

City of San Antonio

ADDENDUM I

SUBJECT: Formal Invitation For Bid (IFB) 6100006381 PURCHASE OF MEDIUM AND HEAVY DUTY TRUCKS AND TRAILERS II scheduled to open Friday, August 7, 2015 date of issue July 22, 2015.

DATE: August 3, 2015

THE ABOVE MENTIONED INVITATION FOR BID (IFB) IS HEREBY AMENDED AS FOLLOWS:

- 1. THE BID OPENING IS HEREBY EXTENDED TO MONDAY, AUGUST 10, 2015, 2:00 P.M. CENTRAL TIME.**
- 2. IFB Document Section 004 – Specifications / Scope of Services, General Conditions:**

Changed to read:

- 4.2.3 Delivery - All deliveries are to be made inside the City limits of San Antonio. Vendor must deliver equipment to the following address:

Vendor must deliver equipment to:

City of San Antonio,
Northeast Service Center,
10303 Tool Yard, Bldg #2,
San Antonio, TX 78233
Attn: Acquisitions

Delivery to a non-specified location will result in non-acceptance of the equipment by the City. All deliveries must be pre-arranged with a minimum 24-hour notification, NO EXCEPTIONS. Vehicles will be accepted 8:00 A.M. to 3:00 P.M. central time. Vehicles with more than 3000 miles accumulated on the odometer will not be accepted. All vehicles are required to have a full tank(s) when delivered to City specified location.

Changed to read:

- 4.2.12 All vehicles are to be equipped at the factory with air conditioning/Heater/defroster, (Maximum capacity cooling system offered by manufacturer), full headliner minimum OEM AM/FM radio, power steering, power ABS brakes, power and heated mirrors and manual tilt steering wheel. All units to be equipped with steering column mounted gear selector unless otherwise specified. Each unit shall have a **minimum three (3) sets of keys**. **Convenience Features:** Vehicle shall be equipped with adjustable seats; intermittent wipers, cruise control.

Changed to read:

4.2.16 Any diesel engine being bid must conform to latest NOx EPA and GHG emission standard in effect at the time of offer. Vendor must supply a copy of the latest Emissions Certificate of Conformity for the vehicles bid. Only engines using selective catalytic reduction (SCR) technology will be accepted

4.3	ITEM	QUANTITY	DESCRIPTION
	1	1	22K-28K, 15' Platform Dump Truck

Changed to read:

4.3.3 TRANSMISSION: Minimum Allison MD-2500 RDS, or proven equal.

Changed to read:

4.3.7 WHEELS AND TIRES: Wheels to be 10 hole hub piloted steel disk wheel, minimum 11R-22.5R steel belted tubeless radials, minimum load range G tires. Front tires to be conventional tread. Rear dual wheel application to be on-off, self-cleaning, lug design. Loose lug indicators on front and back.

Changed to read:

4.3.8 BRAKES: Full air, S-cam type, manufacturer's heavy duty brake shoes, spring set parking brakes. Front and rear Rockwell or equal, automatic slack adjusters. Minimum 13 CFM compressor, Midland Pure Air Plus Dryer Model DA33100 or equal with automatic drain valves Model KN24000 or equal on all tanks. Spring set parking brakes on both rear axles. All brake drums to be cast iron. Brake linings to be non-asbestos. Quick connect couplings to be located in a protected area near the front bumper. Couplings will not be mounted to the bumper. Female coupling ½" Milton M Type or approved equal to air tanks.

Changed to read:

4.3.10 FUEL SYSTEM: To be equipped with under cab minimum 50 gallon left or right hand tanks. Fuel filtration system to include primary and secondary type fuel filters with automatic water separator.

Changed to read:

4.3.11 COOLING SYSTEM: Largest capacity radiator with automatic viscous fan.

Deleted:

4.3.12.3 Deleted

Changed to read:

4.3.14 EXHAUST SYSTEM: Horizontal muffler and exhaust system to be vertically mounted with turnout.

Changed to read:

4.3.15 CONVENIENCE FEATURES: Manual Adjustable steering, Air Ride seating, drivers only, passenger seat bucket type and standard rear seat.

Changed to read:

- 4.3.17 SAFETY: Equipped with seatbelts, running daytime lights, Hide-a-Way type amber colored LED strobe lights to be installed in all four corners (front and rear light assemblies) of truck. All strobes to be wired to a factory type switch located in cab.

4.4	ITEM	QUANTITY	DESCRIPTION
	2	4	Cab and Chassis, Minimum GVWR 30,000 lbs., Heavy Duty Service Bodies, with 6,000 lb. Crane

Changed to read:

- 4.4.2 ENGINE: Diesel, minimum 250 net HP producing a minimum of 600 ft. lb. of gross torque, automatic viscous fan clutch, engine shut down control for high coolant temperature and low oil pressure.

Changed to read:

- 4.4.3 TRANSMISSION: Minimum Allison 2500 RDS or proven equal.

Changed to read:

- 4.4.8 BRAKES: Full air, S-cam type, manufacturer's heavy duty brake shoes, spring set parking brakes. Front and rear Rockwell or equal, automatic slack adjusters. Minimum 13 CFM compressor, Midland Pure Air Plus Dryer Model DA33100 or equal with automatic drain valves Model KN24000 or equal on all tanks. Spring set parking brakes on both rear axles. All brake drums to be cast iron. Brake linings to be non-asbestos. Quick connect couplings to be located in a protected area near the front bumper. Couplings will not be mounted to the bumper. Female coupling ½" Milton M Type or approved equal to air tanks.

Changed to read:

- 4.4.10 FUEL SYSTEM: To be equipped with single left hand tank, with total minimum capacity of 50 gallons. Fuel filtration system to include primary and secondary type fuel filter(s).

Changed to read:

- 4.4.11 COOLING SYSTEM: Largest capacity radiator with automatic viscous fan.

