



Teton County Road & Bridge Request for Bids for a New Dump Truck

1) Purpose of Request:

The County of Teton in the State of Idaho ("County") is soliciting responses to this request for bids (RFB) for a New Dump Truck complete with Dump Bed, Snow Plow and Wing.

For a more complete description of the requirements refer to the specifications.

2) Time Schedule:

The County will follow the following general timetable:

- a. Issue RFB Thursday, December 20, 2012
- b. Companies may submit written questions concerning this RFB to the Contact Person for receipt no later than 3:00 PM local time on January 4, 2013. Questions may be submitted to Clay Smith via email to csmith@co.teton.id.us or by facsimile at (208)-354-3932 (call first). Questions received after the stated deadline will not be answered.
- c. Any addenda to the RFB will be posted to the County website (www.tetoncountyidaho.gov) and available at the Teton County Courthouse by 3:00 PM local time on Monday January 7, 2013. No oral statement of any person shall modify or otherwise change or affect the terms or conditions stated in the RFB, and changes to the RFB, if any, shall be made in writing only and issued in the form of an Addendum to the RFB and highlighted in the RFB.
- d. Deadline for Submittal of Responses to RFB (opening);
 - i) The deadline for submitting the responses is Friday, January 11, 2013 at 10:00 am local time.
 - ii) The RFB submittal opening will occur in the Public Works Director's office on Friday, January 11, 2013 at 10:30 am local time and a recommendation will be made to the Commissioners and selection will be made Monday, January 14, 2013 at approximately 10:00 am.

3) Instructions to Proposers:

- a. All responses shall be sent to:
Clay Smith / Road & Bridge Supervisor
Teton County
70 W Buxton Avenue
Driggs, ID 83422
208-354-2932
Or hand delivered to the County Clerk/Recorder office at 150 Courthouse Drive, Driggs, Idaho.
- b. Please place two (2) copies of your bid in a sealed envelope and clearly label "Bid for New Dump Truck" and the name of the respondent.
- c. Bids should be prepared simply and economically, providing a straight forward, concise description of provider capabilities to satisfy the requirements of the request. Using both sides of paper sheets for submittals to the County is desirable whenever practicable.
- d. An authorized representative of the firm must complete and sign at least one (1) page original of its bid. This can be addressed in the cover letter.

4) Terms and Conditions:

- a. The County reserves the right to reject any and all bids, and to waiver minor irregularities in any RFB response.

- b. The County reserves the right to request clarification of the information submitted, and to request additional information from any respondent.
- c. Any RFB response may be withdrawn up until the date and time set above for opening of the RFB responses.

5) Scope of Services:

All equipment shall meet the specifications pages 1-12. Any exceptions shall be noted and explained in detail.

The equipment shall be delivered to the Teton County Road & Bridge shop at 70 W. Buxton Avenue, Driggs, Idaho within 120 days of the contract execution.

Contractors shall possess and keep in force all licenses, business permits and other permits required to perform the services of this agreement.

6) Submittal Requirements:

The bid response shall include the Bidder Response Form with all Addenda acknowledged on the form.

It is mutually agreed that the time for the commencement and completion of the work will affect the operation of the Road & Bridge Department. In view of this fact it is agreed that in the event the County recognizes suffering, County will charge the contractor an additional \$500 per day for each calendar day that equipment remains undelivered beyond the date specified for the delivery.

7) Selection Criteria:

Each bid shall be evaluated based on the following criteria:

- a. Cost of Equipment
- b. Ability of the equipment to meet the specifications.

All responsive submittals shall be reviewed. The County will rank all bids based on the criteria.

The County will attempt to reach a final contract with the first ranked Contractor. If negotiations with the first ranked Contractor fail, the County will proceed with the next highest ranked Contractor.

The County anticipates execution of contract within 30 days of RFB opening.



Bidder Response Form

Bidder's Corporation/Partnership Name: _____

Bidder's Business Address: _____

Bidder's Phone Number: _____ Bidder's Fax: _____

Bidder's Email: _____

By (Signature): _____

Name (typed or printed): _____

SUBMITTED ON: _____

New Dump Truck

Item No.	Description	Price Installed/Delivered
1	New Truck Chassis with Dump Body and Snow Plow	
2	Alternate 1: Bed Vibrator	
3	Alternate 2: Wing Plow	
TOTAL PRICE		

Bid prices listed shall include all applicable taxes and fees.



