



## City of San Antonio

### ADDENDUM I

**SUBJECT:** Formal Invitation For Bid (IFB) 6100006820 PURCHASE OF MEDIUM AND HEAVY DUTY TRUCKS scheduled to open Monday, November 30, 2015 date of issue November 6, 2015.

**DATE:** November 20, 2015

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

1. **THE BID OPENING IS HEREBY EXTENDED TO MONDAY, DECEMBER 7, 2015, 2:00 P.M. CENTRAL TIME.**

2. **Questions Submitted by email: Item 7**

4.9.14 **Question:** they ask for a 13.5" x 94" body (they probably meant 13 1/2 ft x 94") ours is 14ft x 95".

**Response:** The body will be a minimum of 14 ft" L x 95" W maximum with an approximately weight of 5,400 lbs.

4.9.16 **Question:** we have a 50 gal storage sump and used filter box instead of 15 gal combination bumper and drain pan.

**Response:** The unit shall have a 50 gallon storage sump and used filter box.

4.9.17 **Question:** our doors are different dimensions

**Response:** The compartment to be approximately 114"W x 58.5" H x 22"D. The curb side compartment to have a pair of overlapping doors and a storage approximately 24.4 Cu. Ft. The compartment to measure approximately 60"W x 32" H x 22" D.

4.9.18 **Question:** use a fold down ladder rather than integrated steps

**Response:** The access steps must be fold down ladder or integrated into the lower body skirts and consist of two steps and two grab handles that are located on either side of the door opening for safety.

4.9.26 **Question:** our pumps and control manifold are mounted in a under floor compartment not in the right rear of the cabinet.

**Response:** The manifold pumping system is to be mounted in a under floor compartment or the right hand, bottom portion of the hose reel compartment so that the pumps are mounted in a vertical manner.

4.9.31 **Question:** we do not use a tank rail mounting system as they can loosen and let the tanks move around. Our tanks are 4 point rubber bushing mounted.

**Response:** The tank must be mounted with rails incorporated into the body or be four (4) point mounted with rubber bushing. Tank may be steel or poly.

4.9.35 **Question:** we use reelcraft reels that have a cast steel single pedestal rather than the lighter gauge fabricated double pedestal.

**Response:** The reel must be a minimum of cast steel single pedestal.

4.9.40 **Question:** our auxiliary platform is 58" x 95" not the specified 36" x 94".

**Response:** The platform will measure a minimum 58"L x 95" W maximum and must have the same tank containment system as the main platform.

4.4.43 **Question:** our underbody tool cabinets are located under the body not attached to the auxiliary platform. The auxiliary platform has the full height vertical cabinets. **Response:**

**Response:** The auxiliary platform has full height vertical cabinets.

### 3. Questions Submitted by email: Item 3

**Question:** The compaction rate is so high on our Wayne 9 or 10 yard bodies it will require a 26K GVW chassis. With the chassis restrictions at 19.5 GVW will you consider our 8 yard body with a 4 ton payload?

**Response:** We would like to hold to the capacity of 9 cubic yards with a hopper loading area of 2 cubic yards.

**Question:** Two yard hopper units will typically have an average of 22 second cycle time but our one yard hopper has a 13 second cycle time. Will you consider 1 yard hopper with a 13 second cycle time?

**Response:** We would like to hold to the capacity of 9 cubic yards with a hopper loading area of 2 cubic yards.

4. IFB Document Section 004 – Specifications / Scope of Services, Item Description changed to read:

4.1 SCOPE: The City of San Antonio is soliciting bids to provide 21 medium and heavy trucks in accordance with the Building and Equipment Services Department specifications listed herein. This equipment will be utilized by the Aviation, Solid Waste Management, Parks & Recreation, Office of Downtown Operations, Convention Facilities, and Transportation and Capital Improvements departments for various construction and/or repair projects across the City

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:

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. CST. Vehicles with more than 3,500 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:

4.2.4 Literature and Equipment Manuals – The supplier shall furnish (4) complete sets per vehicle type, of the following: Parts Manual, Maintenance Manual, Service Manual, and Operators Manual, or (5) CD ROM per model of all equipment, accessories, and components, or (4) USB drives, or accessible on-line through manufacturer's website. The supplier shall furnish (4) complete sets of detailed literature and specifications of each vehicle type upon contract award.

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. Each unit shall have a **minimum three (3) sets of keys. Convenience Features:** Vehicle shall be equipped with adjustable seats; intermittent wipers, cruise control. All lighting shall be LED where available.

