

CERTIFIED COPY OF ORDER

STATE OF MISSOURI }
County of Boone } ea.

April Session of the April Adjourned

Term. 20 16

In the County Commission of said county, on the 28th day of April 20 16

the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby approve Sole Source Contract 131-123116SS for re-certification for 911 operators and renewal of departmental accreditations from International Academies of Emergency Dispatch (IAED) of Salt Lake City, UT.

It is further ordered the Presiding Commissioner is hereby authorized to sign said Sole Source Fact Sheet.

Done this 28th day of April, 2016

ATTEST:

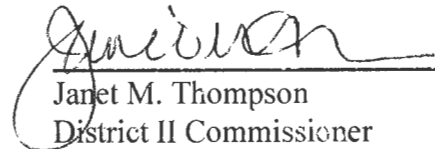
Wendy S. Noren
Wendy S. Noren
Clerk of the County Commission



Daniel K. Atwill
Presiding Commissioner

Absent

Karen M. Miller
District I Commissioner



Janet M. Thompson
District II Commissioner

Boone County Purchasing

Melinda Bobbitt, CPPO
Director of Purchasing



613 E. Ash, Room 110
Columbia, MO 65201
Phone: (573) 886-4391
Fax: (573) 886-4390

MEMORANDUM

TO: Boone County Commission
FROM: Melinda Bobbitt, CPPO, CPPB
DATE: April 13, 2016
RE: Sole Source Approval – 131-123116SS – Re-certification for 911
Operators and Renewal of Departmental Accreditations

Attached for signature and approval is a Sole Source Request Form from Joint Communications for approval to purchase re-certification for 911 operators and renewal of departmental accreditations from International Academies of Emergency Dispatch (IAED) of Salt Lake City, Utah.

This certification and accreditation service is proprietary to the vendor.

It is anticipated that up to \$10,000 annually will be spent on certification and accreditation. Invoices will be paid from 2701 – Joint Communications, account 37000 – Dues and Professional certifications. Currently invoices are being paid from 71100 – Outside Services (and being reimbursed to the City).

The intent to purchase as sole source was advertised in the Missourian and Tribune on Friday, April 15, 2016.

ATT Sole Source Request

cc: Patricia Schreiner, Joint Communications
Sole Source File

Boone County Purchasing

Melinda Bobbitt, CPPO, CPPB
Director of Purchasing



613 E. Ash, Rm 110
Columbia, MO 65201
Phone: (573) 886-4391
Fax: (573) 886-4390

SOLE SOURCE/NO SUBSTITUTE FACT SHEET

Originating Office	Boone County 911 Joint Communications
Person Requesting	Pat Schreiner, Budget Administrator
Date Requested	April 13 2016
Contact Phone Number	573-886-7207

UPON COMPLETION OF THIS FORM, PLEASE SUBMIT TO THE PURCHASING DEPARTMENT.

PURCHASING DEPARTMENT APPROVAL: Melinda Bobbitt Signature 4-13-16 Date

SOLE SOURCE NUMBER: 131-123116 55
(Assigned by Purchasing)

COMMISSION APPROVAL: Samuel K. Howell Signature 4-29-16 Date

Expiration Date: 20 through 12/31 2016 ongoing One Time Purchase (check)

Vendor Name	International Academies of Emergency Dispatch (IAED)
Vendor Address	139 East South Temple, Suite 200, Salt Lake City, Utah 84111
Vendor Phone and Fax	(800) 363-9172
Product Description	Re-certification for 911 operators and renewal of departmental accreditations.
Estimated Cost	\$5,000 - \$10,000 per year.
Department/Account	Dept 2701: Joint Communications
Number(s) Invoices Will Be Paid	Account 37000: Dues and Professional Certifications <u>currently budgeted 71000 reimbursement to City</u>

The following is a list of questions that must be answered when making sole source requests. This is a formal document for submission to the County Commission. If a question is not applicable, please indicate N/A. Use layman's terms and avoid jargon and the use of acronyms.

- Please check the reason(s) for this sole request:
 - Only Known Source-Similar equipment or material not available from another vendor
 - Equipment or materials must be compatible with existing Equipment
 - Immediate purchase necessary to correct situation threatening life/property
 - Lease Purchase - Exercise purchase option on lease
 - Medical device or supply specified by physician
 - Used Equipment - Within price set by one/two appraisal(s) by disinterested party(ies)

Other - List (attach additional sheets if necessary)
Service is Proprietary to the Contractor

2. Briefly describe the commodity/material you are requesting and its function: *Individual re-certification for 911 operators for Emergency Medical Dispatch(EMD), Emergency Fire Dispatch(EFD) and Emergency Police Dispatch(EPD); Departmental accreditation for EMD EFD & EPD; Instructor certifications; Quality Assurance certifications.*
3. Describe the unique features/compatibility of the commodity/material that precludes competitive bidding. *Non-Profit Accreditation agency, sets the standards for accreditation and certification. Specific to training curriculum.*
4. What research has been done to verify this vendor as the only known source? *Industry standard, general knowledge in this profession.*
5. Does this vendor have any distributors, dealers, resellers, etc. that sell the commodity/material?
 - Yes (please attach a list of known sources)
 - No
6. Must this commodity/material be compatible with present inventory/equipment, or in compliance with the manufacturer's warranty or existing service agreement? If yes, please explain. *Yes. Current training providers and department policies and procedures are based on the IAED standards.*
7. If this is an initial purchase, what are the future consequences of the purchase? That is, once this purchase is approved and processed, what additional upgrades/additions/supplies/etc. are anticipated/projected over the useful life of this product?
Not an initial purchase
8. If this is an upgrade/add-on/supply/repair/etc. to existing equipment, how was the original equipment purchased (sole source or competitive bid)? What additional, related, sole source purchases have occurred since the initial purchase? Please state previous purchase order number(s).
Not an upgrade. Priority Dispatch software purchases are related to IAED standards, currently paid via City of Columbia (Sole Source). Priority Dispatch training courses and continuing education from Priority Dispatch and other providers are selected based on acceptance by IAED.
9. How has this commodity/material been purchased in the past? (Sealed Bid, Sole Source, RFP, other) Please provide document numbers.
Sole Source (City of Columbia)
10. What are the consequences of not securing this specific commodity/material?
Loss of accreditation; increased liability; compromised quality of service to the public; loss of support for dispatch protocols..
11. List any other information relevant to the acquisition of this commodity/material (additional sheets may be attached, if necessary).
The IAED sets and maintains professional practice standards for emergency dispatch Curriculum, Certification, Recertification, and Accreditation of Centers of Excellence through separate expert Boards for each area (Medical, Fire, and Police Dispatch).
12. How long is sole source approval necessary for this type of purchase? Is this a one-time purchase or is there an identified time period needed? *On-going (continuation from City of Columbia; part of BCJC transition from City to County.)*

Boone County Purchasing

Melinda Bobbitt, CPPO
Director of Purchasing



613 E. Ash St.-Rm 110
Columbia, MO 65201
Phone (573) 886-4391
Fax (573) 886-4390

To: Melody Cook (884-0003)
cookmr@missouri.edu
advertising@columbiainmissourian.com

From: Melinda Bobbitt, Director of Purchasing

RE: Advertisement for Sole Source Purchase

Date: April 13, 2016

The following is a sole source purchase advertisement. Please call if you have any questions.

NOTICE OF INTENT TO MAKE SINGLE FEASIBLE SOURCE PURCHASE

Boone County believes there is only a single feasible source from which to purchase the following and intends to make a single feasible source purchase unless viable competition is established. Please contact the Boone County Purchasing Department if you can supply the following:

Re-certification for 911 operators and renewal of departmental accreditations from International Academies of Emergency Dispatch (IAED) of Salt Lake City, Utah.

To receive additional information or to express an interest in providing the above, please contact the Purchasing Department by **9:30 a.m. on April 26, 2016**. Boone County Purchasing Department, 613 E. Ash, Columbia, MO 65201.

Information is available in the Purchasing Office by phone: (573) 886-4391; fax (573) 886-4390 or e-mail: mbobbitt@boonecountymmo.org.

Melinda Bobbitt, CPPO
Director, Boone County Purchasing

Insertion date: Friday, April 15, 2016
COLUMBIA MISSOURIAN

Page : 1 of 1 04/13/2016 15:31:51
Order Number : 30995078
PO Number :
Customer : L8864390 Boone Co. Purchasing
Contact :
Address1 : 613 East Ash
Address2 :
City St Zip : Columbia MO 65201
Phone : (573) 886-4392
Fax : (573) 886-4390
Credit Card :
Printed By : Cook, Melody R.
Entered By : Cook, Melody R.
Keywords : Re-certification for 911 operators & renewal of de
Notes :
Zones :

Ad Number : 31006258
Ad Key : 30995078
Salesperson : 67 - Legal Acct
Publication : Columbia Missourian
Section : Classified Section
Sub Section : Classified Section
Category : Legal Notices 1300
Dates Run : 04/15/2016-04/15/2016
Days : 1
Size : 1 x 2.80, 28 lines
Words : 137
Ad Rate : Open
Ad Price : 18.20
Amount Paid : 0.00
Amount Due : 18.20

**NOTICE OF INTENT TO MAKE SINGLE
FEASIBLE SOURCE PURCHASE**

Boone County believes there is only a single feasible source from which to purchase the following and intends to make a single feasible source purchase unless viable competition is established. Please contact the Boone County Purchasing Department if you can supply the following:

Re-certification for 911 operators and renewal of departmental accreditations from International Academies of Emergency Dispatch (IAED) of Salt Lake City, Utah.

To receive additional information or to express an interest in providing the above, please contact the Purchasing Department by 9:30 a.m. on April 26, 2016. Boone County Purchasing Department, 613 E. Ash, Columbia, MO 65201. Information is available in the Purchasing Office by phone: (573) 886-4391; fax (573) 886-4390 or e-mail: mbobbitt@boonecountymo.org.

Melinda Bobbitt, CPPO
Director, Boone County Purchasing
Insertion Date: April 15, 2016

Boone County Purchasing

Melinda Bobbitt, CPPO
Director of Purchasing



613 E. Ash St.-Rm 110
Columbia, MO 65201
Phone (573) 886-4391
Fax (573) 886-4390

To: Ruby Kuhler
rwheeler@tribmail.com

From: Melinda Bobbitt, Director of Purchasing

RE: Advertisement for Sole Source Purchase

Date: April 13, 2016

The following is a sole source purchase advertisement. Please call if you have any questions.

NOTICE OF INTENT TO MAKE SINGLE FEASIBLE SOURCE PURCHASE

Boone County believes there is only a single feasible source from which to purchase the following and intends to make a single feasible source purchase unless viable competition is established. Please contact the Boone County Purchasing Department if you can supply the following:

Re-certification for 911 operators and renewal of departmental accreditations from International Academies of Emergency Dispatch (IAED) of Salt Lake City, Utah.

To receive additional information or to express an interest in providing the above, please contact the Purchasing Department by **9:30 a.m. on April 26, 2016**. Boone County Purchasing Department, 613 E. Ash, Columbia, MO 65201.

Information is available in the Purchasing Office by phone: (573) 886-4391; fax (573) 886-4390 or e-mail: mbobbitt@boonecountymo.org.

Melinda Bobbitt, CPPO
Director, Boone County Purchasing

Insertion date: Friday, April 15, 2016
COLUMBIA TRIBUNE

Melinda Bobbitt - RE: sole source ad

From: "Kuhler, Ruby" <rgkuhler@columbiatribune.com>
To: 'Melinda Bobbitt' <mbobbitt@boonecountymo.org>
Date: 4/13/2016 5:36 PM
Subject: RE: sole source ad
Attachments: 2041554.pdf

Melinda:

Good evening! I have attached a copy of the notice as it will appear Friday 4/15. Total cost is \$35.58. Please review the attached proof closely and make the following notations:

- If changes are required, mark them clearly on the proof; either email changes or and fax to 866-294-7696
- If no changes are required, please email confirmation

For your convenience, we will fax affidavits of publication on the final or next business day after the completion of your notice. If you'd like to utilize this option, please let us know with your fax number. We will mail the hard copy file after completion of the notice or with your bill.

CANCELLATION POLICY

Please be advised that if a legal notice is cancelled prior to publication, a \$35.00 production fee will be charged. Cancellations or changes made within the duration of the ad will be effective for the next available publication according to our deadlines (typically 72 – 96 hours prior to publication, depending on publication date). Cancellation instructions **MUST** be faxed to 866.294.7696. If you do not receive confirmation from us that the notice has been cancelled, it is your responsibility to follow up on the cancellation request by calling 573-815-1855. The Columbia Daily Tribune will not be liable for cancellation discrepancies if these procedures are not followed.

Thanks,

Ruby

Ruby Kuhler
Classified Advertising Manager
Columbia Daily Tribune / ColumbiaTribune.com PO Box 798, Columbia, MO 65205
Ph 573.815.1859
Fx 866.294.7696

TRIBUNE CLASSIFIEDS

The Market Leader

From: Melinda Bobbitt [mailto:mbobbitt@boonecountymo.org]

**NOTICE OF INTENT TO MAKE
SINGLE FEASIBLE
SOURCE PURCHASE**

Boone County believes there is only a single feasible source from which to purchase the following and intends to make a single feasible source purchase unless viable competition is established. Please contact the Boone County Purchasing Department if you can supply the following:

**Re-certification for 911 operators
and renewal of departmental
accreditations from International
Academies of Emergency
Dispatch (IAED) of
Salt Lake City, Utah.**

To receive additional information or to express an interest in providing the above, please contact the Purchasing Department by **9:30 a.m. on April 26, 2016**. Boone County Purchasing Department, 613 E. Ash, Columbia, MO 65201. Information is available in the Purchasing Office by phone: (573) 886-4391; fax (573) 886-4390 or e-mail:

mbobbitt@boonecountymo.org.

Melinda Bobbitt, CPPO
Director, Boone County Purchasing

INSERTION DATE: April 15, 2016

CERTIFIED COPY OF ORDER

STATE OF MISSOURI }
County of Boone } ea.

April Session of the April Adjourned

Term. 20 16

In the County Commission of said county, on the 28th day of April 20 16

the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Bogne does hereby approve the utilization of the City of Columbia Cooperative Contract 19/2016 for a Term and Supply contract for Asbestos Abatement and Related Services with Asbestos Removal Services, Inc. of Jefferson City, MO.

The terms of the Cooperative Contract are stipulated in the attached Purchase Agreement. It is further ordered the Presiding Commissioner is hereby authorized to sign said Purchase Agreement.

Done this 28th day of April, 2016.

ATTEST:

Wendy S. Noren
Wendy S. Noren
Clerk of the County Commission

Daniel K. Atwill
Presiding Commissioner

Absent

Karen M. Miller
District I Commissioner

Janet M. Thompson
District II Commissioner

204-2016

Boone County Purchasing

Phil Fichter
Buyer



613 E. Ash Street, Room 113
Columbia, MO 65201
Phone: (573) 886-4392
Fax: (573) 886-4390

MEMORANDUM

TO: Boone County Commission
FROM: Phil Fichter
DATE: April 19, 2016
RE: Cooperative Contract 19/2016- Asbestos Abatement and Related Services

Attached is Term and Supply Cooperative Contract utilizing the City of Columbia Cooperative Contract 19/2016- Asbestos Abatement and Related Services with Asbestos Removal Services, Inc. of Jefferson City, Missouri This contract is in effect through January 31, 2017.

cc: Jody Moore, Facilities Maintenance
Contract File

**PURCHASE AGREEMENT
FOR
ASBESTOS ABATEMENT AND RELATED SERVICES
TERM AND SUPPLY**

THIS AGREEMENT dated the 28th day of April 2016 is made between Boone County, Missouri, a political subdivision of the State of Missouri through the Boone County Commission, herein "County" and **Asbestos Removal Services, Inc.**, herein Contractor."

IN CONSIDERATION of the parties performance of the respective obligations contained herein, the parties agree as follows:

1. **Contract Documents** - This agreement shall consist of this Purchase Agreement for a term and supply contract for the furnishing of **asbestos abatement and related services** in compliance with all bid specifications and any addendum issued for the **City of Columbia, Request for Quote number 19/2016** as well as Boone County Standard Terms and Conditions, insurance requirements, Annual Wage Order No. 22, and Work Authorization. All such documents shall constitute the contract documents which are incorporated herein by reference. Service or product data, specification and literature submitted with bid response may be permanently maintained in the County Purchasing Office bid file for this bid if not attached. In the event of conflict between any of the foregoing documents, this Purchase Agreement and the **City of Columbia Request for Quote number 19/2016** shall prevail and control over the contractor's bid response.

2. **Contract Duration** - This agreement shall commence **on the date written above and extend through January 31, 2017** subject to the provisions for termination specified below. This agreement may be extended beyond the expiration date by order of the County for four **(4) additional one year periods** subject to the pricing clauses in the Contractor's bid response and thereafter on a month to month basis in the event the County is unable to re-bid and/or award a new contract prior to the expiration date after exercising diligent efforts to do so or not.

3. **Purchase** - The County agrees to purchase from the Vendor and the Vendor agrees to supply the County with **asbestos abatement and related services** as required in the bid specifications and in conformity with the contract documents for the prices set forth in the Contractor's bid response, as needed and as ordered by County.

4. **Billing and Payment** - All billing shall be invoiced to **Facilities Maintenance**. Billing may only include prices of items ordered and no additional fees, extra services or taxes shall be included. The County agrees to pay all correct monthly statements within thirty days of receipt. Billings may only include the prices as listed and/or calculated in the Vendor's bid response. No additional fees for extra services or taxes shall be included as additional charges in excess of the charges in the Vendor's bid response to the specifications.

In the event of a billing dispute, the County reserves the right to withhold payment on the disputed amount; in the event the billing dispute is resolved in favor of the Vendor, the County agrees to pay interest at a rate of 9% per annum on disputed amounts withheld commencing from the last date that payment was due.

5. **Prevailing Wage** - Contractor agrees it will pay not less than the prevailing hourly rate of wages to all workmen performing work under the Contract in accordance with the prevailing wage determination issued by the Division of Labor Standards of the Department of Labor and Industrial Relations for the State of Missouri and as maintained on file with the Boone County Purchasing

for each calendar day or portion thereof such workman is paid less than the stipulated rates set forth in the prevailing wage determination for the project for any work done under this contract by the Contractor pursuant to the provisions of Section 290.250 RSMo. The Contractor further agrees that he will abide by all provisions of the prevailing wage law as set forth in Chapter 290 RSMo. and rules and regulations issued thereunder and that any penalties assessed may be withheld from sums due to the Contractor by the Owner.

6. OSHA Training - OSHA Program Requirements - The Contractor is familiar with the requirements of 292.675 RSMo. The Contractor shall provide a ten-hour Occupational Safety and Health Administration (OSHA) construction safety program for their on-site employees, subcontractors or others acting on behalf of Contractor on-site which meets the requirements of 292.675 RSMo. The Contractor and each subcontractor shall keep accurate records of those employees who are working on-site and a record of each such employee's completion of the OSHA program, and certify compliance by affidavit at the conclusion of the project. The Contractor shall forfeit as a penalty to the County the sum of Two Thousand Five Hundred Dollars (\$2,500.00) plus One Hundred Dollars (\$100.00) for each employee employed by the Contractor or subcontractor, for each calendar day, or portion thereof, such employee is found to be employed in violation of 292.675 RSMo. Said amounts shall be withheld from all sums and amounts due under this provision when making payments to the Contractor.

7. Transient Employers - Every transient employer, as defined in Section 285.230 RSMo, must post in a prominent and easily accessible place at the work site a clearly legible copy of the following: (1) the notice of registration for employer withholding issued to such transient employer by the director of revenue; (2) proof of coverage for workers' compensation insurance or self-insurance signed by the transient employer and verified by the department of revenue through the records of the division of workers' compensation; and (3) the notice of registration for unemployment insurance issued to such transient employer by the division of employment security. Any transient employer failing to comply with these requirements shall, under Section 285.234 RSMo, be liable for a penalty of five hundred dollars per day until the notices required by this section are posted as required by law.

8. Overhead and Line Protection: The Contractor is aware of the provisions of the Overhead Power Line Safety Act, 319.075 to 319.090 RSMo, and agrees to comply with the provisions thereof. Contractor understands that it is their duty to notify any utility operating high voltage overhead lines and make appropriate arrangements with said utility if the performance of contract would cause any activity within ten feet of any high voltage overhead line. To the fullest extent permitted by law, Contractor shall indemnify, hold harmless and defend the County, its directors, officers, agents, and employees from and against all claims, damages, losses and expenses (including but not limited to attorney's fees) arising by reason of any act or failure to act, negligent or otherwise, of Contractor, of any subcontractor (meaning anyone, including but not limited to consultants having a contract with contractor or a subcontract for part of the services), of anyone directly or indirectly employed by contractor or by any subcontractor, or of anyone for whose acts the contractor or its subcontractor may be liable, in connection with any claims arising under the Overhead Power Line Safety Act. Contractor expressly waives any action for Contribution against the County on behalf of the Contractor, any subcontractor (meaning anyone, including but not limited to consultants having a contract with contractor or a subcontract for part of the services), anyone directly or indirectly employed by contractor or by any subcontractor, or of anyone for whose acts the contractor or its subcontractor may be liable, and agrees to provide a copy of this waiver to any party affected by this provision.

9. Payment Bond - Contractor shall provide the County with a Payment Bond on form provided by County whenever the work associated with a mobilization under this Contract is projected to exceed \$50,000.00. Contractor shall provide the Payment Bond within thirty (30) days of request by County. No additional payment will be made to the contractor for the procurement of the Payment Bond. It should be incidental to all bid items.

204-2016

No additional payment will be made to the contractor for the procurement of the Payment Bond. It should be incidental to all bid items.

10. **Binding Effect** - This agreement shall be binding upon the parties hereto and their successors and assigns for so long as this agreement remains in full force and effect.

11. **Entire Agreement** - This agreement constitutes the entire agreement between the parties and supersedes any prior negotiations, written or verbal, and any other bid or bid specification or contractual agreement. This agreement may only be amended by a signed writing executed with the same formality as this agreement.

12. **Termination** - This agreement may be terminated by the County upon thirty days advance written notice for any of the following reasons or under any of the following circumstances:

- a. County may terminate this agreement due to material breach of any term or condition of this agreement, or
- b. County may terminate this agreement if in the opinion of the Boone County Commission delivery of products are delayed or products delivered are not in conformity with bidding specifications or variances authorized by County, or
- c. If appropriations are not made available and budgeted for any calendar year.

IN WITNESS WHEREOF the parties through their duly authorized representatives have executed this agreement on the day and year first above written.

ASBESTOS REMOVAL SERVICES, INC.

by Warren Frost
title President

BOONE COUNTY, MISSOURI

by: Boone County Commission
Daniel K. Atwill
Daniel K. Atwill, Presiding Commissioner

APPROVED AS TO FORM:

by: [Signature]
County Counselor

ATTEST:

Wendy S. Noren
Wendy S. Noren, County Clerk

AUDITOR CERTIFICATION

In accordance with RSMo 50.660, I hereby certify that a sufficient unencumbered appropriation balance exists and is available to satisfy the obligation(s) arising from this contract. (Note: Certification of this contract is not required if the terms of the contract do not create a measurable county obligation at this time.)

June E. Pitchford
Signature by ag

4/20/16
Date

60100
6100-Term and Supply
No Encumbrance Required
Appropriation Account

STANDARD CONTRACT TERMS AND CONDITIONS - BOONE COUNTY, MISSOURI

1. Contractor shall comply with all applicable federal, state, and local laws and failure to do so, in County's sole discretion, shall give County the right to terminate this Contract.
2. Prices shall include all charges for packing, delivery, installation, etc., (unless otherwise specified) to the Boone County Department.
3. The Boone County Commission has the right to accept or reject any part or parts of all bids, to waive technicalities, and to accept the offer the County Commission considers the most advantageous to the County. Boone County reserves the right to award this bid on an item-by-item basis, or an "all or none" basis, whichever is in the best interest of the County. The Purchasing Director reserves the right, when only one bid has been received by the bid closing date, to delay the opening of bids to another date and time in order to revise specifications and/or establish further competition for the commodity or service required. The one (1) bid received will be retained unopened until the new Closing date, or at request of bidder, returned unopened for re-submittal at the new date and time of bid closing.
4. When products or materials of any particular producer or manufacturer are mentioned in our contracts, such products or materials are intended to be descriptive of type or quality and not restricted to those mentioned.
5. Do not include Federal Excise Tax or Sales and Use Taxes in billing, as law exempts the County from them.
6. The delivery date shall be stated in definite terms.
7. The County Commission reserves the right to cancel all or any part of orders if delivery is not made or work is not started as guaranteed. In case of delay, the Contractor must notify the Purchasing Department.
8. In case of default by the Contractor, the County of Boone will procure the articles or services from other sources and hold the Contractor responsible for any excess cost occasioned thereby.
9. Failure to deliver as guaranteed may disqualify Contractor from future bidding.
10. Prices must be as stated in units of quantity specified, and must be firm.
11. The County of Boone, Missouri expressly denies responsibility for, or ownership of any item purchased until same is delivered to the County and is accepted by the County.
12. The County reserves the right to award to one or multiple respondents. The County also reserves the right to not award any item or group of items if the services can be obtained from a state or other governmental entities contract under more favorable terms. The resulting contract will be considered "Non-Exclusive". The County reserves the right to purchase advertising from other vendors.
13. The County, from time to time, uses federal grant funds for the procurement of goods and services. Accordingly, the provider of goods and/or services shall comply with federal laws, rules and regulations applicable to the funds used by the County for said procurement, and contract clauses required by the federal government in such circumstances are incorporated herein by reference. These clauses can generally be found in the Federal Transit Administration's Best Practices

Procurement Manual – Appendix A. Any questions regarding the applicability of federal clauses to a particular bid should be directed to the Purchasing Department prior to bid opening.

14. In the event of a discrepancy between a unit price and an extended line item price, the unit price shall govern.
15. Should an audit of Contractor's invoices during the term of the Agreement, and any renewals thereof, indicate that the County has remitted payment on invoices that constitute an over-charging to the County above the pricing terms agreed to herein, the Contractor shall issue a refund check to the County for any over-charges within 30-days of being notified of the same.
16. **For all titled vehicles and equipment the dealer must use the actual delivery date to the County** on all transfer documents including the Certificate of Origin (COO,) Manufacturer's Statement of Origin (MSO,) Bill of Sale (BOS,) and Application for Title.
17. **Equipment and serial and model numbers** - The contractor is strongly encouraged to include equipment serial and model numbers for all amounts invoiced to the County. If equipment serial and model numbers are not provided on the face of the invoice, such information may be required by the County before issuing payment.

Insurance Requirements: The Contractor shall not commence work under this contract until they have obtained all insurance required under this paragraph and the Certificate of Insurance has been approved by the County, nor shall the Contractor allow any subcontractor to commence work on their subcontract until all similar insurance required of subcontractor has been so obtained and approved. All policies shall be in amounts, form and companies satisfactory to the County which must carry an A-6 or better rating as listed in the A.M. Best or equivalent rating guide. Insurance limits indicated below may be lowered at the discretion of the County.

Employers Liability and Workers Compensation Insurance - The Contractor shall take out and maintain during the life of this contract, **Employers Liability and Workers Compensation Insurance** for all of its employees employed at the site of work, and in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Workers Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor. Workers Compensation coverage shall meet Missouri statutory limits. Employers Liability limits shall be \$500,000.00 each employee, \$500,000.00 each accident, and \$500,000.00 policy limit. In case any class of employees engaged in hazardous work under this Contract at the site of the work is not protected under the Workers Compensation Statute, the Contractor shall provide and shall cause each subcontractor to provide Employers Liability Insurance for the protection of their employees not otherwise protected.

Commercial General Liability Insurance - The Contractor shall take out and maintain during the life of this contract, such commercial general liability insurance as shall protect it and any subcontractor performing work covered by this contract, from claims for damages for personal injury including accidental death, as well as from claims for property damages, which may arise from operations under this contract, whether such operations be by themselves or for any subcontractor or by anyone directly or indirectly employed by them. The amounts of insurance shall be not less than \$3,000,000.00 combined single limit for any one occurrence covering both bodily injury and property damage, including accidental death. If the Contract involves any underground/digging operations, the general liability certificate shall include X, C, and U (Explosion, Collapse, and Underground) coverage. If providing Commercial General Liability Insurance, then the Proof of Coverage of Insurance shall also be included.

Contractor may satisfy the minimum liability limits required for Commercial General Liability or Business Auto Liability under an Umbrella or Excess Liability policy. There is no minimum per occurrence limit of liability under the umbrella or Excess Liability; however, the Annual Aggregate limit shall not be less than the highest "Each Occurrence" limit for either Commercial General Liability or Business Auto Liability. Contractor agrees to endorse the County as an Additional Insured on the umbrella or Excess Liability, unless the Certificate of Insurance state the Umbrella or Excess Liability provides coverage on a "Follow-Form" basis.

Business Automobile Liability – The Contractor shall maintain during the life of this contract, automobile liability insurance in the amount of not less than \$3,000,000.00 combined single limit for any one occurrence, covering both bodily injury, including accidental death, and property damage, to protect themselves from any and all claims arising from the use of the Contractor's own automobiles, teams and trucks; hired automobiles, teams and trucks; non-owned and both on and off the site of work.

Subcontractors: Contractor shall cause each Subcontractor to purchase and maintain insurance of the types and amounts specified herein. Limits of such coverage may be reduced only upon written agreement of County. Contractor shall provide to County copies of certificates of insurance evidencing coverage for each Subcontractor. Subcontractors' commercial general liability and business automobile liability insurance shall name County as Additional Insured and have the Waiver of Subrogation endorsements added.

Proof of Carriage of Insurance - The Contractor shall furnish the County with Certificate(s) of Insurance which name the County as additional insured in an amount as required in this contract). The Certificate of Insurance shall provide that there will be no cancellation, non-renewal or reduction of coverage without 30 days prior written notice to the Owner. In addition, such insurance shall be on an occurrence basis and shall remain in effect until such time as the County has made final acceptance of the services provided.

INDEMNITY AGREEMENT: To the fullest extent permitted by law, Contractor shall indemnify, hold harmless and defend the County, its directors, officers, agents, and employees from and against all claims, damages, losses and expenses (including but not limited to attorney's fees) arising by reason of any act or failure to act, negligent or otherwise, of Contractor, of any subcontractor (meaning anyone, including but not limited to consultants having a contract with contractor or a subcontract for part of the services), of anyone directly or indirectly employed by contractor or by any subcontractor, or of anyone for whose acts the contractor or its subcontractor may be liable, in connection with providing these services. This provision does not, however, require contractor to indemnify, hold harmless, or defend the County of Boone from its own negligence.

Failure to maintain the required insurance in force may be cause for contract termination. In the event the Agency/Service fails to maintain and keep in force the required insurance or to obtain coverage from its subcontractors, the County shall have the right to cancel and terminate the contract without notice.

Certificate Holder address:

County of Boone, Missouri
C/O Purchasing Department
613 E. Ash Street
Columbia, MO 65201

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS, that we, _____,
_____,
as Principal, hereinafter called Contractor, and _____

_____ a corporation organized under the laws of the State of _____, and authorized to transact business in the State of Missouri, as Surety, hereinafter called Surety, are held and firmly bound unto the County of Boone, Missouri, as Obligee, hereinafter called Owner, for the use and benefit of claimants as herein below defined, in the amount of

_____ DOLLARS

(\$ _____), for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents:

WHEREAS, Contractor has by written agreement dated _____ entered into a contract with Owner for

**CONTRACT NUMBER 19/2016
ASBESTOS ABATEMENT AND RELATED SERVICES
BOONE COUNTY, MISSOURI**

in accordance with specifications and/or plans prepared by the County of Boone which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that the Contractor shall promptly make payments to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise, it shall remain in full force and effect, subject, however, to the following conditions.

- A. A claimant is defined as one having a direct contract with the Contractor or with a subcontractor of the Contractor for labor, material, or both, used or reasonably required for use in the performance of the Contract; labor and material being construed to include the part of water, gas, power, light, heat, oil, gasoline, telephone service, rental, or equipment directly applicable to the Contract.
- B. The above named Contractor and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The owner shall not be liable for the payment of any costs or expenses of any such suit.
- C. No suit or action shall be commenced hereunder by any claimant:

1. Unless claimant, other than one having a direct contact with the Contractor, shall have given written notice to any two of the following: the Contractor, the Owner, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Contractor, Owner, or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.

2. After the expiration of one (1) year following the date on which Contractor ceased work on said contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

3. Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the project, or any part thereof, is situated or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere.

D. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of Mechanic's Liens which may be filed on record against said improvement, whether or not claim for the amount of such lien be presented under or against this bond.

IN TESTIMONY WHEREOF, the Contractor has hereunto set their hand and the Surety caused these present to be executed in its name and its corporate seal to be affixed by its Attorney-In-Fact at _____ on this _____ day of _____ 20_____.

CONTRACTOR _____ (SEAL)

BY: _____

SURETY COMPANY _____

BY: _____
(Attorney-In-Fact)

BY: _____
(Missouri Representative)

(Accompany this bond with Attorney-In-Fact's authority from the Surety Company certified to include the date of this bond. Include Surety's address and contact name with phone number)

Surety Contact Name: _____

Phone Number: _____

Address: _____

**COUNTY OF BOONE - MISSOURI
WORK AUTHORIZATION CERTIFICATION
PURSUANT TO 285.530 RSMo
(FOR ALL AGREEMENTS IN EXCESS OF \$5,000.00)**

County of _____)

)ss

State of _____)

My name is _____. I am an authorized agent of _____

(Bidder). This business is enrolled and participates in a federal work authorization program for all employees working in connection with services provided to the County. This business does not knowingly employ any person that is an unauthorized alien in connection with the services being provided. **Documentation of participation in a federal work authorization program is attached to this affidavit.**

Furthermore, all subcontractors working on this contract shall affirmatively state in writing in their contracts that they are not in violation of Section 285.530.1, shall not thereafter be in violation and submit a sworn affidavit under penalty of perjury that all employees are lawfully present in the United States.

Affiant

Date

Printed Name

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

Notary Public

Attach to this form the first and last page of the *E-Verify Memorandum of Understanding* that you completed when enrolling.

Certification Regarding
Debarment, Suspension, Ineligibility and Voluntary Exclusion
Lower Tier Covered Transactions

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 29 CFR Part 98 Section 98.510, Participants' responsibilities. The regulations were published as Part VII of the May 26, 1988, Federal Register (pages 19160-19211).

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS FOR CERTIFICATION)

- (1) The prospective recipient of Federal assistance funds certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective recipient of Federal assistance funds is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Name and Title of Authorized Representative

Signature

Date

(Please complete and return with Contract)

AFFIDAVIT COMPLIANCE WITH THE PREVAILING WAGE LAW

Before me, the undersigned Notary Public, in and for the County of _____

State of _____, personally came and appeared (name and title)

_____ of the (name of company)

_____ (a corporation) (a partnership) (a proprietorship)

and after being duly sworn did depose and say that all provisions and requirements set out in Chapter 290 Sections 290.210 through and including 290.340, Missouri Revised Statutes, pertaining to the payment of wages to workmen employed on public works projects have been fully satisfied and there has been no exception to the full and complete compliance with said provisions and requirements and with Wage Determination NO. _____ issued by the Division of Labor Standards on the _____ day of _____ 20____, in carrying out the Contract and work in connection with

(name of project) _____ located at

(name of institution) _____ in _____ County,

Missouri and completed on the _____ day of _____, 20_____.

Signature

Subscribed and sworn to me this _____ day of _____, 20_____.

My commission expires _____, 20_____.

Notary Public

RETURN AT CLOSE OF PROJECCT

**AFFIDAVIT OF COMPLIANCE WITH OSHA
TRAINING REQUIREMENTS PURSUANT TO §292.675 RSMo
(FOR ALL PUBLIC WORKS PROJECTS AFTER 8/28/2009)**

County of _____)

)ss

State of _____)

My name is _____ . I am an authorized agent of _____
_____ (Company). I am aware of the requirements for OSHA training set out in §292.675 Revised
Statutes of Missouri for those working on public works. All requirements of said statute have been fully satisfied
and there has been no exception to the full and complete compliance with said provisions relating to the required
OSHA training for all those who performed services on this public works contract for Boone County, Missouri.

NAME OF PROJECT: _____

Affiant

Date

Printed Name

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

Notary Public

NOTE: Failure to return this Affidavit with project close-out documents may result in referral of this project to the
Department of Labor and Industrial Relations for further action to determine compliance with RSMo Sec. 292.675.

RETURN AT CLOSE OF PROJECT



CITY OF COLUMBIA, MISSOURI

FINANCE DEPARTMENT
PURCHASING DIVISION

January 21, 2016

NOTIFICATION OF AWARD - CITY OF COLUMBIA

CONTRACT FOR: Asbestos Abatement & Related Services
Term & Supply


Contract Period is February 1, 2016 through January 31, 2017

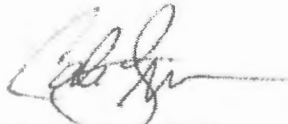
Your firm has been awarded the contract herein in response to our recent Request for Quotation. The purchase orders for this year will be sent to you. Please reference the appropriate purchase order number on every invoice submitted.

Please contact the Procurement Officer shown below if there are any questions pertaining to this contract.

CONTRACT NUMBER	ITEMS AWARDED	VENDOR NUMBER	VENDOR NAME
19/2016	See attached	3426	Asbestos Removal Services, Inc PO Box 105287 Jefferson City, MO 65110 Contact Warren Prost Phone 573-896-0222 Fax 573-896-9389 Email warrenprost@arsi-mo.com

TERMS: Net 30
DELIVERY: As Needed


Barb Lashley, CPPB
Procurement Officer
573-874-7374


Cale Turner, CPPB
Purchasing Agent

cc: Shane Creech-Kathy Sides/Building & Site Development/Community Development
Steve Lewandowski/Power Plant Shawna Victor/WWTP Margie Finlay/PMC

City of Columbia Purchasing

Bid Information

Bid Owner Barb Lashley Procurement
Officer
Email bjorman@gocolumbiamo.com
Phone (573) 8747374
Fax (573) 8747762

Bid Number 19/2016
Title ASBESTOS ABATEMENT AND
RELATED SERVICES TERM &
SUPPLY
Bid Type RFQ-F
Issue Date 12/17/2015
Close Date 1/12/2016 2:00:00 PM Central

Contact Information

Address CITY OF COLUMBIA - FINANCE
PURCHASING
701 E. BROADWAY, 5TH FLOOR
COLUMBIA , MO 65201

Contact Department
Building FINANCE/PURCHASING DIV
Floor/Room
Telephone (573) 8747374
Fax
Email bjorman@GoColumbiaMo.Com

Ship to Information

Address

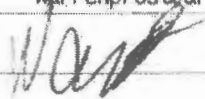
Contact Department
Building
Floor/Room
Telephone
Fax
Email

Supplier Information

Company Name Asbestos Removal Services, Inc.
Contact Name Warren Prost
Address PO Box 105287
Jefferson City, MO 65110

Telephone 573-896-0222
Fax 573-896-9389
Email warrenprost@arsi-mo.com

Signature


Supplier Notes

Date 01 / 11 / 2016

Bid Notes

BIDDERS ARE ENCOURAGED TO USE THE ELECTRONIC BID SYSTEM FOR SUBMITTING BIDS AND MUST COMPLETE ALL REQUIRED FIELDS. NO FAX OR E-MAIL RESPONSES WILL BE ACCEPTED. IF YOU CHOOSE TO SUBMIT MANUALLY, (hard paper copy) PRINT THE "INVITATION" LISTED UNDER "DOCUMENTS" IN ITS ENTIRETY, COMPLETE AND SUBMIT TO PURCHASING, 701 E. BROADWAY, 5TH FLOOR, COLUMBIA MO 65201, UNTIL THE BID CLOSING DATE AND TIME. BIDS MUST BE IN A SEALED ENVELOPE AND HAVE THE BID NUMBER AND DESCRIPTION CLEARLY LABELED ON THE OUTSIDE OF THE ENVELOPE.

Bid ActivitiesBid MessagesBid Attachments

The following attachments are associated with this opportunity and will need to be retrieved separately

Line	Filename	Description
Header	Terms & Conditions of E bidding - Revised 8-26-13.pdf	
Header	E-Verify july 2015.pdf	E-Verify Instructions and Work Authorization Affidavit-7/2015
Header	Wage Order 22 9-23-15.pdf	Prevailing Wage Order 22 (9/15)

Header	Insurance Requirements - City of Columbia Standard.pdf	
Header	19-2016 Asbestos Abatement and Related Services Specifications.pdf	19/2016 Asbestos Abatement & Related Services Specifications
Header	19-2016 Asbestos Abatement And Related Services-information.pdf	19/2016 Asbestos Abatement & Related Services Information Information required to submit with bid.

Bid Attributes

Please review the following and respond where necessary

#	Name	Note	Response
1	Terms and Conditions	Accept terms and conditions	<u>Agree</u> (Required)
2	Insurance Requirements - Bidder Agreement	Successful Bidder agrees to comply with attached Insurance Requirements upon award.	<u>Agree</u> (Required)
3	Payment Terms	Please Indicate Payment Terms:	<u>Net 30 Days</u> (Required)
4	Term and Supply Contract Conditions	TERM AND SUPPLY CONTRACT for furnishing City of Columbia with ASBESTOS ABATEMENT AND RELATED SERVICES, as needed and as requested, from date of award through January 31, 2016. AGREE PRICES WILL BE FIRM FOR THE FIRST YEAR OF THE CONTRACT PERIOD.	<u>Agree</u> (Required)
5	Renewal Options	Term & Supply Contract Renewal Options: Contract subject for renewal at the end of the first contract period, for four (4) additional one-year periods, based upon agreement by both parties as to pricing, delivery, past vendor service, etc. This contract may be canceled by the City upon 10 days written notice to the vendor for non-compliance to these requirements, delivery problems, or other just cause so deemed by the City.	<u>Agree</u> (Required)
6	Cooperative Contract Pricing	Would you be willing to offer the same pricing to members of the Mid-Missouri Public Purchasing Cooperative? (Not responding to this question will not impact the evaluation of this bid.)	<u>Agree</u> (Optional)
7	Prevailing Wages	This Project requires that Prevailing Wages be paid to all employees who work in specific classifications, as identified within the attached wage order.	<u>Agree</u> (Required)
8	19/2016 ASBESTOS ABATEMENT AND RELATED SERVICES EVALUATION INFORMATION	RFQ 19/2016 ASBESTOS ABATEMENT AND RELATED SERVICES INFORMATION HAS BEEN ATTACHED FOR EVALUATION PROCESS.	<u>Agree</u> (Required)
9	DBE or WBE Certification	Is your firm a certified DBE or WBE? If so, what agency are you certified through?	<u>No / N/A</u> (Optional)
10	Staff	Provide the number of employees on your staff and the percent (%) of work on this project that will be done by your own staff	<u>30 employees</u> <u>100%</u> (Required)
11	If you have done business under a different name, please give that name and location:	If you have done business under a different name, please give that name and location:	<u>No/ N/A</u> (Optional)
12	Have you ever failed to complete any work awarded to your company?	Have you ever failed to complete any work awarded to your company? If so, where and why?	<u>No</u> (Required)

13 References List three references, minimum, for same type of work performed in the past six months. State name and telephone number of contact person, as well as nature and cost of appraisal(s). Attach separate sheet if necessary. See Attached (Required)

14 EMPLOYMENT OF UNAUTHORIZED ALIENS PROHIBITED (a) Contractor agrees to comply with Missouri State Statute section 285.530 in that they shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri.
 (b) As a condition for the award of this contract the contractor shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. The Contractor shall also sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services.
 (c) Contractor shall require each subcontractor to affirmatively state in its contract with contractor that the subcontractor shall not knowingly employ, hire for employment or continue to employ an unauthorized alien to perform work within the state of Missouri. Contractor shall also require each subcontractor to provide contractor with a sworn affidavit under the penalty of perjury attesting to the fact that the subcontractor's employees are lawfully present in the United States.
 Indicate if you agree to comply. Agree See Attached (Required)

15 W-9 Submission Provide a current W-9 using any of the following methods: by uploading and attaching to their bid response; by emailing the W-9 to the Buyer named on page 1 of this document; or by mailing to the City of Columbia Purchasing Division, 701 E. Broadway, 5TH Floor, Columbia, MO 65205. Agree See Attached (Optional)

16 Contract Administration Contact Provide the contact information for the person in your firm responsible for contracting and authorizing renewals of the contract.
 Name/Job Title/Phone/Fax/Email
 Warren Prost
 President
 573-896-0222
 warrenprost@arsi-mo.com See Below (Required)

Line Items

#	Qty	UOM	Description	Response
1	1	PKG	BIDDERS SHALL QUOTE THE RATE PER HOUR FOR THE FOLLOWING	<u>\$Agree</u>

Item Notes: MUST COMPLY WITH PREVAILING WAGE ORDER FOUND IN BID ATTACHMENTS

Supplier Notes: All labor costs listed in Section 1.1 thru 1.20 include all overhead and profit mark-ups.

Package Line Items:

#	Qty	UOM	Description	Response
1.1	1	EA	CERTIFIED ASBESTOS BUILDING INSPECTOR: REGULAR TIME	<u>\$74.00</u>

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier Notes:

1.2	1	EA	CERTIFIED ASBESTOS BUILDING INSPECTOR: OVERTIME	<u>\$85.00</u>
-----	---	----	---	----------------

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier Notes:

1.3	1	EA	PROJECT MANAGER: REGULAR TIME	<u>\$59.00</u>
-----	---	----	-------------------------------	----------------

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier Notes:

1.4	1	EA	PROJECT MANAGER: OVERTIME	<u>\$75.00</u>
-----	---	----	---------------------------	----------------

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier Notes:

1.5	1	EA	FIELD SUPERVISOR: REGULAR TIME	<u>\$53.00</u>
-----	---	----	--------------------------------	----------------

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier Notes:

1.6 1 EA FIELD SUPERVISOR: OVERTIME \$ 72.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier
Notes:

1.7 1 EA ASBESTOS REMOVAL FOREMAN: REGUI AR TIME \$ 51.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier
Notes:

1.8 1 EA ASBESTOS REMOVAL FOREMAN: OVERTIME \$ 60.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier
Notes:

1.9 1 EA ASBESTOS WORKER/HEAT AND FROST: REGULAR TIME \$ 69.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier
Notes:

1.10 1 EA ASBESTOS WORKER/HEAT AND FROST: OVERTIME \$ 84.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier
Notes:

1.11 1 EA SECOND SEMI-SKILLED LABORER: REGULAR TIME \$ 49.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier
Notes:

1.12 1 EA SECOND SEMI-SKILLED LABORER: OVERTIME \$ 67.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier
Notes:

1.13 1 EA SKILLED LABORER: REGULAR TIME \$ 47.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier
Notes:

1.14 1 EA SKILLED LABORER: OVERTIME \$ 65.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier
Notes:

1.15 1 EA OTHER INDICATE CLASSIFICATION DESCRIPTION: REGULAR TIME \$ 0.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier
Notes:

None - N/A

1.16 1 EA OTHER INDICATE CLASSIFICATION DESCRIPTION: OVERTIME \$ 0.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier
Notes:

None - N/A

1.17 1 EA OTHER INDICATE CLASSIFICATION DESCRIPTION: REGULAR TIME \$ 0.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier
Notes:

None - N/A

1.18 1 EA OTHER INDICATE CLASSIFICATION DESCRIPTION: OVERTIME \$ 0.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier Notes: None - N/A

1.19 1 EA OTHER INDICATE CLASSIFICATION DESCRIPTION: REGULAR TIME \$ 0.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier Notes: None - N/A

1.20 1 EA OTHER INDICATE CLASSIFICATION DESCRIPTION: OVERTIME \$ 0.00

Item Notes: INCLUDE HOURLY RATE PER EMPLOYEE

Supplier Notes: None - N/A

2 1 PKG EQUIPMENT RATES *Prices are daily rate w/* \$

Item Notes: INDICATE ANY OTHER RELEVANT INFORMATION IN SUPPLIER NOTES.

Supplier Notes: All equipment costs listed in Section 2.1 - 2.47 include overhead & profit mark-ups.

Package Line Items:

#	Qty	UOM	Description	Response
2.1	1	EA	HEPA EXHAUST FAN: DAILY RATE	\$20.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier Notes:

2.2 1 EA HEPA EXHAUST FAN: WEEKLY RATE \$15.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier Notes:

2.3 1 EA HEPA EXHAUST FAN: PER PROJECT RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.4 1 EA HEPA VACUUM: DAILY RATE \$15.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.5 1 EA HEPA VACUUM: WEEKLY RATE \$ 10.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.6 1 EA HEPA VACUUM: PER PROJECT RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.7 1 EA DECON SHOWER UNIT: DAILY RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.8 1 EA DECON SHOWER UNIT: WEEKLY RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.9 1 EA DECON SHOWER UNIT: PER PROJECT RATE \$50.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier Notes:

2.10 1 EA AIRLESS SPRAYER: DAILY RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier Notes:

2.11 1 EA AIRLESS SPRAYER: WEEKLY RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier Notes:

2.12 1 EA AIRLESS SPRAYER: PER PROJECT RATE \$50.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier Notes:

2.13 1 EA WATER FILTER SYSTEM: DAILY RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier Notes:

2.14 1 EA WATER FILTER SYSTEM: WEEKLY RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier Notes:

2.15 1 EA WATER FILTER SYSTEM: PER PROJECT RATE \$30.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.16 1 EA FULL FACE POWERED AIR PURIFYING RESPIRATOR: DAILY RATE \$15.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.17 1 EA FULL FACE POWERED AIR PURIFYING RESPIRATOR: WEEKLY RATE \$10.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.18 1 EA FULL FACE POWERED AIR PURIFYING RESPIRATOR: PER PROJECT RATE \$0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.19 1 EA AIR MONITORING EQUIPMENT: DAILY RATE \$20.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.20 1 EA AIR MONITORING EQUIPMENT: WEEKLY RATE \$15.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.21 1 EA AIR MONITORING EQUIPMENT: PER PROJECT RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.22 1 EA MOBILE DECON TRAILER: DAILY RATE \$ 100.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.23 1 EA MOBILE DECON TRAILER: WEEKLY RATE \$ 75.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.24 1 EA MOBILE DECON TRAILER: PER PROJECT RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.25 1 EA PNEUMATIC SPUD HOSE: DAILY RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.26 1 EA PNEUMATIC SPUD HOSE: WEEKLY RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE

Supplier
Notes:

2.27 1 EA PNEUMATIC SPUD HOSE: PER PROJECT RATE \$ 30.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.28 1 EA INFRA-RED VINYL ASBESTOS TILE MACHINE: DAILY RATE \$ 30.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.29 1 EA INFRA-RED VINYL ASBESTOS TILE MACHINE: WEEKLY RATE \$ 60.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.30 1 EA INFRA-RED VINYL ASBESTOS TILE MACHINE: PER PROJECT RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.31 1 EA HI-PRESSURE WASHER (3,000 PSI): DAILY RATE \$ 25.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.32 1 EA HI-PRESSURE WASHER (3,000 PSI): WEEKLY RATE \$ 20.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.33 1 EA HI-PRESSURE WASHER (3,000 PSI): PER PROJECT RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.34 1 EA GAS POWERED PORTABLE ELECTRIC GENERATOR: DAILY RATE \$50.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.35 1 EA GAS POWERED PORTABLE ELECTRIC GENERATOR: WEEKLY RATE \$40.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.36 1 EA GAS POWERED PORTABLE ELECTRIC GENERATOR: PER PROJECT RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.37 1 EA PIRANHA FLOORING DEMOLITION MACHINE: DAILY RATE \$100.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.38 1 EA PIRANHA FLOORING DEMOLITION MACHINE: WEEKLY RATE \$80.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.39 1 EA PIRANHA FLOORING DEMOLITION MACHINE: PER PROJECT RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.40 1 EA OTHER, SPECIFY EQUIPMENT YOU ARE OFFERING AND THE RATE \$1.50/mile

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes: Truck, 1/2 ton pickup for project specific hauling

2.41 1 EA OTHER, SPECIFY EQUIPMENT YOU ARE OFFERING AND THE RATE \$3.00/mile

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes: Truck, Greater than 1/2 ton, for project specific hauling

2.42 1 EA OTHER, SPECIFY EQUIPMENT YOU ARE OFFERING AND THE RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.43 1 EA OTHER, SPECIFY EQUIPMENT YOU ARE OFFERING AND THE RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.44 1 EA OTHER, SPECIFY EQUIPMENT YOU ARE OFFERING AND THE RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier
Notes:

2.45 1 EA OTHER, SPECIFY EQUIPMENT YOU ARE OFFERING AND THE RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier Notes: None - N/A

2.46 1 EA OTHER, SPECIFY EQUIPMENT YOU ARE OFFERING AND THE RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier Notes: None - N/A

2.47 1 EA OTHER, SPECIFY EQUIPMENT YOU ARE OFFERING AND THE RATE \$ 0.00

Item Notes: RESPOND TO ALL THAT APPLY TO YOUR BID RESPONSE.

Supplier Notes: None - N/A

3 1 EA MATERIALS WILL BE SUPPLIED AT CONTRACTOR'S COST PLUS A PERCENT (%). INDICATE A PERCENTAGE YOU WILL USE IN CALCULATING MARKUP. ANY APPLICABLE FREIGHT WILL BE AT COMNTRACTOR'S COST AND WILL NOT BE SUBJECT TO MARKUP. 10 %

Manufacturer: Manufacturer #:

Item Notes: ANY MATERIAL ITEMS COSTING OVER \$100.00 WILL REQUIRE A COPY OF THE CONTRACTOR'S INVOICE FROM HIS SUPPLIER TO BE SUBMITTED WITH THE CONTRACTOR'S ITEMIZED INVOICE TO THE CITY OF COLUMBIA.


Supplier Notes: Other Direct Costs incurred (e.g. landfill disposal costs, DNR Fees, Third-Party Air-Monitoring Services, other authorized subcontractors) will be supplied at Contractor's plus a percent (%) 10%

CITY OF COLUMBIA, MISSOURI
WORK AUTHORIZATION AFFIDAVIT
PURSUANT TO 285.530 RSMo
(FOR ALL BIDS IN EXCESS OF \$5,000.00)

County of Cole)
)SS.
State of Missouri)

My name is Warren Prost. I am an authorized agent of
Asbestos Removal Services, Inc. (Bidder). This business is enrolled and participates in a
federal work authorization program for all employees working in connection with
services provided to the City of Columbia. This business does not knowingly employ
any person who is an unauthorized alien in connection with the services being provided.
**Documentation of participation in a federal work authorization program is
attached to this affidavit.**

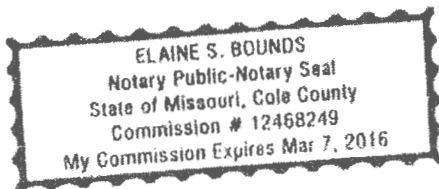
Furthermore, all subcontractors working on this contract shall affirmatively state
in writing in their contracts that they are not in violation of Section 285.530.1 RSMo and
shall not thereafter be in violation. Alternatively, a subcontractor may submit a sworn
affidavit under penalty of perjury that all employees are lawfully present in the United
States.

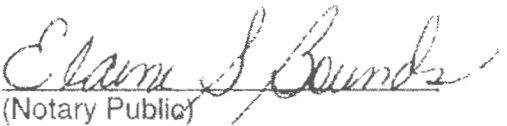
Asbestos Removal Services, Inc.
Affiant
Warren Prost, President
Printed Name 

Personally appeared before me, a Notary Public, within and for the County of
Cole,

State of Missouri, the person whose signature appears above, PERSONALLY AND
KNOWN TO ME AND ACKNOWLEDGED, that signed the foregoing Affidavit for the
purposes therein stated.

Subscribed and sworn to me this 11th day of January, 2016.
My Commission expires _____, 20 .




(Notary Public)

ATTACHMENT F

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
4/16/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Thomas McGee, L.C. 920 Main Street Suite 1700 P.O. Box 419013 Kansas City MO 64105		CONTACT NAME: Barb DeSmet PHONE (A/C, No., Ext): 816-842-4800 FAX (A/C, No.): 816-472-5018 E-MAIL ADDRESS: bdesmet@thomasmcgee.com	
INSURED ASBES-1 Asbestos Removal Services, Inc PO Box 105287 Jefferson City MO 65110-5287		INSURER(S) AFFORDING COVERAGE	
		INSURER A: Allied Insurance	NAIC # 36528
		INSURER B: COLONY INS CO	39993
		INSURER C: AMERICAN INTERSTATE INS CO	31895
		INSURER D:	
		INSURER E:	
		INSURER F:	

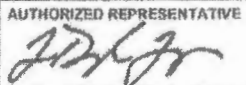
COVERAGES **CERTIFICATE NUMBER:** 1254862207 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDITIONAL SUBROGATION RIGHTS	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
B	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Asb/Lead/Poll <input checked="" type="checkbox"/> Prof/Mold GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC	Y	PACE303194	3/31/2015	3/31/2016	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Per occurrence) \$300,000 MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 \$
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS		BAA7208035689	3/31/2015	3/31/2016	COMBINED SINGLE LIMIT (Per accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
B	UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> RETENTION \$0		EXC303195	3/31/2015	3/31/2016	EACH OCCURRENCE \$10,000,000 AGGREGATE \$10,000,000 \$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	AVWC02381342015	3/31/2015	3/31/2016	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - FA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
A	Leased & Rented Equipment		CIM7208035689	3/31/2015	3/31/2016	Limit 100,000 Ded 1,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Project: Asbestos Abatement. The City of Columbia, Missouri is included as additional insured, as required by written contract.

CERTIFICATE HOLDER City of Columbia, MO P O Box 6015 Columbia MO 65205	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
--	--

© 1988-2010 ACORD CORPORATION. All rights reserved.

Missouri

Division of Labor Standards

WAGE AND HOUR SECTION



JEREMIAH W. (JAY) NIXON, Governor

Annual Wage Order No. 22

Section 010
BOONE COUNTY

In accordance with Section 290.262 RSMo 2000, within thirty (30) days after a certified copy of this Annual Wage Order has been filed with the Secretary of State as indicated below, any person who may be affected by this Annual Wage Order may object by filing an objection in triplicate with the Labor and Industrial Relations Commission, P.O. Box 599, Jefferson City, MO 65102-0599. Such objections must set forth in writing the specific grounds of objection. Each objection shall certify that a copy has been furnished to the Division of Labor Standards, P.O. Box 449, Jefferson City, MO 65102-0449 pursuant to 8 CSR 20-5.010(1). A certified copy of the Annual Wage Order has been filed with the Secretary of State of Missouri.

Original Signed by

John E. Lindsey, Director
Division of Labor Standards

This Is A True And Accurate Copy Which Was Filed With The Secretary of State: March 10, 2015

Last Date Objections May Be Filed: April 9, 2015

Prepared by Missouri Department of Labor and Industrial Relations

OCCUPATIONAL TITLE	** Date of Increase	*	Basic Hourly Rates	Over-Time Schedule	Holiday Schedule	Total Fringe Benefits
Asbestos Worker (H & F) Insulator			\$32.06	55	60	\$20.71
Boilermaker	8/15		\$34.76	57	7	\$28.00
Bricklayer and Stone Mason	6/15		\$28.95	59	7	\$16.25
Carpenter	6/15		\$24.75	60	15	\$15.55
Cement Mason	6/15		\$26.83	9	3	\$11.95
Communication Technician	6/15		\$31.35	29	7	\$12.70 + 13%
Electrician (Inside Wireman)	6/15		\$31.35	28	7	\$12.70 + 13%
Electrician (Outside-Line Construction) Lineman)	9/15		\$42.52	43	45	\$5.00 + 36.5%
Lineman Operator	9/15		\$36.70	43	45	\$5.00 + 36.5%
Groundman	9/15		\$28.38	43	45	\$5.00 + 36.5%
Elevator Constructor		a	\$44.37	26	54	\$28.386
Glazier		c	\$28.15	122	76	\$14.22 + 5.2%
Ironworker	8/15		\$28.41	11	8	\$24.04
Laborer (Building):						
General			\$21.71	42	44	\$12.84
First Semi-Skilled			\$23.71	42	44	\$12.84
Second Semi-Skilled			\$22.71	42	44	\$12.84
Lather			USE CARPENTER RATE			
Linoleum Layer and Cutler	6/15		\$24.63	60	15	\$15.55
Marble Mason			\$21.55	124	74	\$12.79
Marble Finisher			\$14.01	124	74	\$9.21
Milwright	6/15		\$25.75	60	15	\$15.55
Operating Engineer						
Group I	6/15		\$28.66	86	66	\$24.01
Group II	6/15		\$28.66	86	66	\$24.01
Group III	6/15		\$27.41	86	66	\$24.01
Group III-A	6/15		\$28.66	86	66	\$24.01
Group IV	6/15		\$26.43	86	66	\$24.01
Group V	6/15		\$29.36	86	66	\$24.01
Painter	6/15		\$22.94	18	7	\$11.33
Pile Driver	6/15		\$25.75	60	15	\$15.55
Pipe Fitter	7/15	b	\$37.00	91	69	\$26.68
Plasterer	6/15		\$25.40	94	5	\$12.00
Plumber	7/15	b	\$37.00	91	69	\$26.68
Roofer \ Waterproofer			\$29.30	12	4	\$14.55
Sheet Metal Worker	7/15		\$31.14	40	23	\$16.24
Sprinkler Fitter - Fire Protection	6/15		\$32.39	33	19	\$19.05
Terrazzo Worker			\$28.73	124	74	\$14.38
Terrazzo Finisher			\$18.68	124	74	\$14.38
Tile Setter			\$21.55	124	74	\$12.79
Tile Finisher			\$14.01	124	74	\$9.21
Traffic Control Service Driver			\$26.415	22	55	\$9.045
Truck Driver-Teamster						
Group I			\$25.30	101	5	\$10.70
Group II			\$25.95	101	5	\$10.70
Group III			\$25.45	101	5	\$10.70
Group IV			\$25.95	101	5	\$10.70

Fringe Benefit Percentage is of the Basic Hourly Rate

**Annual Incremental Increase

OCCUPATIONAL TITLE	** Date of Increase	Basic Hourly Rates	Over-Time Schedule	Holiday Schedule	Total Fringe Benefits

* Welders receive rate prescribed for the occupational title performing operation to which welding is incidental.

