

TOWN OF HAMPTON, NH
INVITATION TO BID

2016-004 Two (2) New 6 Wheel Dump Trucks w/ Plow and Wing Plow

I. INTENT

The Town of Hampton, acting through its Town Manager for the Hampton Department of Public Works (DPW), in accordance with the provisions of New Hampshire Revised Statutes Annotated Chapter 37, Section 6 and the provisions of the Town of Hampton Policy requests sealed written bids from qualified licensed Dealers for the purchase and delivery of two (2) new 6 Wheel dump trucks each with a plow and a wing plow.

II. INSTRUCTIONS TO BIDDERS

The Bid price shall be held firm and not withdrawn for 90 days from Bid opening for each vehicle. All prices shall include any and all taxes, surcharges, and fees. All delivery costs shall be included in the pricing.

The vehicles shall be of current production from an established, recognized manufacturer. The successful vendor shall provide written information on the standard warranty for each of the vehicles and the vehicles associated components.

In addition, the successful vendor shall provide all information concerning any safety bulletin or recall of any parts and/or components of the vehicle by the manufacturer, its suppliers, or any government agency for a period of ten (10) years.

All inquiries regarding the bid document, bid procedure, and any technical aspect may be directed to Chris Jacobs, Department of Public Works Director, at (603) 926-3202, weekdays between the hours of 7:00 am and 3:30 pm, or by email cjacobs@town.hampton.nh.us

All bids shall be submitted in conformance with this Invitation to Bid and all its sections, and any attachments, and any addenda distributed, all requested information must be supplied. Failure to comply will be reflected in the evaluation of the bid, and may result in disqualification of the bidder.

III. QUALIFICATIONS

The successful vendor will be a licensed dealer in New Hampshire, Massachusetts, Maine, and/or Vermont.

IV. MINIMUM SPECIFICATIONS

Please see attached document entitled "Bid 2016-004 Two (2) New 6 Wheel Dump Trucks w/ Plow and Wing Plow Attachment A – Minimum Specifications" – 11 Pages

V. TRADE-IN VEHICLES

The Town of Hampton has the following two vehicles for trade-in value against the cost of the new vehicles. Bidders are requested to provide the trade-in value for each of the vehicles in Part A of the Bid Proposal Form.

Vehicle #1 - 1988 Mack RD690P (#45) 6-wheel dump truck w/plow, wing, & spreader, 70,992 miles

Vehicle #2 - 1990 Mack RD601 (#42) 6-wheel dump truck w/plow, wing, & spreader, 88,438 miles

The vehicles may be viewed by appointment at the 1 Hardardt's Way, Hampton, NH. You may set up an appointment by calling Chris Jacobs, Department of Public Works Director at (603) 926-3202.

All trades are in as is, as seen condition. Vehicles will be traded-in if deemed to be prudent by the Public Works Director, the Town Manager, and the Board of Selectmen.

VI. CONTRACT AGREEMENT

The vendor selected through the award process will be required to enter into a contract agreement with the Town of Hampton and to execute the contract agreement within two weeks of the date of award, unless prior arrangements are made with the DPW Director or his designee. This document "Bid 2016-004 Two (2) New 6 Wheel Dump Trucks w/ Plow and Wing Plow" shall become part of the contract.

The selected vendor and/or its employees shall not represent themselves as employees or agents of the Town of Hampton.

VII. PRODUCT AND DELIVERY SPECIFICATIONS

The successful vendor shall state the expected delivery date for each of the vehicles. The vehicles shall be delivered to the Hampton Public Works Department no later than 120 days from award of bid by Town. The award is expected to be made within (15) working days of the bid opening.

The successful vendor shall provide training for all Public Works employees on the use of each vehicle, its components, and systems, if applicable.

VIII. LIQUIDATED DAMAGES

The contract as awarded will contain a liquidated damages clause to the effect that there shall be a \$100/day late penalty should the successful vendor fail to meet the scheduled delivery dates for either of the two vehicles. Such late penalty shall be deducted from the payment for the vehicles by way of liquidated damages.