Deleted:

4.3	ITEM	QUANTITY	DESCRIPTION
	1	5	19,501-26,000 GVWR General Purpose Flatbed

DELETED:

Changed to read:

4.4	ITEM	QUANTITY	DESCRIPTION
	2	1	19,501 - 26,000 GVWR 15' Brush Dump Body and Tarp

Changed to read:

4.4.1 ENGINE: Diesel, minimum 260 H.P.

Changed to read:

4.4.4 REAR AXLE: Minimum 17,500 lbs., single speeds, 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.

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 automatic slack adjusters. Gear or belt driven compressor. 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. 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:

4.4.9 FUEL SYSTEM: To be equipped with under cab minimum 45 gallon left or right hand tanks. Fuel filtration system to include primary and secondary type fuel filters with automatic water separator. Diesel Exhaust Fluid (DEF) Gauge inside of cab.

Changed to read:

4.4.11 FRAME: Minimum 75,000 PSI rail, 900,000 RBM.

Changed to read:

4.4.12 EXHAUST SYSTEM: Exhaust system to be vertically mounted with turn out

Changed to read:

4.4.13 UNIT TO BE EQUIPPED WITH THE FOLLOWING ADDITIONAL EQUIPMENT:

4.4.13.1 Minimum one (1) electrical and one (1) air horns.

Changed to read:

4.4.13.11 Seating: Vinyl or premium synthetic upholstery. Driver seat to be reclining with high back, and passenger seating to be 2 man bench type.

Added:

4.4.13.12 Minimum four (4) factory installed up-fitter switches.

Changed to read:

4.4.15 Dump is to be ALL STEEL BODY and must be hydraulic and have PTO inside cab to operate.

Changed to read:

4.4.19 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. Allow 16" spacing between cross sills.

Changed to read:

4.4.25 PIVOTS & PINS: All pivots shall be equipped with grease fittings.

Changed to read:

4.4.26 HYDRAULICS: Hoist shall be heavy duty, double lift arm hoist. Hoist to be type V, underbody hoist. 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 (a full mating surface is

required) at maximum dump angle. Hydraulic pump to be close couple direct mount to power take off. Pump to be air controlled with feathering valve. Hydraulic system to include in-line hydraulic filter. 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. Units will be provided with safety limit equipment designed to stop the dump body at its maximum dump angle. Safety limit equipment to include a flexible wand type switch and an air solenoid valve rated at not less than 125 PSI. Hoist installation must provide for use of the entire cylinder stroke when reaching maximum dump angle. The only acceptable substitute to the above requirement for a flexible wand type switch and air solenoid valve will be for a system designed with an internal bypass stroke limit system. Hoist assemblies with the tie rod design for cylinder construction are not acceptable.

Changed to read:

4.4.27 OTHER EQUIPMENT: All necessary clearance lights, marker lights, reflectors, mud flaps and mechanical backup alarm to be included and meet State Inspection requirements.

Changed to read:

4.4.28 TAILGATE OPENING: Swing Door design. Double doors open from the middle and latch with a chain to secure load. Each door is 4' wide. The width of the truck is 8'. Need to be 5'.5" high. Need to open out and lock at the gate. Tailgate is to be hinged vertically, not horizontally.

Changed to read:

4.4.29 SAFETY: Equipped with seatbelts, flush mounted type 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.

Changed to read:

4.4.30 No trail hitch or pintle required.

Changed to read:

4.5	ITEM	QUANTITY	DESCRIPTION
	3	3	35,000 Minimum GVWR 7 Cubic Yard Dump Truck

Changed to read:

4.5.1 ENGINE: Diesel, minimum 250 H.P., 660 ft. lb. of torque at manufacturers recommended RPM.

Changed to read:

4.5.2 GVWR: Maximum 35,000 lbs.

Changed to read:

4.5.3 TRANSMISSION: Minimum Allison 2500 RDS, or proven equal.

Changed to read:

4.5.4 REAR AXLE: Minimum 23,000 lbs., single speed, ratio geared to attain 65 mph +/-2 mph, equipped with hub piloted steel hubs, out-board mount type brake drums.

Changed to read:

- 4.5.5 FRONT AXLE: Minimum 12,000 lbs., equipped with hub piloted steel hubs, out-board mount type brake drums with front wheel visible caps bearing oiler. Front shock absorbers to be heaviest duty available for specified axle.

Changed to read:

- 4.5.7 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. Loose lug indicators on front and rear wheels.

Changed to read:

- 4.5.8 BRAKES: Full air, S-cam type, manufacturer's heavy duty brake shoes, spring set parking brakes. Front and rear automatic slack adjusters. Gear or belt driven compressor. 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. 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:

- 4.5.9 FUEL SYSTEM: To be equipped with under cab minimum 50 gallon left or right hand tank. Fuel filtration system to include primary and secondary type fuel filters with automatic water separator. Diesel Exhaust Fluid (DEF) Gauge inside of cab

Changed to read:

- 4.5.13 UNIT TO BE EQUIPPED WITH THE FOLLOWING ADDITIONAL EQUIPMENT:

Changed to read:

- 4.5.13.1 Minimum one (1) electrical and one (1) air horns.

