



# CITY OF ST. LOUIS

OFFICE OF THE SUPPLY COMMISSIONER  
 1200 MARKET ST RM 324  
 ST LOUIS MO 63103-2842



REQUEST FOR QUOTE  
 91017Q0215

PAGE  
 2

ADDRESS CORRESPONDENCE TO

... We agree to furnish the following articles to the City of St. Louis, free of any extra charges, in the quantity named and at the prices respectively stated:

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EQUIPMENT SERVICES DIVISION  
 1900 HAMPTON  
 ST LOUIS MO 63139  
 314-768-2891

SEE TERMS AND CONDITIONS ON THE REVERSE SIDE OF THIS QUOTATION SHEET.

DATE PRINTED 09/06/16	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
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REPLY DUE BY: 09/28/16 12:00 O'CLOCK NOON

NEEDED BY DATE	QUANTITY	UNIT	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
STATE BEST GUARANTEED DELIVERY:				A.R.O.		
ALL ITEMS SHALL BE F.O.B. DESTINATION						
FREIGHT OR DELIVERY CHARGES MUST BE INCLUDED IN QUOTE OR INDICATED BELOW IN ORDER TO RECEIVE PAYMENT!						
<input type="checkbox"/> FREIGHT IS INCLUDED IN THE QUOTE PROVIDED - OR - <input type="checkbox"/> WE WILL CHARGE \$ _____ FREIGHT/DELIVERY						
THE CITY RESERVES THE RIGHT TO SPLIT AWARDS, VENDOR MUST INDICATE (SPLIT) OR (ALL OR NONE) FOR MULTI LINE BIDS.						
----- BIDDING "ALL OR NONE" ----- SPLIT AWARD ACCEPTABLE						
PLEASE PROVIDE CONTACT INFORMATION FOR THIS BID:						
NAME: _____						
E-MAIL: _____						
PHONE: _____						
						<b>TOTAL</b> →

NAME OF FIRM	STATE DELIVERY:	COMPTRROLLER	Date
ADDRESS	CALENDAR DAYS		
CITY STATE	SIGNED BY:	SUPPLY COMMISSIONER	Date
PHONE Area Code ( )			

ADVERTISED BID  
**CITY OF ST. LOUIS**

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NEEDED BY DATE	QUANTITY	UNIT	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
	ORDINANCE #60643 - A CITY OF ST LOUIS BUSINESS LICENSE IS REQUIRED IF YOUR COMPANY MEETS ANY OF THE FOLLOWING: (CHECK AS APPROPRIATE): ----- BUSINESS IS LOCATED WITHIN THE CITY LIMITS ----- DELIVERY WITHIN CITY LIMITS IS BY COMPANY TRUCK ----- SALES CALLS ARE MADE WITHIN THE CITY LIMITS * VENDORS SHOULD NOTE IF THEY ARE MINORITY OR WOMEN OWNED BUSINESS (CHECK) MBE ----- WBE----- LIST ITEMS MANUFACTURED, ASSEMBLED OR PRODUCED IN A FOREIGN COUNTRY ON THE ENCLOSED (BUY AMERICAN) FORM FOR BIDS TOTALING \$1,000 OR HIGHER ***** WEBSITE INFORMATION ***** * * * * * * TO DOWNLOAD SUPPLY BIDS GO TO: * * * * * * * * * * * HTTP://STLOUIS-MO.GOV/SUPPLY/BID-NOTICES.CFM * * * * * * * * * * * CLICK ON BID NOTICES * * * * * ***** *****					
<b>TOTAL</b> →						

NAME OF FIRM	STATE DELIVERY:	COMPTRROLLER	Date
ADDRESS	CALENDAR DAYS		
CITY	STATE	SIGNED BY:	SUPPLY COMMISSIONER
PHONE	Area Code ( )		Date

City of St. Louis  
Equipment Services Division

Equipment Specification

Fuel Data Module with GPS Option

To be supplied by the Chassis Dealer:

The vehicle must come equipped with the AssetWorks FuelFocus Vehicle Data Module System FJ3 installed with the GPS option. (NO exception to be taken)

Information about this product and related costs for these kits can be received through AssetWorks by contacting:

E-Mail: [fuelsales@assetworks.com](mailto:fuelsales@assetworks.com)

This will be the camera system that is to be installed in each truck after the truck is assembled.

*(6 Camera) PRO-VISION® 4 Channel Solid State Video Recording System Includes:*

- DVR-704CD Base KIT with No Cameras
- PC-1107 VLS Series™ Night Vision Camera KIT - Black ... (Includes: Camera, Housing and 10m AV Cable) – **SIDE CAMERA**
- PC-1107 VLS Series™ Night Vision Camera KIT - Black ... (Includes: Camera, Housing and 10m AV Cable) – **SIDE CAMERA**
- DVR-131 Windshield / Deck Camera KIT – **FORWARD CAMERA**
- PC-1110W VLI Series™ Wireless Night Vision Camera and Receiver KIT – **REAR WIRELESS CAMERA**
- DVR-750 GPS Antenna
- DVR-710 Enhanced Event Marker Button
- PM-1694S 9.0" Quad View Touch Screen LCD Monitor KIT
- DVR-123 Standard / Roof Night Vision Camera KIT - 28 LEDs – **MAST CAMERA**
- DVR-123 Standard / Roof Night Vision Camera KIT - 28 LEDs – **HOPPER CAMERA**
- PD-1456 Video Splitter Cable
- PD-1456 Video Splitter Cable
- PD-1456 Video Splitter Cable
- PX-1072 2 Camera Control Device
- PX-1072 2 Camera Control Device
- Solid State DVR (Included in DVR-704CD)
- 64GB Class 10 SDXC Memory Card (Included in DVR-704CD)
- Lockable Cage (Included in DVR-704CD)
- Software & Guides (Included in DVR-704CD)

## **Pressure Pro's Tire Pressure Monitoring Equipment To be installed on trucks**

*Part Number HDGRM10*

**Pressure Pro's 10 Wheel Monitor** provides users with real time tire pressure and temperature information and alerts direct to the driver or operator in-cab. Monitoring up to 10 positions on a vehicle, this Monitor is commonly used for monitoring autos, busses, heavy equipment, emergency vehicles, agriculture equipment, straight and box trucks and more. The Monitor comes standard with built in RS232 communication protocols and data logging capabilities.

### **SPECIFICATIONS**

Sensor Transmit Range Approx. 300 feet line-of-sight  
Operating Frequency 433.92 MHz FM  
Monitor Power Requirements 12VDC; 125 mA in standby, <250mA with LEDs on.  
Monitor Dimensions 6.5" W x 3.0" H x 0.5" D  
Monitor Weight 4 oz.  
Monitor Power Cord Plug Type USB Mini B – 8 ft. cord  
Monitor Tire Positions 1 to 10 wheel positions  
Sensor Alarm Trigger Settings 12.5% and 25% below the original tire inflation level;  
Upper alert variable by user from 10% to 45% (or off)  
High temperature alert at 194° F  
RS232 Capable Real time serial packet data  
Data logging

Pressure Pro Sensors continue to lead the TPMS market in performance, durability, accuracy and reliability. Touting an average life of 5+ years, they lead the market in lifespan and value. Sampling tire pressure every 7 seconds and providing immediate alerts to low and high pressure situations and high temperature occurrences, Pressure Pro Sensors report continuous tire performance information via RF signal directly to your Pressure Pro in-cab Monitor, integrated partner displays or to a remote management system.

### **SPECIFICATIONS**

Sensor Transmit Range Approx. 300 feet (Line-of-Sight)  
Conformity FCC, IC, CE, RoHS  
Operating Frequency 433.92 MHz  
Temperature Range -40° to 120°C / 248F  
Sensor Weight 2/3 oz. or 17 grams  
Sensor Dimensions 1.01" H x 1.11" Dia.  
Power 3V Lithium Coin Cell Battery  
Internal, non-rechargeable  
Sensor Pressure Range  
Survivability 0 to 299 PSI  
Operation 8 to 215 PSI  
Sensor Low Voltage Shutdown 2.2 Volts  
Accuracy ±3%  
Tire Type/Installation Installs onto standard valve stem

## **Additional Equipment per truck**

1. One (1) 5 lb. Fire Extinguisher  
One (1) 20 lb. Fire Extinguisher  
Class A B & C

2. First Aid Kits Metal Case  
DOT Approved

3. Day/Night Road Warning Kit  
Dot Approved

These items are not per truck quantities as listed.

4. FILTERS: One complete set of filters for  
all systems of the chassis and body except for the Air Filter.

5. Spare tires two front tires on rims, and two rear tires on rims.

**Service Manuals &  
Diagnostic software**  
To be included in the bid

Please list the cost separately for the service, parts manuals/CD and diagnostic software that is need for this bid. These items must cover at least ten (10) years. So if there is a yearly cost for the subscription list it as a yearly cost. The diagnostic software must cover the complete vehicle (i.e. engine, transmission, chassis, brakes and body if it applies).

<u>ITEM</u>	<u>TERM</u>	<u>COST</u>
PARTS	_____	_____
SERVICE	_____	_____
BODY	_____	_____
CHASSIS	_____	_____
ENGINE	_____	_____
TRANSMISSION	_____	_____
BRAKES	_____	_____
=====	_____	_____
=====	_____	_____

Also list any hardware and costs that are needed for any of these items listed above. This should include scanners and cabling etc.

Any and all of these costs should be added to your bid if we need these items to repair this vehicle you are bidding on.

	<b>Toughbook 31 –Fully Rugged</b>
Testing certifications	MIL-STD810G, IP65, MIL-STD 461F, ANSI 12.12
OS:	Windows 8 Pro
CPU	Intel i5-5300U vPro 2.3GHz (2.9max) 4GB RAM (up to 16GB), 3MB cache
GPU	ATI 5500, 1785MB VRAM
Display size	13.1" Anti-glare LED Touchscreen
Disk space	500GB 7200rpm w/heater *128GB,256GB, and 512GB SSD available
Keyboard	Waterproof, Backlit 87 key
DVD/RW	Optional Super MULTI DVD
Battery	18 hours (27 with optional battery) 3.5 hour charge time
Interface/ports	USB 3.0 (1) USB 2.0 (2) HDMI, VGA Express/PC/SD card Serial port (9 pin) *Optional IEEE (FireWire) RJ-45 Network Cable (2) Ext. Antenna – 50ohm Mini-jack stereo/microphone Docking port (80 pin)
Options	4GLTE Wireless w/ satellite GPS Intel dual-band wireless AC7265 802.11a/b/g/n/ac Bluetooth v4.0

# REFUSE TRUCK CHASSIS

Cab-Over Design  
Right Hand Drive Only

## REFUSE CHASSIS

A cab and chassis shall be provided, designed and engineered specifically for an automated refuse collection service application. Low entry **right hand drive only**.

Y\_\_N\_\_

## ENGINE

In-line six-cylinder turbo charged diesel, air to air aftercooler with electronic control system(s) with advanced diagnostics, prognostic and programming options. Engine is rated for 300 + HP at 2200 RPM, Torque rating 860 + lbs/ft. at 1300 RPM. Oil filter, full flow, spin-on type, engine mounted. Coolant water filter, spin-on type. Must have engine block heater. **Also to include one (1) complete set of diagnostic software for this engine. See Last Page**

Y\_\_N\_\_

## ENGINE PROTECTION

Automatic type, with 30 second warning prior to shutdown for low engine oil psi, low coolant level, high coolant temperature and high transmission temperature.

Y\_\_N\_\_

## DIPSTICKS

Engine and transmission oil dipstick(s) routed behind the cab. Marked and color coded for quick identification and readily accessible without tilting cab with cables attached. Must have chain and marked dipsticks and fill caps.