NEW DUMP TRUCK SPECIFICATION

	Meets?	
	YES	NO
1. Truck Chassis		
1.1 General Description & Design: Truck offered shall be the manufacturer's current model. Dump truck will be used by Teton County for vocational dump truck duty during the summer season and plowing snow in mountainous terrain during the winter season. Truck manufacturer shall have a fully staffed parts and service dealership with 75 miles of Driggs, Idaho. Specify Manufacturer & Model _____		
1.2 G.V.W. Rating: Dump truck offered must bear a certification plate stamped 66,000 GVW or higher, and the dump truck offered shall conform to this rating in all component parts. State G.V.W. Rating _____		
1.3 Cab and Components: <ol style="list-style-type: none"> 1) Conventional cab design with set forward front axle 2) Cab – 123" bumper back of cab, aluminum, with huck-bolted, lap-seam construction 3) Full-width, conventional type with fiberglass tilt hood 4) 2.25" Fender lips on front fenders 5) Hella Vision plus headlights with integral turn signals 6) (5) Cab mounted L.E.D. lights 7) Stationary front grille 8) Cab to have a flat floor with no dog house 9) Two-piece flat glass windshield 10) Full length heavy-duty, piano type door hinges 11) Acoustic insulation package to include inside firewall, top side floor, kick panels, insulated back wall, and roof structure 12) View window in right hand door 13) 2" Extended rear window 14) Gauges/Controls - All gauges shall be back lit, visible, and readable from driver's position and include, but not be limited to, the following gauges: <ol style="list-style-type: none"> A. Speedometer with trip odometer B. Tachometer with hour meter C. Outside air temperature display D. Voltmeter E. Engine oil pressure F. Engine coolant temperature G. Engine oil temperature H. Fuel level I. Manifold pressure J. Primary and secondary air pressure gauges K. Air application L. Standard warning light package: high water temperature, low oil pressure, and low air pressure warning lights w/audible alarms M. High beam N. Turn signal O. Low fuel P. Parking brake Q. Ice warning indicators 		

<ul style="list-style-type: none"> R. Seat belt reminder S. Rocker switches to be long-life type with L.E.D. indicators T. Intermittent windshield wiper/washer U. Headlamp beam control V. Air filter restriction indicator W. Inter-axle differential lock switch X. Differential lock switch 		
<p>1.4 Color:</p> <ul style="list-style-type: none"> 1) Cab and hood painted with DuPont Viper Red 2) Chassis frame black 3) Wheels to be white 		
<p>1.5 Air Conditioner/Heater:</p> <ul style="list-style-type: none"> 1) Factory installed 2) Heavy-duty fresh air with dual defroster 3) Must also blow on both side door windows as well as windshield 4) Shall be equipped with a replaceable fresh air filter 		
<p>1.6 Mirrors:</p> <ul style="list-style-type: none"> 1) 7" x 16" stainless steel type with heat element on driver side & passenger side 2) 8" stainless steel convex type mounted under rear view mirrors with heat element on driver side & passenger side 		
<p>1.7 Radio/CB:</p> <ul style="list-style-type: none"> 1) AM/FM/CD/Weather band stereo with antennae mounted on RH mirror 2) Manufactures standard CB radio installed in header 3) CB wiring mounted under header with dual mirror mounted antennae 		
<p>1.8 Seats:</p> <ul style="list-style-type: none"> 1) UltraRide high-back Air-Ride driver seat with armrest 2) Low-back non-suspension passenger seat with armrest 		
<p>1.9 Miscellaneous Equipment Installed/Supplied:</p> <p>Shall be equipped with the below listed equipment:</p> <ul style="list-style-type: none"> 1) Tilt/telescopic adjustable steering column with 18" steering wheel 2) Power Window – Passenger Side Only 3) Driver’s door map pocket 4) Dual air bag cab suspension 5) Dual output sensors for road & engine speed 6) Dual interior sun visors with mirrors 7) Cab mounted stainless steel sun visor 8) (2) 29" Hadley chrome top cab mounted air horns with shields 9) Cigar lighter and ashtray with power port 10) Switch and wiring for cab/strobe light with 10' of wire coiled behind cab for body vendor 11) Switch and wiring for work lights with 10' of wire coiled behind cab for body vendor 12) (5) inside entry grab handles 13) Removable bug screen and winter front 14) Air and electrical connections with 7-way trailer socket to be located at end of frame rails 15) Chassis manufacturer to supply crank shaft adapter to connect to hydraulic pump 16) (1) 5lb. ABC type fire extinguisher with metal head 17) (1) I.C.C. triangle reflector kit 18) (1) Line sheet will be furnished with truck at time of delivery <p>Manuals:</p> <ul style="list-style-type: none"> 19) (1) Shop manual – CD or web based 20) (1) Parts manual – CD or web based 21) (1) Operator’s manual – CD or web based 22) (1) Electrical manual/schematics – CD or web based 		