Changed to read:

- 4.4.13 SAFETY: Equipped with seatbelts, running daytime lights, Hide-a-Way type amber colored strobe lights to be installed in all four corners (front and rear light assemblies) of truck. All strobes LED to be wired to a factory type switch located in cab. All lights to LED where available.

Changed to read:

- 4.4.14.2 Driver seat to be Air Ride and passenger seat 2 man bench seat.

Deleted:

- 4.4.14.4 Deleted

Changed to read:

4.4.16 EXHAUST SYSTEM: Muffler, vertical exhaust tailpipe, heat cover, rain cap or turnout.

Changed to read:

4.4.17.5 BODY: All steel, all welded. Load area is to be reinforced on all inside walls with minimum 10 gauge Tread plate. Top of compartments to be reinforced with minimum 12 gauge tread plate or 12 gauge tread plate overlay. Crossmembers must be made of minimum 3" X 5" X 7 gauge rectangular tubing or equal. Front and rear crossmembers must be minimum 3" X 5" X 7 gauge rectangular tubing or equal. Right rear corner must be braced for 6,000 lb. crane mount. Rear corners must be reinforced for quick detach out rigger jacks, two (2) each to be included with package. Units must have mud flaps for dual wheels. Suspension of truck must be sufficient to assure truck is level after body and crane components have been installed. Body to be painted to match cab and chassis. Manual out and crank down outriggers, spring retractable legs. Two (2) each hand grab rails to be installed on each side of rear vertical compartments. Front of utility body to have a rear cab glass protector, made from 2" square tubing and covered with 3/4" expanded metal.

Changed to read:

4.4.17.7 LIGHTS: F.S.S. light kit for body, 96" wide; directional signals, back up lights and Electronic Back up alarm, two (2) polished S.S., two (2) LED amber strobe lights, all recessed into body and wired on truck system

4.5	ITEM	QUANTITY	DESCRIPTION
	3	1	60K GVWR 5 th Wheel Tractor

Changed to read:

4.5.9 WHEELS AND TIRES: Front wheels to be 10 hole hub piloted , 22.5X 9" steel disk wheels, minimum 315/80R 22.5, steel belted tubeless radials, rated 10,000 lbs each. Front wheels to be highway tread design. Real dual wheel application to be 11R22.5 self cleaning, lug design. Loose lug indicators on front and back.

Changed to read:

4.5.10 BRAKES: Full air, S-cam type, manufacturer's heavy duty brake shoes, spring set parking brakes. Front and rear Rockwell or equal, automatic slack adjusters. Minimum 13 CFM compressor, Midland Pure Air Plus Dryer Model DA33100 or equal with automatic drain valves Model KN24000 or equal on all tanks. Spring set parking brakes on both rear axles. All brake drums to be cast iron. Brake linings to be non-asbestos. Quick connect couplings to be located in a protected area near the front bumper. Couplings will not be mounted to the bumper. Female coupling 1/2" Milton M Type or approved equal to air tanks.

Changed to read:

4.5.14 EXHAUST SYSTEM: Muffler, vertical tailpipe, heat guard, and rain cap or turnout.

Changed to read:

4.5.15 COOLANT SYSTEM: Largest capacity radiator available.

Changed to read:

4.5.19 EMERGENCY LIGHT BAR: Acceptable model will be equal to or greater than the Whelan model FX2AAAA all amber. Two (2) halogen or LED rear work lights (acceptable model, Whelan model FLWL2) to include two (2) amber inboard super LED light heads. (acceptable model Whelan model FLDAA or equal). Lightbar/light stick to be wired to switchbox located in cab.

Changed to read:

4.5.20 WET KIT: A truck mounted wet kit will be provided and installed. A transmission mounted PTO and direct mount pump will be installed on the truck transmission. A metal hydraulic reservoir to be mounted behind cab and be a minimum of 75 gallon capacity. Hydraulic controls to be mounted inside truck cab readily accessible to the driver. All valves and fittings required to make wet kit and trailer completely operational to include one female quick coupler (Aeroquip 6-5100-2516 or equal) and one male quick coupler (Aeroquip 6-5100-52-16B or equal). Wet kit to be filled to capacity with SAE 10 Hydraulic oil meeting MIL-L-46152 specifications. Wet kit pump shall be configured to be used with life bottom trailers.

4.7	ITEM	QUANTITY	DESCRIPTION
	5	3	35K GVWR Water Distribution Trucks

Changed to read:

4.7.5 REAR AXLE: Minimum 23,000 lbs. capacity, ratio geared to attain 65 MPH +/- 2mph.

Changed to read:

4.7.6 FRONT AXLE: I Beam type, minimum 12,000 lbs capacity, non-driving.

Changed to read:

4.7.8 BRAKES: Air brakes, full power with automatic adjustment, 4-channel ABS antilock brake system with Traction Control. Rear axle mounted parking brake with key switch interlock.

Changed to read:

4.7.14 EXHAUST SYSTEM: Muffler with horizontal exhaust tailpipe.

Changed to read:

4.7.15 COOLING SYSTEM: Largest capacity radiator with automatic viscous fan

Deleted:

4.7.17.4 Deleted

Changed to read:

- 4.7.18.1 **WATER TANK:** Minimum 1900 gallon tank with 3/16" construction. Tank interior sand blasted and coated with Epoxy coating. 1/4" Z-Frame, dished and flanged heads, a 24" manway, a Berkely (or equivalent) 3x4 pump. Unit to be equipped for a 2 1/2 " hydrant fill.

4.8	ITEM	QUANTITY	DESCRIPTION
	6	5	35K GVWR 7 Cu Yd Hydraulic Dump Trucks

Changed to read:

- 4.8.5 **WHEELS AND TIRES:** Wheels to be 10 hole hub piloted steel disk wheel, minimum 11R22.5 steel belted tubeless radials, minimum load range G tires. Front tires to be conventional tread. Rear dual wheel application to be on-off, self-cleaning, lug design (Goodyear G124 series or equal). Loose lug indicators on front and back.

