



CITY OF TORRINGTON
INVITATION TO BID

BID # PLT-031-062705 FOUR PLOW TRUCKS

Date of bid opening: June 27, 2005 Time: 10:00 AM Location: Room 109A, City Hall

Bid Bond or Certified Check required with bid: 5%

Performance Bond required if awarded bid: 100 %

Submit an original bid and a duplicate copy.

The City of Torrington reserves the right to accept or reject any or all bids or any portion thereof, to waive technicalities, and to award the contract as will best serve the public interest.

Omit State and Federal Taxes.

All prices must be F.O.B.: Destination (Torrington)

Dated in Torrington: June 2, 2005 Purchasing Agent _____
Charlene R. Antonelli, CPPB

Item	Price each	Total Price
Four (4) Plow Trucks Per Specifications	\$ _____	\$ _____

Bid Submitted By: _____

Signature

Title

Name of Company _____ Date _____

Address _____

Phone _____ Fax _____ Delivery _____

E-mail address _____ Web Page _____

Comments: _____

INSTRUCTIONS TO BIDDERS

Sealed bids will be received by the Purchasing Agent, Room 109A, 140 Main St., Torrington, CT until the time and date specified on the cover sheet and opened immediately thereafter. Bids received later than the time specified will not be accepted. Amendments to or withdrawal of any section of the submitted bid received later than the time & date set for the bid opening will not be considered. Bid proposals must remain in effect for a minimum of 30 days unless otherwise noted elsewhere in the bid specifications.

BID DOCUMENTS: are available over the Internet on the City's web page, under "open bids", www.torrington-CT.org. Businesses without internet access may contact the Purchasing Department at 860-489-2224 for the bid documents. Any alleged oral agreement made by a bidder or contractor with any agency or employee of the City of Torrington will be disregarded.

FREIGHT: Prices quoted shall be net delivery **F.O.B. Torrington, CT.** All bid prices must include prepaid delivery, assembly, and/or installation (ready for operation and/or use) of all equipment and/ or materials to the individual locations(s) as designated by the Purchasing Agent. All bid prices are to be submitted on the sheets provided on this bid. Quantities and pricing are to be listed in accordance with these sheets.

QUESTIONS: Request for interpretation of any portion of the bid may be made by telephone to the Purchasing Agent at (860) 489-2225. All replies will be given verbally and a copy of any such inquiry and advice (if deemed vital to the bid by the Purchasing Agent) will be made available to each prospective bidder. Bidders should check the web site for addendums/updates 48 hours prior to the bid opening.

In the event of receipt of identical bids as to offerings, delivery, service, content, price, etc., the bid will be awarded in accordance with the information contained in the bid document, based on the first received as to date and time of receipt of the bid.

NON-COLLUSION STATEMENTS: In order for bids to be considered, a non-collusive statement must be submitted with the bid. A sample non-collusive bid statement is attached. Bidders may elect to submit their own notarized non-collusion statement.

CONDITIONAL, QUALIFIED OR NON-RESPONSIVE BIDS/PROPOSALS: All bids/proposals shall be submitted in the form and manner as indicated by the bid documents and bid forms. Any proposal which is not submitted in the form and manner indicated by the bid documents or which contains information, statements, conditions, or qualifications which place conditions or qualifications on the proposal submittal for purposes of making an award, or which alter any proposal terms, conditions, specifications, or forms, which has not been previously approved by written addendum from the Purchasing Agent, or which does not meet legal requirements, shall be declared as a qualified, conditional, or non-responsive proposal and shall be rejected without further consideration. Any proposal response that does not fully respond to and comply with all detailed specifications or requests for information including execution of proposal forms, may be declared "non-responsive" and recommended for rejection. The City of Torrington shall not be responsible for any errors or omissions of the Offeror.

TAXES: Omit all State and Federal taxes from the bid. The City of Torrington is exempt from the payment of taxes imposed by Federal government and/or the State of Connecticut.

OWNERSHIP OF DOCUMENTS: All documents, including drawings, plans, specifications, videotapes, or other documents or maps prepared by a contractor pursuant to any agreement arising from this bid shall become the property of the City of Torrington upon completion of the project or any termination of the project prior to the completion of the project.

LEGALITY: All bid offers for commodities, work, materials, or equipment hereunder shall comply in every respect with the laws, specifications and requirements of the State of Connecticut and the Federal government. Contractor will comply with the provisions of the Connecticut Fair Employment Practices Law.