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

- a - Vacation: Employees over 5 years - 8%; Employees under 5 years - 6%
- **b - All work over \$7 Mil. Total Mech. Contract - \$37.00, Fringes - \$26.68
All work under \$7 Mil. Total Mech. Contract - \$35.66, Fringes - \$21.29
- c - Vacation: Employees after 1 year - 2%; Employees after 2 years - 4%; Employees after 10 years - 6%

**REPLACEMENT PAGE
BOONE COUNTY
BUILDING CONSTRUCTION OVERTIME SCHEDULE**

FED: Minimum requirement per Fair Labor Standards Act means time and one-half (1 ½) shall be paid for all work in excess of forty (40) hours per work week.

NO. 9: Means the regular workday starting time of 8:00 a.m. (and resulting quitting time of 4:30 p.m.) may be moved forward to 6:00 a.m. or delayed one hour to 9:00 a.m. All work performed in excess of the regular work day and on Saturday shall be compensated at one and one-half (1½) times the regular pay. In the event time is lost during the work week due to weather conditions, the Employer may schedule work on the following Saturday at straight time. All work accomplished on Sunday and holidays shall be compensated for at double the regular rate of wages. The work week shall be Monday through Friday, except for midweek holidays.

NO. 11: Means eight (8) hours shall constitute a day's work, with the starting time to be established between 6:00 a.m. and 8:00 a.m. from Monday to Friday. Time and one-half (1½) shall be paid for first two (2) hours of overtime Monday through Friday and the first eight (8) hours on Saturday. All other overtime hours Monday through Saturday shall be paid at double (2) time rate. Double (2) time shall be paid for all time on Sunday and recognized holidays or the days observed in lieu of these holidays.

NO. 12: Means the work week shall commence on Monday at 12:01 a.m. and shall continue through the following Friday, inclusive of each week. All work performed by employees anywhere in excess of forty (40) hours in one (1) work week, shall be paid for at the rate of one and one-half (1½) times the regular hourly wage scale. All work performed within the regular working hours which shall consist of a ten (10) hour work day except in emergency situations. Overtime work and Saturday work shall be paid at one and one-half (1½) times the regular hourly rate. Work on recognized holidays and Sundays shall be paid at two (2) times the regular hourly rate.

NO. 18: Means the regular work day shall be eight (8) hours. Working hours are from six (6) hours before Noon (12:00) to six (6) hours after Noon (12:00). The regular work week shall be forty (40) hours, beginning between 6:00 a.m. and 12:00 Noon on Monday and ending between 1:00 p.m. and 6:00 p.m. on Friday. Saturday will be paid at time and one-half (1½). Sunday and Holidays shall be paid at double (2) time. Saturday can be a make-up day if the weather has forced a day off, but only in the week of the day being lost. Any time before six (6) hours before Noon or six (6) hours after Noon will be paid at time and one-half (1½).

NO. 22: Means a regular work week of forty (40) hours will start on Monday and end on Friday. The regular work day shall be either eight (8) or ten (10) hours. If a crew is prevented from working forty (40) hours Monday through Friday, or any part thereof by reason of inclement weather, Saturday or any part thereof may be worked as a make-up day at the straight time rate. Employees who are part of a regular crew on a make-up day, notwithstanding the fact that they may not have been employed the entire week, shall work Saturday at the straight time rate. A workday is to begin between 6:00 a.m. and 9:00 a.m. However, the project starting time may be advanced or delayed if mutually agreed to by the interest parties. For all time worked on recognized holidays, or days observed as such, double (2) time shall be paid.

NO. 26: Means that the regular working day shall consist of eight (8) hours worked between 6:00 a.m., and 5:00 p.m., five (5) days per week, Monday to Friday, inclusive. Hours of work at each jobsite shall be those established by the general contractor and worked by the majority of trades. (The above working hours may be changed by mutual agreement). Work performed on Construction Work on Saturdays, Sundays and before and after the regular working day on Monday to Friday, inclusive, shall be classified as overtime, and paid for at double (2) the rate of single time. The employer may establish hours worked on a jobsite for a four (4) ten (10) hour day work week at straight time pay for construction work; the regular working day shall consist of ten (10) hours worked consecutively, between 6:00 a.m. and 6:00 p.m., four (4) days per week, Monday to Thursday, inclusive. Any work performed on Friday, Saturday, Sunday and holidays, and before and after the regular working day on Monday to Thursday where a four (4) ten (10) hour day workweek has been established, will be paid at two times (2) the single time rate of pay. The rate of pay for all work performed on holidays shall be at two times (2) the single time rate of pay.

**REPLACEMENT PAGE
BOONE COUNTY
BUILDING CONSTRUCTION OVERTIME SCHEDULE**

NO. 28: Means a regular workday shall consist of eight (8) hours between 7:00 a.m. and 5:30 p.m., with at least a thirty (30) minute period to be taken for lunch. Five (5) days a week, Monday through Friday inclusive, shall constitute a work week. The Employer has the option for a workday/workweek of four (4) ten (10) hour days (4-10's) provided:

- The project must be for a minimum of four (4) consecutive days.
- Starting time may be within one (1) hour either side of 8:00 a.m.
- Work week must begin on either a Monday or Tuesday: If a holiday falls within that week it shall be a consecutive work day. (Alternate: If a holiday falls in the middle of a week, then the regular eight (8) hour schedule may be implemented).
- Any time worked in excess of any ten (10) hour work day (in a 4-10 hour work week) shall be at the appropriate overtime rate.

All work outside of the regular working hours as provided, Monday through Saturday, shall be paid at one & one-half (1½) times the employee's regular rate of pay. All work performed from 12:00 a.m. Sunday through 8:00 a.m. Monday and recognized holidays shall be paid at double (2) the straight time hourly rate of pay. Should employees work in excess of twelve (12) consecutive hours they shall be paid double time (2X) for all time after twelve (12) hours. Shift work performed between the hours of 4:30 p.m. and 12:30 a.m. (second shift) shall receive eight (8) hours pay at the regular hourly rate of pay plus ten (10%) percent for seven and one-half (7½) hours work. Shift work performed between the hours of 12:30 a.m. and 8:00 a.m. (third shift) shall receive eight (8) hours pay at the regular hourly rate of pay plus fifteen (15%) percent for seven (7) hours work. A lunch period of thirty (30) minutes shall be allowed on each shift. All overtime work required after the completion of a regular shift shall be paid at one and one-half (1½) times the shift hourly rate.

NO. 33: Means the standard work day and week shall be eight (8) consecutive hours of work between the hours of 6:00 a.m. and 6:00 p.m., excluding the lunch period Monday through Friday, or shall conform to the practice on the job site. Four (4) days at ten (10) hours a day may be worked at straight time, Monday through Friday and need not be consecutive. All overtime, except for Sundays and holidays shall be at the rate of time and one-half (1½). Overtime worked on Sundays and holidays shall be at double (2) time.

NO. 40: Means the regular working week shall consist of five (5) consecutive (8) hour days' labor on the job beginning with Monday and ending with Friday of each week. Four (4) 10-hour days may constitute the regular work week. The regular working day shall consist of eight (8) hours labor on the job beginning as early as 6:00 a.m. and ending as late as 5:30 p.m. All full or part time labor performed during such hours shall be recognized as regular working hours and paid for at the regular hourly rate. All hours worked on Saturday and all hours worked in excess of eight (8) hours but not more than twelve (12) hours during the regular working week shall be paid for at time and one-half (1½) the regular hourly rate. All hours worked on Sundays and holidays and all hours worked in excess of twelve (12) hours during the regular working day shall be paid at two (2) times the regular hourly rate. In the event of rain, snow, cold or excessively windy weather on a regular working day, Saturday may be designated as a "make-up" day. Saturday may also be designated as a "make-up" day, for an employee who has missed a day of work for personal or other reasons. Pay for "make-up" days shall be at regular rates.

**REPLACEMENT PAGE
BOONE COUNTY
BUILDING CONSTRUCTION OVERTIME SCHEDULE**

NO. 42: Means eight (8) hours between the hours of 8:00 a.m. and 4:30 p.m. shall constitute a work day. The starting time may be advanced one (1) or two (2) hours. Employees shall have a lunch period of thirty (30) minutes. The Employer may provide a lunch period of one (1) hour, and in that event, the workday shall commence at 8:00 a.m. and end at 5:00 p.m. The workweek shall commence at 8:00 a.m. on Monday and shall end at 4:30 p.m. on Friday (or 5:00 p.m. on Friday if the Employer grants a lunch period of one (1) hour), or as adjusted by starting time change as stated above. All work performed before 8:00 a.m. and after 4:30 p.m. (or 5:00 p.m. where one (1) hour lunch is granted for lunch) or as adjusted by starting time change as stated above or on Saturday, except as herein provided, shall be compensated at one and one-half (1½) times the regular hourly rate of pay for the work performed. All work performed on Sunday and on recognized holidays shall be compensated at double (2) the regular hourly rate of pay for the work performed. When working a five 8-hour day schedule and an Employer is prevented from working forty (40) hours, Monday through Friday, or any part thereof by reason of inclement weather (rain or mud), Saturday or any part thereof may be worked as a make-up day at the straight time rate. The Employer shall have the option of working five eight (8) hour days or four ten (10) hour days Monday through Friday. If an Employer elects to work five (5) eight (8) hour days during any work week, hours worked more than eight (8) per day or forty (40) hours per week shall be paid at time and one-half (1½) the hourly rate Monday through Friday. If an Employer elects to work four (4) ten (10) hour days in any week, work performed more than ten (10) hours per day or forty (40) hours per week shall be paid at time and one-half (1½) the hourly rate Monday through Friday. If an Employer is working ten (10) hour days and loses a day due to inclement weather, they may work ten (10) hours Friday at straight time. All hours worked over the forty (40) hours Monday through Friday will be paid at time and one-half (1½) overtime rate. Overtime shall be computed at half-hour intervals. Shift Work: Two (2) or three (3) shifts shall be permitted, provided such shifts are scheduled for a minimum of three (3) consecutive days. The second shift shall begin at 4:30 p.m. and end at 12:30 a.m. with one-half (1/2) hour for lunch between 7:30 p.m. and 9:00 p.m. and shall received eighty (8) hours' pay. The third shift shall begin at 12:30 a.m. and end at 8:00 a.m. with one-half (1/2) hour for lunch between 3:30 a.m. and 5:00 a.m. and shall received (8) hours' pay. There shall be at least one (1) foreman on each shift on jobs where more than one shift is employed, provided that there are two (2) or more employees on second and on the third shifts. All shifts shall arrange to interchange working hours at the end of each week. When three shifts are used, the applicable rate must be paid from Saturday at 8:00 a.m. until the following Monday at 8:00 a.m. When three shifts are employed, the second and third shifts shall contain at least one-half (1/2) as many employees as the first shift.

NO. 43: Eight (8) hours shall constitute a work day between the hours of 7:00 a.m. and 4:30 p.m. Forty (40) hours within five (5) days, Monday through Friday inclusive, shall constitute the work week. Work performed in the 9th and 10th hour, Monday through Friday, shall be paid at time and one-half (1½) the regular straight time rate of pay. Contractor has the option to pay two (2) hours per day at the time and one-half (1½) the regular straight time rate of pay between the hours of 6:00 a.m. and 5:30 p.m., Monday through Friday. Work performed outside the regularly scheduled working hours and on Saturdays, Sundays and recognized legal holidays, or days celebrated as such, shall be paid for at the rate of double (2) time.

NO. 55: Means the regular work day shall be eight (8) hours between 6:00 a.m. and 4:30 p.m. The first two (2) hours of work performed in excess of the eight (8) hour work day, Monday through Friday, and the first ten (10) hours of work on Saturday, shall be paid at one & one-half (1½) times the straight time rate. All work performed on Sunday, observed holidays and in excess of ten (10) hours a day, Monday through Saturday, shall be paid at double (2) the straight time rate.

NO. 57: Means eight (8) hours per day shall constitute a day's work and forty (40) hours per week, Monday through Friday, shall constitute a week's work. The regular starting time shall be 8:00 a.m. If a second or third shift is used, the regular starting time of the second shift shall be 4:30 p.m. and the regular starting period for the third shift shall be 12:30 a.m. These times may be adjusted by the employer. The day shift shall work a regular eight (8) hours shift as outlined above. Employees working a second shift shall receive an additional \$0.25 above the regular hourly rate and perform seven and one-half (7½) hours work for eight (8) hours pay. Third shift employees shall be paid an additional \$0.50 above the regular hourly rate and work seven (7) hours for eight (8) hours pay. When circumstances warrant, the Employer may change the regular workweek to four (4) ten-hour days at the regular time rate of pay. All time worked before and after the established workday of eight (8) hours, Monday through Friday, and all time worked on Saturday shall be paid at the rate of time and one-half (1½) except in cases where work is part of an employee's regular Friday shift. All time worked on Sunday and recognized holidays shall be paid at the double (2) time rate of pay except in cases where work is part of an employee's previous day's shift. For all overtime hours worked \$26.71 of the fringe benefits portion of the prevailing wage shall be paid at the same overtime rate at which the cash portion of the prevailing wage is to be paid. The remaining \$1.29 of the fringe benefit portion of the prevailing wage may be paid at straight time.

**REPLACEMENT PAGE
BOONE COUNTY
BUILDING CONSTRUCTION OVERTIME SCHEDULE**

NO. 59: Means that except as herein provided, eight (8) hours a day shall constitute a standard work day, and forty (40) hours per week shall constitute a week's work. All time worked outside of the standard eight (8) hour work day and on Saturday shall be classified as overtime and paid the rate of time and one-half (1½). All time worked on Sunday and holidays shall be classified as overtime and paid at the rate of double (2) time. The Employer has the option of working either five (5) eight hour days or four (4) ten hour days to constitute a normal forty (40) hour work week. When the four (4) ten-hour work week is in effect, the standard work day shall be consecutive ten (10) hour periods between the hours of 6:30 a.m. and 6:30 p.m. Forty (40) hours per week shall constitute a week's work, Monday through Thursday, inclusive. In the event the job is down for any reason beyond the Employer's control, then Friday and/or Saturday may, at the option of the Employer, be worked as a make-up day, straight time not to exceed ten (10) hours or forty (40) hours per week. When the five day eight (8) hour work week is in effect, forty (40) hours per week shall constitute a week's work, Monday through Friday, inclusive. In the event the job is down for any reason beyond the Employer's control, then Saturday may, at the option of the Employer, be worked as a make-up day, straight time not to exceed eight (8) hours or forty (40) hours per week. The regular starting time (and resulting quitting time) may be moved to 6:00 a.m. or delayed to 9:00 a.m. Make-up days shall not be utilized for days lost due to holidays.

NO. 50: Means the Employer shall have the option of working five 8-hour days or four 10-hour days Monday through Friday. If an Employer elects to work five 8-hour days during any work week, hours worked more than eight (8) per day or forty (40) per week shall be paid at time and one-half (1½) the hourly wage rate plus fringe benefits Monday through Friday. **SATURDAY MAKE-UP DAY:** If an Employer is prevented from working forty (40) hours, Monday through Friday, or any part thereof by reason of inclement weather (rain or mud), Saturday or any part thereof may be worked as a make-up day at the straight time rate. It is agreed by the parties that the make-up day is not to be used to make up time lost due to recognized holidays. If an Employer elects to work four 10-hour days, between the hours of 6:30 a.m. and 6:30 p.m. in any week, work performed more than ten (10) hours per day or forty (40) hours per week shall be paid at time and one half (1½) the hourly wage rate plus fringe benefits Monday through Friday. If an Employer is working 10-hour days and loses a day due to inclement weather, the Employer may work ten (10) hours on Friday at straight time. All hours worked over the forty (40) hours Monday through Friday will be paid at time and one-half (1½) the hourly wage rate plus fringe benefits. All Millwright work performed in excess of the regular work day and on Saturday shall be compensated for at time and one-half (1½) the regular Millwright hourly wage rate plus fringe benefits. The regular work day starting at 8:00 a.m. (and resulting quitting time of 4:30 p.m.) may be moved forward to 6:00 a.m. or delayed one (1) hour to 9:00 a.m. All work accomplished on Sundays and recognized holidays, or days observed as recognized holidays, shall be compensated for at double (2) the regular hourly rate of wages plus fringe benefits. **NOTE:** All overtime is computed on the hourly wage rate plus an amount equal to the fringe benefits.

NO. 86: The regular workday shall consist of eight (8) consecutive hours, exclusive of a thirty (30) minute lunch period, with pay at the straight time rate with all hours in excess of eight (8) hours in any one day to be paid at the applicable overtime rate at time and one-half (1½). The regular workday shall begin between the hours of 6:00 a.m. and 8:00 a.m. The Employer may have the option to schedule the work week from Monday through Thursday at ten (10) hours per day at the straight time rate of pay with all hours in excess of ten (10) hours in any one day to be paid at the applicable overtime rate at time and one-half (1½). If the Employer elects to work from Monday through Thursday and is stopped due to inclement weather, holiday or other conditions beyond the control of the Employer, they shall have the option to work Friday at the straight time rate of pay to complete the forty (40) hours for the workweek. All overtime work performed on Monday through Saturday shall be paid at time and one-half (1½) the hourly rate. Fringe benefits shall be paid at the one and one half the hourly rate. All work performed on Sundays and recognized holidays shall be paid at double (2) the hourly rate. Fringe benefits shall be paid at double the hourly rate. Shifts may be established when considered necessary by the Employer. Shift hours and rates will be as follows: If shifts are established, work on the First Shift will begin between 6:00 a.m. and 9:00 a.m. and consist of eight (8) hours of work plus one-half hour unpaid lunch. Hours worked during the first shift will be paid at the straight time rate of pay. The second shift shall start eight hours after the start of the first shift and consist of eight (8) hours of work plus one-half hour unpaid lunch. Work on the second shift will begin between 2:00 p.m. and 5:00 p.m. and be paid the straight time rate plus \$2.50 per hour. The third shift shall start eight hours after the start of the second shift and consist of eight (8) hours plus one-half hour unpaid lunch. Work on the third shift will begin between 10:00 p.m. and 1:00 a.m. and be paid the straight time rate plus \$3.50 per hour. The additional amounts that are to be paid are only applicable when working shifts. Shifts that begin on Saturday morning through those shifts which end on Sunday morning will be paid at time and one-half these rates. Shifts that begin on Sunday morning through those shifts which end on Monday morning will be paid at double time these rates.

**REPLACEMENT PAGE
BOONE COUNTY
BUILDING CONSTRUCTION OVERTIME SCHEDULE**

NO. 87: Means eight (8) hours starting between 6:00 a.m. and 8:00 a.m. and ending between 2:30 p.m. and 4:30 p.m. at the Employers discretion shall constitute a day's work. Any work prior to 6:00 a.m. or after eight (8) hours shall be paid at the overtime rate. Five (5) days from Monday through Friday inclusive shall constitute a regular work week. All hours before and after these regular hours shall be considered overtime and shall be paid for at the rate of double (2) time. All work on Saturday and Sunday shall be paid at double (2) the prevailing scale of wages.

NO. 91: Means eight (8) hours shall constitute a day's work commencing at 7:00 a.m. and ending at 3:30 p.m., allowing one-half (½) hour for lunch. The option exists for the Employer to use a flexible starting time between the hours of 6:00 a.m. and 9:00 a.m. The regular workweek shall consist of forty (40) hours of five (5) workdays, Monday through Friday. The workweek may consist of four (4) ten (10) hour days from Monday through Thursday, with Friday as a make-up day. If the make-up day is a holiday, the employee shall be paid at the double (2) time rate. The employees shall be paid time and one-half (1½) for work performed on Saturdays, before the regular starting time or after the regular quitting time or over eight (8) hours per work day (unless working a 10-hour work day, then time and one-half (1½) is paid for work performed over ten (10) hours a day) or over forty (40) hours per work week. Work performed on Sundays and recognized holidays shall be paid at the double (2) time rate of pay. **SHIFT WORK:** When it is necessary for the project to operate in shifts, there will be three (3) eight (8) hour shifts commencing at 8:00 a.m. Shift work must continue for a period of not less than three (3) consecutive work days, two (2) days which must be regular work days (Monday through Friday). In the event the second or third shift of any regular work day shall fall into a Saturday or a holiday, such extension into a Saturday or holiday shall be considered as part of the previous workday and employees shall be paid at the regular shift rate. The first day shift shall work a regular eight (8) hour day at regular rates. The second shift shall be eight (8) hours regular time pay plus \$2.50 per hour premium for eight (8) hours work. Third shift will be for eight (8) hours regular time pay plus \$3.00 per hour premium for eight (8) hours work.

NO. 94: Means eight (8) hours shall constitute a day's work between the hours of 8:00 a.m. and 5:00 p.m. The regular workday starting time of 8:00 a.m. (and resulting quitting time of 4:30 p.m.) may be moved forward to 6:00 a.m. or delayed one (1) hour to 9:00 a.m. All work performed in excess of the regular work day and on Saturday shall be compensated at one and one-half (1½) times the regular pay. In the event time is lost during the work week due to weather conditions, the Employer may schedule work on the following Saturday at straight time. All work accomplished on Sunday and holidays shall be compensated at double the regular rate of wages.

NO. 101: Means that except as provided below, eight (8) hours a day shall constitute a standard work day, and forty (40) hours per week shall constitute a week's work, which shall begin on Monday and end on Friday. All time worked outside of the standard work day and on Saturday shall be classified as overtime and paid the rate of time and one-half (1½) (except as herein provided). All time worked on Sunday and recognized holidays shall be classified as overtime and paid at the rate of double (2) time. The regular starting time of 8:00 a.m. (and resulting quitting time of 4:30 p.m.) may be moved forward to 6:00 a.m. or delayed one (1) hour to 9:00 a.m. The Employer has the option of working either five (5) eight-hour days or four (4) ten-hour days to constitute a normal forty (40) hour work week. When a four (4) ten-hour day work week is in effect, the standard work day shall be consecutive ten (10) hour periods between the hours of 6:30 a.m. and 6:30 p.m. Forty (40) hours per week shall constitute a week's work Monday through Thursday, inclusive. In the event the job is down for any reason beyond the Employer's control, then Friday and/or Saturday may, at the option of the Employer, be worked as a make-up day; straight time not to exceed ten (10) hours per day or forty (40) hours per week. Starting time will be designated by the employer. When the five (5) day eight (8) hour work week is in effect, forty (40) hours per week shall constitute a week's work, Monday through Friday, inclusive. In the event the job is down for any reason beyond the Employer's control, then Saturday may, at the option of the Employer, be worked as a make-up day; straight time not to exceed eight (8) hours per day or forty (40) hours per week. Make-up days shall not be utilized for days lost due to holidays.

NO. 122: Means forty (40) hours between Monday and Friday shall constitute the normal work week. Work shall be scheduled between the hours of 6:00 a.m. and 6:30 p.m., with one-half hour for lunch. Work in excess of eight (8) hours per day and forty (40) hours per week, and on Saturdays, shall be paid at the rate of one and one-half times the normal rate. Due to inclement weather during the week, Saturday shall be a voluntary make up day.

**REPLACEMENT PAGE
BOONE COUNTY
BUILDING CONSTRUCTION OVERTIME SCHEDULE**

NO. 124: Means eight (8) hours shall constitute a day's work on all classes of work between the hours of 6:00 a.m. and 5:30 p.m., Monday through Friday. The pay for time worked during these hours shall be at the regular wage rate. The regular workweek shall be Monday through Friday. Employment from 4:30 p.m. to 12:00 midnight, Monday through Friday, shall be paid for at one and one-half (1½) times the regular hourly rate. From 12:00 midnight until 6:00 a.m. on any day shall be paid for at twice the regular hourly rate. All time worked on Sundays and the recognized holidays shall be paid at the rate of double (2) time. It is understood that forty (40) hours shall constitute a regular workweek, (6-8's) Sunday Midnight through Friday Midnight, understanding anything over eight (8) hours is one and one-half (1½) times the hourly wage rate.

**BOONE COUNTY
HOLIDAY SCHEDULE – BUILDING CONSTRUCTION**

NO. 3: All work done on New Year's Day, Decoration Day, July 4th, Labor Day, Veteran's Day, Thanksgiving and Christmas shall be compensated at the double (2) time rate of pay. When any of these holidays fall on a Sunday, the following Monday shall be observed.

NO. 4: All work done on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas Day shall be paid at the double time rate of pay. If any of the above holidays fall on Sunday, Monday will be observed as the recognized holiday. If any of the above holidays fall on Saturday, Friday will be observed as the recognized holiday.

NO. 5: All work that shall be done on New Year's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day shall be paid at the double (2) time rate of pay.

NO. 7: The following days are assigned days and are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. If a holiday falls on a Saturday, it shall be observed on the preceding Friday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This is applied to protect Labor Day. When a holiday falls during the normal workweek, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week. However, no reimbursement for these eight (8) hours is to be paid to the workman unless worked. If workman are required to work the above enumerated holidays or days observed as such, or on Sunday, they shall receive double (2) the regular rate of pay for such work.

NO. 8: All work performed on New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day, or the days observed in lieu of these holidays, shall be paid at the double time rate of pay.

NO. 15: All work accomplished on the recognized holidays of New Year's Day, Decoration Day (Memorial Day), Independence Day (Fourth of July), Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day, or days observed as these named holidays, shall be compensated for at double (2) the regular hourly rate of wages plus fringe benefits. If a holiday falls on Saturday, it shall be observed on the preceding Friday. If a holiday falls on a Sunday, it shall be observed on the following Monday. No work shall be performed on Labor Day, Christmas Day, Decoration Day or Independence Day except to preserve life or property.

NO. 19: All work done on New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day shall be paid at the double time rate of pay. The employee may take off Friday following Thanksgiving Day. However, the employee shall notify his or her Foreman, General Foreman or Superintendent on the Wednesday preceding Thanksgiving Day. When one of the above holidays falls on Sunday, the following Monday shall be considered a holiday and all work performed on either day shall be at the double (2) time rate. When one of the holidays falls on Saturday, the preceding Friday shall be considered a holiday and all work performed on either day shall be at the double (2) time rate.

NO. 23: All work done on New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Christmas Day and Sundays shall be recognized holidays and shall be paid at the double time rate of pay. When a holiday falls on Sunday, the following Monday shall be considered a holiday. When a holiday falls on Saturday, Friday is recognized as a holiday.

NO. 31: All work done on New Year's Day, Presidents Day, Good Friday, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, and Employee's Birthday shall be paid at the double time rate of pay. If a holiday falls on Sunday, the following Monday will be observed as the recognized holiday. If a holiday falls on Saturday, the preceding Friday will be observed as the recognized holiday.

**BOONE COUNTY
HOLIDAY SCHEDULE – BUILDING CONSTRUCTION**

NO. 44: All work done on New Year's Day, Memorial Day, Independence Day, Veteran's Day, Thanksgiving Day, and Christmas Day shall be paid at the double time rate of pay. If a holiday falls on a Sunday, it shall be observed on the Monday following. If a holiday falls on a Saturday, it shall be observed on the preceding Friday. No work shall be performed on these days except in emergency to protect life or property. All work performed on these holidays shall be compensated at double the regular hourly rate for the work performed. Overtime shall be computed at half-hour intervals.

NO. 45: All work performed on New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the day after Thanksgiving, the day before Christmas, and Christmas Day, shall be paid at the double time rate of pay.

NO. 54: All work performed on New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day shall be paid at the double (2) time rate of pay. When a holiday falls on Saturday, it shall be observed on Friday. When a holiday falls on Sunday, it shall be observed on Monday.

NO. 55: The following days are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid the workmen unless worked. An Employer working a four (4) day, ten (10) hour schedule may use Friday as a make up day when an observed holiday occurs during the work week. Employees have the option to work that make up day. If workmen are required to work the above enumerated holidays, or days observed as such, they shall receive double (2) the regular rate of pay for such work.

NO. 60: All work performed on New Year's Day, Armistice Day (Veteran's Day), Decoration Day (Memorial Day), Independence Day (Fourth of July), Thanksgiving Day and Christmas Day shall be paid at the double time rate of pay. No work shall be performed on Labor Day except when triple (3) time is paid. When a holiday falls on Saturday, Friday will be observed as the holiday. When a holiday falls on Sunday, the following Monday shall be observed as the holiday.

NO. 66: All work performed on Sundays and the following recognized holidays, or the days observed as such, of New Year's Day, Decoration Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day, shall be paid at double (2) the hourly rate plus an amount equal to the hourly Total Indicated Fringe Benefits. Whenever any such holidays fall on a Sunday, the following Monday shall be observed as a holiday.

NO. 69: All work performed on New Year's Day, Memorial Day, July Fourth, Labor Day, Veteran's Day, Thanksgiving Day or Christmas Day shall be compensated at double (2) their straight-time hourly rate of pay. Friday after Thanksgiving and the day before Christmas are also holidays, however, if the employer chooses to work the normal work hours on these days, the employee will be paid at straight-time rate of pay. If a holiday falls on a Saturday, the holiday will be observed on Saturday; if a holiday falls on a Sunday, the holiday will be observed on the following Monday.

NO. 74: All work performed on New Year's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day, shall be paid at double (2) time of the hourly rate of pay. In the event one of the above holiday's falls on Saturday, the holiday shall be celebrated on Saturday. If the holiday falls on Sunday, the holiday will be celebrated on Monday.

NO. 76: Work performed on Holidays shall be paid at the rate of two times the normal rate. Holidays are: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day after Thanksgiving, Christmas Day. If a holiday falls on a Sunday, it shall be celebrated on the following Monday, if it falls on Saturday, it shall be celebrated on the preceding Friday.

OCCUPATIONAL TITLE	* Date of Increase	Basic Hourly Rates	Over-Time Schedule	Holiday Schedule	Total Fringe Benefits
Carpenter	6/15	\$30.41	23	16	\$15.55
Electrician (Outside-Line Construction)(Lineman)	9/15	\$42.52	9	12	\$5.00 + 36.5%
Lineman Operator	9/15	\$36.70	9	12	\$5.00 + 36.5%
Lineman - Tree Trimmer		\$23.65	32	31	\$5.00 + 23%
Groundman	9/15	\$28.38	9	12	\$5.00 + 36.5%
Groundman - Tree Trimmer		\$17.44	32	31	\$5.00 + 23%
Laborer					
General Laborer	6/15	\$27.36	2	4	\$12.82
Skilled Laborer	6/15	\$27.36	2	4	\$12.82
Millwright	6/15	\$30.41	23	16	\$15.55
Operating Engineer					
Group I	6/15	\$27.74	21	5	\$23.91
Group II	6/15	\$27.39	21	5	\$23.91
Group III	6/15	\$27.19	21	5	\$23.91
Group IV	6/15	\$23.54	21	5	\$23.91
Oilier-Driver	6/15	\$23.54	21	5	\$23.91
Pile Driver	6/15	\$30.41	23	16	\$15.55
Traffic Control Service Driver		\$26.415	28	27	\$9.045
Truck Driver-Teamster					
Group I	6/15	\$28.87	25	21	\$12.05
Group II	6/15	\$29.03	25	21	\$12.05
Group III	6/15	\$29.02	25	21	\$12.05
Group IV	6/15	\$29.14	25	21	\$12.05

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

If a worker is performing work on a heavy construction project within an occupational title that is not listed on the Heavy Construction Rate Sheet, use the rate for that occupational title as shown on the Building Construction Rate sheet.

**REPLACEMENT PAGE
BOONE COUNTY
OVERTIME SCHEDULE - HEAVY CONSTRUCTION**

FED: Minimum requirement per Fair Labor Standards Act means time and one-half (1 ½) shall be paid for all work in excess of forty (40) hours per work week.

NO. 2: Means a regular workweek shall be forty (40) hours and will start on Monday and end on Friday. The Employer shall have the option of working five 8-hour days or four 10-hour days Monday through Friday. If an Employer elects to work five 8-hour days during any workweek, hours worked more than eight (8) per day or 40 per week shall be paid at time and one-half the hourly rate Monday through Friday. If an Employer elects to work four 10-hour days in a week, work performed more than ten (10) hours per day or 40 hours per week shall be paid at time and one-half the hourly rate Monday through Friday. When working a five 8-hour day schedule and an Employer is prevented from working forty (40) hours Monday through Friday, or any part thereof, by reason of inclement weather, Saturday or any part thereof may be worked as a make-up day at the straight time rate. If an Employer is working a four 10-hour day schedule and loses a day due to inclement weather, he may work 10 hours Friday at straight time. All hours worked over the 40 hours Monday through Friday will be paid at 1 ½ overtime rate. A workday shift is to begin at the option of the Employer, between 6:00 a.m. and not later than 9:00 a.m. However, the project starting time may be advanced or delayed if required. If workmen are required to work the enumerated holidays or days observed as such or Sundays, they shall receive double (2) the regular rate of pay for such work. Overtime shall be computed at one-half (1/2) hour intervals. Shift: The Contractor may elect to work one, two or three shifts on any work. When operating on more than one shift, the shifts shall be known as the day shift, swing shift, and graveyard shift as such terms are recognized in the industry. When two shifts are worked on any operation, the shifts will consist of eight (8) or ten (10) hours exclusive of lunchtime. When three shifts are worked the first day or day shift will consist of eight (8) hours exclusive of lunchtime. The second or swing shift shall consist of seven and one-half (7 1/2) hours work for eight hours pay, exclusive of lunchtime, and the third or the graveyard shift shall consist of seven (7) hours work for eight (8) hours pay, exclusive of the lunchtime. All time in excess of normal shifts shall be considered overtime. Multiple shift (the two or three shift) operation will not be construed on the entire project if at anytime it is deemed advisable and necessary for the Employer to multiple shift a specific operation. However, no shift shall be started between midnight and six a.m. except the graveyard shift on a three-shift operation, or except in an unusual or emergency situation. If an Employer starts a shift between midnight and 6 a.m. except the graveyard shift on a three-shift operation, he shall reimburse all employees for the entire shift at the double time rate. Completion of the second shift on a two-shift operation or completion of the graveyard shift on a three-shift operation that carries over into Saturday morning, shall be at the straight time rate. Overtime shall be computed at ½ hour intervals.

NO. 9: Eight (8) hours shall constitute a work day between the hours of 7:00 a.m. and 4:30 p.m. Forty (40) hours within five (5) days, Monday through Friday inclusive, shall constitute the work week. Work performed in the 9th and 10th hour, Monday through Friday, shall be paid at time and one-half (1½) the regular straight time rate of pay. Contractor has the option to pay two (2) hours per day at the time and one-half (1½) the regular straight time rate of pay between the hours of 6:00 a.m. and 5:30 p.m., Monday through Friday. Work performed in the first eight (8) hours on Saturday shall be paid at the rate of one and eight tenths (1 8/10) the regular straight time rate. Work performed outside these hours and on Sundays and recognized legal holidays, or days celebrated as such, shall be paid for at the rate of double (2) time.

NO. 21: Means the regular workday for which employees shall be compensated at straight time hourly rate of pay shall, unless otherwise provided for, begin at 8:00 a.m. and end at 4:30 p.m. However, the project starting time may be advanced or delayed at the discretion of the Employer. At the discretion of the Employer, when working a five (5) day eight (8) hour schedule, Saturday may be used for a make-up day. If an Employer is prohibited from working on a holiday, that employer may work the following Saturday at the straight time rate. However, the Employer may have the option to schedule his work from Monday through Thursday at ten (10) hours per day at the straight time rate of pay with all hours in excess of ten (10) hours in any one day to be paid at the applicable overtime rate. If the Employer elects to work from Monday through Thursday and is stopped due to circumstances beyond his control, he shall have the option to work Friday or Saturday at the straight time rate of pay to complete his forty (40) hours. If an Employer is prohibited from working on a holiday, that Employer may work the following Friday or Saturday at the straight time rate. Overtime will be at one and one-half (1½) times the regular rate. If workmen are required to work the enumerated holidays or days observed as such, or Sundays, they shall receive double (2) the regular rate of pay for such work.

**REPLACEMENT PAGE
BOONE COUNTY
OVERTIME SCHEDULE - HEAVY CONSTRUCTION**

NO. 23: Means the regular workweek shall start on Monday and end on Friday, except where the Employer elects to work Monday through Thursday, (10) hours per day. All work over ten (10) hours in a day or forty (40) hours in a week shall be at the overtime rate of one and one-half (1½) times the regular hourly rate. The regular workday shall be either eight (8) or ten (10) hours. If a job can't work forty (40) hours Monday through Friday because of inclement weather or other conditions beyond the control of the Employer, Friday or Saturday may be worked as a make-up day at straight time (if working 4-10's). Saturday may be worked as a make-up day at straight time (if working 5-8's). An Employer, who is working a four (4) ten (10) hour day work schedule may use Friday as a make-up day when a workday is lost due to a holiday. A workday is to begin at the option of the Employer but not later than 11:00 a.m. except when inclement weather, requirements of the owner or other conditions beyond the reasonable control of the Employer prevent work. Except as worked as a make-up day, time on Saturday shall be worked at one and one-half (1½) times the regular rate. Work performed on Sunday shall be paid at two (2) times the regular rate. Work performed on recognized holidays or days observed as such, shall also be paid at the double (2) time rate of pay. **For all overtime hours worked during the week or on Saturday \$14.55 of the fringe benefits portion of the prevailing wage shall be paid at time and one-half (1½). For all overtime hours worked on Sundays or recognized holidays \$14.55 of the fringe benefits portion of the prevailing wage shall be paid double time. The remaining \$.50 of the fringe benefit portion of the prevailing wage shall be paid at straight time.**

NO. 25: Means a regular work week of forty (40) hours, starting on Monday and ending on Friday. The regular work day shall be either eight (8) or ten (10) hours. If a crew is prevented from working forty (40) hours Monday through Friday, or any part thereof by reason of inclement weather, Saturday or any part thereof maybe worked as a make-up day at the straight time rate. Employees who are part of a regular crew on a make-up day, notwithstanding the fact that they may not have been employed the entire week, shall work Saturday at the straight time rate. A work day is to begin between 6:00 a.m. and 9:00 a.m. However, the project starting time maybe advanced or delayed if mutually agreed to by the interest parties. All hours worked on recognized holidays, or days observed as such, double (2) time shall be paid.

NO. 28: Means a regular work week of forty (40) hours will start on Monday and end on Friday. The regular work day shall be either eight (8) or ten (10) hours. If a crew is prevented from working forty (40) hours Monday through Friday, or any part thereof by reason of inclement weather, Saturday or any part thereof may be worked as a make-up day at the straight time rate. Employees who are part of a regular crew on a make-up day, notwithstanding the fact that they may not have been employed the entire week, shall work Saturday at the straight time rate. A workday is to begin between 6:00 a.m. and 9:00 a.m. However, the project starting time may be advanced or delayed if mutually agreed to by the interest parties. For all time worked on recognized holidays, or days observed as such, double (2) time shall be paid.

NO. 32: Means the overtime rate shall be time and one-half the regular rate for work over forty (40) hours per week. Sundays and Holidays shall be paid at double the straight time rate.

**BOONE COUNTY
HOLIDAY SCHEDULE – HEAVY CONSTRUCTION**

NO. 4: All work performed on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, or observed as such, shall be paid at the double time rate of pay. When a Holiday falls on a Sunday, Monday shall be observed. No work shall be performed on Labor Day, except in case of jeopardy to life or property. This is applied to protect Labor Day.

NO. 5: The following days are recognized as holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. If a holiday falls on a Saturday, it shall be observed on the preceding Friday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward a forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid the workman unless worked. If workmen are required to work the above recognized holidays or days observed as such, or Sundays, they shall receive double (2) the regular rate of pay for such work. The above shall apply to the four 10's Monday through Friday work week. The ten (10) hours shall be applied to the forty (40) hour work week.

NO. 12: All work performed on New Year's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day, Christmas Day, or days celebrated as such, shall be paid at the double time rate of pay. When one of the foregoing holidays falls on Sunday, it shall be celebrated on the following Monday. When one of the foregoing holidays falls on Saturday, it shall be celebrated on the Friday before the holiday.

NO. 16: The following days are recognized as holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on Sunday, it shall be observed on the following Monday. If a holiday falls on Saturday, it shall be observed on the preceding Friday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid to the worker unless worked. If workers are required to work the above recognized holidays or days observed as such, they shall receive double (2) the regular rate of pay for such work.

NO. 21: The following days are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid the workman unless worked. An Employer working a four (4) day, ten (10) hour schedule may use Friday as a make-up day when an observed holiday occurs during the work week. Employees have the option to work that make-up day. If workmen are required to work the above enumerated holidays, or days observed as such, they shall receive double (2) the regular rate of pay for such work.

NO. 27: The following days are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid the workmen unless worked. An Employer working a four (4) day, ten (10) hour schedule may use Friday as a make up day when an observed holiday occurs during the work week. Employees have the option to work that make up day. If workmen are required to work the above enumerated holidays, or days observed as such, they shall receive double (2) the regular rate of pay for such work.

NO. 31: All work performed on New Year's Day, Presidents' Day, Veterans' Day, Good Friday, Decoration Day, Fourth of July, Labor Day, Christmas Eve Day, Christmas Day, Thanksgiving Day and Day after Thanksgiving or days celebrated for the same.

INSURANCE REQUIREMENTS

CONTRACTORS INSURANCE: The Contractor shall not commence work under this Contract until they have obtained all insurance required under this paragraph and such insurance has been approved by the City, nor shall the Contractor allow any subcontractor to commence work on their contract until all similar insurance required of subcontractor has been so obtained and approved. All policies shall be in amounts, form, and with companies satisfactory to the City which must carry an A-6 or better rating as listed in the A.M. Best or equivalent rating guide.

- A. **WORKERS COMPENSATION INSURANCE:** The Contractor shall take out and maintain during the life of this Contract **Employers Liability and Workers Compensation Insurance** for all of their employees employed at the site of the work, and in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Workers Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor.

Workers Compensation coverage shall meet Missouri statutory limits. Employers Liability limits shall be \$500,000.00 each employee, \$500,000.00 each accident, and \$500,000.00 policy limit. In case any class of employees engaged in hazardous work under this Contract at the site of the work is not protected under the Workers Compensation Statute, the Contractor shall provide and shall cause each subcontractor to provide Employers Liability Insurance for the protection of their employees not otherwise protected.

- B. **COMMERCIAL GENERAL LIABILITY INSURANCE:** Contractor shall carry Commercial General Liability Insurance written on ISO occurrence form CG 00 01 07 98 or later edition (or a substitute form providing equivalent coverage) and shall cover all operations by or on behalf of the Contractor, providing insurance for bodily injury liability and property damage liability for the limits indicated below and for the following coverage:

- (1) Premises and Operations
- (2) Products and Completed Operations

Contractual Liability insuring the obligations assumed by the Contractor under this Contract.
Personal Injury Liability and Advertising Injury Liability

Except with respect to bodily injury and property damage included within the products and completed operations hazards, the general aggregate limit shall apply separately to the Contractor's project under this Contract. Completed Operations coverage must be maintained for the correction period provided by the agreement.

Limit of Liability: The Commercial General Liability policy limits shall not be less than:
\$2,000,000 Each Occurrence (Combined Single Limit for Bodily Injury and Property Damage)
\$2,000,000 Aggregate for Products/Completed Operations
\$2,000,000 Personal Injury/Advertising Injury
\$2,000,000 General Aggregate (provide endorsement to apply the General Aggregate per project, if available. If not, see Umbrella Liability section.)

Additional Insured: The Owner, all of its officers, directors and employees, shall be named as Additional Insureds under the Commercial General Liability Insurance using ISO Additional Insured Endorsements CG 20 10 or substitute providing equivalent coverage. If additional insured status is required for a correction period then CG 20 37 or equivalent should also be used. These endorsements must be stated on the insurance certificate provided to the Owner and a copy of the endorsements confirming coverage should accompany the insurance certificate.

Primary Coverage: The Contractor's Commercial General Liability Policy shall apply as primary insurance and any other insurance carried by the Architect or the Owner shall be excess only and will not contribute with Contractor's insurance. This must be stated on the insurance certificate and a copy of the endorsement confirming coverage should accompany the insurance certificate.

- C. **BUSINESS AUTOMOBILE LIABILITY INSURANCE:** The policy should be written on ISO form CA 0001, CA 0005, CA 0002, CA0020 or a substitute form providing equivalent coverage and shall provide coverage for all owned, hired and non-owned vehicles. The limit of liability should be at least \$1,000,000 Combined Single Limit for Bodily Injury and Property Damage each accident and should also cover Automobile Contractual Liability. The policy should name the Owner and all of its officers, directors and employees as Additional Insureds. The policy shall be endorsed to be primary coverage and any other insurance carried by the Owner shall be excess only and will not contribute with Contractor's insurance. To confirm coverage, a copy of the Additional Insured Endorsement should accompany the insurance certificate.

- D. **UMBRELLA EXCESS LIABILITY:** The Contractor should provide an umbrella excess liability policy that will provide a minimum of \$1,000,000 per occurrence/\$1,000,000 aggregate over the above listed coverages. This policy should "follow-form" of the underlying policies and comply with all insurance requirements of those policies. If the General Aggregate of the Commercial General Liability policy does not apply per project, the umbrella excess limits should be \$2,000,000 per occurrence/\$2,000,000 aggregate.
- E. **WAIVER OF SUBROGATION:** The Commercial General Liability and Automobile Liability policies shall each contain a waiver of subrogation in favor of the Owner and its officers, directors and employees.
- F. **CERTIFICATES OF INSURANCE:** As evidence of the insurance, limits and endorsements required, a standard ACORD or equivalent Certificate of Insurance executed by a duly authorized representative of each insurer shall be furnished by the Contractor to the Owner and Architect before any Work under the Contract is commenced by the Contractor. Owner shall have the right, but not the obligation, to prohibit Contractor or any Subcontractor from entering the Project site until such certificates are received and approved by the Owner. With respect to insurance to be maintained after final payment, an additional certificate(s) evidencing such coverage shall be promptly provided to Owner as a precondition to final payment. The Certificate of Insurance shall provide that there will be no cancellation or reduction of coverage without 30 days prior written notice to the Owner. The certificate must also contain a description of the project or work to be performed. Failure to maintain the insurance required herein may result in termination of the Contract at Owner's option. In the event the Contractor does not comply with the requirements of this section, the Owner shall have the right, but not the obligation, to provide insurance coverage to protect the Owner and charge the Contractor for the cost of that insurance. The required insurance shall be subject to the approval of the Architect, but any acceptance of insurance certificates by the Owner shall in no way limit or relieve the Contractor of their duties and responsibilities in this Agreement.
- G. **SUBCONTRACTORS:** Contractor shall cause each Subcontractor to purchase and maintain insurance of the types and amounts specified herein. Limits of such coverage may be reduced only upon written agreement of Owner. Contractor shall provide to Owner copies of certificates evidencing coverage for each Subcontractor. Subcontractors' commercial general liability and business automobile liability insurance shall name Owner as Additional Insured and have the Waiver of Subrogation endorsementS added.
- H. **HOLD HARMLESS AGREEMENT:** To the fullest extent not prohibited by law, Contractor shall indemnify and hold harmless the City of Columbia, its directors, officers, agents, and employees from and against all claims, damages, losses, and expenses (including but not limited to attorneys fees) arising by reason of any act or failure to act, negligent or otherwise, of Contractor, of any subcontractor (meaning anyone, including but not limited to consultants having a contract with Contractor or a subcontractor for part of the services), of anyone directly or indirectly employed by Contractor or by any subcontractor, or of anyone for whose acts the Contractor or its subcontractor may be liable, in connection with providing these services. This provision does not, however, require Contractor to indemnify, hold harmless, or defend the City of Columbia from its own negligence.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
3/14/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Thomas McGee, L.C. 920 Main Street Suite 1700 P.O. Box 419013 Kansas City MO 64105		CONTACT NAME: Jon Nee PHONE (A/C, No, Ext): 816-842-4800 FAX (A/C, No): 816-472-5018 E-MAIL ADDRESS: jnee@thomasmcgee.com	
		NAIC #	
INSURED ASBES-1 Asbestos Removal Services, Inc PO Box 105287 Jefferson City MO 65110-5287		INSURER(S) AFFORDING COVERAGE INSURER A: AMCO INS CO 19100 INSURER B: Colony Insurance Co *** INSURER C: American Interstate Ins. Co. INSURER D: Nationwide Mutual Ins. Co.* 23787 INSURER E: INSURER F:	


COVERAGES **CERTIFICATE NUMBER:** 1765793663 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
B	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Asb/Lead/Poll <input checked="" type="checkbox"/> Prof/Mold GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC			PACEP304688	3/31/2016	3/31/2017	EACH OCCURRENCE	\$1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$300,000
							MED EXP (Any one person)	\$5,000
							PERSONAL & ADV INJURY	\$1,000,000
							GENERAL AGGREGATE	\$2,000,000
							PRODUCTS - COMP/OP AGG	\$2,000,000
								\$
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			ACPBA7236035669	3/31/2016	3/31/2017	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000
							BODILY INJURY (Per person)	\$
							BODILY INJURY (Per accident)	\$
							PROPERTY DAMAGE (Per accident)	\$
								\$
B	UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$0			EXC303195	3/31/2016	3/31/2017	EACH OCCURRENCE	\$10,000,000
							AGGREGATE	\$10,000,000
								\$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N <input checked="" type="checkbox"/> N/A			AVWCMO2477992016	3/31/2016	3/31/2017	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER	
							E.L. EACH ACCIDENT	\$1,000,000
							E.L. DISEASE - EA EMPLOYEE	\$1,000,000
							E.L. DISEASE - POLICY LIMIT	\$1,000,000
D	Leased & Rented Equipment			ACP7236035669	3/31/2016	3/31/2017	Limit Ded	100,000 1,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Project: 13/2011 Term Contract; Boone County Purchasing is included as additional insured as required by written contract per terms of policy.

CERTIFICATE HOLDER		CANCELLATION	
Boone County Purchasing 613 E. Ash Street, Room 110 Columbia MO 65201		SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.	
		AUTHORIZED REPRESENTATIVE 	

© 1988-2010 ACORD CORPORATION. All rights reserved.

CERTIFIED COPY OF ORDER

STATE OF MISSOURI }
County of Boone } ea.

April Session of the April Adjourned

Term. 20 16

In the County Commission of said county, on the 28th day of April 20 16

the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby approve the utilization of the City of Columbia Cooperative Contract 112/2014 Term and Supply – Cisco Products, to purchase technology equipment for the Emergency Communication Center project.

The terms of the Cooperative Contract are stipulated in the attached Purchase Agreement. It is further ordered the Presiding Commissioner is hereby authorized to sign said Purchase Agreement.

Done this 28th day of April, 2016.

ATTEST:

Wendy S. Noren
Wendy S. Noren
Clerk of the County Commission

Daniel K. Atwill
Daniel K. Atwill
Presiding Commissioner

Absent
Karen M. Miller
District I Commissioner

Jaret M. Thompson
Jaret M. Thompson
District II Commissioner

Boone County Purchasing

Melinda Bobbitt, CPPO, CPPB
Director of Purchasing



613 E. Ash St., Room 110
Columbia, MO 65201
Phone: (573) 886-4391
Fax: (573) 886-4390

MEMORANDUM

TO: Boone County Commission
FROM: Melinda Bobbitt, CPPO, CPPB
DATE: April 20, 2016
RE: Cooperative Contract: *112/2014 – Cisco Product*

Aron Gish, Information Technology Director recommends the County utilizes the City of Columbia, Missouri's cooperative contract *112/2014 – Cisco Products* to purchase technology equipment for the Emergency Communication Center project.

This is a Term and Supply contract that extends through August 31, 2016 with four, one-year optional renewal periods. It is anticipated that purchases will be made from department 4101 – ECC Radio & Technology, account 71231 – ECC Construction Project. There is \$8.65 million budgeted for the Emergency Communication Center project.

cc: Contract File
Karen Miller, Commission
Aron Gish, IT
Chad Martin, Patricia Schreiner, Joint Communications

**PURCHASE AGREEMENT FOR
Cisco Products**

THIS AGREEMENT dated the 28th day of April 2016 is made between Boone County, Missouri, a political subdivision of the State of Missouri through the Boone County Commission, herein "County" and **Huber & Associates, Inc.**, herein "Contractor."

IN CONSIDERATION of the parties performance of the respective obligations contained herein, the parties agree as follows:

1. **Contract Documents** - This agreement shall consist of this Purchase Agreement for the furnishing, delivery and installation of **Cisco Products** in compliance with all specifications and any addendum issued for the City of Columbia, Missouri contract **112/2014**, Boone County Insurance Requirements and Boone County Standard Terms and Conditions. All such documents shall constitute the contract documents which are incorporated herein by reference. Service or product data, specification and literature submitted with bid response may be permanently maintained in the City of Columbia and County Purchasing Office file for this contract if not attached. In the event of conflict between any of the foregoing documents, the terms, conditions, provisions and requirements contained in this Agreement shall prevail and control over the Contractor's proposal. This Purchase Agreement shall be governed under the laws of the State of Missouri and any disputes concerning this Agreement shall be brought in any appropriate division of the Circuit Court of Boone County, Missouri.

2. **Purchase** - The County agrees to purchase from the Contractor and the Contractor agrees to supply the County with **Cisco Products** as outlined in the discount pricing / discount structure of the attached City of Columbia, Missouri contract. The County will order equipment and installation on an as needed basis.

3. **Delivery** - All deliveries shall be made FOB Destination with freight charges fully included and prepaid. The seller pays and bears the freight charges.

4. **Contract Duration** - This agreement shall commence on **date written above and extend through August 31, 2016** with an additional four, one-year renewal options per contract 112/2014 and subject to the provisions of termination specified below. Discount structure shall remain firm during this contract period.

5. **Billing and Payment** - All billing shall be invoiced to the Boone County Information Technology department and billings may only include the discount structure listed in the contract. No additional fees for paper work processing, labor, or taxes shall be included as additional charges in excess of the charges in the contract shall be billed to the County. The County agrees to pay all invoices within thirty days of receipt of a correct monthly statement. In the event of a billing dispute, the County reserves the right to withhold payment on the disputed amount; in the event the billing dispute is resolved in favor of the Contractor, the County agrees to pay interest at a rate of 9% per annum on disputed amounts withheld commencing from the last date that payment was due.


6. **Binding Effect** - This agreement shall be binding upon the parties hereto and their successors and assigns for so long as this agreement remains in full force and effect.

7. **Termination** - This agreement may be terminated by the County upon thirty days advance written notice for any of the following reasons or under any of the following circumstances:

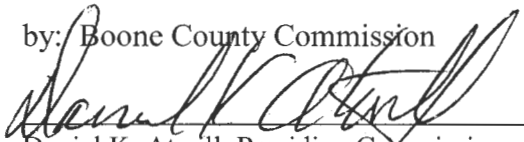
- a. County may terminate this agreement due to material breach of any term or condition of this agreement, or
- b. County may terminate this agreement if in the opinion of the Boone County Commission if delivery of products are delayed or products delivered are not in conformity with bidding specifications or variances authorized by County, or
- c. If appropriations are not made available and budgeted for any calendar year.

IN WITNESS WHEREOF the parties through their duly authorized representatives have executed this agreement on the day and year first above written.

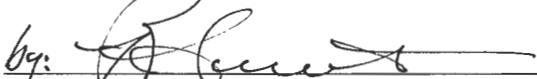
HUBER & ASSOCIATES, INC.

by: 
title: Director of Business Dev.

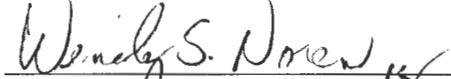
BOONE COUNTY, MISSOURI

by: Boone County Commission

Daniel K. Atwill, Presiding Commissioner

APPROVED AS TO FORM:

by: 
County Counselor

ATTEST:


Wendy S. Noren, County Clerk

In accordance with RSMo 50.660, I hereby certify that a sufficient unencumbered appropriation balance exists and is available to satisfy the obligation(s) arising from this contract. (Note: Certification of this contract is not required if the terms of this contract do not create a measurable county obligation at this time.)

June Pitchford by HA - No Encumbrance Required 4-20-16 Term & Supply
Signature Date Appropriation Account

Insurance Requirements: The Contractor shall not commence work under this contract until they have obtained all insurance required under this paragraph and the Certificate of Insurance has been approved by the County, nor shall the Contractor allow any subcontractor to commence work on their subcontract until all similar insurance required of subcontractor has been so obtained and approved. All policies shall be in amounts, form and companies satisfactory to the County which must carry an A-6 or better rating as listed in the A.M. Best or equivalent rating guide. Insurance limits indicated below may be lowered at the discretion of the County.

Employers Liability and Workers Compensation Insurance - The Contractor shall take out and maintain during the life of this contract, **Employers Liability and Workers Compensation Insurance** for all of its employees employed at the site of work, and in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Workers Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor. Workers Compensation coverage shall meet Missouri statutory limits. Employers Liability limits shall be \$500,000.00 each employee, \$500,000.00 each accident, and \$500,000.00 policy limit. In case any class of employees engaged in hazardous work under this Contract at the site of the work is not protected under the Workers Compensation Statute, the Contractor shall provide and shall cause each subcontractor to provide Employers Liability Insurance for the protection of their employees not otherwise protected.

Commercial General Liability Insurance - The Contractor shall take out and maintain during the life of this contract, such commercial general liability insurance as shall protect it and any subcontractor performing work covered by this contract, from claims for damages for personal & advertising injury, bodily injury including accidental death, as well as from claims for property damages, which may arise from operations under this contract, whether such operations be by themselves or for any subcontractor or by anyone directly or indirectly employed by them. The amounts of insurance shall be not less than \$2,000,000.00 combined single limit for any one occurrence covering both bodily injury and property damage, including accidental death. If the Contract involves any underground/digging operations, the general liability certificate shall include X, C, and U (Explosion, Collapse, and Underground) coverage. If providing Commercial General Liability Insurance, then the Proof of Coverage of Insurance shall also be included.

Contractor may satisfy the minimum liability limits required for Commercial General Liability or Business Auto Liability under an Umbrella or Excess Liability policy. There is no minimum per occurrence limit of liability under the umbrella or Excess Liability; however, the Annual Aggregate limit shall not be less than the highest "Each Occurrence" limit for either Commercial General Liability or Business Auto Liability. Contractor agrees to include the County as an Additional Insured on the umbrella or Excess Liability, unless the Certificate of Insurance state the Umbrella or Excess Liability provides coverage on a "Follow-Form" basis.

Business Automobile Liability – The Contractor shall maintain during the life of this contract, automobile liability insurance in the amount of not less than \$2,000,000.00 combined single limit for any one occurrence, covering both bodily injury, including accidental death, and property damage, to protect themselves from any and all claims arising from the use of the Contractor's own automobiles, teams and trucks; hired automobiles, teams and trucks; non-owned and both on and off the site of work.

Subcontractors: Contractor shall cause each Subcontractor to purchase and maintain insurance of the types and amounts specified herein. Limits of such coverage may be reduced only upon written agreement of County. Contractor shall provide to County copies of certificates of insurance evidencing coverage for each Subcontractor. Subcontractors' commercial general liability and business automobile liability insurance shall name County as Additional Insured and have the Waiver of Subrogation endorsements added.

Proof of Carriage of Insurance - The Contractor shall furnish the County with Certificate(s) of Insurance which name the County as additional insured in an amount as required in this contract. The Certificate of Insurance shall provide that there will be no cancellation, non-renewal or reduction of coverage without 30 days prior written notice to the County. In addition, such insurance shall be on an occurrence basis and shall remain in effect until such time as the County has made final acceptance of the services provided.