Added:

- 4.5.13.11 Seating: Vinyl or premium synthetic upholstery. Driver seat to be reclining with high back, and passenger seating to be 2 man bench type.

Added:

- 4.5.13.12 Minimum four (4) factory installed up-fitter switches.

Changed to read:

- 4.5.14 STANDARD BODY CONSTRUCTION: Body to be 10' X 7' inside and be constructed of minimum 8 gauge steel that meets the ASTM A572 Standard, having a 15 to 20 carbon content. Body shall have a 2" radius between sides and floor to provide easier and cleaner discharge of load. Sides shall be adequately side braced and rub rails be sloped dirt-free self-cleaning type. All welds shall be continuous on floor side, head seams, braces, etc., NO SKIP WELDS. Side boards to be minimum 2" x 6" x 1/4" structural rectangular tubing. Long sills shall be constructed of minimum 5" I-beam with a 1/4" web. Crossmembers shall be constructed of minimum 4" I-beam with a 3/16" web. Crossmembers to be on maximum 14" centers, must extend under rub rails and side post, be gusseted to body long sills and welded to long sills on all sides. Rear corner posts shall be a minimum of 12" wide and constructed of minimum 8 gauge steel which meets the above mentioned standard. Body shall have a half size cab protector. Body sub-frame to have external guides installed to

guide body into proper alignment with sub-frame, to prevent side movement during travel.

Changed to read:

4.5.15 **TAILGATE:** Tailgate shall 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 self-cleaning type. Upper tailgate hardware to be minimum 7/8" thick, flame cut steel. Tailgate locks must be easy to manipulate and provide firm locking. Tailgate spreader chains to be attached directly under upper tailgate crossmember and configured to allow multiple positioning of tailgate to include horizontal. All welds to be continuous, no spot or skip welding

Changed to read:

4.5.16 **TOW PACKAGE:** Rear Bumper – OEM rear bumper and tow package to include receiver hitch with 2" hitch opening, pinel latch 6", OEM in-cab mounted trailer brake controller and both a 4-way flat vehicle connector and 7-Way round vehicle connector (Flat Pin). Unit must have electric brake module for electric brake trailers and gland hands for air brake trailers.

Changed to read:

4.5.17 **PIVOTS & PINS:** All pivots shall be equipped with grease fittings.

Changed to read:

4.8.17.1 Rear Hinge Pins - Minimum 2" O.D.

Changed to read:

4.8.17.2 Upper Tailgate Pins - Minimum 1" O.D.

Changed to read:

4.8.15.3 Lower Tailgate Pins - Minimum 1-1/4" O.D.

Changed to read:

4.5.18 **HYDRAULICS:** Hoist shall be heavy duty, double lift arm hoist, Galion U850HD, Perfection 825, or proven **equal, conforming to the most current National Truck Equipment Association's (N.T.E.A.) criteria for Class 50** lifting capacity. Hoist to be type V, underbody hoist, as defined in the N.T.E.A. second edition, Dump Body Hoist 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 (a full mating surface is required) at maximum dump angle. **NO OTHER STOP IS ACCEPTABLE.** Hydraulic pump to be close couple direct mount to power take off. Pump to be Chelsea DPH25, Munci D2XL27-2BPRL (minimum 19 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 Chelsea 445XSES, Muncie TG6S Powerflex or equal, with air shift controls. Pump and P.T.O. controls to be firmly mounted on vehicle dash board easily accessible from driver's position. Cable or rod operated controls are not acceptable. Units will be provided with safety limit equipment designed to stop the dump body at its maximum dump angle. Safety limit equipment to include a flexible wand type switch, Micro BZE6-2RN18-8631, and an air solenoid valve rated at not less than 125 PSI, Humphrey 062E-3-11-20-35, no exceptions. Hoist installation must provide for use of the entire cylinder stroke when reaching maximum dump angle. The only acceptable substitute to the above requirement for a flexible wand type switch and air solenoid valve will be for a system designed with an internal bypass

stroke limit system, Perfection Dump Hoist Design or proven equal. Hoist assemblies with the tie rod design for cylinder construction are not acceptable

Changed to read:

4.5.19 MISCELLANEOUS EQUIPMENT: All necessary clearance lights, marker lights, reflectors, mud flaps and mechanical backup alarm to be included and meet State Inspection requirement.

Changed to read:

4.5.20 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 component. All components are to be new (overhauled items are NOT acceptable).

