cost <u>\$12,589.00</u>
<b>A.</b>	Knapheide steel service body for 84" cab to axle chassis or approved equal. Vendor shall verify proper body for specified cab and chassis.			
<b>B.</b>	Dimensions:			
1.	Body length overall: 132"	Body Length: <u>133 1/4</u>		
2.	Body width overall: 92"	Body Width: <u>94</u>		
3.	Bed load space width: 52"	Load Space: <u>54</u>		
4.	Compartment depth: 20"	Compartment Depth: <u>20</u>		
5.	Compartment height overall: 40"	Compartment Height: <u>44</u>		
6.	Tailgate height: 6"	Tailgate Height: <u>6</u>		
7.	Tail shelf width: 36"	Tail Shelf Width: <u>30</u>		
<b>C.</b>	Service body construction:			
1.	Body shell, 14 gauge, A40 galvanneal steel.	<u>Yes</u>	No	
2.	Floor, 12-gauge treadplate steel with 1-3/8" return flange with back panel overlapping and interlocking to floor.	<u>Yes</u>	No	
3.	Wheel wells, A40 galvanneal steel.	<u>Yes</u>	No	
4.	Tailgate, 14-gauge 2-sided A40 galvanneal steel construction	<u>Yes</u>	No	
5.	Doors, 20 gauge, 2-sided, A40 galvanneal steel with bulb type neoprene seals, non-corrosive rotary slam-latchable keyed alike latches, adjustable strikers and double spring over center retainers.	<u>Yes</u>	No	
6.	Doors horizontal and vertical cable stops.	<u>Yes</u>	No	
7.	End panels 16 gauge A40 galvanneal steel.	<u>Yes</u>	No	
8.	Shelving, 18 gauge A40 galvanneal steel with hemmed dividers, rated at 250-lbs. minimum.	<u>Yes</u>	No	
9.	Undercoating, body shall have 6 mils minimum petroleum based undercoating.	<u>Yes</u>	No	
10.	Compartment hooks 2-per compartment, 1-per side.	<u>Yes</u>	No	
11.	Compartment lighting: LED type all compartments with switch in cab. The switch shall be installed in an easy to see and access position from both the driver's seat and standing outside the vehicle, but not in a location that interferes or could interfere with the driver or passenger during operation or while entering and	<u>Yes</u>	No	

	exiting the vehicle.			
D.	Street side compartment configuration:			
1.	1st Vertical - Three (3) adjustable shelves with dividers.	<input checked="" type="checkbox"/>	No	\$ <u>—</u>
2.	2nd Vertical- Five (5) pull out Divider drawers on Giant Slide two (2) 3" deep and three (3) 2" deep.	<input checked="" type="checkbox"/>	No	\$ <u>—</u>
3.	Horizontal - With dividers in bottom of compartment.	<input checked="" type="checkbox"/>	No	\$ <u>—</u>
4.	Rear Vertical - Two (2) Adjustable divider shelves.	<input checked="" type="checkbox"/>	No	\$ <u>—</u>
5.	Streetside rear access hotstick door and shelf 98.5" long.	<input checked="" type="checkbox"/>	No	\$ <u>—</u>
E.	Curbside compartment configuration:			
1.	1st Vertical - Three (3) adjustable divider shelves.	<input checked="" type="checkbox"/>	No	\$ <u>—</u>
2.	2nd Vertical - Access steps to be utilized as storage compartment with grab handle.	<input checked="" type="checkbox"/>	No	\$ <u>—</u>
3.	Side Access Steps Material Gate:	<input checked="" type="checkbox"/>	No	\$ <u>35.00</u>
a.	The gate shall be located at top of top step at body floor level to help prevent materials from falling into the stepwell area.	<input checked="" type="checkbox"/>	No	\$ <u>—</u>
b.	The gate shall rotate/pivot up/down with hinge on forward side.	<input checked="" type="checkbox"/>	No	\$ <u>—</u>
c.	The gate shall be easily latchable in both up and down position.	<input checked="" type="checkbox"/>	No	\$ <u>—</u>
d.	The gate shall be painted bright "Safety Yellow".	<input checked="" type="checkbox"/>	No	\$ <u>—</u>
4.	Horizontal - 6 Drawer parts cabinet bolted to underside of shelf with enough room to allow access to bottom of compartment.	<input checked="" type="checkbox"/>	No	\$ <u>—</u>
5.	Rear Vertical - Fixed J-hooks mounted 2-3-2.	<input checked="" type="checkbox"/>	No	\$ <u>—</u>
6.	Curbside rear access hotstick door with 57" long shelf, 7" down from top.	<input checked="" type="checkbox"/>	No	\$ <u>—</u>
F.	Electrical Inverter:			
1.	Dimensions ADI-12/3000N pure sine wave inverter.			
2.	The inverter shall be installed in the right front vertical compartment on the floor.			
3.	A shelf floor shall be provided 6" above the inverter to provide adequate air space for ventilation.			
4.	Ventilation shall be through louvers in rear wall of the compartment and the access door. The louvers shall have a $\frac{1}{4}$ " mesh screen to prevent debris from entering the compartment.			
5.	The inverter shall be connected to the Eaton DC/DC converter 12vDC chassis side for electrical power.			
6.	Electrical 2-gang outlets with GFI circuit protection shall be located on the outside of the service body.			
a.	Front right compartment forward facing			
b.	Rear right compartment rearward facing.			
7.	Outlet Weather Tight Covers: The outlets shall have Thomas &			
		Make: <u>DimensionS</u> Model: <u>12/3000N</u>		\$ <u>2300.00</u>
		Make: <u>—</u> Model: <u>—</u>		