INDEMNITY AGREEMENT: To the fullest extent permitted by law, Contractor shall indemnify, hold harmless and defend the County, its directors, officers, agents, and employees from and against all claims, damages, losses and expenses (including but not limited to attorney's fees) arising by reason of any act or failure to act, negligent or otherwise, of Contractor, of any subcontractor (meaning anyone, including but not limited to consultants having a contract with contractor or a subcontract for part of the services), of anyone directly or indirectly employed by contractor or by any subcontractor, or of anyone for whose acts the contractor or its subcontractor may be liable, in connection with providing these services. This provision does not, however, require contractor to indemnify, hold harmless, or defend the County of Boone from its own negligence.

Failure to maintain the required insurance in force may be cause for contract termination. In the event the Agency/Service fails to maintain and keep in force the required insurance or to obtain coverage from its subcontractors, the County shall have the right to cancel and terminate the contract without notice.

Certificate Holder address:

County of Boone, Missouri
C/O Purchasing Department
613 E. Ash Street
Columbia, MO 65201



CITY OF COLUMBIA, MISSOURI
FINANCE DEPARTMENT
PURCHASING DIVISION

August 3, 2015

NOTIFICATION OF CONTRACT RENEWAL

CITY OF COLUMBIA CONTRACT

112/2014

CONTRACT PERIOD: September 1, 2015 through August 31, 2016

The City of Columbia has renewed the above contract with your firm, with no price changes, per your acceptance dated 7-24-15, for one additional year. The current City purchase orders on file will be used for services against this contract. Please contact the Buyer shown below if there are any questions pertaining to this contract.

CONTRACT NUMBER	RENEWAL TERM	CONTRACT YEAR	VENDOR NUMBER	VENDOR NAME/ADDRESS/PHONE
112/2014	9-1-15 ~ 8-31-16	2 of 5		Huber & Associates 1400 Edgewood Dr Jefferson City, MO 65109 Attn: Dustin Schanzmeyer Phone: 573-634-5000 Fax: 573-634-5500 Email: dschanzmeyer@teamhuber.com

Contract Description: Cisco Products

Items: Per Contract

Prices: See Attached

Terms: Net 30

Sincerely,

Melissa Pasley
Senior Procurement Officer
City of Columbia
(573) 817-5005

cc: Mark Neckerman, Jennifer Ussery, Angie Benad

CITY OF COLUMBIA, MO
 REQUEST FOR QUOTATION

Subject: 112/2014 Cisco Products - T&S

Huber and Associates

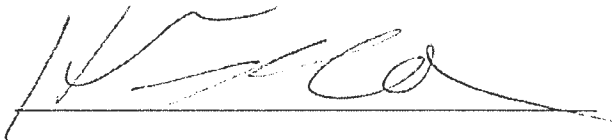
		QTY	Year 1	Year 2	Year 3	Year 4	Year 5
1	Cisco hardware and software, indicate your percentage discount from Cisco global price list.	1	42%	42%			
2	Cisco provided hardware and software maintenance (Smartnet), help desk/telephone/electronic support services provided on an annual basis and paid annually. Indicate your percentage discount from Cisco global price list.	1	20%	20%			
3	Cisco provided hardware and software	1	No bid	No bid			
4	Installation provided by Cisco, indicate	1	\$0	\$0			
5	Installation provided by sucessful bidder	1	\$150.00	\$150.00			
6	Bidder is invited to offer alternate maintenance plan for the City to consider. Provide the cost of the	1	\$0	\$0			

CITY OF COLUMBIA, MISSOURI
WORK AUTHORIZATION AFFIDAVIT
PURSUANT TO 285.530 RSMo
(FOR ALL BIDS IN EXCESS OF \$5,000.00)
Effective 1/1/2009

County of Cole)
)SS.
State of Missouri)

My name is Ken Enloe. I am an authorized agent of Huber & Associates, Inc. (Bidder). This business is enrolled and participates in a federal work authorization program for all employees working in connection with services provided to the City of Columbia. This business does not knowingly employ any person who is an unauthorized alien in connection with the services being provided. Documentation of participation in a federal work authorization program is attached to this affidavit.

Furthermore, all subcontractors working on this contract shall affirmatively state in writing in their contracts that they are not in violation of Section 285.530.1 RSMo and shall not thereafter be in violation. Alternatively, a subcontractor may submit a sworn affidavit under penalty of perjury that all employees are lawfully present in the United States.

Affiant: 

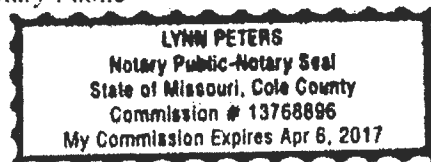
Printed Name: Ken Enloe

Subscribed and sworn to before me this 29th day of July, 2015

Huber & Associates, Inc.
1400 Edgewood Drive
Jefferson City, MO 65109



Notary Public





CITY OF COLUMBIA
PURCHASING DIVISION
Melissa Pasley, Procurement Officer
701 E Broadway, 5th Floor
COLUMBIA, MO. 65201
Phone: (573) 817-5005
Fax: (573) 874-7762
mapasley@gocolumbiamo.com

August 25, 2014

NOTIFICATION OF AWARD - CITY OF COLUMBIA

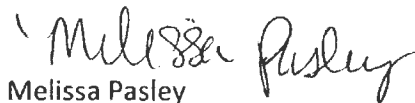
CONTRACT FOR: Cisco Products – Term & Supply

Contract Period is September 1, 2014 through August 31, 2015

Your firm has been awarded the contract herein in response to our recent Request for Quotation - Term & Supply. The purchase order for this year will be mailed to you. Please reference the appropriate purchase order number on every invoice submitted.

Please contact the Buyer shown below if there are any questions pertaining to this contract.

CONTRACT NUMBER	ITEMS AWARDED	VENDOR NAME
112/2014	See attached	Huber and Associates 1400 Edgewood Dr Jefferson City, MO 65109 Attn: Dustin Schanzmeyer Phone: 573-634-5000 Fax: 573-634-5500 Email: dschanzmeyer@teamhuber.com


Melissa Pasley
Buyer/Purchasing
573-817-5005

cc: Mark Neckerman, Jennifer Ussery, Angie Benad

City of Columbia Purchasing (City of Columbia) Supplier Response

Bid Information		Contact Information	Ship to Information
Bid Creator	Melissa Pasley Procurement Officer	Address	Address
Email	mapasley@gocolumbiamo.com	Contact	Contact
Phone	(573) 8175005	Department	Department
Fax		Building	Building
Bid Number	112/2014	Floor/Room	Floor/Room
Title	Cisco Products - Term & Supply	Telephone	Telephone
Bid Type	RFQ-F	Fax	Fax
Issue Date	07/14/2014	Email	Email
Close Date	8/12/2014 2:00:00 PM CT		
Need by Date			

Supplier Information

Company	Huber and Associates
Address	1400 Edgewood Dr. Jefferson City, MO 65109
Contact	Dustin Schanzmeyer
Department	
Building	
Floor/Room	
Telephone	1 (573) 6345000
Fax	1 (573) 6345500
Email	dschanzmeyer@teamhuber.com
Submitted	8/12/2014 1:07:01 PM CT
Total	\$150.00

Signature

Supplier Notes

Bid Notes

BIDDERS ARE ENCOURAGED TO USE THE ELECTRONIC BID SYSTEM FOR SUBMITTING BIDS AND MUST COMPLETE ALL REQUIRED FIELDS. NO FAX OR E-MAIL RESPONSES WILL BE ACCEPTED. SEALED BIDS MAY BE SUBMITTED AT 701 E BROADWAY, 5TH FLOOR FINANCE, COLUMBIA MO 65201, UNTIL THE BID CLOSING DATE AND TIME.

Bid Activities

Bid Messages

Please review the following and respond where necessary

#	Name	Note	Response
1	Terms and Conditions	Accept terms and conditions	Accept
2	Payment Terms	Please Indicate Payment Terms:	Payment is due upon receipt, as referenced in Huber & Associates' standard Terms & Conditions attached.
3	Delivery ARO (After Receipt of Order)	Indicate number of calendar days required to deliver after receipt of Purchase Order. Prompt delivery is a necessity, and shall be an important factor considered for the evaluation of all bids submitted. After award and during the first year contract period, delivery times will be closely monitored to ensure compliance with quoted lead times. It will be the policy of the City of Columbia to NOT RENEW a contract with suppliers who consistently deliver item/services one week or more in excess of the lead times quoted.	Delivery is dependent upon product availability from vendor. Before placing each order, please inquire about availability.
4	Term and Supply Contract Conditions	TERM AND SUPPLY CONTRACT for furnishing City of Columbia with CISCO PRODUCTS, as needed and as requested, from date of award through JULY 31, 2015. AGREE PRICES WILL BE FIRM FOR THE FIRST YEAR OF THE CONTRACT PERIOD.	Term & Supply Contract Acknowledgement
5	Renewal Options	Term & Supply Contract Renewal Options: Contract subject for renewal at the end of the first contract period, for four (4) additional one-year periods, based upon agreement by both parties as to pricing, delivery, past vendor service, etc. This contract may be canceled by the City upon 10 days written notice to the vendor for non-compliance to these requirements, delivery problems, or other just cause so deemed by the City.	Renewal Options Acknowledgement
6	Cooperative Contract Pricing	Would you be willing to offer the same pricing to members of the Mid-Missouri Public Purchasing Cooperative? (Not responding to this question will not impact the evaluation of this bid.)	Agree
7	Insurance Requirements - Bidder Agreement	Successful Bidder agrees to comply with attached Insurance Requirements upon award.	Huber & Associates currently meets all insurance requirements with the following exceptions: \$1,000,000 Each Occurrence \$1,000,000 Personal Injury
8	Staff	Provide the number of employees on your staff and the percent (%) of work on this project that will be done by your own staff	Huber & Associates has over 80 employees and is based out of Jefferson City, Missouri. Huber & Associates Staff will perform Pre-Sales, Installation, and Support Services in coordination with your Cisco Account Team. Cisco Warranty and SMARTnet Maintenance services will be performed by Cisco and facilitated by Huber & Associates.
9	Have you ever failed to complete any work awarded to your company?	Have you ever failed to complete any work awarded to your company? If so, where and why?	Huber & Associates has never failed to complete any work awarded to our company.

10	References	List three references, minimum, for same type of work performed in the past six months. State name and telephone number of contact person, as well as nature and cost of appraisal(s). Attach separate sheet if necessary.	Please refer to 'Huber Cisco References' under the Response Attachments tab.
11	STOCKING	ARE YOU A STOCKING VENDOR? PROVIDE INFORMATION REGARDING INVENTORY KEPT IN STOCK AND INVENTORY AVAILABILITY.	Huber & Associates is not a stocking vendor.
12	CISCO GLOBAL LIST PRICE	PROVIDE THE WEBSITE LINK USED TO OBTAIN THE CISCO GLOBAL LIST PRICE	To access the Cisco Global Price List, users will need to access the link below and sign in with an existing CCO ID. If the user does not have an existing CCO ID, they can work with Huber & Associates to obtain a CCO ID. Upon logging into the Cisco Commerce Workspace, users can access the Cisco Global Price List by selecting, "List Price Catalog" from under the "Quick Links" heading: https://www.cisco.com/go/commerceworkspac
13	INVOICES	Invoices received by the successful bidder will show the CISCO Global list price along with the agreed to discount. INDICATE IF YOU AGREE	Upon request, Huber & Associates can include the CISCO Global List Price, along with the agreed to discount, on invoices.
14	EVALUATION	Evaluation will be made on but not limited to price, availability, and delivery time. In addition, the successful bidder's ability to respond to emergency needs will be an important component of this evaluation. Please indicate how you respond to emergency needs.	Huber & Associates understands and accepts the City's evaluation requirement. We strongly believes the most important thing Huber & Associates can provide our clients is "Extreme, Always On" customer service. That means that when clients need us, we will be there to deliver. Support for our clients is available 24 x 7. During business hours, our Help Desk is staffed by qualified technicians. After-hours emergency support is available by calling our office, where our after-hours service puts clients in touch with one of our support people.
15	Pre-Sales Support Requirements	The successful bidder will provide pre-sales support at no additional charge to the City, including, but not limited to, current and new product information, product selection, configuration assistance, and product pricing.	Accept Pre-Sales Support Requirements
16	Installation Requirements	If requested by the City, the successful bidder will install the equipment. If the equipment is installed by the City, the successful bidder can provide installation assistance (e.g. telephone support), if requested. Bidder shall provide qualifications for employees who might be performing installation work.	Huber & Associates can provide installation services upon request. These services can be billed as fixed-price projects or hourly at the rates outlined in this response document. Our technicians hold over 200 manufacturer certifications. Huber & Associates is a Cisco Premier Partner with CCNA and CCNP certifications. We hold the Express Foundation Specialization as well as the Advanced Unified Computing Technology Specialization.

17	Help-Desk/Telephone/Electronic Support	The successful bidder will provide support services, and help desk, 24/7 telephone support and additional support services such as 24-hour per day, seven-day per week E-mail and web portal access.	Huber & Associates will facilitate Cisco Warranty and SMARTnet Maintenance. Your Cisco Service Contract entitles you to a wide variety of information and services. The level of access that is available is based upon the specific type of SMARTnet Maintenance Agreement that you have with Cisco. Huber & Associates has resources available to help if entitlement issues arise. Support for our clients is available 24 x 7. During business hours, our Help Desk is staffed by qualified technicians. After-hours emergency support is available by calling our offices, where our after-hours service puts clients in touch with one of our support people.
18	Warranty Requirements	So you agree to honor all warranties offered by CISCO?	Accept Warranty Requirements
19	Reporting Requirements	Bidder will provide a listing of products and services ordered by department and date and a report notifying the City of Columbia of expiration of warranty and maintenance agreements 90 days prior to the expiration of said warranties and maintenance agreements and as requested.	Accept Reporting Requirements
20	Substitutions	No item that has been ordered by the City using this contract shall be substituted without prior written approval. The City reserves the right to accept or reject any proposed substitute offered. The City shall be the final authority as to acceptability of requested substitutions.	Accept substitutions acknowledgement
21	Maintenance Requirements	<p>Bidder will provide direct access to Cisco's various levels of service provided directly by Cisco's maintenance technicians.</p> <p>Bidder will provide Cisco Smartnet and/or other appropriate maintenance solution to provide on-site hardware and software maintenance services in accordance with Cisco's coverage areas within the City of Columbia (both during and after the warranty). Software maintenance will include software fixes, patches, upgrades and new releases as available in the Cisco software maintenance offerings. Cisco technicians will provide Cisco Smartnet. The successful bidder, with Cisco providing assistance when needed, will provide the bidder's maintenance package. The City of Columbia shall choose which, if any, maintenance coverage best meets their needs.</p> <p>Bidder will provide advanced parts replacement not involving on-site personnel.</p> <p>Callback response to maintenance calls will be made within thirty (30) minutes of receiving the call.</p> <p>The City of Columbia may cancel maintenance on any or all of the item(s) with 30 days prior written notice to the successful bidder.</p> <p>Any warranty period maintenance, including parts and labor, will be performed by Cisco authorized service organizations. The successful bidder will be responsible for notifying the Cisco authorized service organization in the</p>	<p>Huber & Associates will facilitate Cisco Warranty and SMARTnet Maintenance. Your Cisco Service Contract entitles you to a wide variety of information and services. Maintenance terms and conditions are based upon the specific type of SMARTnet Maintenance Agreement that you have with Cisco. The City of Columbia is responsible for placing Smartnet service calls to Cisco's toll-free number. Huber & Associates is available to assist with any service call entitlement issues that may arise. Reference the attached document for opening a case with Cisco's Technical Assistance Center (TAC).</p>

event maintenance is required during the warranty period.

Bidder will maintain a toll-free number to report problems and request maintenance.

List your maintenance and warranty procedures.

22 Mandatory Networking Products

Bidder will provide the full line of the following Cisco products:
-Routers
-Switches
-Telephony products
-Security products
-Servers
-Network management products
-Software
-Cables, connectors and supplies

Huber & Associates will provide the full line of Cisco products.

23 Contract Information

The City of Columbia is eligible to purchase off the State of Missouri Contract C210033001 but opts to pursue a contract more tailored to our needs. Bidders need not bid if you are unable to compete with this existing contract, <http://www.oa.mo.gov/purch/contracts/index.htm>

Huber & Associates is offering a competitive proposal. With our headquarters conveniently located in Jefferson City, Missouri, Huber & Associates can provide local resources for pre-sales, installation, and technical support.

24 General Contractual Requirements

Bidder will provide Cisco telecommunications and data networking products, including pre-sales support, professional services, and maintenance for the City of Columbia in accordance with the terms and conditions defined herein. In addition, the successful bidder will provide their maintenance solution for Cisco products for hardware and software products.

Accept General Contractual Requirements

Bidder will be authorized to sell and service Cisco products.

All products provided are new and unused. Used, re-manufactured, or refurbished equipment is not available through this contract.

All equipment, accessories, and services provided by the successful bidder will be furnished and performed in accordance with best-established practices and standards recognized by the industry and will adhere to all applicable codes and regulations.

Bidder is responsible for replacing any item received in damaged condition at no cost to the City of Columbia. This includes all shipping costs for returning non-functional items to bidder for replacement.

25 Pricing

Pricing shall be based off of Cisco's global price list less the discount offered for the applicable products/services to the City of Columbia, effective the day the purchase order is mailed or faxed to successful bidder.

Accept Pricing

Line Items

#	Qty	UOM	Description	Response
1	1	EA	CISCO HARDWARE AND SOFTWARE, INDICATE YOUR PERCENTAGE DISCOUNT FROM CISCO GLOBAL PRICE LIST	42.00%

Item Notes:

Supplier Notes:

2	1	EA	CISCO PROVIDED HARDWARE AND SOFTWARE MAINTENANCE (SMARTNET), HELP DESK/TELEPHONE/ELECTRONIC SUPPORT SERVICES PROVIDED ON AN ANNUAL BASIS AND PAID ANNUALLY, INDICATE YOUR PERCENTAGE DISCOUNT FROM CISCO GLOBAL PRICE LIST	20.00%
---	---	----	--	--------

Item Notes:

Supplier Notes: The percentage discount from Cisco Global Price List for SMARTnet Takeovers is 18%. Huber & Associates' Maintenance Team offers a Best in Class Service for tracking SMARTnet Coverage and providing Renewal Notices.

Item Attributes: Please review the following and respond where necessary

#	Name	Note	Response
1	Call Center Support	Indicate the location of the call center for support. The City of Columbia has a preference for a call center located in the United States.	City of Columbia can contact the Cisco USA-based Support Center for Warranty and SMARTnet-related issues. Please see the attached document 'Opening a Case with TAC' for details. For entitlement issues or support through Huber & Associates, you can contact our home office in Jefferson City, Missouri.

3	1	EA	CISCO PROVIDED HARDWARE AND SOFTWARE MAINTENANCE (SMARTNET), HELP DESK/TELEPHONE/ELECTRONIC SUPPORT SERVICES PROVIDED ON AN ANNUAL BASIS AND PAID MONTHLY, INDICATE YOUR PERCENTAGE DISCOUNT FROM CISCO GLOBAL PRICE LIST	No Bid
---	---	----	---	--------

Item Notes:

Supplier Notes:

4	1	EA	INSTALLATION PROVIDED BY CISCO, INDICATE YOUR PERCENTAGE DISCOUNT FROM CISCO GLOBAL PRICE LIST	0.00%
---	---	----	--	-------

Item Notes:

Supplier Notes: Cisco-provided installation is dependent upon the Cisco product category and scope of work. For an estimate of Cisco-provided installation services, the City of Columbia should work with the Cisco Account Manager and Huber & Associates.

5 1 EA INSTALLATION PROVIDED BY SUCESSFUL BIDDER OR SUBCONTRACTOR'S SERVICE ORGANIZATION. INDICATE YOUR HOURLY RATE. \$150.00

Item Notes:

Supplier Notes: Installation services will be billed, as performed, at Huber & Associates' current hourly rate of \$150/hour (M-F, 8-5) and \$225/hour (after-hours, weekends, & holidays.) Fixed fee project services are also available, upon request.

Item Attributes: Please review the following and respond where necessary

#	Name	Note	Response
1	BILLING INCREMENTS	INDICATE THE BILLING INCREMENTS PER HOUR (EXAMPLE: 15 MIN, 30 MIN, ETC).	15 minutes
2	MINIMUM SERVICE CHARGE	INDICATE IF THERE IS A MINIMUM SERVICE CHARGE.	1 hour

6 1 EA BIDDER IS INVITED TO OFFER ALTERNATE MAINTENANCE PLAN FOR THE CITY TO CONSIDER. PROVIDE THE COST OF THE MAINTENANCE PLAN. \$0.00

Item Notes: AN ATTACHMENT MUST BE SUBMITTED OUTLINING THE DETAILS OF THE MAINTENANCE PLAN.

Supplier Notes: Huber & Associates provides a proactive monitoring and support service called Huber Advantage that would complement Cisco's maintenance service (SMARTnet). More information on Huber Advantage (including pricing) is available upon request.

Response Total: \$150.00

Opening a Case with TAC

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, Cisco Technical Support provides 24-hour-a-day, award-winning technical assistance. The Cisco Technical Support Website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website remains available 24 hours a day, 365 days a year at this URL:

<http://www.cisco.com/techsupport>

Using the online TAC Service Request Tool represents the fastest way to open S3 and S4 service requests. (S3 and S4 service requests specify those requests in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool automatically provides recommended solutions. If your issue is not resolved by using the recommended resources, your service request will get assigned to a Cisco TAC engineer. Find the TAC Service Request Tool at this URL:

<http://www.cisco.com/techsupport/servicerequest>

For S1 or S2 service requests or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests represent those in which your production network is down or severely degraded.) Cisco TAC engineers get assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

USA: 1 800 553 2447

For a complete list of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/techsupport/contacts>



Huber & Associates / Cisco Relationship

Huber & Associates facilitates Cisco warranty and SMARTnet (Maintenance) coverage and assists with all entitlement issues. It is Cisco's direct responsibility to honor all warranties and provide services within SMARTnet agreements.

Huber & Associates Standard Terms & Conditions

The following terms and conditions will apply to the performance of the services ("Services") described in any attached Statement of Work ("SOW") between City of Columbia and Huber.

1. Payment. Unless otherwise noted in the SOW, Services invoices will be issued monthly, and payment is due upon receipt. Customer shall be responsible for the payment of federal, state and local taxes due in connection with the performance of the Services, except for corporate income taxes imposed on Huber & Associates. Interest may be charged on past due amounts at the rate of 1.5% per month or the maximum interest rate legally permissible, whichever is less.

2. Change Orders. Any changes, additions, deletions or modifications to an executed SOW may affect the schedule for the Services and/or associated fees. Any such changes or modifications to the SOW of any nature shall be made in writing and be authorized by both parties prior to the commencement of any such changes, additions, deletions, or modifications to the SOW.

3. Warranty

Huber & Associates warrants that it will perform the Services using reasonable care and skill and in a workmanlike manner consistent with industry standards.

Except as expressly provided herein, Huber & Associates makes no warranty of any kind, written or oral, statutory, express or implied, with respect to this Agreement or any Services or Products, including without limitation, any implied warranties of merchantability, fitness for a particular purpose and non-infringement.

4. Confidential Information

(a) "Confidential Information" means all information disclosed by one party to the other party, whether in writing, machine-readable form, or orally, and designated by the disclosing party as confidential, including but not limited to, source code, trade secrets, clients, vendors, finances and other business information.

(b) The parties acknowledge that, in the course of Huber & Associates' performance of the Services under this Agreement, either party may have access to the Confidential Information of the other party. Both parties shall treat such Confidential Information as confidential and use the same degree of care as it employs in the protection of its own confidential information, but in no event less than a reasonable degree of care. Both parties will only use the Confidential Information in connection with their business dealings with each other, and shall disclose Confidential Information only to employees or contractors having a need to know, provided such employee or contractor agrees to comply with the terms within this Section.

(c) Information shall not be subject to these terms if: i) it is in the public domain at the time of disclosure, or enters the public domain without breach of this Agreement; ii) it is known to the receiving party prior to the disclosure, or it is independently developed by the receiving party; iii) it is obtained by the receiving party in good faith from a third party not under obligation of secrecy to the disclosing party;

or iv) it is the subject of a court or government agency order to disclose, provided receiving party gives prompt notice to the disclosing party to allow the disclosing party to contest such order.

5. Non-solicitation of Huber & Associates Employees. During the term of this Agreement and for a period of one (1) year following the termination of this Agreement for any reason whatsoever, Customer agrees not to solicit the employment of any Huber & Associates employees, contractors, or agents that provided Services to Customer under this Agreement within the preceding one (1) year period without the express written permission of Huber & Associates.

6. Relationship of the Parties. Huber & Associates is an independent contractor in the performance of the Services under this Agreement. Nothing in this Agreement or any SOW shall be deemed to create an employment, partnership or joint venture relationship between Customer and Huber & Associates or between Customer and any Huber & Associates Employee.

7. Termination. Either party may terminate this Agreement without cause at any time with at least thirty (30) days prior written notice. In addition, either party may terminate this Agreement immediately on written notice of termination to the other party in the event that i) the other party breaches this Agreement and fails to cure such breach within thirty (30) days after receipt of written notice of breach, or ii) the other party becomes subject to a proceeding under any federal or state bankruptcy or insolvency laws which proceeding is not dismissed or stayed within thirty (30) days. In the event of a termination of this Agreement, Customer shall pay Huber & Associates for all Services performed through the date of termination and reimburse Huber & Associates for all expenses incurred (including cancellation charges, if stated in a SOW).

8. Excusable Delay. Any failure or delay by either party in performing its obligations under this Agreement shall be excused to the extent that such failure or delay is caused by conditions beyond its reasonable control, including without limitation Acts of God, accidents, labor disputes, acts of civil or military authorities or scheduling delays or delays in providing necessary resources by the other party or the other party's third party contractors.

9. Limitation of Liability. In no event shall Huber & Associates be liable to Customer or any other person or entity for any special, indirect, punitive, incidental, or consequential damages whatsoever arising out of or related to this agreement or any Products or Services, including without limitation loss of profits, injuries to persons or property, loss of use of property, lost profits, loss or damage to data or records or damages for which Customer may be liable to other persons or entities, even if Huber & Associates has been advised of the possibility of such damages or cost of procurement of substitute goods, technology, or services. Huber & Associates' maximum aggregate liability under this Agreement shall not exceed the amount of payments actually made by Customer to Huber & Associates under the applicable SOW giving rise to such claim.

10. Miscellaneous

(a) Subcontracts/Assignment. Both parties may delegate any or all of their duties to subcontractors, subsidiaries or parent or affiliated companies, provided that both parties will remain liable for their respective duties. Neither party may assign or otherwise transfer its rights under this Agreement except with the prior written consent of the other party, except however, either party may assign this Agreement to a purchaser of all of the stock, the entire business or substantially all of the assets of the related business unit of such party who expressly assumes all obligations and liabilities of such party hereunder.

(b) Huber & Associates, Inc. shall retain rights, title and interest in the materials delivered in accordance with this Statement of Work.

(c) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Missouri, without regard to the principles of conflict of laws. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to this Agreement.

Huber & Associates' Overview



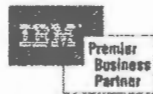
- | | |
|--|--|
| <ul style="list-style-type: none"> • Founded in 1986 • Privately held, Missouri-Certified Woman-owned Business Enterprise (WBE) • Headquartered in Jefferson City, MO, with a satellite office in Springfield and remote sites in Kansas City, St. Louis, South Carolina, and Kansas • 70+ Employees • Nationwide network of certified technical and sales/support specialists • Valued IBM Business Partner since 1986; have maintained Premier Level status since 1991 | <ul style="list-style-type: none"> • Microsoft Gold Certified Partner • VMware Partner • Cisco Premier Partner • Platform support for IBM Power System (and p, System x, BladeCenter, IBM Storage • Total Solutions: From planning and design, to implementation, ongoing support, and customized training • IBM Business Partner Innovation Center (BPIC) – solution demonstrations, proof of concept testing, educational events • Co-Location / Disaster Recovery Center • Managed Services / NOC |
|--|--|

Huber & Associates is a **Missouri-incorporated full-service Information Technology and Managed Services provider** headquartered in Jefferson City, Missouri. We have a sub-office in Springfield; remote sites in Columbia, Kansas City, and St. Louis; and sales professionals, technical consultants, and business partners positioned in other locations across the country to support our global community.

In business since 1986, Huber & Associates has enjoyed healthy growth over the last 28 years, expanding from two employees to over 70 employees, largely due to customer references. We focus on delivering high-quality technical solutions and services, and we invest in skills, technologies and program offerings to ensure that the advice we give, and the products, solutions, and value added services we offer are of the highest quality. Our sales and technical consultants, who hold over 200 manufacturer certifications with IBM, CISCO, and Microsoft, have proven skills in creative problem solving, innovative services, and industry-leading technologies to help our clients achieve success.



Huber & Associates is a **woman-owned business enterprise (WBE)** which helps with many of our clients' diversity spend initiatives. We are also an **IBM Premier Business Partner, Microsoft Gold Partner, Cisco Premier Certified Partner, and VMware Partner**, so we have access to these partners' vast sales, support, and implementation teams, as needed. When our partners and clients do business with us, they not only gain access to the wealth of expertise available at Huber & Associates, but also to the resources of these other industry-leading experts. Huber & Associates has been very successful in developing custom, best-in-class solutions for our clients by not trying to be the expert in all areas. Instead, we team with partners like these who are specialists in their field to give our clients exactly what they need.



Huber & Associates offers a full complement of services across platforms and operating systems, with a focus on IBM Power Systems p and i; System x; BladeCenter; Storage; Printers; i5/OS; AIX; Windows; and Linux:

<p>Systems & Storage Implementation</p> <ul style="list-style-type: none"> • Sizing/configuration/installation • Hardware/OS upgrades and migrations • Software installation • System management and administration • Performance tuning/capacity planning • Health checks • Disk and tape storage integration • Site preparation <p>Server & Storage Simplification</p> <ul style="list-style-type: none"> • Assessment services • Consolidation/optimization/virtualization • Clustering • Logical partitioning <p>Computer Room Design, Move, & Building</p> <ul style="list-style-type: none"> • Office wiring • Infrastructure design • Energy management <p>Networking</p> <ul style="list-style-type: none"> • Network analysis and design • Network implementation • Switches and routers • LAN/WAN solutions 	<p>Data Protection</p> <ul style="list-style-type: none"> • Disaster recovery (DR) • High availability • Backup and recovery <p>Security</p> <ul style="list-style-type: none"> • Security auditing • Security consulting • Security design and implementation • Firewall policy review • Anti-Virus and Anti-Spam • Intrusion detection/prevention <p>Custom Software Development</p> <ul style="list-style-type: none"> • Server-based applications • Web and mobile applications • Mobile phone applications • Database design • Legacy migrations <p>Domain Experience</p> <ul style="list-style-type: none"> • Finance and Accounting • Public Safety • Point of Sale • Workflow Automation • B2B and B2C Systems • Data Mining • Data Interfaces • Kiosk Web Browser 	<p>Collaborative Processes</p> <ul style="list-style-type: none"> • Lotus Notes • Lotus Messaging & Conferencing • Microsoft Exchange • Active Directory • SharePoint <p>IBM Hardware & Software Asset Mgmt.</p> <ul style="list-style-type: none"> • Support options that best match operational and budget requirements • Advance notice of renewal dates • Asset tracking <p>Huber Advantage</p> <ul style="list-style-type: none"> • Monitoring of Networks, Systems, and Applications • Help Desk • Web site hosting • Hosted disaster recovery • Remote backups • Offsite tape storage • Staff augmentation • "On Demand" services <p>Enterpol Solutions for Public Safety</p> <ul style="list-style-type: none"> • Computer Aided Dispatch (CAD) • Records Mgmt. System (RMS) • Jail Mgmt. System (JMS) <p>Project Management</p>
--	--	--



We have the breadth and depth of services and expertise to solve virtually any business or infrastructure problem. One of our greatest strengths is the ability to leverage and integrate multi-vendor hardware and software with our services to architect and deploy scalable solutions to meet client needs for security, privacy, continuity, recovery, availability, regulatory compliance, risk management and mitigation.

Business Nature & Structure of Huber & Associates:

Human Resources:

Huber & Associates has over 75 employees divided into seven departments consisting of three overlay departments: Sales, Marketing, and Accounting; and four primary services departments: Technical Services, Systems Engineering, Application Development, and Enterpol.

-  **HUBER advantage**
Comprehensive Managed Services Our **Technical Services** department specializes in networking, solutions involving Intel servers, and providing remote support through our **Huber Advantage** Managed Services offerings. This team provides support which allows many of our clients to avoid hiring their own IT staff.
- Our **Systems Engineering** department provides support for the IBM Power System platforms. Support includes remote monitoring, installations, migrations, and problem determination/troubleshooting.
- Our **Application Development** department maintains a highly qualified team of application developers dedicated to development and support of government, public safety and other applications. Huber & Associates has developed a number of tools for government clients, helping them contain costs, improve performance, and serve the public better.
- Our **Enterpol** department develops and supports public safety applications, primarily for police and sheriff's offices in local government. Enterpol has over 100 installations across the United States and Canada

Facilities, Supplies, and Infrastructure:

Huber & Associates not only has the personnel required to support our clients, but also has the facilities, systems and infrastructure required to provide support.

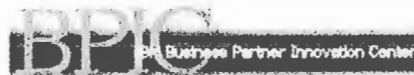


Since our company's beginning in 1986, we have invested in the same systems that our clients use to allow us to provide support and training on those systems. In the summer of 2004, Huber & Associates moved our headquarters into a newly renovated facility in Jefferson City, Missouri, containing almost 20,000 square feet of office space, classroom space, and raised-floor computer room space.

Huber & Associates established a DR facility at this headquarters site, offering many of our clients alternative, security-rich facilities for use in the event of an unplanned outage. The lower level of our building has been dedicated to hosting and disaster recovery services, complete with a raised floor computer room, conference space, and workspace. All customer access to the secured, machine room data center is ESCORTED ONLY.

Our Class 1, fireproof, earthquake-resistant, and tornado-resistant facility includes the following:

- 150kW backup diesel generator
- Weekly fully loaded generator testing
- Redundant heating and air conditioning
- Dual factor electronic access for exterior doors and Data Center
- 7 x 24 security
- 24-Hour video surveillance
- 7 x 24 fire, smoke, temperature, & medical emergency monitoring
- Disaster protection, including fire, earthquake, & flood suppression



Huber & Associates also operates an IBM Business Partner Innovation Center, one of only a limited number of IBM-approved centers in the country. Featuring the latest server and storage technology, the BPIC allows Huber & Associates to target solutions and services that are in high demand by today's government and commercial clients, such as server consolidation, storage virtualization, and business continuity and disaster recovery.

Financial:

Throughout our 28 years of business, Huber & Associates has never maintained any long-term debt. We have substantial lines of credit (totaling over 4.5 million dollars) with our suppliers such as Arrow Electronics, Ingram Micro, Tech Data, and IBM. We also have an excellent relationship with several local banks. You



may contact Mr. David Myer at Central Bank (573-634-1234) or Mr. Jim Vossen at Hawthorn Bank (573-761-6100) for references.



'Huber - Flyers

HUBER & ASSOCIATES

Your technology partner

WHO WE ARE ...

In business since 1986, Huber & Associates has 23+ years experience tailoring information technology solutions to meet our clients' specialized requirements. To achieve our position as an innovative, one-stop technology solution provider, Huber & Associates has built a consulting, sales, and services organization that provides best-of-breed technologies from across a full spectrum of information technology, including: hardware, software, storage, networking, and security. Then, we back it up with post-sales support, giving you the freedom you need to manage your business instead of your technology. Huber & Associates' top priority is complete customer satisfaction through 24 x 7 accessibility, so you can be assured you'll get exactly what you need, when you need it. We call it extreme, "always on" customer service, an attitude that defines and permeates our company culture and enables us to provide what many clients have called the most accessible, responsible technology support in the industry.

AT A GLANCE ...

- Founded in 1986
- Privately held, Missouri-certified Woman-owned Business Enterprise (WBE)
- Headquartered in Jefferson City, MO, with a sub-office in Springfield and remote sites in Kansas City, St. Louis, and Columbia, MO
- 30+ Employees
- Nationwide network of certified technical and sales/support specialists
- Valued IBM Business Partner since 1986; have maintained Premier Level status since 1991
- Only IBM Business Partner who has earned the IBM State and Local Government Value Add Enhancement for Missouri
- Microsoft Gold Partner
- VMware Partner
- Wyse Thin Client Re-Seller
- Platform support for IBM Power Systems i & p, System x, BladeCenter, IBM Storage
- Total solutions: From planning and design to implementation, ongoing support, and customized training
- IBM Authorized Training Provider (IATP) - receive classes locally from certified instructors
- IBM Business Partner Innovation Center (BPIC) - solution demos, Proof of Concept testing, educational events
- Class 1/Class A High Availability/Disaster Recovery facility

Extreme *always on* customer service

HUBER & ASSOCIATES, INC. • 1400 BEECHWOOD DRIVE • JEFFERSON CITY, MO 65109
PHONE: (878) 434-5000 • FAX: (878) 434-5600
EMAIL: INFO@HUBERASSOCIATES.COM

Double Click on Above Image to Open

HUBER & ASSOCIATES

Your technology partner



Huber & Associates is a full service information technology solutions provider that helps you solve your operational and business challenges through innovative technology solutions. To that end, we provide a wide range of industry-leading hardware and software products, and back them up with flexible, client-centric support services. Our top priority is complete customer satisfaction through 24/7 accessibility, so you can be assured you'll get exactly what you need, when you need it. We call it extreme, "always on" customer service. It is an attitude that defines and permeates our company culture, and it is what enables us to provide what many clients have called the most accessible, responsive technology support in the industry.

At Huber & Associates, we understand that each and every technology problem presents its own unique set of challenges. So instead of approaching every problem with a canned, one-size-fits-all process, we begin by truly understanding your business and cultivating relationships. We don't just sell the "latest thing," but rather we employ creativity to develop the most appropriate technology solution that will meet your specific business needs - from simple configurations to complex solutions.

In business since 1986, Huber & Associates has 20 years of experience helping organizations in public and private sectors solve business problems through technology solutions. We know that when you invest in technology, you want a partner you can count on to help make your investment pay off over the long term. Huber & Associates combines the knowledge, experience and resources you'd expect from an established company with a nimble flexibility that can make things happen quickly. Our diverse client base and strategic partnerships give us a global reach while our responsiveness and accessibility give you the intimate, local presence you need.

Huber & Associates' headquarters is located in Jefferson City, Missouri, with a sub office in Springfield and remote sites in Kansas City, St. Louis, and Columbia. We also have sales professionals, technical consultants, and business partners strategically positioned in field sites across the country to support our global community.

Programming

- RPG
- RPG ISE
- COBOL
- CL
- Visual Basic
- Lotus Notes / Lotus Scripts
- JAVA

E-Business

- Web Site Design
- Development/Management
- Data Warehousing
- ERP Resources
- Custom Storefronts
- Web Development
- WebSphere
- Travel

LAN/WAN

- Co-located Business Partner
- Configuration and Setup
- Firewall/Network Security
- Ethernet/Telnet Ring
- Power UPS/UPSes
- Frame Relay/Point-to-Point

Enterprise Solutions for Public Safety

- Computer Aided Dispatch with E911 interface, UCR & MBRIS compliant Records Management System and complete Job Management System for any size facility

Linux and IBM eServers

- Linux Server configuration and setup, Networking - File and Print sharing Web services
- Mail, Calendaring & Scheduling applications (IBM Lotus Domino/Notes) Database Servers (IBM DB2) Network Management

Systems Integration

- Series/AS400
- pSeries/IX
- sSeries (Linux and Windows)
- Logical Partitioning
- Storage (SAN)

Domino/Lotus Notes

- Setup/Config./Administration
- Lotus Scripts/Java Script
- Custom Applications
- Website Development/Admin.
- E-Commerce Applications
- Secure/SSL Applications
- WebSphere
- Travel



Always on customer service

Double Click on Above Image to Open

01-23-14

Huber & Associates' Overview

Page 7

Missouri Sheriff's Association

Kevin Merritt, Grants Coordinator

(573) 301-7728

Nature of Business:

Huber & Associates worked with Missouri Sheriff's Association to implement a Statewide Network for Conceal and Carry Permits (CCP). Huber & Associates installed Redundant Cisco ASA 5545-X Firewalls with ISP Failover, Hardware Failover, and IPS, along with Redundant Cisco 3850 Switches as part of the Core Network for the CCP Database. Huber & Associates also provided installation of the Cisco AnyConnect Clients for Remote Access on the CCP Workstations at each County, as well as LAN to LAN VPN Tunnels at select counties. As part of the ongoing project, Huber & Associates now provides ongoing Network Support to Missouri Sheriffs Association. In addition, Huber & Associates also worked with Missouri Sheriff's Association to take inventory of existing remote Cisco Firewalls that had been sold by another reseller and fallen off of Maintenance, to get them back on Cisco SMARTnet coverage.

Cost Appraisal:

\$65,000 – Services

\$125,000 – Hardware, Software, & SMARTnet

Mid America Bank

Lisa McKim, Vice President, Director of Information Technology

(573) 635-0019

Nature of Business:

Huber & Associates worked with Mid America Bank to design and implement a High Bandwidth Solution for Branch Communication. Huber and Associates installed 2900 Series Routers at the Main Site and Branch Offices, and utilized Site to Site VPNs with Encryption over a Broadband Wireless Service. Huber & Associates also Implemented QoS and Traffic Shaping on the Routers for Branch Voice Traffic running over the connection.

Cost Appraisal:

\$12,500 – Services

\$15,000 – Hardware & SMARTnet

Legends Bank

Karen Luebbering, Network Administrator

(573) 417-0291

Nature of Business:

Huber & Associates assisted Legends Bank in an emergency when their unsupported firewall, which was installed by another reseller, failed. Huber & Associates overnighted a new Cisco ASA5512-X Firewall with IPS and a new Cisco 2900 Series Router to help get Legends Bank up and running. Huber & Associates worked with Legends Bank and their multiple vendors over the course of a week, to rebuild their entire network, and to insure that things were again running as normal.

Cost Appraisal:

\$6,000 – Services

\$10,000 – Hardware & SMARTnet

Zimmer Radio Group

Jeff Studley, Technician

(573) 875-1099

Nature of Business:

Huber & Associates worked with Zimmer Radio Group to configure an ASA Firewall at their Main Location with ISP Failover to a Secondary IP Address. Huber & Associates also worked with Zimmer Radio Group to Configure ASA Firewalls at their remote locations with VPN Tunnels to the Main Location with Automatic Failover to the Secondary IP Address. In addition, Huber & Associates also sold Cisco Meraki Wireless Equipment to Zimmer Radio Group, and is currently working with them on the Implementation.

Cost Appraisal:

\$6,000 – Services

\$6,000 – Hardware & SMARTnet

CERTIFIED COPY OF ORDER

STATE OF MISSOURI

April Session of the April Adjourned

Term. 20 16

County of Boone

} ea.

In the County Commission of said county, on the

28th

day of

April

20

16

the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby approve the utilization of the Missouri Department of Transportation General Services Contract 3-140214RJ to purchase six (6) 13 foot Henderson Spreader Stands from Henderson Truck Equipment.

The terms of the Cooperative Contract are stipulated in the attached Purchase Agreement. It is further ordered the Presiding Commissioner is hereby authorized to sign said Purchase Agreement.

Done this 28th day of April, 2016.

ATTEST:

Wendy S. Noren
Wendy S. Noren
Clerk of the County Commission

Daniel K. Atwill
Daniel K. Atwill
Presiding Commissioner

Absent
Karen M. Miller
District I Commissioner

Janet M. Thompson
Janet M. Thompson
District II Commissioner

206-2016

Boone County Purchasing

Phil Fichter
Buyer



613 E. Ash Street, Room 113
Columbia, MO 65201
Phone: (573) 886-4392
Fax: (573) 886-4390

MEMORANDUM

TO: Boone County Commission
FROM: Phil Fichter
DATE: April 25, 2016
RE: Cooperative Contract: **Missouri Department of Transportation General Services (MODOT) Contract 3-140214RJ – Spreader Stands**

Public Works requests permission to utilize the **Missouri Department of Transportation General Services (MODOT) Contract 3-140214RJ** to purchase six (6) 13 foot Henderson Spreader Stands.

Total cost of contract is \$18,528 and will be paid from department 2040 – PW Maintenance Operations, account 91300 – Machinery & Equipment. This is a new purchase; there will be no disposal form for replacement machinery or equipment. A Budgeted Revision was previously made to address this purchase.

cc: Greg Edington, PW
Contract File

**PURCHASE AGREEMENT
FOR
Spreader Stands**

THIS AGREEMENT dated the 28th day of April 2016 is made between Boone County, Missouri, a political subdivision of the State of Missouri through the Boone County Commission, herein "County" and **Henderson Truck Equipment - Missouri** herein "Vendor."

IN CONSIDERATION of the parties performance of the respective obligations contained herein, the parties agree as follows:

1. **Contract Documents** - This agreement shall consist of this Purchase Agreement for **Spreader Stands** in compliance with all bid specifications and any addendum issued for the **Missouri Department of Transportation General Services (MODOT) Contract 3-140214RJ, Henderson Truck Equipment - Missouri** quote dated **January 25, 2016** and Boone County Standard Terms and Conditions. All such documents shall constitute the contract documents which are incorporated herein by reference. Service or product data, specification and literature submitted with bid response may be permanently maintained in the County Purchasing Office bid file for this bid if not attached. In the event of conflict between any of the foregoing documents, this Purchase Agreement, the **MODOT Contract 3-140214RJ** and Boone County Standard Terms and Conditions shall prevail and control over the vendor's bid response.

2. **Purchase** - The County agrees to purchase from the Vendor and the Vendor agrees to supply the County with new **spreader stands** as follows:

<u>Item</u>	<u>Quantity</u>	<u>Cost</u>	<u>Extended Cost</u>
13 foot Henderson HHS-13 Stand	6	\$1,937	\$11,622
Galvanized Option	6	\$1,001	\$6,006
Freight (all 6 delivered at same time)	1	\$900	\$900
Grand Total			\$18,528

3. **Delivery** - Vendor agrees to deliver spreader stands, complete with all equipment quoted and installed, ready to put in service, **within 90 calendar days** after receipt of order. Delivery shall be FOB Destination – with freight charges fully included and prepaid. The seller pays and bears the freight charges. Delivery address shall be: Boone County Public Works, Attn: Greg Edington, 5551 Tom Bass Rd., Columbia, MO 65201.

4. **Billing and Payment** - All billing shall be invoiced to the Boone County Public Works Department and billings may only include the prices listed in the vendor's bid response. No additional fees for paper work processing, labor, or taxes shall be included as additional charges in excess of the charges in the Vendor's bid response to the specifications. The County agrees to pay all invoices within thirty days of receipt. In the event of a billing dispute, the County reserves the right to withhold payment on the disputed amount; in the event the billing dispute is resolved in favor of the Vendor, the County agrees to pay interest at a rate of 9% per annum on disputed amounts withheld commencing from the last date that payment was due.

5. **Binding Effect** - This agreement shall be binding upon the parties hereto and their successors and assigns for so long as this agreement remains in full force and effect.

6. **Termination** - This agreement may be terminated by the County upon thirty days advance written notice for any of the following reasons or under any of the following circumstances:

- a. County may terminate this agreement due to material breach of any term or condition of this agreement, or
- b. County may terminate this agreement if in the opinion of the Boone County

206-2016

Commission if delivery of products are delayed or products delivered are not in conformity with bidding specifications or variances authorized by County, or
c. If appropriations are not made available and budgeted for any calendar year.

IN WITNESS WHEREOF the parties through their duly authorized representatives have executed this agreement on the day and year first above written.

**HENDERSON TRUCK EQUIPMENT-
MISSOURI**

by Timothy L Brummer
title Sales Rep.

BOONE COUNTY, MISSOURI

by: Boone County Commission
Daniel K. Atwill
Daniel K. Atwill, Presiding Commissioner

APPROVED AS TO FORM:

by: [Signature]
County Counselor

ATTEST:

Wendy S. Noren
Wendy S. Noren, County Clerk

In accordance with RSMo 50.660, I hereby certify that a sufficient unencumbered appropriation balance exists and is available to satisfy the obligation(s) arising from this contract. (Note: Certification of this contract is not required if the terms of this contract do not create a measurable county obligation at this time.)

[Signature]
Signature by ag

4/20/16
Date

2040-91300 - \$18,528

Appropriation Account

Specimen

STANDARD CONTRACT TERMS AND CONDITIONS - BOONE COUNTY, MISSOURI

1. Contractor shall comply with all applicable federal, state, and local laws and failure to do so, in County's sole discretion, shall give County the right to terminate this Contract.
2. Prices shall include all charges for packing, delivery, installation, etc., (unless otherwise specified) to the Boone County Department.
3. The Boone County Commission has the right to accept or reject any part or parts of all bids, to waive technicalities, and to accept the offer the County Commission considers the most advantageous to the County. Boone County reserves the right to award this bid on an item-by-item basis, or an "all or none" basis, whichever is in the best interest of the County. The Purchasing Director reserves the right, when only one bid has been received by the bid closing date, to delay the opening of bids to another date and time in order to revise specifications and/or establish further competition for the commodity or service required. The one (1) bid received will be retained unopened until the new Closing date, or at request of bidder, returned unopened for re-submittal at the new date and time of bid closing.
4. When products or materials of any particular producer or manufacturer are mentioned in our contracts, such products or materials are intended to be descriptive of type or quality and not restricted to those mentioned.
5. Do not include Federal Excise Tax or Sales and Use Taxes in billing, as law exempts the County from them.
6. The delivery date shall be stated in definite terms.
7. The County Commission reserves the right to cancel all or any part of orders if delivery is not made or work is not started as guaranteed. In case of delay, the Contractor must notify the Purchasing Department.
8. In case of default by the Contractor, the County of Boone will procure the articles or services from other sources and hold the Contractor responsible for any excess cost occasioned thereby.
9. Failure to deliver as guaranteed may disqualify Contractor from future bidding.
10. Prices must be as stated in units of quantity specified, and must be firm.
11. The County of Boone, Missouri expressly denies responsibility for, or ownership of any item purchased until same is delivered to the County and is accepted by the County.
12. The County reserves the right to award to one or multiple respondents. The County also reserves the right to not award any item or group of items if the services can be obtained from a state or other governmental entities contract under more favorable terms. The resulting contract will be considered "Non-Exclusive". The County reserves the right to purchase advertising from other vendors.
13. The County, from time to time, uses federal grant funds for the procurement of goods and services. Accordingly, the provider of goods and/or services shall comply with federal laws, rules and regulations applicable to the funds used by the County for said procurement, and contract clauses required by the federal government in such circumstances are incorporated herein by reference. These clauses can generally be found in the Federal Transit Administration's Best Practices Procurement Manual – Appendix A. Any questions regarding the applicability of federal clauses to

a particular bid should be directed to the Purchasing Department prior to bid opening.

14. In the event of a discrepancy between a unit price and an extended line item price, the unit price shall govern.
15. Should an audit of Contractor's invoices during the term of the Agreement, and any renewals thereof, indicate that the County has remitted payment on invoices that constitute an over-charging to the County above the pricing terms agreed to herein, the Contractor shall issue a refund check to the County for any over-charges within 30-days of being notified of the same.
16. **For all titled vehicles and equipment the dealer must use the actual delivery date to the County** on all transfer documents including the Certificate of Origin (COO,) Manufacturer's Statement of Origin (MSO,) Bill of Sale (BOS,) and Application for Title.
17. **Equipment and serial and model numbers** - The contractor is strongly encouraged to include equipment serial and model numbers for all amounts invoiced to the County. If equipment serial and model numbers are not provided on the face of the invoice, such information may be required by the County before issuing payment.



Henderson Truck Equipment-Fulton
400 W. St. Eunice Road
Fulton, MO 65251

Toll Free: 888-360-7483
Office: 573-826-2911

Quote

Date: 01/25/2016
To: Boone County Public Works
By: Tim Bruemmer (573-590-1467)
Re: Spreader Stands

Henderson Truck Equipment-Fulton is pleased to quote the following equipment:

10FT Henderson HSS-10 Spreader Stand Powder Coated MODOT Contract price \$1,717 plus Freight
Galvanized Option MODOT Contract price add \$913

Additional Spreader Stand Options on MODOT Contract

13FT Henderson HSS-13 Spreader Stand Powder Coated MODOT Contract price \$1937 plus Freight
Galvanized Option MODOT Contract price add \$1001

16FT Henderson HSS-16 Spreader Stand Powder Coated MODOT Contract price \$2063 plus Freight
Galvanized Option MODOT Contract price add \$1060

Freight to Boone County add \$250 for 1 and add \$150 for each additional Spreader Stand

Freight Price for 6 Spreader Stands shipped together as 1 Order \$900.00

Price per Unit:	\$1,717.00
Number of Units	1
Extended Price	\$1,717.00
Tax	
Total Quote Price	\$1,717.00

FOB Fulton, MO

Please note the following regarding installation quotes:

A clean truck frame without obstruction is assumed in the pricing of our quote. Re-positioning of air tanks, fuel tanks or other obstacles to the ease of installation may require additional charges. Henderson will notify you before modification if this occurs.

MISSOURI DEPARTMENT OF TRANSPORTATION
GENERAL SERVICES
830 MoDOT Drive
Jefferson City, MO 65109

REQUEST NO.	3-140214RJ
DATE	January 4, 2014
PAGE NO.	1
NO. OF PAGES	54

SEALED BIDS, SUBJECT TO THE ATTACHED CONDITIONS WILL BE RECEIVED AT THIS OFFICE UNTIL

2:00 pm, Local Time, February 14, 2014

AND THEN PUBLICLY OPENED AND READ FOR FURNISHING THE FOLLOWING SUPPLIES OR SERVICES.

BIDS TO BE BASED F.O.B. MISSOURI DEPARTMENT OF TRANSPORTATION

Submit net bid as cash discount stipulations will not be considered
Various MoDOT Locations

DEFINITE DELIVERY DATE SHOULD BE SHOWN. THE BIDDER MUST SIGN AND RETURN BEFORE DATE AND TIME SET FOR OPENING.

BUYER: Rebecca L. Jackson, CPPO, CPPB
BUYER EMAIL:
Rebecca.Jackson@modot.mo.gov

BUYER TELEPHONE: 573-526-7930

SUPPLIES OR SERVICES

DUMP TRUCKS

To establish a contract to furnish "DUMP TRUCKS" with an effective date of Notice to Proceed and ending in one year with the option to renew for five additional one year periods in accordance with the attached pages.

Schedule of Events:

Pre-Bid Conference – January 13, 2014 – 8:30 a.m to 11:30 a.m. at 830 MoDOT Dr, Blue Conference Room, Jefferson City, MO 65109

Pre-Approved Product Request Deadline - January 17, 2014 before 2:00 p.m. local time.

Issuance of Addendum - Anticipated no later than January 24, 2014

Last Day for Vendor Questions – January 28, 2014 no later than 2:00 p.m. local time.

Bids Due – February 14, 2014 no later than 2:00 p.m. local time.

Return sealed bid to the address shown at the top of this page.

(SEE ATTACHED FOR TERMS, CONDITIONS, AND INSTRUCTIONS)

In compliance with the above Request For Bid, and subject to all conditions thereof, the undersigned bidder agrees to furnish and deliver any or all the items on which prices were bid within the timeframe specified herein, after receipt of formal purchase order.

Date: _____
Telephone No.: _____
Fax No.: _____
Federal I.D. No. _____
Email Address: _____

Firm Name: _____
Address: _____
By (Signature): _____
Type/Print Name _____

Is your firm MBE certified? Yes No

Title: _____
Is your firm WBE certified? Yes No



1. INTRODUCTION AND GENERAL INFORMATION

1.1 Introduction:

- 1.1.1 This Request for Bid (RFB) seeks bids from qualified organizations to provide **DUMP TRUCKS** to the Missouri Highways and Transportation Commission (MHTC) and Missouri Department of Transportation (MoDOT). The contract period shall be from the Notice to Proceed for one year with the option to renew for five additional one year periods. Each bid must be in a sealed envelope, be mailed or delivered by courier to the RFB Coordinator at the below listed address, on or before the date and time listed herein for receipt of bids/proposals. All questions regarding the RFB shall be submitted to the RFB Coordinator. **Bids must be returned to the office of the RFB Coordinator no later than 2:00 p.m., Central Time, February 14, 2014.**

RFB COORDINATOR:

Rebecca L. Jackson, CPPO, CPPB

Procurement Manager

Missouri Department of Transportation, General Services

830 MoDOT Drive

(physical address, zip 65109)

P.O. Box 270

(mailing address, zip 65102)

Jefferson City, MO 65109

PHONE: 573-526-7930

FAX: 573-526-1218

EMAIL: Rebecca.Jackson@modot.mo.gov

1.2 General Information:

- 1.2.1 This document constitutes an invitation for competitive, sealed bids for the procurement of **DUMP TRUCKS** as set forth herein.
- 1.2.2 Organization: This RFB is divided into the following parts:
- 1) Introduction and General Information
 - 2) Scope of Work
 - 3) Bid Submission and Evaluation
 - 4) Pricing Page(s)
 - 5) Vendor Information and Preference Certification Form
 - 6) Notice of Cooperative Purchasing
 - 7) Anti-Collusion Statement
 - 8) Terms and Conditions

2. SCOPE OF WORK

2.1 General Requirements:

- 2.1.1 The bidder shall provide **DUMP TRUCKS** on an as needed, if needed basis for the MHTC and MoDOT, in accordance with the provisions and requirements stated herein and at the sole satisfaction of MoDOT.
- 2.1.2 MoDOT reserves the right to obtain “like or similar” products as specified herein from other manufacturers, exclusive of the contract, when use of such products is deemed in the best interest of MoDOT.
- 2.1.3 Unless otherwise specified herein, the Bidder shall furnish all material, labor, facilities, equipment, and supplies necessary to provide the deliverables/services required herein.
- 2.1.4 MoDOT reserves the right to reject any or all bids, and to accept or reject any items thereon, and to waive technicalities. In case of error in the extension of prices in the bid, unit prices will govern.
- 2.1.5 A MoDOT Purchase Order will be issued identifying the truck configuration for all units purchased.
- 2.1.6 The outfitter or installer of all non-chassis manufacturer installed components shall hereafter be referred to as the “Body Builder.”
- 2.1.7 Units shall be designed for material hauling, trailer towing, and operation of hydraulically controlled snow plows and a material spreader.
- 2.1.8 Units shall comply with all vehicle weight, dimension, and safety requirements of the State of Missouri.
- 2.1.9 Units shall be complete with all standard equipment, plus any optional or special equipment to meet the minimum specifications.
- 2.1.10 Bidder must provide all applicable Material Safety Data Sheets (MSDS) and American Society for Testing and Materials (ASTM) documentation.
- 2.1.11 All items not specifically described in the specification, but necessary for the proper and efficient operation of each unit, must be supplied and included in the bid price and described in the bidders response.
- 2.1.12 Each unit must be equipped with all safety components required by the current Federal Motor Vehicle Safety Standards.
- 2.1.13 All units must be electronically governed at a gross speed of 65 miles per hour.
- 2.1.14 Engine idle shutdown timer shall be programmed to shut down engine after 10 minutes of idle time with park brake set. MoDOT shall have the ability to adjust the governed speed intervals.

2.2 Common Requirements:

- 2.2.1 Pre-Approved and/or Approved Equal Acceptance Process:
 - a. Any notation throughout the following specifications that states “**Pre-Approved Equal and/or Equivalent**” requires the bidder to submit a request for acceptance of the item for approval no later than **2:00 p.m., Central Time, January 17, 2014**. All P-Approved requests must be submitted to Rebecca Jackson at the above address. These requests may be in the form of a hard copy, email or facsimile. Bidder is responsible to ensure receipt of any request. Acceptance of the Pre-Approved Equal and/or Equivalent product will be issued in an addendum allowing all bidders the opportunity to bid the same item.
 - b. Any notation of “**Equal or Equivalent**” allows the bidder to submit the substituted item in their bid without pre-approval. MoDOT at its sole discretion will determine if the item submitted is an equivalent resulting in a responsive bid. Items determined not to be an equivalent could render a bidder’s response as non-responsive.

Bidders must identify any time an item included in the bid is an equivalent as required on the pricing page. MoDOT reserves the right to request additional information if required for equivalent determination any time before or after contract award. The following actions may be necessary to evaluate equal and/or equivalent submittals:

- Demonstration of a typical and/or similar same model machine and/or component shall be provided to MoDOT for up to two working days of unimpeded evaluation. A physical use demonstration may be conducted if applicable at a MoDOT Maintenance Facility. Equipment will be operated by MoDOT personnel.
 - Submittal of a contact list including the name, address, and telephone number of other customers using the same equipment within the State of Missouri that can be contacted and a visit arranged upon request.
 - Bidder may be required to facilitate manufacturing facility inspection tours during normal working hours.
 - All costs associated with providing any or all of these items are the sole responsibility of the bidder.
- c. References throughout the bid document requiring MoDOT Representative approval shall mean a request must be submitted in writing to the Central Office General Services Fleet Manager for review, acceptance and approval prior to implementation.