Changed to read:

4.5.21 DUMP BODY COVER ASSEMBLY: Tarp system to be Pull Tarps, Universal Super shield Automated Arm System, part number S9E (or current equivalent), with steel arms, or proven equal. Motor will be mounted in the "down" position. A weather proof control panel, with a minimum 25-amp reset breaker, to operate tarp system will be located in conjunction with the hydraulic controls. Controls to operate the tarping system will not be placed in the cab of the tractor.

4.6	ITEM	QUANTITY	DESCRIPTION
	4	2	19,501- 26,000 GVWR 9 Cubic Yard Sanitation Truck

Changed to read:

4.6.3 TRANSMISSION/DRIVE Automatic transmission with overdrive; 5 speed minimum, 4x2 design.

Changed to read:

4.6.9 FUEL SYSTEM: Fuel tank shall hold a minimum of 35 gallons of Ultra Low Sulfur Diesel. Diesel Exhaust Fluid (DEF) Gauge inside of cab.

4.6.17 HYDRAULIC SYSTEM: Unit to be equipped with the following:

Changed to read:

4.6.16.3 Hydraulic Tank: The tank shall hold a minimum of 40 Gallons.

Changed to read:

4.6.21 COLOR: Cab and Chassis of unit to be OEM White and sanitation attachment to be OEM Yellow.

4.7	ITEM	QUANTITY	DESCRIPTION
	5	8	>50,000 GVWR Fifth Wheel Tractors

Changed to read:

4.7.3 TRANSMISSION: Manual transmission; Fuller FR-RTLO-18918B, or proven equal. 18 Speed.

Changed to read:

4.7.4 REAR AXLE: Tandem axle configuration- 6x4 design. Single speed tandem drive, minimum 40,000 lbs capacity. Gear ratio installed must be capable of 80 +/- 2 mph geared road speed at full engine governed RPM. Driver controlled differential locks on both rear axles.

Changed to read:

4.7.5 FRONT AXLE: Minimum 13,200 lbs. capacity with 13,200 lbs spring with Stemco or proven equal front wheel bearing oiler or maintenance free axle approved. To include heavy duty front shocks.

Changed to read:

4.7.6 REAR SUSPENSION: Minimum 40,000 lbs capacity; Hendricks Air Ride.

Changed to read:

4.7.8 BRAKES: Full air, S-cam type, manufacture's heavy duty brake shoes, spring set parking brakes. Unit must be equipped with a 2 Stage "J" Brake. Front and rear 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. Quick connect couplings to be located in a protected area near the front bumper. Couplings will not be mounted to the bumper. Equipped with glad-hands suitable for ABS brakes. Female coupling ½" Milton M Type or approved equal to air tanks.

Changed to read:

4.7.9 FUEL SYSTEM: Single left or right hand metal tank mounted under cab or dual left and right hand step tanks mounted under cab. Minimum to fuel capacity to be 70 gallons. Fuel filtration to include primary and secondary filtering systems with automatic water separator. Diesel Exhaust Fluid (DEF) Gauge inside of cab

Changed to read:

4.7.11 EXHAUST SYSTEM: Vertical tailpipe, heat guard, and turn out, mounted to allow full utilization of specified cab to trunion length.

Changed to read:

4.7.16 FIFTH WHEEL: Unit to be a non-tilt convertible fifth wheel design.

4.8	ITEM	QUANTITY	DESCRIPTION
	6	1	>50,000 GVWR Dump Truck

Changed to read:

4.8.1 ENGINE: Diesel, Minimum 8.9 liter water cooled, minimum 345 net horsepower rated at not more than 1800 RPM, producing a minimum of 1,000 ft. lb. of gross torque at between 1100 and 1300 RPM. Road speed to be electronically governed to 65 +/- 2 MPH.

Changed to read:

4.8.2 GVWR: Greater than 50,000 lbs.

Changed to read:

4.8.3 TRANSMISSION: Allison 3000 RDS or proven equal.

Changed to read:

4.8.6 REAR SUSPENSION: Minimum 40,000 lbs. capacity, Hendrickson HMX or equal.

Changed to read:

4.8.8 BRAKES: Full air, S-cam type, manufacture's heavy duty brake shoes, spring set parking brakes. Front and rear 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. 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. Equipped with glad-hands suitable for ABS brakes.

Changed to read:

4.8.9 FUEL SYSTEM: Single left or right hand tank mounted under cab or dual left and right hand step tanks mounted under cab. Minimum total fuel capacity to be 70 gallons. Fuel filtration to include primary and secondary filtering systems. Fuel filtration to be combination primary filter, automatic water separator. Diesel Exhaust Fluid (DEF) Gauge inside of cab

Changed to read:

4.8.11 EXHAUST SYSTEM: Vertical tailpipe, heat guard, and turnout, mounted to allow full utilization of specified cab-to-trunion length.

