

# REQUEST FOR BID No. 201303-217

Taney County will accept separate sealed Bids from qualified persons or firms interested in providing the following:

## COMPLETE TANDEM AXLE DUMP TRUCKS (2)

BIDS *MUST* BE RECEIVED BY: <u>4:00 P.M.</u> LOCAL TIME ON <u>Tuesday April 30, 2013</u> TO BE OPENED AT: 9:30 AM LOCAL TIME ON Wednesday May 1, 2013

PLEASE MARK YOUR ENVELOPE <u>"SEALED BID #201303-217"</u> RETURN ONE (1) ORIGINAL AND THREE (3) COPIES TO:

> Taney County Purchasing Department Attn: Ron Erickson, Director of Purchasing 132 David Street / P. O. Box 1630 Forsyth, Missouri 65653

PHONE: 417-546-7281 / FAX: 417-546-3931 rone@co.taney.mo.us

The undersigned certifies that they have the authority to bind this company in an agreement to supply the commodity or service in accordance with all terms, conditions, and pricing specified herein or to offer a "no Bid." Please type or print the information below. Bidder is REQUIRED to complete, sign and return this form, as well as all pages of this RFB – initialed, with their submittal of Bid. \* An authorized signature is mandatory, lack thereof will result in a determination of "Non-Responsive". Also required is a direct email address in order to receive award results. We do not use USPS for direct results notification *only* email. In addition final results will later be posted on our website at: www.taneycounty.org. Please do not call for results.

Company Name		Authorized Person (Print)	
Address		Signature	
City/County/State/Zip		Title	
Telephone #	Fax #	Date	Tax ID #
E-mail		Entity Type (Corp	oration, LLC, Sole Proprietor, Partnership)

### INSTRUCTIONS AND GENERAL CONDITIONS

- Delivery of: Sealed Bids, subject to Instructions and General Conditions and any special conditions set forth herein, will be received at the Taney County Purchasing Office until the Bid closing date and time indicated herein for furnishing the County with goods, and or, services as detailed in the following Request for Bid.
- 2) Closing: Sealed Bids must be delivered before <u>4:00 P.M.</u> central time on <u>Tuesday April 30, 2013</u> to the Taney County Purchasing Department as listed on page one. Bidders should take into account all possible risks of their Bid not arriving in time when electing to mail in Bids too close to the above closing date. Often the Post Office leaves a "pick up slip" in our PO Box which may / may not allow us time to retrieve said item. It is the Bidders responsibility, not the county, nor the Post Office to ensure their sealed Bids are <u>delivered</u> in time to the Purchasing Department. (Be extra careful when your Bid response involves a large package or box.)
- 3) The County will not accept any Bids received after the above listed closing date/time and will consider such late Bids as **NON-RESPONSIVE**. They will either be; filed, returned, or discarded.
- 4) Bids will be opened publicly at 9:30 AM on May 1, 2013 and read aloud. All Bid responses will be considered public information as soon as they are opened and become a part of public record to be released to any person or firm that requests it.
- 5) Bids may be withdrawn on written request from the Offeror at the address shown in this RFB prior to the time of acceptance of the Bid.
- 6) Bids must be submitted in a sealed envelope identified with the Bid number and dates of closing & opening. List the Bid number on the outside of the box or envelope and note "Response to Request for Bid enclosed". Also include a return name & address. <u>No fax or electronic</u> <u>transmitted Bids will be accepted.</u>
- 7) If you do not want to submit a Bid, please return the *No Bid Response Form* on page # 28 of this package, and note your reason.
- 8) This County is not responsible for any expenses which proposers may incur in estimating, inspecting, nor preparing and submitting Bids called for in this Request for Bid.
- 9) The County reserves the right to conduct personal interviews or require presentations of any or all proposers prior to selection. The County will not be liable for any costs incurred by the proposer in connection with such interviews or presentations (i.e. travel accommodations, etc.)
- 10) All Bids submitted shall be binding, and remain firm for ninety (90) calendar days following the opening. Pricing / Costs submitted within this response MUST BE HONORED within that set timeframe, NO EXCEPTIONS. Offerors should NOT respond unless certain on this point.
- 11) The Taney County Commission reserves the right to reject any or all Bids, when such rejection is in the best interest of the County.
- 12) Bids may be awarded to one company or multiple companies; when such award is deemed in the best interest of the County.
- 13) County standard payment terms are Net 30 after receipt of invoice.
- 14) This agreement shall take effect upon the approval by the Taney County Commission.

#### INTRODUCTION AND GENERAL INFORMATION

#### Introduction:

This document constitutes a request for sealed Bids for Complete Tandem Axle Dump Trucks (2) as set forth herein.

- 1) Organization This document, referred to as a Request for Bid (RFB), is divided into the following parts:
- Instructions and General Conditions
- Introduction and General Information
- Specifications
- Bid Page / No Bid Response Form
- Standard Terms and Conditions
- Miscellaneous Bidding Process Information

#### **Guidelines for Written Questions:**

- 1) All guestions regarding this Reguest for Bid shall be submitted in writing, prior to the Bid opening and no later than 9:00 AM Wednesday April 24, 2013. All questions must be emailed to; Ron Erickson, Director of Purchasing. (rone@co.taney.mo.us)
- 2) All such questions will be answered in writing, and such answers will be provided to all parties having obtained a Request for Bid packet by the County posting the addendum on the Taney County Web site at: www.taneycounty.org one full week prior to Bid opening date.



- 3) Once at our website click on: \_\_\_\_\_\_. Any/all addenda will be attached at the end of the posted Bid. An indication, in red, will alert visitors as to the presence of any addenda.
- 4) In the event that it becomes necessary to revise any part of this RFB, written addenda will be issued. Any addendum to this RFB is valid only if in writing and issued by the Taney County Purchasing Department.
- 5) Timeline: The County anticipates a contract award following the evaluation of all Bid responses within 45 days from the RFB opening date and completion. These dates are provided for informational purposes and may change as requirements dictate.
- 6) Sunshine Laws: Due to applicable sunshine laws and regulations concerning public documents, all Bid responses will be considered public information as soon as they are opened and become a part of public record releasable to any person or firm that requests it. Requests for copies, of Bid responses, must be made through the Taney County Clerk's Office (417-546-7202) requiring a Public Service Request Form (PSR). By law charges for time spent as well as a cost per page apply. Payment for copying fees is required prior to the making of copies. (Section 610.026, RSMo.)

BIDDER'S INITIALS:

#### **SPECIFICATIONS:**

The Taney County Road & Bridge Department is seeking sealed Bids for **Complete Tandem Axle Dump Trucks (2)** at the **Best / Lowest** price – per the specifications below. The county will purchase two brand new complete units. Vendors are asked not to submit responses to only one or two aspects / components, please respond only with a complete package / offer.

For questions concerning actual required specifications, or any other technical questions, please contact:

Randy Haes, Coordinator Taney County Road & Bridge 417-546-7268 (off) / 417-546-7924 (cell) randyh@co.taney.mo.us