	Betts model WTG-100-GV-L, GFCI heavy-duty NORYL base with clear Lexan cover with integral lock.		
G.	Vehicle Rear Lights: (No Approved Equals)	Make: <u>TRUCK - LITE</u> Warranty: <u>LIFETIME</u>	\$ _____
	1. All lights shall be Truck-Lite "Lifetime Warranty" 12vDC, LED type, flush mount, sealed lexan body, grommet insulated with Fitt' N Forget multi-pin plugs where possible.	<input checked="" type="checkbox"/> Yes No <input checked="" type="checkbox"/> Yes No	\$ 65.00 \$ 125.00 \$ 125.00 \$ 45.00 \$ 45.00 \$ 34.00 \$ 1.00
	2. Integral Stop/Turn/Tail lights mounted in the rear outer corners of the service body model Super 44 P/N 44302R or model 60 P/N 60250R.		
	3. Back up lights Truck-Lite LED, flush mount, sealed lexan body, grommet insulated, multi-pin units model 44 P/N 44206C.		
	4. Marker lights Truck-Lite LED 3 per side model 10 P/N 10250R or 10250Y or model 30 P/N 30250R or 30250Y.		
	5. Rear ID bar Truck-Lite LED model 35 P/N 35741R or 35740R.		
	6. License plate light, Truck-Lite model 15 P/N 15040		
	7. Wiring shall be sealed Fitt' N Forget modular plug-in type where possible.		
	8. Dielectric grease shall be applied to all plug connections and terminals to prevent corrosion.		
H.	Circuit Protection:		
I.	1. Circuit breakers with manual or automatic reset, no fuses.	<input checked="" type="checkbox"/> Yes No <input checked="" type="checkbox"/> Yes No	\$ _____
I.	Wiring:		
J.	1. Wiring shall be color coded with hot stamped wire numbers. All wiring shall be run in wiring looms.		
J.	Rear Deck Extension:		
K.	1. Heavy-duty tread plate with "Non-Slip" coating rear deck extension. 2. Rear deck shall be 30" wide minimum.	<input checked="" type="checkbox"/> Yes No <input checked="" type="checkbox"/> Yes No	\$ 928.00
K.	Platform Access Steps and Walkway:		
	A. Walkways on top of both sides of the service body toolboxes.	<input checked="" type="checkbox"/> Yes No	\$ 703.00
	B. Inside the body steps shall provide access to the right side walkway.	<input checked="" type="checkbox"/> Yes No	
	C. Walkways to be mounted on each toolbox extending from the front to rear.	<input checked="" type="checkbox"/> Yes No	
	D. Platform shall be installed on right rear of the service body and extend above the side boxes to provide easy access into/out of the aerial platform. A safety handrail shall be provided.		
	E. Steps with Handrail/Grab Handles.		
	4. Steps with handrail shall be provided on the inside of the right side toolbox to provide access to the walkway.	<input checked="" type="checkbox"/> Yes No	
	5. The steps shall be evenly spaced to provide easy and safe access		