2.2.2 Manuals and Service publications:

- a. A complete hard copy set of Operator Manuals shall be provided with each delivered unit.
- b. On-Line service system access shall be provided to address all major components identified in sections 2.3 through 2.6 below. Technical information provided shall be comparable to those available to dealerships.
- c. At a minimum, engine, emissions, transmission, chassis, electrical system and Anti-Lock Braking System (ABS) diagnostic software must be provided.
- Diagnostic software must be provided at fleet pricing to allow MoDOT to acquire the needed software.
 - Software shall be compatible with the following equipment configurations:
 - Standard Laptop (minimum requirements): Windows 7, Windows Internet Explorer 8 (IE8), 32 bit machine, 4 gig RAM.
 - Standard Windows Tablet (minimum requirements): Windows 8, Windows Internet Explorer 10 (IE10), 2 gig RAM.
- d. Bidder must provide access to on-line parts catalog system, comparable to those available to dealerships, with accessibility for 150 concurrent users. Parts system shall be complete for all OEM-installed components. Catalogs shall be fully illustrated. MoDOT must pre-approve on-line systems.
- e. Bidder must provide one hard copy parts manual per delivered unit for all Body Builder installed components including but not limited to, the hydraulic system, spreader control system, warning light system, material spreaders, and all plows. An on-line version may be substituted in lieu of hard copy. The manual shall meet the following minimum requirements:
- Shall be vehicle identification number (VIN) specific.
 - Shall include make and model of all Body Builder-installed components.
 - Shall include complete, fully illustrated parts listing for all Body Builder-installed components.
 - Each add-on electrical accessory circuit shall have its own circuit diagram, showing the complete power and ground sides, routing, wire color and gauge, pin numbers, switches, breaker or fuse location and/or number, and specific ground point locations.
 - Each add-on air powered accessory circuit shall have its own circuit diagram, showing valve location, air-line color, air-line size, and routing.
 - A complete hydraulic schematic of all accessory circuits, including flow specifications and pressure settings for relief valves on each circuit.
 - For each hydraulic hose installed, the diameter and overall length of the hose, including both fittings, and the type and size of each fitting.
- f. Each delivered unit shall include a factory line sheet listing all chassis component codes as installed by the bidder. An electronic or hard copy line sheet is acceptable. An electronic version must be submitted in a platform or version viewable and readable by MoDOT.
- g. Each delivered unit shall include a comprehensive list of all fluids, lubricants, coolants, etcetera required for the maintenance of the dump truck. This list should be provided in the form of a sticker located in the interior rear of the cab.

- 2.2.3 Finish: Trucks purchased from the resulting contract are for use in roadway maintenance activities including but not limited to snow removal, asphalt maintenance, aggregate material transport, etcetera . Unless otherwise specified, all equipment and all components, with the exception of stainless steel products, shall be thoroughly cleaned and completely finished with a high quality corrosion resistant product. Color shall be DuPont N2065-Yellow. Finish shall be smooth, shiny, and free of runs, overspray, and/or other defects. No bare ferrous metal components, with the exception of stainless steel products, shall be visible on any OEM and/or Body Builder-installed components.
- 2.2.4 Pilot Truck Build and Acceptance: After issuance of the first purchase order, bidder is required to build a pilot truck for use in specification compliance throughout the life of the contract.
- a. Bidder shall complete the cab and chassis within 120 days of PO issuance. Bidder shall notify MoDOT upon completion of the pilot chassis. Bidder may be required, at MoDOT's discretion, to make arrangements for an inspection of the chassis at the point of manufacture. Discrepancies and/or findings of non-compliance will be listed and must be corrected and/or addressed to the satisfaction of the MoDOT Representative before the rest of the chassis are built.
 - b. Within 60 days after receipt of cab and chassis, the Body Builder shall notify MoDOT of the pilot truck completion, including all Body Builder installed components in the proposed locations. Within two weeks of notification, MoDOT shall complete unit inspection. Discrepancies and/or findings of non-compliance will be listed and must be corrected and/or addressed to the satisfaction of the MoDOT Representative before the rest of the trucks are built or outfitted.
 - c. All costs associated with all pilot inspections, including travel, lodging, and food, for six (6) MoDOT employees must be included in the bid price. In the event that multiple reviews are required prior to final approval of the pilot truck, the costs to MoDOT for those trips are the responsibility of the Bidder as well.
 - d. Any manufacturing specification changes during the pilot inspections will be documented and approved by MoDOT and vendor. Changes must be implemented in the manufacture of this vehicle prior to the pre-delivery inspection and any that are not are subject to the pre-delivery inspection liquidated damages.
- 2.2.5 Pre-Delivery Inspections:
- a. The Bidder and/or Body Builder shall do a thorough pre-delivery inspection of each completed truck to include the chassis and all installed components and snow equipment. Inspection shall be customized to reflect snow removal truck requirements, including but not limited to: hydraulic system individual pressure settings, hydraulic controls operation, spreader control system operation, wing plow and underbody scraper operation, dump bed and tailgate operation, tarp system, warning lights, hydraulic hose and electrical wire routing and protection. Inspection results shall be recorded on a pre-printed form, which shall include the last 8 digits of the truck VIN. A copy of the completed inspection form signed and dated by the inspector shall be placed in the left door pocket of each delivered unit.
 - b. MoDOT reserves the right to complete a thorough pre and/or post-delivery inspection of each unit at the final assembly point and/or MoDOT delivery point. This inspection will include the chassis and all installed components and snow equipment. Bidder shall provide a production and planned delivery schedule to accommodate plant inspections and deliveries to districts.
- 2.2.6 Standard Warranty: If any standard retail warranty exceeds the specifications in this section, the standard warranty shall apply. Additionally, MoDOT is interested in value added solutions in relation to administration of a vehicle warranty to ensure units purchased under this contract will be repaired and returned to the roadway as quickly as possible. Such innovative solutions could include more than an in-house warranty program and all bidders are encouraged to submit options for review and evaluation.
- a. Truck Chassis: The chassis manufacturer shall guarantee to furnish all warranty services gratis at franchised dealers within the State of Missouri or other adjoining states.
 - b. Snow Removal Equipment: From the date that MoDOT assigns this equipment to its requesting location, the manufacturer and/or its representative shall provide a no-deductible, all-inclusive warranty (less normal maintenance) for a minimum of two years.
 - c. Body Builder Manufactured and Installed Components: From the date that MoDOT assigns the completed truck to its requesting location, the Body Builder shall provide a no-deductible, all-inclusive warranty (less normal maintenance) guaranteeing the design, material, installation, and workmanship of the completed unit and all installed components for a minimum of two years. The Body Builder shall provide a list of authorized

repair stations that will perform warranty repairs on all Body Builder-installed components on the truck. These stations, shall handle all associated billing directly with the Body Builder.

- d. In-House Warranty: Bidder shall establish and honor an in-house warranty program. This program shall cover the entire truck as delivered, including the chassis and all Body Builder-installed components and snow equipment. The in-house warranty shall remain in effect for the warranty periods stated above. There shall be no minimum price restriction for in-house warranty repairs. Bidder shall reimburse all warranty parts supplied by MoDOT. Warranty repair labor provided by MoDOT shall be reimbursed by bidder. Credit is unacceptable. Bidder shall submit an hourly labor rate based on fair market value with the bid. Bidder is responsible for all shipping costs of any warranty parts whether shipped to or from MoDOT.

2.2.6.1 Extended Warranty Option #1: Bumper to Bumper (all inclusive) - 1 Year including Towing.

2.2.6.2 Extended Warranty Option #2: Bumper to Bumper (all inclusive) - 3 Years including Towing

2.2.6.3 Extended Warranty Option #3: Bumper to Bumper (all inclusive) - 5 Years including Towing.

2.2.7 Training - Operator Training: Bidder shall provide eight (8) hours of Operator training for each location receiving delivered units as shown in Attachment 1. Training shall include but not be limited to identification of all cab, chassis, body and optional unit features as well as standard preventative maintenance procedures for all unit components. Training shall meet the following requirements:

- a. Content shall be tailored to the components of the delivered unit(s). Course shall include hands-on training to reinforce course content.
- b. Trainer must have experience in the area of servicing proposed truck components.
- c. Cab and Chassis system training shall include but not be limited to operational training of the engine, electronic controls, fuel system, emissions, electrical system controllers and automatic transmission.
- d. Body Builder installed component trainings shall include but not be limited to operational training of the hydraulic, electrical accessories, spreader control and warning light systems.
- e. Training shall be complete within 30 calendar days following unit delivery and must be coordinated with the MoDOT Representative. Bidder is responsible for all costs associated with training and materials for a maximum number of 20 trainees per unit.

2.2.7.1 Training - Technical Training: Annually, bidder shall provide 24 hours of Technical training in each assigned unit location within each district delivery location as shown in section 2.7.2. Training shall include but not be limited to, major unit components such as engine, transmission, electrical, drive line, emissions, hydraulics and other areas of emphasis as defined by the MoDOT Representative. Bidder is responsible for all costs associated with training and materials for a maximum number of 30 trainees per location and/or 15 per twelve hour session.

2.3 Tandem Axle Technical Specifications: The following technical specifications are for the manufacture of a 58,000 pound (lb.) Gross Vehicle Weight Rating (GVWR) Set Forward Tandem Axle Dump Truck with two dump bed configurations to accommodate a sixteen foot spreader.

2.3.1 Cab and Chassis: All specified equipment is to be Original Equipment Manufacturer (OEM) installed, either as standard equipment, a line installed option or factory authorized dealer standard option (DSO) or special equipment (SE) installation unless otherwise specifically stated.

a. Cab

- The design shall be the manufacturers' largest standard design, to accommodate two employees, shall be suitable to provide adequate headroom with the specified air-ride seats and other cab installed equipment.
- Interior trim and insulation package shall include a full headliner and back-of-cab trim panel(s) offering maximum sound reduction.
- Pedals suspended from the cowl are preferred. Floor mounted pedals are not preferred.
- Front grille shall be stationary and mounted in a manner to clear front snow plow hitch.
- Horns shall be air, mounted top-of-cab with snow covers, or frame mounted under hood.
- Driver window may be manual and passenger window shall be power. Unit must have power locks on both doors.
- Unit shall have interior sun visors on left and right side of windshield.

- Grab handles and arm rests must provide the ability to maintain three-points of contact when entering and exiting the cab.
 - Mirrors shall be west coast breakaway type, left and right, powered and heated, set for 102-inch trailer, 7-inch by 16-inch. Integral heated convex, left and right, below primary west coast mirrors, 8-inch round or 6-inch by 6-inch rectangular.
 - Heater, air conditioner, and defroster shall be factory-installed, highest British Thermal Unit (BTU) capacity available. Prefer side window defrosters to operate with the windshield defroster system and heater air selection for outside air source or in-cab air re-circulation. Prefer air conditioning system to have self-diagnostic capabilities.
 - Floor covering shall be heavy-duty rubber and/or vinyl with sound deadening backing covering entire floor, dark in color.
 - Driver and passenger seats shall be vinyl covered high-back air suspension with 3-point seat belts, tethered to allow free suspension movement. Each shall have an adjustable inboard armrest. National Cush-N-Aire Hi-Bac 195 or pre-approved equal.
 - Seat belts shall be a highly visible color such as red or orange.
 - Steering shall be factory installed tilt column with the smallest diameter steering wheel available for the specified front axle.
 - Unit must include map pockets in both doors or other large storage area suitable for manuals and other incidentals. Must not be mounted to or part of back-of-cab interior liner.
 - Overhead console is required and must be suitable for installation of a two-way radio.
 - Unit must include factory installed air ride rear cab suspension.
 - Unit must include a factory installed bug and stone screen behind the grille.
 - Unit must include a cab fresh air filter to reduce exposure to particulates.
- b. Chassis:
- There shall be a minimum of 13-inches ground clearance under any frame mounted components, such as the fuel tank and/or its mounting brackets, steps, air tanks, battery box, etcetera.
 - Battery Box must not interfere with body builder installed equipment. Spliced cables are not acceptable.
 - First cab step height shall not exceed 18-inches from the ground. All steps shall be a minimum of 5.5-inches wide. Steps are required on both sides of unit. MoDOT Representative must pre-approve step configuration.
 - Power steering must be integral hydraulic, gear. Ram system is not acceptable.
 - Wheelbase shall be determined between the bidder and Body Builder collaboration using the guidelines in section 2.3.3 and 2.3.4 of this request.
- c. Brakes:
- Must be a full dual air system with four-channel anti-lock system, rated at or above axle GVWR requirements.
 - Compressor shall be 13.2-Cubic Feet per Minute (CFM) or greater.
 - Shall be heated air dryer.
 - Air dryer must be easy to access and service. Prefer ADIP style or spin on cartridge.
 - Front and rear brakes shall be self-adjusting and rated at or above axle GVWR requirements.
 - All drive wheel positions shall be equipped with a parking brake.
 - Brake systems on the rear drive axle must be located inside the rear tire envelope to prevent any interference with pull-type asphalt spreader rollers.
 - Truck shall be equipped to pull a four-wheel trailer with air brakes. Truck shall have a hand control valve, tractor protection valve, and trailer anti-lock provisions. Air-lines must be run to the rear of the frame rails for glad-hand installation by Body Builder.
 - Installation of the air tanks and/or dryer shall not inhibit the installation of snow removal equipment anywhere underneath the truck behind the cab for a clear frame configuration.
- d. Electrical:
- Alternator shall be 160-ampere (amp) minimum and capacity shall be rated to handle all chassis and body building requirements.
 - Unit shall include three 12-Volt combined 1,950-cold cranking amp (CCA) maintenance free batteries.
 - Unit shall include one 12-Volt accessory power outlet in the cab.

- Gauges shall be three-way type; visual, light, and buzzer, dash mounted, easy operator viewing: Oil Pressure, Coolant Temperature, Air Pressure, Speedometer, Transmission Temperature, Ammeter or Voltmeter, Fuel, Tachometer, and Hour meter. The Hour meter must be OEM electronic and provide true engine running hours of operation.
 - Low Coolant Level Warning shall be an audible alarm.
 - Ignition Switch shall be an automotive key with accessory position. Two sets of keys shall be provided with each unit. Each key set shall have a key tag identifying the MoDOT number, which will be supplied at the time of order.
 - Windshield wiper system shall be electric with intermittent operation and electric washer pump. Wipers should be forced to the slowest intermittent speed if left on for a predetermined length of time with the parking brake set. Headlights shall turn on automatically when the wipers are on.
 - Prefer flush mounted cab marker lights. Light Emitting Diode (LED) is required.
 - Each unit shall include an AM/FM stereo with speakers.
 - Courtesy lamps shall be OEM interior lights to fully illuminate interior of cab and cab step areas.
 - Electrical protection shall be re-settable circuit breakers. Fuses are unacceptable.
 - Turn signal switch shall be self-canceling.
 - Snow plow light connections shall be a factory installed harness with connector for installation of snow plow lights. Harness must provide circuits for high and low beam headlights, marker lights, and turn signals. A factory installed, dash mounted switch shall switch operation from the OEM headlights to the snow plow light headlights. Marker lights and turn signals must function on plow lights regardless of the dash switch position.
 - Trailer light Connection shall be a factory installed 7-way connection socket (J560), anti-lock brake compatible, with sufficient cable to reach the rear of the frame. Socket must be wired for turn signal operation independent of brake lamps.
 - The two-way radio wiring shall be factory installed ten-gauge wire with a single 30-amp circuit protection. Factory installed wiring to support 50- and 100-amp state owned radio. Wires to terminate in both the overhead console and power distribution box between the seats. Coax cable shall be RG58. Coax cable end connections shall be a PL259. No wires or coax shall have splices.
 - Wire ends shall be heat-shrunk to prevent accidental grounding and shall include the proper protection from circuit overload. Wiring configuration must allow continued operation of radio even when ignition is off.
 - The ground speed harness shall be factory installed to provide Body Builder connection point for ground speed signal. Body Builder connection point shall be located inside the cab.
 - A power distribution box shall be mounted to the inside rear wall of the cab. This box shall provide an interface point for the following chassis supplied circuits: circuit breaker protected, switched battery power and ground speed signal. Battery power circuits shall be protected by a resettable circuit breaker located inside same box. It is acceptable to have resettable circuit breakers at the origin of the battery circuits, but the resettable circuit breaker at the point of origin must be of higher amperage than the ones inside the power distribution box.
- e. Engine: Shall be a standard production; turbo charged; governed; diesel fueled; a minimum gross torque of 1,150 pound-feet, and a minimum Society of Automotive Engineers (SAE) gross horsepower of 345 when operated within a governed speed as recommended by the engine manufacturer.
- Drain plug must be magnetic.
 - Shall utilize two dry air filters meeting engine manufacturer optimum filtration requirements.
 - Antifreeze shall be extended life, testing to a minimum of minus 35 degrees Fahrenheit. Meeting the manufacturers' recommendations.
 - Radiator shall be the largest capacity available for provided engine and chassis combination. Radiator shall have an accessible drain petcock. If OEM offers a corrosive resistant radiator coating or treatment, it must be provided.
 - Fan shall be air operated positive on-off temperature controlled clutch type with automatic mechanical failure lockup (on) provision. Viscous drives and electric clutches not acceptable.
 - Engine warning and shut down system shall include an audible buzzer and lamp warning for high engine temperature, low coolant and low engine oil pressure with automatic engine shut down feature.

- All trucks shall be ordered with an engine crankshaft front drive adapter plate suitable for installation of a Spicer No. 1310 accessory drive connector with clearance provisions for a crankshaft driven, front PTO driveshaft. Driveshaft may run through frame cross members, prefer it does not pass through the radiator, charge air cooler, or air conditioning condenser.
 - Engine block heater shall be a 120-Volt and 1,250-Watt mounted in an easily accessible location, near the driver door and in a protected from outside elements. Receptacle shall be easily accessible near the driver's door.
 - Unit must include a dash mounted filter minder lockup type air restriction indicator.
- f. Exhaust:
- Exhaust stack shall be right-hand vertical, with sweep elbow to direct exhaust away and above cab. If the diesel particulate filter (DPF) is part of the vertical stack, the clearance to the dump body must be pre-approved by the MoDOT Representative.
 - Exhaust stack must be shielded the full height of the cab.
 - If flex tubing is used the tubing and clamps shall be stainless steel.
 - Exhaust system design must incorporate a clear frame configuration whereby components shall not hinder the installation of under-frame snow removal equipment anywhere behind the cab.
- g. Frame:
- Single rail system is preferred. Double rail systems must feature anti-corrosive protection.
 - Strength must be 120,000 pounds per square inch (psi) minimum.
 - Resisting bending movement (RBM) shall be a minimum of 2,500,000 inch pounds minimum.
 - Integral extension must have a minimum of 20-inch integral frame extension in front of grille.
 - Unit cost must not include a factory front bumper.
 - Spliced after-frame (AF) extensions are not acceptable. Frame configuration to be determined by body builder and bidder.
 - Unit shall include factory installed two front and two rear tow hooks located on the outside end of the frame rails. Each tow hook shall meet or exceed unit GVWR.
- h. Front Axle and Suspension:
- Axle shall be standard manufacture 18,000-lb. rated capacity.
 - Axle setting shall be set forward only. Axle set-back not to exceed 32-inches measured from the grille.
 - Seals shall be Wet, Stemco or approved equivalent.
 - Suspension shall be parabolic or variable-rate springs, rated to axle capacity with highest deflection rate available.
- i. Rear Axle and Suspension:
- MoDOT prefers the most comfortable operator ride whether loaded or unloaded. Air ride suspensions are not preferred. Identified acceptable suspensions include but are not limited to TufTrac, Camel Back, Hendrickson HMX.
 - Axle shall be standard manufacture 40,000-lb. minimum rated capacity with power divider and lockout.
 - Drain plug shall be magnetic.
 - Gear ratio to provide adequate grade ability and rear wheel torque, and provide sustained 65 miles per hour (MPH) highway cruise speed at GVWR.
- j. Fuel System:
- Fuel Tank shall be a single left side mounted 70-gallon minimum capacity non-polished aluminum tank. Fuel and diesel exhaust fluid (DEF) tank placement shall not interfere with any underbody or wing plow option. If any portion of tank is used as a step, it shall have a non-skid grating. Tank shall include a drain port with plug.
 - Fuel maintenance system shall include a fuel-water separator, with thermostatic fuel temperature controlled electric heater, and fuel filter with restriction and change indicator. Components shall be factory installed ahead of fuel primer and other fuel filter(s).
- k. Transmission:
- Shall be an Allison six-speed automatic transmission.
 - Shifter shall be a dash mounted lever style with 'Mode' select button.
 - Electronic Control Unit (ECU) shall be mounted inside the cab.
 - Fluids shall be manufacturer approved synthetic transmission fluid.

- Shall utilize extended heavy-duty type oil cooler.
- Unit shall include a magnetic drain plug or magnet in oil pan.

1. Wheels and Tires:

- Front wheels shall be heavy service 9-inch steel hub piloted Budd style 10-bolt. White powder coat finish.
- Rear wheels shall be heavy service 8.25-inch steel hub piloted Budd style 10-bolt. White powder coat finish.
- Wheel guards shall be for metric hub-piloted wheels with flanged mounting nuts and installed between hub and wheel, and between dual wheels.
- Front and rear tires shall not be speed restricted below 65 mph. Front tire size shall be 315/80R22.5, load rating “L”, and 20 ply rating. Rear tire size shall be 11R22.5, load rating “G”, and 14 ply rating. Rear tires shall be on and off road tubeless mud and snow tread.

2.3.2 Body Builder:

a. Threaded Fasteners:

- All threaded fastener components (bolts, washers, nuts) with a diameter designation greater than or equal to SAE ½-inch shall be minimum grade eight composition. Nuts shall be all metal self-locking, lock washers are not acceptable. All bolts 5/8-inch and larger shall be flange head. A minimum of two bolt threads must extend through all nuts. All components shall have grade identifier marks and a registered manufacturer's logo.
- All threaded fastener components (bolts, washers, nuts) with a diameter designation greater than or equal to SAE ¼-inch up to less than SAE ½-inch shall be minimum grade five composition. Nuts shall be self-locking, either poly-lock or all metal. Lock washers are not acceptable. A minimum of two bolt threads must extend through all nuts. All components shall have grade identifier marks and a registered manufacturer's logo.
- All threaded fastener components (screws/bolts, washers/lock washers, nuts) with a diameter designation less than SAE ¼-inch shall be minimum grade two composition.

b. Electrical and Illumination Installation:

- All installed wiring must be of adequate size to handle the anticipated loads of all electrical components. All wiring must be uninterrupted and complete with no splices.
- All wiring must be color-coded.
- All wire terminal ends (spade, ring, etc.) shall be: crimped, soldered to the wires and heat shrunk, or weatherproofed connectors. Scotch-Loc fasteners and/or crimp butt connectors are not acceptable for any connection.
- All electrical connections shall be protected with dielectric silicone grease.
- All wiring shall be enclosed in a protective wiring loom, conduit, or wrapped harness.
- The edges of all holes through which wiring must pass shall be protected with a grommet.
- High current circuits, such as the tarp motor circuit, shall be powered directly from the battery, and protected by a master re-settable breaker, or a fusible link.
- Body Builder installed wiring going to the rear of the frame and dump body shall be grouped together and bound. This bound harness shall then be secured to a painted metal strap, approximately 1-1/4-inch x 1/4-inch in size. This strap shall be secured to the top of the frame cross members away from the side rails.
- All wiring to lamps shall be stress relieved within 6-inches of the component.
- Wiring routed through the hydraulic enclosure sides shall be routed through a sealed compression type strain relief, or a molded bulkhead fitting.

c. Auxiliary Snow Plow Headlights: Pre-approval is required for any factory installed snow plow lights or snow plow light bracket.

- Front auxiliary halogen headlights shall be Truck-Lite model 645 or equivalent. MoDOT prefers the safest visibility with a reduced risk of snow and/or ice accumulation.
- Auxiliary headlights shall not obstruct the driver's vision. Mounting shall be approximately 64-inches from ground level, and at approximately the same width apart as truck's headlamps.
- Light shall be secured to a fender mounted, 3-point assembly bracket. Bracket shall be made from stainless steel.
- All fasteners attaching the bracket to the fender shall be stainless, and be secured using locknuts.

- Reinforced rubber washers or grommets shall insulate the bracket from the hood. Fasteners attaching the bracket to the hood shall be insulated from the hood by a 2-inch minimum diameter rubber washer or grommet and 2-inch minimum diameter plated washer.
 - Auxiliary headlights shall be grounded back to chassis ground; minimum 14-gauge wire shall be used. Drill holes to accommodate wire size.
- d. Hydraulic Installation:
- All hoses shall be routed in a manner to minimize rub points and bends. Critical rub points shall be wrapped for protection.
 - All hoses shall be routed or shielded to protect them from heat sources.
 - Teflon tape shall not be used in the hydraulic system.
 - Hydraulic hoses shall not be secured to any factory-installed chassis wiring, cables, hoses, or lines.
 - Hydraulic hoses shall not be secured in the same bundle with any electrical wiring.
 - Hydraulic hoses shall be bundled together and routed by themselves.
 - Hoses shall be adequately supported and securely fastened to withstand snow and icing conditions.
 - All pressure and return hoses shall be rated for at least 3,000 PSI working pressure.
 - Hydraulic hoses running to the rear of the truck shall be secured to a painted metal strap, approximately 1-1/4-inch x 1/4-inch in size. This strap shall be secured to the top of the frame cross members away from the side rails.
 - Each hose going to the dump body shall have 90-degree bulkhead mounted Joint Industry Council (JIC) elbows installed at the rear of the truck frame near the dump body hinge. These elbows shall split each hose going to the dump body into two hoses, allowing for easier routing and replacement.
- e. Air Powered Accessory Installation:
- All lines shall be routed in a manner to minimize rub points and bends. Critical rub points shall be wrapped for protection.
 - All lines shall be routed or shielded to protect them from heat sources.
 - Air lines shall be colored, identifying individual circuits, with each circuit being a different color. Color-coding shall remain consistent for the duration of the contract.
 - Body Builder installed accessory air lines going to the rear of the frame, and dump body, shall be grouped together and bound with the Body Builder installed wiring going to the rear of the frame and dump body. This bound harness shall then be secured to the same painted metal strap as the body-builder installed electrical wire harness.
- f. Bumper, Front Snow Plow Hitch and Lift Assembly: Shall be a heavy-duty channel, swept back front bumper. The bumper must be designed to attach a currently used MoDOT snow plow and to evenly transmit the snow plow load to the truck frame under continuous severe service use.
- Bumper shall be secured to the truck frame using fine thread, grade eight, frame-style hardware. Nuts shall be all metal, top-lock style locknuts. Serrated hardware is not acceptable. Hydraulic quick couplers as required elsewhere in the specifications shall be installed on the bumper.
 - Lift assembly shall include a Monarch CS250 hydraulic cylinder or equivalent for lifting the snow plow. It shall be securely welded to the front bumper and fold down when not in use.
 - Front snow plow hitch must be securely welded to the front bumper.
- g. Rear Hitch Plate and Pintle Hitch: A 3/4-inch thick steel rear hitch plate shall be securely welded and gusseted to rear of frame rails. Rear hitch plate shall include the following items:
- Bulkheads for service and emergency trailer glad-hands, positioned away from the center of the rear hitch plate to prevent interference with a trailer tongue when making tight turns, and have 1/2-inch brass plugs installed. Glad-hands with 1/2-inch brass close nipples and tethered, removable covers shall be placed in the frame mounted tool box.
 - The J560 trailer connection furnished with the chassis shall be mounted through the rear hitch plate to the left of the pintle hitch.
 - Two (2) Buyers Products B50 or equivalent Department of Transportation (DOT) "D" rings, with 20-ton capacity each, shall be securely welded to the rear hitch plate.
 - A Premier model Saf-Tite 100 rigid pintle hitch shall be installed on the rear hitch plate using grade eight hardware torqued to specifications. Hitch shall be 24-inch centerline height above the ground, plus or minus 1-inch.

- Back-up alarm shall exceed 105 decibels or 15 decibels above idle engine ambient and shall be installed at the rear of the frame in a protected area.
- h. Tool box shall be approximately 18 by 18 by 24 inches, weather proof stainless steel tool box. It shall be mounted on the right hand outside frame rail while not interfering with any body-builder installed options.
- i. All grease zerks will be threaded. Drive-in zerks are not acceptable. All threaded holes for grease zerks shall be of sufficient depth to prevent the zerk from bottoming out when tightened.
- j. Air and Electric Powered Body Builder Installed Accessories:
 - All controls for body builder installed accessories shall be located within an operator console installed between the driver and passenger seat.
 - All body builder harnesses going to the operator console shall pass through weather-proof strain relief(s) mounted in the rear wall of the cab. Wiring shall be configured such that the height of the harnesses outside of the cab decreases as it travels away from the strain relief. Any water following the harnesses shall run away from the strain relief. Harnesses shall have sufficient slack to allow movement of the cab air suspension.
 - Harnesses and airlines for body builder installed accessories shall not pass through the floor of the cab.
 - From the rear wall of the cab towards the rear of the truck, no body builder installed wiring, air lines, or hydraulic hoses shall be located beneath the top flange of the frame.
 - All body builder air lines going to the operator console shall be routed through bulkhead unions located in the rear wall of the cab near the strain relief/s for the electrical wiring. Bulkhead mounting shall be facilitated by matching backup plates located on the inside and outside of the cab wall. Outside plate shall be coated with a polyurethane or silicone sealer before being secured to the rear wall of the cab. All bulkhead locations shall have the function for that bulkhead stamped or etched into the plate for identification of each airline installed.
 - A power distribution box shall be mounted to the inside rear wall of the cab. This box shall provide an interface point for the following chassis supplied circuits: circuit breaker protected, switched battery power and ground speed signal. Battery power circuits shall be protected by a resettable circuit breaker located inside same box. It is acceptable to have resettable circuit breakers at the origin of the battery circuits, but the resettable circuit breaker at the point of origin must be of higher amperage than the ones inside the power distribution box. Air lines shall have sufficient slack to allow movement of the cab air suspension.
- k. Spreader light shall be controlled by a rocker-style switch located in the operator console. Circuit shall operate key-on, and be protected by a resettable circuit breaker located in the power distribution box.
- l. Tarp shall be controlled by a rocker-style switch located in the operator console. Circuit shall operate key-on, and be protected by a resettable circuit breaker located in the power distribution box. The high-current tarp relay shall be supplied from the battery box and protected by a resettable circuit breaker located in the battery box. Tarp relay shall be located on the rear wall inside of the cab, or on the rear wall outside of the cab inside a weather-proof enclosure.
- m. Raised body indicator light shall be a red and console mounted. Light shall flash to indicate a raised body condition. Lamp shall be driven by a sealed proximity switch located in a protected position on the frame near the front of the dump body. Circuit shall be protected by a resettable circuit breaker located in the power distribution box and operate key-on.
- n. LED warning lights shall be controlled by a rocker-style switch located in the operator console. Circuit shall operate key-on and key-off, and be protected by a resettable circuit breaker located in the power distribution box.
- o. Tailgate latch shall be air operated and controlled by rocker-style switch located in the operator's console.

2.3.3 Corten V-Style Long Sill Dump Body with Attached Cab Shield - Configuration #1: The following specifications and dimensions shall apply to the 12-cubic yard maximum capacity truck-mounted dump body and hoist. The complete dump body shall be capable of accommodating a 16-foot, slip-in material spreader with attached liquid storage tanks. Any ferrous metal materials used in the manufacture of the bed must be welded prior to priming. Bids will not be considered on any dump body and hoist that deviate from these specifications.

- a. The dump body provided shall be a Western style. No underbody cross-members for support will be allowed. The floor, sides, and main long sill are to be full length with no cross-splices. All boxed areas of the dump body shall be sealed except for long sills. Long sills shall have a 1-1/4" drain hole at the rear to allow

- draining when the body is in a lowered position. No wiring or hoses shall be run through any boxed area. All welds shall be continuous. All hinge pins shall be removable.
- Dump body capacity shall be twelve cubic yards water level.
 - 15-foot maximum inside length.
 - 100-inch minimum outside width.
 - 86-inch minimum inside width.
 - 36 1/2-inch minimum side height with level ends.
- b. The dump body main long sills, floor, tailgate, sides, and front shall be constructed using a minimum of Corten, rated 55,000-psi yield.
- Main Long Sills 1/4-inch Corten
 - Floor, Tailgate 3/16-inch AR 450
 - Sides, Front 10-gauge Corten
 - Formed Top Rail 3/16-inch Corten
 - Rear Corner post 3/16-inch Corten
- c. Dump Body Mounting:
- The rear edge of the dump body pivot pin shall be 0- to 1-inch forward from the rear face of the rear hitch plate.
 - The dump body pivot, measured from the centerline of the pivot pin to the rear face of the dump body not including the tailgate, shall be 12 inches.
 - The chassis wheel base shall be such that the rear drive axle is located 21-22 inches forward from the rear face of the rear hitch plate, measured from the rear face of the rear hitch plate to the center line of the rear drive axle. Rear drive axle tires shall not extend past the rear face of the rear hitch plate.
 - Hydraulic oil reservoir shall be mounted to provide 3- to 4-inch clearance between the cab and reservoir on passenger side of hoist above the frame.
 - The dump body shall be mounted as close as possible to the hydraulic oil reservoir, with a minimum of 3-inch clearance, excluding the sub frame of the reservoir and hoist.
 - A 4-gauge battery cable ground strap shall be installed from the dump body to the truck frame by means of a 5/16-inch cadmium plated bolt. Star washers shall be installed on both sides of the strap eye to insure a good ground.
- d. Hoist:
- Hoist shall be a trunnion mount, head lift, double-acting cylinder.
 - The hoist housing should be designed to accept a Model CS140-5.5-3DA MAILHOT cylinder or pre-approved equal. The cylinder sleeves shall be nitride coated. Sub-frame hoists are not acceptable.
 - A flared body bracket will be attached to either the hoist frame or body understructure to align body in position and keep from moving side to side.
 - The hoist shall be attached to the chassis by means of an above frame cradle. The cradle shall be designed as such to allow the hydraulic reservoir to be mounted on the passenger side of the hoist and the hydraulic valve unit to be mounted on the driver side of the hoist. The cradle shall also be able to accept grease line extensions that run from the outside of the driver side to the pivot point of the hoist on the cradle.
- e. Dump body pivots shall facilitate thorough greasing. Bushings shall have an internal radial groove in line with the grease fitting. Pivot pins shall be drilled and cross-drilled
- f. A storable body prop shall be provided on each side of the dump body. Pivots for the body props shall be greasable. Body props shall be constructed to withstand the down-pressure of the hoist without damaging the dump body, chassis or any related components.
- g. The cab protector shall be made of 10-gauge Corten material, be a minimum of 18-inches deep and not interfere with the cab-mounted vertical exhaust pipe. The cab protector shall be mounted, welded and gusseted to prevent flexing or vibration.
- h. Sides:
- Sides shall have a formed, debris-shedding top rail.
 - External supports for sides shall be horizontal.
 - Sides shall have no provisions for extension boards.
 - Side heights shall be the same height as rear tailgate.
 - Sides shall have a fully welded step on the lowest bottom rubrail in line with pull out ladder.
 - Side corner posts shall have a Whelen box recessed and welded in place for Whelen warning strobe light.
- i. Tailgate:
- The tailgate shall be double-acting, and vertically straight with off-set hinges for positive closure.

- The tailgate shall have boxed upper, lower, side, and intermediate horizontal rib supports made of 10 gauge Corten material. The tailgate sheet shall be made of 3/16-inch AR 450 material. Lift handles shall be welded on each side just above the bottom support rib.
 - A hinged “D” ring shall be mounted top and center of the tailgate to provide a lifting hook for removing the tailgate.
 - Two 3/8-inch grade 70 spreader/holder chains shall be provided and stowed in boxes that are externally welded on tailgate when not in use.
 - Anchor points for the tailgate chains shall be made from 3/8-inch thick steel. These anchor points shall be lapped on the outside of the dump body with a minimum of 1 1/2-inch overlap. Keyhole slot in anchor points shall be configured so that when installed, the link of the tailgate chain nested in the anchor is no more than 1 inch away from the rear face of the dump body at the farthest point.
 - The top hinge pin shall be minimum 1 ¼ - inch diameter and pivot through (2) two ½-inch thick plates welded to the top of the rear body corner posts. The upper hinge plates must be flush with the top of the rear corner posts, body sides, and tailgate. These pins shall have one end tapered approximately 30 degrees for ease of alignment. 30 degree taper shall be ¼ - to 3/8-inch in length. Both upper pins are to be fabricated from 1 ¼ - inch cold rolled steel, and have a 1/4-inch thick outer flange stop. The 2-inch flange is to have one side machined to rest against a 3/8-inch x 1 ¾” flat bar welded to the outer hinge plate in order to capture the pin in place and prevent rotation, and pre-mature pin and hinge wear. Each pin is to be drilled and tapped for grease fittings to be installed into outer pin flange. Grease channels are to be included in order to lubricate the tailgate hinge lug.
 - The tailgate lower pins shall be a minimum 1 ¼” diameter. Tailgate shall, without assistance from the locking device, seal against the floor/side sheets of the dump body, with no more than a 1/16-inch gap at any point. With the tailgate closed and the locking device open, tailgate lower pins shall have a 1/8-inch minimum, 1/4-inch maximum gap between the forward edge of the pin and the forward edge of the cradle.
 - A license plate bracket shall be welded on the left-hand side of the tailgate near the top of the tailgate.
 - When tailgate is lowered parallel to body floor, the inside surface of the tailgate shall provide a smooth level joint between the tailgate and the body floor.
 - Tailgate height shall be 36 1/2 – inches tall measured from the top of the floor to the top of the tailgate sheet.
- j. Tailgate Latch
- An over-center locking device on each side of the dump body shall hold the tailgate securely closed. Latching arms shall be forged steel.
 - The tailgate latch cross shaft assembly shall be supported on each end by bushings.
 - This locking device shall be operated by an air cylinder, which shall be mounted between the long sills. Air cylinder shall be controlled by a rocker-style switch located in the operator’s console.
 - Locking device shall be adjustable at each side of the dump body.
 - A manual over-ride shall be provided on the outside of the dump body, allowing the operator to lock or unlock the tailgate using a simple adjustable wrench and without removing components.
 - Lubrication points on the tailgate latch cross-shaft shall facilitate easier greasing by means of grooved bushings or cross drilled shaft.
 - Grease zerks at each end of the tailgate cross-shaft shall be visible and accessible from the outside face of the dump body.
- k. Ladder:
- A pull out style two-rung ladder shall be installed on each side of the dump body. Ladders shall be centered between the truck tandem rear axles so that the operator does not have to climb over the tarp bow when the tarp is retracted.
 - Grab handles shall be installed on the outside of the dump body and provide for three points of contact while using the ladder.
 - If ladder is open to ground on the underside, a bolt on debris cover shall be installed to prevent buildup of asphalt and other debris on ladder.
- l. Wiring and Hose Routing:
- Wiring and hoses going to the front of the dump body shall be secured to a 1/2-inch diameter painted steel rod which shall be attached to the inside of the long sill by means of 1/2-inch X 1-inch tall stand-offs. Stand-offs shall be placed no farther than 24 inches apart, and be securely welded to the long sill.

- Wiring inside the rear corner posts shall be secured to 3/16" single chain link attached inside the rear corner posts, securely welded. Height of stand-off to be sufficient to support all of the wiring inside the corner post. Stand-offs shall be positioned to allow wires to be secured away from the tailgate latch mechanism, and within 6 inches of all lamps. A sufficient amount of wire shall be left between the last point of securement and the lamp to allow for the removal of the lamp for replacement.
- m. Brake, turn and tail lights shall meet all Federal and State DOT specifications, which recently includes and requires an independent running light on the rear corners.
- All lights shall be mounted in shockproof rubber grommets.
 - All lights shall be LED.
 - All lights shall be connected to a one piece wiring harness with molded connectors.
 - Each rear corner post shall be able to accept a recessed 3-inch x 5-inch rectangular stop/turn taillight. Suitable make and model is Maxxima M42213R or equivalent.
 - Each rear corner post shall be to accept a recessed 3-inch X 5-inch rectangular back up light. Suitable make and model is Maxxima M42213 or equivalent.
 - Each rear corner post shall have one marker/clearance light on the rear face of the corner post and one marker/clearance light on the outside face of the cornerpost.
 - A 3 x 4 inch rectangular tube shall extend through long sills at the rear for routing of electric wiring. Tubes are to be fully welded, sealing the joint at the long sill.
- n. Raised Body Indicator: A sealed proximity switch shall be mounted near the hoist assembly to control a raised body indicator light. A dash mounted indicator light shall be provided, be plainly visible to the seated operator, be red in color, and flash when the dump body is raised.
- o. One Grote rubber utility halogen spreader spotlight shall be mounted below the left rear dump body corner. The light shall be controlled by a rocker-style switch located in the operator console. Light will not hinder the operations of the material spreader
- p. Mud flaps shall be removable by incorporating 201 or 304 stainless steel removable hinge pin approximately 26 inches long by 1/2" diameter solid rod. The rod will have a 2 1/2" - 90 degree bend for a handle with a 3/16" hole at the opposite end for a lynch pin. There shall be three bushings on the truck side and three bushings on the mud flap side constructed of 1/2" inside diameter pipe by 1 1/2" long. Spaced accordingly on flap and truck bracket that is constructed of 24" long by 2" deep by 3/16" thick steel. Mud Flap removal shall not require any tools. See drawing on Attachment 2.
- q. Hydraulic Couplers: See Coupler description specifications in the Hydraulic Section 2.3.5.j.
- The passenger side of the dump body shall have three, 3/8" male couplers. Couplers shall be attached to male pipe X male JIC bulkhead fittings mounted on the lowest rub rail near the rear of the bed.
 - The driver side of the dump body shall have three male couplers for the slip in spreader. One, 1-inch, one, 3/4 -inch, one 1/2 -inch. Couplers shall be attached to male pipe X male JIC bulkhead fittings mounted on the lowest rub rail near the rear of bed.
 - The hydraulic lines shall extend from the lowest rub rails to the body's main long sills through a fabricated enclosure on the underside of the body. The main long sills shall have passageways at the rear for the hydraulic lines. Passages through the long sills shall be sealed around the passage to prevent moisture entry into the long sill.
 - All hydraulic lines running from the valve unit shall be secured to a bulkhead plate with accommodating fittings, mounted on the cab side of the rear hinge between chassis frame rails. Hydraulic lines running into body shall start at this bulkhead plate creating a 2 piece hose for ease of service and routing.
- r. Conspicuity: The dump body shall be outfitted with DOT-C2 11 inch red by 7 inch white prismatic retroreflective conspicuity tape meeting or exceeding Federal Motor Vehicle Safety Standards (FMVSS) 108, DOT-C2 standards. The conspicuity tape shall be applied continuously to the sides of the dump body along the bottom horizontal bed rails. Where there are other fixtures, such as lights, brackets or steps, along the area where the conspicuity tape is to be applied, the tape shall be terminated 1/2 inch from the object and resume 1/2 inch from the far side of the object. The conspicuity tape shall be applied to rear facing surface of the tail gate along all horizontal tail gate bracing including the top and bottom tail gate rails and vertically along both edges of the tail gate. Where Conspicuity tape from a horizontal and vertical application intersects the vertical tape shall be butt spliced to the edge of the horizontal tape application with no overlap or gap. Where these intersections occur at a corner, the horizontal tape shall be trimmed to match the edge of the vertical tape forming a clean box corner. On stainless steel tailgates, the flat recessed areas between the tailgate bracing shall receive yellow 3M Scotchlite® reflective graphic film series 5,000 or equivalent.

This sheeting shall not overlap onto the surrounding bed bracing and shall not be any farther away from the joint of the tailgate bracing than ½ inch.

- s. **Spreader Body Hold Downs:** Four storable winches to be welded prior to priming on the bottom side of upper body rail in a fashion not to exceed the overall width of the body, 4-inch x 10-foot of nylon webbing with flat hook to be included. Body Builder must coordinate placement of winches to line up vertically with the spreader hold down brackets.
- t. **Tarp:**
 - Shall be a fully automatic, electric type installed system and controlled by a rocker-style switch located in the operator's console.
 - Arms and tarp-protecting windshield shall be aluminum.
 - Shall be designed for hot asphalt.
 - Tarp shall be designed as shown in Attachment 4.
 - Arm springs shall be adjustable and designed to mount on the underside of the dump body. Elbows of the tarp arms shall be bolted to the arms.
 - The body shall also be equipped with an air tension bow for the purpose of keeping the tarp at the front of the body down next to the body sides and load during use and transport. The air tension bow shall be operated by an air cylinder, which shall be mounted on the front sheet. Air cylinder shall be controlled by a rocker-style switch located in the operator's console. The air cylinder shall be attached to a cross shaft that extends thru the cab shield side plates and is able to rotate and actuate the tension bow.
 - Shall have side flaps that fold out over the sides of the dump body.
 - 1) The length and positioning of the flaps shall be such that when deployed and secured, the side flaps fit between the rear edge of the cab shield support gusset and the front edge of the rear corner post.
 - 2) Side flaps shall not be the full length of the tarp.
 - The side flap shall be secured in the covered position by a self-storing bungee rope routed through grommets or "D" rings in the outermost edge of the tarp, and "J" hooks on the bottom side of the middle body rail.
- u. A paver or asphalt lip shall be mounted on the rear dump body apron. Paver lip shall be mounted ½-inch hardware. Holes in kip and dump body shall be dimensional to allow any lip to be installed on any dump body. Welded paver lips are not acceptable. Paver lip shall be mounted at a 24-28 degree angle. Length of paver lip shall be such as to provide 20-inches of overhang, measured from the rear face of the rear hitch plate to the rear edge of the paver lip.
- v. Rear post lower covers are used to keep rear tires from throwing debris up into the inside of the rear posts. The bottoms of the corner posts are to include removable 10-gauge Corten covers. The covers are to allow for drainage and must be designed to remove easily for servicing components inside the body corner posts. The covers shall not interfere with the tailgate latching mechanism. See picture below.



- 2.3.4 **Stainless Steel I-Beam Long Sill Dump Body with Detached Cab Shield - Configuration #2:** The dump body provided shall be a 15-foot cross-memberless Western style body.
- No underbody cross-members for support will be allowed.
 - The floor, sides, and main long sill are to be full length with no cross-splices.
 - All boxed areas of the dump body shall be adequately ventilated and drained.
 - No wiring or hoses shall be run through any bed-sides upper and lower rails.
 - All welds shall be continuous.
 - All hinge pins shall be removable.

- The head sheet shall be flat with no doghouse for the hoist cylinder and shall accommodate tarp mounting. Head sheet shall not extend above the height of the cab with tarp installed
 - Hoist cylinder must be forward of the head sheet.
 - Grease hoses shall be installed to allow remote greasing of all points that are not readily accessible from the ground.
- a. Capacity: Shall be a maximum of 12-cubic yards water level.
- Shall have a 15-foot maximum inside length.
 - Shall have a 100-inch minimum outside width.
 - Shall have an 86-inch minimum inside width.
 - Shall have a 36-inch minimum side height with level ends.
- b. Construction:
- The tailgate, sides, ladder, hand holds and front shall be constructed using stainless steel.
 - Floor shall be ¼-inch Abrasion Resistant (AR) 450-plate rated at 145,000 psi yield and 180,000 tensile materials with fully formed radius on each side.
 - Internal bed sides and tailgate surfaces shall be a minimum of seven gauge stainless sheet material.
 - Remaining sheet steel, including bracing on the tailgate, sides, and front head, shall be a minimum 10-gauge Stainless Steel.
 - Stainless steel wire shall be used for all welds when welding stainless panels together.
 - Structural I-beams shall be one piece 10-inch by 12-lb. per foot minimum structural I-beam longitudinal. Each longitudinal shall be a continuous welded to the floor. The longitudinal must be notched to accept hoist cradle without the need for additional spacers between the longitudinal and the truck frame. If spacer is used, it shall be attached to bed and not truck frame.
- c. Mounting:
- The rear edge of the dump body pivot pin shall be up to 1-inch forward from the rear face of the rear hitch plate.
 - The dump body pivot, measured from the centerline of the pivot pin to the rear face of the dump body, not including the tailgate, shall be 12-inches.
 - The chassis wheel base shall be such that the rear drive axle is located 21- to 22-inches forward from the rear face of the rear hitch plate, measured from the rear face of the rear hitch plate to the center line of the rear drive axle. Rear drive axle tires shall not extend past the rear face of the rear hitch plate.
 - Hydraulic oil reservoir shall be mounted to provide 3- to 4-inch clearance between the cab and reservoir.
 - The dump body shall be mounted as close as possible to the hydraulic oil reservoir, with a minimum of 3-inch clearance, excluding the sub frame of the reservoir and hoist.
 - A 4-gauge battery cable ground strap shall be installed from the dump body to the truck frame by means of a 5/16-inch cadmium plated bolt. Star washers shall be installed on both sides of the strap eye to insure a good ground.
- d. Hoist:
- Shall be a trunnion mount, head lift, double-acting cylinder.
 - Should be designed to accept CD140-5.5-3DA Mailhot cylinder or pre-approved equal.
 - The cylinder sleeves shall be nitride coated. Sub-frame hoists are not acceptable.
 - A flared body bracket will be attached to either the hoist frame or body understructure to align body in position and keep from moving side to side.
 - Shall be attached to the chassis by means of an above frame cradle. The cradle shall be designed to allow the hydraulic reservoir to be mounted to the drivers' side of the hoist and the hydraulic valve enclosure mounted to the passenger side of the hoist.
- e. Pivots shall facilitate thorough greasing. Bushings shall have an internal radial groove in line with the grease fitting. Pivot pins shall be drilled, cross-drilled, and spiral grooved and made from stainless steel.
- f. Body Props:
- A storable body prop shall be provided on each side of the dump body.
 - Pivots for the body props shall be greaseable.
 - Body props shall be constructed to withstand the down-pressure of the hoist without damaging the dump body, chassis, or any related components.
- g. Cab Protector:
- Cab shield shall cover the rear of the cab and top rear half of roof. Shield shall not be mounted to dump body or cab, but mounted to the frame.
 - 1) Be reasonably close to top of cab but avoid rubbing or bumping of the cab with full cab suspension travel and clear the vertical exhaust pipe.

- 2) Allow clear visibility from rear cab window.
 - 3) Shall be the same width as widest part of cab above the doors.
 - 4) Standard 8-inch channel will be used as uprights to top part of cab shield and for top cross member. Channel shall be 8-inch and a minimum of 11.5-lbs. per foot. Formed channels may also be used providing they are as strong or stronger than the standard 8-inch channels. Formed channels shall be approved by MoDOT Representative prior to installation.
 - 5) Each upright shall be bolted with minimum of five (5) each of 5/8-inch, grade eight bolts to chassis rail.
 - 6) Upright flanges shall face away from center of chassis.
 - 7) Uprights shall be further stiffened to rail with 8-inch length of 3/8-inch by 3-inch by 3-inch angle irons placed on top of rails and properly welded to uprights. This angle iron may also act as the bottom support for the hydraulic reservoir. This angle iron shall not be welded to frame rails but must rest squarely on chassis rail.
 - 8) All seams shall be continuous. Skip weld is not acceptable.
- Top cross member shall be adequately welded to uprights and gusseted with two 1/4-inch steel plates of 6-inch by 6-inch by approximately 8-1/2-inch dimensions at rear part of assembly.
 - Cab shield shall be welded to uprights and top cross member. Cab shield material shall be a minimum of 10-gauge thickness Stainless Steel material.
 - 1) Reinforced and weld to cross member with two (2) 3-inch by 1-3/8-inch (4.1) channel irons, which extend the full length of cab shield and align with eight inch channel uprights.
 - 2) Shall be gusseted from 3-inch by 4.1-channel iron to 8-inch channel iron in a manner offering highest degree of stability.
 - 3) Shall be welded to 4.1-channel iron with flanges downward.
 - 4) Must meet all OSHA standards
 - 5) Must include provisions that do not allow ponding of water and slopes toward bed. (No Drain Holes)
 - Heavy duty, expanded steel with approximately 1-inch by 2-inch openings welded to cab shield to protect rear cab window area.
 - 1) Outer skirts of cab shield shall extend a minimum of 6-inches below rear cab window.
 - 2) A 2-inch angle iron will be welded to uprights to support the bottom of the expanded steel.
 - Adequately-sized openings with rounded corners which may be necessary may be allowed. Openings will be done in a professional manner with straight sides with minimum one-half inch radius corners..
 - Welding to be continuous on both sides of gussets, channels and cross members.
 - Unit shall include two strobe light mounting brackets mounted to allow for 360 degree visibility of cab shield lights.
 - 1) Brackets shall be welded prior to painting cab shield.
 - 2) Brackets shall be mounted on top of cab shield, one on each side.
- h. Sides:
- Sides shall have a formed, debris-shedding top rail. This shall mean sloped or rounded.
 - External supports for sides shall be horizontal.
 - Sides shall have no provisions for extension boards.
- i. Tailgate:
- Shall be double-acting, and vertically straight with off-set hinges for positive closure.
 - Shall have boxed upper, lower, side, and intermediate horizontal rib supports. Lift handles shall be welded on each side just above the bottom support rib.
 - A hinged "D" ring shall be mounted top and center of the tailgate to provide a lifting hook for removing the tailgate.
 - Two 3/8-inch grade 70 spreader and/or holder chains shall be provided and stowed in boxes that are externally welded on tailgate when not in use.
 - Anchor points for the tailgate chains shall be made from 3/8-inch thick steel. These anchor points shall be lapped on the outside of the dump body with a minimum of 1-inch overlap. Keyhole slot in anchor points shall be configured so that when installed, the link of the tailgate chain nested in the anchor is no more than 1-inch away from the rear face of the dump body at the farthest point.
 - The top hinge pin shall be 1-inch diameter minimum and pivot through a greasable bushing. These pins shall have one end tapered approximately 30-degrees for ease of alignment. A 30-degree taper shall be 1/4- to 3/8-inch in length.

- Lower pins shall be a minimum 1-1/8-inch diameter. Tailgate shall, without assistance from the locking device, seal against the floor and side sheets of the dump body, with no more than a 1/16-inch gap at any point. With the tailgate closed and the locking device open, tailgate lower pins shall have a 1/8-inch minimum, 1/4-inch maximum gap between the forward edge of the pin and the forward edge of the cradle.
 - A license plate bracket shall be welded on the left-hand side of the tailgate, at approximately half the height of the tailgate.
 - When tailgate is lowered parallel to body floor, the inside surface of the tailgate shall provide a smooth level joint between the tailgate and the body floor.
- j. Tailgate Latch:
- An over-center locking device on each side of the dump body shall hold the tailgate securely closed. Latching arms shall be stainless steel.
 - The tailgate latch cross shaft assembly shall be supported on each end by bushings.
 - This locking device shall be operated by an air cylinder, which shall be mounted between the long sills.
 - Locking device shall be adjustable at each side of the dump body
 - A manual over-ride shall be provided on the outside of the dump body, allowing the operator to lock or unlock the tailgate using a simple adjustable wrench and without removing components.
 - Lubrication points on the tailgate latch cross-shaft shall facilitate easier greasing by means of grooved bushings and/or shaft.
 - Grease zerks at each end of the tailgate cross-shaft shall be visible and accessible from the outside face of the dump body.
- k. Ladder:
- A pull-out or fold down style ladder shall be installed on each side of the dump body. The lowest rung shall not be more than 18-inches from the ground. Additional rungs shall have no more than 12-inches spacing between rungs. The top rung shall be no more than 18-inches from the top of the bed. Location of the ladder shall be such that operator does not have to climb over the tarp bow when the tarp is retracted.
 - Grab handles shall be installed on the outside of the dump body in one continuous piece running from the top to the bottom of the bed and provide for three points of contact while using the ladder.
 - Ladder shall be shielded to prevent build-up of debris on ladder if exposed to drive wheels.
- l. Wiring and Hose Routing:
- Wiring and hoses going to the front of the dump body shall be secured to a 1/2-inch diameter painted steel rod which shall be attached to the inside of the long sill by means of 1/2-inch by 1-inch tall stand-offs. Stand-offs shall be placed no farther than 24-inches apart, and be securely welded to the long sill.
 - Wiring inside the rear corner posts shall be secured to 1/4-inch vertical painted steel rods attached inside the rear corner posts by means of 1/4-inch by 1-inch stand-offs, securely welded. Height of stand-off to be sufficient to support all of the wiring inside the corner post. Stand-offs shall be positioned to allow wires to be secured away from the tailgate latch mechanism, and within 6-inches of all lamps. A sufficient amount of wire shall be left between the last point of securement and lamp to allow for the removal of the lamp for replacement.
- m. Brake, Turn and Tail Lights:
- Shall meet all Federal and State DOT specifications, which recently includes and requires an independent running light on the rear corners.
 - Lights and parts must be readily available and non-proprietary.
 - Shall be mounted in shockproof rubber grommets.
 - Shall be LED.
 - Shall be connected to a one piece wiring harness with molded connectors.
 - Each rear corner post shall have a built in, recessed 2-inch by 6-inch oval or 3-inch by 5-inch rectangle stop/turn taillight. Suitable makes and models are Truck Lite Model 60050R, Peterson Model M420R2 or Maxxima M42213R.
 - Each rear corner post shall have a built in, recessed 2-inch by 6-inch oval or 3-inch by 5-inch rectangle back up light. Suitable make and model is Maxxima M42213.
- n. Raised body indicator shall be a sealed proximity switch mounted near the hoist assembly to control a raised body indicator light. A mounted indicator light shall be provided in the operator console, be plainly visible to the seated operator, be red in color, and flash when the dump body is raised.
- o. Spreader light shall be a Truck Lite model 80360 work light mounted below the left rear dump body corner. It must not hinder the operations of the material spreader.

- p. Mud flaps shall be removable by incorporating 201 or 304 stainless steel removable hinge pin approximately 26 inches long by 1/2" diameter solid rod. The rod will have a 2 1/2" - 90 degree bend for a handle with a 3/16" hole at the opposite end for a lynch pin. There shall be three bushings on the truck side and three bushings on the mud flap side constructed of 1/2" inside diameter pipe by 1 1/2" long constructed of 201 or 304 stainless steel. Spaced accordingly on flap and truck bracket that is constructed of 24" long by 2" deep by 3/16" thick 201 or 304 stainless steel. Mud Flap removal shall not require any tools. See drawing on Attachment 2.
- q. Hydraulic Couplers: Must meet the requirements of Section 2.3.5.j.
- The curbside of the dump body shall have three, 3/8-inch male couplers. Couplers shall be attached to male pipe to male JIC bulkhead fittings mounted on the lowest rub rail near the rear of the bed.
 - The drivers' side of the dump body shall have three male couplers for the slip in spreader. Couplers shall be attached to male pipe to male JIC bulkhead fittings mounted on the lowest rub rail near the rear of bed.
 - The hydraulic lines shall extend from the lowest rub rails to the body's main long sills through a fabricated enclosure on the under-side of the body. The main long sills shall have passageways at the rear for the hydraulic lines. Passages through the long sills shall be sealed around the passage to prevent moisture entry into the long sill.
- r. Conspicuity: The dump body shall be outfitted with DOT-C2 11 inch red by 7 inch white prismatic retroreflective conspicuity tape meeting or exceeding Federal Motor Vehicle Safety Standards (FMVSS) 108, DOT-C2 standards. The conspicuity tape shall be applied continuously to the sides of the dump body along the bottom horizontal bed rails. Where there are other fixtures, such as lights, brackets or steps, along the area where the conspicuity tape is to be applied, the tape shall be terminated 1/2 inch from the object and resume 1/2 inch from the far side of the object. The conspicuity tape shall be applied to rear facing surface of the tail gate along all horizontal tail gate bracing including the top and bottom tail gate rails and vertically along both edges of the tail gate. Where Conspicuity tape from a horizontal and vertical application intersects the vertical tape shall be butt spliced to the edge of the horizontal tape application with no overlap or gap. Where these intersections occur at a corner, the horizontal tape shall be trimmed to match the edge of the vertical tape forming a clean box corner. On stainless steel tailgates, the flat recessed areas between the tailgate bracing shall receive yellow 3M Scotchlite® reflective graphic film series 5,000 or equivalent. This sheeting shall not overlap onto the surrounding bed bracing and shall not be any farther away from the joint of the tailgate bracing than 1/2 inch.
- s. Spreader body hold downs shall consist of four storable winches welded to the upper side of lower body rail in a fashion not to exceed the overall width of the body, 4-inch x 10-foot of nylon webbing with flat hook to be included. Material shall be compatible with the bed's material. Body Builder must coordinate placement of winches to line up vertically with the spreader hold down brackets.
- t. Tarp:
- Shall be a fully automatic, electric type installed system operated from the cab.
 - Arms and tarp-protecting windshield shall be aluminum.
 - Shall be designed for hot asphalt.
 - Tarp shall be designed as shown in Attachment 4.
 - Arm springs shall be adjustable and designed to mount on the underside of the dump body. Elbows of the tarp arms shall be bolted to the arms.
 - Shall have side flaps that fold out over the sides of the dump body.
 - 3) The length and positioning of the flaps shall be such that when deployed and secured, the side flaps fit between the rear edge of the cab shield support gusset and the front edge of the rear corner post.
 - 4) Side flaps shall not be the full length of the tarp.
 - 5) The side flap shall be secured in the covered position by a self-storing bungee rope routed through grommets or "D" rings in the outermost edge of the tarp, and "J" hooks on the bottom side of the middle body rail.
- u. Paver or Asphalt Lip:
- Shall be mounted on the rear dump body apron.
 - Shall be mounted with 1/2-inch hardware. Holes in lip and dump body shall be dimensional to allow any lip to be installed on any dump body. Welded lips are not acceptable.
 - Shall be mounted at an angle of 24 to 28-degrees.
 - Length shall be such as to provide 20-inches of overhang, measured from the rear face of the rear hitch plate to the rear edge of the lip.
- v. Rear post lower covers shall keep the rear tires from throwing debris up into the rear body posts. Should allow for drainage and be easily removed for servicing components inside the body post.

