

INTERNATIONAL 7400
TRUCK EQUIPMENT PACKAGES
in
SANDUSKY COUNTY, OHIO

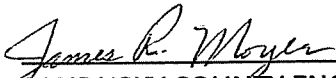
BIDS RECEIVED APRIL 30, 2015 AT 10:30 AM

Plan holder Registration

- To be eligible to bid on a project your company must be added to a plan holders list. If submitting a bid for a project, notify the County Engineer's Office to be placed on the plan holder list by providing company information and the project you will be bidding on. The plan holder registration form is on the project listing page located at the following website: www.sanduskycountyengineers.com

SPECIFICATIONS AND PROPOSAL
FOR
INTERNATIONAL 7400
TRUCK EQUIPMENT PACKAGES
IN
SANDUSKY COUNTY, OHIO

PREPARED BY THE OFFICE OF



SANDUSKY COUNTY ENGINEER

JAMES R. MOYER

2500 WEST STATE STREET

FREMONT, OHIO 43420

(419) 334-9731

www.sanduskycountyengineers.com

LETTING DATE: APRIL 30, 2015 @10:30 A. M.

BID OF: _____

ADDRESS: _____

CITY & STATE: _____

ZIP CODE: _____

PHONE: _____

FAX: _____

E-MAIL: _____

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**ADVERTISEMENT FOR BIDDING
LEGAL NOTICE**

Sealed Proposals will be received by the Sandusky County Board of Commissioners, 622 Croghan Street, Fremont, Ohio 43420 until 10:30 a.m. on the 30th day of April, 2015 for the furnishing all labor, materials and equipment necessary to complete the projects known as **International 7400 Truck Equipment Packages, 2015 Supplying Precast Reinforced Concrete Box Culvert for STR. GR 223 – 1.78 and 2015 Supplying Reinforced Concrete Circular Pipe for STR. YO 177 – 0.11** at said time and place they will be publicly opened and read aloud.

Copies of the Plans, Specifications and the other Contract Documents may be examined and obtained at the Office of the Sandusky County Engineer, 2500 W. State St., without charge, or at the following website www.sanduskycountyengineers.com.

In accordance with the Ohio Revised Code Section 307.87 this shall serve as notification that this notice is available on Sandusky County Engineers internet website on the World Wide Web by logging onto www.sanduskycountyengineers.com and going to Bid/Contracts link-click on Continue to Project Listings and you will be able to view the legal notices for current projects.

Proposals must be submitted on the forms furnished or downloaded from above website and must contain the name of every person interested therein. The Proposal shall be accompanied by a Bid Guarantee and Contract Bond in the amount of 100% or a Certified or Cashier's Check or a Letter of Credit in an amount of at least 10% of the amount bid. The board reserves the right to reject any or all bids and to waive any formalities in any bid. Each bidder must submit evidence of its experience on projects of similar size and complexity.

All contractors and subcontractors involved with the project will, to the extent practicable use Ohio products, materials, services, and labor in the implementation of their product. Additionally, contractor compliance with the equal employment opportunity requirements of Ohio Administrative Code Chapter 123, Governor's Executive order of 1972, and Governor's Executive Order 84-9 shall be required.

By the Order of the Board of County Commissioners

By Theresa Garcia, Administrator

Notice to Newspaper

Please publish Wednesday, April 15, 2015

INSTRUCTION TO BIDDERS

1. ALL THIRTY FOUR (34) PAGES OF THIS PROPOSAL ARE TO BE SUBMITTED IN A SEALED ENVELOPE MARKED:

BID ON: INTERNATIONAL 7400 TRUCK EQUIPMENT PACKAGES

DATE: April 30, 2015 at 10:30 A.M.

ADDRESSED TO: SANDUSKY COUNTY COMMISSIONERS
622 CROGHAN STREET
FREMONT, OHIO 43420

2. ANY AND ALL ERASURES, STRIKE OUTS OR ALTERATIONS MUST BE INITIALED BY THE PERSON SIGNING THE BID.
3. THE BIDDER SHALL FURNISH ALL ITEMS LISTED IN THE ATTACHED SPECIFICATIONS AND ALL ITEMS SO FURNISHED SHALL MEET OR EXCEED THE MINIMUMS SPECIFIED THEREIN.
4. ANY BIDDER SUBMITTING A BID ON AN (EQUAL TO) ITEMS (S) SHALL SUBMIT DETAILED SPECIFICATIONS OF THE (EQUAL TO) ITEMS (S) WITH HIS BID.
5. NO BID WILL BE CONSIDERED UNLESS IT IS ACCOMPANIED BY A BID BOND IN THE AMOUNT OF 10% OF THE BID EXECUTED BY A SURETY COMPANY AUTHORIZED TO DO BUSINESS IN THE STATE OF OHIO OR A CERTIFIED CHECK ON A SOLVENT BANK; EITHER IN THE AMOUNT OF TEN (10%) PERCENT OF THE BID TO GUARANTEE THAT IF SAID BID IS ACCEPTED, A CONTRACT WILL BE ENTERED INTO, AND THE PERFORMANCE PROPERLY SECURED BY AN ACCEPTABLE BOND FOR 100% OF THE AMOUNT OF THE CONTRACT.
6. IN COMPLIANCE WITH THE ATTACHED NOTICE, INVITATION, PROPOSAL, SPECIFICATIONS, AND OTHER DESCRIPTIVE PAPERS, AND SUBJECT TO ALL THE CONDITIONS THEREOF, THE UNDERSIGNED OFFERS AND AGREES TO FURNISH AND DELIVER ALL OF THE ITEMS UPON WHICH THE PRICES ARE QUOTED.
7. THIS PROPOSAL IS MADE WITH FULL KNOWLEDGE OF AND IN COMPLIANCE WITH THE OHIO REVISED CODE RELATIVE TO INTEREST IN CONTRACT AND SUPPLIERS.

PROPOSAL

**SANDUSKY COUNTY BOARD OF COMMISSIONERS,
FREMONT, OHIO**

The undersigned, having full knowledge of the specifications for the following equipment, and the conditions of this proposal, hereby agrees to furnish all the services, labor, materials and equipment necessary to complete proposal known as **INTERNATIONAL 7400 TRUCK EQUIPMENT PACKAGES IN SANDUSKY COUNTY, OHIO** according to the unit price specified below for each item as full compensation for the work in this proposal.