LANGUAGE DISPUTES: Any disputes over the interpretation and/or meaning of any individual terms, conditions, and/or language within this Request for Bid/Proposal document shall be resolved by and at the sole discretion of the City Purchasing Agent in a manner that is in the best interest of, and best advantage to, the City of Torrington, provided any such interpretation shall be reasonable. In the event that an individual term, condition, and/or language/wording is determined at any time, including after award, by the City Purchasing Agent to be "not applicable at all" to his contract, then the term, condition, and or language/wording may be disregarded, even though an addendum is not issued. However, if the Purchasing Agent determines that the term, condition, and/or language/wording "is applicable in part", then the term, condition, and/or language/wording will apply to the degree applicable, even though an addendum is not issued.

RESPONSIBILITY: The Contractor shall save the City of Torrington, its agents or employees, harmless from liability of any kind for all claims of labor payments and materials furnished for this work, and for use of any copyrighted or un-copyrighted composition, secret process patented or unpatented invention, article or application furnished or used in the performance of the contract of which the Contractor is not the patentee, assignee, or licensee. The successful bidder

agrees to indemnify and hold harmless the City of Torrington, its agents and employees from any and all liability arising out of the successful bidders' operations, functions and/or supplied items.

The successful bidder, vendor, and/or contractor must protect all property of the City of Torrington (i.e. all floors, furniture, grass, land, etc.) from injury or other damage. Any damage so caused must be repaired by contractor/vendor at his/her own expense. At the completion of work, the vendor and/or contractor must remove from the premises all surplus materials and all debris created by same. The premises must be left in a broom-clean and finished condition acceptable to the owner or its agents. Successful bidder will furnish adequate protection from damage for all work and to repair damage of any kind; for which he or his workers are responsible, to the premises or equipment to his own work or to the work of other contractors.

DEFAULT: It shall be understood that a bidder supplying equipment and/or supplies will be considered to be in default if/when they have not delivered the item(s) within the time constraints listed in this document or subsequent purchase orders and/or contract. Bidders providing a service and/or construction will be considered to be in default if/when they have failed to meet the completion date set forth in this document or its subsequent contract and/ or purchase orders and/ or they have ceased work on the project for a period of fifteen (15) working days, cumulative or consecutive.

SUSPENSION AND DEBARMENT: The Purchasing Agent may suspend or debar the right of a vendor to be included on the vendor list and has the authority to reject any bid or response from any suspended or debarred vendors.

Suspension: A vendor may be suspended based on the following:

- 1) A vendor defaults or fails to fully comply with the conditions, specifications, or terms of a Bid, Quotation, Proposal or Contract with the City of Torrington.
- 2) A vendor commits any fraud or misrepresentation in connection with a Bid, Quotation, Proposal, or Contract with the City of Torrington.
- 3) A vendor is charged by a court with the commission of a criminal offense as incident to obtaining or attempting to obtain a public or private contract or sub-contract, or in the performance of such contract or sub-contract
- 4) A vendor is charged by a court with the following: embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, or any other offense indicating a lack of business integrity or business honesty which currently, seriously, and directly affects responsibility as a City contractor. If charges are dismissed or the vendor is found not guilty, the suspension shall be lifted automatically upon written notification and proof of final court disposition provided by the vendor to the City of Torrington.
- 5) A vendor becomes insolvent, has proceedings in bankruptcy instituted against it or, compounds its debts or assigns over its estate or effects for payment thereof, or has a receiver to trustee appointed over its property.
- 6) A vendor's commission of any act or omission to perform act is grounds for debarment.
- 7) A vendor violates the ethical standards set forth in local, state, or federal law.
- 8) Any other cause the Purchasing Agent determines to be so serious and compelling as to materially and adversely affect responsibility of a vendor as a City contractor, including but not limited to suspension by another government entity

Debarment: A vendor may be permanently debarred for the following:

- 1) Default or failure to fully comply with the conditions, specifications, drawings, or terms of a bid, proposal, or contract with the City of Torrington twice in any three-year period.
- 2) Conviction of or judgment obtained in a court for commission of those offenses in connection with the vendor's commercial enterprise stated sections 3) or 4) of suspension section listed above. If the conviction is reversed through the appellate process, the debarment shall be removed upon written notification and proof of final Court disposition from the vendor to the City of Torrington.

TRADE NAME REFERENCES: Any and all references to trade names, types, styles, model numbers, stock numbers or catalogs are intended to be descriptive only and not restrictive. The intention is to indicate to bidders the type and quality of the articles and or materials that will be satisfactory. When reviewing the information, it is the responsibility of the prospective bidder to inform the City of Torrington of any discrepancy that is found (i.e. number listed does not fit item description) Bids received on other makes or models with reference to other catalogs will be considered. The bidder is to clearly state in his bid exactly what he intends to furnish and to furnish with his bid a cut or illustration or other descriptive matter that will clearly indicate and give specification as to the product he/she proposes to furnish. Where a bid is offered on an item other than the trade standard used in the specification the item should be identified on the bid form by entering the MAKE, TRADE NAME AND MODEL NUMBER. It is understood that any substitute and/or alternate that might be offered are guaranteed by the bidder to be of equal or better quality than is referenced in the bid. The item(s) must be equivalent as to function, basic design, type and quality of material, method of construction and any required dimensions. It shall be further understood that during original as well as subsequent shipments spot checks will be performed to insure that the items received are in fact the items offered in the bid. When received, should items/materials prove to be different from what was bid in any way, the bidder agrees to the return of the items and agrees to supply correct items (per bid specifications) at the bidders expense. In the event this return action is required, it is understood the bidder may be subject to removal from the city's approved bidder's list. Bidders are cautioned that surplus, seconds, factory rejects, floor samples, close outs or distressed items are not acceptable and shipments of substitutions, defective or shop-worn equipment will be returned for a full refund at the vendor's expense.