Y\_\_N\_\_

## ENGINE OIL CLEANING SYSTEM

A Spinner II CS or equal engine oil cleaning system shall be provided.

Y\_\_N\_\_

## AIR COMPRESSOR

A 15.7 CFM air compressor; direct coupled drive, shall be piped directly through the engine air intake plumbing.

Y\_\_N\_\_

## CRANKSHAFT ADAPTER

A F.E.P.T.O. 1260/1310 series crankshaft adapter shall be supplied. This will not be used if the hydraulic would extend past the front bumper. Then you must include a transmission P.T.O.

Y\_\_N\_\_

**ALTERNATOR**

A 12 volt, negative ground, Delco 21SI 160 amp, belt driven alternator shall be provided. It shall provide high output at idle required for fuel injection electronics and prolonged battery life.

Y\_\_N\_\_

**STARTER**

A 12 volt, negative ground, Delco-Remy 37 MT type 300 starter with Posi-tork motor shall be provided.

Y\_\_N\_\_

**COOLING SYSTEM**

Radiator shall have a heavy-duty cross flow design and construction with bolted tanks and two-row core.

Y\_\_N\_\_

**COOLANT**

Radiator coolant shall provide protection to -40 degrees Fahrenheit below zero. The ethylene glycol engine coolant shall meet the Society of Automotive Engineers classification SAE J814C and J1034 and ASTM D3306, D4985 and D4340.

Y\_\_N\_\_

**OVERFLOW TANK**

A coolant recovery overflow tank with a capacity of 1 gallon shall be provided and installed.

Y\_\_N\_\_

**CHARGE AIR COOLER**

Heavy duty "Ultra seals" type air cooler shall have an aluminum core and cast aluminum tank construction. Silicone rubber molded hoses with stainless steel constant torque type hose clamps, solid mounted in front of radiator shall also be provided.

Y\_\_N\_\_

**RAIN BONNET**

A 90 degree rain bonnet with water/snow separator shall be provided.

Y\_\_N\_\_

**AIR INTAKE STACK**

A painted steel air intake stack shall be provided and installed.

Y\_\_N\_\_

**AIR FILTER MINDER**

An "Air Filter Minder" shall be located on the left side of the dash.

Y\_\_N\_\_

**BATTERIES**

Three (3) Group 31, low maintenance batteries, with a combined rating of 2775 CCA, 925 CCA each, shall be provided. Battery cables shall be 0000 sized and shall have molded, color-coded ends. They shall be covered with heat resistant corrugated plastic and mounted on shock pads.

Y\_\_N\_\_

**BATTERY BOX**

A 17" wide x 12" tall x 25" deep, two-piece fabricated steel battery box with lockable cover and two (2) hand holes, one (1) each side of cover shall be provided. Shall include Start Studs.

Y\_\_N\_\_

**It shall be mounted per the body company's requirements outside of frame rail.**

**DISCONNECT SWITCH**

**A battery disconnect switch that will disconnect the positive cable at the batteries. This switch will be able to be activated from several locations on the truck by an emergency stop button.** The switch shall be wire to the clearance lights so that they are illuminated anytime the switch is in the on position.

Y\_\_N\_\_

**EXHAUST**

A stainless steel catalyst muffler shall be provided on the left side/ street. It shall withstand a maximum operating temperature up to 1250 degrees Fahrenheit and shall be mounted vertically, outboard and above the frame behind the cab.

Y\_\_N\_\_

A bright stainless steel heat shield shall be provided.

Y\_\_N\_\_

**TAILPIPE**

A 48" tall tailpipe with curved elbow outlet shall be provided.

Y\_\_N\_\_

**FUEL TANK**

A 50 gallon capacity, FHWA approved fuel tank shall be provided. Top of tank draw and return fuel line ports, steel braided hoses, vented cap shall also be provided. Drain plug shall be provided and located in the bottom center of the tank.

**The tank shall be mounted as required by the body company.**

Y\_\_N\_\_

**FILL NECK**

A 2" fill neck shall be provided on the right side mounted fuel tank with the cap green in color.

Y\_\_N\_\_

**FUEL/WATER SEPARATOR**

A 60 GPM fuel/water separator shall be provided and installed.

Y\_\_N\_\_

**TRANSMISSION**

Allison 3500RDS, five speed automatic electronic shift type flywheel mounted transmission shall be provided. It includes a 10-bolt PTO mounting pad on both sides, with internal oil filter, push button shift control and integral oil cooler in radiator. **Also to include one (1) complete set of diagnostic software for this transmission.**

Y\_\_N\_\_

**TRANSMISSION PROGRAMMING**

Allison five-speed Group 105, vocation package #145 transmission programming for Refuse Special 1 applications shall be provided.

Y\_\_N\_\_

**TRANSMISSION SHIFTER**

A push-button style keypad shift controller with illuminated digital display, six (6) push buttons (Drive, Neutral, Reverse, Downshift, Upshift and Mode), low oil level indicator and gear/mode selection display shall be provided. It shall be mounted, **for easy access with body company joystick mounted**, on the driver's side in dash preferably. A dash mounted "Check Trans" light shall also be provided.

Y\_\_N\_\_

**TRANSMISSION OIL LEVEL SENSOR**

A transmission oil level sensor shall be provided and installed. A warning light on the shifter shall illuminate and indicate the number of quarts low, when a low oil level is sensed.

Y\_\_N\_\_

**FORCED NEUTRAL SYSTEM**

A forced neutral system ("AG" Function) shall be installed. It shall have three (3) phases, "Stage/Engage", "Activate" and "Deactivate". Both the "Neutral Interlock" and "Auto Neutral" switches must be in the "On" position before activation.

**FRONT AXLE**

A wide track, 20,000# capacity front axle. The axle shall be designed to take high abuse typically associated with heavy refuse.

Y\_\_N\_\_

**FRONT BRAKES**

Air operated "S"-cam type heavy duty front brakes shall be provided with extended service "ES" linings, cast iron drums, dust shields, automatic slack adjusters and ABS wheel end sensors.

Y\_\_N\_\_

**FRONT BRAKE CHAMBERS**

Brake chambers with stroke indicators shall be provided and installed on the front axle.

Y\_\_N\_\_

**AUTOMATIC SLACK ADJUSTERS**

Front axle automatic slack adjusters shall be provided.

Y\_\_N\_\_

**FRONT SUSPENSION**

Shall be provided with a 20,000# capacity at ground for a smoother ride.

Y\_\_N\_\_

**SHOCK ABSORBERS**

The front suspension shall include two (2) heavy duty hydraulically dampened "double acting" type shock absorbers.

Y\_\_N\_\_

**FRONT TIRES**

Two (2) 315/80R22.5 LR(L) 20 ply radial tubeless type tires shall be provided. Each tire shall have a capacity of 10,000 pounds and shall provide a total capacity of 20,000 pounds.

Y\_\_N\_\_

**FRONT WHEELS**

Two (2) 22.5" x 9.00" ten (10) hole 11.25" B.C. hub piloted steel wheels with two (2) hand holes shall be provided. Each wheel shall be rated at 10,000 pounds, for a combined rating of 20,000 pounds. Each rim center is piloted to align onto the axle hub for more positive wheel centering.

Y\_\_N\_\_

**FRONT WHEEL SEALS**

Oil lubricated, shall be provided.

Y\_\_N\_\_

**FRONT AXLE HUBS AND DRUMS**

The front axle shall be equipped with 16.5" x 6" hub pilot cast iron hubs and drums.

Y\_\_N\_\_

**RIGHT HAND STEERING**

The vehicle shall have right hand steering capabilities only. No left hand steer components shall be supplied. MUST BE FACTORY INSTALLED WITH NO MODIFICATIONS OR CONVERSIONS ALLOWED.

Y\_\_N\_\_

**STEERING GEAR**

An integral power assist type steering gear shall be frame mounted. A remote reservoir with sight glass and replaceable filter shall also be provided. Steering linkages shall utilize full ball-joints. Grease fittings shall be included on tie rod ends, drag links and intermediate shaft(s).

Y\_\_N\_\_

**STEERING COLUMN**

Tilt / Telescopic steering column; headlight dimmer switch mounted on column; self-canceling turn signal switch integral to steering column and 4-way hazards lever.

Y\_\_N\_\_

**STEERING WHEEL**

Steering wheel is black; soft touch, two spoke type with center horn button.

Y\_\_N\_\_

**SINGLE REAR AXLE**

On-Highway rating shall be 30,000 pound capacity, single axle (Ratio for 60 mph).

Y\_\_N\_\_

**REAR BRAKES**

Air operated cam brakes with non-asbestos ES (*Extended Service*) linings, cast iron drums, dust shields, spring type "piggy-back" park brake chambers all rear wheels, anti-compound brake system, automatic slack adjusters; brake chambers with stroke indicators, ABS wheel end sensors.

Y\_\_N\_\_

**AUTOMATIC SLACK ADJUSTERS**

Single rear axle automatic slack adjusters shall be provided.

Y\_\_N\_\_

**REAR SUSPENSION**

Rear Suspension @ 30,000# -single axle drive with dual marshmallow springs and parallelogram torque beams or air ride.

**NO Leaf springs.**

Y\_\_N\_\_

**REAR TIRES**

Four (4) 315/80R22.5 LR(L) 20 ply radial tubeless type tires Mud & Snow Off-Road shall be provided. Each tire shall have a capacity of 8,255 pounds and shall provide a total capacity of 33,020 pounds.

Y\_\_N\_.

**REAR WHEELS**

Four (4) 22.5" x 9.00" ten (10) hole 11.25" B.C hub piloted steel disc wheels with two (2) hand holes shall be provided. The rim center is piloted to align onto the axle hub for more positive wheel centering.

Y\_\_N\_\_

**REAR WHEEL SEALS**

Oil seals, oil lubricated, shall be provided.

Y\_\_N\_\_

**REAR AXLE OIL**

The rear axle shall be provided with 85W140 lubricant.

Y\_\_N\_\_

**REAR AXLE HUBS AND DRUMS**

The rear axles shall be equipped with 16.5X7" hub pilot cast iron hubs and drums.

Y\_\_N\_\_

**AIR SYSTEM**

The air tanks shall be located inboard of frame rails. A low pressure warning light and alarm when air brake system pressure drops below 60 PSI shall also be provided.

Y\_\_N\_\_

**ABS SYSTEM**

Bendix, four-channel cab mount system with wheel end sensors, dash mounted indicator lamp and code check switch shall be provided. The 4S/4M ABS system configuration maintains four (4) wheel end sensors and four (4) electronically controlled modulator valves, one (1) at each wheel end or two (2) per axle. Data links shall be configured for SAE J1587/1708. **Also to include one (1) complete set of diagnostic software for this ABS.**

Y\_\_N\_\_

**AIR DRAIN VALVES**

Automatic air drain valves shall be installed on all tanks. Each shall eject moisture and contaminants from the reservoir in which it is connected and shall operate automatically and shall not require manual assistance or control lines from other sources. Each drain valve shall have a die cast aluminum body and cover and shall be mounted either in the bottom of the reservoir using the top port of the drain valve or in the end of an end drain reservoir using the side port of the valve. Each drain valve shall also include a 1/4" male pipe adapter.

Y\_\_N\_\_

**AIR DRAIN PULL CORDS**

Manual 24" air drain pull cords shall be installed on all tanks.

Y\_\_N\_\_

**AIR TANKS**

Steel air tanks shall be provided and installed on the single axle chassis. The air tanks shall be located in the most accessible position determined by the factory/body company. It shall have minimum air reservoir capacity for the chassis and body.

Y\_\_N\_\_

**AIR DRYER**

An air dryer shall be provided. It shall include a 12 volt heated exhaust valve, integral purge source and eight-bolt cartridge replacement type desiccant filter.