ITEM	PRICE PER TRUCK	PRICE BOTH TRUCKS
PROPOSAL #1		
PRICE FOR CENTRAL HYDRAULIC SYSTEM, STEEL DUMP BODY, HOIST, PLOW HITCH, LIGHTS & ELECTRICAL, MISCELLANEOUS, INSTALLATION AND WARRANTY	\$ _____	\$ _____
ADDITIONAL PRICE FOR OPTIONAL SNOW PLOW	\$ _____	\$ _____
ADDITIONAL PRICE FOR OPTIONAL STAINLESS STEEL SALT SPREADER	\$ _____	\$ _____
ADDITIONAL PRICE FOR MID-MOUNT WING PLOW	\$ _____	\$ _____
TOTAL AMOUNT OF THE BID FOR PROPOSAL #1.....		\$ _____

PROPOSAL #2		
PRICE FOR CENTRAL HYDRAULIC SYSTEM, 304 STAINLESS STEEL DUMP BODY, HOIST, PLOW HITCH, LIGHTS & ELECTRICAL, MISCELLANEOUS, INSTALLATION AND WARRANTY	\$ _____	\$ _____
ADDITIONAL PRICE FOR OPTIONAL SNOW PLOW	\$ _____	\$ _____
ADDITIONAL PRICE FOR OPTIONAL STAINLESS STEEL SALT SPREADER	\$ _____	\$ _____
ADDITIONAL PRICE FOR MID-MOUNT WING PLOW	\$ _____	\$ _____
TOTAL AMOUNT OF THE BID FOR PROPOSAL #2.....		\$ _____

**PROPOSAL
(CONTINUED)**

BRAND NAME AND MODEL NUMBER OF:

PTO/PUMP: _____

MAIN CONTROL VALVE: _____

ELECTRONIC CONTROLS: _____

STAINLESS STEEL HYD. OIL RESERVOIR: _____

FILTER: _____

STEEL DUMP BODY: _____

304 STAINLESS STEEL DUMP BODY: _____

STAINLESS STEEL SALT SPREADER: _____

HOIST: _____

SNOW PLOW HITCH: _____

SNOW PLOW: _____

MID-MOUNT WING PLOW: _____

PINTLE HOOK: _____

STROBE LIGHTS: _____

OPTIONAL EXTENDED WARRANTIES AVAILABLE AND COST OF EACH: _____

Have you double checked your bid??? Errors or omissions could result in your bid's being declared informal.

This is part of the proposal of

(Bidder)

.....

(Signature)

PROPOSAL

PROJECT- INTERNATIONAL 7400 TRUCK EQUIPMENT PACKAGES IN SANDUSKY COUNTY, OHIO

PREQUALIFICATION OF BIDDERS- The right to make such investigations as may be deemed necessary to determine the ability of the bidder to perform the work is reserved. The bidder shall furnish all such information and data for this purpose as requested. The right is reserved to reject any bid, if the evidence submitted by or investigation of, such bidder fails to establish that such bidder is properly qualified to carry out the obligations of the contract in a timely manner.

COMPLETION DATE: August 14, 2015

(This page must be executed, in the appropriate place, prior to submission of this bid)

WRITTEN CONTRACT –

On acceptance of the for said work do hereby bind thisday of
(I OR WE) (MYSELF OR OURSELVES)

....., 20....., to enter into a written contract with the Sandusky County Commissioners within ten days from date of the notice of award.

IF AN INDIVIDUAL, SIGN BELOW:

.....
(Name) (Post Office Address)

IF AN INDIVIDUAL DOING BUSINESS UNDER A TRADE NAME, SIGN BELOW:

.....
(Trade Name) (Post Office Address)

.....Sole Owner

By.....

IF A PARTNERSHIP, SIGN BELOW:

.....
(Post Office Address)

By.....

.....
(Partner) (Post Office Address)

.....
(Partner) (Post Office Address)

IF A CORPORATION, SIGN BELOW:

.....
(Name of Corporation)

Incorporated under the laws of the State of

By
(Signature)

.....
(Title of Officer Signing)

BID GUARANTY AND CONTRACT BOND
(Section 153.571 Ohio Revised Code)

KNOW ALL MEN BY THESE PRESENTS:

That we, the undersigned (1) _____
(full name or legal title of Contractor and address)

as principal and (2) _____
(full name or legal title of Surety)

_____ as sureties,
are hereby held and firmly bound unto the State of Ohio, for the use of Sandusky County hereinafter called the Obligee, in the
penal sum of the dollar amount of the bid submitted by the Principal to the Obligee on _____, 20____ to
undertake the project known as: _____
(description of project)

The penal sum referred to herein shall be the dollar amount of the Principal's bid to the Obligee, incorporating any additive or
deductive alternate proposals made by the Principal on the date referred to above to the Obligee, which are accepted by the
Obligee. In no case shall the penal sum exceed the amount of _____ dollars (\$ _____)
(surety ceiling on the amount of the bond)

For the payment of the penal sum well and truly to be made, we hereby jointly and severally bind ourselves, our
heirs, executors, administrators, successors, and assigns.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that whereas the above named Principal has submitted a bid on the above
referred to project;

NOW, THEREFORE, if the Obligee accepts the bid of the Principal and the Principal fails to enter into a proper contract in
accordance with the bid, plans, details, specifications, and bills of material; and in the event the Principal pays to the Obligee the
difference not to exceed ten percent of the penalty hereof between the amount specified in the bid and such larger amount for
which the Obligee may in good faith contract with the next lowest bidder to perform the work covered by the bid: or in the event
the Obligee does not award the contract to the next lowest bidder and resubmits the project for bidding, the Principal will pay
the Obligee the difference not to exceed ten percent of the penalty hereof between the amount specified in the bid, or the costs,
in connection with the resubmission, of printing new contract documents, required advertising and printing and mailing notices
to prospective bidders, whichever is less, then this obligation shall be null and void, otherwise to remain in full force and effect. If
the Obligee accepts the bid of the Principal and the Principal within ten days after the awarding of the contract, enters into a
proper contract in accordance with the bid, plans, details, specifications, and bills of material, which said contract is made a part
of this bond the same as though set forth herein; and

IF THE SAID Principal shall well and faithfully perform each and every condition of such contract; and indemnify the Obligee
against all damage suffered by failure to perform such contract according to the provisions thereof and in accordance with the
plans, details, specifications, and bills of material therefor; and shall pay all lawful claims of subcontractors, material men, and
laborers, for labor performed and materials furnished in the carrying forward, performing, or completing of said contract: we
agreeing and assenting that this undertaking shall be for the benefit of any material man or laborer having a just claim, as well as
for the Obligee herein; then this obligation shall be void; otherwise the same shall remain in full force and effect; it being
expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the
penal amount of this obligation as herein stated.

THE SAID Surety hereby stipulates and agrees that no modifications, omissions, or additions, in or to the terms of the said
contract or in or to the plans and specifications therefor shall in any way affect the obligations of said Surety on this bond, and it
does hereby waive notice of any such modifications, omissions or additions to the terms of the contract or to the work or to the
specifications.

BID GUARANTY AND CONTRACT BOND
(Section 153.571 Ohio Revised Code)
(Continued)

SIGNED AND SEALED This _____ day of _____, 20_____.

In presence of

(Witness to Principal's signature)

(Witness to Principal's signature)

Approved _____, 20_____

Board of County Commissioners

Principal

By: _____

Title: _____

Surety

By: _____

Attorney-in-Fact

Surety company address

Surety Agent's name and address

I hereby approve the form of the foregoing Contract and Bond.

