##### Minimum specifications for

##### Tandem Wheeled Trucks with Beds

##### for the Louisiana Department of Agriculture and Forestry (LDAF)

**1. GENERAL INFORMATION**

1. These trucks will be a new current year model and come equipped with all factory standard features including the following options:
2. Conventional Cab, Set Forward Front Axle Configuration Truck

**2.** **ENGINE**

1. Must be Inline 6-cylinder diesel
2. 450 HP or greater with compression brake
3. 1650 lbs.-ft. torque or greater
4. 12 Liter engine displacement or greater (no exceptions)

**3.** **ELECTRONIC PARAMETERS**

A. Must be able to sustain a highway speed of 70 MPH, but no more than 75 MPH

at governed RPM.

**4.** **ENGINE EQUIPMENT**

1. Alternator, 12-volt, 240-amp. minimum
2. Fan Drive, automatic
3. Engine block heater, 115-volts, with plug-in receptacle mounted under cab, LH door
4. Automatic engine de-rate system with light and buzzer
5. Battery box, with cover, frame mounted
6. Three 12-volt batteries, maintenance free, 1950 CCA minimum
7. Jump Post located on the outside of the battery box
8. Air compressor, 13 CFM minimum
9. HD cooling capacity
10. Battery disconnect switch

**5.** **TRANSMISSION, AUTOMATIC**

A. Must be close ratio, 6-speed with overdrive, severe duty, on/off highway application, includes oil level sensor, with PTO provision, less retarder, maximum input 565 hp, maximum input torque 1650 lb-ft, maximum turbine torque 2450 lb-ft.

**6.** **FRONT AXLE AND EQUIPMENT**

1. "Set Forward" front axle configuration
2. HD16,000 lb. front axle
3. 16,000 lb. flat leaf front suspension
4. Front brakes, air disc
5. Power steering with dual power steering gears
6. Front wheel seals, oil lubricated wheel bearings

**7. REAR AXLE AND EQUIPMENT**

1. 46,000 lb. rear axle with heavy duty housing
2. Driver controlled traction differential, both tandem rear axles
3. Rear axle gear ratio to achieve desired road speed
4. Rear brakes, air disc

**8. REAR SUSPENSION**

1. 46,000 lb. heavy duty air ride suspension
2. 51" to 56" axle spacing
3. Manual dash mounted dump valve for suspension with gauge and audible warning

**9. BRAKE SYSTEM**

1. Dual air brake system, with clear frame behind cab
2. Air dryer with heater, mounted to provide clean CT
3. Moisture drain valve with pull cable drain

**10. WHEELBASE AND FRAME**

1. Effective CT of 151" extend frame for weight distribution
2. Must have at least 108" of after frame
3. Frame rails heat treated steel alloy (120,000 PSI)
4. C-channel frame insert heat treated steel alloy (120,000 PSI) to run full length of frame

**11. CHASSIS EQUIPMENT**

1. Steel front bumper
2. Front tow hooks-frame mounted
3. License plate bracket mounted on driver's side of front bumper, centered vertically on bumper.
4. Mud flap brackets and mud flaps
5. 80-Gallon, aluminum fuel tank, under cab mounted, passenger's side
6. Diesel Exhaust Fluid (DEF) tank to be mounted on driver's side.
7. Fuel/water separator, sight glass or indicator light
8. Single exhaust system w/ heat shield and muffler mounted under cab/chassis
9. Access steps to run full length of cab, driver and passenger side

**12. TIRES**

1. Front tires, 315/80R22.5, 20-ply radial or size rated by manufacturer for vehicle bid
2. Rear tires, 11R22.5, 16-ply radial or size rated by manufacturer for vehicle bid

**13. WHEELS**

1. Wheels, front, 22.5”X 9”, 10-stud 9” rims w/steel hubs or size rated by manufacturer for vehicle bid
2. Wheels, rear 22.5” X 8.25”, 10-stud 8.25” rims w/steel hubs or size rated by manufacturer for vehicle bid
3. Spare tire, 11R22.5, 16-ply radial, 22.5” X 8.25”, 10-stud 8.25” rim, G88 or size rated by manufacturer for vehicle bid