2.3.5 Hydraulic System: All components of the hydraulic system, including optional equipment, shall be designed to operate efficiently at a system maximum pressure of 2,300 psi. Hydraulic specifications listed in this section are for the **standard hydraulic configuration**. All components installed on the standard hydraulic configuration shall be capable of easily accepting the necessary additional hydraulic components for the underbody and wing snow plows as listed in the optional equipment section.

a. Hydraulic Reservoir:

- Shall come complete with all mounting hardware; frame mounting angles, bolts with poly locknuts, and springs.
- Shall be a minimum 40-gallon capacity.
- Shall have a full baffle to prevent sloshing.
- Reservoir and baffle shall be constructed of stainless steel.
- Shall have a screened filler neck with a breather cap.
- Shall include an easily visible all-aluminum housed sight and temperature gauge.
- Bottom shall have a port for suction compatible with hydraulic pump requirements.
- Suction strainer shall be of adequate size to supply full pump demand with a 3 to 5 psi built-in bypass, and have a full flow ball valve installed at the reservoir suction fitting. A heavy plastic wire tie shall be installed to insure the ball valve remains in the open position unless it is intentionally closed.
- Shall have a ¾-inch port with a magnetic plug for draining the reservoir and a ¾-inch port for the pump case drain.
- Back shall have a 3/8-inch port for the solenoid drain and ½-inch port for the low oil sensor.
- Top shall come with provision for a tank-mounted filter.

b. Hydraulic Return Filter Assembly:

- Shall be mounted on the top of the hydraulic reservoir.
- Shall have a 10-micron replaceable cartridge element.
- Assembly shall be capable of 80 gallons per minute (GPM) flow capacity. Shall have a 1-¼-inch NPT port, a built in by-pass and a bypass condition indicator.

c. Hydraulic Return Manifold:

- Shall allow for easy installation of additional hydraulic hoses.
- Shall be installed between the frame rails directly behind the hoist support.
- Unit shall be an aluminum 5-port system. Four ports shall be a #16 O-Ring Boss (ORB) and one shall be a #8 ORB.
- Return oil from the spreader return coupler and valve stack shall be routed to this manifold.
- Return oil from the manifold shall be routed to the inlet of the hydraulic oil return filter.
- Unit shall contain a minimum of two plugged ports for addition of future accessories.

d. Hydraulic Pump: Shall be a Rexroth A10V0100 or pre-approved equal.

- Shall be axial piston, load-sensing type, and be driven off the engine crankshaft by means of a drive shaft.
- Minimum 6.1-cubic inch (100 cubic centimeter) displacement, and capable of 66 GPM (theoretical) at 2,500 rotations per minute (RPM) and 4,000 psi.
- The pump case drain must be positioned as high as possible and directed back to the reservoir without passing through the return line filter.
- Should have an internal bleed down compensator.
- Must have a keyed shaft with an SAE mounting flange.
- Must have side ports. Rear ports are unacceptable.
- Ports must be of the split flange design, sized accordingly for the displacement of the pump.
- Suction fitting shall be a flanged, formed elbow hose barb. Fitting shall be of adequate size for the displacement of the pump.
- Discharge fitting shall be an O-ring thread flange block. Fitting shall be of adequate size for the displacement of the pump.
- A manual, high-pressure ball valve shall be mounted to pressure port of pump.
- System shall be performance checked. System standby pressure shall be set. System maximum pressure shall be set at 2,300 psi.
- A pressure test port shall be provided at the pump by installing a 3/8-inch male Aeroquip FD45-1002-6-6.

e. Hydraulic Pump Drive:

- Driveline must be 1280 and/or 1310 series solid shaft style and must be installed according to manufacturer's instructions to assure proper alignment.
 - Pump shall be driven off the engine crankshaft with a flange yoke.
 - Pump shaft shall have a flange yoke installed to allow shaft to be un-bolted from pump.
 - Universal joints used in the shaft must have grease zerks in the center of the bearing caps.
 - Hardware used for installation of the pump driveshaft shall be to driveline manufacturer's specification. All drive shaft installation hardware shall be torqued to specifications.
- f. Hydraulic Function Control Valves: Shall be bulkhead fitting mounted in a weather-tight enclosure with the fittings on the bottom of the enclosure. Valves shall be mobile hydraulic, cast iron, stackable, load sensing type. All valves shall be operated with proportional electric coils. Proportional coils shall be compatible with the control system valve driver module pulse width modulation (PWM) outputs. All valves within the valve assembly shall have parallel inlets. Valve assembly inlet and outlet ports shall be 1-inch O-ring. Work ports shall be 3/4-inch O-ring. A and B ports shall be individually flow adjustable.
- Standard Hydraulic Function Control Valve Arrangement:
 - 1) Dump Body Hoist: Double acting cylinder valve, with a work port relief valve for down pressure protection on port "A". Pressure setting shall be such that the relief valve will protect the dump body components if the hoist is powered down with the dump body props in place. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 30 GPM. Valve shall prevent any up or down movement of a raised dump body when valve is in the neutral position. Valve shall have a manual override for both raise and lower functions.
 - 2) Front PLOW Lift: Single acting cylinder valve with counter-balance capability. Valve shall be spring return to neutral, with float capability in the lower position. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - 3) Front PLOW Angle: Double acting cylinder valve. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both left and right functions.
 - 4) Spreader: Shall be a 4-circuit motor manifold. The manifold shall be an integral part of the valve assembly. Manifold to contain three solenoid operated, electrically variable, two-port, pressure compensated, direct acting, normally closed when de-energized, proportional flow control cartridges. Each cartridge shall operate by a 12-Volt direct current (DC) coil. Each cartridge shall have a manual override. The flow requirements for each circuit are as follows:
 - Spreader Auger 15 GPM
 - Spreader Spinner 8 GPM
 - Prewet Pump 7 GPM
 - Anti-Ice Pump 15 GPM (cavity plugged if not used for accessory circuit)
 - 5) Hydraulic Accessory: A hydraulic accessory circuit shall be provided. This circuit shall be pressure and flow compensated. Accessory circuit shall have an adjustable flow of 0 to 22-25 GPM. Accessory circuit shall be capable of full pump output at engine idle and regulated to a maximum flow of 22-25 GPM. Accessory circuit shall use the same hose and coupler as the spreader auger circuit. It is permissible to install a proportional flow-control cartridge in the un-used fourth circuit of the spreader manifold and 'tee' this circuit into the auger circuit to accomplish this, provided it does not affect the circuit when used as the spreader auger supply. Accessory circuit shall have a manual override.
- g. Hydraulic Function Control Valve Enclosure:
- a. Must be mounted between the cab and dump body outside of the left hand frame rail.
 - b. Must be mounted in a manner to not conflict with potential attachments.
 - c. Shall allow easy access to hose connections.
 - d. Shall be three pieces: the enclosure body, valve mounting plate, and the lid.
 - e. The valve plate shall be constructed of 1/4-inch stainless steel. The sides of the body shall have integral, formed mounting angles.
 - f. The outside lip of the enclosure shall have a gasket all the way around to seal from weather when lid is installed.
 - g. The enclosure body and lid shall be made of 10-gauge stainless steel with a minimum 1-inch lip on all sides. The lid shall be held on with rubber latches on each side. Unit shall have two lifting handles.

- h. The top and front of the enclosure shall be open with the lid off.
 - i. Valve plate shall bolt to the inside of the enclosure for ease of mounting.
 - j. Must include a formed gasket to seal the valve plate to the enclosure.
 - k. Enclosure shall be large enough to accommodate a valve assembly capable of at least 10 functions.
- h. Snow Plow Cushion Valve:
- A double-relief cushion valve must be installed for front snow plow angle.
 - The valve shall be set at 2,000 psi.
 - The valve shall be constructed of a high-tensile cast iron body with ball and spring style relief that has hardened seats.
 - The valve shall be installed at the front bumper and snow plow hitch.
 - Valve shall have O-ring thread ports.
- i. Hydraulic Hoses:
- Suction hose from the reservoir to the pump shall be SAE 100R4 style of adequate size for the displacement of the pump. Shall be connected to the pump barbed fitting, and double clamped with T-bolt style stainless steel super clamps. Shall be connected to the reservoir ball valve with a king nipple, double clamped with T-bolt style stainless steel super clamps.
 - All hoses, with the exception of the suction hose, shall be rated for a working pressure of 3,000 psi.
 - All hose ends, with the exception of the suction hose, shall be swivel or swivel adapters.
 - Ends connecting to valve assembly shall be 90-degree female JIC swivel.
 - Pressure hose shall be of adequate size for the displacement of the pump, with female JIC swivels at both ends.
 - Return hose shall be of adequate size with female JIC swivels at both ends.
 - Hoist hoses shall be 3/4-inch inside diameter (ID) with female JIC swivels at both ends.
 - Snow plow hoses shall be 3/8-inch ID with female JIC swivels at both ends.
 - Auxiliary hoses to the right rear corner of the dump body shall be 3/8-inch ID with female JIC swivels at each end. The auxiliary hoses shall be "teed" at the control valve enclosure with the front snow plow lift, and left and/or right circuits.
 - Auger hose to the left rear corner of the dump body shall be 3/4-inch ID with female JIC swivels at both ends. The auger circuit shall have a capped "tee" installed at the valve enclosure, enabling later installation of another hose routed to the front of the truck.
 - Spinner hose to the left rear corner of the dump body shall be 1/2-inch ID with female JIC swivels at both ends.
 - Spreader return hose to the left rear corner of the dump body shall be 1-inch ID with female JIC swivels at both ends. The spreader return circuit shall have a capped "tee" installed at the return filter assembly, enabling later installation of another hose routed to the front of the truck.
 - Pump case drain shall be a minimum 3/4-inch ID with female JIC swivels at both ends, and also have a 3/4-inch NPT ball valve installed at the reservoir.
 - Load sense line shall be 3/8-inch ID with female JIC swivels at both ends.
- j. Hydraulic Quick-Disconnect Couplings: All shall be full flow Aeroquip FD45 or Parker 60 series. A dust cap or plug shall be furnished with every male and female coupler. See Dump Body Section 2.3.3q and 2.3.4q for detailed layout and mounting of couplers.
- Front snow plow lift circuit shall be equipped with a male 3/8-inch FD45-1002-6-6 coupler installed in the front bumper. A 3/4-inch by 3/8-inch ID hose with a female 3/8-inch FD45-1003-6-6 coupler shall be installed on the hydraulic lift cylinder.
 - Snow plow cushion valve shall be equipped with a male 3/8-inch FD45-1002-6-6 coupler, and a 3/4-inch by 3/8 inch ID hose with a female 3/8-inch FD45-1003-6-6 coupler.
 - Auxiliary hydraulics at the right rear corner of the dump body shall be equipped with three male 3/8-inch FD45-1002-6-6 couplers.
 - Spinner circuit shall have a 1/2-inch male FD45-1002-8-10 coupler at the left rear corner of the dump body.
 - Auger circuit shall have a 3/4-inch male FD45-1002-12-12 coupler at the left rear corner of the dump body.

- Spreader return circuit shall have a 1-inch male FD45-1002-16-16 coupler at the left rear corner of the dump body.

2.3.6 Spreader Control System: System shall be a Certified Power ACS system meeting the following requirements or a pre-approved equal.

a. Control System:

- Shall be a complete control system that operates on a Controller Area Network (CAN)-Bus, using CANopen protocol, J1939.
- Shall consist of modules that reside on the BUS, and allow flexibility in mounting configurations.
- Shall be completely expandable and allow for additional modules to be added to the BUS, such as a joy stick control for an optional underbody scraper.
- System controller, or valve driver module, shall control all standard hydraulic functions; dump body hoist, snow plow lift, snow plow left and/or right, auger, spinner, hydraulic driven pre-wet, and optional hydraulic functions.
- Shall be capable of providing ground speed sensing, closed loop spreader and granular pre-wet system operation.
- Shall be capable of applying 200 to 400 lbs. of granular material per lane mile at speeds up to 45 mph. Actual application rate shall be +/- 5% of the selected application rate.
- Shall work equally well whether the truck is driven forward or in reverse.
- All modules shall be software upgradeable using a laptop and interface cable. Shall have an Ethernet port for accessing a built in Web server. The Web server may be used to configure or troubleshoot a system by connecting to a PC. Interface shall utilize Internet Explorer and not require any proprietary software to connect to the system. No external components shall be required to calibrate the system.
- Shall incorporate three levels of security and access that are password protected and defined by the user. The three levels of access shall provide access to the system setup, data, configuration fields, and parameters based upon access given.
- Shall have a built in diagnostic feature allowing technicians to view all input signals in real time. System shall also provide error logging and system status change logging for reviewing operator inputs.
- Shall be capable of both automatic and manual modes, and provide a lock out of manual mode.
- Shall provide 'blast' and 'pause' functions, and be capable of calibration at multiple gate settings.
- Shall be capable of operating at least four different programmed materials.
- System software shall incorporate a "test speed" mode for use in testing the system safely without requiring the truck to be moving or the drive axles engaged.
- Shall provide monitoring, and audible and visual operator warning, for low hydraulic oil level and hydraulic oil overheat conditions.
- Shall suspend operation of the spreader and all hydraulic accessory functions in the event of low hydraulic oil level and/or hydraulic oil overheat condition.
- Shall have an override feature to allow function use in an emergency situation.
- Auger feedback sensor shall be mounted to a hydraulic flow meter. Flow meter shall be mounted inside the hydraulic control valve enclosure. Feedback sensor shall be hard wired to the valve driver module. Feedback sensor shall be replaceable independent of the flow meter.
- Shall provide open loop operation in the event of a feedback sensor failure.
- Shall use input from a float-level in the pre-wet enclosure to prevent pre-wet pump run-dry. This shutdown feature shall incorporate a buffer to prevent liquid pump shutdown due to an intermittent signal caused by sloshing material in the supply tanks.
- Shall provide stand-alone operation of the feeder circuit, and spinner circuit, for powering hydraulic accessories other than a slip-in spreader.
- Shall provide stand-alone operation of the pre-wet system, allowing it to be used for other operations.

b. Valve Driver Module:

- Shall be mounted inside the hydraulic control valve enclosure. No portion of the valve driver module may be outside of the hydraulic valve enclosure.
- Shall accept closed loop feedback signals, and digital inputs.
- Shall have a maximum of 6 pulse width modulation (PWM) output channels.

- All PWM outputs shall be software configurable, and controlled by closed loop operation, proportional input devices, or digital input devices.
 - Shall have internal over temperature shutdown, over current shutdown, and low voltage shutdown.
 - All electrical connections shall be IP68 sealed when mated utilizing threaded connections for positive retention.
 - Shall reside on the BUS as the “master”, and all truck values and configurations shall be saved in this module.
- c. Operator Controls and Display Modules:
- Shall be resistant to salt and other chemicals used during the snow removal process.
 - Controls shall utilize detented rotary encoders for setting material application rates.
 - Controls shall utilize snap action push buttons for navigation through the system program and function selection.
 - Controls shall be backlit for nighttime operation.
 - Display screen shall be a minimum of 20-square inches.
 - Controls and display shall be mounted in a factory made, painted or powder coated bracket. Display shall be operator adjustable for proper viewing angle.
 - Display shall automatically adjust brightness level for nighttime operation.
 - Display shall show; auto and manual mode, current material, granular rate, pre-wet rate, lane width, system status, error messages, plow float activated, system hydraulic pressure, and pavement temperature sensor information if optioned.
- d. Hydraulic Function Control Lever Modules:
- Shall be proportional CAN BUS controls and shall be mounted to the right of the driver and be within easy reach.
 - Shall be labeled with decals for operation.
 - Shall be equipped with a single axis control lever with center position dead man lock for the dump body up and/or down.
 - Shall be spring returned to neutral.
 - Shall be equipped with a single axis control lever with center position dead man.
 - Shall be equipped with a dual axis control lever for the snow plow lift, and snow plow left and/or right and shall be spring returned to neutral from all directions.
 - Shall be capable of placing the snow plow lift valve in float when moved to the extreme forward position.
 - Handle shall be equipped with a maintained pass and/or pause switch and a momentary blast switch.
 - Shall be mounted in a factory style stand, spaced for full axis control.
 - Configuration of the center position lock must be pre-approved by the MoDOT Representative.
- e. Control System Cable: Specifications for all cables associated with the hydraulic and spreader control system.
- Shall meet International Organization for Standardization (ISO) rating Ingress Protection (IP) 68 and National Electrical Manufacturers Association (NEMA) 6.
 - Connectors shall be O-ring sealed.
 - Cable jacket should be Thermoplastic Elastomer (TPE), and molded to the connectors.
 - Connectors and harness shall be rated and tested for a temperature range from minus 30-degrees Celsius to 70-degrees Celsius.
 - Connectors shall be tested to be water tight when submerged in 6-feet of water for 24-hours, in 275-feet of water for 1-hour, and when subjected to a 1,000 psi pressure wash.
 - Connectors shall be designed to have no corrosion after 5,000 hours in 35-degrees Celsius salt spray.
 - Cabling shall be rated excellent in low temperature flexibility and in its resistance to oxidation, heat, oil, sunlight, ozone, abrasion, electrical priorities, flame, gasoline, degreaser solvents, alcohol, and weld slag.

2.3.7 Granular Pre-Wet System:

- a. Shall be mounted outboard of the truck frame ahead of the rear axle in a location approved by the MoDOT Representative.
- b. The suction and discharge hoses shall be routed to the rear of the truck frame and secured with bulkhead mounted cam-lock couplers in a location approved by the MoDOT Representative.

- c. Shall come complete with mounting hardware. Pump and hydraulic motor shall be mounted in a weather tight enclosure.
- d. Shall be hard-wired to, and completely controlled, by the spreader control system.
- e. Shall be hard-plumbed to, and supplied by the hydraulic valve assembly.
- f. Liquid pump shall be corrosive and abrasive resistant. No plastic pump components acceptable
- g. Pump shall be self-priming, positive displacement design.
- h. A manual bleed valve shall be installed in the suction hose at the enclosure to facilitate easier pump priming.
- i. Shall have a relief valve to protect against over-pressurization.
- j. Pump shall have a maximum pressure rating of 100 psi.
- k. Pump shall be plumbed through a 0 to 15 GPM flow meter, made of a non-corrosive material.
- l. Pump shall be capable of producing 9 GPM at 40 psi, with 4.5 GPM maximum oil flow to the motor. Coupler between the hydraulic motor and pre-wet pump shall be visible and accessible to break loose when stuck.
- m. Hydraulic connections shall be bulkhead mounted in the enclosure.
- n. All hydraulics inside enclosure shall be hard plumbed.
- o. Shall have a float switch in the pump inlet circuit. The spreader control system shall use this switch to shut off the liquid pump to prevent damage to the pump from running dry.
- p. Flow meter sensor wiring and float switch wiring shall utilize a bulkhead mounted connector in the pre-wet enclosure.
- q. Shall include a ¼ turn valve and strainer-filter. MoDOT Representative shall approve location.
- r. Shall include spray nozzles and plumbing for installation on the material spreader. Nozzles shall be of sufficient size and type for the capacity of the pre-wet system. If a material spreader is optioned, components must be installed on the spreader and tested.
- s. If a material spreader is not optioned, nozzles shall be shipped loose, and placed in the frame-mounted tool box.
- t. A nurse tank with a 2.5-gallon minimum capacity shall be mounted with the pre-wet enclosure to facilitate installation of the pre-wet float, priming, and flushing of the pre-wet system.

2.3.8 LED Warning Light System: Each unit shall be equipped with an SAE Class 1 LED warning light system in accordance with the following specifications. System shall be evaluated and approved by the MoDOT Representative.

- a. Centralized Controller:
 - Shall operate on 12-Volt DC and operate through the range of approximately 10 to 16-Volts DC with nominal degradation of performance in either intensity or flash rate.
 - Shall be mounted with the power distribution box between the seats. All standard mounting hardware shall be included.
 - Shall have radio frequency interference (RFI) suppression circuit(s) to prevent radiated, as well as conducted, interference problems.
 - Shall be powered by a factory work light circuit, or the chassis electric accessory power supply. This circuit shall provide key-on and key-off operation of the LED light system. Circuit shall have its own factory-installed circuit protection and switch. A dash mounted indicator light shall indicate when the warning lights are operating.
 - Shall have four outputs, one for each of the four individual light heads to be installed on the truck. Outputs shall power each light head by means of a two-wire circuit. Controller connections for the individual light heads shall be made using male and female spade terminals. Controller housing shall also provide strain relief for the individual light head harnesses.
 - Shall produce a burst of four impulses per burst to each light head, at a minimum flash rate of 70, maximum flash rate of 110 bursts per minute. MoDOT Representative must pre-approve flash pattern.
 - Shall be reversed input polarity protected. Shall also provide full output short-to-ground protection to prevent damage to the controller and light heads.
- b. LED Modules: System shall use individual LED modules, approximately 3-inches by 5-inches in size. This module must be used in all installed light heads. Modules shall be easily replaced.
- c. Cab Shield (Top) Light Assemblies: Must be Whelan Micro Freedom 400 or pre-approved equivalent. Two light heads shall be mounted to the cab shield, one on each side of the body. Light heads are to be permanently mounted to a fixed mount, and elevated to provide ample cross-visibility of the light head from

the front and rear of the truck. For each light head, one module shall face to the front, one shall face to the rear, and one shall face to the side of the truck. The combination of the two light heads shall provide 360-degrees of visibility in a horizontal plane. The lights shall be amber and white in color. The amber and white LED shall flash in an alternating pattern in sequence with other alternating lighting patterns and in sequence with other alternating truck lighting. Each light head shall have a 12-inch maximum cable with a single weatherpak connector for connecting to the extension harness from the central controller. Each light head shall have protective guards sufficient enough to protect the light head assembly from low hanging tree branches. Protective guards shall not compromise the intensity or visibility of the light head.

- d. Rear and Corner Post Light Assemblies: Must be Whelan 400 Series Square, Super 3, amber, red white triple lights including the Whelan model TIR3 amber side light or pre-approved equivalent. Light heads shall be vertically mounted on each rear corner of the dump body using a stainless steel housing and bracket. Each light head shall have a weatherpak connector for connecting to the extension harness from the central controller.
- e. Cable Harnesses:
 - The cable shall be expected to maintain its electrical, mechanical, and environmental integrity for the life of the vehicle on which it is originally installed on, without the need for re-wiring at any future time.
 - The cable shall be flexible in cold weather, and tolerant of hot temperatures.
 - Each power conductor shall meet the circuit requirements for the specified lighting system. Cable shall have an outer insulation jacket enclosing both conductors.
 - Insulation jacket shall be highly resistant to abrasion, corrosion, oil, grease, and normal highway chemicals or environmental abuse for the normal life expectancy of the vehicle.
 - The cable will be available in bulk from the manufacturer.
 - Splices are not acceptable.

2.4 Single Axle Dump Truck Technical Specifications: The unit offered must meet the technical requirements in section 2.3 above as well as the following requirements in this section. The combined specifications are for the manufacture of a 35,000 pound (lb.) Gross Vehicle Weight Rating (GVWR) Set Forward Single Axle Dump Truck with a bed to accommodate a 10 foot spreader.

- a. Change 2.3.1.e – Minimum gross torque to 660 pound-feet, and a minimum SAE gross horsepower of 270 when operated within a governed speed as recommended by the engine manufacturer.
- b. Change 2.3.1.h – Axle shall be standard manufacture 14,000 lb. rated capacity.
- c. Change 2.3.1.i – Axle shall be standard manufacture 21,000 lb. rated capacity.
- d. Change 2.3.4.a – Dump body shall be a 10-foot cross-memberless Western style body.
- e. Change 2.3.4.b – Capacity shall be a maximum of 5-cubic yards water level.
 - Shall have a 10-foot maximum inside length.
 - Shall have a 100-inch minimum outside width.
 - Shall have an 86-inch minimum inside width.
 - Shall have a 28-inch minimum side height with level ends.

2.5 Tow Plow Dump Truck Technical Specifications: The unit offered must meet the technical requirements in section 2.3 above as well as the following requirements in this section. The combined specifications are for the manufacture of a 58,000 pound (lb.) Gross Vehicle Weight Rating (GVWR) Set Forward Tow Plow Dump Truck with a bed to accommodate a 16 foot spreader.

- a. Change 2.3.1e – Minimum gross torque to 1,500 pound-feet, and a minimum SAE gross horsepower of 425 when operated within a governed speed as recommended by the engine manufacturer.
- b. Change 2.3.1j – Fuel tank capacity shall be a 100-gallon minimum.
- c. Addition 2.3.2p – Three 1/2-inch male hydraulic couplers for the independent control of tow plow shall be placed on the passenger side of vehicle at the rear of the dump body in the lower rub rail.
- d. Addition 2.3.6d – One additional dual axis tow plow control lever for the tow plow moldboard lift, and tow plow steer left and right and shall be spring returned to neutral from all directions.
- e. Addition 2.3.5f6 -
 - Tow Moldboard Lift: Single acting cylinder valve with counter-balance capability. Valve shall be spring return to neutral, with float capability in the lower position. Valve shall be pressure and flow-

compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.

- Tow Plow Steering: Double acting cylinder valve. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both left and right functions.
- f. Addition 2.3.5i – Tow plow lift and steer hoses shall be ½-inch ID with female JIC swivels at both ends.
- g. Addition 2.3.8a – The factory work light circuit shall run to the rear of the truck with a 6 pin trailer-style connector to supply power and ground to the tow plow strobe lights.

2.6 Optional Equipment:

2.6.1 Right hand and/or left hand mid-mount wing plow:

- a. Right hand wing plow shall be a Henke Model MDPW or Monroe MJW-8 or pre-approved equal.
- b. Left hand wing plow shall be a Henke Model MDPW or Monroe MJW-8L or pre-approved equal.
- c. Shall be built and tested to the latest OSHA requirements and SAE standards.
- d. Shall be designed to plow at a desired height, and be able to float.
- e. The moldboard must fold close to the truck for clearing bridges, transporting, or storing.
- f. Shall have an adjustable plowing angle.
- g. The height of either end shall be hydraulically controlled from the cab.
- h. Wing and assemblies must be easily and quickly attached and removed.
- i. All welds and mounting brackets shall be of high quality construction.
- j. All major assemblies such as moldboard, push tubes, mounting plates etc. shall be designed for rugged use.
- k. Moldboard:
 - Moldboard shall be formed from 10-gauge steel, inboard height shall be minimum of 24-inches, outboard height not to exceed 28-inches. Cutting edge shall be a minimum of 1/2-inch by 8-inch and a minimum length of 8-feet. Moldboard top angle shall be a minimum of 2-inch by 2-inch by 5/16-inch and bottom angle minimum of 4-inch by 4-inch by 3/8-inch.
 - There shall be a minimum of five ribs per moldboard to be continuously welded from top moldboard to bottom of moldboard for structural strength.
 - A full moldboard trip shall be provided. Trip mechanism shall perform at plowing speeds up to 45 MPH.
- l. Cutting edge shall have a 45-degree angle mitered leading edge.
- m. Hydraulics:
 - A dual axis control lever shall be installed to operate the wing plow. Control lever shall be CAN BUS proportional electric, and communicate with the valve driver module utilizing the hydraulic/spreader control system cables. Control shall be mounted in the same mounting stand as the standard hydraulic control levers.
 - Hydraulic function control valves shall be bulkhead fitting mounted in a weather tight enclosure, with the fittings on the bottom of the enclosure. Valves shall be mobile hydraulic, stackable, load sensing type. All valves shall be operated with proportional electric coils. Proportional coils shall be compatible with the control system valve driver module PWM outputs. All valves within the valve assembly shall have parallel inlets. Valve assembly inlet and outlet ports shall be 1-inch O-ring. Working ports shall be ¾-inch O-ring. A and B ports shall be individually flow adjustable.
 - 1) Toe Raise and Lower: Double acting cylinder valve, with a work port relief valve for down pressure protection on port “A”. Work port relief valve shall be set at 500 psi. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - 2) Heel Raise and Lower: Double acting cylinder valve. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - Hydraulic Cylinders: A minimum of two double acting cylinders with chrome-plated or black nitrided piston rods shall be included for angling moldboard and applying down pressure to moldboard with integral counter balanced valves. The hydraulic cylinders shall be industrial quality. Bidder shall provide removable cylinder stops of sufficient size to prevent blade from gouging pavement.
 - Hydraulic Hoses and Couplers: All hoses shall be rated for a working pressure of 3,000 psi.
 - 1) Wing plow hoses shall be 3/8-inch ID with female JIC swivels at both ends.

- 2) Hydraulic quick couplers shall be provided, and securely mounted in the wing area to provide easy removal and remounting of the wing.
- 3) All hydraulic couplers shall be full-flow Aeroquip FD45 or equivalent Parker 60 series. Couplers used shall be: male 3/8-inch FD45-1002-6-6 female 3/8-inch FD45-1003-6-6.
- 4) A dust cap or plug shall be furnished with every male and female quick coupler
- n. All grease points shall provide adequate lubrication for the greased joint.
- o. Color shall be DuPont N2065-Yellow.

2.6.2. Heavy Duty Right Hand 3 Function Front Mount Wing Plow:

- a. Truck chassis must come equipped with integral frame extensions allowing adequate clearance to ensure the post will not interfere with hood or plow lights with hood in any position
- b. Front wing plow and mounting shall be removable without the need to remove any front plow mounting components or hitch.
- c. Wing plow assembly shall be mounted in a way as to not interfere with front plowing operations whether the wing is in the deployed or transport position.
- d. Attached transport locks shall be provided to secure the wing toe and heel in the transport position.
- e. Moldboard shall be of ribbed design, open backed, constructed of a one piece, continuous welded, minimum 10 gauge, grade 50 high tensile steel.
- f. Moldboard shall feature a punched bolt-on one piece cutting edge with radius cut at the toe to prevent gouging.
- g. The rear of the moldboard must have provisions to allow bolting of a single extendable wing arm. Attaching area must have adjustment forward and back to allow the wing arm to be as close to 90 degrees with cutting edge of the moldboard.
- h. Single front post design with slide to allow benching of at least 24-inches high.
- i. Slide plate must incorporate a float action to accommodate for different cutting edge heights
- j. Must incorporate a float system independent of the post hydraulic cylinder providing a minimum of 3-inches of toe float
- k. Slide plate will attach to the hinge by means of a 2-inch pin minimum.
- l. Hinge shall be tripping style by way of spring or rubber timbren
- m. Hinge shall be attached to the moldboard by way of 1¼- inch minimum, UNC grade eight bolt, slotted nut and cotter key.
- n. Wing arm brace shall be constructed of an inner and outer tube to allow extension.
- o. Arm will attach to the moldboard using a swivel style connection.
- p. Wing heel lift cylinder shall incorporate mounting to allow floating of the moldboard during plowing operation.
- q. Wing shall be operated using a joystick meeting specifications of section 2.3.5.d.
- r. All functions hydraulic, cables are not allowed.
- s. All hydraulic cylinder ports shall be ORB.
- t. All hydraulic cylinders and circuits shall be double acting, with adjustable down pressure relief capability on the toe and heel hydraulic sections. Work port section relief or load sense limiting relief is acceptable. Remote mounted or in-line relief valves are not acceptable.
- u. Hydraulic hoses shall meet specification requirements of 2.3.5.i, and in addition shall incorporate quick disconnect couplings to allow removal of the wing plow. Couplings shall meet specification requirements of 2.3.5.j.
- v. Wing "out" function shall utilize a counterbalance valve incorporated on the hydraulic cylinder to prevent plow from drifting away from truck when transport lock mechanism is not being used.
- w. Wing shall operate as a moldboard extension to the front plow when used simultaneously to prevent leaving a berm strip on the road surface.
- x. Selection of this option shall require an additional booster type air spring installed on the wing mounted side of the front axle. This air spring shall be controlled by rocker –style switch in the operator console

2.6.3 Underbody Scraper:

- a. Unit shall be a 10-foot underbody scraper designed for plowing and cutting snow and ice. Acceptable model shall be a Henke Model UBS10-XH or pre-approved equal. The underbody scraper shall be built and tested to

the latest OSHA requirements and SAE standards. All welds and mounting brackets shall be high quality construction. The underbody scraper must be easily detachable from the truck.

- Hanger brackets shall be attached to the frame by four heavy-duty mounting legs, minimum of 4-inch ship and car (S&C) 13.8-pound structural channel or better. Bidder shall provide and include detailed installation drawings.
- Hanger board shall be a minimum of 14-inch top plate width, 10-inch 30-pound S&C channel and 4-inch 13.8-pound S&C channel welded to form a single unit or equivalent.
- Moldboard shall be a minimum length of 10 feet, maximum height of 21-inches, 1-inch thick, high-carbon steel, punched with standard blade holes. Moldboard must be hydraulically angled left and right to achieve the maximum possible angle. The moldboard shall be capable of rising to a horizontal position with a minimum ground clearance of 8-inches when not in use. Moldboard shall be drilled for right-hand and left-hand extensions.
- Hinge shall be a minimum 2-1/2-inch diameter, 96-inch length cold-rolled steel. The hinge shall have multiple grease points to provide full-width lubrication of the hinge. The pin shall be spiral grooved to facilitate greasing.
- The circle shall be minimum 1-inch heavy-duty steel, notch-less. The center pin shall be a minimum of 5-inches and a remote mounted grease fitting tube approximately 36-inches long shall be provided. Nylon wear pad required between hold down block and top of circle. Stops shall be welded on after installation of the moldboard to maximize turning radius of the underbody scraper and provide adequate clearance to all truck components.
- Hydraulics:
 - 1) A dual axis control lever shall be installed to operate the underbody scraper. Control lever shall be CAN BUS proportional electric, and communicate with the valve driver module utilizing the hydraulic/spreader control system cables. Control shall be mounted in the same mounting stand as the standard hydraulic control levers.
 - 2) Hydraulic function control valves shall be bulkhead fitting mounted in a weather tight enclosure, with the fittings on the bottom of the enclosure. Valves shall be mobile hydraulic, stackable, load sensing type. All valves shall be operated with proportional electric coils. Proportional coils shall be compatible with the control system valve driver module PWM outputs. All valves within the valve assembly shall have parallel inlets. Valve assembly inlet and outlet ports shall be 1-inch O-ring. Working ports shall be 3/4-inch O-ring. A and B ports shall be individually flow adjustable.
 - Raise and Lower: Double-acting cylinder valve with a work port relief valve for down pressure protection on port A. Work port relief valve shall be set at 500 psi. Valve shall be spring return to neutral. Valve shall be pressure and flow- compensated, with an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - Left and Right: Double-acting cylinder valve. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - Cushion Valve: Shall include a double relief cushion valve, mounted on a cross member behind the cab. The valve shall be constructed of a high-tensile cast iron body with ball and spring style relief that has hardened seats. The relief valves shall be set at 750 psi. The valve shall have O-ring thread ports.
 - 3) Cylinders:
 - Raise and Lower: A minimum of two 3-inch diameter double-acting cylinders with chrome-plated or black nitrided piston rods. Shall have integral counter balance valve.
 - Left and Right: A minimum of two 4-inch double-acting cylinders with 2-inch chrome-plated or black anodized rods for the reversing of the moldboard.
 - 4) Hydraulic Hoses and Couplers: All hoses shall be rated for a working pressure of 3,000 psi.
 - Underbody scraper hoses shall be 3/8-inch ID with female JIC swivels at both ends.
 - Hydraulic quick couplers shall be provided, and securely mounted in the underbody scraper area to provide easy removal and remounting of the scraper.
 - All hydraulic couplers shall be full flow Aeroquip FD45 or equivalent Parker 60 series. Couplers used shall be: male 3/8-inch FD45-1002-6-6, female 3/8-inch FD45-1003-6-6.
 - A dust cap or plug shall be furnished with every male and female quick coupler.

5) Trip Springs: A minimum of two heavy-duty compression springs mounted in 6-inch diameter canisters.

- All grease points shall provide adequate lubrication for the greased joint.
- Color shall be DuPont N2065-Yellow.

- 2.6.4 Skid Mounted Material Spreaders and Auger: Unit shall be a hydraulic driven, materials spreader body. The unit shall be a self-contained, stainless steel, V hopper type. It shall be compatible with the Western style dump body specified in sections two of this request. The spreader shall be capable of spreading uniformly all types of granular materials: salt, cinders, chemicals, abrasives, and mixtures of these up to a width of 40-feet.
- a. The body and conveyor box shall be manufactured into a common unit in accordance with good commercial practices.
 - b. All stainless steel shall be welded using stainless welding wire and shall be left unpainted.
 - c. Any carbon steel components shall be chemically cleaned and coated with a lead-free primer and painted with lead-free gray enamel.
 - d. The manufacturer's standard warranty against defective parts, material, and workmanship shall be furnished. A copy of the warranty is to be attached to the bid
 - e. The body is to be 100% welded on the inside. Cross-member and side-support spacing deviations may be allowed if necessary for component installation.
 - Overall height shall not to exceed 56-inches to the top of the center screen support beam.
 - Top inside width shall not be less than 78-inches.
 - Sidewalls must be sloped at approximately a 45-degree angle.
 - Shall be constructed of a minimum 12-gauge stainless steel.
 - Long sill, cross-members and full-length steel channel skids shall be a minimum of 7-gauge stainless steel.
 - Side supports shall be a minimum of 12-gauge stainless.
 - f. Top Grate Screens:
 - Screens shall be hinged at the center support beam of the spreader body for easy handling.
 - Screens shall be made of either 3/8-inch diameter rods centered on crossbars or 3/8-inch diameter woven wire on heavy-duty frames. Screen openings to be approximately 2-1/2-inches by 2-1/2-inches.
 - The center support beam must be a minimum 2-inch by 6-inch steel tube with a minimum 3/16-inch thickness.
 - The center support beam shall be raised above the top of the body to prevent material build-up on top of the screens.
 - g. Tie Down and Lifting Brackets:
 - A minimum of four, at least 10-gauge stainless steel hold down brackets designed for 4-inch nylon straps with flat hooks, two on each side. The Bidder must coordinate placement of hold down brackets with dump body manufacturer.
 - A 10-gauge minimum stainless steel lift hook and bracket shall be installed on the front and rear face of the body at each upper corner to allow for easy handling when loading or unloading.
 - h. Conveyor:
 - Conveyor box and floor shall be 7-gauge stainless steel.
 - The conveyor chain shall be a heavy-duty pintle chain, Drives D667X or equal.
 - Crossbars shall be 1-1/2-inch by 1/4-inch by 18-inch minimum welded to the chain links on 4-1/2-inch centers.
 - Chain tensioner shall be screw type, spring loaded, on the front idler shaft.
 - A rear belt type bar wiper shall be provided.
 - Front idler shaft bearings shall have grease zerk lines plumbed to the rear of the body.
 - Front idler shaft shall have 8-tooth sprockets.
 - i. Conveyor Gearbox:
 - Ratio shall be 50:1. Gearbox shall have hardened input and output shafts and a bronze bull gear.
 - Output shaft shall have 8-tooth sprockets.
 - Shall have a high torque, low speed, gerotor type hydraulic motor installed. Motor shall be designed to operate effectively at a maximum system pressure of 2,300 psi. Hydraulic motors designed to operate at a pressure above 2,350 psi are unacceptable.

- Hydraulic motor shall have O-ring thread ports.
- j. Discharge gate shall be located at the rear of the body to properly adjust the flow of material to the spinner.
- Maximum feed gate opening shall be 11-inches high by 20-inches wide.
 - The discharge gate and track shall be 7-gauge stainless steel.
 - The screw jack adjusting the discharge gate height shall have nylon U-joints and bushings with grease fittings on jack head.
 - The grease zerk on the jack shall be relocated and plumbed to accommodate greasing from ground level.
- k. Drop Chute and Spinner:
- Drop chute shall be made of a minimum of 12-gauge stainless steel.
 - Drop chute shall bolt to the long sills.
 - The chute shall be fully enclosed and include an operator-adjustable deflector at the bottom to change the flow of material from the middle of the chute to one side or the other.
 - The bottom of the chute shall have a hood with operator-adjustable material deflectors installed on each side and rear of the drop chute.
 - The spinner shall be securely mounted at the bottom of the chute. Spinner motor mounting brackets shall be a minimum of 7-gauge stainless steel.
 - The spinner shall be operated by a high torque, low speed gerotor type hydraulic motor with O-ring thread ports.
 - The height of the spinner disk shall be adjustable with an ideal height of 18-inches above the ground.
 - A 20-inch spinner disk shall be 7-gauge stainless steel or pre-approved equivalent. Spinners made of ferrous metals will not be accepted.
- l. Hydraulic Hoses and Couplers
- All hydraulic hoses shall be rated for 3,000 psi working pressure.
 - Hydraulic hoses shall be long enough to be routed from their respective connection point on the spreader to the male hydraulic couplers mounted in the left rear corner of the dump body.
 - Hoses shall be routed up to the upper left rear corner of the spreader body and secured at a point to allow the hoses to go over the side of the dump body and down to the male couplers at the left rear corner of the dump body.
 - The return circuit for the conveyor and spinner motor shall be “teed” together on the spreader and run together in a common return hose to the truck coupler.
 - Hydraulic hoses shall be sized as follows:
 - 1) Auger hose shall be 3/4-inch ID with female JIC swivels at both ends. Hose shall have a 3/4-inch female FD45-1003-12-12 coupler attached.
 - 2) Spinner hose shall be 1/2-inch ID with female JIC swivels at both ends. Hose shall have a 1/2-inch female FD45-1003-8-10 coupler attached.
 - Spreader return hose shall be 1-inch ID with female JIC swivels at both ends. Hose shall have a 1-inch female FD45-1003-16-16 coupler attached.
- m. Liquid Chemical Storage:
- Two side-mounted, minimum of 100-gallon polyethylene reservoir tanks, one per side, shall be provided.
 - A minimum of a 3-inch top fill port with splash-proof vent and a 3/4-inch suction port shall be molded into each tank.
 - Both tanks shall be plumbed together with a minimum 1-1/2” ID hose and a tee located at the left rear corner of the spreader.
- n. Conspicuity: Spreader shall be outfitted with DOT-C2 11 inch red by 7 inch white prismatic retroreflective conspicuity tape meeting or exceeding FMVSS 108, DOT-C2 standards. The conspicuity tape shall be applied continuously along the top and vertical sides of the rear of the spreader being inset two inches from the edge. It shall be terminated 1/2 inch from any object and resume 1/2 inch from the far side of the object.
- o. 10-Foot Skid-Mounted Materials Spreader – Unit shall meet all minimum requirements of section 2.6.4 a. through n. and in addition offer the following:
- The spreader body shall have a minimum of five cubic yards struck capacity.
 - The spreader shall have an inside body length of 10-feet at the top.
 - The body shall have a minimum of five cross-members and side supports spaced 12-inches from body ends on 24-inch centers.

- The body is to have a top-grate screen grid, having at least four sections, two on each side.
- p. 13-Foot Skid-Mounted Materials Spreader – Unit shall meet all minimum requirements of sections 2.6.4 a. through n. and in addition offer the following:
- The spreader body shall have a minimum of nine cubic yards struck capacity.
 - The spreader shall have an inside body length of 13-feet at the top.
 - The body shall have a minimum of six cross-members and side supports spaced 12-inches from body ends on 24-inch centers.
 - The body is to have a top-grate screen grid, having at least six sections, three on each side.
- q. 16-Foot Skid-Mounted Materials Spreader – Unit shall meet all minimum requirements of sections 2.6.4 a. through n. and in addition offer the following:
- The spreader body shall have a minimum of eleven cubic yards struck capacity.
 - The spreader shall have an inside body length of 16-feet at the top.
 - The body shall have a minimum of eight cross-members and side supports spaced 12-inches from body ends on 24-inch centers.
 - The body is to have a top-grate screen grid, having at least eight sections, four on each side.
- r. Skid Mounted Single Auger – Unit shall meet all minimum requirements of sections 2.6.4. a. through g., k. through n. and in addition offer the following:
- Auger Tube:
 - 1) Shall be 4-inch OD pipe, with a minimum wall thickness of 1/4-inches.
 - 2) The front of the auger tube shall have a 2-inch cold roll end shaft welded to a 3/8-inch minimum thickness end plate. Both shall be continuous welded.
 - 3) The front end shaft of the auger shall be supported by a 4-bolt flange, heavy duty, sealed, self-aligning bearing. Bearing must be greasable from the rear of the spreader body.
 - 4) The rear of the auger tube shall be supported entirely by the hydraulic drive motor by means of a splined, greasable coupler continuous welded to the rear of the auger tube. Grease fitting must grease motor splines and coupler splines.
 - 5) No center support bearings will be allowed.
 - Auger Flighting:
 - 1) Shall have a minimum thickness of 1/2-inch, and an outside diameter of 7-inches.
 - 2) Shall be continuous welded to the tube.
 - 3) Shall have the outer edge hard-surfaced by an electric arc welding process to a minimum #55 Rockwell hardness.
 - 4) Shall have three different pitches in order for the hopper to unload evenly from the front, middle, and rear.
 - Auger Drive Motor:
 - 1) Shall be a heavy duty roller stator type, have a splined output shaft, 4-bolt mounting, with O-ring ports.
 - 2) Shall be rated for a maximum system pressure of at least 2,350 psi, have a displacement of 64-cubic inches, and be rated for a maximum of 25 GPM oil flow.
 - 3) Shall be mounted using a floating mount to prevent minimal differences in spline alignment between the auger and motor from damaging either component.
 - Auger Feed Rate:
 - 1) The rear wall of the spreader shall have a feed opening size of approximately 63-square inches.
 - 2) The auger assembly shall have a minimum theoretical output of .135-cubic feet of material per revolution.
 - 3) The auger and motor assembly shall produce a minimum theoretical output of 7.29-cubic feet per minute of material at 15 GPM oil flow.

2.6.5 Other Options: Bidder shall provide the price for the following change options. Some options may be a change to the base vehicle specified or the request for additional items. Bid price shall include all associated parts and labor for installation and operation of the optional item. All units shall be delivered with all ordered options fully installed, mounted and operational.

a. Manual Transmission:

- Ten speed manual transmission, with “double low” low gear.

- Transmission shall be rated to meet or exceed horsepower and torque of engine.
 - Starter system shall include a neutral start switch.
- b. Manual Transmission:
- Six speed manual transmission.
 - Transmission shall be rated to meet or exceed horsepower and torque of engine.
 - Starter system shall include a neutral start switch.
- c. Eaton Ultra Shift Transmission or equivalent.
- d. Quixote Pavement Temperature Sensor: Shall have the ability to calibrate. Sensor information shall be displayed on the spreader control display. Shall be mounted in a location to provide accurate operation.
- e. Exhaust Brake Engine Retarder: Shall be OEM factory installed.
- f. Automatic Tire Chains: INSTA-CHAIN or ONSPOT brand chain systems complete with universal mounting brackets and to include an inline safety valve from air tank to the automatic tire chains. Automatic tire chains shall be air operated, and shall be controlled by a rocker-style rocker switch inside the operator's console. These shall be installed on the rear drive axle.
- g. Dual Steering: Provide dual steering and controls to allow the vehicle to be steered and driven from either side in the cab. Option shall also include right-hand instrument panel.
- h. Dump Body Vibrator:
- Shall be a Cougar model DC3200, #160181 or pre-approved equal.
 - Bearings used to support the vibrator shaft must be fitted with grease zerks, easily lubricated without removing the protective cover.
 - Shall be controlled by a switch located in the dash panel.
 - Shall not operate unless the raised body indicator is activated.
 - Shall be operated by a two-position, momentary-on switch.
- i. Left-hand and right-hand Truck Mounted Attenuator Pockets (TMA) pockets to be incorporated with the rear hitch plate and welded to the rear of the truck frame per Attachment 3.
- j. Replace base engine with a Cummins ISL9 engine.
- k. Bluetooth Handsfree Technology with interior speakers, microphone and voice activated calling.
- l. A fixed peep window to be installed on the lower portion of the passenger door to allow for extra visibility.
- m. Tank Heater – In tank fuel heater, engine coolant type. Must have a factory installed manual shut-off valve for summer operation. A body builder installed shut-off valve may be substituted upon approval of the chassis manufacturer and MoDOT Representative.
- n. Remove Base Pre-Wet system included in Section 2.3.7 above.
- o. Upgrade Granular Pre-Wet system from a 9 GPM Flow Meter and Pump to a 25 GPM Flow Meter and Pump. All other performance requirements identified in Section 2.3.7 above must be altered to accommodate this change.
- p. Receiver style pintle Hitch compatible with the Saf-Tite 100 rigid pintle hitch and associated installation requirements.
- q. Heavy Duty Seat with five point harness system offering safety from a rear end collision.
- r. Walk Rail for Stainless Steel Beds: The optional bed side walk platform is intended to provide a working platform along the entire length of the dump body from front to back on the outside of the bed. It shall be within the maximum width requirements for the dump body. This platform shall function with the bed side ladders to allow easy access from the ground, up the ladder and onto the platform and shall not interfere with the tarp system. The platform shall support 400 lbs., with a minimum tread width of 2 ½” and be a minimum of 2 ½” from the bed side. The surface of the platform shall be constructed of McNichols Quality GRIP STRUT or equivalent material. Adhesive or painted slip resistant materials are not acceptable. On trucks equipped with the optional bed side walk platform, a hand rail system shall also be added to the top of the bed rail. The hand rails shall be round in shape, approximately 1 1/2” outside dimension (OD) x ¼ wall thickness and supported sufficiently along its length to the top bed rail to support the weight of the operator using the hand hold. The hand rail shall be mounted to provide a 4” gap between the top of the bed rail and the bottom of the hand rail. The ends of the hand rail shall terminate to eliminate catch points on the front or rear of the dump body. The platform and hand rail shall be constructed of material matching that of the dump body.
- s. Walk Rail for Corten Steel Beds: To be constructed in the same manner as the Walk Rail for Stainless Steel Beds option and shall be constructed of material matching that of the dump body and coated appropriately for corrosion resistance.

- t. Back up camera with a cab mounted video display.
- u. Installation of MoDOT owned 50 Watt 2-way radio. Radio shall be wired to an electrical power source. To be mounted in the overhead console. The radio antenna shall be mounted to the center of the cab roof.
- v. Installation of MoDOT owned 100 Watt 2-way radio. Radio shall be wired to an electrical power source. Remote head shall be wired to the ignition. Terminal connections shall be heatshrunk and sealed. The radio antenna shall be mounted to the center of the cab roof.
- y. Heated Windshield.
- z. Vibrating Wiper Blades.
- aa. Lug Nut Torque Indicator.
- bb. Tire Pressure Monitoring System.
- cc. Air Powered Accessories: Air powered accessories shall be supplied from the trucks air supply, originating at a "dry tank." Air supply shall originate at a protection valve which will close at approximately 70 psi to protect the truck air system in the event of a leak in a body builder installed accessory. All body builder air lines going to the operator's console shall be routed through bulk head unions located at the rear wall of the cab near the strain reliefs for electrical wiring. Bulk head mounting shall be facilitated by matching backup plates located on the inside and outside of the cab wall. All bulk head locations shall have the function of that bulk head stamped or etched into the plate for identification of each air line installed. Air supply shall be routed to the operator console and routed through an oil injector installed inside the cab.
 - Air Control Operated Tarp with rocker-style air valve located in the operator console shall meet the same specifications as in section 2.3.3.t and 2.3.4.t with the exception it shall be air operated type, not electric.
 - Air Operated Hydraulic Joy Stick Control Lever The valve controls shall be a feathering remote air control with air shift actuators for valve. The hoist control shall be a single axis control with lock in the center position to prevent accidental actuation. There shall be a Pressure Protection Valve to protect against loss of pressure in the primary system caused by a broken line or an air leak somewhere in the auxiliary system. There shall also be a FLR (filter, lubricator, and regulator) plumbed into the auxiliary air system to protect the air controls from contamination and being over pressurized. All the air tubing will be color coded to identify each individual hydraulic function.
 - Air control operated tail gate latch shall meet the same specifications as in section 2.3.3.j and 2.3.4j in addition, shall be controlled by a rocker-style air valve located in the operator's console, not electric over air.
 - Air control operated tire chains shall meet the same specifications as in section 2.6.5.f with the exception it shall be air operated rocker-style valve located in the operator's console, not electric over air.
- dd. Additional Training Modules: Training must be classroom and/or hands on. Training session shall take place at a location within each district and/or central office. Use of MoDOT owned space may be permitted based upon availability. Modules shall be related to various components and operations of the delivered units. A module is defined as a one day training course and may include subjects such as emissions, electrical, hydraulic, engines, etcetera. Cost shall be per module, per employee.
- ee. Installation of MoDOT Provided Decals. Decals include two MoDOT logo decals and two locations for vehicle four digit vehicle number.
- ff. Shovel tool box to be installed on underside of bed and above standard tool box. Shall be constructed of the same materials as the standard tool box including door and latch. Size shall be consistent with the necessary requirements related to clearance and location when combined with standard tool box.
- gg. Stainless steel spring loaded shovel bracket equivalent to Buyers product #SH675SS.
- hh. Crew Cab on the Single Axle Dump Truck Option.
- ii. Rexroth CS 550/150 Spreader /Joy Stick Controller
- jj. Steel Material Spreader Stand for the 10-foot, 13-foot and 16-foot spreaders. Units shall be constructed to handle the proposed spreaders in accordance with the following requirements.
 - Steel must be hot rolled, mild steel, new with no rust.
 - Stand must have ladder with proper hand holds off the back and out of the way of the operation for workers access to top of spreader.
 - Guide caster rollers on stand for ease of stand/spreader to slip in and out of dump bed.
 - Folding front legs (lockable while used for storage) to aide in the loading of the stand/spreader into dump bed.

- Rotational, folding, pivoting or telescoping rear legs to keep out of the way of operation (lockable while used for storage).
 - Stands must be painted black over one coat of primer.
 - Spreader stand shall be manufactured in a way to center itself inside the dump body, preventing damage to the liquid saddle tanks during spreader installation.
- kk. Force America SSC6100 CAN Bus Spreader Control System.
- ll. Single Axle Truck Options:
- Air Ride Suspension:
 - Contractor bed with drop down sides:

2.7 Delivery Requirements:

2.7.1 The following delivery requirements shall apply:

- a. Unless otherwise specified on the solicitation documents or purchase order, suppliers shall give at least 24 hours advance notice of each delivery. Delivery will only be received between the hours of 8:00 a.m. to 3:00 p.m., Monday through Friday. Deliveries shall not be made on observed holidays as identified in the attached terms and conditions.
- b. Each unit shall be fully operational, with all mechanical adjustments made prior to delivery. The hydraulic and/or spreader control system shall have all hydraulic function controls calibrated for proper operation before inspection and delivery of the completed unit. Calibration of the granular material application and the granular pre-wet system shall be the responsibility of MoDOT.
- c. All chassis, body, component, and snow equipment grease fittings shall be lubricated per manufacturer's specifications prior to delivery.
- d. Chassis driveline universal joints shall be lubricated until fresh grease appears at all four bearing caps prior to delivery.
- e. Each unit shall be pressure washed with hot water and detergent prior to delivery. Units with residual hydraulic oil from assembly on any component will not be accepted.
- f. The bidder shall understand and agree that MoDOT will inspect each unit after delivery to determine if the unit meets specifications, quality and to verify no damage incurred during shipment of the unit. MoDOT shall have five (5) business days after receipt of order to notify the bidder of any visible damage or specification compliance issues. After the five (5) business days, the bidder is still responsible for correction any issues related to specifications or quality.
- g. MoDOT Representative shall have the ability to negotiate the MoDOT requested schedule of work.

2.7.2 The Bidder shall deliver the products specified herein to the following MoDOT locations:

- a. St. Joseph, Missouri 64502
- b. Macon, Missouri 63552
- c. Hannibal, Missouri 63401
- d. Lee's Summit, Missouri 64064-8002
- e. Jefferson City, Missouri 65102
- f. Chesterfield, Missouri 63017-5712
- g. Joplin, Missouri 64802
- h. Springfield, Missouri 65801
- i. Willow Springs, Missouri 65793
- j. Sikeston, Missouri 63801

2.8 Liquidated Damage Requirements:

- 2.8.1 The bidder is directed to the "*Standard Bid Provisions, General Terms and Conditions and Special Terms and Conditions*" attached to the bid documents, regarding the amount and enforcement of liquidated damages.

2.9 Contract/Purchase Order:

- 2.9.1 The contract expresses the complete agreement of the parties and performance shall be governed solely by the specifications and requirements contained therein. Any change, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the Bidder and the duly authorized representative of the MHTC, by a modified purchase order prior to the effective date of such modification. The Bidder expressly and explicitly understands and agrees that no other method and/or no other document, including correspondence, acts, and oral communications by or from any person, shall be used or construed as an amendment or modification

2.10 Invoicing and Payment Requirements:

- 2.10.1 The Bidder shall submit an itemized invoice to the applicable requesting address for the completion of deliverables, as specified herein. MoDOT will make a progress payment of the cab and chassis at the time of confirmed delivery to the body builder. Bidder shall maintain full ownership of the unit until it is complete and delivered to the MoDOT location regardless of progress payments.
- 2.10.2 Each invoice shall be itemized in accordance with items listed on the purchase order and/or contract. The statewide financial management system has been designed to capture certain receipt and payment information. Therefore, each invoice submitted must reference the purchase order number and must be itemized in accordance with items listed on the purchase order. Failure to comply with this requirement may delay processing of invoices for payment.
- 2.10.3 The Bidder shall understand and agree MoDOT reserves the right to make contract payments to the Bidder through electronic funds transfer (EFT). Therefore, prior to any payments becoming due under the contract, the Bidder must return a completed state Vendor Input ACH/EFT Application, which is downloadable from the Vendor Services Portal at: <https://www.vendorservices.mo.gov/vendorservices/Portal/Default.aspx>. Each Bidder invoice must be on the Bidder's original descriptive business invoice form and must contain a unique invoice number. The invoice number will be listed on the state's Vendor Payment Website to enable the Bidder to properly apply state payments to invoices. The Bidder must comply with all other invoicing requirements stated in the RFB.
- 2.10.4 The Bidder shall be paid in accordance with the firm, fixed prices stated on the pricing page of this document after completion of deliverables specified herein and acceptance by MoDOT.
- 2.10.5 Other than the payment specified above, no other payments or reimbursements shall be made to the Bidder for any reason whatsoever.
- 2.10.6 Unless otherwise provided for in the solicitation documents, payment for all equipment, supplies, and/or services required herein shall be made in arrears. The MHTC shall not make any advance deposits.
- 2.10.7 The MHTC assumes no obligation for equipment, supplies, and/or services shipped or provided in excess of the quantity ordered. Any authorized quantity is subject to the MHTC's rejection and shall be returned at the Bidder's expense.
- 2.10.8 The MHTC reserves the right to purchase goods and services using the state-purchasing card.

2.11 Other Contractual Requirements:

- 2.11.1 Contract Period - The contract shall commence from the date of Notice to Proceed until for one year with up to five (5) one-year renewal option periods, or any portion therein. If the option for renewal is exercised by MoDOT, the Bidder shall agree to all terms and conditions of the RFB and all subsequent amendments. Renewal options are at the sole discretion of MoDOT.