Changed to read:

- 4.8.6 **BRAKES:** Full air, S-cam type, manufacturer's heavy duty brake shoes, spring set parking brakes. Front and rear Rockwell or equal, automatic slack adjusters. Minimum 13 CFM compressor, Midland Pure Air Plus Dryer Model DA33100 or equal with automatic drain valves Model KN24000 or equal on all tanks. Spring set parking brakes on both rear axles. All brake drums to be cast iron. Brake linings to be non-asbestos. Quick connect couplings to be located in a protected area near the front bumper. Couplings will not be mounted to the bumper. Female coupling 1/2" Milton M Type or approved equal to air tanks.

Changed to read:

- 4.8.9 **COOLING SYSTEM:** Largest capacity radiator with automatic viscous fan.

Changed to read:

- 4.8.11 **EXHAUST SYSTEM:** Muffler, vertical exhaust tailpipe, heat cover, rain cap or turnout, to be mounted to allow full utilization of specified cab-to-axle length.

Changed to read:

- 4.8.12 **CONVENIENCE FEATURES:** Manual Adjustable steering, Air Ride seating, drivers only, passenger seat bucket type and standard rear seat.

Deleted:

- 4.8.13.5 Delete

Changed to read:

- 4.8.14 **SAFETY:** Equipped with seatbelts, running daytime lights, Hide-a-Way type LED amber colored strobe lights to be installed in all four corners (front and rear light assemblies) of truck. All strobes to be wired to a factory type switch located in cab.

Deleted:

- 4.8.15.3 Deleted

Changed to read:

4.9	ITEM	QUANTITY	DESCRIPTION
	7	7	50K GVWR Minimum 10 Cu Yard Hi-Rise Dump Trucks

Changed to read:

4.9.8 REAR SUSPENSION: Minimum 40,000 lbs. capacity, Hendrickson Haulmax or equal.

Changed to read:

4.9.9 WHEELS & TIRES: Wheels to be 10 hole hub piloted steel disk wheel, minimum 11R-22.5, steel belted tubeless radials, minimum load range G tires, on/off highway tread design. Front wheels to be highway tread design. Rear dual wheel application to be on-off, self-cleaning, lug design (Goodyear G124 series or equal). Loose lug indicators on front and back.

Changed to read:

4.9.10 BRAKES: Full air, S-cam type, manufacturer's heavy duty brake shoes, spring set parking brakes. Front and rear Rockwell or equal, automatic slack adjusters. Minimum 13 CFM compressor, Midland Pure Air Plus Dryer Model DA33100 or equal with automatic drain valves Model KN24000 or equal on all tanks. Spring set parking brakes on both rear axles. All brake drums to be cast iron. Brake linings to be non-asbestos. Quick connect couplings to be located in a protected area near the front bumper. Couplings will not be mounted to the bumper. Female coupling ½" Milton M Type or approved equal to air tanks.

Deleted:

4.9.12.4 Deleted

Changed to read:

4.9.12.14 Air ride driver seat and single passenger seat, bucket type

Changed to read:

4.9.15 COOLING SYSTEM: Cooling system adequate to maintain cooling ability as recommended by manufacturer.

Changed to read:

4.9.18 SAFETY: Equipped with seatbelts, running daytime lights, Hide-a-Way type LED amber colored strobe lights to be installed in all four corners (front and rear light assemblies) of truck. All strobes to be wired to a factory type switch located in cab.

Change specification in its entirety to read:

4.9.19 SPECIFICATIONS HYDRAULIC DUMP BODIES: Minimum 10 Cubic Yard Capacity

4.9.19.1 Body Construction - Body must be 14' x 7' inside and be constructed of minimum 7 gauge steel which meets the ASTM A1011 High Tensile Standard. Body must have a diagonal slope between sides and floor to provide cleaner discharge of load. Sides must be adequately side braced and rub rails be sloped dirt-free type. Floor to be constructed of minimum

¼" AR-400 steel. All welds must be continuous on floor seams, braces, etc., NO SKIP WELDS. Side boards of channel steel minimum 2.60" x 10" x .240" to be installed to present a smooth face on inside of body. Long sills must be constructed of 7" structural I-beam or channel (minimum). Crossmembers must be constructed of 4" 7.7 lbs. per foot structural I-beam or channel (minimum). Under structure must include standard front and rear 4" structural I-beams or channel and intermediate crossmembers maximum on 12" centers evenly spaced from front to rear. Rear corner posts must be a minimum of 10" wide and constructed of 7 gauge steel which meets the above mentioned standard. Body must have half size cab protector. Body sub-frame to have external guides installed to guide body into proper alignment with sub-frame and to prevent side movement during travel.

- 4.9.19.2 Tailgate - Tailgate must be of the double-acting type, constructed with boxed type reinforcements on all sides with a basic sheet wrapped over top and under bottom with a minimum of two vertical box braces and one horizontal box brace in center, or one vertical box brace in center and two horizontal box braces. Base section must be of the sloped, dirt-free type. Upper tailgate hardware 1" (minimum) thick flame cut steel. Tailgate latch 5/8" (minimum) thick flame cut steel.
- 4.9.19.3 Pivots and Pins - All pivots must be equipped with grease fittings. Rear hinge pins 2" O.D. minimum, upper tailgate pin 1" O.D. minimum. Lower tailgate pin 2" O.D. minimum.
- 4.9.19.4 Hydraulics - Hoist must be a class 110 minimum, full sub-frame type head mount telescopic hoist which conforms to National Truck Equipment Association (NTEA), Hydraulic Hoist and Dump Body Classification Chart. Fifty degree (50 degree) dump angle +/-2 degrees, with truck chassis frame tapered at rear to form a positive stop with rails of dump box at maximum dump angle. A full mating surface is required. Hydraulic pump to be close couple direct mount to power take off. Pump to be Chelsea DPH50, minimum 25 GPM at 1,000 RPM, or equal air-controlled with feathering valve. Hydraulic system to include in-line hydraulic filter. Power take off to be Munci TG8 or equal with air shift controls. Pump and P.T.O. controls to be firmly mounted in cab where it is easily accessible from driver's position. Cable or rod operated controls are not acceptable. Unit will be provided with safety limit equipment designed to stop the dump body at its maximum dump angle. Hoist installation must provide for use of the entire cylinder stroke when reaching maximum dump angle. Controls must include capability of hoisting, holding or lowering body.
- 4.9.19.5 Other Equipment - All necessary clearance lights, marker lights, reflectors, mud flaps and mechanical back up alarm to be included must meet State Inspection requirement. Four high intensity strobe lights to be installed, two (2) in, or near, the front bumper and two (2) flush mounted near the top of the rear tailgates.
- 4.9.19.6 Work Quality - Bodies with inferior welds (i.e., pin holes and non-penetrating welds) will not be accepted. Welds on sub-frames or body components will be such as not to interfere with any other frame or body components. All components are to be new (overhauled items are NOT acceptable).
- 4.9.19.7 Tarp system to have aluminum housing, minimum 12 gauge 1 5/8" steel tubing arms. Ground level control with removable crank, and locking