Y\_\_N\_\_

**FRAME**

Straight full-depth, formed "C" shaped side member rails shall be provided, measuring 11" x 3-1/2" x 3/8" thick @ 21.5 lbs. per foot, heat treated steel 110,000 psi minimum yield and, rated RBM: 2,047,000 in. lbs. minimum per rail from front axle to end of frame. A 25' standard length ladder type frame with 34" nominal width outside frame rails shall be fabricated and reinforced tubular cross members, fastened with torque prevailing SAE Grade 8 flanged head nuts and bolts with no projections above the top flange in identified CT. No rivets shall be in the ladder frame assembly.

Y\_\_N\_\_

**PROPSHAFTS**

Dana-Spicer "Life Series" SPL 140 main shaft with bolted half round bearing yokes on transmission and axle U-joints.

Y\_\_N\_\_

**WHEELBASE/AFTERFRAME**

The **wheelbase shall be 164 inches** from the front axle center line to the center of the rear axle, with an after frame (rear frame overhang) of 85 inches. The body manufacturer shall supply these dimensions. **The chassis manufacturer shall be responsible for obtaining the correct dimensions to facilitate the mounting of the body.**

Y\_\_N\_\_

**EXTENDED BUMPER**

A standard bumper shall be provided the full width of the cab. It shall be fabricated of 1/4" thick steel and bolted to the chassis frame. It shall have 1/4" steel side wings that angle rearward.

Y\_\_N\_\_

**SIGHT WANDS**

Flexible sight wands shall be installed on the outer most corners of the front bumper.

Y\_\_N\_\_

**FRAMING**

Reinforced 14 gauge floor shall be welded to sill sides creating a solid foundation. Rear cross sills shall form a rigid box section when welded to floor panel and side members.

Y\_\_N\_\_

**DRIP MOLDING**

1/4" channel type gutters shall be located above side doors on both sides of the cab. They shall be utilized to direct water away from side doors and windows.

Y\_\_N\_\_

**CAB INSULATION**

Insulated, rigid urethane with R9 factor shall be installed on the roof interior, floor, rear exteriors of cab, interior walls and roof of engine compartment for heat and acoustics.

Y\_\_N\_\_

**REAR WINDOWS**

Tinted tempered safety glass in rubber locking channels shall be provided.

Y\_\_N\_\_

**WINDSHIELD**

A bronze tinted and laminated safety type windshield, in rubber locking channel for a water tight seal, shall be provided.

Y\_\_N\_\_

**WINDSHIELD WIPERS**

Single control electronic two-speed and intermittent windshield wipers shall be provided and shall include a one (1) gallon fluid reservoir. Two (2) wet-arm type 18" long wipers shall be mounted on 25" long wet arms with washers.

Y\_\_N\_\_

**CAB TILT SYSTEM**

Hydraulic Power-Packer™ cab tilt system with manual pump and 12V electric assist shall be provided. The system shall include a raise/lower cab control lever with automatic lock type latch and a single double-acting hydraulic cylinder with built-in velocity fuse for safety. It shall tilt the cabin to 60 degrees. The pump shall be mounted to the bracket over the right/curb side front axle, behind the cab.

Y\_\_N\_\_

**MUD FLAPS**

Front wheel mud flaps, each with anti-spray nylon brush material, shall be mounted on the front fenders with inner fender splash shields.

Y\_\_N\_\_

**LEFT & RIGHT SIDE ROLL DOWN WINDOW**

A roll down window shall be provided on the left side full door. It shall be fabricated of tinted, tempered safety glass and shall be electrically operated, with the control switch within easy reach of the driver.

Y\_\_N\_\_

**DOOR LOCKS**

Vertical axis for push/pull sliding type door locks, each with a keyless locking feature shall be provided all trucks will be keyed alike.

Y\_\_N\_\_

**SIDE MIRRORS**

Heated 16" x 7" single flat face, West Coast type mirror with stainless steel housing and arms shall be provided. Upper and lower "A" frame brackets, each with adjustable detents to allow for break-away movement when struck shall also be provided. (Set for 102" wide body).

Y\_\_N\_\_

**LOWER LEFT SPOT MIRROR**

A 8" round clamp-on convex mirror shall be provided for the lower left side of the vehicle. This mirror shall be in addition to the main mirror assembly and shall assist the driver in viewing the area rear of the cab.

Y\_\_N\_\_

**UPPER AND LOWER RIGHT SPOT MIRRORS**

A 8" round clamp-on convex mirror shall be provided for the both the upper and lower right side of the vehicle. These mirrors shall be in addition to the main mirror assembly and shall assist the driver in viewing the area rear of the cab.

Y\_\_N\_\_

**ELECTRONIC HORN**

Two single tone 12 volt electric horns shall be mounted behind the front bumper. They shall be activated by the steering wheel center button.

Y\_\_N\_\_

**CAB EXTERIOR LIGHTING**

Two (2) outboard mounted large, single rectangular (LSR) 5" x 8" halogen headlights shall be mounted in a chrome bezel and housing and shall include high-low beams. LED Five (5) amber ICC clearance lights shall be flush mounted over the windshield on the forward most position of the cab roof. LED Front turn signals shall be mounted behind the front bumper. Stop, tail, backup, turn signals and clearance lights shall be wired to separate circuits.

Y\_\_N\_\_

**DAYTIME RUNNING LIGHTS**

Daytime running lights shall be provided and installed as required.

Y\_\_N\_\_

**STROBE LIGHT**

One (1) amber LED strobe light shall be provided and mounted on the cab roof, front and center.

Y\_\_N\_\_

**DASH PANEL**

A molded and contoured plastic panels design with a textured, non-glare gray finish for durable scratch and corrosion resistant surface shall be provided, full width of the cab. Removable instrument and switch panels shall provide easy service access.

Y\_\_N\_\_

**DASH TRAY**

One (1) piece dash tray shall be provided the full width of the cab interior. The dash tray shall be fabricated of molded plastic under tray, to house cab HVAC ducts and chassis and cab electrical system components in modular assemblies.

Y\_\_N\_\_

**OVERHEAD CONSOLE**

An overhead console shall be provided. It shall provide DIN mounting with an AM/FM radio facing either side, four (4) document/clipboard storage compartments, two (2) each side, mounting locations for cab fans and two-way radio. It shall house the dome and map light and shall be full width of the cab. Ignition, battery and ground wires shall be routed and capped at the center of the console.

Y\_\_N\_\_

**DOME AND MAP LIGHTS**

Interior dome light and two (2) map lights shall be provided. The lights shall be located in the overhead console. The dome light shall be automatically operated by a door open switch or can be manually operated with an On/Off/Auto switch. The map lights shall have individual switches, left and right sides.

Y\_\_N\_\_

**SUN VISORS**

Left and right hand padded sun visors shall be provided, each with a map pocket. They shall be the same color as the cab interior vinyl. Standard interior color is Gray.

Y\_\_N\_\_

**ASHTRAY**

One (1) ashtray shall be mounted to the shift console.

Y\_\_N\_\_

**CIGAR LIGHTER**

A 12 volt power outlet with cigar lighter insert or power point plug shall be provided and installed within easy reach of the left side driver's position.

Y\_\_N\_\_

**INTERIOR TRIM**

The cab headliner and engine enclosure cover shall be padded vinyl. Standard interior color is Gray.

Y\_\_N\_\_

**GRAB HANDLE**

Two (2) black, right hand/passenger side and left hand/drivers side 14" long entry assist handles shall be installed on the inside of the cab, bolted to the "A" pillar post above the dash. And Two (2) alum. finished, right hand/passenger side and left hand/drivers side 17" long entry assist handles shall be installed on the outside of the cab, bolted behind each door.

Y\_\_N\_\_

**BEVERAGE CUP HOLDERS**

Two (2) beverage cup holders shall be provided and mounted to the shift console, within easy reach of the occupants.

Y\_\_N\_\_

**FRONT LEFT SIDE SEAT**

The front left side bucket seat shall be provided with 4" fore and aft adjustment. A shoulder/lap style assembly safety belt with automatic tensioning retractor and pushbutton release shall be provided. The safety belt assembly shall have an adjustable third point anchor to accommodate different size occupants, eliminating the strap crossing over the neck. Nylon weave **Comfort Latch seat belt shall be orange in color.**

Y\_\_N\_\_

**FRONT RIGHT SIDE SEAT**

The front right side seat shall be a "Atlas" mid-high back, air ride suspension, variable shock with 9" fore and aft adjustment and with 6" vertical adjustment. The seat shall be provided with a three-point retractable seat belt. The safety belt assembly shall have an adjustable third point anchor to accommodate different size occupants, eliminating the strap crossing over the neck and **Comfort Latch seat belt shall be orange in color.**

Y\_\_N\_\_

**SEAT UPHOLSTERY, BLACK CLOTH**

The left side seat shall be covered in black "Cordura Plus" cloth.

Y\_\_N\_\_

## SEAT UPHOLSTERY, BLACK CLOTH

The right side seat shall be covered in vocational black cloth.

Y\_\_N\_\_

## CAB AND CHASSIS WIRING

The cab and chassis shall be provided wire, color coded, engine stop control ignition switch on right side only, 12 volt negative ground, engine electronic diagnostic connector SAE J1587, two-way radio power feed and two (2) spare rocker switches identified in the cab, wired to the outside junction box on the rear of the left front fender.

Wiring harnesses shall include sealed twist-lock bulkhead connectors that provide positive, locking connections. These connectors are used extensively throughout the chassis electrical system. Hard shell grommets provide sealed routing of harness through cab and dash, bringing harness connections inside cab and eliminating exposure to outside elements.

Automatic reset circuit breakers shall be standard. The circuit breakers shall be conveniently located below the cab dash and shall provide protection from overloads. The breakers can be reset by de-energizing the circuit and correcting the fault. Dedicated electrical circuits shall be provided for truck body and electrical equipment installations. These circuits shall include a fused 20 amp ignition fed lead and all DOT lighting power.

The ignition fed circuit; battery fed circuits and spare leads shall be located in an outside twelve-lead weather sealed junction box located on left sill approximately 215" from center line of front axle. Ignition, battery and ground wires shall be routed to and capped in the overhead console. Must include a complete electrical schematic for the chassis.

## INSTRUMENTATION

Data-Link, Smart Gauges, round 3.38" speedometer and tachometer with message center display including: odometer, two (2) trip odometers, engine hour meter, clock with alarm shall be provided. The balance of the gauges shall be round 2" dual needle air pressure, fuel level, engine coolant temperature, engine oil pressure and voltmeter. An audible warning alarm shall be provided for the air pressure gauge and stop engine light. Indicator lights shall be provided for left and right turn arrows, high beam headlights, check transmission, check engine, stop engine, park brake, ABS malfunction and low air pressure. Warning alarms shall be dual tone, fast tone for engine shutdown, slow tone for low air pressure. Switches shall have raised bezels to reduce accidental actuation and integral ISO legend identification with back lighting. English text shall be on the actuator to identify each switch and where required function indicator light reflects system status. Back-up Alarm.

Y\_\_N\_\_

## TRANSMISSION OIL TEMPERATURE GAUGE

A transmission oil temperature gauge shall be provided and mounted on the right side of the cab interior, within easy view.

Y\_\_N\_\_

**HEATER/VENTILATION**

This system shall provide increased driver comfort by drawing in outside air and effectively distributing it through four (4) air ducts within the cab. Outside air shall enter through the heater opening in the floor of the cab (the opening shall be covered with a washable filter/screen), entering cab interior through the fresh air intake. As new air is forced in, old air is vented through rear of the cab and exhausts to the outside. A heater/defroster with three-speed blower; rated for 31,600 BTU/HR @ 100° F fresh air and recirculating outlets directed to floor on both sides of the cab shall be provided.