- 2.11.2 Renewal Periods - If the option for renewal is exercised by MoDOT, the Bidder shall agree that the percentages for the renewal period shall not exceed the maximum percentage for the applicable renewal period stated herein.
- If renewal percentages are not provided, the prices during renewal periods shall be the same as during the original contract period.
 - MoDOT does not automatically exercise its option for renewal based upon the maximum percentage of increase without documented justification supporting an increase, and reserves the right to offer or to request renewal of the contract at a percentage less than the maximum percentage stated.
 - In the event MoDOT exercises its option(s) to renew the contract, the requirements for future years shall be basically similar.
- 2.11.3 Escalation Clause - In the event the Bidder requests a price increase during the contract period, either the original contract period or any contract renewal period, the Bidder must provide a written request and documentation justifying the need for a price increase, and the amount of such price increase. MoDOT will review the Bidder's written request and documentation, and decide if a price increase is to be granted at that particular time. The Bidder shall understand and agree that MoDOT's decision shall be final and without recourse.
- No price increase shall be granted during the first 3 months of the original contract period, or if applicable, first 3 months of a contract renewal period.
 - In the event a price increase is granted due to an approved escalation, the renewal percentage shall be based upon the original contract value and any approved escalation in costs.
- 2.11.4 Inspection and Acceptance: MoDOT reserves the right to inspect the material at the point of manufacture, intermediate storage point, or at a destination which shall be at the discretion of MoDOT.
- No equipment, supplies, and/or services received by MoDOT pursuant to a contract shall be deemed accepted until MoDOT has had reasonable opportunity to inspect said equipment, supplies, and/or services.
 - All equipment, supplies, and/or services which do not comply with the specifications and/or requirements or which are otherwise unacceptable or defective may be rejected. In addition, all equipment, supplies, and/or services which are discovered to be defective or which do not conform to any warranty of the Bidder upon inspection (or at any later time if the defects contained were not reasonably ascertainable upon the initial inspection) may be rejected.
 - The MHTC reserves the right to return any such rejected shipment at the Bidder's expense for full credit or replacement and to specify a reasonable date by which replacements must be received.
 - The MHTC's right to reject any unacceptable equipment, supplies, and/or services shall not exclude any other legal, equitable or contractual remedies the MHTC may have.

3. BID SUBMISSION

3.1 Bid Submission Information:

- 3.1.1 All bids must be received in a sealed envelope/package clearly marked **"Dump Truck"**.
- 3.1.2 All bids must be received at the office of the RFB Coordinator as outlined in Section 1. "INTRODUCTION AND GENERAL INFORMATION".
- 3.1.3 The bidder may withdraw, modify or correct his/her bid after it has been deposited with MoDOT provided such request is submitted in writing and received at the location designated for the bid opening prior to the date and time specified for opening bids. Such a request received as specified will be attached to the bid and the bid will be considered to have been modified accordingly. No bid may be modified after the date and time specified for the opening of bids.
- 3.1.4 Open Competition / Request For Bid Document:
- It shall be the bidder's responsibility to ask questions, request changes or clarification, or otherwise advise MoDOT if any language, specifications or requirements of an RFB appear to be ambiguous, contradictory, and/or arbitrary, or appear to inadvertently restrict or limit the requirements stated in the RFB to a single source. Any and all communication from bidders regarding specifications, requirements, competitive bid process, etc., must be directed to the buyer from MoDOT, unless the RFB specifically refers the bidder to

another contact. Such communication should be received at least three (3) working days prior to the official bid opening date.

- b. Every attempt shall be made to ensure that the bidder receives an adequate and prompt response. However, in order to maintain a fair and equitable bid process, all bidders will be advised, via the issuance of an amendment to the RFB, of any relevant or pertinent information related to the procurement. Therefore, bidders are advised that unless specified elsewhere in the RFB, any questions received less than three (3) working days prior to the RFB opening date may not be answered.
- c. Bidders are cautioned that the only official position of the MoDOT is that which is issued by MoDOT in the RFB or an amendment thereto. No other means of communication, whether oral or written, shall be construed as a formal or official response or statement.
- d. MoDOT monitors all procurement activities to detect any possibility of deliberate restraint of competition, collusion among bidders, price-fixing by bidders, or any other anticompetitive conduct by bidders which appears to violate state and federal antitrust laws. Any suspected violation shall be referred to the Missouri Attorney General's Office for appropriate action.

3.1.5 Bid Review: Bids will be reviewed to determine if the bid complies with the mandatory requirements.

3.1.6 Contract Award: This is a Multiple Award bid. All responsive responses will result in a contract award.

- a. Notification of award shall be at the time the tabulation is posted to the Internet. It is the sole responsibility for all bidders to check the website for bid results.

3.1.7 Purchase Determination: After determination of award, evaluator(s) shall use both objective and subjective judgment in conducting a comparative assessment of the bid responses in accordance with the evaluation criteria stated below:

- a. Base and Option Costs 50 Points
- b. Location of Parts and Servicing Dealers 20 Points
- c. Warranty Coverage 15 Points
- d. Delivery Timeline 5 Points
- e. Other response information 10 Points

3.1.7.1 The evaluation of cost will be conducted using a scale of fifty (50) possible points based upon a total amount for the base unit and unit options in the original contract period. Cost points shall be calculated based on the sum from the below calculation using the following formula:

$$\frac{\text{Lowest Responsive Price}}{\text{Compared Price}} \times 50 = \text{Cost score points extended to 2 decimal places} - 50.00 \text{ possible}$$

3.1.7.2 Performance and reliability of any unit and/or contractor can be a part of the subjective evaluation in the determination of lowest and best bid award. Final determination of the evaluation shall be at the discretion of the General Services Director.

4. PRICING PAGE

4.1 The bidder shall provide a firm, fixed price in the table below for the original contract period for providing the deliverables/services in accordance with the provisions and requirements of this RFB. All costs associated with providing the required deliverables/services shall be included in the prices stated below. Prices must be the lowest offered to any governmental or commercial consumer, under the same terms and conditions. Sign where indicated below and return with all required solicitation documents.

Item #	Description	Original Contract Period <i>Firm, Fixed Price</i>
001	Tandem Axle Cab and Chassis	\$
002	Tandem Axle Corten V-Style Long Sill Dump Body – Configuration #1	\$
003	Tandem Axle Stainless Steel I-Beam Long Sill Dump Body – Configuration #2	\$
	Total Cost	\$
<hr/>		
004	Single Axle Cab and Chassis	\$
005	Single Axle Corten V-Style Long Sill Dump Body – Configuration #1	\$
006	Single Axle Stainless Steel I-Beam Long Sill Dump Body – Configuration #2	\$
	Total Cost	\$
<hr/>		
007	Tow Plow Cab and Chassis	\$
008	Tow Plow Corten V-Style Long Sill Dump Body – Configuration #1	\$
009	Tow Plow Stainless Steel I-Beam Long Sill Dump Body – Configuration #2	\$
	Total Cost	\$
<hr/>		
010	Fair Market In-House Labor Rate per Section 2.2.6.d	\$ Per Hour
011	List the Districts Bidding on (NW, NE, KC, CD, SW, SE)	
<hr/>		
012	Tandem Axle Extended Warranty Option #1	\$
013	Single Axle Extended Warranty Option #1	\$
014	Tow Plow Extended Warranty Option #1	\$
015	Tandem Axle Extended Warranty Option #2	\$
016	Single Axle Extended Warranty Option #2	\$
017	Tow Plow Extended Warranty Option #2	\$

018	Tandem Axle Extended Warranty Option #3	\$
019	Single Axle Extended Warranty Option #3	\$
020	Tow Plow Extended Warranty Option #3	\$

4.2 Renewal Periods: The bidder shall provide below the maximum percentage of increase or decrease for the renewal periods. The percentage shall be computed against the original contract period prices for each renewal period. If a renewal percentage is not provided, the prices for the renewal periods shall be the same as the original contract period.

1st Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

2nd Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

3rd Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

4th Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

5th Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

4.3 MSRP Discount: Bidders should submit a complete parts and options list with detailed pricing information for each unit type bid. An electronic source for this information may be provided as well. (i.e. Internet site, jump drive, CD, etc.) Please indicate below the percent (%) discount off Manufacturers' Suggested Retail Prices (MSRP) for all options other than those priced on the attached Options Pricing Page.

% discount off MSRP for all Data Book or Pricing Guide Options: - % Discount _____

4.4 Delivery After Receipt of Order:

Tandem Axle Dump Truck _____ Calendar Days

Single Axle Dump Truck _____ Calendar Days

Tow Plow Dump Truck _____ Calendar Days

4.5 Standard Warranty: All bidders must provide a description below of the standard warranty offered with each unit for the cab and chassis as well as the dump body. (Refer to Section 2.2.6)

4.5.1 Warranty Dealer and Service Locations: All bidders must attach a list of all warranty and service providers and location information. This shall include but not be limited to the company name, address, standard and emergency contact telephone numbers.

4.6 Optional Equipment: The bidder shall provide pricing for the increased or decreased cost associated with the following optional equipment meeting the minimum specifications identified in Section 2.6.

Optional Equipment Continued

Additional Increase/Decrease to Total Unit Price

	Option Description	Tandem Axle	Single Axle	Tow Plow
a.	Right and/or Left Hand Wing Plow	\$	\$	\$
b.	Heavy Duty Right Hand 3 Function Front Mount Wing Plow	\$	\$	\$
c.	Underbody Scraper	\$	\$	\$
d.	10' Skid Mounted Material Spreader	\$	\$	\$
e.	10' Skid Mounted Material Spreader with Auger	\$	\$	\$
f.	13' Skid Mounted Material Spreader	\$	\$	\$
g.	13' Skid Mounted Material Spreader with Auger	\$	\$	\$
h.	16' Skid Mounted Material Spreader	\$	\$	\$
i.	16' Skid Mounted Material Spreader with Auger	\$	\$	\$
j.	10 Speed Manual Transmission	\$	\$	\$
k.	6 Speed Manual Transmission	\$	\$	\$
l.	Eaton Ultra Shift Transmission	\$	\$	\$
m.	Pavement Temperature Sensor	\$	\$	\$
n.	Exhaust Brake Engine Retarder	\$	\$	\$
o.	Automatic Tire Chains	\$	\$	\$
p.	Dual Steering	\$	\$	\$
q.	Dump Body Vibrator	\$	\$	\$
r.	Left-/Right-hand Truck Mounted Attenuator Pockets	\$	\$	\$
s.	Cummins ISL9 Engine	\$	\$	\$
t.	Bluetooth Hands-free Technology	\$	\$	\$
u.	Passenger Door Peep Window	\$	\$	\$
v.	Tank Heater	\$	\$	\$
w.	Removal of Base Granular Pre-Wet System	\$	\$	\$
x.	Replace Pre-Wet System w/a 25 GPM Pre-Wet System	\$	\$	\$
y.	Receive Pintle Hitch	\$	\$	\$
z.	Walk Rail for Stainless Steel Bed	\$	\$	\$
aa.	Walk Rail for Corten Steel Bed	\$	\$	\$
bb.	Back Up Camera and Display	\$	\$	\$
cc.	Installation of MoDOT owned 50 Watt radio	\$	\$	\$
dd.	Installation of MoDOT owned 100 Watt radio	\$	\$	\$
ee.	Heated Windshield	\$	\$	\$
ff.	Vibrating Wiper Blades	\$	\$	\$
gg.	Lug Nut Torque Indicator	\$	\$	\$
hh.	Tire Pressure Monitoring System	\$	\$	\$
ii.	Air Control Operated Tarp	\$	\$	\$
jj.	Air Operated Hydraulic Joy Stick Control Lever	\$	\$	\$

Optional Equipment Continued

Additional Increase/Decrease to Total Unit Price

	Option Description	Tandem Axle	Single Axle	Tow Plow
kk.	Air Control Operated Tail Gate Latch	\$	\$	\$
ll.	Air Control Operated Tire Chains	\$	\$	\$
mm.	Additional Training Modules	\$	\$	\$
nn.	Installation of MoDOT Provided Decals	\$	\$	\$
oo.	Shovel Tool Box	\$	\$	\$
pp.	Stainless Steel Spring Loaded Shovel Bracket	\$	\$	\$
qq.	Crew Cab Option		\$	
rr.	Rexroth CS 550/150 Spreader /Joy Stick Controller	\$	\$	\$
ss.	10-foot Spreader Stand	\$	\$	\$
tt.	13-foot Spreader Stand	\$	\$	\$
uu.	16-foot Spreader Stand	\$	\$	\$
vv.	Force America CAN Bus Spreader Control System	\$	\$	\$
ww.	Single Axle Air Ride Suspension	\$	\$	\$
xx.	Single Axle Contractor Bed with Drop Down Sides	\$	\$	\$

4.7 Additional Bid Response Information:

- a. Does the unit offered feature cowl pedals? _____
- b. Does the unit offered feature side window defrosters? _____
- c. Does the air conditioning unit include self-diagnostic capabilities? _____ If yes, briefly describe:

- d. Does the unit offered feature flush mounted cab marker lights? _____
- e. Does the driveshaft pass through the radiator charge air cooler or air conditioning condenser? _____
- f. Does the unit offered feature a single rail frame system? _____
- g. Does the unit offered feature Truck-Lite model 645 headlights? _____
- h. Does the unit offered feature a ADIP air dryer.
- i. Provide a detailed description of the rear axle suspension offered.

4.8 Innovative Solutions: All bidders must provide unit pricing in section 4.1 above in accordance with the bid specifications, however, MoDOT is interested in innovative solutions as well. Bidders are encouraged to provide various innovative solutions to the specifications provided and any associated cost adjustments to the unit price should MoDOT chose to purchase the solution on any units ordered for the purposes of testing the performance and reliability of the proposed solution. Each submission should reference the technical section of the original bid to be impacted by the innovative change, the proposed innovative change solution and its' impact to MoDOT and all associated costs or savings. MoDOT is most interested in innovative solutions that will reduce purchase and/or maintenance costs while preserving or increasing unit efficiencies and effectiveness. Bidders may use the space below or provide additional attachments clearly marked "Innovative Solutions"

4.9 **Other Submission Information:** All bidders must provide additional information related to all aspects of the units offered for the purposes of review and evaluation. This shall include but not be limited to a complete build sheet per unit requested and all options as well as detailed drawings for each unit offered. This shall include but not be limited to the make and model for each component offered. This information shall be organized in the most efficient, clear and concise manner possible for review by the evaluators.

VENDOR INFORMATION & PREFERENCE CERTIFICATION FORM

Vendor Information

All bidders must furnish **ALL** applicable information requested below

Vendor Name/Mailing Address: Email Address:	Vendor Contact Information (including area codes): Phone #: Cellular #: Fax #:									
Printed Name of Responsible Officer or Employee:	Signature:									
For Corporations - State in which incorporated:	For Others - State of domicile:									
If the address listed in the Vendor Name/Mailing Address block above is not located in the State of Missouri, list the address of Missouri offices or places of business: If additional space is required, please attach an additional sheet and identify it as Addresses of Missouri Offices or Places of Business.										
M/WBE INFORMATION: List all certified Minority or Women Business Enterprises (M/WBE) utilized in the fulfillment of this bid. Include <u>percentages</u> for subBidders and identify the M/WBE certifying agency: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;"><u>M/WBE Name</u></th> <th style="text-align: center; width: 33%;"><u>Percentage of Contract</u></th> <th style="text-align: center; width: 33%;"><u>M/WBE Certifying Agency</u></th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> If additional space is required, please attach an additional sheet and identify it as M/WBE Information		<u>M/WBE Name</u>	<u>Percentage of Contract</u>	<u>M/WBE Certifying Agency</u>						
<u>M/WBE Name</u>	<u>Percentage of Contract</u>	<u>M/WBE Certifying Agency</u>								

Preference Certification

All bidders must furnish **ALL** applicable information requested below

GOODS/PRODUCTS MANUFACTURED OR PRODUCED IN USA: If any or all of the goods or products offered in the attached bid which the bidder proposes to supply to the MHTC are not manufactured or produced in the "United States", or imported in accordance with a qualifying treaty, law, agreement, or regulation, list below, by item or item number, the country other than the United States where each good or product is manufactured or produced.	
Item (or item number)	Location Where Item is Manufactured or Produced
If additional space is required, please attach an additional sheet and identify it as Location Products are Manufactured or Produced.	
MISSOURI SERVICE-DISABLED VETERAN BUSINESS: Please complete the following if applicable. Additional information may be requested if preference is applicable. See below definitions for qualification criteria: Service-Disabled Veteran is defined as any individual who is disabled as certified by the appropriate federal agency responsible for the administration of veterans' affairs. Service-Disabled Veteran Business is defined as a business concern: <ol style="list-style-type: none"> a. Not less than fifty-one (51) percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than fifty-one (51) percent of the stock of which is owned by one or more service-disabled veterans; and b. The management and daily business operations of which are controlled by one or more service-disabled veterans. 	
<u>Veteran Information</u>	<u>Business Information</u>
Service-Disabled Veteran's Name (Please Print)	Service-Disabled Veteran Business Name
Service-Disabled Veteran's Signature	Missouri Address of Service Disabled Veteran Business

NOTICE OF COOPERATIVE PURCHASING

MODOT IS INTERESTED IN ASSISTING MISSOURI GOVERNMENTAL ENTITIES, ETC. IN PURCHASING EQUIPMENT, VARIOUS MATERIALS, AND SUPPLIES THAT MEET THE MISSOURI DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

Each bidder is asked to indicate below whether they would be willing to offer **Dump Truck(s)** listed in the attached "Request for Bid" for sale to these local political entities at the same bid price offered to MoDOT.

It is understood MoDOT will not issue purchase orders, accept delivery nor make payment for these items ordered by any of these agencies. It is further understood the price is based on the **Dump Truck(s)** meeting MoDOT specifications. Any added options, deletions, or extra freight costs would be negotiated between the local agency and the successful vendor.

Indicate below whether your company is willing to offer such cooperative purchasing for Missouri counties, cities or other political entities.

YES _____ NO _____

If the price varies throughout the state on MoDOT bids because of different delivery destinations, please indicate the price F.O.B. your location that would be offered as described.

F.O.B. Location _____

Indicate the deadline date that orders will be accepted. _____

COMPANY NAME _____

ADDRESS _____

E-MAIL _____

PHONE NUMBER _____

SIGNATURE _____

TITLE _____

DATE _____

ANTI-COLLUSION STATEMENT

STATE OF _____)

) SS.

COUNTY OF _____)

_____ being first

duly sworn, deposes and says that he is _____
Title of Person Signing

of _____
Name of Bidder

that all statements made and facts set out in the bid for the above project are true and correct; and that the bidder (The person, firm, association, or corporation making said bid) has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such bid or any contract which may result from its acceptance.

Affiant further certifies that bidder is not financially interested in, or financially affiliated with, any other bidder for the above project.

By _____

By _____

By _____

Sworn to before me this _____ day of _____, 20____.

Notary Public

My Commission Expires _____

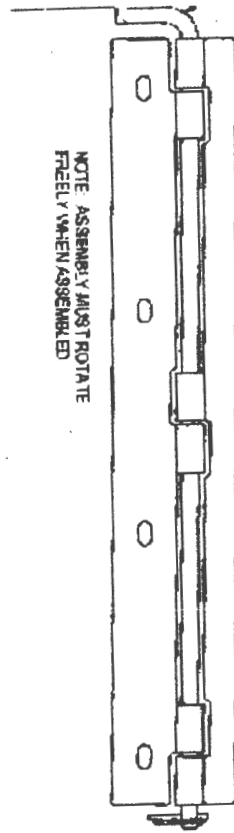
FACILITY NAME	DISTRICT	ADDRESS	CITY	ZIP
Boonville	CD	16803 Hwy 5	Boonville	65233
California	CD	801 West Buchanan	California	65018
Camdenton	CD	586 Pier Thirty One Rd	Camdenton	65020
Columbia	CD	4201 Paris Rd	Columbia	65202
Cuba	CD	7149 Old Hwy 66	Cuba	65453
Drake	CD	1972 Hwy 50	Owensville	65066
Edgar Springs	CD	27800 CR 9150	Edgar Springs	65462
Eldon	CD	30 Hwy Y	Eldon	65026
Fayette	CD	871 State Hwy 240	Fayette	65248
Fulton	CD	4975 CR 304	Fulton	65251
Hallsville	CD	870 E Hwy 124	Hallsville	65255
Iberia	CD	790 E Hwy 42	Iberia	65486
Jefferson City	CD	5607 Red Eagle Dr	Jefferson City	65109
Jefferson City Bridge	CD	744 MoDOT Drive	Jefferson City	65109
Jefferson City Facilities	CD	5606 Raptor Drive	Jefferson City	65109
Jefferson City Striping	CD	740 MoDOT Drive	Jefferson City	65109
Lebanon	CD	1120 Ivey Lane	Lebanon	65536
Linn	CD	1201 E Main	Linn	65051
Mokane	CD	10165 State Rd C	Mokane	65059
Nebo	CD	37998 Hwy 32	Falcon	65470
Osage Beach	CD	749 Hwy 42	Lake Ozark	65049
Potosi	CD	10681 E Hwy E	Potosi	63630
Rolla	CD	351 Salley Rd	Rolla	65401
Salem	CD	Rt 1 Box 2785	Salem	65560
ST. James Project Office	CD	17855 South HWY 8	St. James	65559
St. Robert	CD	375 Old Route 66	St Roberts	65583
Steelville	CD	69 East Highway 8	Steelville	65565
Versailles	CD	501 Jefferson Rd	Versailles	65084
Vienna	CD	702 Hwy 63 N	Vienna	65582
Williamsburg	CD	3949 County Road 1005	Williamsburg	63388
Belton	KC	324 Peculiar Dr.	Belton	64012
Concordia	KC	601 N. Main	Concordia	64020
Harrisonville	KC	27821 S. St. Hwy. 7	Harrisonville	64701
Independence	KC	910 N. 291 Hwy.	Indepdence	64051
Kansas City - District Garage	KC	2050 NE Independence Ave	Lees Summit	64086
Kansas City - Truman Road Constr	KC	908 East Truman Rd	Kansas City	64106
Kearney	KC	301 W. Hwy. 92	Kearney	64060
Knob Noster	KC	143 NE 23 Hwy.	Knob Noster	65336
Lee's Summit	KC	3050 NE Independence Ave	Lees Summit	64064
Lee's Summit -Construction	KC	521 NE Town Centre Dr	Lees Summit	64086
Marshall	KC	1595 West Arrow St.	Marshall	65340
Motorist Assist Main Office	KC	3503 East 18 Street	Kansas City	64127
Mulberry	KC	650 Mulberry St.	Kansas City	
Nashua	KC	1910 NW Cookingham	Kansas City	64155

FACILITY NAME	DISTRICT	ADDRESS	CITY	ZIP
Northmoor	KC	5248 Waukomis Dr.	Kansas City	64151
Odessa	KC	7353 Outer Road	Odessa	64076
Platte City	KC	16105 Elm Grove Rd.	Platte City	64079
Richmond	KC	42896 Old Hwy. 10	Richmond	64085
Sedalia	KC	2200 S Limit	Sedalia	65301
Skiles	KC	3800 Skiles	Kansas City	64161
Stadium	KC	9101 E 40th Terrace	Kansas City	64133
Warrensburg - Striping	KC	660 NE 375	Warrensburg	64093
Bowling Green	NE	1416 Bus. Hwy. 54	Bowling Green	63334
Canton	NE	17365 Hwy. 81	Canton	63435
Center	NE	22447 Hwy. 19, 63436	Center	63436
Edina	NE	St. Rte. 3, Box 180	Edina	63537
Elsberry	NE	3329 N. HWY 79	Elsberry	63343
Hannibal	NE	1711 E. Hwy 61 South	Hannibal	63401
Kirksville	NE	22777 Potter Trail	Kirksville	63501
Lancaster	NE	Hwy. 63 N.	Lancaster	63548
Macon	NE	26988 US Hwy. 63	Macon	63552
Macon-Bridge	NE	26826 US Hwy. 63	Macon	63552
Macon-Co	NE	26824 US Hwy. 63	Macon	63552
Memphis	NE	Rt. 1, Box 139A	Memphis	63555
Mexico	NE	1600 Christopher Dr.	Mexico	65265
Moberly	NE	1501 East Hwy. 24	Moberly	65270
New Cambria	NE	29992 State Hwy. P	New Cambria	63558
New Florence	NE	540 Tree Farm Rd.	New Florence	63363
Palmyra	NE	4945 County Road 288	Hannibal	63401
Paris	NE	25191 Bus. Hwy. 24	Paris	65275
Shelbina	NE	213 N. Douglas	Shelbina	63468
Troy	NE	121 Francis Drive	Troy	63379
Troy - AE/RE Offices	NE	111 Francis Drive	Troy	63379
Warrenton	NE	800 W. Boonslick	Warrenton	63383
Wayland	NE	Rt. 3, Box 45A	Kohoka	63445
Albany	NW	5753 E. US Hwy. 136	Albany	64402
Bethany	NW	3101 Miller St.	Bethany	64424
Brookfield	NW	28877 Hwy. 11	Brookfield	64628
Cameron	NW	513 E. Grand	Cameron	64429
Carrollton	NW	215 S. Mason	Carrollton	64633
Chillicothe	NW	1301 Mitchell Ave.	Chillicothe	64601
Clearmont	NW	18826 State Hwy. C	Clearmont	64431
Gallatin	NW	19335 Pepper Ave.	Gallatin	64640
Grant City	NW	Rte. 3, Box 15A	Grant City	64456
Hamilton	NW	1001 S. Hughes	Hamilton	64644
Keytesville	NW	220 E. Jackson	Keytesville	65261
King City	NW	9990 NW Hwy169	King City	64463
Lathrop	NW	100 North St.	Lathrop	64465

FACILITY NAME	DISTRICT	ADDRESS	CITY	ZIP
Maryville	NW	28320 250th St.	Maryville	64468
Milan	NW	1800 North Pearl	Milan	63556
Mound City	NW	24876 Hwy. 118	Mound City	64470
Princeton	NW	RR 2, Box 316B	Princeton	64673
Rushville	NW	Rte. 116	Rushville	64484
Savannah	NW	11791 Bus. 71 Highway	Savannah	64485
St. Joseph	NW	4718 S. Hwy 169	St. Joseph	64507
Tarkio	NW	US 136, Box 26874	Tarkio	64491
Trenton	NW	230 East Hwy. 6	Trenton	64683
Unionville	NW	2653 Main St.	Unionville	63565
Advance	SE	28275 St. Hwy. 25	Advance	63730
Alton	SE	Rt. 1, Box 1822	Alton	65606
Bellview	SE	2633 Highway 21	Belleview	63623
Bunker	SE	Rte. 2, Box 124C	Bunker	63629
Cape Girardeau	SE	3359 East Outer Rd. North	Scott City	63780
Centerville	SE	Route 1, Box 99	Lesterville	63654
Charleston	SE	6712 N. Outer Rd.	Charleston	63834
Dexter	SE	1111 Hickory Log Dr.	Dexter	63841
Doniphan	SE	Rt. 3, Box 2277	Doniphan	63935
Dora	SE	Box 3830	Dora	65637
Ellington	SE	Route 4, Box 800	Ellington	63638
Ellsinore	SE	Rt. 2, Box 2198	Elsinore	63937
Fredricktown	SE	1001 Madison 200	Fredericktown	63645
Gainesville	SE	Rt. 1, Box 1C	Gainesville	65655
Hartville	SE	5804 Hwy. 5	Hartville	65667
Hayti	SE	301 W High, (RR1, Box 41A	Hayti	63851
Houston	SE	1540 N. Hwy 63	Houston	65783
Jackson	SE	200 State Hwy. Y	Jackson	63755
Kennett	SE	1600 Southwest Dr.	Kennett	63857
Kewanee	SE	Rte. W	New Madrid	63869
Malden	SE	4005 North Douglas St.	Malden	63863
Marble Hill	SE	Rte. 2, Box 1655	Marble Hill	63764
Mountain Grove	SE	8675 Old Hwy. 60	Mountain	65711
Park Hills	SE	2240 Conway Rd	Park Hills	63601
Park Hills	SE	105 Industrial Drive	Park Hills	63601
Patton	SE	Rte. 1, Box 2490	Patton	63662
Peidmont	SE	Rt. 2 box 2636A	Piedmont	63957
Perryville	SE	754 Lake Dr.	Perryville	63775
Poplar Bluff	SE	2568 Hwy. 67 North	Poplar Bluff	63901
Poplar Bluff	SE	3568 Hwy 67 N	Poplar Bluff	63901
Puxico	SE	240 Hwy. 51 South	Puxico	63960
Quilin	SE	13148 HWY 53	Quilin	63961
Sikeston	SE	111 Edwards Street	Sikeston	63801
Sikeston	SE	2675 North Main Street	Sikeston	63801

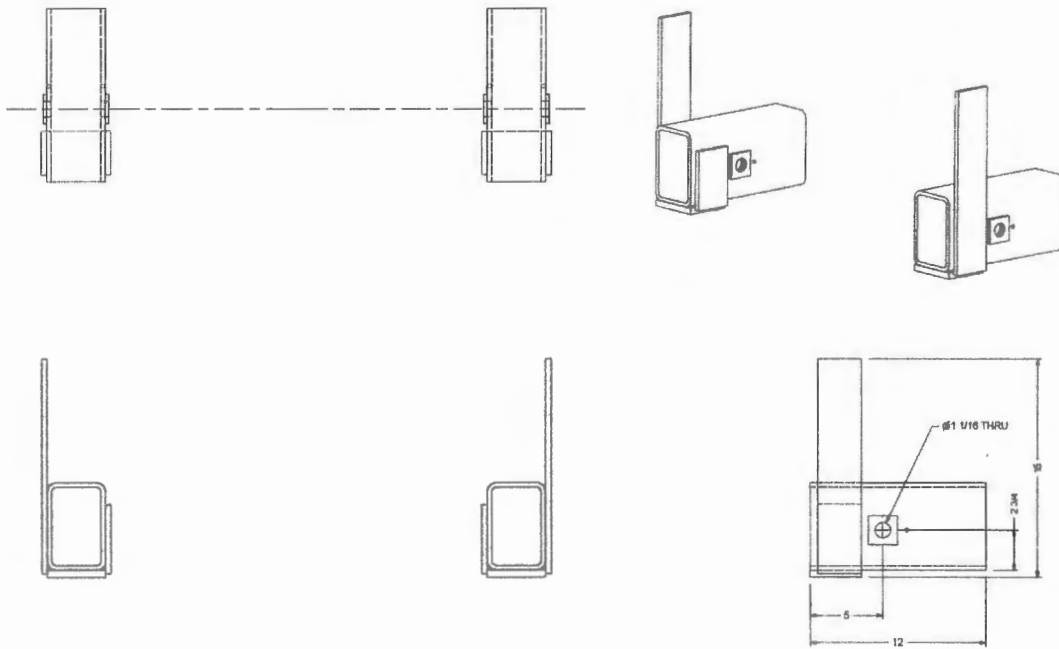
FACILITY NAME	DISTRICT	ADDRESS	CITY	ZIP
Silva	SE	301 Main St.	Silva	63964
Saint Genevieve	SE	17651 Hwy 32	Ste. Genevieve	63670
Summersville	SE	235 S. Hwy. 17	Summersville	65571
Van Buren	SE	HCR 1, Box 99	Van Buren	63965
West Plains	SE	1287 County Road 8690	West Plains	65775
Willow Springs	SE	3952 East Main	Willow Springs	65793
Willow Springs Bridge	SE	3954 East Main Street	Willow Springs	65793
Willow Springs Garage -	SE	3956 East Main Street	Willow Springs	65793
Winona	SE	106 Industrial Drive	Winona	65588
Ava	SE	Rt. 3, Box 23B	Ava	65608
Ballas Complex	SL	12001 N Forty Dr	Town &	63131
Barrett Station Complex	SL	2309 Barrett Station Rd Bldg	St. Louis	63021
Beaufort	SL	6697 Hwy 185 South	Beaufort	63013
Bellefontaine Complex	SL	10601 Lewis & Clark Blvd	St. Louis	63136
Broadway Complex	SL	1200 S. Broadway	St. Louis	63104
Cedar Hill	SL	8400 Local Hillsboro Road	Cedar Hill	63016
Chesterfield Project Office	SL	601 Salt Mill Rd	Chesterfield	63017
Desoto	SL	4400 Highway 110	Desoto	63020
Eureka	SL	615 Viola Lane	Eureka	63025
Festus	SL	1000 Airport Road	Festus	63028
Festus Project Office	SL	3595 Plass Rd	Festus	63028
Hampton Complex	SL	6138 Wilson Ave Bldg A	St. Louis	63139
Lemay	SL	4185 Hoffmeister Ave	St Louis	63125
Maryland Height PO	SL	2620 Adie Rd	Maryland	63043
Normandy Complex	SL	1005 Bermuda Ave	St. Louis	63121
O'Fallon Project Office	SL	6780 Old Hwy N	St. Charles	63304
St. Charles	SL	2360 Old Hwy. 94 S	St Charles	63303
St. Clair Complex	SL	2273 N Service Road	St. Clair	
Sunset Hills	SL	10220 Rahning Road	Sunset Hills	63127
Wentzville Complex	SL	1211 Granville Dr	Wentzville	63385
Anderson	SW	5511 Hwy 59 North	Goodman	64843
Bolivar	SW	2816 W. Broadway	Bolivar	65613
Bradleyville	SW	20907 E. Hwy. 76	Taneyville	65759
Branson	SW	275 S.W. Outer Rd.	Branson	65616
Branson RE	SW	251 SW Outer Rd	Branson	65616
Buffalo	SW	215 N. Ash St.	Buffalo	65622
Building Crew - Springfield	SW	3025 E Kearney	Springfield	65803
Butler	SW	RR4, Box 623	Butler	64730
Carthage	SW	16623 Inca Road	Carthage	64836
Carthage - Construction	SW	16619 Inca Rd	Carthage	64836
Cassville	SW	20622 State Hwy. 37	Cassville	65625
Eldorado Springs	SW	3865 E. Hwy. 54	El Dorado	64744
Galena	SW	Rt. 4, Box 555, (1889 St Hwy	Galena	65656
Greenfield	SW	70 N. State Hwy. 39	Springfield	65661

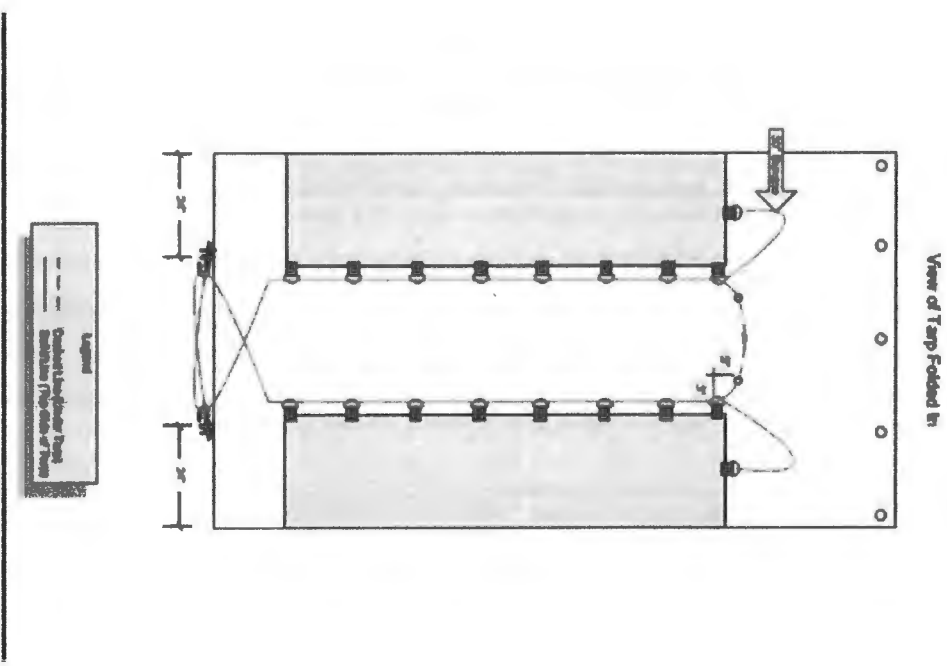
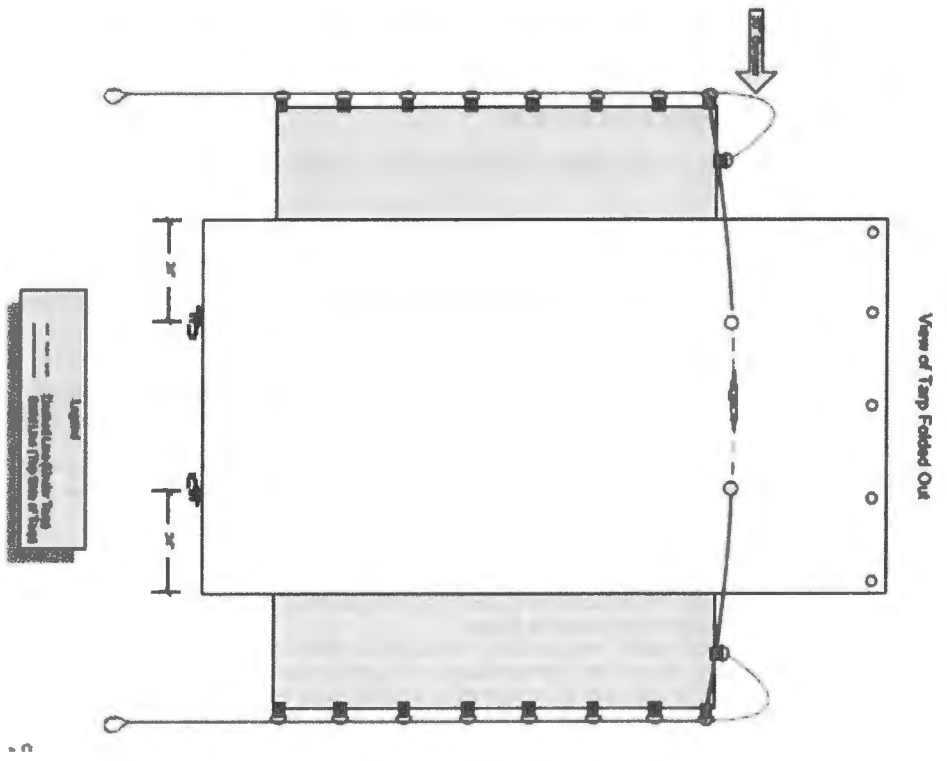
FACILITY NAME	DISTRICT	ADDRESS	CITY	ZIP
Joplin - GENERAL SERVICES	SW	2915 Doughboy Dr	Joplin	64804
Joplin - MAINT.	SW	2800 Stevens Blvd	Joplin	64804
Lamar	SW	67 SE 1st Lane	Lamar	64759
Lampe	SW	HCR1, Box 352, (1063 West	Lampe	65681
Marshfield	SW	331 Pin Oak Loop	Marshfield	65706
Monett	SW	4478 W. Hwy. 60	Monett	65708
Mount Vernon	SW	1001 Spring Park Blvd	Mt Vernon	65712
Neosho	SW	1300 S. Neosho Blvd.	Neosho	64850
Nevada	SW	Rte. 71 WOR, 0.3 Mi. N of	Nevada	64772
Nevada - Construction	SW	601 W Outer Rd North	Nevada	64772
Osceola	SW	5371 NE Bus. Hwy. 82	Osceola	64776
Ozark	SW	Farm Rd. 14-101, 0.2 Mi. S of	Ozark	65721
Preston	SW	Rt. 1, Box 124	Preston	65732
Seymour	SW	Rt. 1, Box 1056 (500 St Hwy	Seymour	65746
Stockton	SW	509 W. Hwy. 32	Stockton	65785
Warsaw	SW	1551 East Main St.	Warsaw	65355
Republic	SW	1925 S. St. Hwy. N	Springfield	65802



NOTE: ASSEMBLY MUST ROTATE
FREELY WHEN ASSEMBLED

TMA Pockets





Missouri Highways and Transportation Commission
Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions

STANDARD SOLICITATION PROVISIONS

- a. The solicitation for the procurement of the supplies referenced therein, to which these "Standard Bid Provisions, General Terms and Conditions and Special Terms and Conditions" are attached, is being issued under, and governed by, the provisions of Title 7 – Missouri Department of Transportation, Division 10 – Missouri Highways and Transportation Commission, Chapter 11 – Procurement of Supplies, of the Code of State Regulations. The Missouri Highways and Transportation Commission (MHTC), acting by and through its operating arm, the Missouri Department of Transportation (MoDOT), draws the Bidder's attention to said 7 CSR 10-11 for all the provisions governing solicitation and receipt of bids/quotes and the award of the contract pursuant to this solicitation.
- b. All bids/quotes must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.

GENERAL TERMS AND CONDITIONS

Definitions

Capitalized terms as well as other terms used but not defined herein shall have the meaning assigned to them in section 7 CSR 10-11.010 Definition of Terms.

Nondiscrimination

- a. The Contractor shall comply with all state and federal statutes applicable to the Contractor relating to nondiscrimination, including, but not limited to, Chapter 213, RSMo; Title VI and Title VII of Civil Rights Act of 1964 as amended (42 U.S.C. Sections 2000d and 2000e, *et seq.*); and with any provision of the "Americans with Disabilities Act" (42 U.S.C. Section 12101, *et seq.*).
- b. **Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, MHTC shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - i. withholding of payments to the Contractor under the contract until the Contractor complies, and/or,
 - ii. cancellation, termination or suspension of the contract, in whole or in part.

Contract/Purchase Order

- a. By submitting a bid/quote, the Bidder agrees to furnish any and all equipment, supplies and/or services specified in the solicitation documents, at the prices quoted, pursuant to all requirements and specifications contained therein.
- b. A binding contract shall consist of: (1) the solicitation documents, amendments thereto, and/or Best and Final Offer (BAFO) request(s) with any changes/additions, (2) the Contractor's bid response, and (3) the MHTC's acceptance of the bid by post-award contract or purchase order.
- c. A notice of award does not constitute an authorization for shipment of equipment or supplies or a directive to proceed with services. Before providing equipment, supplies and/or services, the Contractor must receive a properly authorized notice to proceed and/or purchase order.

Applicable Laws and Regulations

- a. The contract shall be construed according to the laws of the State of Missouri. The Contractor shall comply with all local, state, and federal laws and regulations related to the performance of the contract. The exclusive venue for any legal proceeding relating to or arising, out of the contract shall be in the Circuit Court of Cole County, Missouri.
- b. The Contractor must be registered and maintain good standing with the Secretary of State of the State of Missouri, Missouri Department of Revenue, and other regulatory agencies, as may be required by law or regulations. Prior to the issuance of a purchase order and/or notice to proceed, the Contractor may be required to submit to MHTC a copy of their current Authority Certificate from the Secretary of State of the State of Missouri and/or a copy of their Certificate of No Tax Due from the Missouri Department of Revenue.
- c. Prior to the issuance of a purchase order and/or notice to proceed, all **out-of-state** Contractors **providing services** within the state of Missouri must submit to MHTC a copy of their current Transient Employer Certificate from the Missouri Department of Revenue, in addition to a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.

Executive Order:

The Contractor shall comply with all the provisions of Executive Order 07-13, issued by the Honorable Matt Blunt, Governor of Missouri, on the sixth (6th) day of March, 2007. This Executive Order, which promulgates the State of Missouri's position to not tolerate persons who contract with the state engaging in or supporting illegal activities of employing individuals who are not eligible to work in the United States, is incorporated herein by reference and made a part of this Agreement.

- 1) "By signing this Agreement, the Contractor hereby certifies that any employee of the Contractor assigned to perform services under the contract is eligible and authorized to work in the United States in compliance with federal law."
- 2) In the event the Contractor fails to comply with the provisions of the Executive Order 07-13, or in the event the Commission has reasonable cause to believe that the contractor has knowingly employed individuals who are not eligible to work in the United States in violation of federal law, the Commission reserves the right to impose such contract sanctions as it may determine to be appropriate, including but not limited to contract cancellation, termination or suspension in whole or in part or both.
- 3) The Contractor shall include the provisions of this paragraph in every subcontract. The Contractor shall take such action with respect to any subcontract as the Commission may direct as a means of enforcing such provisions, including sanctions for noncompliance.

Preferences

- a. In the evaluation of bids/quotes, preferences shall be applied in accordance with 7 CSR 10-11.020(7). Contractors should apply the same preferences in selecting subcontractors. The attached document entitled "**VENDOR INFORMATION AND PREFERENCE CERTIFICATION FORM**" must be completed and returned with the solicitation documents.
- b. Bidders are encouraged to obtain minority business enterprise (MBE) and women business enterprise (WBE) participation in this work through the use of subcontractors, suppliers, joint ventures, or other arrangements that afford meaningful participation for M/WBEs. Bidders are encouraged to obtain 10% MBE and 5% WBE participation.

Missouri Highways and Transportation Commission
Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions

Cancellation of Contract

The MHTC may cancel the Contract at any time for a material breach of contractual obligations or for convenience by providing Contractor with written notice of cancellation. Should the MHTC exercise its right to cancel the contract for such reasons, cancellation will become effective upon the date specified in the notice of cancellation sent to the Contractor.

Bankruptcy or Insolvency

Upon filing for any bankruptcy or insolvency proceeding by or against the Contractor, whether voluntarily, or upon the appointment of a receiver, trustee, or assignee, for the benefit of creditors, the Commission reserves the right and sole discretion to either cancel the Agreement or affirm the Agreement and hold the Contractor responsible for damages.

Warranty

The Contractor expressly warrants that all equipment, supplies, and/or services provided shall: (1) conform to each and every specification, drawing, sample or other description which was furnished to or adopted by the MHTC, (2) be fit and sufficient for the purpose expressed in the solicitation documents, (3) be merchantable, (4) be of good materials and workmanship, and (5) be free from defect.

Status of Independent Contractor

The Contractor represents itself to be an independent Contractor offering such services to the general public and shall not represent itself or its employees to be an employee of the MHTC. Therefore, the Contractor shall assume all legal and financial responsibility for taxes, FICA, employee fringe benefits, workers' compensation, employee insurance, minimum wage requirements, overtime, etc., and agrees to indemnify, save and hold the MHTC, its officers, agents and employees harmless from and against any and all losses (including attorney fees) and damage of any kind related to such matters.

Non-Waiver

If one of the parties agrees to waive its right to enforce any term of this Contract, that party does not waive its right to enforce such term at any other time or to enforce any or all other terms of this Contract.

Indemnification

The Contractor shall defend, indemnify and hold harmless MHTC, including its members and department employees, from any claim or liability whether based on a claim for damages to real or personal property or to a person for any matter relating to or arising out of the Contractor's performance of its obligations under the contract awarded pursuant to this solicitation.

SPECIAL TERMS AND CONDITIONS

Tax Exempt Status:

MHTC is exempt from paying Missouri Sales Tax, Missouri Use Tax and Federal Excise Tax. However, the Contractor may themselves be responsible for the payment of taxes on materials they purchase to fulfill the contract. A Project Tax Exemption Certificate will be furnished to the successful Bidder upon request if applicable.

Delivery – Additional Requirements

- a. The Contractor shall furnish the Missouri Department of Transportation with a planned delivery schedule at least 24 hours before starting delivery.
 - 1) Notification should be during the normal workday preceding the day on which the Contractor desires to initiate delivery.
 - 2) It will be necessary for a representative of the Missouri Department of Transportation to be present when the unit(s) is delivered.
- b. The following days shall be construed as **official holidays** under the terms of the contract:

January 1	New Year's Day
Third Monday in January	Martin Luther King, Jr.'s Birthday
February 12	Lincoln's Birthday
Third Monday in February	Washington's Birthday
May 8	Truman's Birthday
Last Monday in May	Memorial Day
July 4	Independence Day
First Monday in September	Labor Day
Second Monday in October	Columbus Day
November 11	Veteran's Day
Fourth Thursday in November	Thanksgiving Day
December 25	Christmas Day
- c. When any of the above **holidays falls** on a **Sunday**, the holiday will be observed on the following **Monday**; when any of the above **holidays falls** on a **Saturday**, the **holiday** will be observed on the immediately preceding **Friday**.

Liquidated Damages

- a. In the event the successful Contractor fails to deliver **a fully functioning unit(s) in accordance with the specifications and purchase order**, the Department and the public will sustain damages because of such delay in delivery, the exact extent of which would be difficult to ascertain, and in order to liquidate such damage in advance it is agreed that the **sum of \$300.00 per day, per unit**, for each assessable calendar day on which the delivery has not been completed, is reasonable and the best estimate which the parties can arrive at as liquidated damages, and it is therefore agreed that said amount will be withheld from payments due the Contractor or otherwise collected from the Contractor as liquidated damages.
- b. **Saturdays, Sundays, holidays and days whereas the Department has suspended work** shall not be assessable days.

Missouri Department of Transportation
David B. Nichols, Director

573.751.2551
Fax: 573.751.6555
1.888.ASK MODOT (275.6636)

ADDENDUM 001
Dump Trucks
Request for Bid 3-140214RJ

Offerors should acknowledge receipt of Addendum 001 (ONE) by **signing** and **including** it with the original proposal. The due date for receipt of proposals is **unchanged** by this Addendum. The following changes shall be included as mandatory requirements for this solicitation. Please see Attachment A, for further clarifications. All other terms and conditions remain unchanged and in full force.

Name and Title of Signer (Print or type)	Name and Title of Department Authority Rebecca L. Jackson, CPPO, CPPB Procurement Manager
Contractor/Offeror Signature <hr/>	Department of Transportation <i>Rebecca L. Jackson, CPPO, CPPB</i> <hr/>
(Signature of person authorized to sign)	(Authorizing Signature)
Date Signed:	Date Signed: <i>January 23, 2014</i>

Bidders are notified of the following changes.

- Revision of Paragraph 2.2.2a;
- Revision of Paragraph 2.2.3;
- Revision of Paragraph 2.2.4;
- Revision of Paragraph 2.2.6;
- Revision of Paragraph 2.2.6.1;
- Revision of Paragraph 2.2.6.2
deleted;
- Revision of Paragraph 2.2.6.3
deleted;
- Revision of Paragraph 2.2.7;
- Revision of Paragraph 2.2.7.1;
- Revision of Paragraph 2.3.1a;
- Revision of Paragraph 2.3.1b;
- Revision of Paragraph 2.3.1d;
- Revision of Paragraph 2.3.1e;
- Revision of Paragraph 2.3.1f;
- Revision of Paragraph 2.3.1g;
- Revision of Paragraph 2.3.1h;
- Revision of Paragraph 2.3.1i;
- Revision of Paragraph 2.3.1j;



*Our mission is to provide a world-class transportation experience that
delights our customers and promotes a prosperous Missouri.*

www.modot.org

- Revision of Paragraph 2.3.1k;
- Revision of Paragraph 2.3.2c;
- Revision of Paragraph 2.3.2f;
- Revision of Paragraph 2.3.2j;
- Revision of Paragraph 2.3.3a;
- Revision of Paragraph 2.3.3b;
- Revision of Paragraph 2.3.3h;
- Revision of Paragraph 2.3.3i;
- Revision of Paragraph 2.3.3j;
- Revision of Paragraph 2.3.3k;
- Revision of Paragraph 2.3.3t;
- Revision of Paragraph 2.3.3u;
- Revision of Paragraph 2.3.4b;
- Revision of Paragraph 2.3.4d;
- Revision of Paragraph 2.3.4h;
- Revision of Paragraph 2.3.4j;
- Revision of Paragraph 2.3.4k;
- Revision of Paragraph 2.3.4m;
- Revision of Paragraph 2.3.5d;
- Revision of Paragraph 2.3.5f;
- Revision of Paragraph 2.3.6;
- Revision of Paragraph 2.3.6b;
- Revision of Paragraph 2.3.6d;
- Revision of Paragraph 2.3.7a;
- Revision of Paragraph 2.3.7b;
- Revision of Paragraph 2.3.7o;
- Revision of Paragraph 2.4a;
- Revision of Paragraph 2.4c;
- Revision of Paragraph 2.4d;
- Revision of Paragraph 2.4e;
- Revision of Paragraph 2.4f;
- Revision of Paragraph 2.4g;
- Revision of Paragraph 2.6.1a;
- Revision of Paragraph 2.6.1b;
- Revision of Paragraph 2.6.1m;
- Revision of Paragraph 2.6.1o;
- Revision of Paragraph 2.6.2e;
- Revision of Paragraph 2.6.2k;
- Revision of Paragraph 2.6.2n;
- Revision of Paragraph 2.6.2v;
- Revision of Paragraph 2.6.2y;
- Revision of Paragraph 2.6.3a;
- Revision of Paragraph 2.6.4f;
- Revision of Paragraph 2.6.4h;
- Revision of Paragraph 2.6.4i;
- Revision of Paragraph 2.6.4k;
- Revision of Paragraph 2.6.4q;
- Revision of Paragraph 2.6.4r;
- Revision of Paragraph 2.6.5h;
- Revision of Paragraph 2.6.5r;
- Revision of Paragraph 2.6.5u;
- Revision of Paragraph 2.6.5b;
- Revision of Paragraph 2.6.5cc;
- Revision of Paragraph 2.6.5ff;
- Revision of Paragraph 2.6.5ii;
- Revision of Paragraph 2.6.5kk;
- Revision of Paragraph 2.6.5ll;
- Revision of Paragraph 2.6.5mm;
- Revision of Paragraph 2.6.5nn;
- Revision of Paragraph 4.1;
- Revision of Paragraph 4.6;
- Revision of Paragraph 4.7;
- Revision of Paragraph 4.10;
- Revision of Paragraph 4.11;
- Addition of Attachment 5;
- Addition of Attachment 6.

*Revisions and added language is denoted by ***bold italics***.

All accepted pre-approved equal requests received are addressed in this addendum. If a specific request is not noted, this means it was not approved. Bidders may submit items not approved in the base specification, under the Innovative Solutions Section 4.8 as an additional option but must not include said innovative solutions in the base/optional components offered.

All questions received in relation to the technical specifications are addressed within the technical specifications.

Additional generic questions received and responses are as follows:

Q: 3.1.7 – How does a bidder determine how to earn the maximum number of points for all the points shown other than base and option costs?

A: Most evaluation factors are self-explanatory. There is no way to guide a bidder on obtaining maximum points as some may be based upon competitor offerings.

Q: 3.1.7e – What is meant by other response information?

A: MHTC reserves the right to consider historic information and facts, whether gained from the bidder, question and answer conferences, references or other sources.

Q: 3.1.7 – Who are the evaluator(s) that determine the assignment of points?

A: This will vary with each purchase decision.

Q: 3.1.7.1 – Are prices for Other Options included in the formula or is just the pricing for the main base items?

A: The cost of the base unit and chosen options will be used in the cost calculation for the purpose of determining low bidder.

Q: 4.2 – This section shows maximum percentage increases for the five renewal periods yet 2.11.3 escalation clause requires bidder to provide written request and documentation justifying the need for a price increase. Section 4.2 needs to be explained.

A: MHTC commonly requests the same form of documentation for renewal pricing changes to support said changes. Price increases at time of renewal are not arbitrarily accepted and are a part of the decision by the MHTC on whether or not to renew any contract. Price escalations are offered to provide all bidders with assurances they do not have to consider all pricing risks to simply offer a bid. Acceptance of any price increase is at the sole discretion of MHTC and must be justified by the vendor.

Q: Is the MSRP discount required at bid submittal or after award?

A: MSRP discounts must be submitted with the bids.

Q: 4.9 – Other Submission Information: Does the level of detail provided here impact the ten points available under “Other Response Information?”

A: It could.

Q: Is the body builder required to be registered with the Secretary of State of the State of Missouri?

A: As stated, Contractors must be registered with the Secretary of State.

Q: Vendor Information and Preference Certification Form – Is the body builder required to complete this form?

A: The Bidder must complete this form but the information must include any information related to products provided by sub-contractors (i.e. body builders and others).

1. INTRODUCTION AND GENERAL INFORMATION

1.1 Introduction:

- 1.1.1 This Request for Bid (RFB) seeks bids from qualified organizations to provide **DUMP TRUCKS** to the Missouri Highways and Transportation Commission (MHTC) and Missouri Department of Transportation (MoDOT). The contract period shall be from the Notice to Proceed for one year with the option to renew for five additional one year periods. Each bid must be in a sealed envelope, be mailed or delivered by courier to the RFB Coordinator at the below listed address, on or before the date and time listed herein for receipt of bids/proposals. All questions regarding the RFB shall be submitted to the RFB Coordinator. **Bids must be returned to the office of the RFB Coordinator no later than 2:00 p.m., Central Time, February 14, 2014.**

RFB COORDINATOR:

Rebecca L. Jackson, CPPO, CPPB

Procurement Manager

Missouri Department of Transportation, General Services

830 MoDOT Drive

(physical address, zip 65109)

P.O. Box 270

(mailing address, zip 65102)

Jefferson City, MO 65109

PHONE: 573-526-7930

FAX: 573-526-1218

EMAIL: Rebecca.Jackson@modot.mo.gov

1.2 General Information:

- 1.2.1 This document constitutes an invitation for competitive, sealed bids for the procurement of **DUMP TRUCKS** as set forth herein.
- 1.2.2 Organization: This RFB is divided into the following parts:
- 1) Introduction and General Information
 - 2) Scope of Work
 - 3) Bid Submission and Evaluation
 - 4) Pricing Page(s)
 - 5) Vendor Information and Preference Certification Form
 - 6) Notice of Cooperative Purchasing
 - 7) Anti-Collusion Statement
 - 8) Terms and Conditions

2. SCOPE OF WORK

2.1 General Requirements:

- 2.1.1 The bidder shall provide **DUMP TRUCKS** on an as needed, if needed basis for the MHTC and MoDOT, in accordance with the provisions and requirements stated herein and at the sole satisfaction of MoDOT.
- 2.1.2 MoDOT reserves the right to obtain “like or similar” products as specified herein from other manufacturers, exclusive of the contract, when use of such products is deemed in the best interest of MoDOT.
- 2.1.3 Unless otherwise specified herein, the Bidder shall furnish all material, labor, facilities, equipment, and supplies necessary to provide the deliverables/services required herein.
- 2.1.4 MoDOT reserves the right to reject any or all bids, and to accept or reject any items thereon, and to waive technicalities. In case of error in the extension of prices in the bid, unit prices will govern.
- 2.1.5 A MoDOT Purchase Order will be issued identifying the truck configuration for all units purchased.
- 2.1.6 The outfitter or installer of all non-chassis manufacturer installed components shall hereafter be referred to as the “Body Builder.”
- 2.1.7 Units shall be designed for material hauling, trailer towing, and operation of hydraulically controlled snow plows and a material spreader.
- 2.1.8 Units shall comply with all vehicle weight, dimension, and safety requirements of the State of Missouri.
- 2.1.9 Units shall be complete with all standard equipment, plus any optional or special equipment to meet the minimum specifications.
- 2.1.10 Bidder must provide all applicable Material Safety Data Sheets (MSDS) and American Society for Testing and Materials (ASTM) documentation.
- 2.1.11 All items not specifically described in the specification, but necessary for the proper and efficient operation of each unit, must be supplied and included in the bid price and described in the bidders response.
- 2.1.12 Each unit must be equipped with all safety components required by the current Federal Motor Vehicle Safety Standards.
- 2.1.13 All units must be electronically governed at a gross speed of 65 miles per hour.
- 2.1.14 Engine idle shutdown timer shall be programmed to shut down engine after 10 minutes of idle time with park brake set. MoDOT shall have the ability to adjust the governed speed intervals.

Paragraph Revised by Addendum 001

2.1.15 Any reference to stainless steel throughout the specification shall mean grade 201 or 304.

2.2 Common Requirements:

- 2.2.1 Pre-Approved and/or Approved Equal Acceptance Process:
 - a. Any notation throughout the following specifications that states “**Pre-Approved Equal and/or Equivalent**” requires the bidder to submit a request for acceptance of the item for approval no later than **2:00 p.m., Central Time, January 17, 2014**. All Pre-Approved requests must be submitted to Rebecca Jackson at the above address. These requests may be in the form of a hard copy, email or facsimile. Bidder is responsible to ensure receipt of any request. Acceptance of the Pre-Approved Equal and/or Equivalent product will be issued in an addendum allowing all bidders the opportunity to bid the same item.

- b. Any notation of “**Equal or Equivalent**” allows the bidder to submit the substituted item in their bid without pre-approval. MoDOT at its sole discretion will determine if the item submitted is an equivalent resulting in a responsive bid. Items determined not to be an equivalent could render a bidder’s response as non-responsive. Bidders must identify any time an item included in the bid is an equivalent as required on the pricing page. MoDOT reserves the right to request additional information if required for equivalent determination any time before or after contract award. The following actions may be necessary to evaluate equal and/or equivalent submittals:
- Demonstration of a typical and/or similar same model machine and/or component shall be provided to MoDOT for up two working days of unimpeded evaluation. A physical use demonstration may be conducted if applicable at a MoDOT Maintenance Facility. Equipment will be operated by MoDOT personnel.
 - Submittal of a contact list including the name, address, and telephone number of other customers using the same equipment within the State of Missouri that can be contacted and a visit arranged upon request.
 - Bidder may be required to facilitate manufacturing facility inspection tours during normal working hours.
 - All costs associated with providing any or all of these items are the sole responsibility of the bidder.
- c. References throughout the bid document requiring MoDOT Representative approval shall mean a request must be submitted in writing to the Central Office General Services Fleet Manager for review, acceptance and approval prior to implementation.