**14. CAB EXTERIOR**

1. Conventional style cab
2. Air ride cab mounts
3. Non-removable bug screen mounted behind grill
4. West coast type heated power adjustable mirrors, with convex mirror on both sides
5. Access grab handles mounted immediately behind driver and passenger doors
6. Air horn, single base, cab-roof mounted
7. Roof mounted Cab Lights 1-3-1 Configuration
8. Roof mounted Windshield Visor
9. All glass windows tinted
10. Tilting front end
11. Paint schematic single color
12. Paint base coat/clear coat.
13. Paint class color, White

**15. CAB INTERIOR**

1. Interior cab fleet trim
2. Air suspension seats with dual armrests for driver and passenger
3. Record storage
4. LH and RH door map pockets
5. Forward roof mounted console w/radio power and antenna pre-wired (specs from Radio Tech)
6. Heater/defroster and air conditioner
7. Two 12-volt power supply, in dash, with 20-amp circuit cigarette lighter type
8. 110-Volt, 600-Watt AC pure sine power inverter with on/off switch, mounted to back wall of cab between seats
9. Adjustable telescoping tilt steering column (no exceptions)
10. 10 lb. fire extinguisher, mounted for easy access
11. Highway warning triangular reflectors, complying with Federal motor standard #125 DOT compliant

**16. INSTRUMENTS AND CONTROLS**

1. Complete instrument gauge cluster, English electronics speedometer and a tachometer for air brake chassis
2. Dual rear axle temperature gauges-tandem axle
3. Cruise control-electronic
4. AM/FM/WB/USB/Bluetooth radio

**17. STIPULATIONS**

1. Each truck will have a comprehensive minimum 12-month warranty and a 72-month/50,000 mile extended engine and 5-year transmission warranty, to include engine electronics and fuel injectors. All documentation of the warranty information will be included with the bid. **All warranties will become effective the date the truck is delivered to Louisiana Property Assistance Agency (LPAA).**
2. All trucks will come furnished with an operator's manual
3. All trucks will be delivered to bed manufacturer within 90 days of vehicle receipt by dealer and in full compliance with these specifications. Payment will be processed once trucks with bed installed are delivered to LDAF.
4. The supplier will provide service manuals (or digital file) and parts manuals (or digital file).
5. The supplier will provide a minimum of 4-hours training to each location receiving a truck. The training will cover operation, maintenance and safety.
6. **All trucks are to be equipped with beds from Wren Body Works (Wren MS.) or equal, and are to meet the Bed Specs listed below. Beds will be used for transportation of JD 650 Dozers.**