QUANTITY: The quantities and/or materials listed in the specifications/bid sheets may be increased or decreased by the City of Torrington or its designated representative based on actual need at the time the purchase orders are placed.

QUALITY: The City of Torrington reserves the right to reject any proposal in whole or in part offering equipment and/or materials and/or services that in its or its agents opinion does not meet the quality standards desired. Such decision is final and not subject to further recourse by the bidder.

SAMPLES: forwarded by the bidder will be returned to the bidder at his request and expense. Requests for return of samples must be submitted in writing at the time the sample is given to the City of Torrington or its representative. Samples not returned to the bidder will be disposed of at the discretion of the City of Torrington or its designated representative. Large pieces of equipment submitted for evaluation and inspection are to be picked up by the bidder within 30 days of the bid opening date. Items remaining with the City of Torrington after 30 days will be discarded.

AWARD: It is the intent to award this bid in its entirety to one bidder, however, the City reserves the right to award the bid line item by line item if it is deemed in its best interest to do so. In addition, bidders are advised that should budgetary constraints dictate, part, and/or all the items in this bid may be rejected. This decision shall be considered final and not subject to recourse by the bidder.

In determining the lowest or highest responsible bidder, the City reserves the right to consider, in addition to price, the compatibility, quality, cost of maintenance and availability of parts, experience and/or past performance of the bidder, sufficiency of the financial resources of the bidder as relates to the offerings as well as the ability of the bidder to provide future maintenance and service.

Documents previously submitted to the city of Torrington will not be considered as satisfying submission requirements for this bid.

No bidder can claim any contract rights by virtue of bidding alone. Awarding of the contract means actual written notice by letter and a properly executed purchase order to the bidder or bidders to whom the bid has been awarded.

OPTION TO RENEW: This contract may be extended for three (3) additional one (1) year periods, provided all terms and conditions remain in full force and effect except for the contract period being extended. This option, if exercised, is to be executed in the form of a letter of agreement, to be issued no later than 30 days prior to the expiration of the then current contract period. This option to renew requires the mutual agreement of both parties. Refusal by either party to exercise this option will cause this contract to expire on the original or mutually agreed upon date. The total period of this contract, including all extensions as a result of exercising this option, will not exceed a maximum combined period of five (5) years.

BONDS:

Performance Bond: The Contractor, when awarded the Bid, must submit within 10 days of the bid award, and before beginning the work or signing a contract, a Performance Bond amounting to one hundred percent (100%) of the total amount of the bid. Said performance bond must be in favor of the City of Torrington and executed by a surety company authorized to do business in the State of Connecticut. The City of Torrington reserves the right to retain the Bid Bond or Certified Check on bids below \$25,000.00 as a Performance Bond. On bids of \$25,000.00 or more the Performance Bond may be furnished in the following manner: Performance Bond, Surety Bond, Certified Check, Bank Check, Savings Account in both the City & Vendor's name or Letter of Credit

Maintenance Bond: The contractor, upon signing a contract and before beginning the work, must submit to the Purchasing Agent a Maintenance Bond to guarantee that if defects in either labor or materials becomes evident within one year after completion and acceptance of work will be fixed at no cost to the City of Torrington. The maintenance bond may be included as a portion of the Performance bond or as a separate bond. If it is issued as a separate bond said maintenance bond must be in favor of the City of Torrington and issued by a surety company licensed and authorized to do business in the State of Connecticut.

Labor and Material Bonds: Per Section 49-41 of the Conn. General Statutes, on Public Works project where the estimate is in excess of \$25,000.00, a labor (payment) and material bond must be furnished to the City. Said bonds must be filed with the Purchasing Agent prior to the commencement of work.

Consent for Release of Final Payment: AIA Document G707 & G706, or equivalent, must be signed and returned by the Surety Company before final payment will be released to the contractor.