	to walkway.			
F.	The handrails and grab handles shall be painted "Safety Yellow" to provide safe and easy access to the aerial platform.	<input checked="" type="checkbox"/>	No	
G.	Step and platform surfaces areas shall be open mesh grip-strut.	<input checked="" type="checkbox"/>	No	\$ 566.00
L.	Chocks:			
1.	Chock blocks (4 required) heavy-duty rubber type with rope handles	<input checked="" type="checkbox"/>	No	
2.	Chock holders located in the body above forward and rearward of each rear wheel.	<input checked="" type="checkbox"/>	No	
M.	Mud Flaps			\$ 75.00
1.	Heavy-duty anti-sail type	<input checked="" type="checkbox"/>	No	
2.	Installed front and rear on rear wheels.	<input checked="" type="checkbox"/>	No	
N.	Cone Holders:			\$ 145.00
1.	Capacity 6 traffic cones each holder minimum.	<input checked="" type="checkbox"/>	No	
2.	Two holders.	<input checked="" type="checkbox"/>	No	
3.	Cone holder location will be mutually determined at pre-inspection.	<input checked="" type="checkbox"/>	No	
O.	Conspicuity Tape:			\$ 400.00
1.	DOT-C2 Standard No. 108 reflective conspicuity tape			
2.	The tape shall be symmetrically and esthetically applied full length to rear and sides of the body and horizontal stripes around the top and bottom of the platform.			
P.	Back Up Alarm:			\$ 65.00
1.	Back up alarm, 97 dB, SAE type C, fully sealed, back-up alarm system wired into vehicle's backup light system using OEM plug-in adapter.			
2.	The alarm shall be mounted out of the vehicle's rear wheel splash area.			
Q.	Paint:			\$ 1550.00
1.	Polyurethane paint equal to DuPont Imron 5000, "Bright White" matching truck cab, applied following manufacturer's procedures to include:			
2.	Color top coat, 2 coats, applied to all non-stainless steel components following manufacturer's procedures.			
3.	Removing all mill scale and slag.			
4.	Variprime 615S self-etching primer or approved equal.			
5.	Treating bare metal with manufacturer's conditioners and conversion coatings or approved equal.			
				Service Body SUB TOTAL COST \$ 20,103.00

## 3.8

**Safety lighting and Sundries Equipment**

Description of Equipment	Offered Equipment	Cost
A. Spotlight: left and right windshield post mounted, Unity model #225 (6") equipped with Hella model 79704 halogen spot lamp or equal.	Make: <u>Unity</u> Model: <u>225</u>	\$ <u>266.00</u>
B. Cab interior lights:		
1. The cab shall have two Whelen LED interior light P/N 80COEHCR or approved equal interior lights to be mounted in the center of the cab	Make: <u>Whelen</u> Model: <u>Boxcar</u>	\$ <u>78.00</u>
C. Opticom:		
1. A Global Traffic Technologies (GTT) Opticom Model 795H high priority optical emitter assembly installed behind the vehicle's front grill.	Make: <u>Gaff</u> Model: <u>795H</u>	\$ <u>1466.00</u>
2. The assembly kit shall consist of an emitter control switch assembly, control switch cable, emitter cable, circuit breaker, terminal block and #16 automotive cable).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
3. The cable shall enter the cab through waterproof fully sealed grommet entry.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
D. Warning Light Bar:		
1. Light bar cab mounted meeting class 1, SAE J1318 specifications. Whelen Freedom Series 12-strobe model FX2DNVR, 55"-long. configured as follows:	Make: <u>Whelen</u> Model: <u>FX2DNVR</u>	\$ <u>2429.00</u>
a. LED corner strobes positioned 4 on outer corners ("Red" left side "Blue" right side)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
b. LED front strobes 4 front facing(2 "Red" left side, 2 "Blue" right side)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
c. LED rear strobes 6 rear facing (3 "Red" left side, 3 "Blue" right side) dual stack Whelen 400 series	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
d. The rear LED strobes shall be capable of being switched into a traffic pattern mode for directing traffic.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
e. Takedown and alley lights on outside surface left and right:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
2. The cable shall enter the cab through waterproof fully sealed grommet entry.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
E. Rear Corner Lights:		
1. Whelen S3600D, 24-Joules strobe heads	Make: <u>Whelen</u> Model: <u>S3600D</u>	\$ <u>489.00</u>
2. Installed on the rear of the service body 1 strobe per side.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
3. Post mounted 12" high on the top rear (leftright) corner of the service body.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
4. Strobe position red left corner, blue right corner.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
F. Arrow Board:		