IX. PAYMENT

Payment will be made within 30-days of receipt of the submission of a completed invoice and authorized by DPW Director or his designee. Payment of each invoice automatically releases any lien that the invoice may have provided against the Town.

Invoicing Instructions. All invoices shall include the following information:

- Company name
- Date of delivery
- Vehicle(s) delivered
- Contract number

X. USE OF SUBCONTRACTORS

The use of subcontractors will not be allowed under this contract.

XI. LAWS, PERMITS AND LICENSING

It shall be the selected vendor's responsibility, and anyone employed by the selected vendor to adhere to and comply with all federal, state and local laws, regulations, and codes as well as with all standards and practices relating to the work being performed or the services provided. In addition, it is the selected vendor's responsibility, and anyone employed by the selected vendor to procure and keep in effect any and all licenses, permits, notifications or other regulatory requirements relating to the work to be performed or the services to be provided.

XII. NON-ASSIGNMENT

Neither the selected vendor nor the Town shall assign, transfer, convey, or otherwise hypothecate the contract or their rights, duties, or obligations hereunder or any part thereof without the prior written consent of the other, which consent shall not be unreasonably withheld.

XIII. INDEMNIFICATION

In accepting the awarded contract, the selected vendor agrees to hold harmless and indemnify the Town of Hampton and its officers, agents, and employees from any liability and any all claims, suits, damages, and attorney's fees and costs, arising from the work to be performed or the services to be provided.

XIV. TERMINATION

The Town of Hampton acting through the Town Manager retains the right to terminate and dismiss the selected vendor for non-performance, or poor performance with five (5) working days' notice. Additionally, the Town of Hampton acting through the Town Manager reserves the right to negotiate a contract agreement with the next qualified vendor for completion of the contract.

XV. SUBMITTAL REQUIREMENTS

All prospective bidders are expected to carefully examine this Invitation to Bid and all its sections, and any attachments, and any addenda distributed before submitting a bid proposal. Failure to do so will not relieve the selected vendor of the obligation to furnish all equipment and labor necessary to carry out the provisions of the Invitation to Bid. The submission of a bid proposal shall be considered prima facie evidence that the bidder has made such examination and has taken into account the Town's intent.

All costs related to the bid proposal preparation and/or submission will be borne by the submitting bidder in responding to this Invitation to Bid or in responding to any request for interviews, additional information, etc. prior to the issuance of a contract.

Any bid proposal which is incomplete, conditional, or obscure, or which contain erasures, alterations or other irregularities of any kind, or in which errors occur or contain abnormally high or low costs, may be rejected.

The completed Bid Proposal Form must contain the full name of the company and the address. Failure to manually sign the Bid Proposal Form will disqualify the submitting bidder. The person signing the Bid Proposal Form shall show title or authority to bind the firm in a contract agreement. Company name and authorized signature must appear on the Bid Proposal Form in the space provided.

The cost shall be stated in both words and figures on the Bid Proposal Form. All words and figures shall be written in ink. In case of a discrepancy between the figures and the words, the written words shall govern.

All submitted bid proposals shall be sealed and shall contain one (1) original and two (2) copies of the completed bid proposal package. This includes this entire document, including the Bid Proposal Form, all attachments, and any addenda distributed.

All vendor(s) are required to provide the following information with their submissions, and in the order that follows:

- Original and two (2) copies of the Invitation to Bid
- Bid Proposal Form
- All attachments and any addendums
- Summary of Qualifications
- A list of three (3) references for which comparable services have been performed. This list shall include company name, person to contact, address, and telephone number. Failure to include references will be ample cause for rejection of proposal as non-responsive. Preferred references include other local government agencies.

XVI. RETURN OF SEALED BID PROPOSALS

Sealed bid proposals will be received until 3:00 PM on Thursday, May 19, 2016 at the Town Manager's Office, 100 Winnacunnet Road, Hampton, NH 03842. Sealed bid proposal envelopes must be clearly marked "BID 2016-004 Two (2) New 6 Wheel Dump Trucks".