Changed to read:

4.8.13 DELETED

Changed to read:

4.8.14 UNIT TO BE EQUIPPED WITH THE FOLLOWING ADDITIONAL EQUIPMENT

Changed to read:

4.8.14.1 Minimum one (1) electrical and one (1) air horns.

Added:

4.8.14.12 Minimum four (4) factory installed up-fitter switches

Changed to read:

4.8.15 BODY CONSTRUCTION: Body must be 14' x 7' inside and be constructed of minimum seven (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. Body height to be a minimum 36", 7 gauge steel. 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 seven (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. Bottom end of body floor shall incorporate a material chute which shall be constructed of ¼" steel.

Changed to read:

4.8.21 TARP SYSTEM: Electric tarp from front to rear of bed with manual override. Heavy duty tarp is to cover entire length of trailer cargo space to prevent loose debris from falling out during transport. Tarp controls to be installed inside of cab.

Changed to read:

4.8.23 HITCH: Unit to be equipped with a minimum 30 ton pintle hitch.

Changed to read:

4.9	ITEM	QUANTITY	DESCRIPTION
	7	2	>33,000 GVWR Utility Bed/Lubrication Body Trucks

Changed to read:

4.9.1 ENGINE: Diesel, minimum 330 SAE net horsepower, and 950 ft. lbs. of torque at manufacturers recommended RPM, with engine oil cooler and full flow spin-on oil filter, dry type air filter. The engine shall be equipped with an automatic engine shutdown with alarm. Largest capacity radiator with automatic viscous fan clutch or on/off fan clutch.

Changed to read:

4.9.4 FRONT & REAR AXLE: **FRONT AXLE:** Minimum 12,000 lbs. capacity with 12,000 lbs. spring capacity. **REAR AXLE:** Minimum 23,000 lbs. capacity with 23,000 lbs. spring capacity, equipped with hub piloted steel hubs, out-board mount type brake drums. Rear axle equipped with heavy duty springs plus auxiliary springs. Stemco or equal rear oil seals. Gear ratio will be determined by the best start ability and grade ability.

Changed to read:

4.9.6 WHEELS & TIRES: Front and rear wheel seals to be Stemco Wet, steel wheels, minimum 8.25" rims with minimum 11R-22.5 (NO EXCEPTIONS), minimum load range H, tubeless steel belted radial tires. Front tires conventional tread. Rear dual application to be self-cleaning lug design. Loose lug indicators on front and rear wheels.

Changed to read:

4.9.7 BRAKES: Air, Full power with automatic adjustment, 4-channel ABS with traction control, rear axle mounted parking brake. Minimum 13 CFM compressor, Midland Pure Air Plus Dryer Model DA33100 or equal with automatic drain valves Model KN24000 or equal on all tanks 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:

4.9.8 FUEL SYSTEM: To be equipped with minimum capacity of 50 gallons. Right or left side tank mount. Fuel filtration system to include primary and secondary with water separator. Fuel filler neck is required to have a removable, full flow screen. Diesel Exhaust Fluid (DEF) Gauge inside of cab.

Changed to read:

4.9.9 EXHAUST SYSTEM: Vertical exhaust pipe, heat cover and turn out to be mounted to allow full utilization of cab-to-axle length.

Changed to read:

4.9.10 ELECTRICAL: Minimum 1800 CCA (total) batteries and minimum 200 amp alternator. Batteries are to be equipped with jump start studs and a battery disconnect switch located in the cab.

Changed to read:

4.9.13 MISCELLANEOUS ITEMS:

Changed to read:

4.9.13.6 Minimum four (4) factory installed up-fitter switches.

Changed to read:

4.9.14 The body will be a minimum of 14 ft" L x 95" W maximum with a approximately weight of 5,400 lbs. Floor plate will be a minimum of 1/8" steel.

Changed to read:

4.9.16 The enclosed rear dropped service compartment shall incorporate a rear tubular style bumper, reel and pump mounting shelves. The unit shall have a 50 gallon storage sump and used filter box. The compartment assembly shall tie directly to the chassis frame to provide support. The finished compartment to be designed for installation of appropriate lights and have a slatted roll up door with weather seals and a drip edge.

Changed to read:

4.9.17 There will be minimum two storage compartments above the deck. The street side compartment shall consist of three separate compartments each having 3-point latching doors. The combined storage capacity of this compartment must be a minimum of 84.9 cu. ft. The compartment to be approximately 114"W x 58.5" H x 22"D. The curb side compartment to have a pair of overlapping doors and a storage approximately 24.4 Cu. Ft. The compartment to measure approximately 60"W x 32" H x 22" D.