<p>1.8 Engine:</p> <ol style="list-style-type: none"> 1) 6-cylinder and governed at 2100 RPM maximum 2) Engine bid shall be an EPA 2010 Certified engine with SCR and 2013 On Board Diagnostics Certified 3) Minimum 12 Liter displacement 4) Minimum peak horsepower rating of 500 HP 5) Minimum torque rating of 1645 ft.-lbs. 6) Phillips immersion type 120 volt engine pre-heater 7) Heated 12V & 120V fuel/water separator 8) Jacobs engine brake with 3-position switch 9) Manufactures standard spin on oil filter 10) Firewall mounted air cleaner with stainless steel clamps 11) Audible engine warning device for high temperature, low coolant level and low oil pressure <p>Specify Manufacturer & Model of Engine_____</p> <p>Specify Gross Brake H.P. Rating at Manufacturer's Recommended R.P.M _____</p> <p>Specify Torque Rating at Manufacturer's Recommended R.P.M _____</p>		
<p>1.9 Exhaust System:</p> <ol style="list-style-type: none"> 1) Manufacturer's standard DPF/SCR system 2) Dual 5" chrome stacks with curved tips installed on back of cab 3) Full round stainless steel heat shields 4) Diesel exhaust fluid tank mounted back of cab and sized appropriately 		
<p>1.10 Transmission:</p> <ol style="list-style-type: none"> 1) Minimum 18 speed Fuller RTLO(F) 16918B 18-speed 2) 1645 ft.-lbs. minimum torque rating 3) 15.5" clutch with 7-spring easy pedal with torque limiting clutch brake 4) Bell housing to be aluminum in lieu of iron 5) Clutch pedal to be through floor design 6) Suspended clutch pedal from firewall is not acceptable 7) Remote lube hoses for clutch linkage, release bearing and cross shafts mounted to LH frame rail 8) Heavy duty driveline to exceed torque rating of engine being quoted <p>Specify Manufacturer & Model of transmission_____</p>		
<p>1.11 Cooling System:</p> <ol style="list-style-type: none"> 1) Heavy-duty type protected to -30°F with extended life type antifreeze and designed to keep engine from overheating while operating at maximum output in 110°F weather 2) Radiator and heater hoses to be silicone 3) Two Speed fan clutch to aid in cooling during frequent start/stops 		
<p>1.12 Frame:</p> <ol style="list-style-type: none"> 1) 10 ¾" x 3.5" x .75" Heavy-duty, constant depth, full C-channel frame rails 2) Full length steel inner liner 3) Combined 3,468,000 inch lbs. resisting bending moment minimum including front frame extension 4) Front mount PTO provision with a minimum 31" front frame extension 5) Frame rails to be painted high gloss frame rail black 		
<p>1.13 Bumper:</p> <ol style="list-style-type: none"> 1) Front only, to be manufacturer's heavy-duty steel channel type 2) Bumper to extend full width 3) Bumper to be black 		

1.14 Cab-To- Trunnion: To be determined prior to ordering with body company		
1.15 Axle, Front: 1) 20,000 lb. Dana Spicer D2000F rated capacity 2) Manufacturer's standard dual power steering 3) Iron hubs required for extended 3 year/350,000 mile coverage for bearings and seals		
1.16 Axles, Rear: 1) 46,000 lb. Dana Spicer D46-170 rated capacity 2) Driver controlled inter-axle and differential lock for both axles 3) Axle ratio to be determined by chassis manufacturer for best performance based on truck application 4) Maximum truck speed to be governed at 70 MPH 5) Heavy wall drive axles both axles 6) Lube pump both axles 7) Iron hubs required for extended 3 year/350,000 mile coverage for bearings and seals Specify Axle Ratio_____		
1.17 Suspension: Front: 1) Taper leaf type rated at 23,000 lbs. total capacity at the ground 2) Greaseable front spring pins 3) Heavy duty shock absorbers Specify Capacity _____ Rear: 1) Chalmers 854 46,000 lbs. rating with low mount saddle height 2) Beam shocks for Chalmers suspension Specify Capacity_____ Specify Suspension Mfr. & No. _____		
1.18 Wheels and Tires: 1) Wheels – "Accuride" 10-bolt hub piloted steel disc type 2) 24.5" x 8.25" base width for rear 3) 22.5" x 9.00" base width for front 4) Tires - Steel radial type, 385/80R22.5 Load Range L, 20-ply rated tread tubeless type on front (Michelin XZUS 2) 5) A matching spare front tire and wheel to be supplied at time of delivery 6) 11R x 24.5 Load Range G, 14-ply, semi-traction, staggered cross lug, tubeless type on rear (Michelin XDE M/S) 7) All tires, front and rear, to be of same manufacture and designed for the truck application Specify Manufacturer & Size Front: _____ Rear: _____		
1.19 Brakes: 1) Brake system to conform to ICC regulations 2) 6-Channel anti-lock (ABS) fully air-operated 3) Sensors for rear wheels shall be out-board mounted at wheels. 4) Hand valve plumbed to all service brakes 5) Compressor – 18.7CFM minimum capacity with Teflon lined stainless steel discharge hose 6) Bendix Air-cam brakes on front and rear axles 7) 16.5" x 7" for front axle and 16.5" x 7" for rear axle 8) Automatic type slack adjusters for both axles		