No faxed or emailed bid proposal or faxed or emailed withdrawals of the bid proposal will be permitted. If a withdrawal is made in either fashion, it will be destroyed upon receipt.

A prospective bidder may withdraw its bid proposal, upon request to the Town Manager before the time of opening; the bid proposal will be returned unread. At the Town's discretion, late bid proposals may be returned to bidder unopened.

(1) Correction or Withdrawal of Bid Proposal and Cancellation of Awards under Competitive Sealed Bid.

Correction or withdrawal of inadvertently erroneous bid proposals before or after award, or cancellation of awards or contracts based on such bid proposal mistakes, shall be permitted at the Town Manager's sole discretion. However, no changes in the proposed cost(s) or other provisions of the bid proposal prejudicial to the interest of the Town or fair competition shall be permitted. Except as otherwise provided by regulation, all decisions to permit the correction or withdrawal of a bid proposal, or to cancel awards or contracts based on errors or omissions, shall be supported by a written determination made by the Town Manager or his/her representative. No bid proposal may be withdrawn when the result would be to award the contract to another bid proposal of the same vendor(s) or of another vendor(s) in which the ownership of the withdrawing vendor(s) is more than five percent. If the Town Manager or his designee denies the withdrawal of a bid proposal, he shall notify the bidder in writing stating the reasons for his decision.

XVII. DISQUALIFICATION

A bidder may be disqualified and their bid proposal rejected for either of the following reasons: 1) failure to supply complete information as requested by this Invitation to Bid or 2) evidence of collusion among other bidders. Any bid proposal(s) so rejected for reason #2 will disqualify the bidder(s) involved from consideration in future dealings with the Town.

The lack of experience of prospective vendors may be grounds for disqualification in the award process.

XVIII. PURCHASING POLICY APPLIES

The Town of Hampton's Purchasing Policy and Purchase Procedures in Chapter 718 of the Hampton Code applies to any bid proposals received hereunder.

XIX. AWARD

The Town acting through the Town Manager reserves the right to reject any or all proposals, to waive any informality on the bids received, to omit any item or items and/or to accept any proposal as he may deem to be in the best interest of the Town. The decision of the Town Manager shall be final.

It is the intent of the Town to award the contract to the most qualified bid proposals that meets all necessary requirements stated in this document and appendices and in accordance with the Town of Hampton's Purchasing Policy and Procedures.

The award will be made to the lowest responsive and responsible bid that meets the specifications contained herein on a total cost basis, with terms viewed as most favorable to the Town of Hampton. An award will only be made after evaluation of a submitted bid and the satisfactory negotiation of a final contract.

The award is expected to be made within (15) working days of the bid opening.

XX. NO RESPONSE REQUEST

It is requested of all prospective bidders that if they will not be submitting a bid proposal to submit a letter of no response to the Town of Hampton.

XXI. POSTING OF BIDS

This Invitation to Bid and any attachments, and any addenda distributed are posted on the Town's website at <http://hamptonnh.gov/wp-content/uploads/Townmanager/Forms/RFP>

All prospective vendor(s) seeking to submit a bid proposal are requested to inform the Town of Hampton by email at inquiries@town.hampton.nh.us that they have obtained the Invitation to Bid from the Town's Website. Please provide your name, address, phone number, and email address. This will enable the Town of Hampton to forward any addenda distributed and/or additional information that may be required for compliance with the Invitation to Bid document.

XXII. GOVERNING LAW AND VENUE

This Invitation to Bid, the bid proposal document, and the contract agreement to be entered into shall be governed by the statutory and common laws of the State of New Hampshire and venue shall lie in the State Courts of the State of New Hampshire as to any dispute.