# Taney County Road & Bridge Specifications on a Chassis

# Freightliner 114SD or Equivalent



Components shown may not reflect all spec'd options and are not to scale

## S P E C I F I C A T I O N S

Price Level		
	SD PRL-04D (EFF:07/26/12)	
Data Version		
	SPECPRO21 DATA RELEASE VER 023	
Vehicle Config	uration	
	114SD CONVENTIONAL CHASSIS	
	2014 MODEL YEAR SPECIFIED	
	SET BACK AXLE - TRUCK	
	TRAILER TOWING PROVISION AT END OF	
	FRAME FOR TRUCK	
General Servic	LH PRIMARY STEERING LOCATION	
General Servic		
	TRUCK/TRAILER CONFIGURATION DOMICILED, USA 50 STATES (INCLUDING	
	CALIFORNIA AND CARB OPT-IN STATES)	
	CONSTRUCTION SERVICE	
	GOVERNMENT BUSINESS SEGMENT	
	DIRT/SAND/ROCK COMMODITY	
	TERRAIN/DUTY: 10% (SOME) OF THE TIME, IN	
	TRANSIT, IS SPENT ON NON-PAVED ROADS	
	MAXIMUM 8% EXPECTED GRADE MAINTAINED DIRT OR SOFT SOIL - MOST	
	SEVERE IN-TRANSIT (BETWEEN SITES) ROAD	
	SURFACE	
	FREIGHTLINER LEVEL II WARRANTY	
	EXPECTED FRONT AXLE(S) LOAD: 20000.0 lbs	
	EXPECTED REAR DRIVE AXLE(S) LOAD :	
	40000.0 lbs EXPECTED GROSS VEHICLE WEIGHT	
	CAPACITY : 60000.0 lbs	
	EXPECTED GROSS COMBINATION WEIGHT :	
	80000.0 lbs	
Truck Service		
	END DUMP BODY	
Engine		
	DETROIT DD13 12.8L 410 HP @ 1800	
	RPM, 2080 GOV RPM, 1450 LB/FT @ 1100	
	RPM (Or equivalent)	
<b>Electronic Par</b>		
	65 MPH ROAD SPEED LIMIT	
	CRUISE CONTROL SPEED LIMIT SAME AS	
	ROAD SPEED LIMIT	
	3 MINUTES IDLE SHUTDOWN WITH CLUTCH ANI BRAKE OVERRIDE	
	BRAKE OVERRIDE	

<b>Engine Equipment</b>	
	2013 ONBOARD DIAGNOSTICS/2010
	EPA/CARB/GHG14
	2008 CARB EMISSION CERTIFICATION CLEAN
	IDLE (INCLUDES 6X4 INCH LABEL ON LOWER
	FORWARD CORNER OF DRIVER DOOR)
	ENGINE MOUNTED OIL CHECK AND FILL
	SIDE OF HOOD AIR INTAKE WITH FIREWALL
	MOUNTED DONALDSON AIR CLEANER AND
	INSIDE/OUTSIDE AIR WITH SNOW DOOR
	DR 12V 160 AMP 28-SI QUADRAMOUNT PAD
	ALTERNATOR WITH REMOTE BATTERY VOLT SENSE
	(3) ALLIANCE MODEL 1231, GROUP 31, 12 VOLT MAINTENANCE FREE 3375 CCA THREADED
	STUD BATTERIES
	BATTERY BOX FRAME MOUNTED
	STANDARD BATTERY JUMPERS
	SINGLE BATTERY BOX FRAME MOUNTED LH
	SIDE BACK OF CAB
	WIRE GROUND RETURN FOR BATTERY
	CABLES WITH ADDITIONAL FRAME GROUND
	RETURN
	NON-POLISHED BATTERY BOX COVER
	POSITIVE LOAD DISCONNECT WITH CAB
	MOUNTED CONTROL SWITCH MOUNTED
	OUTBOARD DRIVER SEAT
	POSITIVE AND NEGATIVE POSTS FOR
	JUMPSTART LOCATED ON FRAME NEXT TO
	STARTER BW MODEL BA-921 19.0 CFM SINGLE
	CYLINDER AIR COMPRESSOR WITH SAFETY
	VALVE
	ELECTRONIC ENGINE INTEGRAL SHUTDOWN
	PROTECTION SYSTEM
	JACOBS COMPRESSION BRAKE
	RH OUTBOARD UNDER STEP MOUNTED
	HORIZONTAL AFTERTREATMENT SYSTEM
	ASSEMBLY WITH RH B-PILLAR MOUNTED
	VERTICAL TAILPIPE
	ENGINE AFTERTREATMENT DEVICE,
	AUTOMATIC OVER THE ROAD REGENERATION
	AND DASH MOUNTED REGENERATION
	REQUEST SWITCH
	09 FOOT 06 INCH (114 INCH+0/-5 INCH)
	EXHAUST SYSTEM HEIGHT
	RH CURVED VERTICAL TAILPIPE B-PILLAR MOUNTED ROUTED FROM STEP
	13 GALLON DIESEL EXHAUST FLUID TANK
	STANDARD DIESEL EXHAUST FLUID PUMP
	MOUNTING
	LH MEDIUM DUTY STANDARD DIESEL
	EXHAUST FLUID TANK LOCATION

STANDARD DIESEL EXHAUST FLUID TANK
CAP
ALUMINUM AFTERTREATMENT
DEVICE/MUFFLER/TAILPIPE SHIELD(S)
BORG WARNER (KYSOR) REAR AIR ON/OFF
ENGINE FAN CLUTCH
AUTOMATIC FAN CONTROL WITHOUT DASH
SWITCH, NON ENGINE MOUNTED
DDC SUPPLIED ENGINE MOUNTED FUEL
FILTER/FUEL WATER SEPARATOR WITH
WATER-IN-FUEL INDICATOR
FULL FLOW OIL FILTER
DDC SUPPLIED COOLANT FILTER, ENGINE
MOUNTED
1500 SQUARE INCH ALUMINUM RADIATOR
ANTIFREEZE TO -34F, NOAT EXTENDED LIFE
COOLANT
GATES BLUE STRIPE COOLANT HOSES OR
EQUIVALENT
CONSTANT TENSION HOSE CLAMPS FOR
COOLANT HOSES
RADIATOR DRAIN VALVE
1350 ADAPTER FLANGE FOR FRONT PTO
PROVISION
PHILLIPS-TEMRO 1500 WATT/115 VOLT BLOCK
HEATER
BLACK PLASTIC ENGINE HEATER
RECEPTACLE MOUNTED UNDER LH DOOR
DELCO 12V 39MT+ HD/OCP STARTER WITH
THERMAL PROTECTION AND INTEGRATED
MAGNETIC SWITCH

#### Transmission

## ALLISON 4000 RDS AUTOMATIC TRANSMISSION WITH PTO PROVISION

#### **Transmission Equipment**

WTEC CALIBRATION - 6 SPEED RDS/TRV (PACKAGE 113) MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE(S) FILL AND DRAIN PUSH BUTTON ELECTRONIC SHIFT CONTROL, DASH MOUNTED TRANSMISSION PROGNOSTICS - ENABLED 2013 WATER TO OIL TRANSMISSION COOLER, FRAME MOUNTED TRANSMISSION OIL CHECK AND FILL WITH ELECTRONIC OIL LEVEL CHECK SYNTHETIC TRANSMISSION FLUID (TES-295 COMPLIANT)

#### **Front Axle and Equipment**

DETROIT DA-F-20.0-5 20,000# FL1 71.0 KPI/3.74 DROP SINGLE FRONT AXLE MERITOR 16.5X6 Q+ CAST SPIDER CAM FRONT BRAKES, DOUBLE ANCHOR, FABRICATED SHOES NON-ASBESTOS FRONT BRAKE LINING CONMET CAST IRON FRONT BRAKE DRUMS SKF SCOTSEAL PLUS XL FRONT OIL SEALS VENTED FRONT HUB CAPS WITH WINDOW, **CENTER AND SIDE PLUGS - OIL** STANDARD SPINDLE NUTS FOR ALL AXLES MERITOR AUTOMATIC FRONT SLACK **ADJUSTERS** STANDARD KING PIN BUSHINGS **TRW THP-60 POWER STEERING WITH RCH45** AUXILIARY GEAR POWER STEERING PUMP **4 QUART POWER STEERING RESERVOIR OIL/AIR POWER STEERING COOLER** ORGANIC SAE 80/90 FRONT AXLE LUBE

#### **Front Suspension**

20,000# TAPERLEAF FRONT SUSPENSION GRAPHITE BRONZE BUSHINGS WITH SEALS -FRONT SUSPENSION FRONT SHOCK ABSORBERS

#### **Rear Axle and Equipment**

MT-40-14X 40,000# R-SERIES TANDEM REAR AXLE WITHOUT PUMP 5.29 REAR AXLE RATIO IRON REAR AXLE CARRIER WITH OPTIONAL HEAVY DUTY AXLE HOUSING MXL 176T MERITOR EXTENDED LUBE MAIN DRIVELINE WITH HALF ROUND YOKES MXL 17T MERITOR EXTENDED LUBE INTERAXLE DRIVELINE WITH HALF ROUND YOKES DRIVER CONTROLLED TRACTION DIFFERENTIAL - BOTH TANDEM REAR AXLES (1) INTERAXLE LOCK VALVE, (1) DRIVER CONTROLLED DIFFERENTIAL LOCK FORWARD-REAR AND REAR-REAR AXLE VALVE BLINKING LAMP WITH EACH MODE SWITCH, INTERAXLE UNLOCK DEFAULT WITH **IGNITION OFF** BLINKING LAMP WITH EACH MODE SWITCH, DIFFERENTIAL UNLOCK WITH IGNITION OFF, ACTIVE <5 MPH