Paragraph Revised by Addendum 001

2.2.2 Manuals and Service publications:

- a. A complete hard copy set of Operator Manuals shall be provided with each delivered unit *at the time of delivery*.
- b. On-Line service system access shall be provided to address all major components identified in sections 2.3 through 2.6 below. Technical information provided shall be comparable to those available to dealerships.
- c. At a minimum, engine, emissions, transmission, chassis, electrical system and Anti-Lock Braking System (ABS) diagnostic software must be provided.
- Diagnostic software must be provided at fleet pricing to allow MoDOT to acquire the needed software.
 - Software shall be compatible with the following equipment configurations:
 - Standard Laptop (minimum requirements): Windows 7, Windows Internet Explorer 8 (IE8), 32 bit machine, 4 gig RAM.
 - Standard Windows Tablet (minimum requirements): Windows 8, Windows Internet Explorer 10 (IE10), 2 gig RAM.
- d. Bidder must provide access to on-line parts catalog system, comparable to those available to dealerships, with accessibility for 150 concurrent users. Parts system shall be complete for all OEM-installed components. Catalogs shall be fully illustrated. MoDOT must pre-approve on-line systems.
- e. Bidder must provide one hard copy parts manual per delivered unit for all Body Builder installed components including but not limited to, the hydraulic system, spreader control system, warning light system, material spreaders, and all plows. An on-line version may be substituted in lieu of hard copy. The manual shall meet the following minimum requirements:
- Shall be vehicle identification number (VIN) specific.
 - Shall include make and model of all Body Builder-installed components.
 - Shall include complete, fully illustrated parts listing for all Body Builder-installed components.
 - Each add-on electrical accessory circuit shall have its own circuit diagram, showing the complete power and ground sides, routing, wire color and gauge, pin numbers, switches, breaker or fuse location and/or number, and specific ground point locations.
 - Each add-on air powered accessory circuit shall have its own circuit diagram, showing valve location, air-line color, air-line size, and routing.
 - A complete hydraulic schematic of all accessory circuits, including flow specifications and pressure settings for relief valves on each circuit.
 - For each hydraulic hose installed, the diameter and overall length of the hose, including both fittings, and the type and size of each fitting.

- f. Each delivered unit shall include a factory line sheet listing all chassis component codes as installed by the bidder. An electronic or hard copy line sheet is acceptable. An electronic version must be submitted in a platform or version viewable and readable by MoDOT.
- g. Each delivered unit shall include a comprehensive list of all fluids, lubricants, coolants, etcetera required for the maintenance of the dump truck. This list should be provided in the form of a sticker located in the interior rear of the cab.

Paragraph Revised by Addendum 001

2.2.3 Finish: Trucks purchased from the resulting contract are for use in roadway maintenance activities including but not limited to snow removal, asphalt maintenance, aggregate material transport, etcetera . Unless otherwise specified, all equipment and all components, with the exception of stainless steel products, shall be thoroughly cleaned, **prepped, primed** and completely finished with a high quality corrosion resistant **paint or powder coat**. **Cab and dump body color** shall be DuPont N2065-Yellow **or Sikkens Akzo Nobel School Bus Yellow 4421**. **Chassis and frame components shall be black. Moldboards shall be orange or yellow, and attaching brackets shall be black.** Finish shall be smooth, shiny, and free of runs, overspray, and/or other defects. No bare ferrous metal components, with the exception of stainless steel products, shall be visible on any OEM and/or Body Builder-installed components.

Paragraph Revised by Addendum 001

- 2.2.4 Pilot Truck Build and Acceptance: After issuance of the first purchase order **for the applicable chassis and body builder combination**, bidder is required to build a pilot truck for use in specification compliance throughout the life of the contract. **Only one pilot truck per chassis and body builder combination is required under the terms of the contract.**
- a. Bidder shall complete the cab and chassis within 120 days of PO issuance. Bidder shall notify MoDOT upon completion of the pilot chassis. Bidder may be required, at MoDOT's discretion, to make arrangements for an inspection of the chassis at the point of manufacture. Discrepancies and/or findings of non-compliance will be listed and must be corrected and/or addressed to the satisfaction of the MoDOT Representative before the rest of the chassis are built.
 - b. Within 60 days after receipt of cab and chassis, the Body Builder shall notify MoDOT of the pilot truck completion, including all Body Builder installed components in the proposed locations. Within two weeks of notification, MoDOT shall complete unit inspection. Discrepancies and/or findings of non-compliance will be listed and must be corrected and/or addressed to the satisfaction of the MoDOT Representative before the rest of the trucks are built or outfitted.
 - c. All costs associated with all pilot inspections, including travel, lodging, and food, for six (6) MoDOT employees must be included in the bid price. In the event that multiple reviews are required prior to final approval of the pilot truck, the costs to MoDOT for those trips are the responsibility of the Bidder as well.
 - d. Any manufacturing specification changes during the pilot inspections will be documented and approved by MoDOT and vendor. Changes must be implemented in the manufacture of this vehicle prior to the pre-delivery inspection and any that are not are subject to the pre-delivery inspection liquidated damages.
- 2.2.5 Pre-Delivery Inspections:
- a. The Bidder and/or Body Builder shall do a thorough pre-delivery inspection of each completed truck to include the chassis and all installed components and snow equipment. Inspection shall be customized to reflect snow removal truck requirements, including but not limited to: hydraulic system individual pressure settings, hydraulic controls operation, spreader control system operation, wing plow and underbody scraper operation, dump bed and tailgate operation, tarp system, warning lights, hydraulic hose and electrical wire routing and protection. Inspection results shall be recorded on a pre-printed form, which shall include the last 8 digits of the truck VIN. A copy of the completed inspection form signed and dated by the inspector shall be placed in the left door pocket of each delivered unit.
 - b. MoDOT reserves the right to complete a thorough pre and/or post-delivery inspection of each unit at the final assembly point and/or MoDOT delivery point. This inspection will include the chassis and all installed components and snow equipment. Bidder shall provide a production and planned delivery schedule to accommodate plant inspections and deliveries to districts.

2.2.6 *Warranty*

- a. *Upon contract award, bidder agrees to provide bumper to bumper warranty on all components for a minimum of two years or 50,000 miles whichever occurs first. A copy of the warranty shall accompany the bid. Warranty coverage shall include costs of transporting the unit to and from servicing shop, when outside a 100 mile radius of the delivery point. The bidder shall be responsible for pickup and delivery (including fuel) of any units that are found to have defects within the first ninety (90) days of delivery to MoDOT and have to return to dealer for repairs. A breakdown of the standard manufacturer's warranty when it is in excess of the 2 years requested shall be listed for each component of the cab and chassis and included in the manual set.*
- b. *MoDOT is interested in value added solutions in relation to administration of vehicle warranty to ensure units purchased under this contract will be repaired and returned to the roadway as quickly as possible. Such innovative solutions could include more than an in-house warranty program and all bidders are encouraged to submit options for review and evaluation.*
- c. *Truck Chassis: The chassis manufacturer shall guarantee to furnish all warranty services gratis at franchised dealers within the State of Missouri or other adjoining states.*
- d. *Snow Removal Equipment: From the date that MoDOT assigns this equipment to its requesting location, the manufacturer and/or its representative shall provide a no-deductible, all-inclusive warranty (less normal maintenance) for a minimum of two years.*
- e. *Body Builder Manufactured and Installed Components: From the date that MoDOT assigns the completed truck to its requesting location, the Body Builder shall provide a no-deductible, all-inclusive warranty (less normal maintenance) guaranteeing the design, material, installation, and workmanship of the completed unit and all installed components for a minimum of two years. The Body Builder shall provide a list of authorized repair stations that will perform warranty repairs on all Body Builder-installed components on the truck. These stations, shall handle all associated billing directly with the Body Builder.*
- f. *In-House Warranty: Bidder shall establish and honor an in-house warranty program. This program shall cover the entire truck as delivered, including the chassis and all Body Builder-installed components and snow equipment. The in-house warranty shall remain in effect for the warranty periods stated above. There shall be no minimum price restriction for in-house warranty repairs. Bidder shall reimburse all warranty parts supplied by MoDOT. Warranty repair labor provided by MoDOT shall be reimbursed by bidder. Credit is unacceptable. Bidder shall submit an hourly labor rate based on fair market value with the bid. Bidder is responsible for all shipping costs of any warranty parts whether shipped to or from MoDOT. In the event of an in-house warranty charge dispute, bidder shall work with the MoDOT Representative to resolve the dispute.*

2.2.6.1 *Extended Warranty Option #1: 5 Year/80,000 mile/3600 Hour: Engine, & Engine/Emission Electronics including Fuel System and A/C*

- 2.2.7 *Training - Operator Training: Bidder shall provide eight (8) hours of Operator training at any MoDOT location as shown in Attachment 1. Training shall include but not be limited to identification of all cab, chassis, body and optional unit features as well as standard preventative maintenance procedures for all unit components. Costs for this training shall be priced separately on the bid pricing page and shall not be included in the dump truck cost. Training shall meet the following requirements:*
- a. *Content shall be tailored to the components of the delivered unit(s). Course shall include hands-on training to reinforce course content.*
 - b. *Trainer must have experience in the area of servicing proposed truck components.*
 - c. *Cab and Chassis system training shall include but not be limited to operational training of the engine, electronic controls, fuel system, emissions, electrical system controllers and automatic transmission.*
 - d. *Body Builder installed component trainings shall include but not be limited to operational training of the hydraulic, electrical accessories, spreader control and warning light systems.*
 - e. *Bidder is responsible for all costs associated with training and materials for a maximum number of 20 trainees per training session.*

2.2.7.1 **Technical Training:** Annually, bidder shall provide 24 hours of Technical training in each assigned unit location within each district delivery location as shown in section 2.7.2. Training shall include but not be limited to, major unit components such as engine, transmission, electrical, drive line, emissions, hydraulics and other areas of emphasis as defined by the MoDOT Representative. Bidder is responsible for all costs associated with training and materials for a maximum number of 30 trainees per location and/or 15 per twelve hour session. **Cost to be included in the base truck bid amount.**

2.3 **Tandem Axle Technical Specifications:** The following technical specifications are for the manufacture of a 58,000 pound (lb.) Gross Vehicle Weight Rating (GVWR) Set Forward Tandem Axle Dump Truck with two dump bed configurations to accommodate a sixteen foot spreader.

2.3.1 Cab and Chassis: All specified equipment is to be Original Equipment Manufacturer (OEM) installed, either as standard equipment, a line installed option or factory authorized dealer standard option (DSO) or special equipment (SE) installation unless otherwise specifically stated.

Paragraph Revised by Addendum 001

- a. Cab
- The design shall be the manufacturers' largest standard design, to accommodate two employees, shall be suitable to provide adequate headroom with the specified air-ride seats and other cab installed equipment.
 - Interior trim and insulation package shall include a full headliner and back-of-cab trim panel(s) offering maximum sound reduction.
 - Pedals suspended from the cowl are preferred. Floor mounted pedals are not preferred.
 - Front grille shall be stationary and mounted in a manner to clear front snow plow hitch.
 - Horns shall be air, mounted top-of-cab with snow covers, mounted under hood **or cab**.
 - Driver window may be manual and passenger window shall be power. Unit must have power locks on both doors.
 - Unit shall have interior sun visors on left and right side of windshield.
 - Grab handles and arm rests must provide the ability to maintain three-points of contact when entering and exiting the cab.
 - Mirrors shall be west coast breakaway type, left and right, powered and heated, set for 102-inch trailer, 7-inch by 16-inch. Integral heated convex, left and right, below primary west coast mirrors, **approximately** 8-inch round or **approximately** 6-inch by 6-inch rectangular.
 - Heater, air conditioner, and defroster shall be factory-installed, highest British Thermal Unit (BTU) capacity available. Prefer side window defrosters to operate with the windshield defroster system and heater air selection for outside air source or in-cab air re-circulation. Prefer air conditioning system to have self-diagnostic capabilities.
 - Floor covering shall be heavy-duty rubber and/or vinyl with sound deadening backing covering entire floor, dark in color.
 - Driver and passenger seats shall be vinyl covered high-back air suspension with 3-point seat belts, tethered to allow free suspension movement. Each shall have an adjustable inboard armrest. National Cush-N-Aire Hi-Bac 195, **Bostrom Talladega 915 High Back Air Suspension or Air-National 2000 (Hi Back) Seats**.
 - Seat belts shall be a highly visible color such as red or orange.
 - Steering shall be factory installed tilt column with the smallest diameter steering wheel available for the specified front axle.
 - Unit must include map pockets in both doors or other large storage area suitable for manuals and other incidentals. Must not be mounted to or part of back-of-cab interior liner.
 - Overhead console is required and must be suitable for installation of a two-way radio.
 - Unit must include factory installed air ride rear cab suspension.
 - Unit must include a factory installed bug and stone screen behind the grille.
 - Unit must include a cab fresh air filter to reduce exposure to particulates.

b. Chassis:

- There shall be a minimum of 13-inches ground clearance under any frame mounted components, such as the fuel tank and/or its mounting brackets, steps, air tanks, battery box, etcetera.
- Battery Box must not interfere with body builder installed equipment. Spliced cables are not acceptable.
- First cab step height shall not exceed 18-inches from the ground. All steps shall be a minimum of **4.5 - inches wide**. Steps are required on both sides of unit. MoDOT Representative must pre-approve step configuration **after contract award and prior to completion of the pilot truck**.
- Power steering must be integral hydraulic, gear. Ram system is not acceptable.
- Wheelbase shall be determined between the bidder and Body Builder collaboration using the guidelines in section 2.3.3 and 2.3.4 of this request.

c. Brakes:

- Must be a full dual air system with four-channel anti-lock system, rated at or above axle GVWR requirements.
- Compressor shall be 13.2-Cubic Feet per Minute (CFM) or greater.
- Shall be heated air dryer.
- Air dryer must be easy to access and service. Prefer ADIP style or spin on cartridge.
- Front and rear brakes shall be self-adjusting and rated at or above axle GVWR requirements.
- All drive wheel positions shall be equipped with a parking brake.
- Brake systems on the rear drive axle must be located inside the rear tire envelope to prevent any interference with pull-type asphalt spreader rollers.
- Truck shall be equipped to pull a four-wheel trailer with air brakes. Truck shall have a hand control valve, tractor protection valve, and trailer anti-lock provisions. Air-lines must be run to the rear of the frame rails for glad-hand installation by Body Builder.
- Installation of the air tanks and/or dryer shall not inhibit the installation of snow removal equipment anywhere underneath the truck behind the cab for a clear frame configuration.

d. Electrical:

- Alternator shall be 160-ampere (amp) minimum and capacity shall be rated to handle all chassis and body building requirements.
- Unit shall include three 12-Volt combined 1,950-cold cranking amp (CCA) maintenance free batteries.
- Unit shall include one 12-Volt accessory power outlet in the cab.
- Gauges shall be three-way type; visual, light, and buzzer, dash mounted, easy operator viewing: Oil Pressure, Coolant Temperature, Air Pressure, Speedometer, Transmission Temperature, Ammeter or Voltmeter, Fuel, Tachometer, and Hour meter. The Hour meter must be OEM electronic and provide true engine running hours of operation.
- Low Coolant Level Warning shall be an audible **buzzer and lamp warning**.
- Ignition Switch shall be an automotive key with accessory position. Two sets of keys shall be provided with each unit. Each key set shall have a key tag identifying the MoDOT number, which will be supplied at the time of order.
- Windshield wiper system shall be electric with intermittent operation and electric washer pump. Wipers should be forced to the slowest intermittent speed if left on for a predetermined length of time with the parking brake set. **Headlights which turn on automatically when the wipers are on are preferred.**
- Prefer flush mounted cab marker lights. Light Emitting Diode (LED) is required.
- Each unit shall include an AM/FM stereo with speakers.
- Courtesy lamps shall be OEM interior lights to fully illuminate interior of cab and cab step areas.
- Electrical protection re-settable circuit breakers **are preferred. Fuses are acceptable.**
- Turn signal switch shall be self-canceling.
- Snow plow light connections shall be a factory installed harness with connector for installation of snow plow lights. Harness must provide circuits for high and low beam headlights, marker lights, and turn

signals. A factory installed, dash mounted switch shall switch operation from the OEM headlights to the snow plow light headlights. **Prefer marker** lights and turn signals function on plow lights regardless of the dash switch position.

- Trailer light Connection shall be a factory installed 7-way connection socket (J560), anti-lock brake compatible, with sufficient cable to reach the rear of the frame. Socket must be wired for turn signal operation independent of brake lamps.
- The ground speed harness shall be factory installed to provide Body Builder connection point for ground speed signal. Body Builder connection point shall be located inside the cab.
- A power distribution box shall be mounted to the inside rear wall of the cab. This box shall provide an interface point for the following chassis supplied circuits: circuit breaker protected, switched battery power and ground speed signal. Battery power circuits shall be protected by a resettable circuit breaker located inside same box. It is acceptable to have resettable circuit breakers at the origin of the battery circuits, but the resettable circuit breaker at the point of origin must be of higher amperage than the ones inside the power distribution box.

Paragraph Revised by Addendum 001

- e. Engine: Shall be a standard production; turbo charged; governed; diesel fueled; a minimum gross torque of 1,150 pound-feet, and a minimum Society of Automotive Engineers (SAE) gross horsepower of 345 when operated within a governed speed as recommended by the engine manufacturer.
- Drain plug must be magnetic.
 - **Prefer the use of** two dry air filters meeting engine manufacturer optimum filtration requirements.
 - Antifreeze shall be extended life, testing to a minimum of minus **34**-degrees Fahrenheit. Meeting the manufacturers' recommendations.
 - Radiator shall be the largest capacity available for provided engine and chassis combination. Radiator shall have an accessible drain petcock. If OEM offers a corrosive resistant radiator coating or treatment, it must be provided.
 - Fan shall be air operated positive on-off temperature controlled clutch type with automatic mechanical failure lockup (on) provision. Viscous drives and electric clutches not acceptable.
 - Engine warning and shut down system shall include an audible buzzer and lamp warning for high engine temperature, low coolant and low engine oil pressure with automatic engine shut down feature.
 - All trucks shall be ordered with an engine crankshaft front drive adapter plate suitable for installation of a Spicer No. 1310 accessory drive connector with clearance provisions for a crankshaft driven, front PTO driveshaft. Driveshaft may run through frame cross members, prefer it does not pass through the radiator, charge air cooler, or air conditioning condenser.
 - Engine block heater shall be a 120-Volt and **1,000-Watt** mounted in an easily accessible location, near the driver door and in a protected from outside elements. Receptacle shall be easily accessible near the driver's door.
 - Unit must include **an in cab air restriction indicator**.

Paragraph Revised by Addendum 001

- f. Exhaust:
- Exhaust stack shall be right-hand vertical, with sweep elbow to direct exhaust away and above cab. If the diesel particulate filter (DPF) is part of the vertical stack, the clearance to the dump body must be pre-approved by the MoDOT Representative **after contract award and prior to the pilot truck build**.
 - Exhaust stack must be shielded the full height of the cab.
 - If flex tubing is used the tubing and clamps shall be stainless steel.
 - Exhaust system design must incorporate a clear frame configuration whereby components shall not hinder the installation of under-frame snow removal equipment anywhere behind the cab.

Paragraph Revised by Addendum 001

- g. Frame:
- Single rail system is preferred. Double rail systems must feature anti-corrosive protection.
 - Strength must be 120,000 pounds per square inch (psi) minimum.
 - Resisting bending movement (RBM) shall be a minimum of **2,470,000** inch pounds minimum.

- ***A 20-inch integral frame extension in front of grille with a continuous cross section.***
- ***Prefer unit cost does not*** include a factory front bumper.
- Spliced after-frame (AF) extensions are not acceptable. Frame configuration to be determined by body builder and bidder.
- Unit shall include factory installed two front and two rear tow hooks located on the outside end of the frame rails. Each tow hook shall meet or exceed unit GVWR.

Paragraph Revised by Addendum 001

h. Front Axle and Suspension:

- Axle shall be standard manufacture 18,000-lb. rated capacity.
- Axle setting shall be set forward only. Axle set-back not to exceed 32-inches measured from the grille.
- ***Prefer wet lubrication Stemco seals or equivalent. Greaseable wheel bearings are unacceptable.***
- Suspension shall be parabolic or variable-rate springs, rated to axle capacity with highest deflection rate available.

Paragraph Revised by Addendum 001

i. Rear Axle and Suspension:

- MoDOT prefers the most comfortable operator ride whether loaded or unloaded. Air ride suspensions are not preferred. Identified acceptable suspensions include but are not limited to TufTrac, Camel Back, Hendrickson HMX.
- ***Axle shall be standard manufacture 40,000-lb. minimum rated capacity with power divider.***
- Drain plug shall be magnetic.
- Gear ratio to provide adequate grade ability and rear wheel torque, and provide sustained 65 miles per hour (MPH) highway cruise speed at GVWR.

Paragraph Revised by Addendum 001

j. Fuel System:

- Fuel Tank shall be a single left side mounted 70-gallon minimum capacity ***and/or a 65-gallon usable capacity*** non-polished aluminum tank. Fuel and diesel exhaust fluid (DEF) tank placement shall not interfere with any underbody or wing plow option. If any portion of tank is used as a step, it shall have a non-skid grating. Tank shall include a drain port with plug.
- Fuel maintenance system shall include a fuel-water separator, with thermostatic fuel temperature controlled electric heater, and fuel filter with restriction and change indicator. Components shall be factory installed ahead of fuel primer and other fuel filter(s).

Paragraph Revised by Addendum 001

k. Transmission:

- Shall be an Allison six-speed automatic transmission.
- Shifter shall be a dash mounted. Lever style with 'Mode' select button ***is preferred.***
- Electronic Control Unit (ECU) shall be mounted inside the cab ***or under the hood on the firewall in a protected casing.***
- Fluids shall be manufacturer approved synthetic transmission fluid.
- Shall utilize extended heavy-duty type oil cooler.
- Unit shall include a magnetic drain plug or magnet in oil pan.

l. Wheels and Tires:

- Front wheels shall be heavy service 9-inch steel hub piloted Budd style 10-bolt. White powder coat finish.
- Rear wheels shall be heavy service 8.25-inch steel hub piloted Budd style 10-bolt. White powder coat finish.
- Wheel guards shall be for metric hub-piloted wheels with flanged mounting nuts and installed between hub and wheel, and between dual wheels.
- Front and rear tires shall not be speed restricted below 65 mph. Front tire size shall be 315/80R22.5, load rating "L", and 20 ply rating. Rear tire size shall be 11R22.5, load rating "G", and 14 ply rating. Rear tires shall be on and off road tubeless mud and snow tread.

2.3.2 Body Builder:

a. Threaded Fasteners:

- All threaded fastener components (bolts, washers, nuts) with a diameter designation greater than or equal to SAE ½-inch shall be minimum grade eight composition. Nuts shall be all metal self-locking, lock washers are not acceptable. All bolts 5/8-inch and larger shall be flange head. A minimum of two bolt threads must extend through all nuts. All components shall have grade identifier marks and a registered manufacturer's logo.
- All threaded fastener components (bolts, washers, nuts) with a diameter designation greater than or equal to SAE ¼-inch up to less than SAE ½-inch shall be minimum grade five composition. Nuts shall be self-locking, either poly-lock or all metal. Lock washers are not acceptable. A minimum of two bolt threads must extend through all nuts. All components shall have grade identifier marks and a registered manufacturer's logo.
- All threaded fastener components (screws/bolts, washers/lock washers, nuts) with a diameter designation less than SAE ¼-inch shall be minimum grade two composition.

b. Electrical and Illumination Installation:

- All installed wiring must be of adequate size to handle the anticipated loads of all electrical components. All wiring must be uninterrupted and complete with no splices.
- All wiring must be color-coded.
- All wire terminal ends (spade, ring, etc.) shall be: crimped, soldered to the wires and heat shrunk, or weatherproofed connectors. Scotch-Loc fasteners and/or crimp butt connectors are not acceptable for any connection.
- All electrical connections shall be protected with dielectric silicone grease.
- All wiring shall be enclosed in a protective wiring loom, conduit, or wrapped harness.
- The edges of all holes through which wiring must pass shall be protected with a grommet.
- High current circuits, such as the tarp motor circuit, shall be powered directly from the battery, and protected by a master re-settable breaker, or a fusible link.
- Body Builder installed wiring going to the rear of the frame and dump body shall be grouped together and bound. This bound harness shall then be secured to a painted metal strap, approximately 1-1/4-inch x 1/4-inch in size. This strap shall be secured to the top of the frame cross members away from the side rails.
- All wiring to lamps shall be stress relieved within 6-inches of the component.
- Wiring routed through the hydraulic enclosure sides shall be routed through a sealed compression type strain relief, or a molded bulkhead fitting.

Paragraph Revised by Addendum 001

c. Auxiliary Snow Plow Headlights: ***Bidders must provide bracket and plow light installation drawings for approval prior to installation on the pilot truck. Approval is required for any factory installed snow plow lights or snow plow light bracket.***

- Front auxiliary halogen headlights shall be Truck-Lite model 645 or equivalent. MoDOT prefers the safest visibility with a reduced risk of snow and/or ice accumulation.
- Auxiliary headlights shall not obstruct the driver's vision. Mounting shall be approximately 64-inches from ground level, and at approximately the same width apart as truck's headlamps.
- Light shall be secured to a fender mounted, 3-point assembly bracket. Bracket shall be made from stainless steel.
- All fasteners attaching the bracket to the fender shall be stainless, and be secured using locknuts.
- Reinforced rubber washers or grommets shall insulate the bracket from the hood. Fasteners attaching the bracket to the hood shall be insulated from the hood by a 2-inch minimum diameter rubber washer or grommet and 2-inch minimum diameter plated washer.
- Auxiliary headlights shall be grounded back to chassis ground; minimum 14-gauge wire shall be used. Drill holes to accommodate wire size.

d. Hydraulic Installation:

- All hoses shall be routed in a manner to minimize rub points and bends. Critical rub points shall be wrapped for protection.
- All hoses shall be routed or shielded to protect them from heat sources.

- Teflon tape shall not be used in the hydraulic system.
 - Hydraulic hoses shall not be secured to any factory-installed chassis wiring, cables, hoses, or lines.
 - Hydraulic hoses shall not be secured in the same bundle with any electrical wiring.
 - Hydraulic hoses shall be bundled together and routed by themselves.
 - Hoses shall be adequately supported and securely fastened to withstand snow and icing conditions.
 - All pressure and return hoses shall be rated for at least 3,000 PSI working pressure.
 - Hydraulic hoses running to the rear of the truck shall be secured to a painted metal strap, approximately 1-1/4-inch x 1/4-inch in size. This strap shall be secured to the top of the frame cross members away from the side rails.
 - Each hose going to the dump body shall have 90-degree bulkhead mounted Joint Industry Council (JIC) elbows installed at the rear of the truck frame near the dump body hinge. These elbows shall split each hose going to the dump body into two hoses, allowing for easier routing and replacement.
- e. Air Powered Accessory Installation:
- All lines shall be routed in a manner to minimize rub points and bends. Critical rub points shall be wrapped for protection.
 - All lines shall be routed or shielded to protect them from heat sources.
 - Air lines shall be colored, identifying individual circuits, with each circuit being a different color. Color-coding shall remain consistent for the duration of the contract.
 - Body Builder installed accessory air lines going to the rear of the frame, and dump body, shall be grouped together and bound with the Body Builder installed wiring going to the rear of the frame and dump body. This bound harness shall then be secured to the same painted metal strap as the body-builder installed electrical wire harness.

Paragraph Revised by Addendum 001

- f. Bumper, Front Snow Plow Hitch and Lift Assembly: *See Attachment 5 and 6 for concept drawings and materials.* Shall be a heavy-duty channel, swept back front bumper. The bumper must be designed to attach a currently used MoDOT snow plow and to evenly transmit the snow plow load to the truck frame under continuous severe service use.
- Bumper shall be secured to the truck frame using fine thread, grade eight, frame-style hardware. Nuts shall be all metal, top-lock style locknuts. Serrated hardware is not acceptable. Hydraulic quick couplers as required elsewhere in the specifications shall be installed on the bumper.
 - Lift assembly shall include a Monarch CS250 hydraulic cylinder or equivalent for lifting the snow plow. It shall be securely welded to the front bumper and fold down when not in use.
 - Front snow plow hitch must be securely welded to the front bumper.
- g. Rear Hitch Plate and Pintle Hitch: A 3/4-inch thick steel rear hitch plate shall be securely welded and gusseted to rear of frame rails. Rear hitch plate shall include the following items:
- Bulkheads for service and emergency trailer glad-hands, positioned away from the center of the rear hitch plate to prevent interference with a trailer tongue when making tight turns, and have 1/2-inch brass plugs installed. Glad-hands with 1/2-inch brass close nipples and tethered, removable covers shall be placed in the frame mounted tool box.
 - The J560 trailer connection furnished with the chassis shall be mounted through the rear hitch plate to the left of the pintle hitch.
 - Two (2) Buyers Products B50 or equivalent Department of Transportation (DOT) "D" rings, with 20-ton capacity each, shall be securely welded to the rear hitch plate.
 - A Premier model Saf-Tite 100 rigid pintle hitch shall be installed on the rear hitch plate using grade eight hardware torqued to specifications. Hitch shall be 24-inch centerline height above the ground, plus or minus 1-inch.
 - Back-up alarm shall exceed 105 decibels or 15 decibels above idle engine ambient and shall be installed at the rear of the frame in a protected area.
- h. Tool box shall be approximately 18 by 18 by 24 inches, weather proof stainless steel tool box. It shall be mounted on the right hand outside frame rail while not interfering with any body-builder installed options.
- i. All grease zerks will be threaded. Drive-in zerks are not acceptable. All threaded holes for grease zerks shall be of sufficient depth to prevent the zerk from bottoming out when tightened.

- j. Air and Electric Powered Body Builder Installed Accessories:
- All controls for body builder installed accessories shall be located within an operator console installed between the driver and passenger seat. *Using dash mounted switches are unacceptable unless otherwise specified.*
 - All body builder harnesses going to the operator console shall pass through weather-proof strain relief(s) mounted in the rear wall of the cab. Wiring shall be configured such that the height of the harnesses outside of the cab decreases as it travels away from the strain relief. Any water following the harnesses shall run away from the strain relief. Harnesses shall have sufficient slack to allow movement of the cab air suspension.
 - Harnesses and airlines for body builder installed accessories shall not pass through the floor of the cab.
 - From the rear wall of the cab towards the rear of the truck, no body builder installed wiring, air lines, or hydraulic hoses shall be located beneath the top flange of the frame.
 - All body builder air lines going to the operator console shall be routed through bulkhead unions located in the rear wall of the cab near the strain relief/s for the electrical wiring. Bulkhead mounting shall be facilitated by matching backup plates located on the inside and outside of the cab wall. Outside plate shall be coated with a polyurethane or silicone sealer before being secured to the rear wall of the cab. All bulkhead locations shall have the function for that bulkhead stamped or etched into the plate for identification of each airline installed.
 - A power distribution box shall be mounted to the inside rear wall of the cab. This box shall provide an interface point for the following chassis supplied circuits: circuit breaker protected, switched battery power and ground speed signal. Battery power circuits shall be protected by a resettable circuit breaker located inside same box. It is acceptable to have resettable circuit breakers at the origin of the battery circuits, but the resettable circuit breaker at the point of origin must be of higher amperage than the ones inside the power distribution box. Air lines shall have sufficient slack to allow movement of the cab air suspension.
- k. Spreader light shall be controlled by a rocker-style switch located in the operator console. Circuit shall operate key-on, and be protected by a resettable circuit breaker located in the power distribution box.
- l. Tarp shall be controlled by a rocker-style switch located in the operator console. Circuit shall operate key-on, and be protected by a resettable circuit breaker located in the power distribution box. The high-current tarp relay shall be supplied from the battery box and protected by a resettable circuit breaker located in the battery box. Tarp relay shall be located on the rear wall inside of the cab, or on the rear wall outside of the cab inside a weather-proof enclosure.
- m. Raised body indicator light shall be a red and console mounted. Light shall flash to indicate a raised body condition. Lamp shall be driven by a sealed proximity switch located in a protected position on the frame near the front of the dump body. Circuit shall be protected by a resettable circuit breaker located in the power distribution box and operate key-on.
- n. LED warning lights shall be controlled by a rocker-style switch located in the operator console. Circuit shall operate key-on and key-off, and be protected by a resettable circuit breaker located in the power distribution box.
- o. Tailgate latch shall be air operated and controlled by rocker-style switch located in the operator's console.

2.3.3 Corten V-Style Long Sill Dump Body with Attached Cab Shield - Configuration #1: The following specifications and dimensions shall apply to the 12-cubic yard maximum capacity truck-mounted dump body and hoist. The complete dump body shall be capable of accommodating a 16-foot, slip-in material spreader with attached liquid storage tanks. Any ferrous metal materials used in the manufacture of the bed must be welded prior to priming. Bids will not be considered on any dump body and hoist that deviate from these specifications.

- a. The dump body provided shall be a Western style. No underbody cross-members for support will be allowed. The floor, sides, and main long sill are to be full length with no cross-splices. All boxed areas of the dump body shall be sealed except for long sills. Long sills shall have a 1-1/4" drain hole at the rear to allow draining when the body is in a lowered position. No wiring or hoses shall be run through any boxed area. All welds shall be continuous. All hinge pins shall be removable.

- Dump body capacity shall be twelve cubic yards water level.
- 15-foot maximum inside length.
- 100-inch minimum outside width.
- 86-inch minimum inside width.
- **36-inch** minimum side height with level ends.

Paragraph Revised by Addendum 001

- b. The dump body main long sills, floor, tailgate, sides, and front shall be constructed using a minimum of Corten, rated 55,000-psi yield.
- Main Long Sills 1/4-inch Corten
 - **Floor, Tailgate 3/16-inch AR 400 or 450**
 - **Formed Intermediate Horizontal Side Brace 10-gauge Corten**
 - Sides, Front 10-gauge Corten
 - Formed Top Rail 3/16-inch Corten
 - Rear Corner post 3/16-inch Corten
- c. Dump Body Mounting:
- The rear edge of the dump body pivot pin shall be 0- to 1-inch forward from the rear face of the rear hitch plate.
 - The dump body pivot, measured from the centerline of the pivot pin to the rear face of the dump body not including the tailgate, shall be 12 inches.
 - The chassis wheel base shall be such that the rear drive axle is located 21-22 inches forward from the rear face of the rear hitch plate, measured from the rear face of the rear hitch plate to the center line of the rear drive axle. Rear drive axle tires shall not extend past the rear face of the rear hitch plate.
 - Hydraulic oil reservoir shall be mounted to provide 3- to 4-inch clearance between the cab and reservoir on passenger side of hoist above the frame.
 - The dump body shall be mounted as close as possible to the hydraulic oil reservoir, with a minimum of 3-inch clearance, excluding the sub frame of the reservoir and hoist.
 - A 4-gauge battery cable ground strap shall be installed from the dump body to the truck frame by means of a 5/16-inch cadmium plated bolt. Star washers shall be installed on both sides of the strap eye to insure a good ground.
- d. Hoist:
- Hoist shall be a trunnion mount, head lift, double-acting cylinder.
 - The hoist housing should be designed to accept a Model CS140-5.5-3DA MAILHOT cylinder or pre-approved equal. The cylinder sleeves shall be nitride coated. Sub-frame hoists are not acceptable.
 - A flared body bracket will be attached to either the hoist frame or body understructure to align body in position and keep from moving side to side.
 - The hoist shall be attached to the chassis by means of an above frame cradle. The cradle shall be designed as such to allow the hydraulic reservoir to be mounted on the passenger side of the hoist and the hydraulic valve unit to be mounted on the driver side of the hoist. The cradle shall also be able to accept grease line extensions that run from the outside of the driver side to the pivot point of the hoist on the cradle.
- e. Dump body pivots shall facilitate thorough greasing. Bushings shall have an internal radial groove in line with the grease fitting. Pivot pins shall be drilled and cross-drilled
- f. A storable body prop shall be provided on each side of the dump body. Pivots for the body props shall be greasable. Body props shall be constructed to withstand the down-pressure of the hoist without damaging the dump body, chassis or any related components.
- g. The cab protector shall be made of 10-gauge Corten material, be a minimum of 18-inches deep and not interfere with the cab-mounted vertical exhaust pipe. The cab protector shall be mounted, welded and gusseted to prevent flexing or vibration.

Paragraph Revised by Addendum 001

- h. Sides:
- Sides shall have a formed, debris-shedding top rail.
 - **Intermediate and bottom external supports for sides shall be horizontal.**
 - Sides shall have no provisions for extension boards.
 - Side heights shall be the same height as rear tailgate.
 - Sides shall have a fully welded step on the lowest bottom rubrail in line with pull out ladder.

- Side corner posts shall have a Whelen box recessed and welded in place for Whelen warning strobe light.

Paragraph Revised by Addendum 001

i. Tailgate:

- The tailgate shall be double-acting, and vertically straight with off-set hinges for positive closure.
- The tailgate shall have boxed upper, lower, side, and **minimum of one** intermediate horizontal rib supports made of 10 gauge Corten material. The tailgate sheet shall be made of 3/16-inch **AR 400 or 450** material. Lift handles shall be welded on each side just above the bottom support rib.
- A hinged “D” ring shall be mounted top and center of the tailgate to provide a lifting hook for removing the tailgate.
- Two 3/8-inch grade 70 spreader/holder chains shall be provided and stowed in boxes that are externally welded on tailgate when not in use.
- Anchor points for the tailgate chains shall be made from 3/8-inch thick steel. These anchor points shall be lapped on the outside of the dump body with a minimum of 1 1/2-inch overlap. Keyhole slot in anchor points shall be configured so that when installed, the link of the tailgate chain nested in the anchor is no more than 1 inch away from the rear face of the dump body at the farthest point.
- The top hinge pin shall be minimum 1 ¼ - inch diameter and pivot through (2) two ½-inch thick plates welded to the top of the rear body corner posts. The upper hinge plates must be flush with the top of the rear corner posts, body sides, and tailgate. These pins shall have one end tapered approximately 30 degrees for ease of alignment. 30 degree taper shall be ¼ - to 3/8-inch in length. Both upper pins are to be fabricated from 1 ¼ - inch cold rolled steel, and have a 1/4-inch thick outer flange stop. The 2-inch flange is to have one side machined to rest against a 3/8-inch x 1 ¾” flat bar welded to the outer hinge plate in order to capture the pin in place and prevent rotation, and pre-mature pin and hinge wear. Each pin is to be drilled and tapped for grease fittings to be installed into outer pin flange. Grease channels are to be included in order to lubricate the tailgate hinge lug.
- The tailgate lower pins shall be a minimum 1 ¼” diameter. Tailgate shall, without assistance from the locking device, seal against the floor/side sheets of the dump body, with no more than a 1/16-inch gap at any point. With the tailgate closed and the locking device open, tailgate lower pins shall have a 1/8-inch minimum, 1/4-inch maximum gap between the forward edge of the pin and the forward edge of the cradle.
- A license plate bracket shall be welded on the left-hand side of the tailgate near the top of the tailgate.
- When tailgate is lowered parallel to body floor, the inside surface of the tailgate shall provide a smooth level joint between the tailgate and the body floor.
- Tailgate height shall be **36 – inches** tall measured from the top of the floor to the top of the tailgate sheet.

Paragraph Revised by Addendum 001

j. Tailgate Latch

- An over-center locking device on each side of the dump body shall hold the tailgate securely closed. Latching arms shall be forged steel.
- The tailgate latch cross shaft assembly shall be supported on each end by bushings.
- This locking device shall be operated by an air cylinder, which shall be mounted between the long sills. Air cylinder shall be controlled by a rocker-style switch located in the operator’s console.
- Locking device shall be adjustable at each side of the dump body.
- A manual over-ride shall be provided on the outside of the dump body, allowing the operator to lock or unlock the tailgate using a simple adjustable wrench and without removing components.
- Lubrication points on the tailgate latch cross-shaft shall facilitate easier greasing by means of grooved bushings **and/or shaft**.
- **If tailgate shaft requires greasing**, grease zerks at each end of the tailgate cross-shaft shall be visible and accessible from the outside face of the dump body.

Paragraph Revised by Addendum 001

k. Ladder:

- **A pull-out or fold down style ladder shall be installed on each side of the dump body. The lowest rung shall not be more than 18-inches from the ground. Additional rungs shall have no more than 12-inches spacing between rungs. The top rung shall be no more than 18-inches from the top of the bed. Location of the ladder shall be such that operator does not have to climb over the tarp bow when the tarp is retracted.**

- *Grab handles shall be installed on the outside of the dump body in one continuous piece running from the top to the bottom of the bed and provide for three points of contact while using the ladder.*
 - *Ladder shall be shielded to prevent build-up of debris on ladder if exposed to drive wheels. A pull out style two-rung ladder shall be installed on each side of the dump body. Ladders shall be centered between the truck tandem rear axles so that the operator does not have to climb over the tarp bow when the tarp is retracted.*
 - *Ladder placement shall not interfere with mounting brackets of wings.*
- l. Wiring and Hose Routing:
- Wiring and hoses going to the front of the dump body shall be secured to a 1/2-inch diameter painted steel rod which shall be attached to the inside of the long sill by means of 1/2-inch X 1-inch tall stand-offs. Stand-offs shall be placed no farther than 24 inches apart, and be securely welded to the long sill.
 - Wiring inside the rear corner posts shall be secured to 3/16" single chain link attached inside the rear corner posts, securely welded. Height of stand-off to be sufficient to support all of the wiring inside the corner post. Stand-offs shall be positioned to allow wires to be secured away from the tailgate latch mechanism, and within 6 inches of all lamps. A sufficient amount of wire shall be left between the last point of securement and the lamp to allow for the removal of the lamp for replacement.
- m. Brake, turn and tail lights shall meet all Federal and State DOT specifications, which recently includes and requires an independent running light on the rear corners.
- All lights shall be mounted in shockproof rubber grommets.
 - All lights shall be LED.
 - All lights shall be connected to a one piece wiring harness with molded connectors.
 - Each rear corner post shall be able to accept a recessed 3-inch x 5-inch rectangular stop/turn taillight. Suitable make and model is Maxxima M42213R or equivalent.
 - Each rear corner post shall be to accept a recessed 3-inch X 5-inch rectangular back up light. Suitable make and model is Maxxima M42213 or equivalent.
 - Each rear corner post shall have one marker/clearance light on the rear face of the corner post and one marker/clearance light on the outside face of the cornerpost.
 - A 3 x 4 inch rectangular tube shall extend through long sills at the rear for routing of electric wiring. Tubes are to be fully welded, sealing the joint at the long sill.
- n. Raised Body Indicator: A sealed proximity switch shall be mounted near the hoist assembly to control a raised body indicator light. A dash mounted indicator light shall be provided, be plainly visible to the seated operator, be red in color, and flash when the dump body is raised.
- o. One Grote rubber utility halogen spreader spotlight shall be mounted below the left rear dump body corner. The light shall be controlled by a rocker-style switch located in the operator console. Light will not hinder the operations of the material spreader
- p. Mud flaps shall be removable by incorporating 201 or 304 stainless steel removable hinge pin approximately 26 inches long by 1/2" diameter solid rod. The rod will have a 2 1/2" - 90 degree bend for a handle with a 3/16" hole at the opposite end for a lynch pin. There shall be three bushings on the truck side and three bushings on the mud flap side constructed of 1/2" inside diameter pipe by 1 1/2" long. Spaced accordingly on flap and truck bracket that is constructed of 24" long by 2" deep by 3/16" thick steel. Mud Flap removal shall not require any tools. See drawing on Attachment 2.
- q. Hydraulic Couplers: See Coupler description specifications in the Hydraulic Section 2.3.5.j.
- The passenger side of the dump body shall have three, 3/8" male couplers. Couplers shall be attached to male pipe X male JIC bulkhead fittings mounted on the lowest rub rail near the rear of the bed.
 - The driver side of the dump body shall have three male couplers for the slip in spreader. One, 1-inch, one, 3/4 -inch, one 1/2 -inch. Couplers shall be attached to male pipe X male JIC bulkhead fittings mounted on the lowest rub rail near the rear of bed.
 - The hydraulic lines shall extend from the lowest rub rails to the body's main long sills through a fabricated enclosure on the underside of the body. The main long sills shall have passageways at the rear for the hydraulic lines. Passages through the long sills shall be sealed around the passage to prevent moisture entry into the long sill.
 - All hydraulic lines running from the valve unit shall be secured to a bulkhead plate with accommodating fittings, mounted on the cab side of the rear hinge between chassis frame rails. Hydraulic lines running into body shall start at this bulkhead plate creating a 2 piece hose for ease of service and routing.
- r. Conspicuity: The dump body shall be outfitted with DOT-C2 11 inch red by 7 inch white prismatic retroreflective conspicuity tape meeting or exceeding Federal Motor Vehicle Safety Standards (FMVSS)

108, DOT-C2 standards. The conspicuity tape shall be applied continuously to the sides of the dump body along the bottom horizontal bed rails. Where there are other fixtures, such as lights, brackets or steps, along the area where the conspicuity tape is to be applied, the tape shall be terminated ½ inch from the object and resume ½ inch from the far side of the object. The conspicuity tape shall be applied to rear facing surface of the tail gate along all horizontal tail gate bracing including the top and bottom tail gate rails and vertically along both edges of the tail gate. Where Conspicuity tape from a horizontal and vertical application intersects the vertical tape shall be butt spliced to the edge of the horizontal tape application with no overlap or gap. Where these intersections occur at a corner, the horizontal tape shall be trimmed to match the edge of the vertical tape forming a clean box corner. On stainless steel tailgates, the flat recessed areas between the tailgate bracing shall receive yellow 3M Scotchlite® reflective graphic film series 5,000 or equivalent. This sheeting shall not overlap onto the surrounding bed bracing and shall not be any farther away from the joint of the tailgate bracing than ½ inch.

- s. Spreader Body Hold Downs: Four storable winches to be welded prior to priming on the bottom side of upper body rail in a fashion not to exceed the overall width of the body, 4-inch x 10-foot of nylon webbing with flat hook to be included. Body Builder must coordinate placement of winches to line up vertically with the spreader hold down brackets.

Paragraph Revised by Addendum 001

- t. Tarp: ***Must be an Aero 550 Easy Cover or equivalent.***
- Shall be a fully automatic, electric type installed system and controlled by a rocker-style switch located in the operator's console.
 - Arms and tarp-protecting windshield shall be aluminum.
 - Shall be designed for hot asphalt.
 - Tarp shall be designed as shown in Attachment 4.
 - Arm springs shall be adjustable and designed to mount on the underside of the dump body. Elbows of the tarp arms shall be bolted to the arms.
 - The body shall also be equipped with an air tension bow for the purpose of keeping the tarp at the front of the body down next to the body sides and load during use and transport. The air tension bow shall be operated by an air cylinder, which shall be mounted on the front sheet. Air cylinder shall be controlled by a rocker-style switch located in the operator's console. The air cylinder shall be attached to a cross shaft that extends thru the cab shield side plates and is able to rotate and actuate the tension bow.
 - Shall have side flaps that fold out over the sides of the dump body.
 - 1) The length and positioning of the flaps shall be such that when deployed and secured, the side flaps fit between the rear edge of the cab shield support gusset and the front edge of the rear corner post.
 - 2) Side flaps shall not be the full length of the tarp.
 - The side flap shall be secured in the covered position by a self-storing bungee rope routed through grommets or "D" rings in the outermost edge of the tarp, and "J" hooks on the bottom side of the middle body rail.

Paragraph Revised by Addendum 001

- u. A paver or asphalt lip shall be mounted on the rear dump body apron. Paver lip shall be mounted ½-inch hardware. Holes in kip and dump body shall be dimensional to allow any lip to be installed on any dump body. Welded paver lips are not acceptable. Paver lip shall be mounted at a 24-28 degree angle. Length of paver lip ***shall*** be such as to provide 20-inches of overhang, measured from the rear face of the rear hitch plate to the rear edge of the paver lip.
- v. Rear post lower covers are used to keep rear tires from throwing debris up into the inside of the rear posts. The bottoms of the corner posts are to include removable 10-gauge Corten covers. The covers are to allow for drainage and must be designed to remove easily for servicing components inside the body corner posts. The covers shall not interfere with the tailgate latching mechanism. See picture below.



2.3.4 Stainless Steel I-Beam Long Sill Dump Body with Detached Cab Shield - Configuration #2: The dump body provided shall be a 15-foot cross-memberless Western style body.

- No underbody cross-members for support will be allowed.
 - The floor, sides, and main long sill are to be full length with no cross-splices.
 - All boxed areas of the dump body shall be adequately ventilated and drained.
 - No wiring or hoses shall be run through any bed-sides upper and lower rails.
 - All welds shall be continuous.
 - All hinge pins shall be removable.
 - The head sheet shall be flat with no doghouse for the hoist cylinder and shall accommodate tarp mounting. Head sheet shall not extend above the height of the cab with tarp installed
 - Hoist cylinder must be forward of the head sheet.
 - Grease hoses shall be installed to allow remote greasing of all points that are not readily accessible from the ground.
- a. Capacity: Shall be a maximum of 12-cubic yards water level.
- Shall have a 15-foot maximum inside length.
 - Shall have a 100-inch minimum outside width.
 - Shall have an 86-inch minimum inside width.
 - Shall have a 36-inch minimum side height with level ends.

Paragraph Revised by Addendum 001

- b. Construction:
- The tailgate, sides, ladder, hand holds and front shall be constructed using stainless steel.
 - ***Floor shall be 3/16-inch Abrasion Resistant (AR) 400 or 450-plate rated at 145,000 psi yield and 180,000 tensile materials with fully formed radius on each side.***
 - Internal bed sides and tailgate surfaces shall be a minimum of seven gauge stainless sheet material.
 - Remaining sheet steel, including bracing on the tailgate, sides, and front head, shall be a minimum 10-gauge Stainless Steel.
 - Stainless steel wire shall be used for all welds when welding stainless panels together.
 - Structural I-beams shall be one piece 10-inch by 12-lb. per foot minimum structural I-beam longitudinal. Each longitudinal shall be a continuous welded to the floor. The longitudinal must be notched to accept hoist cradle without the need for additional spacers between the longitudinal and the truck frame. If spacer is used, it shall be attached to bed and not truck frame.
- c. Mounting:
- The rear edge of the dump body pivot pin shall be up to 1-inch forward from the rear face of the rear hitch plate.
 - The dump body pivot, measured from the centerline of the pivot pin to the rear face of the dump body, not including the tailgate, shall be 12-inches.
 - The chassis wheel base shall be such that the rear drive axle is located 21- to 22-inches forward from the rear face of the rear hitch plate, measured from the rear face of the rear hitch plate to the center line of the rear drive axle. Rear drive axle tires shall not extend past the rear face of the rear hitch plate.
 - Hydraulic oil reservoir shall be mounted to provide 3- to 4-inch clearance between the cab and reservoir.
 - The dump body shall be mounted as close as possible to the hydraulic oil reservoir, with a minimum of 3-inch clearance, excluding the sub frame of the reservoir and hoist.
 - A 4-gauge battery cable ground strap shall be installed from the dump body to the truck frame by means of a 5/16-inch cadmium plated bolt. Star washers shall be installed on both sides of the strap eye to insure a good ground.

- d. Hoist:
- Shall be a trunnion mount, head lift, double-acting cylinder.
 - Should be designed to accept **CS140-5.5-3DA Mailhot** cylinder or pre-approved equal.
 - The cylinder sleeves shall be nitride coated. Sub-frame hoists are not acceptable.
 - A flared body bracket will be attached to either the hoist frame or body understructure to align body in position and keep from moving side to side.
 - ***Shall be attached to the chassis by means of an above frame cradle. The cradle shall be designed to allow the hydraulic reservoir to be mounted to the passenger side of the hoist and the hydraulic valve enclosure mounted to the driver's side of the hoist.***
- e. Pivots shall facilitate thorough greasing. Bushings shall have an internal radial groove in line with the grease fitting. Pivot pins shall be drilled, cross-drilled, and spiral grooved and made from stainless steel.
- f. Body Props:
- A storable body prop shall be provided on each side of the dump body.
 - Pivots for the body props shall be greaseable.
 - Body props shall be constructed to withstand the down-pressure of the hoist without damaging the dump body, chassis, or any related components.
- g. Cab Protector:
- Cab shield shall cover the rear of the cab and top rear half of roof. Shield shall not be mounted to dump body or cab, but mounted to the frame.
 - 1) Be reasonably close to top of cab but avoid rubbing or bumping of the cab with full cab suspension travel and clear the vertical exhaust pipe.
 - 2) Allow clear visibility from rear cab window.
 - 3) Shall be the same width as widest part of cab above the doors.
 - 4) Standard 8-inch channel will be used as uprights to top part of cab shield and for top cross member. Channel shall be 8-inch and a minimum of 11.5-lbs. per foot. Formed channels may also be used providing they are as strong or stronger than the standard 8-inch channels. Formed channels shall be approved by MoDOT Representative prior to installation.
 - 5) Each upright shall be bolted with minimum of five (5) each of 5/8-inch, grade eight bolts to chassis rail.
 - 6) Upright flanges shall face away from center of chassis.
 - 7) Uprights shall be further stiffened to rail with 8-inch length of 3/8-inch by 3-inch by 3-inch angle irons placed on top of rails and properly welded to uprights. This angle iron may also act as the bottom support for the hydraulic reservoir. This angle iron shall not be welded to frame rails but must rest squarely on chassis rail.
 - 8) All seams shall be continuous. Skip weld is not acceptable.
 - Top cross member shall be adequately welded to uprights and gusseted with two ¼-inch steel plates of 6-inch by 6-inch by approximately 8-1/2-inch dimensions at rear part of assembly.
 - Cab shield shall be welded to uprights and top cross member. Cab shield material shall be a minimum of 10-gauge thickness Stainless Steel material.
 - 1) Reinforced and weld to cross member with two (2) 3-inch by 1-3/8-inch (4.1) channel irons, which extend the full length of cab shield and align with eight inch channel uprights.
 - 2) Shall be gusseted from 3-inch by 4.1-channel iron to 8-inch channel iron in a manner offering highest degree of stability.
 - 3) Shall be welded to 4.1-channel iron with flanges downward.
 - 4) Must meet all OSHA standards
 - 5) Must include provisions that do not allow ponding of water and slopes toward bed. (No Drain Holes)
 - Heavy duty, expanded steel with approximately 1-inch by 2-inch openings welded to cab shield to protect rear cab window area.
 - 1) Outer skirts of cab shield shall extend a minimum of 6-inches below rear cab window.
 - 2) A 2-inch angle iron will be welded to uprights to support the bottom of the expanded steel.
 - Adequately-sized openings with rounded corners which may be necessary may be allowed. Openings will be done in a professional manner with straight sides with minimum one-half inch radius corners..
 - Welding to be continuous on both sides of gussets, channels and cross members.

- Unit shall include two strobe light mounting brackets mounted to allow for 360 degree visibility of cab shield lights.
 - 1) Brackets shall be welded prior to painting cab shield.
 - 2) Brackets shall be mounted on top of cab shield, one on each side.

Paragraph Revised by Addendum 001

h. Sides:

- Sides shall have a formed, debris-shedding top rail. This shall mean sloped or rounded.
- ***Intermediate and bottom external supports for sides shall be horizontal.***
- Sides shall have no provisions for extension boards.

i. Tailgate:

- Shall be double-acting, and vertically straight with off-set hinges for positive closure.
- Shall have boxed upper, lower, side, and intermediate horizontal rib supports. Lift handles shall be welded on each side just above the bottom support rib.
- A hinged “D” ring shall be mounted top and center of the tailgate to provide a lifting hook for removing the tailgate.
- Two 3/8-inch grade 70 spreader and/or holder chains shall be provided and stowed in boxes that are externally welded on tailgate when not in use.
- Anchor points for the tailgate chains shall be made from 3/8-inch thick steel. These anchor points shall be lapped on the outside of the dump body with a minimum of 1-inch overlap. Keyhole slot in anchor points shall be configured so that when installed, the link of the tailgate chain nested in the anchor is no more than 1-inch away from the rear face of the dump body at the farthest point.
- The top hinge pin shall be 1-inch diameter minimum and pivot through a greasable bushing. These pins shall have one end tapered approximately 30-degrees for ease of alignment. A 30-degree taper shall be 1/4- to 3/8-inch in length.
- Lower pins shall be a minimum 1-1/8-inch diameter. Tailgate shall, without assistance from the locking device, seal against the floor and side sheets of the dump body, with no more than a 1/16-inch gap at any point. With the tailgate closed and the locking device open, tailgate lower pins shall have a 1/8-inch minimum, 1/4-inch maximum gap between the forward edge of the pin and the forward edge of the cradle.
- A license plate bracket shall be welded on the left-hand side of the tailgate, at approximately half the height of the tailgate.
- When tailgate is lowered parallel to body floor, the inside surface of the tailgate shall provide a smooth level joint between the tailgate and the body floor.

Paragraph Revised by Addendum 001

j. Tailgate Latch:

- An over-center locking device on each side of the dump body shall hold the tailgate securely closed. Latching arms shall be stainless steel.
- The tailgate latch cross shaft assembly shall be supported on each end by bushings.
- This locking device shall be operated by an air cylinder, which shall be mounted between the long sills.
- Locking device shall be adjustable at each side of the dump body
- A manual over-ride shall be provided on the outside of the dump body, allowing the operator to lock or unlock the tailgate using a simple adjustable wrench and without removing components.
- Lubrication points on the tailgate latch cross-shaft shall facilitate easier greasing by means of grooved bushings and/or shaft.
- ***If tailgate shaft requires greasing***, grease zerks at each end of the tailgate cross-shaft shall be visible and accessible from the outside face of the dump body.

Paragraph Revised by Addendum 001

k. Ladder:

- A pull-out or fold down style ladder shall be installed on each side of the dump body. The lowest rung shall not be more than 18-inches from the ground. Additional rungs shall have no more than 12-inches

spacing between rungs. The top rung shall be no more than 18-inches from the top of the bed. Location of the ladder shall be such that operator does not have to climb over the tarp bow when the tarp is retracted.

- Grab handles shall be installed on the outside of the dump body in one continuous piece running from the top to the bottom of the bed and provide for three points of contact while using the ladder.
- Ladder shall be shielded to prevent build-up of debris on ladder if exposed to drive wheels.
- **Ladder placement shall not interfere with mounting brackets of wings.**

l. Wiring and Hose Routing:

- Wiring and hoses going to the front of the dump body shall be secured to a 1/2-inch diameter painted steel rod which shall be attached to the inside of the long sill by means of 1/2-inch by 1-inch tall stand-offs. Stand-offs shall be placed no farther than 24-inches apart, and be securely welded to the long sill.
- Wiring inside the rear corner posts shall be secured to 1/4-inch vertical painted steel rods attached inside the rear corner posts by means of 1/4-inch by 1-inch stand-offs, securely welded. Height of stand-off to be sufficient to support all of the wiring inside the corner post. Stand-offs shall be positioned to allow wires to be secured away from the tailgate latch mechanism, and within 6-inches of all lamps. A sufficient amount of wire shall be left between the last point of securement and lamp to allow for the removal of the lamp for replacement.

Paragraph Revised by Addendum 001

m. Brake, Turn and Tail Lights:

- Shall meet all Federal and State DOT specifications, which recently includes and requires an independent running light on the rear corners.
- Lights and parts must be readily available and non-proprietary.
- Shall be LED.
- Shall be connected to a one piece wiring harness with molded connectors.
- **Rear and Corner Post Light Assemblies: Must be Whelan 400 Series Square, Super 3, amber, red white triple lights including the Whelan model TIR3 amber side light or pre-approved equivalent. Light heads shall be vertically mounted on each rear corner of the dump body using a stainless steel housing and bracket. Each light head shall have a weathertek connector for connecting to the extension harness from the central controller.**

n. Raised body indicator shall be a sealed proximity switch mounted near the hoist assembly to control a raised body indicator light. A mounted indicator light shall be provided in the operator console, be plainly visible to the seated operator, be red in color, and flash when the dump body is raised.

o. Spreader light shall be a Truck Lite model 80360 work light mounted below the left rear dump body corner. It must not hinder the operations of the material spreader.

p. Mud flaps shall be removable by incorporating 201 or 304 stainless steel removable hinge pin approximately 26 inches long by 1/2" diameter solid rod. The rod will have a 2 1/2" - 90 degree bend for a handle with a 3/16" hole at the opposite end for a lynch pin. There shall be three bushings on the truck side and three bushings on the mud flap side constructed of 1/2" inside diameter pipe by 1 1/2" long constructed of 201 or 304 stainless steel. Spaced accordingly on flap and truck bracket that is constructed of 24" long by 2" deep by 3/16" thick 201 or 304 stainless steel. Mud Flap removal shall not require any tools. See drawing on Attachment 2.

q. Hydraulic Couplers: Must meet the requirements of Section 2.3.5.j.