INSURANCE:

Certificate of Insurance: All insurers must have an AM Best rating of A-V11 or better and admitted to do business in the State of Connecticut. All insurance policies must include a Waiver of Subrogation whereby the insured waives its right to subrogate against the City, its subsidiaries, employees, volunteers, directors and officers. Proof of proper insurance coverage, Workers Compensation Insurance, Liability and Property damage, and Vehicle Insurance shall be filed with the City of Torrington Purchasing Agent within 10 days after the award of the bid. The Certificate of Insurance must name the City of Torrington, 140 Main St., Torrington, CT, its subsidiaries, employees, volunteers, directors & officers as the **additional insured** and filed with the Purchasing Agent prior to commencement of work. Renewal Certificates of Insurance must be mailed to the Purchasing Agent 10 days prior to the expiration of the required coverage.

Workman's Compensation Insurance: The Contractor shall take out and maintain during the life of the contract adequate Workman's compensation Insurance for all the employees employed on said work. In case any class of employees or subcontractors is engaged in hazardous work under the contract at the site of the work is not protected

under the Workman's Compensation statute, the contractor shall provide Workman's Compensation Insurance for the protection of employees not otherwise protected.

Liability Insurance: The Contractor shall take out and maintain for the life of the contract, adequate public liability insurance insuring against liability to persons not employed by him in an amount of not less than \$1,000,000.00 for injuries, wrongful death to any one person and subject to the limit for each person in an amount of not less than \$2,000,000.00 on account of one accident and property damage insurance in an amount of not less than \$1,000,000.00.

Vehicle Insurance: The Contractor shall take out and maintain for the life of the contract, adequate automotive/truck or other vehicle insurance with minimum coverage of \$1,000,000.00 each for both liability and under insured and uninsured motorist as well as any other coverage required by the State of Connecticut or requested by an official of the City of Torrington as relates to the contract.

Additional Security: The City of Torrington reserves the right to require successful bidders to enter into and such security arrangements as are deemed necessary to protect the City of Torrington, its property and goods.

PERMITS: The successful bidder agrees to obtain all work/building permits as might be required. The cost of obtaining such permits is the responsibility of the bidder. The City of Torrington reserves the right to waive local permit fees. In addition, it shall be understood that where property lines are to be considered, bidders are to verify said lines and measurements with proper City Officials prior to commencement of work. It is to be understood that any/all specifications and/or plans or drawings contained in or developed as a result of the bid process are and shall be presented subject to the approval of the City of Torrington planning, zoning and building officials and that awards made prior to said approval are subject to cancellation.

PREVAILING WAGE: When the State of Connecticut Prevailing Wage Rate is applicable to the bid, the successful bidder must submit a Certified Payroll Record prior to any request and/or invoice for payment.

CITIZENSHIP: Each employee of the Contractor shall be a citizen of the United States or an alien who has been lawfully admitted for permanent residence as evidenced by an Alien Registration Receipt Card. The Contractor agrees not to employ any person undergoing sentence of imprisonment except as provided by Public Law 89-176, September 10, 1965, (18 USC 4082)(c)(2).

SAFETY:

Machine and/or Equipment Hazard Assessment and Safety Training: Upon delivery of machines and/or equipment, suppliers are required to provide to the end-user employees, at no additional charge, a training session that will emphasize hazard awareness and assessment and the safe use of such machinery/equipment.

Occupational Safety and Health Act of 1970: Seller shall warrant that the machinery, equipment or other materials covered hereby shall upon delivery to the City of Torrington, be in compliance with the standards required by said Act and any updates as pertain to or reference said Act as well as the standards required by comparable State and local laws, if any, for such machinery, equipment or other materials in effect at the time of delivery.

Machines and/or Equipment Lockout/Tagout: In an effort to comply with OSHA's final rule on the control of hazardous energy sources, vendors must warrant that any and all machines and/or equipment as is covered under this bid will be supplied and/or installed equipped with lockout/tagout devices as prescribed by OSHA.

Toxic Substance Control Act (PL94-469): Seller warrants that each and every chemical substance constituting or contained in the products sold or otherwise transferred to the City of Torrington under this bid and subsequent purchase orders is not on the list of prohibited chemical substances compiled and published by the Administrator of the Environmental Protection Agency pursuant to Act PL94-469 and are otherwise in compliance with said Act.

Hazardous Materials: Any materials required by this bid and subsequent purchase orders that are hazardous under federal, state, or local statute, ordinance, regulation, or agency order will be packaged, labeled, marked and shipped by the seller to comply with all federal, state and local regulations then in effect including but limited to the provisions of the Hazardous Materials Transportation Act and Regulations promulgated thereunder and will further comply with any special requirements and any policies and procedures of the City of Torrington relating to the purchase of hazardous materials as might be noted on subsequent purchase orders or otherwise communicated to seller in writing.