	MERITOR 16.5X8.62 Q+ CAST SPIDER CAM	
	REAR BRAKES, DOUBLE ANCHOR,	
	FABRICATED SHOES	
	NON-ASBESTOS REAR BRAKE LINING	
	BRAKE CAMS AND CHAMBERS ON FORWARD	
	SIDE OF DRIVE AXLE(S)	
	CONMET CAST IRON REAR BRAKE DRUMS	
	SKF SCOTSEAL PLUS XL REAR OIL SEALS	
	HALDEX GOLDSEAL LONGSTROKE 2-DRIVE	
	AXLES SPRING PARKING CHAMBERS	
	HALDEX AUTOMATIC REAR SLACK	
	ADJUSTERS	
	ORGANIC SAE 80/90 REAR AXLE LUBE	
<b>Rear Suspension</b>		
	TUFTRAC 40,000# 2-STAGE REAR SPRING	
	SUSPENSION	
	TUFTRAC STANDARD RIDE HEIGHT	
	AXLE CLAMPING GROUP	
	54 INCH AXLE SPACING	
	FORE/AFT AND TRANSVERSE CONTROL RODS	
	REAR SHOCK ABSORBERS - TWO AXLES	
Dueles Contern	(TANDEM)	
Brake System		
	WABCO 4S/4M ABS WITHOUT TRACTION	
	CONTROL	
	REINFORCED NYLON, FABRIC BRAID AND	
	WIRE BRAID CHASSIS AIR LINES	
	FIBER BRAID PARKING BRAKE HOSE STANDARD BRAKE SYSTEM VALVES	
	STANDARD AIR SYSTEM PRESSURE PROTECTION SYSTEM	
	STD U.S. FRONT BRAKE VALVE	
	RELAY VALVE WITH 5-8 PSI CRACK PRESSURE,	
	NO REAR PROPORTIONING VALVE	
	WABCO SS-1200 PLUS AIR DRYER WITH	
	INTEGRAL AIR GOVERNOR AND HEATER	
	WABCO OIL COALESCING FILTER FOR AIR	
	DRYER	
	AIR DRYER MOUNTED INBOARD ON LH RAIL	
	STEEL AIR BRAKE RESERVOIRS	
	PULL CABLES ON ALL AIR RESERVOIR(S)	
Trailer Connectio	ns	
	AIR CONNECTIONS TO END OF FRAME WITH	
	GLAD HANDS FOR TRUCK WITH 36 INCHES	
	ADDITIONAL LINE END OF FRAME	

GLAD HANDS FOR TRUCK WITH 36 INCHES ADDITIONAL LINE END OF FRAME PRIMARY CONNECTOR/RECEPTACLE WIRED FOR SEPARATE STOP/TURN, CENTER PIN POWERED THROUGH IGNITION SAE J560 7-WAY PRIMARY CABLE RECEPTACLE MOUNTED END OF FRAME WITH 36" ADDITIONAL CABLE AT REAR CROSSMEMBER UPGRADED CHASSIS MULTIPLEXING UNIT

## Wheelbase & Frame

vi neerouse ee i		
	5175MM (204 INCH) WHEELBASE	
	1/2X3.64X11-7/8 INCH STEEL FRAME	
	(12.7MMX301.6MM/0.5X11.88 INCH) 120KSI	
	PARTIAL INNER FRAME REINFORCEMENT AT	
	FRONT SUSPENSION	
	1600MM (63 INCH) REAR FRAME OVERHANG	
	FRAME OVERHANG RANGE: 61 INCH TO 70	
	INCH	
	24 INCH INTEGRAL FRONT FRAME EXTENSION	
	CALC'D BACK OF CAB TO REAR SUSP C/L (CA) :	
	138.45 in	
	CALCULATED EFFECTIVE BACK OF CAB TO	
	REAR SUSPENSION C/L (CA): 135.45 in	
	CALC'D FRAME LENGTH - OVERALL : 336.61	
	CALC'D SPACE AVAILABLE FOR DECKPLATE :	
	138.45 in	
	FRAME SPACE LH SIDE : 42.95 in	
	FRAME SPACE RH SIDE : 92.63 in	
	SQUARE END OF FRAME	
	FRONT CLOSING CROSSMEMBER	
	STANDARD WEIGHT ENGINE CROSSMEMBER	
	STANDARD MIDSHIP #1 CROSSMEMBER(S)	
	STANDARD REARMOST CROSSMEMBER	
	HEAVY DUTY SUSPENSION CROSSMEMBER	
<b>Chassis Equip</b>	nent de la companya d	
ennosis Equip		
	OMIT FRONT BUMPER, CUSTOMER INSTALLED SPECIAL BUMPER, DOES NOT COMPLY WITH	
	FMCSR 393.203	
	FRONT TOW HOOKS - FRAME MOUNTED	
	CLEAR FRAME RAILS FROM BACK OF CAB TO	
	FRONT REAR SUSPENSION BRACKET, BOTH	
	RAILS OUTBOARD	
	HUCK-SPIN ROUND COLLAR CHASSIS	
	FASTENERSEXCEPT REAR CLOSING	
	CROSSMEMBER	
<b>Fuel Tanks</b>		
	80 GALLON/302 LITER ALUMINUM FUEL TANK	
	- LH	
	- LH 25 INCH DIAMETER FUEL TANK(S)	
	PLAIN ALUMINUM/PAINTED STEEL FUEL/HYDRAULIC TANK(S) WITH PAINTED	
	BANDS	
	FUEL TANK(S) FORWARD	

PLAIN STEP FINISH FUEL TANK CAP(S) EQUIFLO INBOARD FUEL SYSTEM HIGH TEMPERATURE REINFORCED NYLON FUEL LINE

Tires		
	GOODYEAR G289 WHA DURASEAL 315/80R22.5 20 PLY RADIAL FRONT TIRES GOODYEAR G338 11R22.5 14 PLY RADIAL REAR TIRES TIRE QTY - PUSHER AXLE: 0 TIRE QTY - TAG AXLE: 0	
Hubs		
	CONMET PRE-SET BEARING IRON FRONT HUBS CONMET PRE-SET BEARING IRON REAR HUBS	
Wheels		
	ACCURIDE 29039 22.5X9.00 10-HUB PILOT 5.25 INSET 5-HAND STEEL DISC FRONT WHEELS ACCURIDE 28828 22.5X8.25 10-HUB PILOT 2- HAND HD STEEL DISC REAR WHEELS	
Cab Exterior		
	<ul> <li>114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB AIR CAB MOUNTS</li> <li>NONREMOVABLE BUGSCREEN MOUNTED BEHIND GRILLE</li> <li>LH AND RH GRAB HANDLES</li> <li>STATIONARY BLACK GRILLE</li> <li>BLACK HOOD MOUNTED AIR INTAKE GRILLE</li> <li>FIBERGLASS HOOD</li> <li>SINGLE 14 INCH ROUND POLISHED AIR HORN</li> <li>ROOF MOUNTED</li> <li>SINGLE ELECTRIC HORN</li> <li>SINGLE HORN SHIELD</li> <li>DOOR LOCKS AND IGNITION SWITCH KEYED</li> <li>THE SAME</li> <li>REAR LICENSE PLATE MOUNT END OF FRAME</li> <li>HALOGEN COMPOSITE HEADLAMPS WITH</li> <li>BLACK BEZELS</li> <li>LED AERODYNAMIC MARKER LIGHTS</li> <li>DAYTIME RUNNING LIGHTS - LOW BEAM</li> <li>ONLY</li> <li>INTEGRAL STOP/TAIL/BACKUP LIGHTS WITH</li> <li>36 INCHES ADDITIONAL WIRE AT CHASSIS</li> <li>END OF FRAME</li> </ul>	