gears. Chain cover and tarp to be same width as body inside. Housing to be mounted on cab protector. Acceptable model, Aero 400 or proven equal.

4.9.19.8 Mud Flaps - Mud flaps manufactured of a rubber base material are to be installed on both sides of vehicle front and rear of rear tires. Front mud flaps to have anti-sail device. Rear flaps to be free swinging. Mud flaps to be minimum 1.5 lbs. per square foot and plain black without identifying markings.

4.11	ITEM	QUANTITY	DESCRIPTION
	9	11 Each	End Dump 15K Trailer

Changed to read:

4.11.2 FRAME: Hi-Tensile steel I-beam, 18" main frame, 9" front section, 78" long, 42 1/2" wide and minimum 24 feet in length.

Changed to read:

4.11.6 SUSPENSION: 50,000 lb. Single point spring suspension. Hubs to be 10 stud hub piloted, steel with 11R-22.5 tires on steel, 10-hole hub piloted wheels.

Changed to read:

4.11.8 HOIST: Standard hoist with dog house.

Changed to read:

4.11.9 LIGHTING: All lighting and reflectors will meet D.O.T. and Texas State Standards. Reflectors shall be attached with mechanical fasteners. LED Strobe lights shall be installed on the front and rear of trailer. LED Strobe lights and light assemblies on the rear of the trailers shall be shielded to prevent damage.

4.12	ITEM	QUANTITY	DESCRIPTION
	10	6	Semi-Trailer, Pusher Rear Ejection, Brush Trailer

Changed to read:

4.12.4 WHEELS AND BRAKES: Dual wheel, dual axle, eight wheels, system compatible to GVWR of vehicle. Brakes to be full air ABS with automatic slack adjusters and must meet or exceed D.O.T. requirements for rated GVWR. Wheels to be 10-stud hubs, outboard uni-mount drums with 11R x 22.5 minimum, load range H, 16 ply rating steel belted radial tires self-cleaning lug design installed.

Added Item NO: 11

4.13	ITEM	QUANTITY	DESCRIPTION
	11	1 Each	Tri Axle Low Boy Trailer
4.13.1	HAULING CAPACITY: 110,000 lbs. minimum payload on any 16 ft. of deck. Trailer weight minimum 22,000 lbs., maximum weight of 24,000 lbs		
4.13.2	CONSTRUCTION: High tensile strength steel with minimum 100,000 psi yield strength. Fully cambered 4 beam design with tapered front for maximum 8 degree climb angle. Full width cross members on 20 inch centers.		
4.13.3	DIMENSIONS: a). Deck Width..... 108 inches maximum b). Deck Height..... 22 inches maximum when loaded c). Deck Clearance..... 6 inches minimum when loaded d). Overall Length..... 54-1/2 feet maximum. e). Deck Length..... 24 feet minimum, unobstructed. f). Rear deck length..... 13.5 feet minimum, unobstructed		
4.13.4	Hydraulic removable gooseneck with a minimum hydraulic lifting travel height of 30 inches. Removable King pin with dual settings of 84 inch and 108 inch. Non-ground engaging design.		
4.13.5	DECK: Floor to be full width 1-1/2 inch apitong or oak on main deck between beams, rear ramp and rear deck. Secured with recessed self-taping screws or bolts. Ramp climb angle to rear deck to be maximum of 18 degrees with side steel members integral to main deck and rear deck allowing functional tie-downs. Roller stops at rear of deck. Swinging/removable 12 inch outriggers (without planks) with double hook-on outriggers at front of deck. Flip over "wide load" sign at the rear deck.		
4.13.6	TIE-DOWNS: Minimum of 6 tie-down D-rings on main deck on each side. One tie-down D-ring on each side of deck ramp. One tie-down D-ring on each bolster. Two tie-down D-rings on rear of trailer. Tie downs to be equally spaced at corresponding dimensions on both sides.		
4.13.7	TIRES & WHEELS: Twelve (12) 255/70R22.5 (H) 16 PR tubeless radials on hub piloted wheels with outboard seals. Minimum 8.25 x 22.5 steel disk wheels. Rubber mud flaps at rear wheels. Trailer to be delivered with one spare tire and wheel.		
4.13.8	BRAKES: 16-1/2 inch by 7 inch air brakes minimum. Automatic slack adjusters.		
4.13.9	SUSPENSION: Air ride suspension with combined axle capacity of 67,500 lbs. Rear (3rd) axle to be air lift. Manual 6 inch (+3"/-3") travel adjustment with air exhaust valve.		
4.13.10	RAMPS: (front) Two (2) flip ramps, wood filled. Split aluminum center ramps with ramp trays on sides of gooseneck.		
4.13.11	POWER: Minimum 13 hp engine recessed within gooseneck for hydraulic power to twin lift cylinders, and plumbing to allow optional quick-connect use of tractor wet kit.		