_____, 20_____ _____ Pros,

Atty.

Attach corporate seal of principal if corporation.

Attach corporate seal of surety company if signing as surety.

(1) If a corporation, insert " A corporation organized under the laws of the State of _____, with it's principal place of business at _____ in Ohio."

(2) If a surety company, insert " A corporation organized under the laws of the State of _____ and duly authorized to transact business within the State of Ohio."

PROPOSAL

Attach to this page:

A properly executed Power of Attorney showing the authority of the person or persons executing the bond for the Surety or Sureties at the date of the bond;

or

A Certified Check

or

A Cashiers Check

or

A Letter of Credit

Note: The blank on the bond form where surety indicates the ceiling amount of the bond is not the penal sum of the bond, but the maximum surety will bond the bidder. If there is an error in the extension of unit prices and the total bid exceeds the ceiling amount indicated, the bid will be declared informal and may be rejected. In the event the contract were offered to the bidder, a new bond would be required. The words "Unlimited Dollars" are acceptable, if that is in fact the relationship between the bidder and his surety. The words "100% of the Contract" are also acceptable. The ceiling amount should not exceed the maximum dollar amount indicated on the Power of Attorney.

Affidavit

FOR

(CONTRACT)

STATE OF OHIO)
)
COUNTY OF _____)

_____, being duly sworn that he is a (sole proprietorship-partnership-corporation) having been awarded a public contract let by competitive bid and that by this statement says that at this time (he-it) (is-are) not charged with any delinquent personal taxes on the general tax list of personal property of any county in which the taxing district of the Sandusky County Commissioners has territory.

(Signature of owner-partner-office)

of _____ being first duly sworn, deposes and says that this statement made above, concerning delinquent personal property taxes is true. Sworn to before me and signed in my presence this _____ day of _____, 20__.

(Notary Public)

My commission expires: _____

CERTIFICATION OF PERSONAL PROPERTY TAX

being the fiscal officer of _____, a political subdivision of the State of Ohio, hereby certifies the above statement to the county treasurer.

Fiscal Officer of Sandusky County,
A Political Subdivision of the State of Ohio

This certification is in complete with Section 5719.042 of the Ohio Revised Code, which requires a certification of delinquent personal property by any successful bidder prior to the execution of the contract of a political subdivision and in the event there are any due and unpaid delinquent taxes, a copy of this shall be transmitted to the county treasurer within thirty days.

VERIFICATION OF “NO FINDING FOR RECOVERY”

No political subdivision shall award a contract for goods, services, or construction to a person against whom a Finding for Recovery has been issued by the Auditor of State, if the Finding for Recovery is unresolved.

The undersigned, by their signature and title, document that no “Finding for Recovery” is outstanding for the bidder.

By: _____

Title: _____

CONTRACT AGREEMENT

This agreement, made this.....day ofA. D.20.....
Between the Board of County Commissioners of Sandusky County, Ohio hereinafter called the Party of the First Part, and

ofand.....successors, executors, administrators
and assigns, hereinafter called the Party of the Second Part,

WITNESSETH: That for and in consideration of payments hereinafter mentioned to be made by Party of the First
Part, Party of the Second Part agrees to furnish all materials excepting the following:

.....
and all appliances, tools, and labor, and perform all the work that may be required for the construction and completion of
Improvement No.....known as.....

.....
according to the plans and specifications and estimates for the construction of said improvement on file in the offices of said
Commissioners and the Engineer of said County, and to the satisfaction and acceptance of the Party of the First Part, and
subject to inspection at all times and approval of the County Engineer and said Commissioners.

The Party of the Second Part also agrees to complete said improvement in accordance with the completion date set
forth in the proposal.

The Party of the Second Part further covenants and agrees that the following papers shall be bound with or
accompany and be an essential part of this contract: Advertisement, Information to Bidders, plans and specifications,
contract bond and approximate estimate and proposal.

In consideration of the premises the Party of the First Part agrees to pay to the Party of the Second Part the
approximate sum of(\$.....) Dollars.
The actual sum to be paid, however, will be the aggregate total determined by the work actually performed according to the
plans and specifications by the Party of the Second Part, calculated upon the unit prices set out in this proposal hereto
attached and made a part hereof.

Sureties on any bond provided in this contract and insurance companies writing any insurance policies provided in
the contract, and the contractor by the execution of the bid and contract shall by the same agree to and herby authorize any
attorney at law to appear in any court of record in Sandusky County, State of Ohio in any action or proceeding, either in
contract or tort, commenced by any person, firm or corporation claiming to suffer or incur any damage or injury arising out of
the construction of this contract or the attempted performance, non-performance, improper performance of the work done
in connection therewith, or caused by the misfeasance or malfeasance in an attempt to carry out or perform said contract.
Said parties herby waive the issuance and service of summons and enter appearance of such party in any such action or
proceedings; provided that no judgement or decree will be taken thereafter in such legal action or proceedings, until after
three weeks shall elapse after such attorney at law shall notify by registered mail such party at his or it's business address
designated on such document of the fact:

- a. of such waiver and entry of appearance,
- b. with the name of such action,
- c. title of same,
- d. the name of the court,
- e. the date of filing of such waiver and entry of appearance,
- f. furnish a copy of the petition, and
- g. furnish a copy of such waiver and entry of appearance in such action or proceedings to such party whose
appearance is entered.

IN WITNESS WHEREOF, The Party of the First Part has hereunto subscribed by the Board of County Commissioners,
and the Party of the Second Part has affixed.....name.

**CONTRACT AGREEMENT
(CONTINUED)**

Attest:

.....

Clerk, Board of County Commissioners
I hereby certify that there is

\$.....

in thefund
of Sandusky County not otherwise appropriated
to satisfy the above payment of the above
mentioned contract.

If a partnership, so state, giving names and post
office addresses of all partners on lines opposite.

If a corporation, give full corporation name and
state under the laws of what state you are
incorporated: officer signing should add his
title after signature.

Board of County Commissioners

By.....

.....
Party of the First Part

Contractor

By.....

.....
Party of the Second Part

INTERNATIONAL 7400 TRUCK EQUIPMENT PACKAGES SANDUSKY COUNTY, OHIO

GENERAL

The purpose of this contract is to equip two (2) International 7400 6 x 4 trucks with hydraulic systems, dump bodies, hoists, snow plow hitches, snow plows, mid-mount wing plows, salt spreaders, lighting, electrical systems and other miscellaneous items all complete in place and in good working order including all necessary labor, materials, equipment, and warranty.

Sandusky County reserves the right to reject any and/or all bids, to waive informalities or irregularities and to award the bid in the manner deemed to be in the best interest of the County.

WARRANTY

The minimum warranty is twenty-four (24) months for all parts, equipment, installation and labor without a deductible. Any other available warranties and the cost thereof are to be listed as indicated.