DUAL WEST COAST MOLDED-IN COLOR HEATED MIRRORS DOOR MOUNTED MIRRORS 102 INCH EQUIPMENT WIDTH LH AND RH 8 INCH MOLDED-IN COLOR CONVEX MIRRORS MOUNTED UNDER PRIMARY MIRRORS STANDARD SIDE/REAR REFLECTORS RH AFTERTREATMENT SYSTEM CAB ACCESS WITH STEEL SHIELDING 63X14 INCH TINTED REAR WINDOW TINTED DOOR GLASS LH AND RH WITH TINTED OPERATING WING WINDOWS MANUAL DOOR WINDOW REGULATORS TINTED WINDSHIELD 2 GALLON WINDSHIELD WASHER RESERVOIR WITHOUT FLUID LEVEL INDICATOR, FRAME MOUNTED

#### **Cab Interior**

OPAL GRAY VINYL INTERIOR MOLDED PLASTIC DOOR PANEL WITHOUT VINYL INSERT WITH ALUMINUM KICKPLATE LOWER DOOR MOLDED PLASTIC DOOR PANEL WITHOUT VINYL INSERT WITH ALUMINUM KICKPLATE LOWER DOOR BLACK MATS WITH SINGLE INSULATION DASH MOUNTED ASH TRAYS AND LIGHTER FORWARD ROOF MOUNTED CONSOLE WITH UPPER STORAGE COMPARTMENTS WITHOUT NETTING CENTER STORAGE CONSOLE MOUNTED ON BACKWALL (2) CUP HOLDERS LH AND RH DASH GRAY/CHARCOAL WING DASH SMART SWITCH EXPANSION MODULE HEATER, DEFROSTER AND AIR CONDITIONER STANDARD HVAC DUCTING WITH SNOW SHIELD FOR FRESH AIR INTAKE MAIN HVAC CONTROLS WITH **RECIRCULATION SWITCH** STANDARD HEATER PLUMBING WITH BALL SHUTOFF VALVES AT SUPPLY LINES ONLY DENSO HEAVY DUTY AIR CONDITIONER COMPRESSOR **BINARY CONTROL, R-134A** STANDARD INSULATION SOLID-STATE CIRCUIT PROTECTION AND **FUSES** 12V NEGATIVE GROUND ELECTRICAL SYSTEM DOME DOOR ACTIVATED LH AND RH. DUAL READING LIGHTS, FORWARD CAB ROOF CAB DOOR LATCHES WITH MANUAL DOOR LOCKS (1) 12 VOLT POWER SUPPLY IN DASH BASIC HIGH BACK AIR SUSPENSION DRIVER SEAT WITH MECHANICAL LUMBAR AND INTEGRATED CUSHION EXTENSION BASIC HIGH BACK NON SUSPENSION PASSENGER SEAT LH AND RH INTEGRAL DOOR PANEL ARMRESTS VINYL WITH VINYL INSERT DRIVER SEAT VINYL WITH VINYL INSERT PASSENGER SEAT **3 POINT HIGH VISIBILITY ORANGE** RETRACTOR DRIVER AND PASSENGER SEAT BELTS ADJUSTABLE TILT AND TELESCOPING STEERING COLUMN 4-SPOKE 18 INCH (450MM) STEERING WHEEL DRIVER AND PASSENGER INTERIOR SUN VISORS

#### **Instruments & Controls**

GRAY DRIVER INSTRUMENT PANEL GRAY CENTER INSTRUMENT PANEL BLACK GAUGE BEZELS LOW AIR PRESSURE LIGHT AND BUZZER 2 INCH PRIMARY AND SECONDARY AIR PRESSURE GAUGES INTAKE MOUNTED AIR RESTRICTION INDICATOR WITHOUT GRADUATIONS 97 DB BACKUP ALARM ELECTRONIC CRUISE CONTROL WITH SWITCHES ON AUXILIARY GAUGE PANEL (B DASH PANEL) KEY OPERATED IGNITION SWITCH AND **INTEGRAL START POSITION; 4 POSITION** OFF/RUN/START/ACCESSORY ODOMETER/TRIP/HOUR/DIAGNOSTIC/VOLTAG E DISPLAY: 1X7 CHARACTER, 26 WARNING LAMPS, DATA LINKED, ICU3 DIAGNOSTIC INTERFACE CONNECTOR, 9 PIN, SAE J1939, LOCATED BELOW DASH 2 INCH ELECTRIC FUEL GAUGE FUEL FILTER RESTRICTION INDICATOR ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE 2 INCH TRANSMISSION OIL TEMPERATURE GAUGE ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY

ELECTRIC ENGINE OIL PRESSURE GAUGE **OVERHEAD INSTRUMENT PANEL** NO WRG-BDY MULTIPLEX EXPNSN UNIT AM/FM/WB RADIO WITH FRONT AUXILIARY INPUT DASH MOUNTED RADIO (2) RADIO SPEAKERS IN CAB AM/FM ANTENNA MOUNTED ON FORWARD LH ROOF POWER AND GROUND STUDS IN DASH PLUS ROOF CONSOLE WIRING **ROOF/OVERHEAD CONSOLE CB RADIO** PROVISION WITH FACE PLATE ELECTRONIC MPH SPEEDOMETER WITH SECONDARY KPH SCALE, WITHOUT **ODOMETER** ELECTRONIC 3000 RPM TACHOMETER DETROIT VIRTUAL TECHNICIAN REMOTE ENGINE DIAGNOSTICS 2 YEAR SERVICE CONTRACT INCLUDED WITH VIRTUAL TECHNICIAN IGNITION SWITCH CONTROLLED ENGINE STOP FOUR ON/OFF ROCKER SWITCHES IN THE DASH WITH INDICATOR LIGHTS AND WIRE ROUTED TO CHASSIS AT BACK OF CAB, LABEL OPT PRE-FLIGHT, ALL OUTPUTS FLASH WITH SMART SWITCH NO ON/OFF LATCHING SMARTPLEX SWITCH NO ON/OFF MOMENTARY SMARTPLEX SWITCH NO ON/OFF/ON LATCHING SMARTPLEX SWITCH NO ON/OFF/ON MOMENTARY SMARTPLEX SWITCH NO PRE-DEFINED SMARTPLEX INDICATOR LAMPS NO UNDEFINED SMARTPLEX INDICATOR LAMPS BW TRACTOR PROTECTION VALVE TRAILER HAND CONTROL BRAKE VALVE 2 INCH TURBO AIR PRESSURE GAUGE DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY MARKER LIGHT SWITCH INTEGRAL WITH HEADLIGHT SWITCH AND DUAL CONNECTORS AND SWITCH FOR CUSTOMER FURNISHED SNOW PLOW LIGHTS, LOW BEAMS OFF WITH HIGH BEAMS TWO VALVE PARKING BRAKE SYSTEM WITH WARNING INDICATOR

SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER, WASHER/WIPER AND HAZARD IN HANDLE INTEGRAL ELECTRONIC TURN SIGNAL FLASHER WITH HAZARD LAMPS OVERRIDING STOP LAMPS

#### Design

PAINT: ONE SOLID COLOR

#### Color

CAB COLOR A: L0824EB YELLOW ELITE BC

BLACK, HIGH SOLIDS POLYURETHANE CHASSIS PAINT VENDOR WHITE FRONT WHEELS/RIMS (PW, TKWHT21, W, TW) VENDOR WHITE REAR WHEELS/RIMS (PW, TKWHT21, W, TW)