<ul style="list-style-type: none"> 9) Outboard mounted brake drums for all axles 10) Steel air reservoirs placed as far forward or under cab or between frame rails 11) Outside frame rail must be "clean" installation of equipment 12) Manual reservoir drain, cable pull type moisture ejector 13) Spring Brake Modulation System to include SBM and relay valves 14) Bendix AD-IS air dryer with heater <ul style="list-style-type: none"> A. Includes easy to service spin-on desiccant filter 15) Air brake chambers on rear axle shall be installed so as not to protrude past plane of rear tires 16) Air glad hands to be located at end of frame 		
1.20 Electrical System: <ul style="list-style-type: none"> 1) Plug-in auto reset 12-volt circuit breaker system 2) Minimum 160 Amp alternator 3) Wires labeled every 4" or less 4) Junction box containing light and power circuits for body connections located at end of frame 5) Snow plow light switch in dash and wiring harness to front fenders 		
1.21 Battery: <ul style="list-style-type: none"> 1) (3) Optima DT 31T batteries with minimum CCA rating of 2700 at 0 degrees 2) Aluminum battery box mounted left hand back of cab 3) Battery jumper terminal mounted under hood on left hand frame rail 		
1.22 Fuel Tank: <ul style="list-style-type: none"> 1) 26" diameter 100 gallon aluminum fuel tank mounted left hand under cab 2) Paddle handle filler cap with thread less filler neck 3) Hotline 600 watt fuel heater 4) Shut-off valves on supply lines 		
Exception(s) Detail:		

	Meets?	
	YES	NO
2. Dump Body		
2.1 Body General: <ul style="list-style-type: none"> 1) Contractor type asphalt body with Uni-Body crossmemberless design 2) 16' body length 3) 96" outside width 4) 36" side height 5) Asphalt sloped double acting tailgate rear body design 6) Rear corner posts to be 8" above rear side height 7) Full depth rear corner posts tied to 8" deep rear apron 8) Vertical style headboard sheet 9) Bed must be built to shed dirt on all surfaces and rails 10) Body to have overhang behind rear tires of approximately 18" - 20", so asphalt lip is not needed 		
2.2 Floor: <ul style="list-style-type: none"> 1) 1/4" AR 400 floor with 5" floor to side radius for easy clean-out 2) No crossmembers 3) 8" formed 1/4" grade 50 longitudinals with rubber cushion for wear strip between body and truck frame 4) Longitudinals to extend the full length of body floor 		
2.3 Sides/Front: <ul style="list-style-type: none"> 1) 10 GA. grade 50 36" high sides 2) Dirt shedding sloped 10 GA. grade 50 double weld-on side braces 3) Dirt shedding sloped top and bottom rail construction 4) 7 GA. grade 50 rear corner post material 		

<ul style="list-style-type: none"> 5) All joints and seams will be closed, with full seam welding 6) 4" wide side board pockets 7) Body company to provide one-piece 4" x 8" rough cut wood side boards 8) 10 GA. grade 50 head sheet 		
<p>2.4 Tailgate:</p> <ul style="list-style-type: none"> 1) Asphalt style rear body/tailgate 2) Tailgate shall be six inches 8" taller than dump body sides to accommodate 8" tall sideboards 3) 7 GA. grade 50 tailgate sheet material 4) (3) 10 GA. grade 50 horizontal tailgate braces 5) 1½" steel upper hinge brackets welded to tailgate, 1 ½" pivot pins and 1 ¼" pivot joint 6) Double link style with grease zerks 7) Full-box type perimeter with full seam welds 8) 3/8" tailgate chains 9) Center D-ring welded to top of tailgate for removal 10) Tailgate latch to use an air cylinder to open and close tailgate latches 11) Tailgate latch control valve to be 12 volt electric over air with on/off rocker switch and warning light mounted on the control console 		
<p>2.5 Cylinder:</p> <ul style="list-style-type: none"> 1) Hoist must be external trunnion mount with oscillating trunnion assembly to reduce side loading 2) 4-stages; first stage to be 6.5" diameter and 160" total stroke 3) Cylinder must achieve 50 degree body dump angle 4) Cylinder to be nitrided to resist corrosion, prevent scoring, scuffing, and marking 5) Cylinder cradle is modular, one piece with body guides, and two safety body props 		
<p>2.6 Body Hinge:</p> <ul style="list-style-type: none"> 1) Rear hinge to be 8" x 6" structural angle 2) 2" solid stainless steel pins and greaseless composite bushings bolted to hinge assembly to prevent pins from spinning 3) 2.5" pivot blocks 		
<p>2.7 Cab guard:</p> <ul style="list-style-type: none"> 1) Cab guard to be full width of dump body with room for dual vertical exhaust stacks and installed 4" above truck cab 2) Cab guard to be 10 Ga. Grade 50 steel with 7 Ga. endplates and must extend over front mounted cylinder and back of cab 3) Center mount plate for Whelen R2LPHPA Responder light bar 4) Mount plate to allow line of sight to light bar from front, rear, and both sides of truck 		
<p>2.8 Body Lighting:</p> <ul style="list-style-type: none"> 1) All lights and reflectors must conform to FMVSS specifications and standards 2) Sealed dump body wiring harness to be wired to the junction box provided on the chassis 3) (1) L.E.D. Oblong grommet mounted stop, tail, turn light in each corner post 4) (2) 4" L.E.D. round grommet mounted stop, tail, turn light installed at rear 5) (1) 4" L.E.D. round grommet mounted back up light installed at rear 6) Factory chassis taillights are not acceptable 7) Aluminum L.E.D. I.C.C. triple light bar at rear 8) L.E.D. Clearance lights and license plate light 9) Light bar wiring to be ran through metal tube down cab guard/front of body 10) (2) 1500 Lumen 10-diode L.E.D. work lights installed at rear and wired to chassis work light switch 		
<p>2.9 Paint:</p> <ul style="list-style-type: none"> 1) Body to be phosphate etched and covered with a 2 part urethane primer 2) Finish coat to match chassis 3) Bottom of body to be painted black 		
<p>2.10 Options & Accessories:</p>		