4.13.12 **ELECTRICAL SYSTEM:** LED sealed lighting with amber strobes and flasher kit with rechargeable battery for marker light circuit. 7-way ATA plug.

4.13.13 **PAINT:** Shot blasted, primed and urethane black yellow or red paint. Heat cured.

Added Item NO: 12

4.14	ITEM	QUANTITY	DESCRIPTION
	12	1 Each	15 Ton Trailer

4.14 .1 **HULING CAPACITY:** not less than 50 mph over improved roads.

4.14 .2 **CONSTRUCTION:** Main frame, tongue, and ramps shall be constructed for high tensile strength steel, all welded construction with adequate size rails, cross members., designed for load specified.

4.14 .3 **DIMENSIONS:**

Width	Maximum 96"
Height	Maximum 37"
Overall Length	Maximum 32', Minimum 27'
Deck Length	18' 6" to 22'
Dovetail	5' 6" (approximately)
Tongue	6' (approximately)
Ramps	5' 6" (approximately)

4.14 .4 **TONGUE:** Shall be straight through type with suspension attached to the tongue frame for direct pull with an adjustable lunette eye (Holland #1250-15 or approved equal) from tongue hitch. To be bolted on with grade 9 bolts (5/8" minimum). One fourth (1/4") plate shall be welded to underside of tongue to form a tote tray and have drainage holes. Unit shall have a 10% minimum weight on tongue with trailer empty or loaded. Maximum tongue weight not to exceed 15%.

4.14 .5 **DECK-OVER:** Deck-Over wheel type deck with 12° dovetail. Floor to be 2" minimum rough oak firmly secured to frame members with recessed bolts or screws. There shall be twelve (12) tie down rings, six (6) to each side of trailer installed approximately four feet (4') apart. Rings to have an inside diameter big enough to accept 1/2" hook and chains (D ring type) and have a rod diameter of 3/4". Two (2) 12,000 lb. drop leg jacks to be installed outside tongue on the left and right sides of tongue and positioned in front of deck as low as possible. Pipe used to connect jacks to be below deck level and protected with angle iron front and bottom. Handle for operating jacks to be installed on passenger side of trailer. Two (2) steps 3/8" x 12" x 17" shall be on the left front and right rear of trailer. One handle on left front and two handles of 5/8" x 60" cold roll shall be at the steps. Height of handles to be approximately 25".

4.14 .6 **TIRES:** 8.25 x 15 load range G or equal

4.14 .7 **BRAKES:** Full air brakes, minimum 12-1/4" x 7-1/2" with break-a-way system.

4.14 .8 **SUSPENSION:** Hatch H-7000 multi-point spring or equal. Tandem axles to be standard Forge A-2ZS or equal.

4.14 .9 **RAMPS:** Two (2) , approximately 5'6" long, 12 degree fold over, self supporting type with double hinge points. Adjustable loading width from 96" to approximately 24". Ramps to be manufactured of 80,000 PSI, high tensile steel compatible to trailer hauling capacity.

Maximum lifting weight to be 60 lbs. when ramps are lifted to place in travel position. Ramp assist springs may be used.

- 4.14 .10 **ELECTRICAL SYSTEM:** to be color coded and protected in conduit. Class A dual stop tail-lights and turn indicating lights, license plate lights and rear identification lights. Reflectors on sides and rear. Electrical system to have automotive reset circuit breakers. Male trailer plug (Cole Hersey 6 pole 76P) to be on end of trailer wire that plugs into truck. Lights to be recess mounted at rear of trailer deck. Trailer to have breakaway switch with wet cell battery. Protection plate to be bolted over battery top. All safety laws and regulations covering trailers of this class to be complied with.

Added Item NO: 13

4.15	ITEM	QUANTITY	DESCRIPTION
	13	1 Each	Cab and Chassis, Minimum GVWR 26,000 lbs. with 84" useable cab to axle, 35' Hi-Ranger Aerial Lift & Service Body
4.15.1	TRUCK:		Standard cab, two door with cab grab handles, tilt hood, and fenders.
4.15.2	ENGINE:		Diesel, minimum 240 H.P., 605 ft. lb. of torque at manufacturers recommended RPM, with engine oil cooler and full flow spin on oil filter.
4.15.3	TRANSMISSION:		Minimum Allison 2500 RDS; or proven equal.
4.15.4	REAR AXLE:		Minimum 17,500 lbs., single speed, ratio geared to attain 65 mph +/-2 mph, equipped with hub piloted steel hubs, out-board mount type brake drums. Stemco (or equal) oil rear seals.
4.15.5	FRONT AXLE:		Minimum 8,500 lbs., equipped with hub piloted steel hubs, out-board mount type brake drums with Stemco (or equal) front wheel visible cap bearing oiler. Front shock absorbers to be heaviest duty available for specified axle.
4.15.6	SUSPENSION:		Equipped with manufacturer's heavy duty suspension applicable to axle ratings and overall gross vehicle weight
4.15.7	WHEELS AND TIRES:		Wheels to be 10 hole hub piloted steel disk wheel, minimum 11R-22.5 steel belted tubeless radials, minimum load range H tires. Front tires to be conventional tread. Rear dual wheel application to be on-off, self-cleaning, lug design.
4.15.8	BRAKES:		Full air, S-cam type, manufacturer's heavy duty brake shoes, spring set parking brakes. Front and rear Rockwell or equal, automatic slack adjusters. Minimum 13 CFM compressor, Midland Pure Air Plus Dryer Model DA33100 or equal with automatic drain valves Model KN24000 or equal on all tanks. Spring set parking brakes on both rear axles. All brake drums to be cast iron. Brake linings to be non-asbestos. Quick connect couplings to be located in a protected area near the front bumper. Couplings will not be mounted to the bumper. Female coupling 1/2" Milton M Type or approved equal to air tanks..
4.15.9	STEERING:		Integral power steering.
4.15.10	FUEL SYSTEM:		To be equipped with under cab minimum 50 gallon left and right hand tanks. Right hand tank to be step type, left hand tank may be step or frame type not to

extend more than 4" behind cab. Fuel filtration system to include primary and secondary type fuel filters with automatic water separator.