### **Certification / Compliance**

U.S. FMVSS CERTIFICATION

## FRAME SIDE SPACE

#### **VEHICLE SPECIFICATIONS SUMMARY - FRAME SIDE SPACE**

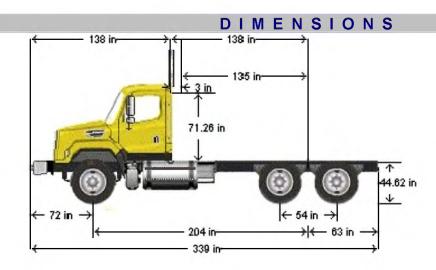
Model	
Wheelbase (545)	
Cab Size (829)114	INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
Sleeper (682)	NO SLEEPER BOX/SLEEPERCAB
Exhaust System (016)RH OUTBOARD U	NDER STEP MOUNTED HORIZONTAL AFTERTREATMENT
SYSTEM ASSEMBLY WITH RH B-PILLAR M	OUNTED VERTICAL TAILPIPE
Frame Side Space LH (in)	
Frame Side Space RH (in)	
Battery Box (290)	BATTERY BOX FRAME MOUNTED
Left-Hand Fuel Tank (204)	
Left-Hand Auxiliary Fuel / Oil Tank(200)	NO LH AUXILIARY FUEL TANK
Right-Hand Fuel Tank (206)	
Right-Hand Auxiliary Fuel / Oil Tank(201)	NO RH AUXILIARY FUEL TANK
Rear Fenders(583)	NO REAR QUARTER FENDERS
	NO HYDRAULIC OIL TANK

# TABLE SUMMARY - FRAME SIDE SPACE

Oimensions (Left Side)	Inches
Max CP - Maximum value of all Cab Protrusions	3.0
Bumper to chassis zero dimension	28.9
First front axle to chassis zero dimension	43.3
Bumper to Centerline of Front Axle (BA)	72.2
Wheelbase (WB)	204.0
Frame Overhang (OH)	63.0
Overall Length (OAL)	339.2
Length of Front Tire Unladen Radius (UR)	21.6
Length of Rear Tire Unladen Radius (UR)	21.0
Length Rear Axle Spacing factor	54.0
Pusher Axle Spacing	0.0
Length of Pusher Tire Unladen Radius (UR)	0.0
Frame Space Left Side	42.9
Side Step Left Side	0.0
Exhaust Left Sidle	0.0
Urea Tank Left Side	13.6
Battery Box Left Side	15.8
Fuel Tank Left Side	42.5
Hydraulic Tank Left Side	0.0
Aux1 Tank Left Side	0.0
Aux2 Tank Left Side	0.0
StoreBox1 Tank Left Side	0.0
StoreBox2 Tank Left Side	0.0
Frame Step Left Side	0.0
Fender Left Side	0.0
Other1 Left Side	0.0
Other2 Left Side	0.0
Adj Left Side	0.0

Dimensions (Right Side)	Inches
Max CP - Maximum value of all Cab Protrusions	3.0
Bumper to chassis zero dimension	28.9
First front axle to chassis zero dimension	43.3
Bumper to Centerline of Front Axle (BA)	72.2
Wheelbase (WB)	204.0
Frame Overhang (OH)	63.0
Overall Length (OAL)	339.2
Length of Front Tire Unladen Radius (UR)	21.6
Length of Rear Tire Unladen Radius (UR)	21.0
Length Rear Axle Spacing factor	54.0
Pusher Axle Spacing	0.0
Length of Pusher Tire Unladen Radius (UR)	0.0
Frame Space Right Side	92.6
Side Step Right Side	0.0
Exhaust Right Side	32.2
Urea Tank Right Side	0.0
Battery Box Right Side	0.0
Fuel Tank Right Side	0.0
Hydraulic Tank Right Side	0.0
Aux1 Tank Right Side	0.0
Aux2 Tank Right Side	0.0
StoreBox1 Tank Right Side	0.0
StoreBox2 Tank Right Side	0.0
Frame Step Right Side	0.0
Fender Right Side	0.0
Other1 Right Side	0.0
Other2 Right Side	0.0
Adj Right Side	0.0

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.



## **VEHICLE SPECIFICATIONS SUMMARY - DIMENSIONS**

Model
Rear Frame Overhang (552)
Fifth Wheel (578)NO FIFTH WHEEL
Mounting Location (577) NO FIFTH WHEEL LOCATION
Maximum Forward Position (in)
Maximum Rearward Position (in)
Amount of Slide Travel (in)
Slide Increment (in)
Desired Slide Position (in)
Cab Size (829)114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
Sleeper (682) NO SLEEPER BOX/SLEEPERCAB
Exhaust System (016)RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT
SYSTEM ASSEMBLY WITH RH B-PILLAR MOUNTED VERTICAL TAILPIPE

## **TABLE SUMMARY - DIMENSIONS**

Dimensions	Inches
Bumper to Back of Cab (BBC)	137.8
Bumper to Centerline of Front Axle (BA)	72.2
Min. Cab to Body Clearance (CB)	3.0
Back of Cab to Centerline of Rear Axle(s) (CA)	138.4
Effective Back of Cab to Centerline of Rear Axle(s) (Effective CA)	135.4
Back of Cab Protrusions (Exhaust/Intake) (CP)	1.6
Back of Cab Protrusions (Side Extenders/Trim Tab) (CP)	0.0
Back of Cab Clearance (CL)	3.0
Back of Cab to End of Frame	201.4
Cab Height (CH)	71.3
Wheelbase (WB)	204.0
Frame Overhang (OH)	63.0
Overall Length (OAL)	339.2
Rear Axle Spacing	54.0
Unladen Frame Height at Centerline of Rear Axle	44.6

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering

## FRAME RBM

#### VEHICLE SPECIFICATIONS SUMMARY - FRAME RBM

Wheelbase (545)	
Frame Rails (546) 1/2X3.64X11-7/8 INCH STEEL F.	RAME (12.7MMX301.6MM/0.5X11.88 INCH)
120KSI(546)	
Yield Strength (psi)	
Section Modulus (per rail) (cu in)	
RBM (per rail) (lbf-in)	
Inner Frame Reinforcement (547) PARTIAL INN	NER FRAME REINFORCEMENT AT FRONT
SUSPENSION	
Outer Frame Reinforcement (548)	NO OUTER FRAME REINFORCEMENT

## TABLE SUMMARY - FRAME RBM

Item	Description / Value	
Wheelbase	5175MM (204 INCH) WHEELBASE	
Frame	1/2X3.64X11-7/8 INCH STEEL FRAME (12.7MMX301.6MM/0.5X11.88 INCH) 120KSI	
Inner Frame Reinforcement	PARTIAL INNER FRAME REINFORCEMENT AT FRONT SUSPENSION	
Outer Frame Reninforcement	NO OUTER FRAME REINFORCEMENT	
Yield Strength (psi)	120000	
Section Modulus - per rail (cu, in.)	26.70	
Frame RBM - per rail (lbf-in)	3204000	

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.

# Taney County Road & Bridge Specifications on a Dump Body

# Dura Class HPT-316 or Equivalent

## MINIMUM SPECIFICATIONS HEAVY DUTY MULTI-AXLE MUNICIPAL DUMP BODY & HOIST PACKAGE DuraClass HPT-316

### GENERAL:

The dump body shall be a heavy-duty contractor body to be used on a multi-axle chassis. The hoist shall be a single cylinder front mount telescopic type hoist. The complete body, hoist, and cylinder package must be supplied by a single manufacturer and be a proven standard production model. Literature must be supplied for the body and hoist being submitted for approval. A DuraClass HPT-316 or approved equal are recommended.