		Make: <u>Sho-ME</u> Model: <u>02-1652</u>	\$ <u>160.00</u>
1.	Arrow board SHO-ME model 02-6052 Ultra-Bright LED with control head.	<input checked="" type="checkbox"/> Yes	No
2.	The arrow board shall be mounted in the vertical area between the rear deck and the rear bumper.	<input checked="" type="checkbox"/> Yes	No
3.	Mounting height at bottom center of arrow board approximately 12" above rear bumper and approximately 4.1' above the ground.	<input checked="" type="checkbox"/> Yes	No
4.	The control head shall be group mounted on transmission tunnel floor in an easy to see and access position, but not in a location that interferes or could interfere with the driver or passenger during operation or while entering and exiting the vehicle.	<input checked="" type="checkbox"/> Yes	No
G.	Work Lights:	Make: <u>Signal Stat</u> Model: <u>623u</u>	\$ <u>42.00</u>
	1. Halogen side lights Signal-Stat 623W work lights mounted on the rear side of the top utility body steps.	<input checked="" type="checkbox"/> Yes	No
	2. The lights shall be swivel mounted capable of moving up/down and rotating left/right.	<input checked="" type="checkbox"/> Yes	No
	3. The lights shall provide lighting for night repair work.		
H.	Control switches for PTO, emergency lights and other equipment shall be controlled by a Whelen model PCC-10 lighted 10-switch panel. Switches shall have sufficient rating for electrical load. The switch panel shall be group mounted on transmission tunnel floor in an easy to see and access position, but not in a location that interferes or could interfere with the driver or passenger during operation or while entering and exiting the vehicle. Switch configuration shall be as follows from left to right from driver's seat: Switch Position		\$ <u>1</u>
	1. Aerial bucket PTO.		
	2. Front facing strobes on Whelen 9438-Y light bar.		
	3. Front facing flashers on Whelen 9438-Y light bar.		
	4. Rear facing strobes on Whelen 9438-Y light bar.		
	5. Rear facing flashers on Whelen 9438-Y light bar.		
	6. Service body rear mounted Whelen S360D strobe lights.		
	7. Service body compartment lights.		
	8. Left side light Deitz 9-450.		
	9. Right side light Deitz 9-450.		
	10. High intensity Grote model 90408 interior cab lights.		
	11. Switches 2 through 6 shall be 3-position with high, off, low to control the brightness of the strobes for day and night operation. The switch panel shall be installed in an easy to see and access position, but not in a location that interferes or could interfere with the driver or passenger during operation or while entering and exiting the vehicle.		\$ <u>253.00</u>

	12. All wiring from the Opticom, the PTO, arrow board and the light control panel shall be connected to wire terminal strips in an master control box (approx. 17" x 13" x 3") with removable cover. The control box shall contain:	
a)	Seven (7) constant-duty relays one each for the PTO, overhead light bar, rear light bar, side work lights, service body compartment lights, arrow board and the Opticom.	\$ 12.00
b)	The control box shall be located behind the seat.	\$ 1.00
c)	A complete and accurate wiring schematic shall be mounted on the inside of the control box lid.	\$ 1.00
d)	Two additional copies of the wiring schematic shall be provided with the owner's manual for the 37" serial bucket device.	\$ 1.00
I.	3M Opticom control head shall be group mounted on transmission tunnel floor in an easy to see and access position, but not in a location that interferes or could interfere with the driver or passenger during operation or while entering and exiting the vehicle.	\$ 1.00
J.	The switch panel and all control heads shall be group mounted in an AV-TECH Electronics Inc. AVT-RSR radio, siren rack. The AVT-RSR shall be installed on transmission tunnel floor in the same configuration as City vehicles KA18 and KA19. The switch panel and control heads in an easy to see and access position, but not in a location that interferes or could interfere with the driver or passenger during operation or while entering and exiting the vehicle. The configuration shall be as follows top to bottom: Aerial device controls, Emergency 10-position light switch panel, SHO-ME arrow board controls and Opticom controls bottom.	\$ 26.00
K.	Driver Height Warning Sign 1. Installed on truck dash providing the travel height of the vehicle. 2. Sign shall be in 1" "white" block letters.	\$ 20.00
L.	Fire extinguishers 5-lb ABC type mounted on front side of the street side step behind the driver's door.	\$ 24.00

**Sundries Equipment SUB TOTAL COST**      \$6273.00

### 3.9

#### Optional Equipment

Do not include Optional Equipment in the total price of the vehicle; however an equipment price must be provided. The City will determine if the equipment is to be purchased.