<ol style="list-style-type: none"> 1) (2) Driver's side front 1.5" grip strut steps 2) Driver's side front grab handle 3) Shovel bracket mounted on front of bed, driver's side to hold a #2 tempered asphalt shovel 4) Mud flaps installed in front of and behind rear of drive axles 5) Front to have anti-sail brackets 6) Rear to have removable rod brackets easy removal 		
2.11 Warning Lights: <ol style="list-style-type: none"> 1) (1) L.E.D. Whelen R2LPHPA Responder light bar with aluminum base mounted to cab-guard 2) (2) Surface mounted Whelen M2AC Linear L.E.D. light heads mounted at rear of body 3) Chassis provided switch for lights to be on dash of truck with activation light in switch 		

ALTERNATE 1(Bed Vibrator):

2.12 Bed Vibrator: <ol style="list-style-type: none"> 1) Vibrator to be Vibco Big Bertha DC 3500 2) 4,000 VPM, 3,500 Lbs. force minimum 3) Bed vibrator mounted under body a 1/4 length from front & centered between body longitudinals 4) 80-amp maximum voltage draw with self-resetting circuit breaker 5) Vibrator control shall be located on controls console with momentary push button switch 		
Exception(s) Detail:		

3. Snow Plow	Meets?	
	YES	NO
3.1 Reversible Expressway Snow Plow With Compression Spring Trip Edge: <ol style="list-style-type: none"> 1) Plow shall consist of twin nitrided hydraulic reversing cylinders, steel moldboard, and continuous seam welding 		
3.2 Minimum Mold Board Requirements: <ol style="list-style-type: none"> 1) 12' moldboard length with 40" center and 56" discharges 2) Cutting path at 35° for a 12' length must be 118" 3) 10GA Grade 50 rolled moldboard with eight (8) ½" x 3½" rolled ribs for extra strength and rigidity 4) All welds must be continuous (skip welds not acceptable) 5) Bottom angle must be 4" x 4" x 3/4" with an additional 4" x 3" x ½" reinforcements between the cutting edge bolt holes 6) Top moldboard angle must be constructed of 3½" x 2½" x 3/8" with holes to allow moisture to escape 7) Two horizontal braces for added rigidity 8) Attack angle must adjustable to 5°, 10°, and 20° 9) 5/8" x 8" one piece cutting edge with AASHO punching-standard 10) 12" x ½" thick rubber snow deflector installed 		
3.3 Snow Plow Trip Assembly: <ol style="list-style-type: none"> 1) Full Moldboard Trip with (2) two external compression springs 2) Trip-Spring anchor plates are encased and continuous welded to the push frame providing greater strength 3) Spring wire material to be AISI 51604 rated 4) Free length of 23.25", OD of 5.31", ID of 3.87" and wire diameter of .719" 5) Qty. 14.32 coils with 12.32 coils active 6) Spring Rate of 322 pounds/inch 		
3.4 Circle Frame and Push Tube: Design allows continuous level lift in any position		