Y\_\_N\_\_

**AIR CONDITIONING**

An air conditioning system shall be installed with the condenser mounted in front of the radiator and the evaporator integral with the heater core.

Y\_\_N\_\_

**FAN**

A two-speed fan shall be provided. It shall be fixed and mounted in the overhear consol panel to provide additional air circulation for the driver.

Y\_\_N\_\_

**RADIO WITH CASSETTE AND CLOCK**

An AM/FM radio with cassette and clock shall be provided and mounted in an overhead area within easy reach of the driver.

Y\_\_N\_\_

**CHASSIS KEYED ALIKE**

All chassis in the fleet, ordered at the same time, shall be keyed alike with the standard code.

Y\_\_N\_\_

**CAB EXTERIOR PAINT**

Each chassis and cab shall be protected with the Acrylic Urethane (low VOC, high solids) paint system.

Y\_\_N\_\_

**CAB PAINT**

The cab exterior shall be decided by the City. A paint code or sample shall be provided by the city at the time of the award.

Y\_\_N\_\_

**INTERIOR PAINT**

The interior of the cab shall be painted the same as the exterior. The instrument cluster and warning lights shall be mounted in molded plastic bezels. The instrument cluster face, steering wheel, steering wheel column, rocker switches, instrumentation bezels and chassis controls shall be black.

Y\_\_N\_\_

**BUMPER PAINT**

The bumper shall be painted black.

Y\_\_N\_\_

**PAINT FRONT WHEELS**

The front wheels shall be painted with black or a powder coat finish shall be applied.

Y\_\_N\_\_

**PAINT REAR WHEELS**

The rear wheels shall be painted with black or a powder coat finish shall be applied.

Y\_\_N\_\_

Bid as an Option CNG ready Engine which include everything that is needed to run on CNG. Except for the tanks and any hardware to mount them.

Quote as an option warranties for engine, transmission, and other items that could apply.

Bid as an Option CNG ready Engine which include everything that is needed to run on CNG. Except for the tanks and any hardware to mount them.

The City reserves the right to consider delivery time, and to reject any and/or all bids and to waive any informalities in the bidding and to accept the best and most satisfactory bid. The City also reserves the right to waive individual specifications if it is satisfied that the bid otherwise meets the performance standards set by these specifications. A \$50.00 per day penalty will be charged to the bidder for delivery beyond specified delivery date of the chassis. A demonstration may be required after the bids have been opened to determine operator's preference for safety and comfort needs.

The contract will be awarded to the lowest responsible bidder(s) complying with the specifications and bidding regulations, provided such bid is reasonable and is in the best interests of the City to accept. The City, however, reserves the right to reject any and all bids and to waive any informalities in bids received. In evaluating the proposals, the City may also consider any or all of the following: • Compliance with specification, • Proposal prices, listed separately if requested, as well as a lump sum total, • Time of completion/delivery, • Warranty terms, • Compatibility with existing refuse trucks, • Bidder's responsibility based on, but not limited to: – Ability, capacity, organization, technical qualifications and skill to perform the contract or provide the services required, – References, judgment, experience, efficiency and stability, – Whether the contract can be performed within the time specified, – Quality of performance of previous contracts or services, – Location of nearest factory authorized warranty repair facility or parts dealership. All other elements or factors, whether or not specifically provided for in this contract, which would affect the final cost to, and the benefits to be derived by, the City will be considered in determining the award of the contract. The final award decision will be based on the best interests of the City

The City of St. Louis has the Right to  
change the quantities for this  
Requisition depending on Funds  
available.

To be included in Specification

Will be a complete drawing of the chassis

With all lengths, heights, and weights

Also to included turning radius of the chassis

Which will included wall to wall.

City of St. Louis  
Equipment Services Division

Equipment Specification

Fuel Data Module with GPS Option

To be supplied by the Chassis Dealer:

The vehicle must come equipped with the AssetWorks FuelFocus Vehicle Data Module System FJ3 installed with the GPS option. (NO exception to be taken)

Information about this product and related costs for these kits can be received through AssetWorks by contacting:

E-Mail: [fuelsales@assetworks.com](mailto:fuelsales@assetworks.com)

This will be the camera system that is to be installed in each truck after the truck is assembled.

*(6 Camera) PRO-VISION® 4 Channel Solid State Video Recording System Includes:*

- DVR-704CD Base KIT with No Cameras
- PC-1107 VLS Series™ Night Vision Camera KIT - Black ... (Includes: Camera, Housing and 10m AV Cable) – **SIDE CAMERA**
- PC-1107 VLS Series™ Night Vision Camera KIT - Black ... (Includes: Camera, Housing and 10m AV Cable) – **SIDE CAMERA**
- DVR-131 Windshield / Deck Camera KIT – **FORWARD CAMERA**
- PC-1110W VLI Series™ Wireless Night Vision Camera and Receiver KIT – **REAR WIRELESS CAMERA**
- DVR-750 GPS Antenna
- DVR-710 Enhanced Event Marker Button
- PM-1694S 9.0" Quad View Touch Screen LCD Monitor KIT
- DVR-123 Standard / Roof Night Vision Camera KIT - 28 LEDs – **MAST CAMERA**
- DVR-123 Standard / Roof Night Vision Camera KIT - 28 LEDs – **HOPPER CAMERA**
- PD-1456 Video Splitter Cable
- PD-1456 Video Splitter Cable
- PD-1456 Video Splitter Cable
- PX-1072 2 Camera Control Device
- PX-1072 2 Camera Control Device
- Solid State DVR (Included in DVR-704CD)
- 64GB Class 10 SDXC Memory Card (Included in DVR-704CD)
- Lockable Cage (Included in DVR-704CD)
- Software & Guides (Included in DVR-704CD)

## **Pressure Pro's Tire Pressure Monitoring Equipment To be installed on trucks**

*Part Number HDGRM10*

**Pressure Pro's 10 Wheel Monitor provides users with real time tire pressure and temperature information and alerts direct to the driver or operator in-cab. Monitoring up to 10 positions on a vehicle, this Monitor is commonly used for monitoring autos, busses, heavy equipment, emergency vehicles, agriculture equipment, straight and box trucks and more. The Monitor comes standard with built in RS232 communication protocols and data logging capabilities.**

### **SPECIFICATIONS**

Sensor Transmit Range Approx. 300 feet line-of-sight  
Operating Frequency 433.92 MHz FM  
Monitor Power Requirements 12VDC; 125 mA in standby, <250mA with LEDs on.  
Monitor Dimensions 6.5" W x 3.0" H x 0.5" D  
Monitor Weight 4 oz.  
Monitor Power Cord Plug Type USB Mini B – 8 ft. cord  
Monitor Tire Positions 1 to 10 wheel positions  
Sensor Alarm Trigger Settings 12.5% and 25% below the original tire inflation level;  
Upper alert variable by user from 10% to 45% (or off)  
High temperature alert at 194° F  
RS232 Capable Real time serial packet data  
Data logging

Pressure Pro Sensors continue to lead the TPMS market in performance, durability, accuracy and reliability. Touting an average life of 5+ years, they lead the market in lifespan and value. Sampling tire pressure every 7 seconds and providing immediate alerts to low and high pressure situations and high temperature occurrences, Pressure Pro Sensors report continuous tire performance information via RF signal directly to your Pressure Pro in-cab Monitor, integrated partner displays or to a remote management system.

### **SPECIFICATIONS**

Sensor Transmit Range Approx. 300 feet (Line-of-Sight)  
Conformity FCC, IC, CE, RoHS  
Operating Frequency 433.92 MHz  
Temperature Range -40° to 120°C / 248F  
Sensor Weight 2/3 oz. or 17 grams  
Sensor Dimensions 1.01" H x 1.11" Dia.  
Power 3V Lithium Coin Cell Battery  
Internal, non-rechargeable  
Sensor Pressure Range  
Survivability 0 to 299 PSI  
Operation 8 to 215 PSI  
Sensor Low Voltage Shutdown 2.2 Volts  
Accuracy ±3%  
Tire Type/Installation Installs onto standard valve stem

## **Additional Equipment per truck**

1. One (1) 5 lb. Fire Extinguisher  
One (1) 20 lb. Fire Extinguisher  
Class A B & C

2. First Aid Kits Metal Case  
DOT Approved

3. Day/Night Road Warning Kit  
Dot Approved

These items are not per truck quantities as listed.

4. FILTERS: One complete set of filters for  
all systems of the chassis and body except for the Air Filter.

5. Spare tires two front tires on rims, and two rear tires on rims.

**Service Manuals &  
Diagnostic software**  
To be included in the bid

Please list the cost separately for the service, parts manuals/CD and diagnostic software that is need for this bid. These items must cover at least ten (10) years. So if there is a yearly cost for the subscription list it as a yearly cost. The diagnostic software must cover the complete vehicle (i.e. engine, transmission, chassis, brakes and body if it applies).

<u>ITEM</u>	<u>TERM</u>	<u>COST</u>
PARTS	_____	_____
SERVICE	_____	_____
BODY	_____	_____
CHASSIS	_____	_____
ENGINE	_____	_____
TRANSMISSION	_____	_____
BRAKES	_____	_____
=====	_____	_____
=====	_____	_____

Also list any hardware and costs that are needed for any of these items listed above. This should include scanners and cabling etc.

Any and all of these costs should be added to your bid if we need these items to repair this vehicle you are bidding on.

	<b>Toughbook 31 –Fully Rugged</b>
Testing certifications	MIL-STD810G, IP65, MIL-STD 461F, ANSI 12.12
OS:	Windows 8 Pro
CPU	Intel i5-5300U vPro 2.3GHz (2.9max) 4GB RAM (up to 16GB), 3MB cache
GPU	ATI 5500, 1785MB VRAM
Display size	13.1" Anti-glare LED Touchscreen
Disk space	500GB 7200rpm w/heater *128GB,256GB, and 512GB SSD available
Keyboard	Waterproof, Backlit 87 key
DVD/RW	Optional Super MULTI DVD
Battery	18 hours (27 with optional battery) 3.5 hour charge time
Interface/ports	USB 3.0 (1) USB 2.0 (2) HDMI, VGA Express/PC/SD card Serial port (9 pin) *Optional IEEE (FireWire) RJ-45 Network Cable (2) Ext. Antenna – 50ohm Mini-jack stereo/microphone Docking port (80 pin)
Options	4GLTE Wireless w/ satellite GPS Intel dual-band wireless AC7265 802.11a/b/g/n/ac Bluetooth v4.0

Expansion	2 <sup>nd</sup> battery
Weight	7.9 lbs.
Warranty	3 years

# REFUSE TRUCK CHASSIS

Cab-Over Design  
Right Hand Drive Only

## REFUSE CHASSIS

A cab and chassis shall be provided, designed and engineered specifically for an automated refuse collection service application. Low entry right hand drive only.

Y\_\_N\_\_

## ENGINE

In-line six-cylinder turbo charged diesel, air to air aftercooler with electronic control system(s) with advanced diagnostics, prognostic and programming options. Engine is rated for 300 + HP at 2200 RPM, Torque rating 860 + lbs/ft. at 1300 RPM. Oil filter, full flow, spin-on type, engine mounted. Coolant water filter, spin-on type. Must have engine block heater. **Also to include one (1) complete set of diagnostic software for this engine. See Last Page**

Y\_\_N\_\_

## ENGINE PROTECTION

Automatic type, with 30 second warning prior to shutdown for low engine oil psi, low coolant level, high coolant temperature and high transmission temperature.

Y\_\_N\_\_

## DIPSTICKS

Engine and transmission oil dipstick(s) routed behind the cab. Marked and color coded for quick identification and readily accessible without tilting cab with cables attached. Must have chain and marked dipsticks and fill caps.