Material Safety Data Sheets: Shall be provided by the Seller upon delivery to the City of Torrington of any goods having constituents listed in the following references - OSHA 1910, ACHIG Current Threshold Values, DOT HazMat Table 49, IARC Carcinogen List, National Toxicology Program Carcinogen List, and/or Radioactive Materials. These Material Safety Data Sheets must be consistent with and include information required by the OSHA Hazard Communication Standard published as 29 CFR 1910.1200, as the same may be amended or supplemented from time to time.

Asbestos: Bidders are advised that asbestos-containing material may be located in the boiler rooms, pipe tunnels, storage areas and various portions of City buildings. Before proceeding on any contractual work on City buildings or their interiors, it is mandatory that bidders familiarize themselves with the asbestos-containing material and that said material be considered as a health hazard and all precautionary measures according to the Ahera Rules & Regulations be observed. It is the bidder's responsibility to notify all employees and/or subcontractors of this notification.

SUBCONTRACTORS: The successful bidder shall not employ any subcontractor to fulfill any of the duties herein specified without express, prior written approval of the City of Torrington or its designated agent.

EEO: The successful bidder shall provide any/all additionally required, affirmative action statements, fair employment plans and non-discrimination programs and statement as might be required by the City of Torrington. In connection with the execution of this bid, subsequent purchase orders and/or contracts, the seller shall not discriminate against any employee or applicant for employment because of age, race, religion, color, sex or national origin. Bidders must comply with all rules & regulations of the Department of Labor with regard to Equal Employment Opportunities as pertains to municipalities.

TERMINATION OF CONTRACT: Any contract entered into by the City and the successful bidder shall provide that the City may terminate the contract upon thirty (30) days notice to the bidder.

The City of Torrington reserves the right to award or reject any or all bids, or any portion thereof, to waive technicalities, and to award the bid and/or contracts to one or more bidders submitting essentially identical proposals and, that in the city's judgment, will best serve the public interest.
The terms and conditions of these "Instructions To Bidders" are made a part this bid.

SAMPLE FORM

Bid # _____

NON-COLLUSION AFFIDAVIT

STATE OF _____ COUNTY OF _____

I, _____, being first duly sworn, deposes and says that:

1. I am _____ of _____, the bidder that has submitted the attached request for proposal for _____;
2. I am fully informed respecting the preparation and contents of the attached RFP and of all pertinent circumstances respecting such bid;
3. Such Bid is genuine and is not a collusive or sham Bid;
4. Neither the Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties of interest, including this affiant, has in any way colluded, conspired, connived or agreed directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the work for which the attached Bid has been submitted nor has it in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the price of any Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Torrington or any person interested in the proposed Bid; and
5. The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of it agents, representatives, owners, employees, or parties in interest, including this affiant.

Signed _____

Title _____

Subscribed and sworn to before this _____ day of _____, 20____.

Notary Public

My commission expires _____

SAMPLE FORM

BID # _____

CONSENT OF SURETY COMPANY TO RELEASE FINAL PAYMENT

City	<input type="checkbox"/>	Surety	<input type="checkbox"/>
Architect	<input type="checkbox"/>	Other	<input type="checkbox"/>
Contractor	<input type="checkbox"/>		

PROJECT/BID NUMBER :

TO: City of Torrington
Attn: Purchasing Agent
140 Main Street
Torrington, CT 06790

CONTRACTOR: _____

In accordance with the provisions of the Contract between the City of Torrington and the Contractor as indicated above, the (insert name & address of Surety Co.)

SURETY COMPANY on bond of (insert name & address of Contractor)

CONTRACTOR, hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not relieve the Surety Company of any of its obligations to the CITY OF TORRINGTON as set forth in the Surety Company's bond.

Subscribed and sworn to before this
_____ day of _____, 20__.

_____ Surety Company

Notary Public

Authorized Representative's Signature

Title

My commission expires _____

**CITY OF TORRINGTON
PLOW TRUCK SPECIFICATIONS
BID # PLT-031-062705**

The purpose of this specification is to describe the plow truck required by the City of Torrington to meet its snow plowing needs. All items shall be supplied, installed and delivered by a single source. The successful bidder shall supply drawings and detailed component lists for all items included in the following specifications. All warranties shall be stated in writing with bid proposal. Any exceptions to the specification shall be clearly stated in writing on bidder's letterhead and spelled out in detail as to any exceptions and /or alternate proposals. Each unit shall comply to all state and federal codes and regulations. The successful bidder shall supply final certification of maximum gross vehicle weight rating. All body material shall include mill certification. All component installation shall conform to the latest recommendation, procedures and regulations of the following organizations. ASME - ASTM - AISI - API - AWS - DOT - FPS - ICC -ISO - JIC - MSS - NFPA - NEMA - NTEA - SAE - TTMA - USASI.