**18. BED SPECIFICATIONS (17' flatbed w/6' Beaver Tail)**

1. No spot welds, all joints must be fully welded
2. Main body shall be 17' long
3. Beaver tail shall be 6' long and sloped on 12 degrees
4. Overall width shall be 102"
5. Long Rail shall be constructed of 5" -10 # I-beam and spaced on 34" centers
6. Cross members shall be constructed of 3" 5.7 # I-beam on 12" centers
7. Rub rail shall be constructed of 6" - 8.2 # Channel and assembled with legs facing outward
8. Floor Plate shall be constructed of 1/4" ASTM A786 Plate
9. Front corners of bed shall be rounded off to approximately 1" radius
10. Rear skirt shall be constructed of 10" — 25.4 # channel
11. Track guide shall be constructed of 3" x 2" x 1/4" angle with the front rail being 144" long and the rear being 72" long
12. Cleats shall be constructed of 2" x 2" x 3/8" angle on 69" track centers. Install cleats on beaver tail only. Locate and weld cleat on welded seam where beaver tail and main body connect
13. Ramp mount plates shall be constructed of 1" ASTM A36 plate
14. Cylinder mount plates shall be constructed of 1" ASTM A36 plate
15. Cylinder base pin shall be constructed of 1 1/2" diameter ASTM A108 CR RD
16. Body shall be mounted using 1/2" x 3" mounting bars with a minimum of four mounting bars on main body and two mounting bars on beaver tail. A minimum of one grade 8 bolt must be used per mounting bar
17. Bent forged lashing rings capable of a Working Load Limit (WLL) of 12,000 lbs. each will be installed two per side on main body. Location of lashing rings will be determined by Louisiana Department of Agriculture and Forestry.
18. Four ratchet type load binders with Working Load Limit (WLL) of 12,000 lbs. each shall be provided, and permanently fixed to lashing rings.
19. Beaver Tail shall have 2" x # 9 expanded metal tack welded to rear of dove tail for nonskid surface approximately 36" x 36"
20. Cable step shall be installed at rear of beaver tail.
21. Main body shall have 2" x # 9 expanded metal tack welded to both left and right front corners adjacent to cross box for non-skid surface

**19. BULK HEAD ASSEMBLY**

1. Bulkhead shall be 90" wide, and extend to 4" above cab height
2. Bulkhead shall be constructed of 6" x 2" x 1/4" wall ASTM A500 tube outer frame left, right and top
3. 6" — 8.2 # channel cross members shall be welded at 9 1/2" from floor level and 33" from floor level

D. 2" x # 9 expanded metal shall be welded to front side of bulkhead for Window

**20. CROSS BOX (STORAGE)**

1. Cross box shall be 24" x 8" x 90" with T-handle latched door on both ends
2. Cross Box shall be constructed of 10-gauge ASTM A1011-45
3. Cross box must have four evenly spaced blade supports on toolbox constructed of 4" - 5.4 Channel and must be able to support the full weight of dozer blade - approximately 3,100 pounds

**21. RAMP ASSEMBLY**

1. Ramps will be 26" wide
2. Ramps, when lowered on level ground, should be of sufficient length to maintain the same slope as the Beaver tail
3. Main rail shall be constructed of 6" - 8.2 # channel
4. Center rail shall be constructed of 4" — 5.4 # channel
5. Cross member shall be constructed of 4"- 5.4 # channel on 24" centers
6. Upper Cylinder Mounting bar shall be 5/8" x 5" ASTM A36 HR FB and welded to 4" - 5.4 # channel cross member
7. Upper Cylinder Attaching Ear shall be constructed of 3/4" ASTM A36 Plate
8. Ramp safety latch shall be constructed of 1/4" flat bar and pinned at each end. Bar hanger shall be welded to bed for purpose of storing hanger bar when ramps are down
9. Cleats shall be constructed of 2" x 2" x 3/8" angle and welded on 12" Spacing
10. Cylinder top pin shall be 3/4" diameter ASTM A108 CR RD
11. Ramp pivot pin shall be constructed of 1 1/4" diameter ASTM A108 CR RD
12. The area of the ramp that contacts the ground will be covered with 1/4" Plate
13. Ramp shall have grab handle mounted to inside of ramp

**22. OUT RIGGER ASSEMBLY (MUST ATTACH TO THE FRONT OF THE RAMP WHERE THE RAMP ATTACHES TO THE BED)**

1. Outrigger pivot plates shall be welded solid to bottom side of ramps as close to front as possible.
2. Outrigger vertical legs shall be constructed of 3/8” ASTM A36 plate.
3. Outrigger brace shall be constructed of 3/8” ASTM A36 plate and pinned at each end to allow outrigger to pivot when brace is unpinned.
4. Outrigger brace hinge pins shall be 1-1/4” diameter ASTM A108 CR RD
5. Bottom foot shall be constructed of 6” x 2” x 1/4" tube and capped on both ends
6. Foot shall be no more than 1-1/2” above level ground when suspension is lowered, and body is unloaded. Must have firm contact with ground during loading and unloading.