Description of Equipment	Offered Equipment	Cost
A.	Hybrid Plug-In Rechargeable Battery System:	\$ 114

1. The system shall provide for a minimum of 100 mile vehicle range conducting City business or 8 hours of normal vehicle work.	Battery Range: _____ miles Battery Life: _____ hours Recharge Time: _____ hours Recharge Time: _____ 100% discharge Recharge Voltage: _____ 50% discharge Recharge Voltage: _____ VAC
2. Provide a vehicle battery system that can be recharged off the City electric grid in less than 8 hours.	
3. The recharge system shall plug-in to either/both a 120vAC or 220vAC electrical outlet.	
4. The battery system shall also recharge during the regular driving cycle using dynamic braking to recharge the batteries and provide vehicle braking.	Yes      No
5. The batteries shall have at minimum a 5-year life cycle in the City's application.	Battery Life: _____ years Battery Pack Voltage: _____ Amps: N/A

## 5.0

**Manuals/Equipment**

Item	Description of Equipment	Offered Equipment	Cost
<b>Training Tape</b>	One VHS tape, DVD or CD demonstrating and explaining the safe and proper use of the vehicle/equipment.	Yes <i>(S)</i> No	\$ <i>N/A</i>
	1. Cab and chassis. 2. Equipment		\$ <i>N/A</i>
<b>Operators Manual Paper</b>	One book per vehicle/equipment with "safe equipment operation" section for each component.		
	2. Cab and Chassis. 3. Equipment.		
<b>Service/Maintenance Manual Paper</b>	Two complete sets per Procurement (not per vehicle); binder required.		
	A. Manuals shall be provided for:		
	A. Cab and Chassis	Yes <i>(S)</i> No	\$ <i>N/A</i>
	B. Equipment	No	
	B. Manuals shall include complete and detailed information for maintenance of the equipment, including general information, specifications, troubleshooting guide, lubrication and required adjustments.		
	C. The hydraulic and electrical sections of the manuals shall be provided in a separate electrical/hydraulic binder. Both the hydraulic and electrical circuits shall have separate color coded schematics for each equipment function to show the flow of both electrical current and	Yes No	

	hydraulic oil	One complete set; per Procurement (not per vehicle)			
<b>Service/ Maintenance Manual on CD rom or DVD</b>	1. Manuals shall be provided for: A. Cab and Chassis B. Equipment 2. Manuals shall include complete and detailed information for maintenance of the equipment, including general information, specifications, troubleshooting guide, lubrication and required adjustments. 3. The hydraulic and electrical sections of the manuals shall be provided in a separate electrical/hydraulic binder. Both the hydraulic and electrical circuits shall have separate color coded schematics for each equipment function to show the flow of both electrical current and hydraulic oil. 4. New CD roms or DVDs shall be provided when information is updated, superseded or changed.	Yes Yes Yes No Yes	No No No Yes Yes	\$ \$ \$ \$	
<b>Service/ Maintenance Manual on Internet Access, or Other Electronic Media</b>	One complete set; per Procurement (not per vehicle) 1. Vendor shall provide access to the site for the length of time that the City owns the vehicle/equipment at a one time up front cost to the City. 2. Internet information shall include complete and detailed information for maintenance of the equipment, including general information, specifications, troubleshooting guide, lubrication and required adjustments. 3. The hydraulic and electrical sections of the manuals shall be provided in a separate electrical/hydraulic binder. Both the hydraulic and electrical circuits shall have separate color coded schematics for each equipment function to show the flow of both electrical current and hydraulic oil.	Yes Yes Yes No Yes	No If other Specify: Yes No	\$ \$ \$	
<b>Parts Manual</b>	Two complete sets, per Procurement (not per vehicle)				

<b>Paper</b>	vehicle) binders required. 1. Manuals shall be provided for: A. Cab and Chassis B. Equipment 2. Illustrated parts book shall be furnished containing data so that part numbers can be readily found for each system.	Yes <del>Yes</del> <u>Yes</u>	No No No	\$ \$ \$
<b>Parts Manual on CD rom or DVD</b>	One complete set, per Procurement (not per vehicle) illustrated parts book shall be furnished containing data so that part numbers can be readily found for each system. 1. Information shall be provided for: A. Cab and chassis B. Equipment 2. Parts manuals shall include complete and detailed information for replacement parts for the equipment, including general information, specifications ordering guide lines and superseded parts information. 3. New CD roms or DVDs shall be provided when information is updated, superseded or changed.	Yes Yes Yes	No <del>Yes</del> <u>No</u>	\$ \$ \$
<b>Parts Manual on Internet Access, or Other Electronic Media</b>	One complete subscription, per Procurement (not per vehicle) 1. Internet information shall allow the City 24 hour 7 days/week including holidays access from its main maintenance facility and all its satellite maintenance facilities. 2. Internet information shall include complete and detailed information for parts for the: A. Cab and Chassis B. Equipment 3. Internet information shall cover vehicle/equipment, shall include general parts information, parts specifications, ordering guide lines and superseded parts information. 4. Vendor shall provide access to the site for the length of time that the City owns the vehicle/equipment at a one time up front cost to the City.	Yes Yes Yes Yes	No <del>No</del> <u>No</u> Yes	\$ \$ \$ If other Specify: _____