Y\_\_N\_\_

## ENGINE OIL CLEANING SYSTEM

A Spinner II CS or equal engine oil cleaning system shall be provided.

Y\_\_N\_\_

## AIR COMPRESSOR

A 15.7 CFM air compressor; direct coupled drive, shall be piped directly through the engine air intake plumbing.

Y\_\_N\_\_

## CRANKSHAFT ADAPTER

A F.E.P.T.O. 1260/1310 series crankshaft adapter shall be supplied. This will not be used if the hydraulic would extend past the front bumper. Then you must include a transmission P.T.O.

Y\_\_N\_\_

**ALTERNATOR**

A 12 volt, negative ground, Delco 21SI 160 amp, belt driven alternator shall be provided. It shall provide high output at idle required for fuel injection electronics and prolonged battery life.

Y\_\_N\_\_

**STARTER**

A 12 volt, negative ground, Delco-Remy 37 MT type 300 starter with Posi-tork motor shall be provided.

Y\_\_N\_\_

**COOLING SYSTEM**

Radiator shall have a heavy-duty cross flow design and construction with bolted tanks and two-row core.

Y\_\_N\_\_

**COOLANT**

Radiator coolant shall provide protection to -40 degrees Fahrenheit below zero. The ethylene glycol engine coolant shall meet the Society of Automotive Engineers classification SAE J814C and J1034 and ASTM D3306, D4985 and D4340.

Y\_\_N\_\_

**OVERFLOW TANK**

A coolant recovery overflow tank with a capacity of 1 gallon shall be provided and installed.

Y\_\_N\_\_

**CHARGE AIR COOLER**

Heavy duty "Ultra seals" type air cooler shall have an aluminum core and cast aluminum tank construction. Silicone rubber molded hoses with stainless steel constant torque type hose clamps, solid mounted in front of radiator shall also be provided.

Y\_\_N\_\_

**RAIN BONNET**

A 90 degree rain bonnet with water/snow separator shall be provided.

Y\_\_N\_\_

**AIR INTAKE STACK**

A painted steel air intake stack shall be provided and installed.

Y\_\_N\_\_

**AIR FILTER MINDER**

An "Air Filter Minder" shall be located on the left side of the dash.

Y\_\_N\_\_

**BATTERIES**

Three (3) Group 31, low maintenance batteries, with a combined rating of 2775 CCA, 925 CCA each, shall be provided. Battery cables shall be 0000 sized and shall have molded, color-coded ends. They shall be covered with heat resistant corrugated plastic and mounted on shock pads.

Y\_\_N\_\_

**BATTERY BOX**

A 17" wide x 12" tall x 25" deep, two-piece fabricated steel battery box with lockable cover and two (2) hand holes, one (1) each side of cover shall be provided. Shall include Start Studs.

Y\_\_N\_\_

**It shall be mounted per the body company's requirements outside of frame rail.**

**DISCONNECT SWITCH**

A battery disconnect switch that will disconnect the positive cable at the batteries. This switch will be able to be activated from several locations on the truck by an emergency stop button. The switch shall be wire to the clearance lights so that they are illuminated anytime the switch is in the on position.

Y\_\_N\_\_

**EXHAUST**

A stainless steel catalyst muffler shall be provided on the left side/ street. It shall withstand a maximum operating temperature up to 1250 degrees Fahrenheit and shall be mounted vertically, outboard and above the frame behind the cab.

Y\_\_N\_\_

A bright stainless steel heat shield shall be provided.

Y\_\_N\_\_

**TAILPIPE**

A 48" tall tailpipe with curved elbow outlet shall be provided.

Y\_\_N\_\_

**FUEL TANK**

A 50 gallon capacity, FHWA approved fuel tank shall be provided. Top of tank draw and return fuel line ports, steel braided hoses, vented cap shall also be provided. Drain plug shall be provided and located in the bottom center of the tank.

**The tank shall be mounted as required by the body company.**

Y\_\_N\_\_

**FILL NECK**

A 2" fill neck shall be provided on the right side mounted fuel tank with the cap green in color.

Y\_\_N\_\_

**FUEL/WATER SEPARATOR**

A 60 GPM fuel/water separator shall be provided and installed.

Y\_\_N\_\_

**TRANSMISSION**

Allison 3500RDS, five speed automatic electronic shift type flywheel mounted transmission shall be provided. It includes a 10-bolt PTO mounting pad on both sides, with internal oil filter, push button shift control and integral oil cooler in radiator. **Also to include one (1) complete set of diagnostic software for this transmission.**

Y\_\_N\_\_

**TRANSMISSION PROGRAMMING**

Allison five-speed Group 105, vocation package #145 transmission programming for Refuse Special 1 applications shall be provided.

Y\_\_N\_\_

**TRANSMISSION SHIFTER**

A push-button style keypad shift controller with illuminated digital display, six (6) push buttons (Drive, Neutral, Reverse, Downshift, Upshift and Mode), low oil level indicator and gear/mode selection display shall be provided. It shall be mounted, **for easy access with body company joystick mounted**, on the driver's side in dash preferably. A dash mounted "Check Trans" light shall also be provided.

Y\_\_N\_\_

**TRANSMISSION OIL LEVEL SENSOR**

A transmission oil level sensor shall be provided and installed. A warning light on the shifter shall illuminate and indicate the number of quarts low, when a low oil level is sensed.

Y\_\_N\_\_

**FORCED NEUTRAL SYSTEM**

A forced neutral system ("AG" Function) shall be installed. It shall have three (3) phases, "Stage/Engage", "Activate" and "Deactivate". Both the "Neutral Interlock" and "Auto Neutral" switches must be in the "On" position before activation.

**FRONT AXLE**

A wide track, 20,000# capacity front axle. The axle shall be designed to take high abuse typically associated with heavy refuse.

Y\_\_N\_\_

**FRONT BRAKES**

Air operated "S"-cam type heavy duty front brakes shall be provided with extended service "ES" linings, cast iron drums, dust shields, automatic slack adjusters and ABS wheel end sensors.

Y\_\_N\_\_

**FRONT BRAKE CHAMBERS**

Brake chambers with stroke indicators shall be provided and installed on the front axle.

Y\_\_N\_\_

**AUTOMATIC SLACK ADJUSTERS**

Front axle automatic slack adjusters shall be provided.

Y\_\_N\_\_

**FRONT SUSPENSION**

Shall be provided with a 20,000# capacity at ground for a smoother ride.

Y\_\_N\_\_

**SHOCK ABSORBERS**

The front suspension shall include two (2) heavy duty hydraulically dampened "double acting" type shock absorbers.

Y\_\_N\_\_

**FRONT TIRES**

Two (2) 315/80R22.5 LR(L) 20 ply radial tubeless type tires shall be provided. Each tire shall have a capacity of 10,000 pounds and shall provide a total capacity of 20,000 pounds.

Y\_\_N\_\_

**FRONT WHEELS**

Two (2) 22.5" x 9.00" ten (10) hole 11.25" B.C. hub piloted steel wheels with two (2) hand holes shall be provided. Each wheel shall be rated at 10,000 pounds, for a combined rating of 20,000 pounds. Each rim center is piloted to align onto the axle hub for more positive wheel centering.

Y\_\_N\_\_

**FRONT WHEEL SEALS**

Oil lubricated, shall be provided.

Y\_\_N\_\_

**FRONT AXLE HUBS AND DRUMS**

The front axle shall be equipped with 16.5" x 6" hub pilot cast iron hubs and drums.

Y\_\_N\_\_

**RIGHT HAND STEERING**

The vehicle shall have right hand steering capabilities only. No left hand steer components shall be supplied. MUST BE FACTORY INSTALLED WITH NO MODIFICATIONS OR CONVERSIONS ALLOWED.

Y\_\_N\_\_

**STEERING GEAR**

An integral power assist type steering gear shall be frame mounted. A remote reservoir with sight glass and replaceable filter shall also be provided. Steering linkages shall utilize full ball-joints. Grease fittings shall be included on tie rod ends, drag links and intermediate shaft(s).

Y\_\_N\_\_

**STEERING COLUMN**

Tilt / Telescopic steering column; headlight dimmer switch mounted on column; self-canceling turn signal switch integral to steering column and 4-way hazards lever.

Y\_\_N\_\_

**STEERING WHEEL**

Steering wheel is black; soft touch, two spoke type with center horn button.

Y\_\_N\_\_

**SINGLE REAR AXLE**

On-Highway rating shall be 30,000 pound capacity, single axle (Ratio for 60 mph).

Y\_\_N\_\_

**REAR BRAKES**

Air operated cam brakes with non-asbestos ES (*Extended Service*) linings, cast iron drums, dust shields, spring type "piggy-back" park brake chambers all rear wheels, anti-compound brake system, automatic slack adjusters; brake chambers with stroke indicators, ABS wheel end sensors.

Y\_\_N\_\_

**AUTOMATIC SLACK ADJUSTERS**

Single rear axle automatic slack adjusters shall be provided.

Y\_\_N\_\_

**REAR SUSPENSION**

Rear Suspension @ 30,000# -single axle drive with dual marshmallow springs and parallelogram torque beams or air ride.

**NO Leaf springs.**

Y\_\_N\_\_

**REAR TIRES**

Four (4) 315/80R22.5 LR(L) 20 ply radial tubeless type tires Mud & Snow Off-Road shall be provided. Each tire shall have a capacity of 8,255 pounds and shall provide a total capacity of 33,020 pounds.

Y\_\_N\_\_

**REAR WHEELS**

Four (4) 22.5" x 9.00" ten (10) hole 11.25" B.C hub piloted steel disc wheels with two (2) hand holes shall be provided. The rim center is piloted to align onto the axle hub for more positive wheel centering.

Y\_\_N\_\_

**REAR WHEEL SEALS**

Oil seals, oil lubricated, shall be provided.

Y\_\_N\_\_

**REAR AXLE OIL**

The rear axle shall be provided with 85W140 lubricant.

Y\_\_N\_\_

**REAR AXLE HUBS AND DRUMS**

The rear axles shall be equipped with 16.5X7" hub pilot cast iron hubs and drums.

Y\_\_N\_\_

**AIR SYSTEM**

The air tanks shall be located inboard of frame rails. A low pressure warning light and alarm when air brake system pressure drops below 60 PSI shall also be provided.

Y\_\_N\_\_

**ABS SYSTEM**

Bendix, four-channel cab mount system with wheel end sensors, dash mounted indicator lamp and code check switch shall be provided. The 4S/4M ABS system configuration maintains four (4) wheel end sensors and four (4) electronically controlled modulator valves, one (1) at each wheel end or two (2) per axle. Data links shall be configured for SAE J1587/1708. **Also to include one (1) complete set of diagnostic software for this ABS.**

Y\_\_N\_\_

**AIR DRAIN VALVES**

Automatic air drain valves shall be installed on all tanks. Each shall eject moisture and contaminants from the reservoir in which it is connected and shall operate automatically and shall not require manual assistance or control lines from other sources. Each drain valve shall have a die cast aluminum body and cover and shall be mounted either in the bottom of the reservoir using the top port of the drain valve or in the end of an end drain reservoir using the side port of the valve. Each drain valve shall also include a 1/4" male pipe adapter.

Y\_\_N\_\_

## AIR DRAIN PULL CORDS

Manual 24" air drain pull cords shall be installed on all tanks.

Y\_\_N\_\_

## AIR TANKS

Steel air tanks shall be provided and installed on the single axle chassis. The air tanks shall be located in the most accessible position determined by the factory/body company. It shall have minimum air reservoir capacity for the chassis and body.