<ol style="list-style-type: none"> 1) Push frame tube to be 96" in width constructed of 4" x 4" x 3/8" square tube. 2) Five (5) moldboard to push frame pivot points with 1 1/4" bushing pinning to two (2) 5/8" mounting ears with 1 1/4" diameter pins (No exceptions) 3) Semi-circle constructed of 3 1/2" x 3 1/2" x 1/2" HR angle with 77.26" span at push-tube 4) Semi-circle is further reinforced from back side of circle to push tube with two (2) 3 1/2" x 3 1/2" x (1) 2" HR angle 5) Semi-circle pivot and reversing cylinders yokes constructed of two (2) HR 1/2" plates 6) There shall be two (2) reversing stops constructed of 1" x 5" plate welded to circle 7) Moldboard attack angle brace connection plate are continuously welded to the push frame assembly and constructed of 1/2" plate with a 3" x 10" x 1/2" plate 8) Twin (2) 4" x 10" x 1 1/2" hydraulic reversing cylinders are double acting for heavy duty reversing. 9) Cylinders to be nitrided to resist corrosion, prevent scoring, scuffing, and marking 10) Reversing cylinders must be located above the circle frame for increased protection against road debris and for ease of maintenance 11) Plow mounted cushion valve for reversing cylinders is standard 12) 1"x 6" Rectangular carbide skid shoes with screw jack adjustment 13) Screw jack to support hitch when connecting truck 		
<p>3.5 A-Frame:</p> <ol style="list-style-type: none"> 1) A-frame sides constructed of 4" x 13.8# channel welded to 1" x 5" x 33.5" A-frame end plate 2) End plate to side channels is further reinforced with a 5/8"x 3 1/2" x 22.5" plate 3) A-frame to circle frame pivot tongue consists of two (2) 4" x 8.25"x .75" plates with a 1 3/4" x 6.75 Zinc plated pin 4) Reversing cylinders pin to dual 5/8" thick cylinder mounts on each side of A-frame 		
<p>3.6 Truck Portion of Quick Hitch:</p> <ol style="list-style-type: none"> 1) Plow to attach to truck portion by means of a "drive in" quick hitch 2) Push lugs on plow portion of hitch to automatically attach to pins mounted on truck portion of hitch 3) Hitch release to be a single lever type 4) Drawing of "quick hitch" to be included with bid response 5) The receiver opening must be tapered and allow up to a 5" horizontal misalignment when connecting plow to truck 6) Receiver boxes shall be fabricated from 1/2" plate and welded to 4" x 4" x 1/2" vertical structural angles 7) Hitch frame members are 1/2" x 4" x 4" structural angle 8) This hitch is low profile for access to the truck's engine compartment 9) The lift arm and lift frame shall be designed to accept a 4" lift cylinder with nitrided cylinder tube 10) Cylinders pins are to be 1" cold rolled steel 11) Lift cylinder to be 4" x 10" 12) Cylinder to be nitrided to resist corrosion, prevent scoring, scuffing, and marking 13) Self-storing lift arm accomplished by pulling one 1" pin and folding the cylinder up, allows you to re-pin to store 14) The telescopic lift arm shall be manufactured of 4" x 4" x 3/8" square outer tubing and 3" x 3" x 3/8" square inner tubing 15) The lifting plate shall be 3/8" x 4" flat material and have two banjo-type chain eyes able to accept 1/2" chain as well as the weight of the plow 		
<p>3.7 Plow Portion of Quick Hitch:</p> <ol style="list-style-type: none"> 1) Plow portion of quick hitch to have 2-point locking mechanism on 30 1/2" centers 2) Plow portion constructed of MC 7" x 22.7 lbs./ft. channel by 34 1/2" in length 3) (2) locking devices shall be 1 1/2" square and shall lock behind the fixed welded pin in the truck hitch frame 4) Decoupling shall be accomplished by removal of a vertical safety pin and the tripping of a lever which automatically opens the receptacles and allows the truck to back away from the plow unit 5) Plow portion of quick hitch shall be affixed to the frame with 1 1/2" GR 8 bolts so the entire hitch can be removed for summer use 6) The plow portion of the quick hitch shall swivel horizontally, allowing the plow to follow the 		

variations in the road surface		
3.8 Snow Plow Lights <ol style="list-style-type: none"> 1) Snowplow lights to be dual-beam halogen headlamps with turn signal/parking lights encased in a high-impact polycarbonate housing 2) Plow lights will be mounted so the lights will shine over the top of the plow when it is lifted in the transport position 3) Light housing to use double-post mounting hardware and be securely mounted to hood of chassis using aluminum brackets 4) Plow lights to use high output H1 and H7 halogen bulbs and 1157A amber turn signal/parking light bulbs 5) Plow lights are to be wired to the snow plow wiring circuit provided on the chassis 6) All plow wiring to be run through conduit or a weather proof sheathing to prevent wiring from shorting out 7) (2) Light Force 170 Striker 50W H.I.D. driving lights mounted to mirrors and wired to switch mounted on control console. To include amber combo filters 		
Exception(s) Detail:		

ALTERNATE 2 (Wing Plow):