**23. HYDRAULIC & CONTROLS STORAGE**

1. Storage box shall be 18" wide x 36" long and deep enough to accommodate the power unit and switch. Constructed of 1/4" plate, top to fit the slope of Beaver tail
2. The door shall be constructed of 1/4" plate and be equipped with two T-handle latches and two hinges
3. Hydraulic cylinders shall be 2" x 16" with 1" chrome hardened (One per ramp)
4. Power unit shall be 12-volt, dual stage (power up & down) w/float.
5. Must be fitted with the large capacity hydraulic oil storage tank.
6. Hydraulic oil tank must be easily accessible to accommodate checking and refilling of fluid.
7. Power unit power cable running to unit must be in a protective cover.
8. Power On/Off switch for the power unit to be mounted inside the battery box.
9. Hydraulic hoses shall be a minimum of 3/8" diameter fitted with swivel elbows on cylinder.

**24. LIGHT REQUIREMENTS**

1. LED lights shall be mounted on both sides of the bed to be in compliance with FMVSS-108.
2. There shall be one LED amber light mounted in outer channel at front and one LED amber light mounted in outer channel where dove tail begins.
3. Oval Stop, Turn, and Taillights shall be LED, and mounted in rear skirt.
4. Clear LEDBackup light mounted in rear Skirt.
5. Four flashing RED LED lights, each consisting of six 4-watt Cree LEDs or equal, providing 40-degrees of light spread, shall be mounted two light heads on the grill at the outside corners and two light heads vertically in the rear body skirt. Front and rear lights to be controlled by separate dash mounted, permanently labeled on/off switches.
6. Two 24" low profile LED light bars, single color RED, consisting of 4-watt Cree LEDs or equal. Mounted on top outside corners of bulkhead. Front and rear facing lights to be controlled by separate dash mounted switches, permanently labeled on/off.
7. Shall be equipped with back-up alarm.
8. Two adjustable LED work lights (one driver side and one passenger side) shall be installed on headboard facing main deck with separate on/off switches installed in cab and on bulkhead. Successful bidder is to contact LDAF for location.

**25. WATERPROOF STORAGE BOX**

A. Bidder shall supply two 36" x 24" x 24" lockable waterproof storage boxes that shall be frame mounted, one on either side of main body.

**26. BACK FIRE FUEL TANK**

1. Auxiliary, non-plumbed, 30-gallon aluminum "D-Style" fuel tank, frame mounted, under bed, passenger's side, forward of storage box, with easy access to fill spout, permanently labeled "BACK FIRE FUEL ONLY"
2. Fuel tank to have built in gauge, or sight glass
3. 90-degree, 3/4" Drain valve, located on the side of the tank, threaded to allow standard hose fittings, to be toward the front of the truck

**27. PLOW REST**

1. Main plate shall be constructed of 1" ASTM A36 pl with approximate dimensions of 18" wide x 12" tall.
2. Top section of main plate shall be notched 4" deep x 13" wide in center of plate leaving 4" tall guides. These guides shall be cut on an angle from the bottom to the top to create a slope on each side.
3. The mounting plate shall be 1/2" thick approximately 8" x 18" with three braces 1/2" thick x 4" tall located on the back side of the mounting plate to create a 45-degree angle on the main plate to the beaver tail.
4. Plow rest shall be hinged with a 3/4" hinge pin. The hinge tube shall have 1/4" side walls.

E. The hinge pin shall be removable and greaseable

F. The mounting plate shall be fastened to the bed with 6/2" grade 8 bolts

G. Successful bidder is to contact LDAF for location of Plow Rest.

**28. TRACK STOPS**

1. Track stops shall be a minimum of 21" tall x 8" wide
2. Track stops shall have a radius on the rear facing side to accept a contour of track leading edge.
3. Successful bidder is to contact LDAF for location of Track Stops and specifications due to LDAF plows being utilized.