	5. Parts manuals shall include complete and detailed information for replacement parts for the equipment, including general information, specifications, ordering guide lines and superseded parts information.	Yes	No	
<b>New Equipment Check-in Form:</b>	The successful vendor shall complete the City's "New Equipment Check-in Form" completely and accurately with all requested information.			\$ <u>4/c</u>

### 5.1 Operator and Mechanics Training

Item	Description of Equipment	Offered Equipment	Cost
<b>On Site Equipment Manufacturers Training</b>	On site the vendor shall insure that the equipment manufacturers training representative, after delivery of the equipment Contacts Fleet Maintenance training manager to coordinate equipment training.		\$ <u>4/c</u>
<b>Fleet Maintenance Training Manager</b>	Mr. Felix Espinosa, Telephone: 720-865-3912 Contact time: 8:00 am to 3:00 pm M-F		\$ <u>4/c</u>
<b>Training Requirements</b>	Training shall consist of factory training materials, classroom and actual field training on the equipment for the equipment operators and supervisors.		\$ <u>4/c</u>
<b>On Site Mechanics Training</b>	On site mechanics training shall be 1 class, approximately 8 hours, day shift total provided at City facilities. The training shall cover maintenance and service procedures, trouble shooting and use of manuals.		\$ <u>4/c</u>

### 6.0 Warranty

#### 6.1 General Warranty Provisions

	<b>WARRANTY (Table 1) Class 7 &amp; 8 Vehicles</b>	<b>Complies (Y or N/A)</b>
A.	Express warranty is to be a minimum of 12 months on the vehicle/equipment. The standard factory warranty plan shall be provided as an attachment to your bid proposal	Y
B.	The Warranty is to include at no cost to the City of Denver, all parts and labor, and no charge for work performed at the vendors facility	Y
C.	Warranty shall start when the City places the vehicle into service <b>NOT</b> on the delivery date.	Y

D.	Warranty plans shall consist of the total unit and be broken out to a separate plan for each warranty item if applicable, such as engine warranty plan, transmission warranty plan, electrical, etc.	Y
E.	Options listed shall be bid and provided as factory installed under the terms of the full factory-backed warranty. This includes, but is not limited to, air conditioning, radios, cruise control, bumpers, towing packages etc. Dealer-installed options will not be permitted unless pre-approved by the City in writing and, where applicable, indicated on bid sheet as a "dealer installed" non-factory item.	
F.	Bidder will be responsible for warranty repair of all installed options/auxiliary equipment included in the bid that has a standard warranty that is less than the standard warranty for the base vehicle/equipment	Y
G.	Bidder shall use a single, local factory authorized dealership that will accomplish or coordinate required warranty work. The dealership must have a minimum of 1-year experience as a factory authorized vendor for like equipment being bid. Warranty parts shall be available and supplied within 24 hours	Y
H.	If applicable, bidder shall provide a plan for the City to be reimbursed if the work can be done by the City on site. The current shop rate is \$65.00/hour not to exceed \$85.00/hour. (Enter a response of N/A if not available)	Y/A
I.	The bidder shall respond to request for warranty assistance within twenty-four (24) hours.	Y
J.	Warranty work shall be accomplished within an appropriate length of time (generally less than 3 working days for everything other than major component repair such as a transmission rebuild) and shall be coordinated with an authorized City representative	Y
K.	During the entire warranty period, if the unit requires transportation to a repair facility, the vendor/sub-vendors shall be responsible for all transportation at "NO COST" to the City and County of Denver. This includes transporting the unit back to the City's domicile location after repairs are complete. If an alternate is bid, charges to the City of Denver shall be listed (e.g. mileage, travel, labor, etc.). Even if an alternate is bid, in NO CIRCUMSTANCES will the City and County of Denver be responsible for transporting a unit greater than 25 miles from the center of Denver. For purposes of these warranty provisions, the center of Denver is defined as the City and County Building located on the corner of Colfax and Barnock Street.	Y
L.	The item(s) procured by the City pursuant to this Bid Proposal shall, in addition to being subject to the express warranties referenced above, be subject to all implied warranties arising by operation of law under State of Colorado and Federal law, including but not limited to the implied warranty of merchantability and, to the extent applicable, the implied warranty of fitness for a particular purpose arising under the Colorado Uniform Commercial Code, Title 4, Colorado Revised Statutes. The bidder shall in no event attempt to limit or disclaim any of such implied warranties under this Bid Proposal, and any attempt to do so will render the bidder's bid non-responsive under this Bid Proposal.	Y
M.	This warranty in Table 1 and Table 2, is IN ADDITION to factory warranties on the vehicle and components	Y