THE USE OF ANY OF THE FOLLOWING ITEMS OR PRACTICES SHALL NOT BE ACCEPTED:

- Non-steel fittings on the hydraulic pressure lines
- Excessive use of elbows on hydraulic lines
- Use of thread tape on hydraulic fittings
- Use of galvanized fittings or components on hydraulic system
- Improper hydraulic line size
- Use of high-pressure hoses for hydraulic suction line
- Scotchlok type wire splices
- Non-insulated wire splices
- Improper hose or wire routing near exhaust, over sharp edges or through holes without grommets
- Unfinished or sharp edges
- Improperly prepared, primed and painted surfaces
- Non-fused electric circuits
- Hydraulic circuits without pressure relief protection
- Dissimilar metals without liner

A. GENERAL SPECIFICATIONS:

1. 43,000 G.V.W.R.
2. 96" C.A. (for 10' all seasons body)
3. 171' W.B.
4. Truck must meet CONN-OSHA noise requirements.

5. Truck to be equipped with a Beka-Max lube system this system can be supplied and installed by Lubrication Technologies, Inc. 168 Windsor Street West Springfield, MA 01089-3530 phone (413) 788-5823. Both the truck supplier and the body and equipment supplier will work with Lubrication Technologies to assure the lubrication needs and number grease points for there equipment are met.

B. FRAME:

1. Single frame rails, heavy duty, heat-treated alloy steel 120,000 P.S.I. yield 10.866" x 3.622" x .433" minimum.
2. Frame shall extend 18-24" past the front grill for installation of plow frame (frame extension must be integral; bolt-on will not be accepted).

C. AXLES:

1. 18,000 lb. Front axle with 18,000 lb. Multi-leaf springs w/rubber auxiliary, no shock absorbers.
2. Power steering Sheppard M-100/M-80 Dual power.
3. Steering wheel 18" 2-spoke
4. 30,000 lb. Rear axle with 30,000 lb. Single reduction differential with driver controlled differential lock. Gear ratio 6.14. Magnetic drain plug.
5. Rear springs 31,000 lb. Multi-leaf vari-rate springs, with 4500 lb. rubber auxiliary springs.

D. BRAKES:

1. Dual air brake system for straight truck applications.
2. Front 16.5" x 6" S-Cam w/24 sq. in. brake chambers.
3. Rear 16.5" x 7" S-Cam cast shoes with 36/36 MGM spring actuated parking brake chambers.
4. Air compressor Cummins 18.7 CFM.
5. Air dryer Meritor-Webco System Saver 1200
6. Dust shields for both front and rear brakes.
7. Automatic slack adjusters both front and rear.
8. Drain valve manual w/pull chain for air tank.

E. ENGINE:

1. Cummins ISM 320V 305 HP @ 2100 RPM governed speed; 1150 lb-ft torque @ 1200 RPM.
2. Spin-On oil and fuel filters.
3. Engine hour meter
4. Tachometer
5. Engine shutdown system for high water temperature or low oil pressure shutdown.

6. Air cleaner intake must be under the hood or on the left side of truck to avoid plow discharge; if possible, it shall be equipped with integral snow valve with in cab control; air cleaner will include a restriction gauge.
7. Heavy duty cooling system w/spin-on water filter.
8. Hand throttle.
9. Single exhaust w/horizontal muffler, w/vertical outboard mounted tailpipe to give adequate body clearance.
10. Fan drive Horten Drivemaster on/off type control, w/normally closed temperature control; w/nylon fan.
11. Engine compression brake Jacobs Model 411 for Cummins ISM engine; it shall have a selector switch and a on/off switch.
12. All radiator and heater hoses will be silicone.
13. Oil pan will be rust protected with zinc nickel plating.
14. Starter motor will be Leece-Neville MS2 12 volt; w/thermal over-crank protection.

F. POWER TAKE OFF:

1. P.T.O. shall be transmission mounted air operated clutch type.
2. P.T.O. control shall be dash mounted; it will include switch, electric/air solenoid piping and wiring.

G. ELECTRICAL:

1. 12 Volt
2. Alternator Leece-Neville BLP2309 brushless 160 amp. Capacity.
3. Single electric horn.
4. Batteries 3 12volt maintenance free total of 2775 CCA.
5. Electric windshield wiper w/2 speed and intermittent feature.
6. Body Builder wiring; includes sealed connectors for tail/amber turn/marker/backup/accessory power/ground and sealed connector for stop/turn. Located at back of standard cab left frame.
7. Tail light wiring to be modified to the following; wiring for the standard left tail light and right tail light shall have an extra 8 foot of cable for right and left tail lights mounted in the truck body.
8. Switch body circuits MID for bodybuilder, 6 switches in the instrument panel; one power module with 6 channels; 20 amp. max. per channel and 80 amp. max. output; switches control the power module through multiplex wiring.
9. All lights, wherever possible, will be LED. Lighting package for entire truck will be submitted with the bid proposal.
10. Toggle switch for work light, lighted on instrument panel wired to back of cab.
11. Halogen headlights.