	Meets?	
4. Wing Plow	YES	NO
4.1 Wing Post With Rotational Float And Integrated Trip: <ol style="list-style-type: none"> 1) Single integrated rotational float mechanism to provide up to 13" of float and up to 35° of moldboard trip rotation 2) Wing post attaches to front-mount for ease of removal with cheek plates 3) One piece 7" x 5" x 3/8" rectangular cross tube welded to mast assembly 4) Toe cylinder is double acting 3" x 10" stroke with 1½" rod 5) Cylinder to be nitrided to resist corrosion, prevent scoring, scuffing, and marking 6) Lift arm constructed of 3" x 5" x 3" x ¼" formed channel with ½" x 3" x 20" lifting link attached to trailing arm 7) Lift arm weldment attached to mast with a 1¼" diameter cold rolled 1045 steel pin 8) Mast is a formed and welded channel constructed of ¼" thick material 9) Trailing arm weldment is constructed of a formed ½" plate with a welded and boxed reinforcement 10) Wing Dee is 1½" x 14" x 6" with 1" ears 8½" apart and secured to the arm weldment with a 1½" by 12" pin 11) Wing to Dee attachment is 1½" NC by 7" with heavy duty hex nut and cotter pin 12) Front mounting cheek plates shall measure 19" x 35" x ½" 13) Moldboard heel actuation to be achieved from a front heel lift cylinder 14) Cylinder shall be 4" bore x 10" stroke, with a 2" rod 15) Cylinder to be nitrided to resist corrosion, prevent scoring, scuffing, and marking 16) Cylinder shall be double acting design 		
4.2 Rear Push Arm Assembly And Mount: <ol style="list-style-type: none"> 1) The rear of the moldboard shall be supported by a single spring cushioned push arm 2) The out tube shall be constructed of 3.25" OD x .38" wall round tube 3) The inner shaft shall be constructed of 2.38" solid steel shaft 4) The inner shaft shall a series of bolt holes to allow for push arm length adjustment 5) The shock spring shall be 4" x 8", .63" thick wire 6) Rear cross tube and cheek plate mount with 7"x 4" x .38" cross tube 7) Front mast and rear push arm cheek plates shall be 19" x 35" x ½" thick 		
4.3 Wing Moldboard <ol style="list-style-type: none"> 1) Moldboard height shall be tapered 32" intake - 37" discharge 		

<ol style="list-style-type: none"> 2) 9' x 1/2" x 6" one piece cutting edge with radius toe end 3) 10GA Grade 50 rolled moldboard with a minimum of seven (7), 1/2" flame cut ribs for extra strength and rigidity 4) Continuous welded one-piece moldboard 5) Reinforced 4" x 4" x 3/4" bottom angle with 1/4" x 4" plate braces 6) 2" x 2" x 3/16" boxed top angle with ends capped 7) (2) 2" x 2" x 3/16" angle horizontal stiffeners for added rigidity 8) Push arm mounting points shall be 3/8" plate 		
Exception(s) Detail:		

	Meets?	
5. Dump Body, Plow, & Wing Warranty:	YES	NO
5.1 Warranty: <ol style="list-style-type: none"> 1) Twelve (12) month warranty on parts from the date recorded by as the in-service date, not to extend beyond twenty-four (24) months from date of manufacture. 2) Twelve (12) month repair labor from the date recorded by as the in-service date, not to extend beyond twenty-four (24) month from date of manufacture. 		
Exception(s) Detail:		

	Meets?	
6. Hydraulics/Controls	YES	NO
6.1 Hydraulic Pump: <ol style="list-style-type: none"> 1) The hydraulic pump shall be a U.S. manufactured axial piston pressure and flow compensated load-sensing type 2) The pump shall be cast iron construction and rated to 4.67 cubic inches per revolution at maximum stroke which will deliver 19.2 GPM @ 1000 engine RPM 3) The pump shall have a 2" inch suction line and 3/4" case drain line plumbed directly back to the reservoir. 4) The pump shall be rated for 4000 PSI maximum and 3500 PSI continuous 5) The pump shall have a 1 1/4" keyed drive shaft and SAE type C mounting flange 6) The pump shall be a FASD-34 		
6.2 System Shut Down Protection: <ol style="list-style-type: none"> 1) A single normally open, two position, two way, poppet style solenoid valve capable of stopping oil flow to the hydraulic system when actuated, shall be installed at the discharge port of the pump 2) The valve assembly must also incorporate a high pressure relief valve to protect the system from over pressurizing during system shut down 3) This solenoid valve shall be wired to a float type level sensor that is mounted through the top of the reservoir 4) The system shall be designed so that when the float contacts close, the solenoid valve stops the flow of oil to the system 5) At the same time, a signal will be sent to an indicator light on the control panel that alerts the operator of system shutdown 6) The control panel will also incorporate a momentary override switch wired to de-energize the shutdown system to facilitate diagnostics and equipment storage 		
6.3 Mounting: <ol style="list-style-type: none"> 1) The pump mounting shall be incorporated with a bracket fabricated to mount in the extended frame rails of the truck and connected to the crankshaft of the engine 2) Chassis dealer to provide crankshaft to driveshaft adapter 3) The hydraulic pump shall be mounted with shaft centerline parallel to the crankshaft centerline 		