## 6.2 Fleet Defects

### **WARRANTY - [Table 2] Fleet Defect Clause, Class 7 & 8 Vehicles**

- A. **Definition:** If during the warranty period, thirty percent (30%) of the total number of units delivered have the same part(s) and/or components failure requiring replacement and/or modifications, caused by defects in Design, Testing, Material, and/or Workmanship, then this "Fleet Defect Clause" goes into effect.
- B. **Remedy:** Following notification of a Fleet Defect, the vendor shall develop and implement a plan that either reengines, modifies, or replaces

<p>the defective parts/ systems, such that the identified problem is cured and the operation of the vehicle/equipment is not altered. When alterations are required to cure the defect, those alterations that change or modify the original bid specifications must be approved by the City and County of Denver prior to execution. The vendor will pay for all necessary labor and materials to repair, modify, and/or "update" all vehicles/units in this group. The vendor shall also propose a work schedule that is mutually agreed upon by the City of Denver that corrects the fleet deficiency within 30 days or a mutual agreed upon schedule.</p> <p><b>C. Exceptions:</b> Fleet defects will not apply to minor aftermarket accessories specified by the City of Denver and installed per instructions/specifications. Examples include: toolboxes, spotlights, bed-liners, etc.</p> <p><b>D. Mitigation:</b> Should the vendor become non responsive to the City's notification of a Fleet Defect, the City may employ several options. (1) After notifying the vendor in writing of The City's intent to mitigate its circumstances, the City may chose to perform its own warranty work and seek reimbursement for both parts and labor. (2) On major components, such as engine, transmission, air conditioning, etc., the City may chose to have the repairs performed by an authorized dealer and vendor shall reimburse the City for any parts or labor not covered by other warranty.</p> <p><b>E. Outside Metro-Denver:</b> Vendor will pay for all transportation costs if unit(s) must be sent out of the Denver area for repairs. The City and County of Denver reserves the right to inspect unit(s) before returning back to Denver. The City and County of Denver also reserves the right to send at least one employee, without cost to the City, to inspect the repair(s) before unit is released back to the City.</p> <p><b>F. Expired Warranties:</b> Units that have mutually agreed upon warranty defects during the warranty period will continue to be repaired until completed. If an on-going remedy continues past the warranty date the repairs will continue under warranty until completed or cease at a time agreed upon by the vendor and City and County of Denver.</p>																																																																				
<p><b>6.3 Warranty Options</b></p> <table border="1"> <thead> <tr> <th>Cost of Factory Extended Warranties</th> <th colspan="3">WARRANTY Options (Table 3) Class 7 &amp; 8 Vehicles</th> </tr> <tr> <th></th> <th colspan="3">Please indicate in the columns below the additional cost of an extended warranty for all applicable components listed in the left hand column.</th> </tr> <tr> <th>Incl = Included</th> <th>N/A = Not available</th> <th>Two Years</th> <th>Three Years</th> </tr> </thead> <tbody> <tr> <td>A. Cab and Chassis</td> <td></td> <td></td> <td></td> </tr> <tr> <td>B. Engine</td> <td></td> <td></td> <td></td> </tr> <tr> <td>C. Transmission</td> <td></td> <td></td> <td></td> </tr> <tr> <td>D. Drive Train</td> <td></td> <td></td> <td></td> </tr> <tr> <td>E. Suspension</td> <td></td> <td></td> <td></td> </tr> <tr> <td>F. Air Conditioning</td> <td></td> <td></td> <td></td> </tr> <tr> <td>G. Hydraulics</td> <td></td> <td></td> <td></td> </tr> <tr> <td>H.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    a. Pumps</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    b. Cylinders</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    c. Tanks</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    d. Valves</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    e. Controls</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					Cost of Factory Extended Warranties	WARRANTY Options (Table 3) Class 7 & 8 Vehicles				Please indicate in the columns below the additional cost of an extended warranty for all applicable components listed in the left hand column.			Incl = Included	N/A = Not available	Two Years	Three Years	A. Cab and Chassis				B. Engine				C. Transmission				D. Drive Train				E. Suspension				F. Air Conditioning				G. Hydraulics				H.				a. Pumps				b. Cylinders				c. Tanks				d. Valves				e. Controls			
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G. Hydraulics			
H.			
a. Pumps			
b. Cylinders			
c. Tanks			
d. Valves			
e. Controls			