#### DIMENSIONS:

#### COMPLY: YES/NO

Body Length	16'	
Body Width	84"	
Body Capacity	13/14 Cubic Yards	
Side Height	38"	
End Height	48"	

## **MATERIAL:**

Sides	3/16" AR400	
Side braces	10 Gauge High Tensile	
Tailgate	3/16" AR400	
Front Head	3/16" AR400	
Floor	<sup>1</sup> /4" AR400	
Understructure	Crossmemberless	
	Two deep flared longitudinals	
	fabricated of 3/16" hi-tensile	
	steel and are 10" fully boxed	
Rear Apron	8 Gauge High Tensile	
Rear Corner Post	10 Gauge High Tensile	

## SIDES:

Side panel constructed of 10 ga. high tensile steel, all	
exposed bends to be 1" radius Top rail to be box section 4-5/8" wide x 8-3/8" tall	
Centerbend to fold back at 20 degrees at top	
and bottom to bend back at 35 degrees from horizontal. No seam visible to outside or bottom	
of top rail	
Minimum of three, 4-1/2" wide vertical side braces	
At the face and flared to 9" wide at the body,	
3-1/4" deep slanted forward. All exposed bends to be 1-1/2" radius. C/C not to exceed 35"	
Front corner post to be $3-7/8^{\circ}$ deep and shaped to	
match side posts	
5-1/2" inch wide 35 degree sloped rub rails	
Minimum 10" wide full depth rear corner post	
Minimum $5-1/2$ " deep rear corner post to house needed	
lighting	
8" Board pockets	
100% fully solid welded construction	· · · · · · · · · · · · · · · · · · ·

## TAILGATE:

## FRONT HEAD:

Front head panel constructed of a one piece sheet of 3/16" AR400 steel Three bend top rail (minimum 3" wide, 2" deep with a 7/8" return flange) To be a minimum 8" higher than the side height 100% fully solid welded construction Dog-house to be no deeper than 11" \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## FLOOR:

Constructed of two center seam welded pieces of <sup>1</sup>/<sub>4</sub>" AR400 steel 84" inside width Knee brace floor to side bracing **UNDERSTRUCTURE:** Crossmemberless Two deep flared longitudinals fabricated of 3/16" hi-tensile steel and are 10" fully boxed HOIST: Subframeless, double acting hoist Single cylinder high-pressure inverted telescopic hoist Maximum 6" nominal diameter cylinder with three Stages and a minimum 140" stroke Chrome plated (Vickers, DPH 900-1100) piston rods Minimum 50 degree dump angle Minimum 30 ton, NTEA Class 120 hoist Heavy-duty hoist frame Heavy-duty flame cut platform type rear hinges 100% fully solid welded construction

## MISCELLANEOUS:

Tailgate spreader chain kit Stop/Tail/Turn light cutouts in rear corner post In cab body up warning light Approved body prop Back up alarm Completely installed Air/Air operated tailgate Asphalt taper Cab protector Strobe light cutouts in rear corner post Oval strobe lights in rear Corner post and on front Corners of cab protector Bed Vibrator, 12 volt, Big Bertha 3500 or equal and in cab control Electric tarp assembly, in cab control, Aluminum polished arms, Asphalt tarp, Aero model 575 or equal Access step on left front side of dump body Step needs to fold or stow away under body Full walk rail on both sides Air connections to end of frame with glad hands for truck The glad hands mounted above pintle hitch, 1" solid steel hitch plate with bolt on pintle hitch 90,000lb. Rating (height 26" from ground level) SAE J560 7-way primary trailer cable receptacle mounted end of frame

## Spreader Mounting:

Four permanent mount, (2) each side of bed, 4" ratchet straps for spreader hold downs.

## Hydraulic Couplers:

Hydraulic quick couplers and hoses to be at left rear of dump body, not at rear of dump body. Hydraulic lines running outside rails shall be protected by accessible steel plate. All hydraulic hose ends should have protective covers.

### Plow:

Frame hitch needs to match county existing plows, Flink PF91QL2 hitch is required or equivalent.

This specification shall describe a bumper to frame hitch with a tilt feature that allows the snowplow to remain coupled to the push frame while servicing vehicle. It incorporates the advantage of quick installation with the strength and reliability needed for performance durability. Front bumper manufactured using 10" channel and will be incorporated into the plows front frame hitch. Snowplow lights shall be furnished and installed on trucks hood/fender using manufacture wiring from factory.

# Taney County Road & Bridge Specifications on Hydraulic System, Spreader and Plow Control

### **Hydraulic Pump:**

- The hydraulic pump will be crankshaft driven using a 1280/1310-driveline assembly.
- The piston pump (load sensing type) must be capable of 48 GPM and 3000 PSI at 2500 RPM.
- Pump must have side to avoid multiple 90-degree bends in suction line (rear ports are unacceptable).
- The case drain must be positioned as high as possible and directed back to the reservoir without passing \_ through the return line filter.
- The pump must have internal bleed down compensator option, a 1 1/4" keyed shaft drilled and tapped, a 1" \_ split flange pressure port and a 2" split flange suction port.
- A 1" oring high pressure ball valve shall be installed on pressure port of pump.
- Sauer-Danfoss model JRL075 no exceptions.

#### **Pump Drive:**

- The driveline must be 1280/1310 series solid shaft style.
- The driveline shall come with all crosses, pump end yoke and flange for engine.
- The pump shall be driven off the engine crankshaft.
- The pump shall get a companion flange that un-bolt from driveshaft for easy belt replacement.
- Certified Power SG01010016 no exceptions.

#### **Hydraulic Return Filter:**

- Filter shall be top tank mounted type 10 microns with a by-pass and replaceable cartridge element. Filter shall be capable of 80 GPM flow capacity.
- Filter shall have one 1 1/4" SAE port with the ability to be machined for another.
- A bypass condition gauge shall be provided. \_
- Certified Power model SG03020010 no exceptions. -

### **Snow Plow Cushion Valve:**

- A double relief cushion valve must be installed for the plow angle.
- The valve shall be set at 2000 PSI and have #8 SAE o-ring ports.
- The valve shall be constructed of a high-tensile cast iron body with ball and spring style relief that has hardened seat.
- The valve shall be plumbed at the front of the truck for snowplow angle.
- Certified Power model DRV5HH no exceptions.

### Cable Controls:

- Sections 1-3 of stack valve shall be actuated by the remote valve cable control system.
- Cables shall have Stainless Steel cable core capable of 90 lbs. Push-pull.
- Controls shall be mounted beside driver easily accessible.
- Single axis control lever for dump body up/down with dead man push button.
- Dual axis control lever "+" pattern for plow lift and angle.
- Control levers to be labeled with decals for operation.
- Controls to be mounted in factory style stand.

## Hydraulic Reservoir:

- Reservoir shall be 30-gallon minimum with breather cap, magnetic drain plug and suction screen.
- Fill neck must be screened and a sight/temperature gauge mounted on the reservoir so easily visible for inspection.
- Symmetrical side ports to allow mounting on either side of truck frame.
- Suction screen to be 2" NPT with built in bypass.
- Suction port shall have a 2" full flow ball valve installed for ease of pump service.
- Bottom suction is not acceptable.
- Reservoir must have provision for the mounting of a tank mounted return line filter.
- Certified Power MTRA2303000007 no exceptions

### **Hydraulic Stack Valve:**

- The valve shall be of a mobile stackable design load sensing type.
- The valve shall be capable of a nominal 35 GPM with published flow curves to 40 GPM.
- The valve must be pressure and flow compensated.
- Inlet and outlet ports to be 1" o-ring, all working ports shall be <sup>3</sup>/<sub>4</sub>" and 5/8" o-ring.
- Valve to be arranged as follows:
- Inlet cap with pressure, tank, load sense and drain port.
- Single acting cylinder spool for hoist, spring return to neutral cable shifted pressure compensated with 32 GPM main spool.
- Single acting cylinder spool for plow lift, spring return to neutral for raise and detent for down, cable shifted pressure compensated with 10.6 GPM main spool.
- Double acting cylinder spool for plow angle, spring return to neutral cable shifted pressure compensated with 10.6 GPM main spool.
- Single acting motor spool for broom on/off, 12VDC operated with spring to neutral, pressure compensated 0-26 GPM with manual override for future use
- Out let cover top ported with Pressure carry over, tank port and load sense carry over for in cab spreader control with bleed orifice. Pressure and tank port to be #16 o-ring, load sense port to be #6 o-ring.
- Certified Power PVG32 no exceptions

## Spreader Valve:

- Spreader control valve must be dual flow pressure compensated type.
- Closed inlet design valve specifically designed for load sensing.
- The use of line mounted auxiliary valves or conversion of valves designed for any other purpose is not acceptable.
- O-ring style (leak free) ports.
- Integral shuttle sensing true load pressure.
- Manual on/off control, capable of de-stroking a variable displacement piston pump.
- Dual flow design shall be set-up as one knob 0-7 gpm and the other from 0-16 gpm.
- Certified Power model SG03020029 no exceptions

#### **Pre-Wet Control:**

- Spreader control must be able to run the existing 12VDC electric pre-wet systems already installed on the counties spreaders.
- If there is no float switch for low level in the tanks, it will need to be added.
- Control system shall be able to connect to existing wiring for pre-wet systems.
- Control shall be able to control pre-wet in open loop mode and get set in gallons per ton.