Changed to read:

4.9.18 There will be a door and steps to access the upper deck and storage tanks. The door to measure approximately 29.25" W x 57.50" H and have a single point latch. The access steps must be fold down ladder or integrated into the lower body skirts and consist of two steps and two grab handles that are located on either side of the door opening for safety.

Changed to read:

- 4.9.21 LED Lights will be mounted along all sides of body and rear section. These LED lights are to be swivel and adjustable work lights. ALL COMPARTMENTS SHALL BE LIGHTED.

Changed to read:

- 4.9.26 The product oil pumping g system shall consist of a hydraulic driven pump per oil tank. Each product must be equipped with an on-off valve and be capable of a sustained delivery rate of a minimum 12 GPM. The pump will supply the manifold consisting of multiple oil systems pumps. The manifold is to provide the hydraulic power for the pumps. The manifold pumping system is to be mounted in a under floor compartment or the right hand, bottom portion of the hose reel compartment so that the pumps are mounted in a vertical manner.

Changed to read:

- 4.9.28 There will be one (1) 75 gallon antifreeze system. It will have a lockable 2-inch vented cap, 1 micron breather filter and include a 1 inch bottom suction port. The tank is to be mounted with rails incorporated into the body, tanks may be steel or poly.

Changed to read:

- 4.9.31 There will be one (1) 135 gallon oil salvage system, with a lockable 2-inch vented cap, 1 micron breather filter and include a 1 inch bottom suction port. The tank must be mounted with rails incorporated into the body or be four (4) point mounted with rubber bushing. Tank may be steel or poly.

Changed to read:

- 4.9.33 The salvage reel must be heavy duty, high volume and spring retractable. The reel is to be of a heavy gauge steel frame and dual support arms. The reel must have a positive lock and unlock ratchet and be equipped with a 1 ¼ X 35 minimum hose with a ball stop.

Changed to read:

- 4.9.35 The air reel is to be heavy duty, high volume and spring retractable. The reel must be a minimum of cast steel single pedestal. Each reel must have a positive lock and unlock ratchet and be equipped with a ½ "x 50' minimum hose with a ball stop.

Changed to read:

- 4.9.40 An auxiliary platform will be installed between the main platform and the chassis cab as required for additional fluid systems. The platform will measure a minimum 58"L x 95" W maximum and must have the same tank containment system as the main platform. The platform is to have a minimum 485 gallon capacity. The platform must not exceed 1,200 lbs and will be equipped with hose reels and pump.

Changed to read:

- 4.9.42 A quick fill system for filling product tanks is required. Quick couplers centrally located in the rear reel enclosure.

Changed to read:

- 4.9.43 Two underbody toolboxes will be required. Underbody toolboxes to be mounted under the

body, one each side and will be the largest size and capacity allowed by space available. The auxiliary platform has full height vertical cabinets.

Changed to read:

4.10	ITEM	QUANTITY	DESCRIPTION
	8	1	>33,000 GVWR Grapppler Truck (Turnkey Unit)

Changed to read:

4.10.1 ENGINE: In line six (6) cylinder, minimum 8.9 liter, diesel, minimum 330 net HP rated at not more than 2400-RPM, producing a minimum of 950 lb. ft. of gross torque rated at not more than 1400-RPM. Engines to be equipped with OEM or equal shut down control on high water temperature and low oil pressure. Electronic engine controls must have all necessary components and wiring to allow for complete operation of a power take off at a pre-determined RPM using an in-cab control (must be load sensitive). Maximum road speed to be electronically limited to 60-MPH +/-2-MPH. Cruise control will not be activated. Engine will have automatic shut down feature enabled after 5-minutes of idle time.

Changed to read:

4.10.6 WHEELS & TIRES: Wheels to be 10-hole hub piloted steel disk wheel, 22.5 X 8 1/4 painted white. Tires -- Front tires are to be 315/80R 22.5 20 ply and rear tires are to be 11R 22.5 16 ply, tubeless steel belted radial tires. Loose wheel stud/lug indicators shall be installed on all wheels, color orange.

Changed to read:

4.10.7 BRAKES: Full air disc brake with dust shields and ABS brake control system. Brakes to be the maximum O.E.M size offered of disc brakes front and rear to meet or exceed August 2011 Federal brake requirements. Air disc brake internal adjuster's front and rear. Minimum 15 CFM compressor, Midland Pure Air Plus dryer model DA-33100, or proven equal, with a manual drain valve on each tank. It is preferred that the air tanks be grouped together, easily accessible to an operator standing at the side of the truck. If not possible, all air tank drains shall be plumbed to a manifold system where drain valves are at one location, easily accessible to an operator standing at the side of the truck. Spring set parking brakes on rear axle. Female coupling 1/2" Milton M Type or approved equal to air tanks. connected to the emergency side of air system, to be located in a protected area near the front bumper.