<p>and at a level to create no more than a three-degree angle on the driveline</p>		
<p>6.4 Drive Line:</p> <ol style="list-style-type: none"> 1) The hydraulic pump shall be driven directly off the engine crankshaft via a splined driveline to allow for movement 2) The driveline shall include grease fittings on both u-joints 3) Driveline shall be a Spicer model 1310 series 		
<p>6.5 Reservoir and Valve Enclosure:</p> <ol style="list-style-type: none"> 1) The hydraulic reservoir shall be of 45 gallons nominal capacity, constructed of 10-gauge steel, and be internally baffled 2) The mounting bracket is to be designed and supplied by the reservoir supplier 3) The mounting bracket shall allow for a 1" clearance from frame obstructions 4) To prevent any truck torsional loads from transmitting through the reservoir, the reservoir shall be mounted by three points to the tank mounting bracket 5) The enclosure shall use gasket-less passive technology 6) Rubber seals, gaskets, or weather stripping of any kind are not acceptable 7) The enclosure cover shall be removable within seconds by one person without the use of any tools and shall protect from both road and pressure washer spray 8) The hydraulic oil filter shall be mounted in the reservoir 9) Hydraulic filter shall be a 16-micron absolute and rated for no less than 60 GPM 10) Filter shall be an Internormen TEF31016VG16SP-UG60E115 11) The filter will come with both a visual and an electrical bypass indicator 12) All valve fittings, hoses, filter, filler breather, oil level/temp sensor units, electrical connections, and valve assembly must be protected by the enclosure cover 13) Bulkhead fitting connections through the top of the enclosure as well as any other exposed valve fittings are not acceptable 14) The control valve assembly must be easily accessible from all six sides without the use of any tools 15) The valve plate shall be mounted to two hinged, swing down arms to allow for easy service of hoses 16) A 2" full flow brass ball valve shall be installed at the suction port of the tank 17) The reservoir and valve enclosure shall be a Force America VT45 		
<p>6.6 Hydraulic Control Valve:</p> <ol style="list-style-type: none"> 1) Control valve shall be U.S. manufactured 2) Valve shall be a load sensing type with O-ring ports 3) Mid-inlet section porting will be #16 inlet, #20 outlet, #16 hoist section, #4 load sense port, and #10 or #12 for all other sections 4) The hoist and pup sections shall be stacked to one side of the mid-inlet and all other sections will be stacked on the other side 5) All ports shall be level with each other so as to lay flat on its base 6) There will be a main relief in the mid-inlet section that will be set at 3000 PSI to protect the system from being over pressurized 7) Valve shall be air controlled for hoist and plow functions 8) Valve shall be a Force America Add-A-Stack® valve or prior approved equal 9) Valve sections to be arranged as follows: <ol style="list-style-type: none"> A. Dump body hoist, 3-way for a single acting cylinder with a cable pull-off valve model 121.935.00227 plumbed into the hoist line B. Pup trailer hoist, 3-way for a single acting cylinder C. Mid-inlet transition section with a 0-4000 pressure gage installed D. Plow lift, 3-way for a single acting cylinder with flow control E. Plow Angle, 4-way for a double acting cylinder with flow control F. Heel lift cylinder, 4-way for a double acting cylinder with flow control G. Toe lift cylinder, 4-way for a double acting cylinder with flow control 		
<p>6.7 Control Console:</p> <ol style="list-style-type: none"> 1) Control levers shall be two single axis with center safety lock for hoist and pup, dual axis for plow functions, and single axis for wing cylinders 		

<ul style="list-style-type: none"> 2) Air control levers for all functions shall be installed in top bay of the console 3) The console shall have an adjustable base height for operator safety and comfort 4) The console shall be Force America model InControl or approved equal 5) Switches for the following functions: <ul style="list-style-type: none"> A. Dump body tailgate – Guarded toggle style B. Pup trailer tailgate – Guarded toggle style C. Push button momentary switch for body vibrator D. Light Force auxiliary lights E. (1) auxiliary rocker switch F. Rocker switches to be lighted style and easily seen during night operation 		
Exception(s) Detail:		

7. Manufacturing Specifications:	YES	NO
7.1 Origin of Manufacture: Dump body, plow, wing, and hydraulic system are to be designed and manufactured in the United States of America. Foreign design and manufacture is not acceptable. Must have resident full time engineering staff based in the U.S.		
Exception(s) Detail:		

	Meets?	
8. Rear Pintle Hitch	YES	NO
8.1 Hitch Assembly <ul style="list-style-type: none"> 1) Rear hitch to be gusseted to frame of chassis using heavy-duty wing plates 2) (2) Heavy duty D-rings for safety chains welded to hitch 3) 35-Ton air cushion pintle hitch to be set at 26" from ground 4) Air glad hands to be relocated to rear hitch plate in most accessible location 5) Glad-hands and covers will be supplied by truck manufacturer. 6) 7-way pin trailer socket to be wired to junction box at rear of chassis 7) Designated pin on 7-way socket to be wired to switch on console to control tailgate on pup trailer 8) Quick coupler hydraulic fitting(s) for pup trailer/auxiliary equipment to be located in most accessible location 9) Quick coupler hydraulic fitting(s) to include dust caps and plugs 10) The entire hitch assembly and dump body hinge to be painted black 11) Installed chip spreader bar compatible with Teton County Chip Spreader. 		
Exception(s) Detail:		