BID PROPOSAL FORM

Bid 2016:004 Two (2) New 6 Wheel Dump Truck w/Plow and Wing Plow

Town Manager
100 Winnacunnet Road
Hampton, NH 03842

The bidder shall specify here in figures and words the cost of purchase and delivery of the vehicles. In the case of a discrepancy between the figure amounts and the words, the written words shall govern.

All costs shall include all equipment, materials, labor, and tools incidental to the delivery of the vehicles.

Part A. Trade-In Value for each vehicle:

On the lines below, submit a trade-in value in figures and words for each of the following vehicles. These values maybe deducted from the cost of the trucks, and maybe factored into the evaluation of all submitted bid proposals.

Vehicle #1 - 1988 Mack RD690P (#45) 6-wheel dump truck w/plow, wing, & spreader, 70,992 miles

\$ _____
Value in Figures

\$ _____ each
Value in Words

Vehicle #2 - 1990 Mack RD601 (#42) 6-wheel dump truck w/plow, wing, & spreader, 88,438 miles

\$ _____
Value in Figures

\$ _____ each
Value in Words

Part B. Standard Cost for Two (2) New 6-Wheeled Dump Trucks with Plow and Wing Plow with minimum specifications.

Vehicle #1 \$ _____
Price in Figures

\$ _____
Price in Words

Vehicle #2 \$ _____
Price in Figures

\$ _____
Price in Words

- All plows and hitch assemblies will carry a two year warranty from manufacturing defect

\$ _____
Price in Figures

\$ _____
Price in Words

- Dump body, hydraulic pump and valves will carry a two year warranty from manufacturing defects

\$ _____
Price in Figures

\$ _____
Price in Words

Part E. Total Bid Proposal Price = Cost for (2) 6-Wheel Dump Truck w/Plow and Wing Plow with minimum specifications + Trade-in Values + Warranty Totals

\$ _____
Price in Figures

\$ _____
Price in Words

The undersigned is submitting this Bid without collusion with any other individual or corporation. By signing you are attesting that you are duly authorized by law to commit the individual, association, partnership, company, or corporation to the terms of the bid and resulting contract attached hereto.

Name of Bidder _____
 Address of Bidder _____
 City, State and Zip Code of Bidder _____
 Business Telephone of Bidder _____
 Business Fax Telephone Number of Bidder _____
 E-Mail Address of Bidder _____
 Bidders Website Address _____
 Signature of Authorized Person _____
 Date _____

Once submitted, the Bid price shall be held firm and not withdrawn for 90 days from Bid opening.

Any exceptions shall be noted in the column titled “Actual Bid”.

Minimum Specifications Requested:

Actual Bid:

Engine Components:

325 Horsepower, 1200 lb/ft Torque

Onboard diagnostics

Carbon Emission Certification-Clean Idle

Side of hood air intake with firewall mounted
air cleaner and inside/outside air with snow door

Alternator: 12V 130 Amp 24-SI quadramount pad
with remote battery volt sense

18.7 CFM single cylinder air compressor
with safety valve

Electronic engine integral shutdown protection
system

Right side outboard under step mounted
horizontal after treatment system assembly
with right side B-pillar mounted vertical
tailpipe

Engine after treatment device, automatic over
the road regeneration and dash mounted
regeneration request switch

Ten ft. exhaust system height with a right
hand curved tailpipe

Left side mounted medium duty diesel exhaust
tank

Stainless steel after treatment device, muffler,
tailpipe shield

1500 square inch aluminum radiator with
drain valve

1350 Adapter flange for front PTO provision

1500 watt/ 120 volt block heater with
engine heater receptacle under left side door

12V.39MT+ HD/OCP starter with thermal
protection and integrated magnetic switch

C brake by Jacobs

Transmission Equipment:

Allison 30500 RDS-6 automatic transmission with PTO provision

Vehicle interface wiring with body builder connector mounted back of the cab

Electronic transmission access connector mounted to the firewall

Magnetic plugs- engine drain, transmission drain, axles fill and drain

Dash mounted push button electronic shift control

Frame mounted water to oil transmission cooler

Electronic transmission oil level check

Synthetic Transmission Fluid

Front Axle and Suspension:

18,000 lb front axle with 18,000 lb multileaf suspension

Right hand spring build up for wing plow applications

Graphite bronze bushings with seals

16.5 x 6 front brakes with automatic slack adjusters

Frame mounted power steering with cooler

Front hub, caps with window, center and side plugs. Synthetic 75w-90 front axle lube

Rear Axle and Suspension:

30,000 lb rear axle with 30,000 lb. multileaf leaf springs and shock absorbers

16.5 x 7 P rear brakes with automatic slack adjusters

Driver controlled traction differential

5.57 rear axle ratio

Brake System:

ABS without traction control, air dryer with integral air governor, heater, and oil coalescing filter for air dryer

Aluminum air brake reservoirs with pull cable

Reinforced nylon, fabric braided and wire
braided chassis air lines

Wheelbase and Frame:

180” to 190” wheel base; 237” frame
(actual spacing determined upon award)

20” front frame extension for snow plow mount
if needed.

Inner frame reinforcement at front suspension

Additional front frame reinforcement
for snow plow

Fuel Tank:

50 gallon aluminum rectangular tank mounted
on left side

Tires:

Michelin XZU-S2 315/80R22.5 20 ply radial
front tires

Michelin XDE M/S 11R22.5 16 ply radial
rear tires

Wheels:

22.5x9.00 10-hub pilot 5.25 inset 5-hand steel
disc front wheels brushed Alcoa alloy

22.5x8.25 10-hub pilot 2-hand HD steel disc
rear wheels painted black

Nylon wheel guards front and rear all
interfaces

Exterior Cab:

Conventional cab

Fender extensions

Left side and right side exterior grab handles
with rubber insert

Fiberglass hood with access hatches

Tunnel/firewall line

Dual 24 inch round polish aluminum air horns
roof mounted

Door locks and ignition switch keyed the same
with 6 keys

Rear license plate mount at end of frame

Halogen composite headlamps with bright bezels

LED aerodynamic marker lights

Headlights on with wipers with low beam
daytime running lights

Integral stop, tail, and backup lights

Standard front turn signal lights

Dual west coast bright finish heated mirrors
with left hand and right hand remote

Left hand and right hand 8 inch bright finish
convex mirrors mounted below primary mirrors

Right hand and left hand 8 inch heated stainless
fender mounted convex mirrors with tripod brackets

Right hand down view mirror

Standard side and rear reflectors

Right hand aftertreatment system with cab
access and plain diamond plate cover

Composite exterior sun visor

Rear window

Tinted door glass left hand and right hand
with a tinted wing window

Right hand and left hand electric powered windows

One piece tinted curved bonded windshield
with heated wiper blade parking areas

Interior Cab:

Molded plastic door panels with aluminum
kick plates on lower door

Black mats with a single layer of insulation

Center storage console mounted on back wall

Two cup holders

Switch expansion module

2 ½ lb. fire extinguisher

Triangular reflectors

Heater, defroster and air conditioner

HVAC duct work with snow shield for fresh air intake

Main HVAC controls with recirculation switch

Heavy duty air conditioning compressor

Solid State circuit protection and fuses with spare fuse kit

Dome door and switch activated left hand and right hand dual reading lights

Left hand and right hand electric door locks

12 volt power supply in dash

Premium high back air suspension driver seat with 3 chamber air lumbar, integrated cushion extension, forward and rear cushion tilt, adjustable shock absorber

Premium high back air suspension passenger seat with 3 chamber air lumbar, integrated cushion extension, forward and rear cushion tilt, adjustable shock absorber

Dual driver and passenger seat armrests

Left hand and right hand integral door armrests

Adjustable tilt and telescoping steering column

Eighteen inch steering wheel

Driver and passenger interior sun visor

Instruments and Controls:

Black gauge bezels

Low air pressure light and alarm

Single brake application air gauge

Two inch primary and secondary air pressure gauges

Two valve parking brake system with dash valve control, auto-neutral and warning indicator