12. Auxiliary harness 3 foot in length for auxiliary front headlights and turn signals for front plow applications.
13. Circuit breakers manual reset for all fuses above 5 amp.
14. 2-Way radio wiring 20 amp fuse protected; includes ignition wire w/5 amp fuse, wire ends heat shrink and 10 foot coil taped to base harness.
15. Radio AM/FM stereo w/weather band, clock, and dual cone speakers.
16. Electric back-up alarm 102dba.
17. Body integrated, remote power module mounted under cab 6 inputs and outputs 20 amp per channel max. 80-amp total. Includes 1 switch pack w/latched switches.

G. TRANSMISSION:

1. Allison automatic 4500 RDS P with wide ratio, 6-speed with double overdrive, oil level sensor, PTO provision. No retarder.
2. Modine oil cooler water to oil.
3. Allison T-bar transmission shift control.
4. Allison spare input/output for rugged duty series (RDS).

H. FUEL TANK:

1. Top draw; D style 80 U.S. gal non-polished aluminum.
2. Fuel lines: nylon tubing with o-ring snap-on quick-connect fittings at both ends.

I. CAB:

1. Conventional steel.
2. Five clearance lights LED if possible.
3. Floor covering black rubber with additional "catch-all" style floor mats on both drivers and passenger sides.
4. Tinted glass
5. Gauge cluster speedometer, odometer w/miles, engine hours, engine oil pressure, engine water temperature, fuel, tachometer, voltmeter, and transmission oil temperature (Allison Transmission).
6. Warning system low fuel, low engine oil pressure, high engine coolant temperature and low battery voltage.
7. Air cleaner restriction gauge mounted in instrument panel.
8. Both driver and passenger seats shall be National 2000 air suspension, high back w/integral headrest, vinyl, insulated, w/2-position front cushion and lumbar support.
9. Seat belts 3-point, lap and shoulder type.

10. Mirrors (2) rectangular 7.09" x 15.75" with breakaway brackets and 7.44" sq. convex on both sides, all heads will be heated and thermostatically controlled, bright finish.
11. One convex 6 "x10 ¼" look down mirror on the right side.
12. Chrome grab handle w/anti-slip rubber inserts on left side only.
13. Heavy-duty heater/defroster.
14. Cab shall be equipped with sound insulation including in the dash, engine cover and floor mats.
15. Instrument panel shall have an ergonomic center section (wrap around).
16. Fresh air filter for HVAC.
17. Hood front-end tilting, fiberglass, hood shall have two service hatches and a stationary grille.
18. Steering column shall be of the tilt type.
19. Front bumper will be full width steel.
20. Deluxe interior trim.
21. Cab rear suspension air bag type.
22. Air horn Grover chrome dual trumpet, air solenoid operated mounted on cab roof left side.
23. Cab paint color will be Omaha Orange; Aluminum rear dump body need not be painted.

J. WHEELS:

1. Front wheels disc 24.5 10-stud painted steel.
2. Rear wheels dual disc 24.5 10-stud hub piloted, flanged nut DC rims with steel hubs.

K. TIRES:

1. Front 12R24.5 Goodyear G286
2. Rear 12R24.5 Goodyear G177

L. MANUALS & OILS:

1. Complete operators, parts and service manuals will be supplied with each truck.
2. All oils; transmission, rear end, engine, etc. shall be synthetic and graded for the proper application.

M. TRUCK BODY:

1. Body will be a **J&J DYNA HAULER DDA** all aluminum all seasons or equal.
2. Length 120" (10.0 feet)
3. Width 96" (8.0 feet)
4. Side height 36.0" (3.0 feet) with no side boards
5. ½ Cab shield
6. 6" long members
7. 4" cross members
8. Dirt shedder bottom rails
9. All tailgate chains will be covered with nylon mesh
10. Walk rails 3" wide bustin tread on both sides of body
11. Fenders and flaps shall be sized and mounted so not to exceed 22-degree federal regulation. Mudguards and fenders will be "Spraymate" black in color with stainless steel brackets.
12. Ladder to be mounted on right side of body.
13. ¾" Grab handles mounted on both sides of body
14. Bolt on rear apron aluminum construction ¼" x 8" x 96"
15. All lighting to be LED **NO EXCEPTIONS**
16. Four light strobe system; light shall be designed to provide a minimum of one hundred thousand hours (100,000 hrs) four amber lamps shall be mounted in sides and face of cab shield. Lights shall be mounted in such a way as not to interfere with clearance lights. Lights will be mounted in a shockproof vinyl mounting grommet. Lights will be wired to flash alternately; Rear body post lights; install two stop, turn and tail lights in each rear corner post. Completely sealed, shock mounted and wired into the truck chassis light system. Lights shall be located according to all federal lighting standards and practices. A two strobe light system shall be provided and mounted in the rear corner posts one light on each side. One hundred thousand hours (100,000 hrs) operation. Entire light system controlled via a cab mounted properly labeled lighted rocker switch.