Bidder to make notation of "Comply" or "Exception" for each item. These specifications are not intended to preclude bidding components that are equal in quality and performance to the products described. Bidder must include with each exception an explanation why equipment is equal to or better than specified.

CENTRAL HYDRAULIC SYSTEM

	COMPLY OR EXCEPTION
A. TYPE:	
1. System to be of load sensing pressure-compensated type, pumping oil only when needed and in exact volume and pressure required.	_____
2. Pump to automatically revert to standby mode when no oil flow is required (No on/off switch).	_____
3. Must be able to operate all equipment on truck simultaneously. No one function to interfere with any other.	_____
4. System controls to be a combination of pneumatic and electronic.	_____
5. Operating speed of all functions must-be variable and adjustable.	_____
B. POWER TAKE-OFF:	
1. Chelsea model 267 constant running PTO or approved equal.	_____
2. Mounted on left side of transmission.	_____
3. PTO to be constant running.	_____

**COMPLY OR
EXCEPTION**

- 4. Splined output shaft. _____
- 5. Output shaft speed to be 103% of engine RPM. _____
- 6. PTO to be engine-driven (not torque converter driven). _____

C. PUMP:

- 1. Danfoss KVA (or approved equal) variable displacement load sense axial piston pump. _____
 - a. Direct mounted to PTO on Allison RDS 3500 automatic transmission. _____
 - b. Capable of 20 GPM at 1000 engine RPM, minimum. _____
 - c. Rear ported. _____
 - d. Internal bleed-down compensator to prevent gradual pressure build up when running in standby mode for long periods. _____
 - e. Case drain for lubrication and cooling in standby mode --- ½" case drain line must be routed directly back to hydraulic oil reservoir, not to a return line. _____
 - f. Two separate adjustable pressure settings at pump --- one for standby pressure to be set at approximately 400-600 PSI and one for system pressure relief set at approximately 2400 PSI. _____
 - g. ½" diameter pump-to-valve hose for demand signal. _____
- 2. A 1" high-pressure ball valve at pump output port for emergency shut down. _____
 - a. Low oil warning light located on dash with stainless steel tank float. _____
 - b. A 6"x 4" yellow engraved placard that states "WARNING In the event of hose failure immediately close ball valve on output side of pump and return to garage for repairs." Mounted inside of cab. _____
 - c. A 6"x 5" yellow engraved placard the states the central hydraulic maintenance schedule. This will state when to change the oil, filter and grease the pump shaft/ PTO. Mounted inside of cab. _____

**COMPLY OR
EXCEPTION**

D. HYDRAULIC VALVE:

- 1. Danfoss model M-4 five-section pneumatic/electric mobile type spool valve or approved equal. _____
- 2. Three plow and hoist spools pneumatically operated. _____
- 3. Two spreader spools to be 12-volt DC electric proportional solenoid operated. _____
- 4. All hydraulic valving in one main valve assembly --- multiple valve assemblies are unacceptable. _____
- 5. Standard stack/sectional type of mobile design with off-the-shelf availability not specific to any particular electronic spreader control system. _____
 - a. Machined aluminum mono-block manifold assemblies not acceptable. _____
- 6. Flow capability minimum 30 GPM. _____
- 7. Each section must have a built-in flow and pressure compensator to permit simultaneous operation regardless of any other system function. _____
- 8. Dump body valve section must have 900 PSI pressure relief in "power down" port. _____

E. OPERATOR CONTROLS FOR DUMP HOIST AND SNOW PLOW:

Controls for hoist and plow operated by pneumatic controls mounted in a swivel style console. The in cab controls to be set up as Plow up/down, Plow angle, Body up/down the Spreader control to be electric with blast button, and spot spreading switch. Spreader control to feature two rotary knobs for spinner and auger and current controlled out-puts. The joysticks, spreader and switch controls will be mounted in a swivel console that will sit on a 3/8"x 20"x20" steel floor mounting base. Switches will be provided for warning lights. Indicators will be provided for hoist up and low oil. Spreader control to be wired to vehicle spool signal to start and stop spreader automatically upon truck movement. A spot switch will be provided for putting the spreader control in standby. Control console to be a Stormguard with an Freedom 2.1 control or approved equal. _____

**COMPLY OR
EXCEPTION**

F. SPREADER CONTROL:

- 1. Component Technology Freedom 2.1 (or approved equal) electronic spreader controller. _____
- 2. Momentary contact "BLAST" button on control panel to speed up auger at ramps, bridges, intersections, hills, and other trouble spots. _____
- 3. To be equipped with auto start/stop feature. _____
 - a. Automatically starts spreader when truck begins to move and stops spreader when truck stops. _____
 - b. Speedometer tie-in must be performed per truck manufacturer's Body Builders Book instructions. _____
- 4. Mounted on control console within easy reach and visibility of driver. _____

G. RESERVOIR/VALVE COMPARTMENT:

- 1. Square 30 gallon all-welded, stainless steel combination hydraulic oil reservoir and control valve mounting compartment. _____
- 2. Mid-point vertical internal baffle. _____
- 3. 100 micron 2" I.D., minimum, suction strainer. _____
- 4. Filler to have safety screen and ¼-turn twist off breather type cap. _____
- 5. Sight/temperature gauge installed in a readily visible location. _____
 - a. Gauge protected with a heavy stainless steel perimeter guard welded to side of reservoir. _____
- 6. Magnetic drain plug. _____
- 7. Suction and return ports to be on opposite sides of baffle. _____
- 8. Top opening to accommodate in-tank return line filter. _____

**COMPLY OR
EXCEPTION**

- 9. Integral weatherproof compartment in top of reservoir to accommodate control valve. _____
 - a. Removable cover. _____
 - b. Automotive type rubber weather seal. _____
 - c. Stainless steel hex/slotted head cover-retention screws. _____
 - d. Breather to prevent condensation. _____
- 10. Stainless steel low oil level switch installed at approximate mid-point of reservoir to activate dash-mounted warning light. _____
- 11. Electrical connections for oil level switch inside sealed valve compartment. _____
- 12. Valve ports plumbed to compartment end panel with JIC steel tubing and JIC 37 degree bulkhead fittings. _____
- 13. 2" x 12" yellow engraved plastic label on side of reservoir stating "HYDRAULIC OIL". _____

H. HOSES MUST BE WEATHERHEAD (NO EXCEPTIONS)

- 1. All hoses to be wire braid reinforced with swaged on high pressure JIC 37 degree tapered seat end fittings. _____
 - a. Swivels on both ends of each hose for ease in maintenance. _____
 - b. Minimum 2500 lb working pressure. _____
 - c. 6' stainless ½" hydraulic lines to front for plow. 9' stainless steel lines to rear. _____
- 2. All fittings and adapters to be forged steel (no tapered pipefittings except on suction hose). _____
- 3. Hoses to front with ½" 100% stainless steel (no exceptions) quick couplers for power reversing plow. _____
 - a. Plow power reversing couplers to be mounted driver side top of plow hitch. _____
 - b. Plow couplers to be equipped with agricultural quick couplers to prevent hose damage in the event driver forgets to disconnect before removing plow. _____