Changed to read:

4.10.8 FUEL SYSTEM: To be equipped with minimum capacity of 70-gallons, aluminum or steel tank. Fuel filtration system to include primary and secondary filter with water separator. Fuel filler neck is required to have a, full flow screen. Truck will be delivered with a full fuel tank and DEF fluid, if applicable. Fuel tank and DEF tank shall be mounted street side. Diesel Exhaust Fluid (DEF) Gauge inside of cab.

Changed to read:

4.10.11 TOW HOOKS/WINCH ASSEMBLY: Two front tow hooks installed on frame and strengthened sufficiently to lift, pull, and tow truck without damaging bumper or other body parts. A wire rope, minimum 1-inch diameter, shall be provided and fastened to both tow hooks to attach tow equipment. A winch assembly to be mounted on the frame of the truck.

Electric type winch with minimum 10,000 pound single line pull. Minimum cable drum capacity two hundred feet (200'). Winch to have power in and out capability and be configured with a free spooling clutch and adjustable brake.

4.10.16 UNITS TO BE EQUIPPED WITH THE FOLLOWING ITEMS:

Changed to read:

4.10.16.16 DELETED

Changed to read:

4.10.16.17 DELETED

Changed to read:

4.10.31 BOOM LENGTH: Maximum 22 feet, minimum 21 feet, without telescoping boom.

4.10.41 ADDITIONAL REQUIREMENTS:

Changed to read:

4.10.41.1 Install a safety cradle around operator seat approximately 3-inches wider than seat, level with the seat in the folded position, and not more than 18" inches to the rear. Material to be 1 1/4-inches steel tubing firmly mounted and must not interfere with operator's range of motion. Unit shall have a main engine cutoff switch to be equipped in the grapples operator area.

Changed to read:

4.10.41.7 Front Bumper mounted hydraulic or electric winch - 12,000 capacity. Minimum 100 feet.

Changed to read:

4.11	ITEM	QUANTITY	DESCRIPTION
	9	1	>26,000 Minimum GVWR 5 Cubic Yard Dump Truck

Changed to read:

4.11.1 ENGINE: Minimum 6 cylinder with not less than 210 HP at 2,500M; 520 lb ft torque.

Changed to read:

4.11.2 GVWR: Minimum 26,000 lbs

Changed to read:

4.11.3 TRANSMISSION/DRIVE: Allison 2500 RDS; or equivalent.

Changed to read:

4.11.5 TIRES & WHEELS: Six (6) 11R22.5, 10-hole steel disc wheel equipped with truck. Loose lug indicators on front and rear wheels.

Changed to read:

4.11.6 BRAKES: Air drum brake for front and rear wheels. Minimum 13 CFM compressor, Midland Pure Air Plus Dryer Model DA33100 or equal with automatic drain valves Model KN24000 or equal on all tanks 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:

4.11.7 FUEL SYSTEM: Fuel tank shall hold a minimum of 50 gallons of Ultra Low Sulfur Diesel. Diesel Exhaust Fluid (DEF) Gauge inside of cab

Changed to read:

4.11.8 SEATING: Capacity to be for three (3) individuals. Driver seat to be reclining with high back, and passenger seating to be 2 man bench type.

Added:

4.11.11 UNIT TO BE EQUIPPED WITH THE FOLLOWING ADDITIONAL EQUIPMENT:

Added all:

- 4.11.11.1 Minimum one (1) electrical and one (1) air horns.
- 4.11.11.2 Integral power steering.
- 4.11.11.3 Turn indicators, front and rear, stop and tail lights.
- 4.11.11.4 Tachometer.
- 4.11.11.5 Adjustable steering column.
- 4.11.11.6 Cigar lighter/Power port for use with cell Phone
- 4.11.11.7 Water temperature, oil pressure and volt or amp gauges.
- 4.11.11.8 DOT reflector flare kit.
- 4.11.11.9 Electronic back up alarm.
- 4.11.11.10 5 lb. fire extinguisher.
- 4.11.11.11 Fixed interval wiper control with windshield washer.
- 4.11.11.12 Minimum four (4) factory installed up-fitter switches

Changed to read:

4.11.12 STANDARD BODY CONSTRUCTION: Body to be 10' X 7' inside and be constructed of minimum 7 gauge steel. Body shall have a 2" radius between sides and floor to provide easier and cleaner discharge of load. Sides shall be adequately side braced and rub rails be sloped dirt-free self-cleaning type. All welds shall be continuous on floor side, head seams, braces, etc., NO SKIP WELDS. Side boards to be minimum 2" x 6" x ¼" structural rectangular tubing. Long sills shall be constructed of minimum 5" I-beam with a ¼" web. Crossmembers shall be constructed of minimum 4" I-beam with a 3/16" web. Crossmembers to be on maximum 12" centers, must extend under rub rails and side post, be gusseted to body long sills and welded to long sills on all sides. Rear corner posts shall be a minimum of 10" wide and constructed of minimum 7 gauge steel which meets the above mentioned standard. Body shall have a half size cab protector. Body sub-frame to have external guides installed to guide body into proper alignment with sub-frame, to prevent side movement during travel.