## **Hydraulic Hoses:**

- All hoses shall be properly rated for pressure of hydraulic system.
- All hose ends connecting to valve assembly shall be 90-degree female JIC swivel.
- Suction Hose shall be 2 " ID SAE 100R4 style, connecting the pump and reservoir with a king nipples, with both ends being double clamped with T-bolt style stainless steel super clamps.
- Pressure hose shall be 1" ID 2000 PSI rated with female JIC swivels at both ends.
- Return line shall be 1 <sup>1</sup>/<sub>4</sub>" ID SAE 100R4 style with female JIC swivels at both ends.
- Hoist lines shall be 1" ID 2250 PSI rated with female JIC swivels at both ends.
- Plow lines 1/2" ID 2250 PSI rated, ran to front of truck with female JIC swivels at both ends.
- Auger line shall be <sup>3</sup>/<sub>4</sub>" ID 2250 PSI rated and have female JIC swivels at both ends.
- Spinner line shall be  $\frac{1}{2}$ " ID 2250 PSI rated and have female JIC swivels at both ends.
- Spreader return line shall be 1" ID SAE 100R4 style with female JIC swivels at both ends.
- Pump case drain shall be 3/4" ID minimum 2250 PSI rated and have female JIC swivels at both ends.
- Load sense line shall be 3/8" ID 2250 PSI rated and have female JIC swivels at both ends.

## **Options: (Optional Pricing Only for the Freedom 2 Electronic Spreader Control)**

- Provide cost adder for the use of Freedom 2 electronic spreader control in lieu of manual controlled dual knob spreader valve.
- The electronic spreader control option will include adding valve/reservoir combination instead of standard frame mounted 30 gallon reservoir with a tank mounted filter and the hydraulic stack valve being mounted on the frame that makes it accessible. Hydraulic valve will be modified to accommodate spreader manifold for Freedom 2 spreader control.

## "TPE" Wiring Specification:

- Wiring and harness system should meet ISO rating IP68 and NEMA 6.
- The connectors should be zinc die cast E-coated, similar to a MIL spec connector.
- Each should have three sealing points- the lock ring itself, a raised portion of the molded plastic around each pin, and a viton O-ring that seals the whole connector.
- *The cable jacket should be TPE- thermoplastic elastomer, and molded to the connectors.*
- Connectors and harness should be rated and tested for a temperature range from -30C to +70C.
- Connectors should be tested to be water tight when submerged in 6' of water for 24 hours, in 275' of water for 1 hour, and when subjected to a 1000-psi pressure wash.
- The connectors should be designed to have NO corrosion after 500 hours in a 35C salt spray.
- Cabling should be rated excellent in low temperature flexibility and in its resistance to oxidation, heat, oil, weather, sun, ozone, abrasion, electrical priorities, flame, water, acid, alkali, gasoline, benzol, toluol, degreaser solvents, alcohol, and weld slag.
- *All cabling for the hydraulic system and pre-wet system must be this style.*
- Certified Power TPE Yellow Jacket cables no exceptions.

## **Hydraulic Stack Valve:**

- The valve shall be of a mobile stackable design load sensing type.
- The valve shall be all cast iron design and all sections must be of the same valve series.
- The valve shall be capable of a nominal 35 GPM with published flow curves to 40 GPM.
- The valve must be pressure and flow compensated.
- Inlet and outlet ports to be 1" o-ring, all working ports shall be 5/8" o-ring minimum.
- Valve to be arranged as follows:
- Inlet cap with top ported pressure and tank, load sense and drain ports.
- Single acting cylinder spool for hoist0-47 GPM, proportional 12VDC operated, with spring return to neutral. Section shall have manual handle overrides with stroke limiters. (option double acting hoist with 500 PSI down side relief.)
- Single acting cylinder spool for plow lift, proportional 12VDC operated with spring return to neutral. Pressure compensated 0-15 GPM main spool. Section shall have manual handle overrides and stroke limiters. Plow float shall be incorporated and controlled by console.
- Double acting cylinder spool for plow lift, proportional 12VDC operated with spring return to neutral. Pressure compensated 0-15 GPM main spool. Section shall have manual handle overrides and stroke limiters.
- Single acting motor spool for broom on/off, 12VDC operated with spring to neutral, pressure compensated 0-26 GPM with manual override for future use.
- Single acting 0-15 GPM spool for feeder, proportional 12VDC spring to center with manual override.
- Single acting 0-7 GPM spool for spinner, proportional 12VDC spring to center with manual override.
- Spreader sections shall be part of a manifold assembly that has a pressure reducing value and solenoid drain and has the ability to have a cartridges added for pre-wet and anti-ice applications.
- Aluminum manifold cartridge valve design is not acceptable.
- Certified Power PVG100/32 valve no exceptions

## Hydraulic Reservoir:

- Reservoir shall be 30-gallon minimum capacity with the breather cap mounted to an inspection lid. Inspection lid shall also provide for an in tank mounted return line filter.
- Breather cap fill neck must be screened and mounted on a riser.
- Reservoir shall be complete with a sight temperature gauge and a magnetic drain plug. Suction port will allow for installation of a 2" NPT 50GPM suction screen. Suction screen will have a 3 to 5 PSI by-pass spring.
- A 2" full flow ball valve shall be installed at reservoir in suction port.
- Reservoir must be constructed of 10-gauge steel.
- As an integral part of the reservoir, there shall be an area for mounting of the hydraulic stack valve. Reservoir must be of template style for bulkhead "through" mounting of the valve and be completely free from internal tubing or hoses from the work ports and inlet of the valve.
- Valve must be removable as a unit with template through the top of the reservoir for service and accessibility.
- All Electrical connections must be made via IP68 rated connectors on the front (cab) side of the reservoir.
- The hydraulic fittings must come out the bottom of the enclosure and must be male JIC bulkheads.
- Access to the enclosure must be by a removable top lid that is held in place with 2 rubber tie downs.
- The reservoir filter and fill cap must be accessible without removing a lid or cover.
- Hydraulic reservoir must be mounted on the driver's side of the vehicle.
- Certified Power model MTCA2301 no exception.

## Freedom 2.1 Spreader Control:

- Control to have 3 PWM output channels
- 1 channel shall be ground speed oriented conveyor/spreader, 1 channel for spinner, and one channel for liquid output either pre-wet or anti-ice if desired.
- Control to have a simple operator interface consisting of 3 buttons, two knobs and an interactive touch screen.
- Knobs to be rotary encoders with no maximum or minimum limit position.
- Programming of unit shall not require the use of an ancillary device
- Touch screen shall be used for calibration of the unit.
- There shall be a USB port on the side of the unit for data download if option is selected
- USB shall also function as an upload port to allow field upgrade of the software or capabilities of the system
- Unit shall be available in 3 versions, and software shall be available for purchase to allow unit to be reconfigured to any version.
- Control shall come with F.I.R.S.T., a interactive calibration setup tutorial.
- Unit delivered shall be Freedom 2.1as manufactured by Certified Power
- To prevent glare at night, there shall be a "night mode" for the touch screen
- The unit shall be supplied with 8MB of RAM and 4MB of flash memory
- The front panel shall be backlit for night viewing
- There shall be a field replaceable fuse to protect the system. Fuse shall be easily accessible.
- Help screens for troubleshooting and calibration shall be embedded in the on board software.
- The system shall support a remote blast and remote pause functions.
- Control shall be closed loop for auger and liquid if liquid is used, open loop only systems will not be accepted.
- PWM circuits shall be current regulated to reduce hysteresis
- There shall be an input to sense a stall of the spreader
- A float input circuit shall be provided to turn off liquid system at low level
- Storm totals shall be available either on screen or via USB download
- Unit dimensions shall be approximately 7.8L, 4H, 3.8 D
- Control systems communicating with Power line Technology will not be accepted.
- Certified Power Freedom 2.1 no exceptions.