- | | COMPLY OR
EXCEPTION |
|--|--------------------------------|
| 4. Hoses to rear with ½" 100% stainless steel poppet style quick couplers for spreader (no exceptions). | _____ |
| 5. Spreader hose couplers to be mounted on stainless steel brackets under dump body side rails at rear on both sides. | _____ |
| 6. Polymer dust plugs or caps on all couplers with retainer straps. | _____ |
| 7. Pressure hose from pump to valve body 1" hose must be 6,000 psi hose SAE100R15. | _____ |
| 8. All other pressure hoses except for plow & spreader spinner to be ¾" I.D. SAE 100R2. | _____ |
| 9. Plow and spreader spinner pressure hoses to be ½" I.D.SAE 100R2. | _____ |
| 10. All return hoses to be SAE 100R2. | _____ |
| 11. Suction hose to be minimum 1-1/2" I.D. SAE 100R4 spiral wire reinforced with long radius ells. Stainless steel T bolt clamping devices at hose ends | _____ |
| 12. All hoses and tube assemblies must be anchored with bolt on shock absorbing poly green clamps every 30" above frame rails. Poly clamps must be mounted with steel stand off brackets. | _____ |
| 13. All hoses to be routed away from chassis exhaust whenever possible to protect against heat deterioration. All hose assemblies must have rubber hose guards installed where they come in contact with metal brackets. | _____ |

**DUMP BODY
(PROPSAL #1)**

- | | |
|---|-------|
| A. DUMP BODY TO BE HEAVY DUTY STEEL CROSSMEMBERLESS SMOOTH-UNDERSIDE TYPE. | _____ |
| 1. Inside length 14'. | _____ |
| 2. Inside width 7' minimum. | _____ |
| 3. Sides (from body floor to top of top rail) 44" high.
(not including built in side boards) | _____ |
| 4. Tailgate 52" high. | _____ |

**COMPLY OR
EXCEPTION**

- 5. Head sheet 52" high. _____
 - a. Two (2) 2" x 3" horizontal head sheet braces. _____
- 6. Water level capacity 8 to 10 cubic yard. _____
- 7. Sides, head sheet and tailgate 10 gauge steel. _____
- 8. Floor 1/4" AR400 steel. _____
- 9. All corner posts and side braces 7 gauge steel. _____
- 10. Top rails are to be 4" x 5" seamless, sloping (dirt/salt shedding) and boxed for added strength. _____
- 11. Bottom rails seamless and sloping (dirt/salt shedding). _____
- 12. Long sills one-piece 8" structural steel I-beam. _____
- 13. Rear apron 8" structural channel. _____
- 14. There are **no crossmembers**. _____
- 15. Rear corner posts 6" x 12" and full depth (to bottom of long sills). _____
- 16. Front corner posts 6" x 24", full-height (to bottom of side rail), seamless and tapered. _____
- 17. (2) Intermediate side brace 6" horizontal, full-length and sloped (dirt/salt shedding). _____
- 18. Holes cut in rear corner posts for recessed marker and clearance lights. _____
- 19. 2" side-to-floor radius for easy clean out. _____
- 20. There are NO side board pockets. _____
- 21. Formed-in 12" x 12" front doghouse to accommodate trunnion-mounted pivoting telescopic hoist. _____

**COMPLY OR
EXCEPTION**

22. Tailgate:

a. Double-acting heavy duty.

b. Bracing full perimeter box type, 6" top and bottom and 4" sides.

c. Three intermediate 6" horizontal brace.

d. Bottom and intermediate horizontal braces sloped (dirt/salt shedding).

e. Top and bottom tailgate pins 1-1/2" diameter, minimum.

f. Minimum 3/8" steel coil spreader chains long enough to hold tailgate in horizontal position.

g. Tailgate level with dump body floor when in horizontal position.

h. Heavy nylon mesh sleeves installed over spreader chains to protect body finish.

i. Lower latch hooks cut from 3/4" plate with cross drilled grease zerks.

j. Full width 1" diameter (minimum) tailgate release rod at rear of body with grease zerks on all pass thru bushings.

k. Air tailgate release with spring parking brake chamber mounted center rear of body with dash control.

23. One half (84" X 22") 7 gauge steel cab protector.

a. Cab protector continuous welded to dump body inside and out.

24. Continuous welded body shell (except longsills to floor sheet), cab protector and tailgate.

25. Stow-away grip strut two-step ladder on left front corner of body with grab handle and steps above.

26. Two (2) shovel holders one on each side of body -- County personnel to specify exact location.

27. 18" x 18" x 42" top to be sloped (dirt/salt shedding) intrical tool box built into the front corner of the dump body, driver side and constructed out of 1/4" AR 400 plate with greaseable door hinges.

**COMPLY OR
EXCEPTION**

28. Custom brackets installed under body in front of the rear corner posts for the stainless steel quick couplers .

29. 48" high steel end spill shield bolted in the body to eliminate material loss.

30. Dump body sandblasted, 2 part epoxy primed and painted with DuPont Imron paint to match cab.

**DUMP BODY
(PROPOSAL #2)**

A. DUMP BODY TO BE HEAVY DUTY 304 STAINLESS STEEL CROSSMEMBERLESS SMOOTH-UNDERSIDE TYPE.

1. Inside length 14'.

2. Inside width 7' minimum.

3. Sides (from body floor to top of top rail) 44" high.
(not including built in side boards)

4. Tailgate 52" high.

5. Head sheet 52" high.

a. Two (2) 2" x 3" horizontal head sheet braces.

6. Water level capacity 8 to 10 cubic yard.

7. Sides, head sheet and tailgate 10 gauge steel.

8. Floor 1/4" AR400 steel.

9. All corner posts and side braces 7 gauge steel.

10. Top rails are to be 4" x 5" seamless, sloping (dirt/salt shedding) and boxed for added strength.

11. Bottom rails seamless and sloping (dirt/salt shedding).

12. Long sills one-piece 8" structural steel I-beam.

**COMPLY OR
EXCEPTION**

- 13. Rear apron 8" structural channel. _____
- 14. There are **no crossmembers**. _____
- 15. Rear corner posts 6" x 12" and full depth (to bottom of long sills). _____
- 16. Front corner posts 6" x 24", full-height (to bottom of side rail), seamless and tapered. _____
- 17. (2) Intermediate side brace 6" horizontal, full-length and sloped (dirt/salt shedding). _____
- 18. Holes cut in rear corner posts for recessed marker and clearance lights. _____
- 19. 2" side-to-floor radius for easy clean out. _____
- 20. There are NO side board pockets. _____
- 21. Formed-in 12" x 12" front doghouse to accommodate trunnion-mounted pivoting telescopic hoist. _____
- 22. Tailgate:
 - a. Double-acting heavy duty. _____
 - b. Bracing full perimeter box type, 6" top and bottom and 4" sides. _____
 - c. Three intermediate 6" horizontal brace. _____
 - d. Bottom and intermediate horizontal braces sloped (dirt/salt shedding). _____
 - e. Top and bottom tailgate pins 1-1/2" diameter, minimum. _____
 - f. Minimum 3/8" steel coil spreader chains long enough to hold tailgate in horizontal position. _____
 - g. Tailgate level with dump body floor when in horizontal position. _____
 - h. Heavy nylon mesh sleeves installed over spreader chains to protect body finish. _____
 - i. Lower latch hooks cut from 3/4" plate with cross drilled grease zerks. _____