4.15.11 **COOLING SYSTEM:** Largest capacity radiator with automatic viscous fan.

4.15.12 **UNIT TO BE EQUIPPED WITH THE FOLLOWING ADDITIONAL EQUIPMENT:**

- 4.15.12.1 Two (2) air horns.
- 4.15.12.2 Integral power steering.
- 4.15.12.3 Turn indicators, front and rear, stop and tail lights.
- 4.15.12.4 Deleted
- 4.15.12.5 Tachometer.
- 4.15.12.6 Adjustable steering column.
- 4.15.12.7 Cigar lighter/Power port for use with cell Phone
- 4.15.12.8 Water temperature, oil pressure, tachometer and volt or amp gauges.
- 4.15.12.9 DOT reflector flare kit.
- 4.15.12.10 Back up alarm.
- 4.15.12.11 Minimum AM/FM radio.
- 4.15.12.12 5 lb. fire extinguisher.
- 4.15.12.13 Fixed interval wiper control with windshield washer.
- 4.15.12.14 Tinted glass.

4.15.13 **FRAME:** Minimum 50,000 PSI rail, 900,000 RBM

4.15.14 **EXHAUST SYSTEM:** Muffler and exhaust system to be horizontally mounted.

4.15.15 **ELECTRICAL:** Minimum 1800 CCA Battery and minimum 130 amp alternator

4.15.16 **VEHICLE TO BE EQUIPPED WITH TWO (2) FRONT TOW HOOKS INSTALLED ON FRAME AND STRENGTHENED SUFFICIENTLY TO LIFT, PULL, AND TOW TRUCK.**

4.15.17 **SPECIFICATIONS 12' PLATFORM/ FLATBED**

4.15.17.1 **LENGTH:** Twelve feet (12')

4.15.17.2 **WIDTH:** Ninety inches (90").

4.15.17.3 **LONGITUDINAL SILLS:** Minimum four inch (4") channel, 5.6 pound, high strength steel

4.15.17.4 **CROSS SILLS:** Minimum four inch (4") formed box channel of "C" section high strength steel, eleven (11) gauge. All cross sills to be welded to longitudinal sills on all sides.

4.15.17.5 **SIDES AND END RAILS:** Five inch (5") deep, minimum eleven (11) gauge, with built in box type stake pockets

4.15.17.6 **FLOOR:** Minimum three sixteenths inch (3/16"), steel tread plate with floor welded to cross members, or minimum one eighth inch (1/8") steel tread plate with a minimum of five (5) floor support long sills, formed of twelve (12) gauge steel channel.

4.15.17.7 **LIGHTS:** Two (2) amber reflectors; four (4) red reflectors; two (2) combination stop and turn signal lights; four (4) clearance lights (mounted on left and right rub rails), all required to meet State inspection requirements.

4.1517.8 MUD FLAPS: Mud flaps manufactured of a rubber base material are to be installed on both sides of vehicle, front and rear of rear tires. Front mud flaps to have anti-sail device. Mud flaps to be minimum one point five (1.5) pounds per square foot and plain black without identifying markings.

4.15.17.9 CAB PROTECTOR: To be manufactured of minimum two inch (2") by two inch (2") minimum eleven (11) gauge steel box tubing. Protector to be cab width and four inches (4") above cab height. Sides of protector to be angled to conform to cab contour (approximately) and extend four inches (4") above top vertical brace. Two (2) vertical, evenly spaced, center supports of minimum two inch (2") by two inch (2") square box is required. Three (3) horizontal braces, one (1) top, one (1) center, and one (1) bottom of frame between vertical braces, using minimum two inch (2") by two inch (2") steel box tubing. Entire protector to be covered from cab side with one inch (1") raised pattern expanded metal (minimum twelve (12) gauge) and welded securely to frame. Wire mesh must extend from top of frame to the platform floor. Protector to be welded to platform. Cab protector to be painted with Automotive Black Enamel.

4.15.17.10 FOLD DOWN TAILGATE: Tailgate to be sixteen inches (16") high and bed width manufactured of minimum ten (10) gauge steel. Gate upper lip and ends to have a minimum of one and a half inch (1-1/2") roll edges. Two (2) vertical braces minimum one inch by two inch (1" X 2") channel will be installed in center of gate, each evenly spaced from outer ends. Hinges and pins (minimum four (4) each will be installed below platform level and manufactured of minimum four inch by half inch (4" X 1/2") pins and appropriate size retainers. Post manufactured of minimum two inch by two inch by one quarter inch (2" X 2" X 1/4") boxed steel and will be firmly welded to the platform floor to serve as tailgate retainers and stop when gates are closed. A chain type securing device to be provided that holds tailgates in the closed position.

4.15.18 SPECIFICATION AERIAL LIFT WITH SERVICE BODY:

4.15.18.1 The aerial Lift must have a minimum height of 35 ft. from the ground to the bottom of the basket, i.e. 40 ft. working height based on a standard frame height of 40 inches. The horizontal reach, from the centerline of rotation to the edge of basket, must not be less than 20ft. when the lower boom is at maximum elevations. The utility body must be an open-type suitable for use with an aerial basket unit of this size, and must be in compliance with the listed body requirements

4.15.18.2 The complete unit, aerial lift and utility body, must be furnished with the following equipment and must meet the following minimum requirements-

4.15.18.3 The aerial lift unit must be mounted on the truck's frame on the longitudinal centerline of the truck directly behind driver's cab. The aerial lift unit must not depend on the body for support when the basket is not in the stowed position. The lift supplier must reinforce the truck's frame to meet the requirements of this unit.