Y\_\_N\_\_

## AIR DRYER

An air dryer shall be provided. It shall include a 12 volt heated exhaust valve, integral purge source and eight-bolt cartridge replacement type desiccant filter.

Y\_\_N\_\_

## FRAME

Straight full-depth, formed "C" shaped side member rails shall be provided, measuring 11" x 3-1/2" x 3/8" thick @ 21.5 lbs. per foot, heat treated steel 110,000 psi minimum yield and, rated RBM: 2,047,000 in. lbs. minimum per rail from front axle to end of frame. A 25' standard length ladder type frame with 34" nominal width outside frame rails shall be fabricated and reinforced tubular cross members, fastened with torque prevailing SAE Grade 8 flanged head nuts and bolts with no projections above the top flange in identified CT. No rivets shall be in the ladder frame assembly.

Y\_\_N\_\_

## PROPSHAFTS

Dana-Spicer "Life Series" SPL 140 main shaft with bolted half round bearing yokes on transmission and axle U-joints.

Y\_\_N\_\_

## WHEELBASE/AFTERFRAME

The **wheelbase shall be 164 inches** from the front axle center line to the center of the rear axle, with an after frame (rear frame overhang) of 85 inches. The body manufacturer shall supply these dimensions. **The chassis manufacturer shall be responsible for obtaining the correct dimensions to facilitate the mounting of the body.**

Y\_\_N\_\_

## EXTENDED BUMPER

A standard bumper shall be provided the full width of the cab. It shall be fabricated of 1/4" thick steel and bolted to the chassis frame. It shall have 1/4" steel side wings that angle rearward.

Y\_\_N\_\_

## SIGHT WANDS

Flexible sight wands shall be installed on the outer most corners of the front bumper.

Y\_\_N\_\_

**FRAMING**

Reinforced 14 gauge floor shall be welded to sill sides creating a solid foundation. Rear cross sills shall form a rigid box section when welded to floor panel and side members.

Y\_\_N\_\_

**DRIP MOLDING**

1/4" channel type gutters shall be located above side doors on both sides of the cab. They shall be utilized to direct water away from side doors and windows.

Y\_\_N\_\_

**CAB INSULATION**

Insulated, rigid urethane with R9 factor shall be installed on the roof interior, floor, rear exteriors of cab, interior walls and roof of engine compartment for heat and acoustics.

Y\_\_N\_\_

**REAR WINDOWS**

Tinted tempered safety glass in rubber locking channels shall be provided.

Y\_\_N\_\_

**WINDSHIELD**

A bronze tinted and laminated safety type windshield, in rubber locking channel for a water tight seal, shall be provided.

Y\_\_N\_\_

**WINDSHIELD WIPERS**

Single control electronic two-speed and intermittent windshield wipers shall be provided and shall include a one (1) gallon fluid reservoir. Two (2) wet-arm type 18" long wipers shall be mounted on 25" long wet arms with washers.

Y\_\_N\_\_

**CAB TILT SYSTEM**

Hydraulic Power-Packer™ cab tilt system with manual pump and 12V electric assist shall be provided. The system shall include a raise/lower cab control lever with automatic lock type latch and a single double-acting hydraulic cylinder with built-in velocity fuse for safety. It shall tilt the cabin to 60 degrees. The pump shall be mounted to the bracket over the right/curb side front axle, behind the cab.

Y\_\_N\_\_

**MUD FLAPS**

Front wheel mud flaps, each with anti-spray nylon brush material, shall be mounted on the front fenders with inner fender splash shields.

Y\_\_N\_\_

**LEFT & RIGHT SIDE ROLL DOWN WINDOW**

A roll down window shall be provided on the left side full door. It shall be fabricated of tinted, tempered safety glass and shall be electrically operated, with the control switch within easy reach of the driver.

Y\_\_N\_\_

**DOOR LOCKS**

Vertical axis for push/pull sliding type door locks, each with a keyless locking feature shall be provided all trucks will be keyed alike.

Y\_\_N\_\_

**SIDE MIRRORS**

Heated 16" x 7" single flat face, West Coast type mirror with stainless steel housing and arms shall be provided. Upper and lower "A" frame brackets, each with adjustable detents to allow for break-away movement when struck shall also be provided. (Set for 102" wide body).

Y\_\_N\_\_

**LOWER LEFT SPOT MIRROR**

A 8" round clamp-on convex mirror shall be provided for the lower left side of the vehicle. This mirror shall be in addition to the main mirror assembly and shall assist the driver in viewing the area rear of the cab.

Y\_\_N\_\_

**UPPER AND LOWER RIGHT SPOT MIRRORS**

A 8" round clamp-on convex mirror shall be provided for the both the upper and lower right side of the vehicle. These mirrors shall be in addition to the main mirror assembly and shall assist the driver in viewing the area rear of the cab.

Y\_\_N\_\_

**ELECTRONIC HORN**

Two single tone 12 volt electric horns shall be mounted behind the front bumper. They shall be activated by the steering wheel center button.

Y\_\_N\_\_

**CAB EXTERIOR LIGHTING**

Two (2) outboard mounted large, single rectangular (LSR) 5" x 8" halogen headlights shall be mounted in a chrome bezel and housing and shall include high-low beams. LED Five (5) amber ICC clearance lights shall be flush mounted over the windshield on the forward most position of the cab roof. LED Front turn signals shall be mounted behind the front bumper. Stop, tail, backup, turn signals and clearance lights shall be wired to separate circuits.

Y\_\_N\_\_

**DAYTIME RUNNING LIGHTS**

Daytime running lights shall be provided and installed as required.

Y\_\_N\_\_

**STROBE LIGHT**

One (1) amber LED strobe light shall be provided and mounted on the cab roof, front and center.

Y\_\_N\_\_

**DASH PANEL**

A molded and contoured plastic panels design with a textured, non-glare gray finish for durable scratch and corrosion resistant surface shall be provided, full width of the cab. Removable instrument and switch panels shall provide easy service access.

Y\_\_N\_\_

**DASH TRAY**

One (1) piece dash tray shall be provided the full width of the cab interior. The dash tray shall be fabricated of molded plastic under tray, to house cab HVAC ducts and chassis and cab electrical system components in modular assemblies.

Y\_\_N\_\_

**OVERHEAD CONSOLE**

An overhead console shall be provided. It shall provide DIN mounting with an AM/FM radio facing either side, four (4) document/clipboard storage compartments, two (2) each side, mounting locations for cab fans and two-way radio. It shall house the dome and map light and shall be full width of the cab. Ignition, battery and ground wires shall be routed and capped at the center of the console.

Y\_\_N\_\_

**DOME AND MAP LIGHTS**

Interior dome light and two (2) map lights shall be provided. The lights shall be located in the overhead console. The dome light shall be automatically operated by a door open switch or can be manually operated with an On/Off/Auto switch. The map lights shall have individual switches, left and right sides.

Y\_\_N\_\_

**SUN VISORS**

Left and right hand padded sun visors shall be provided, each with a map pocket. They shall be the same color as the cab interior vinyl. Standard interior color is Gray.

Y\_\_N\_\_

**ASHTRAY**

One (1) ashtray shall be mounted to the shift console.

Y\_\_N\_\_

**CIGAR LIGHTER**

A 12 volt power outlet with cigar lighter insert or power point plug shall be provided and installed within easy reach of the left side driver's position.

Y\_\_N\_\_

**INTERIOR TRIM**

The cab headliner and engine enclosure cover shall be padded vinyl. Standard interior color is Gray.

Y\_\_N\_\_

**GRAB HANDLE**

Two (2) black, right hand/passenger side and left hand/drivers side 14" long entry assist handles shall be installed on the inside of the cab, bolted to the "A" pillar post above the dash. And Two (2) alum. finished, right hand/passenger side and left hand/drivers side 17" long entry assist handles shall be installed on the outside of the cab, bolted behind each door.

Y\_\_N\_\_

**BEVERAGE CUP HOLDERS**

Two (2) beverage cup holders shall be provided and mounted to the shift console, within easy reach of the occupants.

Y\_\_N\_\_

**FRONT LEFT SIDE SEAT**

The front left side bucket seat shall be provided with 4" fore and aft adjustment. A shoulder/lap style assembly safety belt with automatic tensioning retractor and pushbutton release shall be provided. The safety belt assembly shall have an adjustable third point anchor to accommodate different size occupants, eliminating the strap crossing over the neck. Nylon weave **Comfort Latch seat belt shall be orange in color.**

Y\_\_N\_\_

**FRONT RIGHT SIDE SEAT**

The front right side seat shall be a "Atlas" mid-high back, air ride suspension, variable shock with 9" fore and aft adjustment and with 6" vertical adjustment. The seat shall be provided with a three-point retractable seat belt. The safety belt assembly shall have an adjustable third point anchor to accommodate different size occupants, eliminating the strap crossing over the neck and **Comfort Latch seat belt shall be orange in color.**

Y\_\_N\_\_

**SEAT UPHOLSTERY, BLACK CLOTH**

The left side seat shall be covered in black "Cordura Plus" cloth.

Y\_\_N\_\_

## **SEAT UPHOLSTERY, BLACK CLOTH**

The right side seat shall be covered in vocational black cloth.

Y\_\_N\_\_

## **CAB AND CHASSIS WIRING**

The cab and chassis shall be provided wire, color coded, engine stop control ignition switch on right side only, 12 volt negative ground, engine electronic diagnostic connector SAE J1587, two-way radio power feed and two (2) spare rocker switches identified in the cab, wired to the outside junction box on the rear of the left front fender.

Wiring harnesses shall include sealed twist-lock bulkhead connectors that provide positive, locking connections. These connectors are used extensively throughout the chassis electrical system. Hard shell grommets provide sealed routing of harness through cab and dash, bringing harness connections inside cab and eliminating exposure to outside elements.

Automatic reset circuit breakers shall be standard. The circuit breakers shall be conveniently located below the cab dash and shall provide protection from overloads. The breakers can be reset by de-energizing the circuit and correcting the fault. Dedicated electrical circuits shall be provided for truck body and electrical equipment installations. These circuits shall include a fused 20 amp ignition fed lead and all DOT lighting power.

The ignition fed circuit; battery fed circuits and spare leads shall be located in an outside twelve-lead weather sealed junction box located on left sill approximately 215" from center line of front axle. Ignition, battery and ground wires shall be routed to and capped in the overhead console. Must include a complete electrical schematic for the chassis.

## **INSTRUMENTATION**

Data-Link, Smart Gauges, round 3.38" speedometer and tachometer with message center display including: odometer, two (2) trip odometers, engine hour meter, clock with alarm shall be provided. The balance of the gauges shall be round 2" dual needle air pressure, fuel level, engine coolant temperature, engine oil pressure and voltmeter. An audible warning alarm shall be provided for the air pressure gauge and stop engine light. Indicator lights shall be provided for left and right turn arrows, high beam headlights, check transmission, check engine, stop engine, park brake, ABS malfunction and low air pressure. Warning alarms shall be dual tone, fast tone for engine shutdown, slow tone for low air pressure. Switches shall have raised bezels to reduce accidental actuation and integral ISO legend identification with back lighting. English text shall be on the actuator to identify each switch and where required function indicator light reflects system status. Back-up Alarm.

Y\_\_N\_\_

## **TRANSMISSION OIL TEMPERATURE GAUGE**

A transmission oil temperature gauge shall be provided and mounted on the right side of the cab interior, within easy view.

Y\_\_N\_\_

**HEATER/VENTILATION**

This system shall provide increased driver comfort by drawing in outside air and effectively distributing it through four (4) air ducts within the cab. Outside air shall enter through the heater opening in the floor of the cab (the opening shall be covered with a washable filter/screen), entering cab interior through the fresh air intake. As new air is forced in, old air is vented through rear of the cab and exhausts to the outside. A heater/defroster with three-speed blower; rated for 31,600 BTU/HR @ 100° F fresh air and recirculating outlets directed to floor on both sides of the cab shall be provided.