Changed to read:

4.11.13 TAILGATE: Tailgate shall be of the double-acting type, constructed with boxed type reinforcements on all sides. Base section must be of the sloped, dirt-free self-cleaning type. Upper tailgate hardware to be minimum 3/4" thick, flame cut steel. Tailgate locks must be

easy to manipulate and provide firm locking. Tailgate spreader chains to be attached directly under upper tailgate crossmember and configured to allow multiple positioning of tailgate to include horizontal. All welds to be continuous, no spot or skip welding.

Changed to read:

4.11.14 PIVOTS & PINS: All pivots shall be equipped with grease fittings.

Changed to read:

4.11.15 HYDRAULICS: Hoist shall be heavy duty, double lift arm hoist. Hoist to be type V, underbody hoist. 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 (a full mating surface is required) at maximum dump angle. Hydraulic pump to be close couple direct mount to power take off. Pump to be air controlled with feathering valve. Hydraulic system to include in-line hydraulic filter. 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. Units will be provided with safety limit equipment designed to stop the dump body at its maximum dump angle. Safety limit equipment to include a flexible wand type switch and an air solenoid valve rated at not less than 125 PSI. Hoist installation must provide for use of the entire cylinder stroke when reaching maximum dump angle. The only acceptable substitute to the above requirement for a flexible wand type switch and air solenoid valve will be for a system designed with an internal bypass stroke limit system. Hoist assemblies with the tie rod design for cylinder construction are not acceptable.

Changed to read:

4.11.16 OTHER EQUIPMENT: All necessary clearance lights, marker lights, reflectors, mud flaps and mechanical backup alarm to be included and meet State Inspection requirements.

Changed to read:

4.11.17 DUMP BODY COVER ASSEMBLY: Tarp system to be equipped with steel arms. Motor will be mounted in the "down" position. A weather proof control panel, with a minimum 25-amp reset breaker, to operate tarp system will be located in conjunction with the hydraulic controls. Controls to operate the tarp system will not be placed in the cab of the tractor. Control to be accessible in the cab.

Changed to read:

4.11.18 MUD FLAPS: Mud flaps to be 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.

4.12	ITEM	QUANTITY	DESCRIPTION
	10	2	60K Fifth Wheel Tractor Truck

Changed to read:

4.12.4 REAR AXLE: Tandem axle configuration- 6x4 tandem axle design. Single speed tandem drive, minimum 46,000 lbs capacity to be Rockwell RT 46-160 or equal. Gear ratio installed must be capable of 65 +/- 2 mph geared road speed at full engine governed RPM. Driver controlled differential locks on both rear axles.

Changed to read:

4.12.7 WHEELS AND TIRES: Front wheels to be 10 hole hub piloted, 22.5X 8 ¼ 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 11R 22.5 on/of, self cleaning, lug design. Loose lug indicators on front and rear wheels.

Changed to read:

4.12.8 BRAKES: Full air, S-cam type, with dust shields, manufacture's heavy duty brake shoes, spring set parking brakes. Front and rear Rockwell (or equal) automatic slack adjusters. Minimum 13CFM compressors, Midland Pure Air Plus Model DA33100 (or equal) with automatic drain valves Model KN24000 (or equal). Spring set parking brakes on both rear axles. All brake drums to be cast iron. Brake linings to be non-asbestos. Female coupling ½" Milton M Type or approved equal to air tanks located in an area near the front bumper for emergency brake release.

Changed to read:

4.12.9 FUEL SYSTEM: Single left or right hand steel tank mounted under cab or dual left and right hand step tanks mounted under cab. Minimum total fuel capacity to be 70 gallons. Fuel filtration to include primary and secondary filtering systems with automatic water separator. Diesel Exhaust Fluid (DEF) Gauge inside of cab

Changed to read:

4.12.11 EXHAUST SYSTEM: Vertical tailpipe, heat guard, turn out, mounted to allow full utilization of specified cab to trunion length.

Changed to read:

4.12.18 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 which produces 50-90% of engine RPM. 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.

PRICE SCHEDULE DESCRIPTION

Deleted:

ITEM	QUANTITY	DESCRIPTION
1	5	19,501-26,000 GVWR General Purpose Flatbed

DELETED

Changed to read:

ITEM	QUANTITY	DESCRIPTION
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