4.15.18.4 The aerial unit must be equipped with a torsion bar stabilizer. In addition, the aerial unit must be equipped with at least one hydraulically actuated outrigger on each side of the truck behind the cab. The outriggers must be the H-Frame type or modified A-frame type, must not obstruct the bed floor

space, and must be capable of leveling and stabilizing the unit. Each outrigger must have an individual control. The outriggers must not extend beyond the truck when retracted. Each two (2) outriggers must have a warning light on the dash of the truck's cab, wired to come-on whenever the outriggers have traveled approximately 2" from the retracted position (i.e. light on = set and light off = retracted). The outriggers' control must have ¼ - turn type shut-off needle valves located next to the control valves. The outriggers' control and shut-off valves must have visible directional labels (i.e. up-down and open-closed). The outriggers must be equipped with locks which will hold them in the retracted position and prevent them from settling.

- 4.15.18.5 The aerial unit must be equipped with outriggers' interlock down limit feature, which prevent the operation of the booms until the outriggers are no more than 12" away from the ground level i.e. the aerial unit must be operative if the outriggers are within the range of 12" away from the ground
- 4.15.18.6 The pedestal-mounted turntable must have 360 degree continuous rotation
- 4.15.18.7 The upper boom must be made of non-conducting material, such as fiberglass, and must be tested and certified for 69 KVAC rating minimum. The construction, testing and certification of the upper boom must meet and be in accordance with the latest ANSI A92.2 requirements. The basket's end of the upper boom must have a D-ring to attach the safety belt and lanyard. There must be no exposed metal structures at the basket or at the top end of the upper boom. The lower boom must have an insulated fiberglass insert; the insert must be insulated for 50 KVAC minimum
- 4.15.18.8 The aerial lift unit must have a center-mounted two-man basket. The inside dimensions of the basket should be approximately 24" x 38" x 42" deep. The basket must be insulated for 30 KVAC minimum through all sides and bottom. The basket lip must not be drilled for an "eye-bolt" installation for the purpose of holding either the safety belt or the basket cover. The basket must be maintained in a leveled position by a positive leveling system; gravity leveling systems will not be acceptable. The basket must be provided with a removable liner insulated for 50 KVAC minimum through all sides and bottom. The basket must be furnished with a waterproof canvas cover for the basket opening. The basket must have a minimum safe working capacity of 400 lbs.(without liner installed) minimum in all positions. The basket must have two (2) foot supports on the outside portion of the basket, for the purpose of entering into the basket. The supplier must furnish a lower boom hold-down (lock) at the boom rest and an upper boom tie-down. The aerial lift must be manufactured in accordance with the latest American National Standard Institute (ANSI) specifications.
- 4.15.18.9 The aerial lift unit must be actuated by a hydraulic system with the following minimum requirements: Power for hydraulic system must be obtained from a transmission mounted power take off with a close coupled (direct mount) hydraulic pump installed. Pump to be rated at manufactures recommended GPM and PSI and be air controlled. Power take off to be Chelsea 381XSB0x-A3XR or equal with shift controls. And indicator light must be dash mounted to indicate when power take off is engaged
- 4.15.18.10 The hydraulic system must have filtration as recommended by the aerial lift manufacturer. The installation of the hydraulic lines must be in a manner and location as to provide complete accessibility to the hydraulic connections. Any material which are not furnished by the aerial lift's manufacturer, such as hydraulic tank, etc., must be provided by the supplier, and must be of first

class design and manufacture

- 4.15.18.11 Integral holding valves must be provided on all cylinders to hold the booms in position in the case of hydraulic line and/or pressure failure. Means of manual bleed-off must be provided with the holding valves. The holding valves must be located at the cylinders.
- 4.15.18.12 A single-lever control handle must be provided at the basket for rotation and operation of the upper and lower booms. The aerial lift controls must be completely recessed at all boom positions or be protected with a guard. A multi-lever set of controls must be installed at the pedestal of the aerial lift unit and must control the same movements and in every case override the controls that are located at the basket, i.e. regardless of the position of the controls at the basket, the basket may be moved in any desired direction by using the controls located at the pedestal. The controls must be designed in a manner requiring two (2) independent actions to be initiated by the operator prior to movement of the aerial basket; both independent actions must be incorporated in the same single-lever control handle. All controls must be of the type which automatically return to the neutral position whenever released. All movements of the aerial lift must be executed with immediate and full response without depending on any other operation of the aerial lift to keep the hydraulic system up.
- 4.15.18.13 The solenoid to power the aerial unit must be set-up on a separate electrical circuit from other functions such as boom warning lights, outriggers warning lights, etc. This solenoid must be switch activated, i.e. whenever the aerial unit is ready to be operated. The switch must be located, and labeled inside the cab within easy access to the operator.
- 4.15.18.14 Aerial lift units that are equipped with closed-center hydraulic systems must have an automatic engine throttle that controls the engine's speed between idle and maximum pump speed, as specified by the pump manufacturer according to the demand of the hydraulic system. The throttle control arrangement must not produce erratic basket operation.
- 4.15.18.15 Aerial lift units that are equipped with open-center hydraulic systems must have two (2) insulated 2-speed throttle controls; one (1) such control must be located at the baskets controls and another such control must be located near the outriggers' controls, so that the operator can select either engine idle speed or maximum pump speed. The throttle control arrangements must not produce erratic basket operation.
- 4.15.18.16 The supplier must install a high-pressure hydraulic line terminated in two (2) quick couplers at the basket. Supplier must also install a hydraulic return line with 2 quick couplers at the basket. Quick couplers at the basket must not project above the top surface of the boom when the upper boom is in the stored position, and must all be "male" type. Coupling on both pressure and return lines must fit the "Hansen, Series 3HK, Part #3-H21" sockets. This system must utilize the same pump that drives the aerial basket, but the supply at the quick coupling must not be greater than 2000 PSI and six (6) gallons per minute and must not be less than 1500 PSI and four (4) gallons per minute. The supplier must also furnish a hydraulic regulator suitable for use in and located in the basket to provide the pressure and volume specified above automatically, but be adjustable for varying tool requirements. This system will be used to power hydraulic hand tools, either in the basket or on the ground.