Y\_\_N\_\_

**AIR CONDITIONING**

An air conditioning system shall be installed with the condenser mounted in front of the radiator and the evaporator integral with the heater core.

Y\_\_N\_\_

**FAN**

A two-speed fan shall be provided. It shall be fixed and mounted in the overhear consol panel to provide additional air circulation for the driver.

Y\_\_N\_\_

**RADIO WITH CASSETTE AND CLOCK**

An AM/FM radio with cassette and clock shall be provided and mounted in an overhead area within easy reach of the driver.

Y\_\_N\_\_

**CHASSIS KEYED ALIKE**

All chassis in the fleet, ordered at the same time, shall be keyed alike with the standard code.

Y\_\_N\_\_

**CAB EXTERIOR PAINT**

Each chassis and cab shall be protected with the Acrylic Urethane (low VOC, high solids) paint system.

Y\_\_N\_\_

**CAB PAINT**

The cab exterior shall be decided by the City. A paint code or sample shall be provided by the city at the time of the award.

Y\_\_N\_\_

**INTERIOR PAINT**

The interior of the cab shall be painted the same as the exterior. The instrument cluster and warning lights shall be mounted in molded plastic bezels. The instrument cluster face, steering wheel, steering wheel column, rocker switches, instrumentation bezels and chassis controls shall be black.

Y\_\_N\_\_

**BUMPER PAINT**

The bumper shall be painted black.

Y\_\_N\_\_

**PAINT FRONT WHEELS**

The front wheels shall be painted with black or a powder coat finish shall be applied.

Y\_\_N\_\_

**PAINT REAR WHEELS**

The rear wheels shall be painted with black or a powder coat finish shall be applied.

Y\_\_N\_\_

Bid as an Option CNG ready Engine which include everything that is needed to run on CNG. Except for the tanks and any hardware to mount them.

Quote as an option warranties for engine, transmission, and other items that could apply.

Bid as an Option CNG ready Engine which include everything that is needed to run on CNG. Except for the tanks and any hardware to mount them.

The City reserves the right to consider delivery time, and to reject any and/or all bids and to waive any informalities in the bidding and to accept the best and most satisfactory bid. The City also reserves the right to waive individual specifications if it is satisfied that the bid otherwise meets the performance standards set by these specifications. A \$50.00 per day penalty will be charged to the bidder for delivery beyond specified delivery date of the chassis. A demonstration may be required after the bids have been opened to determine operator's preference for safety and comfort needs.

The contract will be awarded to the lowest responsible bidder(s) complying with the specifications and bidding regulations, provided such bid is reasonable and is in the best interests of the City to accept. The City, however, reserves the right to reject any and all bids and to waive any informalities in bids received. In evaluating the proposals, the City may also consider any or all of the following: • Compliance with specification, • Proposal prices, listed separately if requested, as well as a lump sum total, • Time of completion/delivery, • Warranty terms, • Compatibility with existing refuse trucks, • Bidder's responsibility based on, but not limited to: – Ability, capacity, organization, technical qualifications and skill to perform the contract or provide the services required, – References, judgment, experience, efficiency and stability, – Whether the contract can be performed within the time specified, – Quality of performance of previous contracts or services, – Location of nearest factory authorized warranty repair facility or parts dealership. All other elements or factors, whether or not specifically provided for in this contract, which would affect the final cost to, and the benefits to be derived by, the City will be considered in determining the award of the contract. The final award decision will be based on the best interests of the City



CITY OF ST. LOUIS  
DEPARTMENT OF FINANCE  
OFFICE OF THE SUPPLY COMMISSIONER

CAROL L. SHEPARD  
SUPPLY COMMISSIONER

FRANCIS G. SLAY  
MAYOR

1200 MARKET ST RM 324  
SAINT LOUIS MO 63103  
PHONE 314-622-4580  
FAX 314-622-4141

**ATTENTION BIDDERS**

*Please carefully review all information requested in this bid package.*

*Failure to submit requested samples, literature or any other requested information may result in disqualification of your bid or any portion of your bid.*

*Also the reasons indicated below may disqualify your bid. If you have any questions, call the buyer indicated in this bid package.*

**This form must be returned with your bid.**

- Two or more bids submitted for one item, unless instructed to do so. (item rejected)
- Signature missing on bid or any required form.
- Buy American Form not completed or returned. (may be rejected)
- M/WBE Form not completed or returned. (may be rejected)
- Altered or erased unit prices must be initialed.
- Faxed bid, unless specifically requested (will be rejected).
  
- FOR CONTRACTS ONLY: Please provide your DUNS # \_\_\_\_\_
- FOR CONTRACTS ONLY: Failure to submit required Bond by the date indicated.

***I certify that I have read and understand the information above.***

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## CERTIFICATION FORM ST. LOUIS DOMESTIC PRODUCTS PROCUREMENT ACT (BUY AMERICAN)

Bidders are advised of legislation enacted by the City of St. Louis which requires all manufactured goods or commodities used or supplied in the performance of this contract or any subcontract to be manufactured, assembled or produced in the United States, unless obtaining American made products would increase the cost of this contract by more than ten percent.

Section Four requires the vendor or contractor to certify his compliance with this legislation and if applicable, Section Six, if preference is claimed.

This legislation does not apply if the total bid is less than one thousand dollars (\$1,000.00).

Bids received will be evaluated on the basis of this legislation. Certificates of compliance must be completed and returned to be considered for preference. Failure to provide certification shall cause the City to presume that such product is not American made.

**CERTIFICATION**

If **all** the specified goods or products are manufactured, assembled or produced in the United States, check box at left and complete certification at the bottom of this form.

**SECTION SIX CERTIFICATION**

If any or all of the specified goods or products are manufactured, assembled or produced in a country other than the "United States", and exemption is requested because such product is Fair Trade Product: (a) list the country, other than the United States, where each good or product you propose to furnish is manufactured, assembled or produced; (b) check box at left of this paragraph and list corresponding commodities and (c) complete Section Six Documentation portion below.

Item Number(s)	Location Where Item Manufactured, Assembled or Produced

**SECTION SIX DOCUMENTATION**

The specified goods or products are treated as manufactured, assembled or produced in the United States under an existing treaty, law, agreement or regulation of the United States regarding export-import restrictions and international trade. List item Number(s) and Treaties covering item below.

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**DEFINITIONS**

- MANUFACTURED** - to make or process a raw material into a finished product; create, or to produce or to turn-out in a mechanical manner.
- ASSEMBLED** - to fit or join together the parts in a manufacturing environment.
- PRODUCED** - create by manual or physical effort, to make or yield the customary product or products.

**MUST BE COMPLETED AND SIGNED**

I hereby certify that the above information is true and correct and further certify that this statement complies with all provisions of Section 5.58.010 Revised Code of the City of St. Louis, 1985, as amended.

FIRM NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

BY: \_\_\_\_\_

(SIGNATURE and TITLE)

## ST. LOUIS DOMESTIC PRODUCTS PROCUREMENT ACT

The City of St. Louis has enacted an ordinance relating to the purchase of domestic products by City government, with penalty provisions. The ordinance amends Section 5.58.010 Revised Code of the City of St. Louis, 1986, as amended by adding thereto new subsections dealing with the requirement that the Supply Commissioner or his designee give preference to goods or commodities manufactured in the United States of America, stating exceptions to said policy. Sections one through six are reprinted below.

**Section One.** Section 5.58.010 Revised Code of the City of St. Louis is hereby amended by adding the following language: Each solicitation to bid and the method of describing the items to be bid upon of any goods or commodities sought to be purchased by the Office of Supply Commissioner, and any contract entered into by and on behalf of the City of St. Louis and executed by the Mayor and/or the Comptroller of the City of St. Louis wherein the construction, alteration, repair or maintenance of any public works is the subject of the contract so executed, shall contain a provision that the goods or commodities furnished or used in the furtherance of said project by any contractor or subcontractor, manufacturer or supplier as the case may be, shall be manufactured, assembled or produced in the United States, and said requirement as defined above shall be stated in said bid.

**Section Two.** The provision of Section One of this Ordinance shall not apply in the following instances:

- (i) Where the item purchased as the contract entered into for repairs or renovation is less than One Thousand (\$1,000.00) Dollars.
- (ii) Where no line of a particular good or product is manufactured, assembled or produced in the United States.
- (iii) Where the acquisition of United States manufactured or produced goods would increase the cost by more than (10%) percent.

**Section Three.** The certificate required by this section shall specify the nature of the contract, the product being purchased or leased, the names and addresses of the United States manufacturers and producers contracted by the Commissioner or the project architect or engineer, and an indication that such manufacturers or producers could not supply sufficient quantities or that the price of the products would increase the cost of the contract by more than ten percent.

**Section Four.** No public agency may authorize, provide for, or make any payment to any vendor or contractor upon any contract in violation of section 2 of this act. Prior to the awarding of the bid and before any public agency authorizes, provides, or makes payment to any vendor or contractor upon any contract to which section 2 or 6 of this act applies, the vendor or contractor shall provide proof of compliance with section 2, and, if applicable, section 6 of this act. Any vendor or contractor who knowingly misrepresents any material fact to the public agency concerning the origin of any manufactured goods or commodities shall be guilty of a Class A misdemeanor.

**Section Five.** Sections 1 to 6 of this act shall apply only to contracts and subcontracts entered into after the effective date of this act, and shall not limit the use or supply of manufactured goods or commodities purchased or leased prior to the effective date of this act.

**Section Six.** Nothing in sections 1 or 6 of this act is intended to contravene any existing treaty, law, agreement, or regulation of the United States. All contracts under section 1 or 6 of this act shall be entered into in accordance with existing treaty, law, agreement, or regulation of the United States including all treaties entered into between foreign countries and the United States regarding export-import restrictions and international trade and shall not be in violation of sections 1 to 6 of this act to the extent of such accordance.

### Interpretations and Guidelines

**Section One:** "Shall be manufactured" is interpreted to mean to make or process a raw material into a finished product or to turn-out in a mechanical manner. "Assembled" is interpreted to mean to fit or to join together the parts, gather, or to congregate in a manufacturing environment. "Produced" is interpreted to mean to create by manual or physical effort, to make or yield to customary product or products.

**Section Two (i)** This is interpreted to mean less than one thousand dollars in aggregate (total purchases).

**(iii)** When applying this subsection, multiply the cost of the foreign product by ten percent and compare the cost to the American product. If the American product cost is less than the sum of the cost of the foreign product plus ten percent, the award will be made to the vendor bidding the American product. The price paid by the City of St. Louis will be the actual price bid by the winning bidder.

**Section Three:** "Could not supply sufficient quantities" is interpreted to mean in order to meet the using agency's delivery schedule and in quantity specified.

**Section Four:** The vendor's authorized representative must complete a self-certification form, as required by the existing procedures previously indicated. These certification forms will be used to determine whether the manufacturer or producers could, or could not supply sufficient quantities, or the cost of the products would increase the contract by more than ten percent.

Prior to the City awarding the bid, the vendor shall provide certification that the product being bid is manufactured, assembled or produced in the United States or there is an existing treaty, law or regulation whereby the product bid shall be treated the same as product manufactured, assembled or produced in the United States. The procuring agency shall accept the self certification in order to apply the percentage differential that is applicable under this law. Failure to provide certification shall cause the city to presume that such product is not American made and preference shall not be considered for that product.