Dash mounted air restriction indicator with graduations

- Ninety seven decibel backup alarm _____
- Programmable RPM control _____
- Diagnostic interface connector, 9 pin, SAE
J1939, located below dash _____
- Fuel filter restriction indicator _____
- Engine coolant temperature gauge _____
- Engine oil temperature gauge _____
- Engine oil pressure gauge _____
- Two inch fuel gauge _____
- Two inch transmission oil temperature gauge _____
- Inside/outside temperature gauge with
LCD Fahrenheit display _____
- Engine and trip hour meters integral within
driver display _____
- Overhead instrument panel _____
- Smartplex hub module with overhead switch
mounting, driver side, 6 switch slots; to receive
strobe and safety light wiring _____
- Six on/off Smartplex switches _____
- AM/FM/WB radio with Bluetooth and
microphone, USB, front and rear inputs
and J1939, dash mounted _____
- Radio wiring with power cutoff when
vehicle is in reverse gear _____
- Two radio speakers mounted in cab _____
- Multi-band AM/FM/WB/CB left hand mirror
mounted antenna system _____
- Power and ground studs in dash plus roof
console wiring _____
- Overhead console CB radio provision _____
- Speedometer MPH/KPH _____
- 3000 RPM Tachometer _____
- Remote engine diagnostics _____
- Digital voltage display integral with
drivers display _____

Single electric windshield wiper motor
with delay programmed to slowest speed
with parking break set

Marker light switch integral with headlight switch
and dual connectors and switch for snow plow
lights. Low beams off with high beams on

Self-canceling turn signal switch with
dimmer, washer/wiper and hazard in handle

Diagnostics and Software:

Diagnostic software and all required laptop
computer cables and or connections for diagnosis
of engine, chassis and electrical system, and ABS
system. Latest version of Allison transmission
software shall be provided for programming with one
day of on-site programming instruction.

Service and Parts Manuals:

For the life of the vehicle, the contractor shall
provide web based access to all truck specific services
manuals, technical specifications and parts catalogs

Color:

Cab color- Dupont Centari Safety Yellow

Chassis- Black

Warranty:

Standard factory warranty on cab and chassis

Engine- 7 year/250,000 mile full coverage

Transmission- 5 years/unlimited miles

Cooling- 5 years/200,000 miles

Dump Body:

5-7 cubic yard, 10 foot body will be standard

Headboard shall be a minimum of 48" high
constructed of 10 gauge steel with a ½ cab shield

Body floor will be constructed of 3/8" AR steel

Attachment A – Minimum Specifications

Body shall have a dirt shedding boxed top rail with vertical side bracing and 6” high rear board pockets. Straight vertical sides will be 10 gauge steel and dirt shedding lower rub rail.

It shall have perimeter box bracing made from 10 gauge material. There shall be two 3/8” grade 30 galvanized spreader chains. Three asphalt doors will be standard.

Body sides shall be 48” minimum, tailgate 54” minimum

Body shall be equipped with a safety brace

Polyethylene fenders shall be mounted to the chassis over the rear tires with mud flaps

Body shall be equipped with stop/turn lights, rear strobe lights, front strobe lights mounted in the headboard, back up lights, and reflectors. All lights shall be LED

Body shall be equipped with an in cab operated electric tarper

24 ton pintel hook

All shop manuals shall be included.