I.	Attached Body	6 Yes	6 Yes
J.	Joystick	1/4	1/4
K.	Electrical Components	\$	\$
L.	Aerial Lift and System	1286.00	2914.00
M.	Other		
N.	Notes:		

**6.4 Warranty Service Locations:** Warranty repair parts and service shall be available locally at an established factory authorized dealership meeting requirements of Table 1 Section 7.

- A. Cab & Chassis: Dealership Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City: \_\_\_\_\_ Telephone #: \_\_\_\_\_
- B. Aerial Components: Dealership Name: Intertech Corp  
Street Address: 1051 E 33rd Ave  
City: \_\_\_\_\_ Telephone #: (303) 365-0028
- D. Hybrid Component  
Dealership Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City: \_\_\_\_\_ Telephone #: \_\_\_\_\_
- E. Sundries  
Dealership Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City: \_\_\_\_\_ Telephone #: \_\_\_\_\_

**ACORD™ CERTIFICATE OF LIABILITY INSURANCE**

## PRODUCER

Flood & Peterson Ins., Inc.  
 Corporate Mailing Address:  
 P. O. Box 578  
 Greeley, CO 80632

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERNS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

## INSURED

Transwest Freightliner LLC  
 5550 East 76th Avenue  
 Commerce City, CO 80022

## INSURERS AFFORDING COVERAGE

## NAIC #

INSURER A: The Hartford Insurance

INSURER B: National Union Fire Insurance

INSURER C:

INSURER D:

INSURER E:

## COVERAGE(S)

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR ADD'L LTR	INSRC	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A		GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR	34UJUNRA0887	04/01/10	04/01/11	EACH OCCURRENCE	\$1,000,000
						DAMAGE TO RENTED PREMISES (EA occurrence)	\$300,000
						MED EXP (Any one person)	\$10,000
						PERSONAL & ADV INJURY	\$1,000,000
						GENERAL AGGREGATE	\$2,000,000
						PRODUCTS - COMP/OP AGG	\$2,000,000
A		AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS	34UENTZ5507	04/01/10	04/01/11	COMBINED SINGLE LIMIT (EA accident)	\$1,000,000
						BODILY INJURY (Per person)	\$
						BODILY INJURY (Per accident)	\$
						PROPERTY DAMAGE (Per accident)	\$
A		GARAGE LIABILITY <input checked="" type="checkbox"/> ANY AUTO	34UENTZ5507	04/01/10	04/01/11	AUTO ONLY - EA ACCIDENT	\$1,000,000
						OTHER THAN EA ACC	\$1,000,000
						AUTO ONLY: AGG	\$3,000,000
B		EXCESS/UMBRELLA LIABILITY <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE	BE23573251	04/01/10	04/01/11	EACH OCCURRENCE	\$20,000,000
						AGGREGATE	\$20,000,000
							\$
							\$
							\$
A		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below	34WEBO8790	04/01/10	04/01/11	<input checked="" type="checkbox"/> WC STATUTORY LIMITS	OTHR.
						E.L. EACH ACCIDENT	\$1,000,000
						E.L. DISEASE - EA EMPLOYEE	\$1,000,000
						E.L. DISEASE - POLICY LIMIT	\$1,000,000
		OTHER					

## DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

The City and County of Denver, its elected and appointed officials, employees and volunteers are named as additional insured with regards to Commercial General Liability policy and Business Auto Liability Policy.

This insurance is primary. Waiver of subrogation is also included.

## CERTIFICATE HOLDER

## CANCELLATION

## 10 Days for Non-Payment

City and County of Denver 201 West Colfax Avenue Dept. 1105 Denver, CO 80202	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL <u>30</u> DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.
	AUTHORIZED REPRESENTATIVE 

## **IMPORTANT**

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

## **DISCLAIMER**

The Certificate of Insurance on the reverse side of this form does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.