CITY OF ST. LOUIS/SUPPLY DIVISION  
 MINORITY/WOMEN BUSINESS ENTERPRISES FORM  
 (M/WBE FORM)

D. BID/CONTRACT IDENTIFICATION

Bid #: \_\_\_\_\_ or Contract Name: \_\_\_\_\_

Opening Date: \_\_\_\_\_ Your Bid Total: \$ \_\_\_\_\_

If your bid is \$500 or higher, please complete Section 'E'. We are NOT requesting information on how your company currently supports M/WBE suppliers. We want to know if there are opportunities you might consider to work with M/WBE suppliers for THIS SPECIFIC bid/contract.

E. ASSURANCE MBE/WBE Goal: 25% MBE and 5% WBE (Minimum Participation)

I, acting in my capacity as an officer of the undersigned bidder(s) if a joint venture, hereby assure the City of St. Louis that on this bid/contract my company will: (CHECK ONLY ONE)

Meet or exceed the M/WBE goal with: \_\_\_\_\_ % MBE and \_\_\_\_\_ % WBE Participation

Proposed MBE Vendor Name: \_\_\_\_\_ Amount \$ \_\_\_\_\_

Item or materials to be supplied by MBE Vendor: \_\_\_\_\_

Proposed WBE Vendor Name: \_\_\_\_\_ Amount \$ \_\_\_\_\_

Item or materials to be supplied by WBE Vendor: \_\_\_\_\_

Fail to meet the M/WBE goal, but made a good faith effort to meet the goals as follows:

\_\_\_\_\_ % MBE and \_\_\_\_\_ % WBE Participation (Enter Proposed Vendor information above.)

Not meet the M/WBE goal for the following reasons(s):(Check All That Apply)

<input type="checkbox"/>	Our Company is an MBE certified by the State of:
<input type="checkbox"/>	Our Company is a WBE certified by the State of:
<input type="checkbox"/>	We have contacted suppliers listed in the SLAA Directory but have received no reply
<input type="checkbox"/>	There are no subcontracting opportunities for this bid/contract
<input type="checkbox"/>	We are a Dealer and the order will be drop-shipped from the manufacturer to the user
<input type="checkbox"/>	We are the manufacturer and the order will be drop-shipped from the factory to the user
<input type="checkbox"/>	A letter of explanation is attached
<input type="checkbox"/>	Other reason: _____

FIRM NAME: \_\_\_\_\_ FEDERAL ID NUMBER: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ FAX NUMBER: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

TITLE: \_\_\_\_\_ E-MAIL: \_\_\_\_\_

CITY OF ST. LOUIS/SUPPLY DIVISION  
MINORITY/WOMEN BUSINESS ENTERPRISES FORM  
(M/WBE FORM)

**A. Mayor's Executive Order #28, Section Six - Supply Contracts**

1. The goal of the City of St. Louis is that 25% of the value of all contracts let and purchases made by the Supply Commissioner shall be let or made with Minority Business Enterprises (MBEs) and that 5% of the value of all contracts let and purchases made by the Supply Commissioner shall be let or made with Women's Business Enterprises (WBEs).
2. All contracts let by the Supply Division for the purchase or lease of materials, equipment, supplies, commodities or services, the estimated cost of which exceeds \$500, shall be subject to this goal.
3. The methods by which the Supply Commissioner shall pursue this goal shall include but not be limited to the following:
  - a. The Supply Commissioner shall solicit bids from minority business enterprises and women's business enterprises certified to supply the required materials, equipment, supplies or services;
  - b. St. Louis Airport Authority (SLAA) shall provide the Supply Commissioner with a list of minority business enterprises and women's business enterprises qualified to provide each of those commodities that the Supply Commissioner indicates are required by the City;
  - c. The Supply Commissioner shall notify SLAA prior to solicitation of bids whenever no such qualified businesses are available;
  - d. SLAA shall attempt to identify such qualified businesses, and if successful, shall notify the Supply Commissioner of their availability; and
  - e. The Supply Commissioner shall provide such minority business enterprises and women's business enterprises every practical opportunity to submit bids.
4. Joint ventures or mentor-protégé relationships between prime contractors and subcontractors with local MBE and WBE firms are encouraged.
5. Participation of MBE and WBE firms located outside the St. Louis Metropolitan Statistical Area (SMSA) shall not count toward the goals established in this order.

**B. SUPPLY DIVISION POLICY**

It is the policy of the Supply Division that all bids/contracts awarded adhere to the Mayor's Executive Order #28. All vendors are encouraged to comply with this policy and all other provisions of Executive Order #28. A copy of Executive Order #28 is available upon request. Each Vendor/Contractor (bidder) must complete, sign and return this M/WBE Form. Failure to complete, sign and return the M/WBE Form will result in the bid being declared non responsive and your bid may be eliminated.

**C. OBLIGATION**

The bidder agrees to make a good faith effort to ensure that M/WBE businesses have an opportunity to participate in the performance of contracts or subcontracts financed in whole or in part with City funds. The bidder will take all necessary and reasonable steps to ensure that said businesses have an opportunity to compete for and perform under this bid/contract. The bidder shall not discriminate on the basis of race, color, national origin or sex in the award and performance of bids/contracts. The Directory of Disadvantaged, Minority and Women Owned Business Enterprises certified by the City of St. Louis, can be viewed at [www.mwdb.org](http://www.mwdb.org).

ORDINANCE #69431  
Board Bill No. 295  
Committee Substitute  
As Amended

An Ordinance repealing Section One, part 86.040 of Ordinance 56716, pertaining to the opening of bids, codified as Section 5.58.040 of the Revised Code of the City of St. Louis, and enacting a new provision on the same subject matter which allows a local bidder to match the lowest bid when the lowest bid is from a non-local bidder; enacting a new provision on the same subject matter; containing severability clause.

WHEREAS, local businesses which seek to enter into contracts with the City of St. Louis are at a competitive disadvantage with businesses from other areas because of the higher administrative costs of doing business in the City;

WHEREAS, the City of St. Louis desires to encourage businesses to remain in the City and to relocate to the City;

WHEREAS, by enacting a local preference law that allows a local firm to match the lowest bid when its bid is within 2% percent of the lowest bid, the City hopes to encourage and stimulate local business.

**BE IT ORDAINED BY THE CITY OF ST. LOUIS AS FOLLOWS:**

SECTION ONE. Section One, part 86.040, Ordinance 56716 is hereby repealed.

SECTION TWO. Enacted in lieu thereof is the following new section.

5.58.040 - Opening of bids.

A. Proposals shall be opened at the time and place fixed by the advertisement, in the presence of such bidders as desire to be present, and shall be open to the inspection of bidders.

B. The bids shall not be materially modified or amended as to price, specification or otherwise, nor substitutions placed thereon, after opening except when the lowest bid is from a non-local bidder. When the lowest bid is from a non-local bidder, any local bidder within two percent of the lowest bid may match the lowest bid. If a local bidder matches the lowest bid, then the Supply Commissioner may select the bid from the local bidder. If more than one local bidder is within two percent of the lowest bid, then only the lowest local bidder may match the bid. In all other circumstances, modification, supplementation or amendment shall cause rejection of the bid. For purposes of this chapter, local bidder means a bidder whose principal place of business is within the City of St. Louis, has had a valid business license for at least one year, and is current in payment of local taxes. Principal place of business shall be defined as the business's physical office, plant, or site where a majority (51%) of the full-time employees, chief officer, and managers of the business regularly work and conduct business, or where the plant or office and equipment required for the furnishing of the goods or performance of the services provided to the City, as required by the contract, are physically located in the City of St. Louis for at least one taxable year immediately prior to the date of the bid.

C. Bids may be for one or more or all the articles advertised for, but there shall be a specific bid on each article. The award may be made to the lowest bidder for any article, or to the lowest bidder for the entire requisition or any part thereof, but the Board of Standardization may reject any or all bids or any part of any bid.

SECTION THREE. Severability.

The provisions of this section are severable. If any provision of this ordinance is declared invalid, that invalidity shall not affect other provisions of the ordinance which can be given effect without the invalid provision.

Approved: April 29, 2013

**CITY OF ST LOUIS, MISSOURI**  
**INSTRUCTION TO BIDDERS (for request for quotations - RFQs)**

VENDORS SHOULD CAREFULLY READ THE FOLLOWING INSTRUCTIONS AND TERMS AND CONDITIONS, BEFORE SUBMITTING QUOTATION. **CAUTION: THIS IS NOT AN ORDER**

- Quotations will only be accepted on this form which must be returned in a **sealed envelope**. *The upper left corner of the envelope must include the following information: Vendor Name, Quotation Number and the Due By Date.* This information is also required on any mail delivered next day or overnight.
- Quotations should be typewritten or in ink. Altered or erased unit price(s) must be initialed. One copy of Quotation Sheet must be submitted, please retain a copy for your files.
- The Supply Commissioner reserves the right to reject any or all bids.
- The Supply Commissioner reserves the right to make awards on an item basis or on a total basis.
- Bidders must quote Unit Price(s) and Extension on each item. When an error appears on an extension, the Unit Price(s) will govern.
- When Quotation Sheet requests item(s) by brand name and your quote is for an alternate brand – show brand name(s) with model number(s) and attach full specifications.
- When Quotation Sheet has only a general description(s) of item(s) required – show brand name with model number(s) and attach full specifications.
- Suppliers shall not offer more than one bid on each item. Two or more quotations on the same item may cause a rejection of the bid. Suppliers must determine which one of their many styles or types fully meet the specification.
- Freight or delivery charges must be included in quote, or shown separately on quote, so bid can be evaluated.
- **Bids must arrive no later than NOON** on the date stated or will be rejected. Faxed or E-mailed bids are not accepted unless specifically requested.
- Bids will be publicly opened on the date specified beginning at NOON.
- Prices quoted will be considered firm.
- Bids having an acceptance limit of less than 30 days after opening date may be rejected.
- Time of proposed delivery must be stated in definite terms.
- Failure of Bidder to understand the item(s) requested or any part of the specifications will not be a valid reason for bidding on the wrong item(s). Any questions regarding description of item(s) requested should be cleared with the Buyer listed in the bid document.
- **Samples** when requested must be delivered before actual time of bid opening with each sample plainly tagged showing the name of Bidder, Quotation Number, Brand Name and lot number or quality. Submission of samples does not relieve bidder from meeting the specifications as outlined in the Bid Documents unless the bidder specifically states they are bidding on an alternate.
- All samples are to be submitted to the address listed below unless otherwise stated in Bid Documents.
- Deliveries must be accompanied by a packing slip or invoice, listing the Department, Quotation Number, and the exact quantities of each item included in the shipment.
- ONLY U.S.P., N.F., OR N.N.D. DRUGS ARE ACCEPTABLE. ALL DRUGS MUST COME IN MANUFACTURER'S ORIGINAL PACKAGES, PROPERLY SEALED.
- In the event the successful bidder fails to make delivery of any item or items that meet the conditions and requirements as outlined in this proposal within 7 days of time stated by bidder on face of this quotation sheet, the City reserves the right to purchase said item or items on the "OPEN MARKET" and charge any costs above the BID PRICE to the bidder.
- The laws of the State of Missouri provide that the City of St. Louis pay no State Sales or Use Tax or Federal Excise Taxes and these taxes should be excluded from your bid price. Federal Excise Tax Exemption Certificates will be furnished to successful bidder.
- Suppliers shall save harmless the City of St. Louis from the payment of any and all claims or demands arising out of any infringement, alleged infringement, or use of any patent or patented device, article, system, arrangement, material or process used by him in the execution of this contract.
- Supply Division hours are Monday through Friday – 8:00 A.M. to 5:00 P.M. Main Number: 314-622-4580.

**All bids must be submitted in a SEALED ENVELOPE and mailed to:**

SUPPLY COMMISSIONER  
1200 MARKET ST RM 324  
ST LOUIS MO 63103-2842