N. PLOW FRAME:

1. Plow frame shall be manufactured and installed in such a way; as to allow the hood of a chassis fitted with a tilt hood and stationary grill; to tilt in the same manner as supplied by truck manufacturer.
2. Side plates will be 5/8" thick steel; reinforced and bolted on to the truck frame as far back as possible. We will be installing an 11 foot power angling plow on this truck and when angled all the way either way the plow will not hit the bumper or any part of the truck nor shall the plow extend way out in front of the truck.
3. The lift cylinder will be a 4" double acting cylinder with a 10" stroke. The rod and gland nut will be salt bath nitrated with ARCOR-N treatment.
4. Plow centers are 30"

5. The plow we will be installing on this truck weights approximately 2500 lbs. The plow frame must be able to handle this plow on all types of road conditions, during snowplow operations. The construction of this frame is not described in detail, intentionally. With the bid proposal, submit pictures and/or detailed drawings of the proposed plow frame and customer contact information for users of this plow frame.

O. HYDRAULIC SYSTEM:

1. The hydraulic system will be designed so the truck and all it's components operate at top efficiency. The hydraulic pump will be a gear type positive displacement pump. Slow operation of the all seasons' body or any other component is not acceptable. Operations of the hydraulic system will be body up and down, plow up and power down, plow angle right and left, body floor up and down for sanding operations, and conveyor and spinner operations for sanding.
2. Hydraulic pump will be controlled and driven by an air operated transmission mounted PTO.
3. Hydraulic tank will be 30 gallons minimum and constructed out of 3/16" aluminum, it will be cushion mounted to the truck chassis. An internal baffle shall be located to prevent return oil from venting directly to suction port. Suction and return filters will be installed to protect the hydraulic pump a ball type valve will be installed on the suction line at tank end to enable mechanics in shutting off oil flow to the hydraulic pump. Hydraulic tank will be designed as to eliminate aeration of the hydraulic oil. A screw lock breather filler cap will be installed in the top of tank. A 12" diameter clean out cover will also be mounted in the top of tank. A 5" combination level and temperature gauge will be mounted in the side of tank in a visible but protected location.
4. A level sensor will be mounted in the hydraulic tank, connected to a buzzer and light mounted in the cab to alert the operator that hydraulic oil is leaking somewhere and a mechanic has to be notified.
5. Hydraulic system will be air controlled **CABLES ARE NOT ACCEPTABLE.**
6. Controls are to be mounted in the cab between the seats in easy reach of the driver.
7. The all seasons' body sand spreader control system shall maintain individual adjustable flows to two separate circuits regardless of down stream system pressure. The spreader system shall be capable of variable signals for proper function. Excess hydraulic flow shall be bypassed to a downstream circuit. Each flow circuit shall be completely adjustable and provide positive placement settings as required for desired spreader operation. The spreader control system shall be located within the cab to provide ease of operation by the driver. Spreader circuit shall be internally shuttled to provide smooth operation

between conveyor and spinner circuits. All plumbing shall be located and shielded to protect cab personnel.

8. The only quick couplers needed in this system are two for the plow angle right and angle left. Their location will be discussed at time of construction.
9. Hydraulic tubes to deliver and return hydraulic oil from control valve to plow functions will be, integrated, modular, ½" ID stainless steel tube. Custom bent and mounted in cushion clamps. Extended lengths of hydraulic hose will not be accepted. Pressure and suction lines to the hydraulic pump will also be stainless steel tube of appropriate size to meet system requirements. Joined with hydraulic hose at flex points. Hydraulic hose may only be utilized at flex points and must have swivel fittings on both ends for ease of replacement if necessary.

P. BODY COVER:

1. The body cover will be a “ **Mountain Tarp**” under body mount for a 10' body. It will be mounted on the cab shield with smooth wind guard and ¼" smooth end plates.
2. The direct drive motor will be 1100 lbs. Torque 1.1 HP 12 volt, with a 3-year non-prorated full warranty.
3. Under body mount with 5/8" torsion springs 3300 lbs of pressure.
4. Tarp material will be 18 oz. black vinyl.
5. Tarp controls will be mounted within the truck cab in easy reach of driver.
6. Tarp will be mounted such that any dissimilar metal corrosion with the aluminum body does not occur.

Questions about the technical portions of the specifications may be addressed to Fleet Manager Michael Michaud (860) 689-3132. Questions about the bid requirements may be addressed to Purchasing Agent Charlene Antonelli (860) 489-2225.