Pricing, or costs, MUST be entered as a GRAND TOTAL on the line provided on the Bid Page.

#### BID PAGE

Bidder must complete the following section in its entirety, and sign and date where indicated on page #1. This agreement shall take effect upon the approval by the Taney County Commission.

- A. ACCEPTANCE OF BID BY COUNTY: The County shall have a minimum of 90 calendar days from the date of the opening to accept bidder's offer.
- B. County standard payment terms are Net 30 after receipt of invoice. State any discounts offered: \_\_\_\_\_
- C. Response time/delivery: \_\_\_\_\_\_ (After receipt of order)
- D. Submittals The following must be submitted with bid:
  - 1. References and experience
  - 2. Key personnel
  - 3. Warranty
  - 4. Descriptive literature

E. Total Price: \$\_\_\_\_\_(Each)

## NO BID RESPONSE FORM

**NOTE:** Complete and return this section only if you do not want to submit a Bid. If you do not wish to respond to this RFB, please fill this form out and return it to the Purchasing Department by mail or fax.

#### Thank you...

### RFB# 201303-217 Complete Tandem Axle Dump Trucks (2)

Business Name:	
Address:	
Telephone:	
Contact Person:	
Date:	
Reason(s) for not E	Jidding:

See following pages for Terms & Conditions and other helpful information which apply appropriately as needed specifically to items or services required within this RFB.



## STANDARD TERMS AND CONDITIONS

- 1. Responses shall include all charges for packing, delivery, installation, etc., (unless otherwise specified) to the Taney County Department identified in this Request for Bid.
- 2. The Taney County Commission has the right to accept or reject any part or parts of all Bids, to waive technicalities, and to accept the offer the County Commission considers the most advantageous to the County. Taney County reserves the right to award this Bid on an item-by-item basis, or an "all or none" basis, whichever is in the best interest of the County.
- 3. Bidders must use the Bid forms provided for the purpose of submitting Bids, must return the Bid and Bid sheets comprised in this Bid, give the unit price, extended totals, and **sign the Bid**.
- 4. When products or materials of any particular producer or manufacturer are mentioned in our specifications, such products or materials are intended to be descriptive of type or quality and not restricted to those mentioned.
- 5. Do not include Federal Excise Tax or Sales and Use Taxes in Bid process, as law exempts the County from them.
- 6. The delivery date shall be stated in definite terms, as it will be taken into consideration in awarding the Bid.
- 7. The County Commission reserves the right to cancel all or any part of orders if delivery is not made or work is not started as guaranteed. In case of delay, the Contractor must notify the Purchasing Department.
- 8. In case of default by the Contractor, the County of Taney will procure the articles or services from other sources and hold the Bidder responsible for any excess cost occasioned thereby.
- 9. Failure to deliver as guaranteed may disqualify Bidder from future Bidding.
- 10. Prices must be as stated in units of quantity specified, and must be firm.
- 11. No Bid transmitted by fax machine or e-mail will be accepted.
- 12. The County of Taney, Missouri expressly denies responsibility for, or ownership of any item purchased until same is delivered to the County and is <u>accepted</u> by the County.
- 13. The County reserves the right to award to one or multiple respondents. The County also reserves the right to not award any item or group of items if the services can be obtained from a state or other governmental entities contract under more favorable terms. (Cooperative Purchase.)
- 14. The County, from time to time, uses federal grant funds for the procurement of goods and services. Accordingly, the provider of goods and/or services shall comply with federal laws, rules and regulations applicable to the funds used by the County for said procurement, and contract clauses required by the federal government in such circumstances are incorporated herein by reference. These clauses can generally be found in the Federal Transit Administration's Best Practices Procurement Manual – Appendix A. Any questions regarding the applicability of federal clauses to a particular Bid should be directed to the Purchasing Department prior to Bid opening.
- 15. In the event of a discrepancy between a unit price and an extended line item price, the unit price shall govern.
- 16. Should an audit of Contractors invoices during the term of the Agreement, and any renewals thereof, indicate that Taney County has remitted payment on invoices that constitute an over-charging to the County above the pricing terms agreed to herein, the Contractor shall issue a refund check to the County for any over-charges within 30 days of being notified of the same.

## **MISCELLANEOUS BIDDING PROCESS INFORMATION**

The Purchasing Department is responsible for the Bid opening at the time and place noted in the request. If a Vendor is interested in a copy of the Bid tabulation they must include a direct email address, not website, in order to receive results. Obviously sealed Bids cannot be emailed so they must either be delivered by hand, courier, or USPS. (Please note USPS concerns on page #2, item #2.)

A formal invitation for Bid is utilized when the total purchase exceeds \$4,500. The County also uses this method when the life of a term and supply contract is valued more than \$4,500. The Bid Package will contain well-defined standard technical specifications for the nature of the service or product requested. A formal closing date and time is specified. The Bidder must comply with this requirement in order to be considered for award. All Formal Invitations for Bid are handled by the Taney County Purchasing Department Technical specifications are the responsibility of the specific requesting department.

#### Bid Response Tips:

- 1. Read ALL Bid documents immediately upon receipt. Note any special dates or requirements.
- 2. Contact the Taney County Purchasing Department with any questions relating to the Bid seven days prior to the Bid opening. (Email <u>ONLY</u> to: <u>rone@co.taney.mo.us</u>.)
- 3. Use ink to fill in all blanks clearly. (If I can't read your handwriting your Bid <u>will be rejected.</u>)
- 4. Remember to supply the required number of copies, marking copies vs. original.
- 5. Turn your Bid in as soon as possible. The deadline dates and times are strictly adhered to. The County cannot accept any late Bids. In the event of only one Bid response the County may reject the entire Bid and re-let it hoping for more participation.
- 6. Attend pre-Bid conferences, if any. (Most are Mandatory.)
- 7. Pay close attention to the terms *must*, *shall*, *should* or *may*. **READ EVERYTHING**.
- 8. Include an updated W-9 form completed with your company information and signature.
- 9. Include, if applicable, a current level of prevailing wage considerations within your Bid.
- 10. Remember to sign the Bid sheet as this is mandatory.

#### Please Note...

There are several steps, requirements and legalities which must be followed when engaging in an effort to respond to any certain Bid. Here I hope I have served to assist any/all participants in making sure everyone has a fair and pleasant experience with my County. Please keep in mind that it is entirely possible that this sheet, along with all of the other information as detailed within this Bid, may NOT include everything to cover every possible situation. Should that occur please let me know.

Thank you for your interest in Taney County Missouri.

Sincerely,



RON ERICKSON Director of Purchasing Taney County Missouri rone@co.tanev.mo.us www.tanevcounty.org 417-294-7863 (Cell)



## Taney County, Missouri COMPLETE TANDEM AXLE DUMP TRUCKS (2) RFB #201303-217 Addendum #1

This addendum is issued in accordance with the Introduction and General Information in the Request for Bid and is hereby incorporated into and made a part of the Request for Bid Documents. Offerors are reminded that receipt of this addendum **shall** be acknowledged and submitted with Offeror's *Response Page*.

Specifications for the above noted Request for Bid and the work covered thereby are herein modified as follows, and except as set forth herein, otherwise remain unchanged and in full force and effect:

This office has received a question which has resulted in the need to release the following information as a request to be included within any full response. Keeping in full compliance with the instructions stated within this RFB PLEASE include a response to the following which is to be considered as required information:

## Please provide optional costs / pricing for EXTENDED WARRANTY on the Engine as well as the Base Vehicle.

Thank you.

By,

Ron Erickson, Director of Purchasing 132 David Street / P.O. Box 1630 Forsyth, Mo. 65653 Phone: 417-546-7281 Fax: 417-546-3931 E-mail: <u>rone@co.taney.mo.us</u>

OFFEROR has examined copy of Addendum #1 to Complete Tandem Axle Dump Trucks (2) RFB #201303-217, receipt of which is hereby acknowledged:

Authorized Representative Signature:	Date:	
--------------------------------------	-------	--

Authorized Representative Printed Name:

Complete Tandem Axle Dump Trucks (2) RFB #201303-217 4/22/13