**COMPLY OR
EXCEPTION**

- j. Full width 1" diameter (minimum) tailgate release rod at rear of body with grease zerks on all pass thru bushings. _____
- k. Air tailgate release with spring parking brake chamber mounted center rear of body with dash control. _____
- 23. One half (84" X 22") 7 gauge stainless steel cab protector. _____
 - a. Cab protector continuous welded to dump body inside and out. _____
- 24. Continuous welded body shell (except longsills to floor sheet), cab protector and tailgate. _____
- 25. Stainless steel stow-away grip strut two-step ladder on left front corner of body with grab handle and steps above. _____
- 26. Two (2) shovel holders one on each side of body – (County personnel to specify exact location). _____
- 27. 18" x 18" x 42" top to be sloped (dirt/salt shedding) intrical tool box built into the front corner of the dump body, driver side and constructed out of ¼" AR 400 plate with greaseable door hinges. _____
- 28. Custom stainless steel brackets installed under body in front of the rear corner posts for the stainless steel quick couplers . _____
- 29. 48" high stainless steel end spill shield bolted in the body to eliminate material loss. _____

HOIST

- A. HEAVY DUTY FRONT TELESCOPIC TYPE HOIST SUITABLE FOR USE WITH A DUMP BODY ON A ROAD AND HIGHWAY MAINTENANCE TRUCK USED FOR SNOW AND ICE CONTROL _____
 - 1. NTEA Class 80. _____
 - 2. 58,800# capacity minimum @ 2000 PSI. _____
 - 3. Double-acting (power up and all the way power down). _____
 - 4. Largest diameter stage must be at bottom-(inverted cylinder not acceptable). _____
 - 5. 5.5" inside diameter cylinder base tube (minimum). _____

**COMPLY OR
EXCEPTION**

- 6. 120" stroke (minimum).

- 7. All cylinder stages nitrated for corrosion resistance and wear resistance.

- 8. Internal bore seal design so no packing adjustment or bleeding is required.

- 9. One-piece modular cradle incorporates twin self-aligning OSHA body props, body guides, and greaseless composite hoist bushings.

- 10. Lowest possible mounting height -- not to exceed 9" (top-of chassis frame to dump body floor).

- 11. 6"x 8" x 1/2" structural angle with 2" 303 stainless steel pins.

- 12. All hoist pivot points to have greaseable fitting and Teflon composite bushings, including rear hinges.

- 13. All hoist pins (cylinder pins and rear hinge pins) to be 304 stainless steel.

- 14. Hoist phosphate rinsed, epoxy primed, and finish with DuPont Imron Black Paint.

- 15. Hoist powered and controlled by central hydraulic system above.

SNOW PLOW HITCH

- A. HEAVY FRONT FRAME SIDE PLATE LOW PROFILE HITCH TO ACCOMMODATE REVERSIBLE SNOW PLOW.

- 1. To be engineered, designed and built by a recognized snow plow manufacturer. Hitch to be a low profile configuration. The design will limit the amount of front overhang to a minimum.

- 2. A truck frame extension is not required for the mounting of the hitch.

- 3. Heavy front frame hitch of modular design shall allow the cab hood to tilt forward a sufficient amount to provide engine access.

- 4. Side plates will transmit plowing forces directly to the truck frame side rails and will custom fit the specified year, make and model of the truck.

**COMPLY OR
EXCEPTION**

- 5. The side plates custom fitted 5/8" steel plate of proper length and construction for heavy duty service and shall provide adequate clearance for steering mechanisms and spring suspensions. _____
- 6. Side plate mounting angles or plates shall mount flush to the truck frame for maximum strength. Pipe spacers are not acceptable. _____
- 7. The front section of the hitch assembly: lift frame, center section and the lower push plate shall all be welded to the two vertical angular supports. The angular supports are to be constructed of 4" x 4" x 1/2" thick wall. _____
- 8. The center cylinder structural section to be built with a 4" x 3" x 1/2" angle. Two 1/2" x 3" x 4" lift cylinder ears to be welded to this angle along with a 1/2" x 3" flat reinforcement bar. _____
- 9. 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. _____
- 10. The lift arm and lift frame shall be designed to accept 4"x 10" lift cylinder with nitrile cylinder tube. Cylinders pins are to be 1" cold rolled steel. _____
- 11. Self-storing lift arm. _____
- 12. Sufficient openings shall be provided in the bottom and back part of the fabricated member to prevent the buildup of ice and/or snow. _____
- 13. The receiver shall be 30.5" pin ear style. _____
- 14. Design consideration will allow permissible plow misalignment of a range of 6" in height and 7" left to right of center. _____
- 15. The plow hoist cylinder shall be of premium grade and shall be a double acting 4" bore x 10" stroke. _____
- 16. The piston rod made of steel construction treated with a nitro steel process. _____
- 17. The ram sleeve or outer barrel will be such that the rod packing may be maintained or replaced as required. A positive stop must be incorporated that will help prevent mechanical pressure being applied to the packing when the rod is fully extended. _____

**COMPLY OR
EXCEPTION**

- 18. The cylinder shall be capable of 14,137 pounds of thrust @ 2,000 PSI and 16,000 pounds of bursting pressure @ 2,000 PSI. Minimum weight of the cylinder shall be 28 pounds. Ports to be 3/8"NPT. _____
- 19. Re-cut factory bumper and reinstall. _____
- 20. Epoxy prime, and finish with DUPont Imron Black Paint. _____

SNOW PLOW OPTION

A. MOLDBOARD:

- 1. The moldboard shall be heavy duty full trip design highway type snowplow _____
- 2. Moldboard Gledhill GL11EHSBVRT or Henderson RSP-11' x 48", or equal. _____
 - a. Length 11' _____
 - b. Height 48" (not including rubber deflector) _____
 - c. Rubber snow deflector 12" x 132" _____
- 3. The moldboard shall be reinforced at the top with a 3-1/2" x 2-1/2" x 3/8" angle with holes to allow moisture to escape with poly 36" markers. _____
- 4. Mouse ear on right side extended over cutting edge. _____
- 5. 10 GA. stainless steel rolled moldboard with eight (8) 1/2" x 3-1/2" ribs. _____
- 6. All welds must be continuous (skip welds not acceptable). _____
- 7. Bottom angle must be 4"x 4" x 3/4" with 12 reinforcements. _____