- 4.15.18.17 The fully assembled aerial lift unit must meet the additional following minimum requirements: Unit must have an electric powered emergency lowering system. The lowering system must include a pump, motor and all necessary equipment to make it complete and fully operational. Assembled unit must be insulated for 69 KVAC minimum from basket's end of upper boom to elbow's end of upper boom. This insulation valve must include the boom and any and all control circuits, leveling devices, and auxiliary circuits or devices in or on the upper boom. Distance from the highest point on the assembled unit to the ground, in the stowed travel position, must not exceed 12 ft., based on 40" chassis frame height.

4.15.19 SPECIFICATIONS UTILITY BODY

- 4.15.19.1 Dimensions: Length- approximately 134" Width – approximately 94"
Compartment depth- approximately 20" Floor width – approximately 54".
- 4.15.19.2 Compartments: Three vertical and one horizontal compartment in center on street side. Two vertical and one horizontal compartment in center, plus a minimum 18" wide personnel access opening at front of body on curb side. Opening to have a minimum of 2 steps from lower side of body to floor level manufactured of minimum 10 gauge tread plate. Vertical compartments must have a minimum of 2 adjustable shelves for compartment on adjustable shelf supports. Horizontal compartments must each have pull-out type gasket trays on full extension drawer slides and one tray per side with adjustable dividers for bottom of compartment. All doors must be sealed with weather-proofing material, be double panel type (minimum 20 gauge H.T.) and have rust proof paddle lock handles. One key must operate all locks. All vertical doors must have a positive door holder to retain doors in the open position when necessary.
- 4.15.19.3 Body-All steel, all welded. Load area is to be reinforced on all inside walls with minimum 10 gauge safety tread plate. Top of compartments to be reinforced with minimum 3/16" safety tread plate. Crossmembers must be made of minimum 4" – 5.4# structural channel or equal. Front and rear crossmembers must be minimum 4" x 2" x 11 gauge rectangular tubing or equal. Units must have mud flaps for dual wheels. Unit to be painted to match white cab and chassis. Rear Bumper- Step type, heavy-duty, minimum 3/16" gauge safety walk plate steel. Minimum 12" deep and body width.
- 4.15.19.4 Lighting requirement: Furnish all lighting required by D.O.T., including the following: Directional lights mounted on rear of body. Simultaneous flasher is provided on cab and chassis; wire body to accommodate this feature. Clearance lights as required by law. Two stop and tail lights, license plate light (6) reflectors.
- 4.15.19.5 Cab Guard: Must be manufactured to cover the entire cab of the vehicle from the front bumper to a minimum of 3" behind the vehicle cab and the cab width. Frame is to be a minimum of 2" structural square tubing with minimum 3/16" walls. 2" schedule 80 pipe, with minimum .218" walls may be used instead of square tubing. Design must allow for full opening of the vehicle hood to service engine. Frame to be re-inforced and overlaid with expand metal (3/4" No.9) installed with the diamond design perpendicular to the longitudinal axis of the truck. When completed, the guard must be capable of withstanding the weight of two 200 lb. men working side by side on the guard. Guard must be firmly bolted to the front bumper and truck frame

behind the cab. Portion of guard behind the truck cab must also be re-inforced (both vertically and horizontally) and covered with the expanded metal mentioned above from the frame of the truck to the top of the guard. All re-inforcing braces for the top and rear of cab guards must be of the same material as used for the frame and must be installed at not more than 24" centers and form a 2' square patterns over the entire structure.

- 4.15.19.6 **Warning Lights:** Install two emergency warning lights on top of cab guard at front of cab guard (one each side). Lights to be two sealed beam type rotating beacon with yellow domes (Grate 76223 or equal). Each light is to be protected by a removable expanded metal shield which covers the entire assembly. On/Off switches to be dash mounted. Each unit is to fused in accordance with manufacturer's recommendation.
- 4.15.19.7 **Water Can Bracket:** Bracket to have 14" base and be 14" high. Bracket to be mounted over front right vertical compartment.
- 4.15.19.8 **Backup Alarm:** An electrical backup alarm will be installed at rear of vehicle Alarm will meet OSHA standards.
- 4.15.10.9 **Additional Equipment:** A travel cradle/support as recommended by the equipment manufacturer must be provided to anchor the lift arm while in the travel mode. Successful bidder will furnish and install all necessary steps ladders and/or grab handles to provide easy and safe access to the basket and inner portions of the utility body. Warning lights are required on the vehicle dash which will be wired to illuminate whenever the upper and/or lower boom is out of the travel mount.

PRICE SCHEDULE:

The following items were changed or added to the Price Schedule.

Changed to read:

ITEM	QUANTITY	DESCRIPTION
7	7	50K GVWR Minimum 10 Cu Yard Hi-Rise Dump Trucks

Added Item:

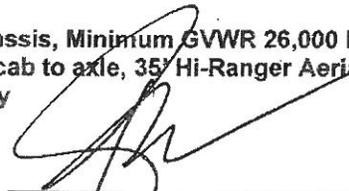
ITEM	QUANTITY	DESCRIPTION
11	1 Each	Tri Axle Low Boy Trailer

Added Item:

ITEM	QUANTITY	DESCRIPTION
12	1 Each	15 Ton Trailer

Added Item:

ITEM	QUANTITY	DESCRIPTION
13	1 Each	Cab and Chassis, Minimum GVWR 26,000 lbs. with 84" useable cab to axle, 35' Hi-Ranger Aerial Lift & Service Body



Paul J. Calapa
Purchasing Administrator
Finance Department, Purchasing Division

Date: _____

Company Name: _____

Address: _____

City/State/Zip Code: _____

Signature _____