Front Hitch for Snow Plow:

The front hitch will be quick coupling power tilt consisting of a “male” hoist and a “female” frame that attaches to the push frame of the plow

Shall have a 4” bore by 12” stroke double acting nitride hoist cylinder

Shall have 2 1/2” double acting locking cylinders to secure the bottom of the “female” frame

The hitch shall allow the installation of a wing system without modification. The cross tubes shall be 6” by 4” by 3/8” tubing

Cheek plates will be 5/8” heavy duty steel with 5/8” bumper plate

One set of halogen plow lights with integral Turn/park lights shall be standard

Wing Plow Hitch:

The wing control cylinder shall be a 3” diameter bore by 24” stroke double acting with a 2” nitride piston rod

The push arm bracket shall be fabricated of HSS 6” by 6” by 1/2” by 3/8” vertical height. The wing arms attach to 3/4” thick double arm mounting ears

The rear saddle shall be a laterally mounted HSS 6” by 4” by 1/2” thick

The front tower shall be box section by design. It shall have a single wire rope sheave on the cylinder rod end and a single sheave on the tower top. The slide travel will be twice the cylinder stroke

The upper wing arm shall have a tension spring. The outer member is a 3” diameter schedule 80 tubular section and the inner section is a 2 3/4” diameter solid bar. Universal joint connectors will be located at each end

The lower wing arm outer member shall be a 2 1/2” diameter schedule 80 tubular section and the inner section is a 2 1/4” diameter solid bar. Universal joint connectors will be located at each end

The sheaves shall be 6” nominal size with extra deep rope groove, 1 1/4” axle with a greaseable brass bushing. The sheaves will be machined steel construction

The wire rope shall be 1/2” diameter SS steel with double clamps, loop thimbles, and anchor shackles at each end

The slide control cylinder shall be 3 inches diameter bore by 18” stroke double acting with a 2” diameter nitride rod.

The front wing slider shall consist of a base plate of 3/4” by 7” plate by the height of the tower the front wing pivot block attaches to the slide with a 1” vertical steel pin. The block will be Safety “D” model having a 1 1/2” diameter grade 5 wing mounting bolt with slotted hex nut and cotter pin

Front Plow:

An 11' power angle torsion spring trip edge plow with a 3/8" polymer skinplate no less than 45" high, punched to ASSHO standards 12" on center

Plow shall be complete with a carbide cutting edge and cover plate

Trip edge shall be punch to accept a 132" Standard hi-way punched plow blade

The moldboard shall have 2 curb shoes and 2 steel wear shoes

The drive frame and reversing mechanism shall consist of an "A" frame, a truss frame and 2 single acting 3 1/2" hydraulic cylinders with a 16" stroke and a cushion valve

Moldboard and truss frame shall pivot about the "A" frame on a removable lubricated pin not less than 3" in diameter and up to 37 degrees to either side of the chassis centerline

Wing Plow:

Wing plow shall be right hand mount with an 11' long cutting edge

It shall include 2 mounting locations for a 1 1/2" pivot bolt. The bolt holes will be reinforced with 1/2" steel plate

Wing blades will be punched 12" on center

Plow intake shall be no less than 32" and discharge no less than 39"

Cutting edge length will be 120" and the overall length will be 131"

Two cast steel wear shoes will be fitted to the cutting edge

Hydraulics and Controls:

A P20 gear type crankshaft mounted pump with a Spicer driveline and end yokes shall be standard

A 35 gallon hydraulic oil tank with sight gauge, filter assembly, shut off valves and all necessary control valves required for operation as a plow/dump truck shall be included

All controls for the plows, dump body and tarper shall be mounted to the drivers right side, at an angle and within arm's reach

All cylinders must have nitrate shafts

All hoses will be secured and protected against chaffing

An as-built set of electrical schematics shall be provided for the body

Body and all fabricated plow components shall be painted black

Four (4) hours of training shall be provided for operators and mechanics

Spreaders

Heavy duty, self-contained, hopper-type design hydraulic spreader

304 stainless steel body not less than 5.8 cubic yards struck capacity

Feed conveyor

Poly spinner disc

Power drive

Spreader controls shall be plumbed to the rear of the truck

Steel access ladder constructed from "grip strut" material shall be mounted on the rear of the spreader. Upper side rails to be from a minimum of 1" heavy-duty pipe

Warranties:

All plows and hitch assemblies will carry a two year warranty from manufacturing defects

Dump body, hydraulic pump and valves will carry a two year warranty from manufacturing defects