B. CUTTING EDGE:

- 1. The cutting edge shall be of abrasion resistant steel C1090 or equal with a Brinell hardness of 250 minimum and 325 maximum. It shall be 5/8" thick x 8" wide and full length of moldboard, AASHO standard punched, flush with moldboard and be easily replaceable. _____
- 2. Three (3) Winter Equipment part # PS8412X Plowguards installed on the cutting edge (right, middle, left). _____

C. TRIPPING MECHANISM:

- 1. Full mold board trip. _____
- 2. Two (2) Adjustable compression springs _____

**COMPLY OR
EXCEPTION**

- 3. Five (5) position adjustment on each compression spring to allow changes in road condition. Adjustable via factory supplied spring adjustment wrench. _____
- 4. The trip spring anchor plates are encased and continuous welded to the push frame providing greater strength. _____

D. TABLE:

- 1. "Level lift" design allows continuous level lift in any position. _____
- 2. Push frame tube 132" in width constructed of 4"x 4" x 3/8" square tube. _____
- 3. Seven (7) or Eight (8) 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. _____
- 4. Semi-circle constructed of 3-1/2"x 3-1/2" x 3/4" angle with 77.26" span at push-tube. _____
- 5. Semi circle is further reinforced from back side of circle to push tube with two (2) 3-1/2"x 3-1/2" x 3/4" HR angle. _____
- 6. Semi-circle pivot and reversing cylinders yokes constructed of two (2) HR 1/2" plates. _____
- 7. Two (2) reversing stops constructed of 1"x 5" plate welded to circle. _____
- 8. 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. _____
- 9. Twin (2) 4" x 10" x 2" nitrided hydraulic reversing cylinders are double acting for heavy duty reversing. _____
- 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. _____

E. A-FRAME:

- 1. A-frame sides constructed of 4" x 13.8# channel welded to 1"x 5"x 33.5" A-frame end plate. End plate to side channels is further reinforced with a 5/8"x 3-1/2"x 22.5" plate. _____

**COMPLY OR
EXCEPTION**

- 2. 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. _____
- 3. 30.5" pin ear plow portion installed at rear of A-frame on swivel bar. _____

F. PAINT:

- 1. All metal surfaces phosphate washed to remove slag, splatter, oxide and oil residue. _____
- 2. Moldboard is powder-coated or epoxy primed and painted with DUPont Imron highway orange on back side for increase paint durability. _____
- 3. Push frame, A frame and other miscellaneous components are powder-coated black or epoxy primed and painted with DUPont Imron Black. _____

MID-MOUNT WING PLOW

- 1. The wing system shall be designed for use as a heavy duty mid- mount wing system. _____
- 2. The wing moldboard shall have a cutting edge length of 8' feet. _____
- 3. The wing system shall be trip edge design. _____
- 4. Moldboard heel left shall be provided thru the use of a front moldboard heel left cylinder. _____
- 5. The complete wing mounting system shall utilize cross tube and cheek plate design. _____
- 6. The wing moldboard shall be fully welded (skip welds not acceptable). _____
- 7. The moldboard shall have a cutting edge length of 8'. _____
- 8. There shall be no flare on the discharge end. _____
- 9. The moldboard height shall be 32" across the moldboard. _____
- 10. The moldboard sheet shall be constructed of 10 ga. stainless steel and rolled formed to provide a better clean off. _____
- 11. The backside of the moldboard shall be reinforced thru the use of (6) vertical rib braces. _____

**COMPLY OR
EXCEPTION**

12. The top of the moldboard shall be boxed design. The moldboard sheet shall be formed to an integral J with additional 7ga formed angle fully welded to the underside to complete the box formation.

13. The bottom moldboard backer angle shall be constructed of 4" x 4" x .75" structural angle. The backer angle shall be punched to accept both standard steel and carbide cutting edges. Punching shall conform to AASHTO standard.

14. The front mast shall be fabricated I-beam design to maximize slide contact to mast contact. The mast shall provide up to 8" of lift and capable of being tucked under the dump body floor.

15. The I-beam sides shall be fabricated of no less than 1/2" thick plate. The center-beam web section shall be constructed of no less than 1/2" plate. Both the sides and the center webbing shall be slot and tab construction.

16. The overall height of the front mast shall be 36.75".

17. The single rear push arm will be shock spring brace design.

18. The push arm shall have the ability to adjust from 65.5" to 83.5" in overall length.

19. The inner brace weldment shall be constructed of 2-3/8" round bar and be drilled with the five (5) adjustment holes.

20. The outer brace tube shall be constructed of 3.25" OD x .38 mechanical tubes.

21. The shock spring shall be .63 diameter x 4" x 8" and should have a spring rate of 885#/in.

22. Both the front and the rear mounts will consist of a cross tube and cheek plate design with cheek plate for both sides of the chassis.

23. The front and rear cheek plates shall be fabricated from 1/2" plate and measure 19" x 35".

24. Additional 1/2" x 1' bars are to be supplied for additional plate bracing during installation.

25. The front and rear cross tubes shall be constructed of 7" x 4" x 8w structural tube. The front cross tube shall have a 1/2" mounting base plate for attaching the front mast assembly.

**COMPLY OR
EXCEPTION**

26. Mounting bolts and nuts are to be grade 8.

27. All metal surfaces are to be high pressure washed to remove slag, splatter, oxide, and oil residue.

28. Moldboard shall be powder coated orange on backside. With all other bracing components to be black.

SALT SPREADER OPTION

A. Henderson Model UTG-96– heavy duty stainless steel including installation, or equal.

B. TROUGH MOUNTING

1. The mounting brackets from the dump body and spreader trough shall be constructed of 304 stainless steel.

2. Spreader has 304 stainless steel quick disconnect mounting pins removable without tools.

3. Safety shut off valve, (no quick coupler).

C. PREP & CLEAN:

1. All metal surfaces high-pressure cleaned with a phosphate solution to remove slag, splatter, oxide and oil residue.

LIGHTING & ELECTRICAL

A. WHELEN DOT-3 SPECIAL WARNING LIGHT SYSTEM

1. Whelen 400 series high intensity amber strobe light assembly installed on cab protector corners in steel boxes. (steel box for steel dump body/ stainless steel box for stainless steel dump body).

2. Two (2) 400 series triple-light assemblies (strobe, stop/tail/turn & backup) mounted inside on dump body rear corner posts. (County personal to specify exact location).

3. Two (2) 30’ nine-conductor heavy duty cable assemblies (“Home Run” type) and tinned for full length with stainless steel connectors and TPR inner and outer jackets.

4. Two (2) 50’ three-conductor heavy duty cable assemblies with same construction as “3” above.

5. 9M mini edge centered on cab roof.

**COMPLY OR
EXCEPTION**

- 6. Golight remote control spot light installed on right side of cab roof.
(All roof mounts to be sealed with silicone sealer). _____
- 7. One three-switch bracket to control all four warning light heads. _____
- 8. All wiring run up the front of the body to the cab protector encased
in steel tubing. (steel box for steel dump body/stainless steel box for
stainless steel dump body). _____
- 9. Body company to submit drawing of light system with bid. _____
- B. RECTANGULAR, DUAL BEAM, HALOGEN, NIGHT SABER II SNOW PLOW
LIGHTS WITH INTEGRAL TURN SIGNALS AND MARKER LIGHTS. _____
 - 1. Mounted with custom fabricated 100% stainless steel brackets on existing
mirror brackets on the tilting fiberglass hood. _____
 - 2. Stainless steel mounting bolts with large diameter (1-1/2" to 2") fender washers
behind all fasteners to prevent cracking. _____
- C. LED 4" SEALED BEAM SPINNER LIGHT. _____
 - 1. Mount salter light on the dump body, for the left side salter. _____
 - 2. Heavy duty lighted rocker switch on control console. _____
- D. ALL FMVSS108 LIGHTING ON DUMP BODY TO BE LED _____
- E. Mount provided backup alarm in protected location where it is not easily splashed. _____
- F. BODY UP INDICATOR LIGHT ON DASH. _____
 - 1. Sealed weatherproof microswitch on hoist-frame. _____
- G. ALL ELECTRICAL SWITCHES EXCEPT FOR SPREADER ELECTRONIC CONTROL AND
WARNING LIGHTS MUST BE EXTRA HEAVY DUTY LIGHTED ROCKER TYPE. _____
- H. ALL SWITCHES TO BE IN A SINGLE HOUSING ATTACHED TO OR INTEGRAL
TO HYDRAULIC CONTROL CONSOLE. _____
 - 1. All switches and controls must be marked with engraved laminated plastic
labels (***no Dymo, tape***). _____
- I. SEPARATE IN-CAB POWER DISTRIBUTION PANEL. _____
 - 1. Each terminal to have individual circuit breaker. _____

**COMPLY OR
EXCEPTION**

- 2. Accessory circuit terminal strip activated by separate heavy-duty relay powered from ignition switch. _____
- 3. Separate 80 amp manual-reset circuit breaker at battery in sealed box inside battery box for above relay attaches. _____
- 4. Body company electrical center mounted on an aluminum panel on back of cab behind passenger seat. _____
- 5. Panel attached to back of cab with stainless steel fasteners and sealed with silicone sealer. _____
- 6. Separate color-coded wires for all add-on electrical items. _____
- 7. All add-on wiring by body company isolated from chassis wiring system through terminal strip and relay to eliminate electrical warranty and service conflicts between chassis dealer and body company. _____

J. ALL NON-STROBING WIRING TO BE 7-WIRE TRAILER CABLE--- SEPARATE CABLE ROUTED FROM IN-CAB ELECTRICAL PANEL TO ALL NON-STROBE LIGHTS ON BODY WITH SEALED JUNCTION BOX AT REAR IF NECESSARY SO ALL WIRING CONNECTIONS ARE MADE EITHER INSIDE CAB OR IN A SEALED JUNCTION BOX. _____

MISCELLANEOUS

- A. ELBOW WITH RAIN CAP OR "S" EXTENSION ON TOP OF CHASSIS VERTICAL EXHAUST STACK TO CLEAR CAB PROTECTOR AND STILL ROUTE EXHAUST UPWARD. _____
- B. HEAVY DUTY RUBBER AND FABRIC FLAPS BEHIND REAR WHEELS. _____
 - 1. Flaps to have tie-up hooks to protect them when backing into piles of dumped material. _____
- C. FLEET ENGINEERING FULL POLY FENDERS OVER TANDEM REAR WHEELS, OR EQUAL. _____
- D. FLEET ENGINEERING STAINLESS STEEL OFF-SET MOUNTS, OR EQUAL. _____

**COMPLY OR
EXCEPTION**

- F. PINTLE PLATE WITH A 20 TON PINTLE HOOK
 - 1. Mounted on reinforced 5/8" thick mounting plate at rear of chassis frame.
 - 2. Diagonal braces forward to rear hoist mounting plates that extend below chassis frame rails.
 - 3. 1" thick forged steel D-Rings on both sides of pintle hook.
 - 4. 7 Way trailer plug to be recessed in pintle plate.
 - 5. TEKONSHA PRODIGY or approved equal electronic brake controller in cab.

- G. REMOVABLE 10 GAUGE 12" ASPHALT APRON TO PIN INTO THE SPREADER MOUNTS ON THE DUMP. (steel box for steel dump body/ stainless steel box for stainless steel dump body).

INSTALLATION

- A. NO WELDING IS TO BE DONE ON CHASSIS FRAME BETWEEN FRONT OF MOST FORWARD SPRING HANGER AND REAR OF REAR MOST SPRING HANGER.

- B. DO NOT DRILL, OR WELD TO FRAME RAIL FLANGES.

- C. COPY OF CENTRAL HYDRAULIC SYSTEM SCHEMATIC TO BE FURNISHED SHOWING BRAND NAME AND PART NUMBER OF ALL COMPONENTS.
 - 1. Copy of central hydraulic schematic laminated in clear plastic and affixed to inside of cab.

- D. COPY OF WIRING SCHEMATIC TO BE FURNISHED.
 - 1. Copy of wiring schematic laminated in clear plastic and affixed to inside of cab.

- E. OPERATOR'S PARTS AND SERVICE MANUALS FOR ALL COMPONENTS, (DUMP BODY, HOIST, SNOW PLOW, SALT SPREADER, MID-MOUNT PLOW, CENTRAL HYDRAULIC SYSTEM AND STROBE LIGHTS, ETC.) ARE TO BE PROVIDED.

- F. COMPLETED VEHICLE MUST BE CERTIFIED TO MEET ALL FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT AT TIME OF CHASSIS PRODUCTION.
 - 1. Approved NHTSA/FMVSS certification label must be furnished and located Inside cab on driver's side.

**COMPLY OR
EXCEPTION**

- G. COMPLETED UNIT TO COMPLY WITH CURRENT **OSHA** REGULATIONS. _____
- H. BIDDER MUST BE REGISTERED WITH NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION AS A FINAL STAGE MANUFACTURER OF MOTOR VEHICLES AS REQUIRED BY FEDERAL LAW. _____
- I. BIDDER IS RESPONSIBLE TO PICK UP THE VEHICLE FOR WARRANTY WORK AND RETURN IN A TIMELY MANNER TO THE SANDUSKY COUNTY ENGINEERS. _____
- J. BIDDER TO CONDUCT OPERATOR TRAINING SESSION ON BODY AND EQUIPMENT AT COUNTY GARAGE AFTER DELIVERY OF COMPLETED TRUCK. _____
- K. REFERENCES: BIDDERS ARE ENCOURAGED TO LIST TRUCKS, THEY HAVE EQUIPPED IN THE PAST AND TO WHOM SOLD WITH CONTACT NAMES AND PHONE NUMBERS. _____