- The curbside of the dump body shall have three, 3/8-inch male couplers. Couplers shall be attached to male pipe to male JIC bulkhead fittings mounted on the lowest rub rail near the rear of the bed.
- The drivers' side of the dump body shall have three male couplers for the slip in spreader. Couplers shall be attached to male pipe to male JIC bulkhead fittings mounted on the lowest rub rail near the rear of bed.
- The hydraulic lines shall extend from the lowest rub rails to the body's main long sills through a fabricated enclosure on the under-side of the body. The main long sills shall have passageways at the rear for the hydraulic lines. Passages through the long sills shall be sealed around the passage to prevent moisture entry into the long sill.

r. Conspicuity: The dump body shall be outfitted with DOT-C2 11 inch red by 7 inch white prismatic retroreflective conspicuity tape meeting or exceeding Federal Motor Vehicle Safety Standards (FMVSS) 108, DOT-C2 standards. The conspicuity tape shall be applied continuously to the sides of the dump body along the bottom horizontal bed rails. Where there are other fixtures, such as lights, brackets or steps, along the area where the conspicuity tape is to be applied, the tape shall be terminated 1/2 inch from the object and resume 1/2 inch from the far side of the object. The conspicuity tape shall be applied to rear facing surface of

the tail gate along all horizontal tail gate bracing including the top and bottom tail gate rails and vertically along both edges of the tail gate. Where Conspicuity tape from a horizontal and vertical application intersects the vertical tape shall be butt spliced to the edge of the horizontal tape application with no overlap or gap. Where these intersections occur at a corner, the horizontal tape shall be trimmed to match the edge of the vertical tape forming a clean box corner. On stainless steel tailgates, the flat recessed areas between the tailgate bracing shall receive yellow 3M Scotchlite® reflective graphic film series 5,000 or equivalent. This sheeting shall not overlap onto the surrounding bed bracing and shall not be any farther away from the joint of the tailgate bracing than ½ inch.

- s. Spreader body hold downs shall consist of four storable winches welded to the upper side of lower body rail in a fashion not to exceed the overall width of the body, 4-inch x 10-foot of nylon webbing with flat hook to be included. Material shall be compatible with the bed's material. Body Builder must coordinate placement of winches to line up vertically with the spreader hold down brackets.
- t. Tarp:
 - Shall be a fully automatic, electric type installed system operated from the cab.
 - Arms and tarp-protecting windshield shall be aluminum.
 - Shall be designed for hot asphalt.
 - Tarp shall be designed as shown in Attachment 4.
 - Arm springs shall be adjustable and designed to mount on the underside of the dump body. Elbows of the tarp arms shall be bolted to the arms.
 - Shall have side flaps that fold out over the sides of the dump body.
 - 3) The length and positioning of the flaps shall be such that when deployed and secured, the side flaps fit between the rear edge of the cab shield support gusset and the front edge of the rear corner post.
 - 4) Side flaps shall not be the full length of the tarp.
 - 5) The side flap shall be secured in the covered position by a self-storing bungee rope routed through grommets or "D" rings in the outermost edge of the tarp, and "J" hooks on the bottom side of the middle body rail.
- u. Paver or Asphalt Lip:
 - Shall be mounted on the rear dump body apron.
 - Shall be mounted with 1/2-inch hardware. Holes in lip and dump body shall be dimensional to allow any lip to be installed on any dump body. Welded lips are not acceptable.
 - Shall be mounted at an angle of 24 to 28-degrees.
 - Length shall be such as to provide 20-inches of overhang, measured from the rear face of the rear hitch plate to the rear edge of the lip.
- v. Rear post lower covers shall keep the rear tires from throwing debris up into the rear body posts. Should allow for drainage and be easily removed for servicing components inside the body post.

2.3.5 Hydraulic System: All components of the hydraulic system, including optional equipment, shall be designed to operate efficiently at a system maximum pressure of 2,300 psi. Hydraulic specifications listed in this section are for the **standard hydraulic configuration**. All components installed on the standard hydraulic configuration shall be capable of easily accepting the necessary additional hydraulic components for the underbody and wing snow plows as listed in the optional equipment section.

- a. Hydraulic Reservoir:
 - Shall come complete with all mounting hardware; frame mounting angles, bolts with poly locknuts, and springs.
 - Shall be a minimum 40-gallon capacity.
 - Shall have a full baffle to prevent sloshing.
 - Reservoir and baffle shall be constructed of stainless steel.
 - Shall have a screened filler neck with a breather cap.
 - Shall include an easily visible all-aluminum housed sight and temperature gauge.
 - Bottom shall have a port for suction compatible with hydraulic pump requirements.
 - Suction strainer shall be of adequate size to supply full pump demand with a 3 to 5 psi built-in bypass, and have a full flow ball valve installed at the reservoir suction fitting. A heavy plastic wire tie shall be installed to insure the ball valve remains in the open position unless it is intentionally closed.
 - Shall have a ¾-inch port with a magnetic plug for draining the reservoir and a ¾-inch port for the pump case drain.

- Back shall have a 3/8-inch port for the solenoid drain and 1/2-inch port for the low oil sensor.
 - Top shall come with provision for a tank-mounted filter.
- b. Hydraulic Return Filter Assembly:
- Shall be mounted on the top of the hydraulic reservoir.
 - Shall have a 10-micron replaceable cartridge element.
 - Assembly shall be capable of 80 gallons per minute (GPM) flow capacity. Shall have a 1-1/4-inch NPT port, a built in by-pass and a bypass condition indicator.
- c. Hydraulic Return Manifold:
- Shall allow for easy installation of additional hydraulic hoses.
 - Shall be installed between the frame rails directly behind the hoist support.
 - Unit shall be an aluminum 5-port system. Four ports shall be a #16 O-Ring Boss (ORB) and one shall be a #8 ORB.
 - Return oil from the spreader return coupler and valve stack shall be routed to this manifold.
 - Return oil from the manifold shall be routed to the inlet of the hydraulic oil return filter.
 - Unit shall contain a minimum of two plugged ports for addition of future accessories.

Paragraph Revised by Addendum 001

- d. **Hydraulic Pump: Shall be a Rexroth A10V0100, Series 45 Sauer Danfoss, Danfoss 90cc F Series, or Eaton 620 Series.**
- Shall be axial piston, load-sensing type, and be driven off the engine crankshaft by means of a drive shaft.
 - **Prefer a minimum** 6.1-cubic inch (100 cubic centimeter) displacement, and capable of 66 GPM (theoretical) at 2,500 rotations per minute (RPM) and 4,000 psi.
 - The pump case drain must be positioned as high as possible and directed back to the reservoir without passing through the return line filter.
 - Should have an internal bleed down compensator.
 - Must have a keyed shaft with an SAE mounting flange.
 - Must have side ports. Rear ports are unacceptable.
 - Ports must be of the split flange design, sized accordingly for the displacement of the pump.
 - Suction fitting shall be a flanged, formed elbow hose barb. Fitting shall be of adequate size for the displacement of the pump.
 - Discharge fitting shall be an O-ring thread flange block. Fitting shall be of adequate size for the displacement of the pump.
 - A manual, high-pressure ball valve shall be mounted to pressure port of pump.
 - System shall be performance checked. System standby pressure shall be set. System maximum pressure shall be set at 2,300 psi.
 - A pressure test port shall be provided at the pump by installing a 3/8-inch male Aeroquip FD45-1002-6-6.
- e. Hydraulic Pump Drive:
- Driveline must be 1280 and/or 1310 series solid shaft style and must be installed according to manufacturer's instructions to assure proper alignment.
 - Pump shall be driven off the engine crankshaft with a flange yoke.
 - Pump shaft shall have a flange yoke installed to allow shaft to be un-bolted from pump.
 - Universal joints used in the shaft must have grease zerks in the center of the bearing caps.
 - Hardware used for installation of the pump driveshaft shall be to driveline manufacturer's specification. All drive shaft installation hardware shall be torqued to specifications.

Paragraph Revised by Addendum 001

- f. Hydraulic Function Control Valves: Shall be bulkhead fitting mounted in a weather-tight enclosure with the fittings on the bottom of the enclosure. Valves shall be mobile hydraulic, cast iron, stackable, load sensing type. All valves shall be operated with proportional electric coils. Proportional coils shall be compatible with the control system valve driver module pulse width modulation (PWM) outputs. All valves within the valve

assembly shall have parallel inlets. Valve assembly inlet and outlet ports shall be 1-inch O-ring. Work ports shall be *a minimum 5/8-inch O-ring*. A and B ports shall be individually flow adjustable.

- Standard Hydraulic Function Control Valve Arrangement:
 - 1) Dump Body Hoist: Double acting cylinder valve, with a work port relief valve for down pressure protection on port “A”. Pressure setting shall be such that the relief valve will protect the dump body components if the hoist is powered down with the dump body props in place. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 30 GPM. Valve shall prevent any up or down movement of a raised dump body when valve is in the neutral position. Valve shall have a manual override for both raise and lower functions.
 - 2) Front Plow Lift: Single acting cylinder valve with counter-balance capability. Valve shall be spring return to neutral, with float capability in the lower position. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - 3) Front Plow Angle: Double acting cylinder valve. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both left and right functions.
 - 4) Spreader: Shall be a 4-circuit motor manifold. The manifold shall be an integral part of the valve assembly. Manifold to contain three solenoid operated, electrically variable, two-port, pressure compensated, direct acting, normally closed when de-energized, proportional flow control cartridges. Each cartridge shall operate by a 12-Volt direct current (DC) coil. Each cartridge shall have a manual override. The flow requirements for each circuit are as follows:
 - Spreader Auger 15 GPM
 - Spreader Spinner 8 GPM
 - Prewet Pump 7 GPM
 - Anti-Ice Pump 15 GPM (cavity plugged if not used for accessory circuit)
 - 5) Hydraulic Accessory: A hydraulic accessory circuit shall be provided. This circuit shall be pressure and flow compensated. Accessory circuit shall have an adjustable flow of 0 to 22-25 GPM. Accessory circuit shall be capable of full pump output at engine idle and regulated to a maximum flow of 22-25 GPM. Accessory circuit shall use the same hose and coupler as the spreader auger circuit. It is permissible to install a proportional flow-control cartridge in the un-used fourth circuit of the spreader manifold and ‘tee’ this circuit into the auger circuit to accomplish this, provided it does not affect the circuit when used as the spreader auger supply. Accessory circuit shall have a manual override.
- g. Hydraulic Function Control Valve Enclosure:
 - a. Must be mounted between the cab and dump body outside of the left hand frame rail.
 - b. Must be mounted in a manner to not conflict with potential attachments.
 - c. Shall allow easy access to hose connections.
 - d. Shall be three pieces: the enclosure body, valve mounting plate, and the lid.
 - e. The valve plate shall be constructed of ¼-inch stainless steel. The sides of the body shall have integral, formed mounting angles.
 - f. The outside lip of the enclosure shall have a gasket all the way around to seal from weather when lid is installed.
 - g. The enclosure body and lid shall be made of 10-gauge stainless steel with a minimum 1-inch lip on all sides. The lid shall be held on with rubber latches on each side. Unit shall have two lifting handles.
 - h. The top and front of the enclosure shall be open with the lid off.
 - i. Valve plate shall bolt to the inside of the enclosure for ease of mounting.
 - j. Must include a formed gasket to seal the valve plate to the enclosure.
 - k. Enclosure shall be large enough to accommodate a valve assembly capable of at least 10 functions.
- h. Snow Plow Cushion Valve:
 - A double-relief cushion valve must be installed for front snow plow angle.
 - The valve shall be set at 2,000 psi.
 - The valve shall be constructed of a high-tensile cast iron body with ball and spring style relief that has hardened seats.
 - The valve shall be installed at the front bumper and snow plow hitch.
 - Valve shall have O-ring thread ports.

- i. Hydraulic Hoses:
- Suction hose from the reservoir to the pump shall be SAE 100R4 style of adequate size for the displacement of the pump. Shall be connected to the pump barbed fitting, and double clamped with T-bolt style stainless steel super clamps. Shall be connected to the reservoir ball valve with a king nipple, double clamped with T-bolt style stainless steel super clamps.
 - All hoses, with the exception of the suction hose, shall be rated for a working pressure of 3,000 psi.
 - All hose ends, with the exception of the suction hose, shall be swivel or swivel adapters.
 - Ends connecting to valve assembly shall be 90-degree female JIC swivel.
 - Pressure hose shall be of adequate size for the displacement of the pump, with female JIC swivels at both ends.
 - Return hose shall be of adequate size with female JIC swivels at both ends.
 - Hoist hoses shall be ¾-inch inside diameter (ID) with female JIC swivels at both ends.
 - Snow plow hoses shall be 3/8-inch ID with female JIC swivels at both ends.
 - Auxiliary hoses to the right rear corner of the dump body shall be 3/8-inch ID with female JIC swivels at each end. The auxiliary hoses shall be “teed” at the control valve enclosure with the front snow plow lift, and left and/or right circuits.
 - Auger hose to the left rear corner of the dump body shall be 3/4-inch ID with female JIC swivels at both ends. The auger circuit shall have a capped “tee” installed at the valve enclosure, enabling later installation of another hose routed to the front of the truck.
 - Spinner hose to the left rear corner of the dump body shall be 1/2-inch ID with female JIC swivels at both ends.
 - Spreader return hose to the left rear corner of the dump body shall be 1-inch ID with female JIC swivels at both ends. The spreader return circuit shall have a capped “tee” installed at the return filter assembly, enabling later installation of another hose routed to the front of the truck.
 - Pump case drain shall be a minimum 3/4-inch ID with female JIC swivels at both ends, and also have a 3/4-inch NPT ball valve installed at the reservoir.
 - Load sense line shall be 3/8-inch ID with female JIC swivels at both ends.
- j. Hydraulic Quick-Disconnect Couplings: All shall be full flow Aeroquip FD45 or Parker 60 series. A dust cap or plug shall be furnished with every male and female coupler. See Dump Body Section 2.3.3q and 2.3.4q for detailed layout and mounting of couplers.
- Front snow plow lift circuit shall be equipped with a male 3/8-inch FD45-1002-6-6 coupler installed in the front bumper. A 34-inch by 3/8-inch ID hose with a female 3/8-inch FD45-1003-6-6 coupler shall be installed on the hydraulic lift cylinder.
 - Snow plow cushion valve shall be equipped with a male 3/8-inch FD45-1002-6-6 coupler, and a 34-inch by 3/8 inch ID hose with a female 3/8-inch FD45-1003-6-6 coupler.
 - Auxiliary hydraulics at the right rear corner of the dump body shall be equipped with three male 3/8-inch FD45-1002-6-6 couplers.
 - Spinner circuit shall have a ½-inch male FD45-1002-8-10 coupler at the left rear corner of the dump body.
 - Auger circuit shall have a 3/4-inch male FD45-1002-12-12 coupler at the left rear corner of the dump body.
 - Spreader return circuit shall have a 1-inch male FD45-1002-16-16 coupler at the left rear corner of the dump body.

Paragraph Revised by Addendum 001

2.3.6 Spreader Control System: ***System shall be a Certified Power ACS system.***

a. Control System:

- Shall be a complete control system that operates on a Controller Area Network (CAN)-Bus, using CANopen protocol, J1939.
- Shall consist of modules that reside on the BUS, and allow flexibility in mounting configurations.
- Shall be completely expandable and allow for additional modules to be added to the BUS, such as a joy stick control for an optional underbody scraper.

- System controller, or valve driver module, shall control all standard hydraulic functions; dump body hoist, snow plow lift, snow plow left and/or right, auger, spinner, hydraulic driven pre-wet, and optional hydraulic functions.
- Shall be capable of providing ground speed sensing, closed loop spreader and granular pre-wet system operation.
- Shall be capable of applying 200 to 400 lbs. of granular material per lane mile at speeds up to 45 mph. Actual application rate shall be +/- 5% of the selected application rate.
- Shall work equally well whether the truck is driven forward or in reverse.
- All modules shall be software upgradeable using a laptop and interface cable. Shall have an Ethernet port for accessing a built in Web server. The Web server may be used to configure or troubleshoot a system by connecting to a PC. Interface shall utilize Internet Explorer and not require any proprietary software to connect to the system. No external components shall be required to calibrate the system.
- Shall incorporate three levels of security and access that are password protected and defined by the user. The three levels of access shall provide access to the system setup, data, configuration fields, and parameters based upon access given.
- Shall have a built in diagnostic feature allowing technicians to view all input signals in real time. System shall also provide error logging and system status change logging for reviewing operator inputs.
- Shall be capable of both automatic and manual modes, and provide a lock out of manual mode.
- Shall provide 'blast' and 'pause' functions, and be capable of calibration at multiple gate settings.
- Shall be capable of operating at least four different programmed materials.
- System software shall incorporate a "test speed" mode for use in testing the system safely without requiring the truck to be moving or the drive axles engaged.
- Shall provide monitoring, and audible and visual operator warning, for low hydraulic oil level and hydraulic oil overheat conditions.
- Shall suspend operation of the spreader and all hydraulic accessory functions in the event of low hydraulic oil level and/or hydraulic oil overheat condition.
- Shall have an override feature to allow function use in an emergency situation.
- Auger feedback sensor shall be mounted to a hydraulic flow meter. Flow meter shall be mounted inside the hydraulic control valve enclosure. Feedback sensor shall be hard wired to the valve driver module. Feedback sensor shall be replaceable independent of the flow meter.
- Shall provide open loop operation in the event of a feedback sensor failure.
- Shall use input from a float-level in the pre-wet enclosure to prevent pre-wet pump run-dry. This shutdown feature shall incorporate a buffer to prevent liquid pump shutdown due to an intermittent signal caused by sloshing material in the supply tanks.
- Shall provide stand-alone operation of the feeder circuit, and spinner circuit, for powering hydraulic accessories other than a slip-in spreader.
- Shall provide stand-alone operation of the pre-wet system, allowing it to be used for other operations.

Paragraph Revised by Addendum 001

- b. Valve Driver Module:
 - Shall be mounted inside the hydraulic control valve enclosure. No portion of the valve driver module may be outside of the hydraulic valve enclosure.
 - Shall accept closed loop feedback signals, and digital inputs.
 - Shall have a **minimum of 6** pulse width modulation (PWM) output channels **based upon the plow options ordered**.
 - All PWM outputs shall be software configurable, and controlled by closed loop operation, proportional input devices, or digital input devices.
 - Shall have internal over temperature shutdown, over current shutdown, and low voltage shutdown.
 - All electrical connections shall be IP68 sealed when mated utilizing threaded connections for positive retention.
 - Shall reside on the BUS as the "master", and all truck values and configurations shall be saved in this module.
- c. Operator Controls and Display Modules:

- Shall be resistant to salt and other chemicals used during the snow removal process.
- Controls shall utilize detented rotary encoders for setting material application rates.
- Controls shall utilize snap action push buttons for navigation through the system program and function selection.
- Controls shall be backlit for nighttime operation.
- Display screen shall be a minimum of 20-square inches.
- Controls and display shall be mounted in a factory made, painted or powder coated bracket. Display shall be operator adjustable for proper viewing angle.
- Display shall automatically adjust brightness level for nighttime operation.
- Display shall show; auto and manual mode, current material, granular rate, pre-wet rate, lane width, system status, error messages, plow float activated, system hydraulic pressure, and pavement temperature sensor information if optioned.

Paragraph Revised by Addendum 001

- d. Hydraulic Function Control Lever Modules:
- Shall be proportional CAN BUS controls and shall be mounted to the right of the driver and be within easy reach.
 - Shall be labeled with decals for operation.
 - Shall be equipped with a single axis control lever with center position dead man lock for the dump body up and/or down.
 - Shall be spring returned to neutral.
 - Shall be equipped with a single axis control lever with center position dead man.
 - Shall be equipped with a dual axis control lever for the snow plow lift, and snow plow left and/or right and shall be spring returned to neutral from all directions.
 - Shall be capable of placing the snow plow lift valve in float when moved to the extreme forward position.
 - Handle shall be equipped with a maintained pass and/or pause switch and a momentary blast switch.
 - Shall be mounted in a factory style stand, spaced for full axis control.
 - Configuration of the center position lock must be pre-approved by the MoDOT Representative *after contract award and prior to pilot truck manufacture.*
- e. Control System Cable: Specifications for all cables associated with the hydraulic and spreader control system.
- Shall meet International Organization for Standardization (ISO) rating Ingress Protection (IP) 68 and National Electrical Manufacturers Association (NEMA) 6.
 - Connectors shall be O-ring sealed.
 - Cable jacket should be Thermoplastic Elastomer (TPE), and molded to the connectors.
 - Connectors and harness shall be rated and tested for a temperature range from minus 30-degrees Celsius to 70-degrees Celsius.
 - Connectors shall be tested to be water tight when submerged in 6-feet of water for 24-hours, in 275-feet of water for 1-hour, and when subjected to a 1,000 psi pressure wash.
 - Connectors shall be designed to have no corrosion after 5,000 hours in 35-degrees Celsius salt spray.
 - Cabling shall be rated excellent in low temperature flexibility and in its resistance to oxidation, heat, oil, sunlight, ozone, abrasion, electrical priorities, flame, gasoline, degreaser solvents, alcohol, and weld slag.

2.3.7 Granular Pre-Wet System:

Paragraph Revised by Addendum 001

- a. Shall be mounted outboard of the truck frame ahead of the rear axle in a location approved by the MoDOT Representative *following contract award and prior to pilot truck manufacture.*

Paragraph Revised by Addendum 001

- b. The suction and discharge hoses shall be routed to the rear of the truck frame and secured with bulkhead mounted cam-lock couplers in a location approved by the MoDOT Representative *following contract award and prior to pilot truck manufacture.*

- c. Shall come complete with mounting hardware. Pump and hydraulic motor shall be mounted in a weather tight enclosure.
- d. Shall be hard-wired to, and completely controlled, by the spreader control system.
- e. Shall be hard-plumbed to, and supplied by the hydraulic valve assembly.
- f. Liquid pump shall be corrosive and abrasive resistant. No plastic pump components acceptable
- g. Pump shall be self-priming, positive displacement design.
- h. A manual bleed valve shall be installed in the suction hose at the enclosure to facilitate easier pump priming.
- i. Shall have a relief valve to protect against over-pressurization.
- j. Pump shall have a maximum pressure rating of 100 psi.
- k. Pump shall be plumbed through a 0 to 15 GPM flow meter, made of a non-corrosive material.
- l. Pump shall be capable of producing 9 GPM at 40 psi, with 4.5 GPM maximum oil flow to the motor. Coupler between the hydraulic motor and pre-wet pump shall be visible and accessible to break loose when stuck.
- m. Hydraulic connections shall be bulkhead mounted in the enclosure.
- n. All hydraulics inside enclosure shall be hard plumbed.

Paragraph Revised by Addendum 001

- o. Shall have a float switch in the *nurse tank*. The spreader control system shall use this switch to shut off the liquid pump to prevent damage to the pump from running dry.
- p. Flow meter sensor wiring and float switch wiring shall utilize a bulkhead mounted connector in the pre-wet enclosure.
- q. Shall include a ¼ turn valve and strainer-filter. MoDOT Representative shall approve location.
- r. Shall include spray nozzles and plumbing for installation on the material spreader. Nozzles shall be of sufficient size and type for the capacity of the pre-wet system. If a material spreader is optioned, components must be installed on the spreader and tested.
- s. If a material spreader is not optioned, nozzles shall be shipped loose, and placed in the frame-mounted tool box.
- t. A nurse tank with a 2.5-gallon minimum capacity shall be mounted with the pre-wet enclosure to facilitate installation of the pre-wet float, priming, and flushing of the pre-wet system.

2.3.8 LED Warning Light System: Each unit shall be equipped with an SAE Class 1 LED warning light system in accordance with the following specifications. System shall be evaluated and approved by the MoDOT Representative.

- a. Centralized Controller:
 - Shall operate on 12-Volt DC and operate through the range of approximately 10 to 16-Volts DC with nominal degradation of performance in either intensity or flash rate.
 - Shall be mounted with the power distribution box between the seats. All standard mounting hardware shall be included.
 - Shall have radio frequency interference (RFI) suppression circuit(s) to prevent radiated, as well as conducted, interference problems.
 - Shall be powered by a factory work light circuit, or the chassis electric accessory power supply. This circuit shall provide key-on and key-off operation of the LED light system. Circuit shall have its own factory-installed circuit protection and switch. A dash mounted indicator light shall indicate when the warning lights are operating.
 - Shall have four outputs, one for each of the four individual light heads to be installed on the truck. Outputs shall power each light head by means of a two-wire circuit. Controller connections for the individual light heads shall be made using male and female spade terminals. Controller housing shall also provide strain relief for the individual light head harnesses.
 - Shall produce a burst of four impulses per burst to each light head, at a minimum flash rate of 70, maximum flash rate of 110 bursts per minute. MoDOT Representative must pre-approve flash pattern.
 - Shall be reversed input polarity protected. Shall also provide full output short-to-ground protection to prevent damage to the controller and light heads.
- b. LED Modules: System shall use individual LED modules, approximately 3-inches by 5-inches in size. This module must be used in all installed light heads. Modules shall be easily replaced.

- c. Cab Shield (Top) Light Assemblies: Must be Whelan Micro Freedom 400 or pre-approved equivalent. Two light heads shall be mounted to the cab shield, one on each side of the body. Light heads are to be permanently mounted to a fixed mount, and elevated to provide ample cross-visibility of the light head from the front and rear of the truck. For each light head, one module shall face to the front, one shall face to the rear, and one shall face to the side of the truck. The combination of the two light heads shall provide 360-degrees of visibility in a horizontal plane. The lights shall be amber and white in color. The amber and white LED shall flash in an alternating pattern in sequence with other alternating lighting patterns and in sequence with other alternating truck lighting. Each light head shall have a 12-inch maximum cable with a single weatherpak connector for connecting to the extension harness from the central controller. Each light head shall have protective guards sufficient enough to protect the light head assembly from low hanging tree branches. Protective guards shall not compromise the intensity or visibility of the light head.
- d. Rear and Corner Post Light Assemblies: Must be Whelan 400 Series Square, Super 3, amber, red white triple lights including the Whelan model TIR3 amber side light or pre-approved equivalent. Light heads shall be vertically mounted on each rear corner of the dump body using a stainless steel housing and bracket. Each light head shall have a weatherpak connector for connecting to the extension harness from the central controller.
- e. Cable Harnesses:
 - The cable shall be expected to maintain its electrical, mechanical, and environmental integrity for the life of the vehicle on which it is originally installed on, without the need for re-wiring at any future time.
 - The cable shall be flexible in cold weather, and tolerant of hot temperatures.
 - Each power conductor shall meet the circuit requirements for the specified lighting system. Cable shall have an outer insulation jacket enclosing both conductors.
 - Insulation jacket shall be highly resistant to abrasion, corrosion, oil, grease, and normal highway chemicals or environmental abuse for the normal life expectancy of the vehicle.
 - The cable will be available in bulk from the manufacturer.
 - Splices are not acceptable.

2.4 Single Axle Dump Truck Technical Specifications: The unit offered must meet the technical requirements in section 2.3 above as well as the following requirements in this section. The combined specifications are for the manufacture of a 35,000 pound (lb.) Gross Vehicle Weight Rating (GVWR) Set Forward Single Axle Dump Truck with a bed to accommodate a 10 foot spreader.

Paragraph Revised by Addendum 001

- a. Change 2.3.1.e – Minimum gross torque to 660 pound-feet, and a minimum SAE gross *horsepower of 260* when operated within a governed speed as recommended by the engine manufacturer.
- b. Change 2.3.1.h – Axle shall be standard manufacture 14,000 lb. rated capacity.

Paragraph Revised by Addendum 001

- c. Change 2.3.1.i – Axle shall be standard manufacture 21,000 lb. rated capacity *without power divider*.

Paragraph Revised by Addendum 001

- d. *Change 2.3.3.d – Hoist as a minimum shall be a CS90-4.5-3DA.***

Paragraph Revised by Addendum 001

- e. Change **2.3.3a and 2.3.4.a** – Dump body shall be a 10-foot cross-memberless Western style body.

Paragraph Revised by Addendum 001

- f. ***Change 2.3.3b and 2.3.4.b to meet the size requirements below.***
 - Shall have a 10-foot maximum inside length.
 - Shall have a 100-inch minimum outside width.
 - Shall have an 86-inch minimum inside width.
 - Shall have a 28-inch minimum side height with level ends.

Paragraph Revised by Addendum 001

g. *Change 2.3.4.d – Hoist as a minimum shall be a CS90-4.5-3DA.*

2.5 Tow Plow Dump Truck Technical Specifications: The unit offered must meet the technical requirements in section 2.3 above as well as the following requirements in this section. The combined specifications are for the manufacture of a 58,000 pound (lb.) Gross Vehicle Weight Rating (GVWR) Set Forward Tow Plow Dump Truck with a bed to accommodate a 16 foot spreader.

- a. Change 2.3.1e – Minimum gross torque to 1,500 pound-feet, and a minimum SAE gross horsepower of 425 when operated within a governed speed as recommended by the engine manufacturer.
- b. Change 2.3.1j – Fuel tank capacity shall be a 100-gallon minimum.
- c. Addition 2.3.2p – Three 1/2-inch male hydraulic couplers for the independent control of tow plow shall be placed on the passenger side of vehicle at the rear of the dump body in the lower rub rail.
- d. Addition 2.3.6d – One additional dual axis tow plow control lever for the tow plow moldboard lift, and tow plow steer left and right and shall be spring returned to neutral from all directions.
- e. Addition 2.3.5f6 -
 - Tow Moldboard Lift: Single acting cylinder valve with counter-balance capability. Valve shall be spring return to neutral, with float capability in the lower position. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - Tow Plow Steering: Double acting cylinder valve. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both left and right functions.
- f. Addition 2.3.5i – Tow plow lift and steer hoses shall be ½-inch ID with female JIC swivels at both ends.
- g. Addition 2.3.8a – The factory work light circuit shall run to the rear of the truck with a 6 pin trailer-style connector to supply power and ground to the tow plow strobe lights.

2.6 Optional Equipment:

2.6.1 Right hand and/or left hand mid-mount wing plow:

Paragraph Revised by Addendum 001

- a. Right hand wing plow shall be a Henke Model MDPW, Monroe MJW-8, *Henderson HWS or Viking MW025.*

Paragraph Revised by Addendum 001

- b. Left hand wing plow shall be a Henke Model MDPW or Monroe MJW-8L, *Henderson HWS or Viking MW025.*
- c. Shall be built and tested to the latest OSHA requirements and SAE standards.
- d. Shall be designed to plow at a desired height, and be able to float.
- e. The moldboard must fold close to the truck for clearing bridges, transporting, or storing.
- f. Shall have an adjustable plowing angle.
- g. The height of either end shall be hydraulically controlled from the cab.
- h. Wing and assemblies must be easily and quickly attached and removed.
- i. All welds and mounting brackets shall be of high quality construction.
- j. All major assemblies such as moldboard, push tubes, mounting plates etc. shall be designed for rugged use.
- k. Moldboard:
 - Moldboard shall be formed from 10-gauge steel, inboard height shall be minimum of 24-inches, outboard height not to exceed 28-inches. Cutting edge shall be a minimum of 1/2-inch by 8-inch and a minimum length of 8-feet. Moldboard top angle shall be a minimum of 2-inch by 2-inch by 5/16-inch and bottom angle minimum of 4-inch by 4-inch by 3/8-inch.
 - There shall be a minimum of five ribs per moldboard to be continuously welded from top moldboard to bottom of moldboard for structural strength.
 - A full moldboard trip shall be provided. Trip mechanism shall perform at plowing speeds up to 45 MPH.
- l. Cutting edge shall have a 45-degree angle mitered leading edge.

Paragraph Revised by Addendum 001

- m. Hydraulics:

- A dual axis control lever shall be installed to operate the wing plow. Control lever shall be CAN BUS proportional electric, and communicate with the valve driver module utilizing the hydraulic/spreader control system cables. Control shall be mounted in the same mounting stand as the standard hydraulic control levers.
- Hydraulic function control valves shall be bulkhead fitting mounted in a weather tight enclosure, with the fittings on the bottom of the enclosure. Valves shall be mobile hydraulic, stackable, load sensing type. All valves shall be operated with proportional electric coils. Proportional coils shall be compatible with the control system valve driver module PWM outputs. All valves within the valve assembly shall have parallel inlets. Valve assembly inlet and outlet ports shall be 1-inch O-ring. Working ports shall be ¾-inch O-ring. A and B ports shall be individually flow adjustable.
 - 1) Toe Raise and Lower: Double acting cylinder valve, with a work port relief valve for down pressure protection on port “A”. Work port relief valve shall be set at 500 psi. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - 2) Heel Raise and Lower: Double acting cylinder valve. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
- Hydraulic Cylinders: A minimum of two double acting cylinders with chrome-plated or black nitrided piston rods shall be included for angling moldboard and applying down pressure to moldboard with *internal or external* counter balanced valves. The hydraulic cylinders shall be industrial quality. ***Bidder shall provide a stop of sufficient size to prevent blade from gouging pavement.***
- Hydraulic Hoses and Couplers: All hoses shall be rated for a working pressure of 3,000 psi.
 - 1) Wing plow hoses shall be 3/8-inch ID with female JIC swivels at both ends.
 - 2) Hydraulic quick couplers shall be provided, and securely mounted in the wing area to provide easy removal and remounting of the wing.
 - 3) All hydraulic couplers shall be full-flow Aeroquip FD45 or equivalent Parker 60 series. Couplers used shall be: male 3/8-inch FD45-1002-6-6 female 3/8-inch FD45-1003-6-6.
 - 4) A dust cap or plug shall be furnished with every male and female quick coupler
- n. All grease points shall provide adequate lubrication for the greased joint.

Paragraph Revised by Addendum 001

- o. ***Refer to Section 2.2.3 for finishing requirements.***

2.6.2. Heavy Duty Right Hand 3 Function Front Mount Wing Plow:

- a. Truck chassis must come equipped with integral frame extensions allowing adequate clearance to ensure the post will not interfere with hood or plow lights with hood in any position
- b. Front wing plow and mounting shall be removable without the need to remove any front plow mounting components or hitch.
- c. Wing plow assembly shall be mounted in a way as to not interfere with front plowing operations whether the wing is in the deployed or transport position.
- d. Attached transport locks shall be provided to secure the wing toe and heel in the transport position.

Paragraph Revised by Addendum 001

- e. Moldboard shall be ***11- feet long*** of ribbed design, open backed, constructed of a one piece, continuous welded, minimum 10 gauge, grade 50 high tensile steel.
- f. Moldboard shall feature a punched bolt-on one piece cutting edge with radius cut at the toe to prevent gouging.
- g. The rear of the moldboard must have provisions to allow bolting of a single extendable wing arm. Attaching area must have adjustment forward and back to allow the wing arm to be as close to 90 degrees with cutting edge of the moldboard.
- h. Single front post design with slide to allow benching of at least 24-inches high.
- i. Slide plate must incorporate a float action to accommodate for different cutting edge heights
- j. Must incorporate a float system independent of the post hydraulic cylinder providing a minimum of 3-inches of toe float.

Paragraph Revised by Addendum 001

- k. Slide plate will attach to the hinge by means of a **1-1/2 inch pin minimum.**
- l. Hinge shall be tripping style by way of spring or rubber timbren
- m. Hinge shall be attached to the moldboard by way of 1 ¼- inch minimum, UNC grade eight bolt, slotted nut and cotter key.

Paragraph Revised by Addendum 001

- n. Wing arm brace shall be constructed of an inner and outer tube to allow extension **of approximately 20-inches from fully collapsed to fully extended.**
- o. Arm will attach to the moldboard using a swivel style connection.
- p. Wing heel lift cylinder shall incorporate mounting to allow floating of the moldboard during plowing operation.
- q. Wing shall be operated using a joystick meeting specifications of section 2.3.5.d.
- r. All functions hydraulic, cables are not allowed.
- s. All hydraulic cylinder ports shall be ORB.
- t. All hydraulic cylinders and circuits shall be double acting, with adjustable down pressure relief capability on the toe and heel hydraulic sections. Work port section relief or load sense limiting relief is acceptable. Remote mounted or in-line relief valves are not acceptable.
- u. Hydraulic hoses shall meet specification requirements of 2.3.5.i, and in addition shall incorporate quick disconnect couplings to allow removal of the wing plow. Couplings shall meet specification requirements of 2.3.5.j.

Paragraph Revised by Addendum 001

- v. Wing “out” function shall utilize a counterbalance valve incorporated on the hydraulic cylinder to prevent plow from drifting away from truck when transport lock mechanism is not being used. **This references the cylinder that brings the wing back against the truck.**
- w. Wing shall operate as a moldboard extension to the front plow when used simultaneously to prevent leaving a berm strip on the road surface.
- x. Selection of this option shall require an additional booster type air spring installed on the wing mounted side of the front axle. This air spring shall be controlled by rocker –style switch in the operator console.

Paragraph Revised by Addendum 001

- y. **Refer to Section 2.2.3 for finishing requirements.**

2.6.3 Underbody Scraper:

Paragraph Revised by Addendum 001

- a. **Unit shall be a 10-foot underbody scraper designed for plowing and cutting snow and ice. Acceptable model shall be a Henke Model UBS10-XH, Henderson UBS, Viking UBPRR 1020 or Monroe Model MS3510.** The underbody scraper shall be built and tested to the latest OSHA requirements and SAE standards. All welds and mounting brackets shall be high quality construction. The underbody scraper must be easily detachable from the truck.
 - **Hanger brackets shall be attached to the frame by 24 inch by 18 inch by ¾ inch steel plates, one on each side.**
 - Hanger board shall be a minimum of 14-inch top plate width, 10-inch 30-pound S&C channel and 4-inch 13.8-pound S&C channel welded to form a single unit or equivalent.
 - Moldboard shall be a minimum length of 10 feet, maximum height of 21-inches, 1-inch thick, high-carbon steel, punched with standard blade holes. Moldboard must be hydraulically angled left and right to achieve the maximum possible angle. The moldboard shall be capable of rising to a horizontal position with a minimum ground clearance of 8-inches when not in use. Moldboard shall be drilled for right-hand and left-hand extensions.
 - Hinge shall be a minimum 2-1/2-inch diameter, 96-inch length cold-rolled steel. The hinge shall have multiple grease points to provide full-width lubrication of the hinge. **The hinge or the pin shall be double spiral grooved to facilitate greasing.**

- The circle shall be minimum 1-inch heavy-duty steel, notch-less. The center pin shall be a minimum of 5-inches and a remote mounted grease fitting tube approximately 36-inches long shall be provided. Nylon wear pad required between hold down block and top of circle. Stops shall be welded on after installation of the moldboard to maximize turning radius of the underbody scraper and provide adequate clearance to all truck components.
- Hydraulics:
 - 1) A dual axis control lever shall be installed to operate the underbody scraper. Control lever shall be CAN BUS proportional electric, and communicate with the valve driver module utilizing the hydraulic/spreader control system cables. Control shall be mounted in the same mounting stand as the standard hydraulic control levers.
 - 2) Hydraulic function control valves shall be bulkhead fitting mounted in a weather tight enclosure, with the fittings on the bottom of the enclosure. Valves shall be mobile hydraulic, stackable, load sensing type. All valves shall be operated with proportional electric coils. Proportional coils shall be compatible with the control system valve driver module PWM outputs. All valves within the valve assembly shall have parallel inlets. Valve assembly inlet and outlet ports shall be 1-inch O-ring. Working ports shall be 3/4-inch O-ring. A and B ports shall be individually flow adjustable.
 - Raise and Lower: Double-acting cylinder valve with a work port relief valve for down pressure protection on port A. Work port relief valve shall be set at 500 psi. Valve shall be spring return to neutral. Valve shall be pressure and flow- compensated, with an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - Left and Right: Double-acting cylinder valve. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - Cushion Valve: Shall include a double relief cushion valve, mounted on a cross member behind the cab. The valve shall be constructed of a high-tensile cast iron body with ball and spring style relief that has hardened seats. The relief valves shall be set at 750 psi. The valve shall have O-ring thread ports.
 - 3) Cylinders:
 - Raise and Lower: A minimum of two 3-inch diameter double-acting cylinders with chrome-plated or black nitrided piston rods. Shall have integral counter balance valve.
 - Left and Right: A minimum of two 4-inch double-acting cylinders with 2-inch chrome-plated or black anodized rods for the reversing of the moldboard.
 - 4) Hydraulic Hoses and Couplers: All hoses shall be rated for a working pressure of 3,000 psi.
 - Underbody scraper hoses shall be 3/8-inch ID with female JIC swivels at both ends.
 - Hydraulic quick couplers shall be provided, and securely mounted in the underbody scraper area to provide easy removal and remounting of the scraper.
 - All hydraulic couplers shall be full flow Aeroquip FD45 or equivalent Parker 60 series. Couplers used shall be: male 3/8-inch FD45-1002-6-6, female 3/8-inch FD45-1003-6-6.
 - A dust cap or plug shall be furnished with every male and female quick coupler.
 - 5) Trip Springs: A minimum of two heavy-duty compression springs mounted in 6-inch diameter canisters.
- All grease points shall provide adequate lubrication for the greased joint.
- ***Refer to Section 2.2.3 for finishing requirements.***

- 2.6.4 Skid Mounted Material Spreaders and Auger: Unit shall be a hydraulic driven, materials spreader body. The unit shall be a self-contained, stainless steel, V hopper type. It shall be compatible with the Western style dump body specified in sections two of this request. The spreader shall be capable of spreading uniformly all types of granular materials: salt, cinders, chemicals, abrasives, and mixtures of these up to a width of 40-feet.
- a. The body and conveyor box shall be manufactured into a common unit in accordance with good commercial practices.
 - b. All stainless steel shall be welded using stainless welding wire and shall be left unpainted.
 - c. Any carbon steel components shall be chemically cleaned and coated with a lead-free primer and painted with lead-free gray enamel.
 - d. The manufacturer's standard warranty against defective parts, material, and workmanship shall be furnished. A copy of the warranty is to be attached to the bid

- e. The body is to be 100% welded on the inside. Cross-member and side-support spacing deviations may be allowed if necessary for component installation.
- Overall height shall not to exceed 56-inches to the top of the center screen support beam.
 - Top inside width shall not be less than 78-inches.
 - Sidewalls must be sloped at approximately a 45-degree angle.
 - Shall be constructed of a minimum 12-gauge stainless steel.
 - Long sill, cross-members and full-length steel channel skids shall be a minimum of 7-gauge stainless steel.
 - Side supports shall be a minimum of 12-gauge stainless.

Paragraph Revised by Addendum 001

- f. Top Grate Screens:
- Screens shall be hinged at the center support beam of the spreader body for easy handling.
 - Screens shall be made of either 3/8-inch diameter rods centered on crossbars or 3/8-inch diameter woven wire on heavy-duty frames. Screen openings to be approximately 2-1/2-inches by 2-1/2-inches.
 - The center support beam must be a minimum 2-inch by 6-inch *stainless steel* tube with a minimum 3/16-inch thickness.
 - The center support beam shall be raised above the top of the body to prevent material build-up on top of the screens.
- g. Tie Down and Lifting Brackets:
- A minimum of four, at least 10-gauge stainless steel hold down brackets designed for 4-inch nylon straps with flat hooks, two on each side. The Bidder must coordinate placement of hold down brackets with dump body manufacturer.
 - A 10-gauge minimum stainless steel lift hook and bracket shall be installed on the front and rear face of the body at each upper corner to allow for easy handling when loading or unloading.

Paragraph Revised by Addendum 001

- h. Conveyer:
- Conveyor box and floor shall be 7-gauge stainless steel.
 - The conveyor chain shall be a heavy-duty pintle chain, Drives D667X or equal.
 - Crossbars shall be 1-1/2-inch by 1/4-inch by 18-inch minimum welded to the chain links on 4-1/2-inch centers.
 - Chain tensioner shall be screw type, spring loaded, on the front idler shaft.
 - A rear belt type bar wiper shall be provided.
 - Front idler shaft bearings shall have grease zerk lines plumbed to the rear of the body.
 - **Front idler shaft shall have 6- to 8-tooth sprockets.**

Paragraph Revised by Addendum 001

- i. Conveyer Gearbox:
- Ratio shall be 50:1. Gearbox shall have hardened input and output shafts and a bronze bull gear.
 - **Output shaft shall have 6- to 8-tooth sprockets.**
 - Shall have a high torque, low speed, gerotor type hydraulic motor installed. Motor shall be designed to operate effectively at a maximum system pressure of 2,300 psi. Hydraulic motors designed to operate at a pressure above 2,350 psi are unacceptable.
 - Hydraulic motor shall have O-ring thread ports.
- j. Discharge gate shall be located at the rear of the body to properly adjust the flow of material to the spinner.
- Maximum feed gate opening shall be 11-inches high by 20-inches wide.
 - The discharge gate and track shall be 7-gauge stainless steel.
 - The screw jack adjusting the discharge gate height shall have nylon U-joints and bushings with grease fittings on jack head.
 - The grease zerk on the jack shall be relocated and plumbed to accommodate greasing from ground level.

Paragraph Revised by Addendum 001

- k. Drop Chute and Spinner:
 - Drop chute shall be made of a minimum of 12-gauge stainless steel.
 - Drop chute shall bolt to the long sills.
 - The chute shall be fully enclosed and include an operator-adjustable deflector at the bottom to change the flow of material from the middle of the chute to one side or the other.
 - The bottom of the chute shall have a hood with operator-adjustable material deflectors installed on each side and rear of the drop chute.
 - The spinner shall be securely mounted at the bottom of the chute. Spinner motor mounting brackets shall be a minimum of 7-gauge stainless steel.
 - The spinner shall be operated by a high torque, low speed gerotor type hydraulic motor with O-ring thread ports.
 - The height of the spinner disk shall be adjustable with an ideal height of 18-inches above the ground.
 - A 20-inch spinner disk shall be 7-gauge stainless steel or pre-approved equivalent. Spinners made of ferrous metals will not be accepted.
 - ***Chute shall have ability to fold out of the way of pintle hitch to attach tow plow.***
- l. Hydraulic Hoses and Couplers
 - All hydraulic hoses shall be rated for 3,000 psi working pressure.
 - Hydraulic hoses shall be long enough to be routed from their respective connection point on the spreader to the male hydraulic couplers mounted in the left rear corner of the dump body.
 - Hoses shall be routed up to the upper left rear corner of the spreader body and secured at a point to allow the hoses to go over the side of the dump body and down to the male couplers at the left rear corner of the dump body.
 - The return circuit for the conveyor and spinner motor shall be “teed” together on the spreader and run together in a common return hose to the truck coupler.
 - Hydraulic hoses shall be sized as follows:
 - 1) Auger hose shall be 3/4-inch ID with female JIC swivels at both ends. Hose shall have a 3/4-inch female FD45-1003-12-12 coupler attached.
 - 2) Spinner hose shall be 1/2-inch ID with female JIC swivels at both ends. Hose shall have a 1/2-inch female FD45-1003-8-10 coupler attached.
 - Spreader return hose shall be 1-inch ID with female JIC swivels at both ends. Hose shall have a 1-inch female FD45-1003-16-16 coupler attached.
- m. Liquid Chemical Storage:
 - Two side-mounted, minimum of 100-gallon polyethylene reservoir tanks, one per side, shall be provided.
 - A minimum of a 3-inch top fill port with splash-proof vent and a 3/4-inch suction port shall be molded into each tank.
 - Both tanks shall be plumbed together with a minimum 1-1/2” ID hose and a tee located at the left rear corner of the spreader.
- n. Conspicuity: Spreader shall be outfitted with DOT-C2 11 inch red by 7 inch white prismatic retroreflective conspicuity tape meeting or exceeding FMVSS 108, DOT-C2 standards. The conspicuity tape shall be applied continuously along the top and vertical sides of the rear of the spreader being inset two inches from the edge. It shall be terminated 1/2 inch from any object and resume 1/2 inch from the far side of the object.
- o. 10-Foot Skid-Mounted Materials Spreader – Unit shall meet all minimum requirements of section 2.6.4 a. through n. and in addition offer the following:
 - The spreader body shall have a minimum of five cubic yards struck capacity.
 - The spreader shall have an inside body length of 10-feet at the top.
 - The body shall have a minimum of five cross-members and side supports spaced 12-inches from body ends on 24-inch centers.
 - The body is to have a top-grate screen grid, having at least four sections, two on each side.
- p. 13-Foot Skid-Mounted Materials Spreader – Unit shall meet all minimum requirements of sections 2.6.4 a. through n. and in addition offer the following:
 - The spreader body shall have a minimum of nine cubic yards struck capacity.
 - The spreader shall have an inside body length of 13-feet at the top.

- The body shall have a minimum of six cross-members and side supports spaced 12-inches from body ends on 24-inch centers.
- The body is to have a top-grate screen grid, having at least six sections, three on each side.

Paragraph Revised by Addendum 001

- q. 16-Foot Skid-Mounted Materials Spreader – Unit shall meet all minimum requirements of sections 2.6.4 a. through n. and in addition offer the following:
- The spreader body shall have a minimum of eleven cubic yards struck capacity.
 - The spreader shall have an inside body length of 16-feet at the top.
 - ***It is preferred the body will have a minimum of eight cross-members and side supports spaced 12-inches from body ends on 24-inch centers. The minimum must be seven cross-members and side supports evenly spaced.***
 - The body is to have a top-grate screen grid, having at least eight sections, four on each side.

Paragraph Revised by Addendum 001

- r. Skid Mounted Single Auger – Unit shall meet all minimum requirements of sections 2.6.4. a. through g., k. through n. and in addition offer the following:
- Auger Tube:
 - 1) Shall be 4-inch OD pipe, with a minimum wall thickness of 1/4-inches.
 - 2) The front of the auger tube shall have a 2-inch cold roll end shaft welded to a 3/8-inch minimum thickness end plate. Both shall be continuous welded.
 - 3) The front end shaft of the auger shall be supported by a 4-bolt flange, heavy duty, sealed, self-aligning bearing. Bearing must be greasable from the rear of the spreader body.
 - 4) The rear of the auger tube shall be supported entirely by the hydraulic drive motor by means of a splined, greasable coupler continuous welded to the rear of the auger tube. Grease fitting must grease motor splines and coupler splines.
 - 5) No center support bearings will be allowed.
 - Auger Flighting:
 - 1) Shall have a minimum thickness of 1/2-inch, and an outside diameter of 7-inches.
 - 2) Shall be continuous welded to the tube.
 - 3) Shall have the outer edge hard-surfaced by an electric arc welding process to a minimum #55 Rockwell hardness.
 - 4) Shall have three different pitches in order for the hopper to unload evenly from the front, middle, and rear.
 - Auger Drive Motor:
 - 1) Shall be a heavy duty roller stator type, have a splined output shaft, 4-bolt mounting, with O-ring ports.
 - 2) Shall be rated for a maximum system pressure of at least 2,350 psi, have a displacement of 64-cubic inches, and be rated for a maximum of 25 GPM oil flow.
 - 3) Shall be mounted using a floating mount to prevent minimal differences in spline alignment between the auger and motor from damaging either component.
 - 4) ***Spreader shall incorporate a safety interlock to disable the motor when top grates are open.***
 - 5) ***Gear reduction or direct drive motor is acceptable.***
 - Auger Feed Rate:
 - 1) The rear wall of the spreader shall have a feed opening size of approximately 63-square inches.
 - 2) The auger assembly shall have a minimum theoretical output of .135-cubic feet of material per revolution.
 - 3) The auger and motor assembly shall produce a minimum theoretical output of 7.29-cubic feet per minute of material at 15 GPM oil flow.

2.6.5 Other Options: Bidder shall provide the price for the following change options. Some options may be a change to the base vehicle specified or the request for additional items. Bid price shall include all associated parts and labor for installation and operation of the optional item. All units shall be delivered with all ordered options fully installed, mounted and operational.

- a. Manual Transmission:
 - Ten speed manual transmission, with “double low” low gear.
 - Transmission shall be rated to meet or exceed horsepower and torque of engine.
 - Starter system shall include a neutral start switch.
- b. Manual Transmission:
 - Six speed manual transmission.
 - Transmission shall be rated to meet or exceed horsepower and torque of engine.
 - Starter system shall include a neutral start switch.
- c. Eaton Ultra Shift Transmission or equivalent.
- d. Quixote Pavement Temperature Sensor: Shall have the ability to calibrate. Sensor information shall be displayed on the spreader control display. Shall be mounted in a location to provide accurate operation.
- e. Exhaust Brake Engine Retarder: Shall be OEM factory installed.
- f. Automatic Tire Chains: INSTA-CHAIN or ONSPOT brand chain systems complete with universal mounting brackets and to include an inline safety valve from air tank to the automatic tire chains. Automatic tire chains shall be air operated, and shall be controlled by a rocker-style rocker switch inside the operator’s console. These shall be installed on the rear drive axle.
- g. Dual Steering: Provide dual steering and controls to allow the vehicle to be steered and driven from either side in the cab. Option shall also include right-hand instrument panel.

Paragraph Revised by Addendum 001

- h. Dump Body Vibrator:
 - Shall be a Cougar model DC3200, #160181 or pre-approved equal.
 - Bearings used to support the vibrator shaft must be fitted with grease zerks, easily lubricated without removing the protective cover.
 - Shall be controlled by a switch located in the *operator console*.
 - Shall not operate unless the raised body indicator is activated.
 - Shall be operated by a two-position, momentary-on switch.
- i. Left-hand and right-hand Truck Mounted Attenuator Pockets (TMA) pockets to be incorporated with the rear hitch plate and welded to the rear of the truck frame per Attachment 3.
- j. Replace base engine with a Cummins ISL9 engine.
- k. Bluetooth Handsfree Technology with interior speakers, microphone and voice activated calling.
- l. A fixed peep window to be installed on the lower portion of the passenger door to allow for extra visibility.
- m. Tank Heater – In tank fuel heater, engine coolant type. Must have a factory installed manual shut-off valve for summer operation. A body builder installed shut-off valve may be substituted upon approval of the chassis manufacturer and MoDOT Representative.
- n. Remove Base Pre-Wet system included in Section 2.3.7 above.
- o. Upgrade Granular Pre-Wet system from a 9 GPM Flow Meter and Pump to a 25 GPM Flow Meter and Pump. All other performance requirements identified in Section 2.3.7 above must be altered to accommodate this change.
- p. Receiver style pintle Hitch compatible with the Saf-Tite 100 rigid pintle hitch and associated installation requirements.
- q. Heavy Duty Seat with five point harness system offering safety from a rear end collision.

Paragraph Revised by Addendum 001

- r. Walk Rail for Stainless Steel Beds: The optional bed side walk platform is intended to provide a working platform along the entire length of the dump body from front to back on the outside of the bed. It shall be within the maximum width requirements for the dump body. This platform shall function with the bed side ladders to allow easy access from the ground, up the ladder and onto the platform and shall not interfere with the tarp system. The platform shall support 400 lbs., with a minimum tread width of 2 ½” and be a minimum of 2 ½” from the bed side. The surface of the platform shall be constructed of McNichols Quality GRIP STRUT or equivalent material. Adhesive or painted slip resistant materials are not acceptable. On trucks equipped with the optional bed side walk platform, a hand rail system shall also be added to the top of the bed rail. The hand rails shall be round in shape, approximately 1 1/2” outside dimension (OD) x ¼ wall thickness and supported sufficiently along its length to the top bed rail to support the weight of the operator using the hand hold. The hand rail shall be mounted to provide a 4” gap between the top of the bed rail and

the bottom of the hand rail. ***Taper the ends of the hand rail in a manner that does not interfere with tarp and to eliminate catch points on the front or rear of the dump body.*** The platform and hand rail shall be constructed of material matching that of the dump body.

- s. Walk Rail for Corten Steel Beds: To be constructed in the same manner as the Walk Rail for Stainless Steel Beds option and shall be constructed of material matching that of the dump body and coated appropriately for corrosion resistance.
- t. Back up camera with a cab mounted video display.

Paragraph Revised by Addendum 001

- u. Installation of MoDOT owned 50 Watt 2-way radio. Radio shall be wired to an electrical power source. To be mounted in the overhead console. The radio antenna shall be mounted to the center of the cab roof. ***The two-way radio wiring shall be factory installed ten-gauge wire with a single 30-amp circuit protection. Factory installed wiring to support 50-Watt state owned radio. Wires to terminate in the overhead console and power distribution box between the seats. Coax cable shall be RG58. Coax cable end connections shall be PL259. No wires or coax shall have splices. Wire ends shall be heat-shrunk to prevent accidental grounding and shall include the proper protection from circuit overload. Wiring configuration must allow continued operation of radio even when ignition is off.***

Paragraph Revised by Addendum 001

- v. Installation of MoDOT owned 100 Watt 2-way radio. Radio shall be wired to an electrical power source. Remote head shall be wired to the ignition. Terminal connections shall be heatshrunk and sealed. The radio antenna shall be mounted to the center of the cab roof. ***The two-way radio wiring shall be factory installed ten-gauge wire with a single 30-amp circuit protection. Remote radio head shall be installed in the overhead console and radio body shall be installed on the rear cab wall. Coax cable shall be RG58. Coax cable end connections shall be PL259. No wires or coax shall have splices. Wire ends shall be heat-shrunk to prevent accidental grounding and shall include the proper protection from circuit overload.***
- y. Heated Windshield.
- z. Vibrating Wiper Blades.
- aa. Lug Nut Torque Indicator.
- bb. Tire Pressure Monitoring System.

Paragraph Revised by Addendum 001

- cc. Air Powered Accessories: Air powered accessories shall be supplied from the trucks air supply, originating at a "dry tank." Air supply shall originate at a protection valve which will close at approximately 70 psi to protect the truck air system in the event of a leak in a body builder installed accessory. All body builder air lines going to the operator's console shall be routed through bulk head unions located at the rear wall of the cab near the strain reliefs for electrical wiring. Bulk head mounting shall be facilitated by matching backup plates located on the inside and outside of the cab wall. All bulk head locations shall have the function of that bulk head stamped or etched into the plate for identification of each air line installed. Air supply shall be routed to the operator console and routed through an oil injector installed inside the cab.
 - Air Control Operated Tarp with rocker-style air valve located in the operator console shall meet the same specifications as in section 2.3.3.t and 2.3.4.t with the exception it shall be air operated type, not electric.
 - Air Operated Hydraulic Joy Stick Control Lever: The hoist control shall be a single axis control with lock in the center position to prevent accidental actuation. ***All other hydraulic controls shall be a dual axis feathering remote air control with air shift actuator for the valve.*** There shall be a Pressure Protection Valve to protect against loss of pressure in the primary system caused by a broken line or an air leak somewhere in the auxiliary system. There shall also be a FLR (filter, lubricator, and regulator) plumbed into the auxiliary air system to protect the air controls from contamination and being over pressurized. All the air tubing will be color coded to identify each individual hydraulic function.
 - Air control operated tail gate latch shall meet the same specifications as in section 2.3.3.j and 2.3.4j in addition, shall be controlled by a rocker-style air valve located in the operator's console, not electric over air.
 - Air control operated tire chains shall meet the same specifications as in section 2.6.5.f with the exception it shall be air operated rocker-style valve located in the operator's console, not electric over air.

- dd. Additional Training Modules: Training must be classroom and/or hands on. Training session shall take place at a location within each district and/or central office. Use of MoDOT owned space may be permitted based upon availability. Modules shall be related to various components and operations of the delivered units. A module is defined as a one day training course and may include subjects such as emissions, electrical, hydraulic, engines, etcetera. Cost shall be per module, per employee.
- ee. Installation of MoDOT Provided Decals. Decals include two MoDOT logo decals and two locations for vehicle four digit vehicle number.

Paragraph Revised by Addendum 001

- ff. Shovel tool box to be installed on underside of bed and above standard tool box. ***Shall be constructed of the same materials as well as latch style and key as the standard tool box.*** Size shall be consistent with the necessary requirements related to clearance and location when combined with standard tool box. ***Overall dimensions are 8.5-inches tall, 64-inches wide and 24-inches deep. Door opening shall be 5-inches by 42-inches.***
- gg. Stainless steel spring loaded shovel bracket equivalent to Buyers product #SH675SS.

Paragraph Revised by Addendum 001

Truck Option.

- ii. ***Replace the Spreader Control System identified in section 2.3.6 with a Rexroth CS 550/150 Spreader /Joy Stick Controller. Installed system shall be functionally equivalent to the system described in sections 2.3.5 and 2.3.6.***
- jj. Steel Material Spreader Stand for the 10-foot, 13-foot and 16-foot spreaders. Units shall be constructed to handle the proposed spreaders in accordance with the following requirements.
 - Steel must be hot rolled, mild steel, new with no rust.
 - Stand must have ladder with proper hand holds off the back and out of the way of the operation for workers access to top of spreader.
 - Guide caster rollers on stand for ease of stand/spreader to slip in and out of dump bed.
 - Folding front legs (lockable while used for storage) to aide in the loading of the stand/spreader into dump bed.
 - Rotational, folding, pivoting or telescoping rear legs to keep out of the way of operation (lockable while used for storage).
 - Stands must be painted black over one coat of primer.
 - Spreader stand shall be manufactured in a way to center itself inside the dump body, preventing damage to the liquid saddle tanks during spreader installation.

Paragraph Revised by Addendum 001

- kk. ***Replace the Spreader Control System identified in section 2.3.6 with a Force America SSC6100 CAN Bus Spreader Control System. Installed system shall be functionally equivalent to the system described in sections 2.3.5 and 2.3.6.***

Paragraph Revised by Addendum 001

- ll. ***Replace the Spreader Control System identified in section 2.3.6 with a Cirus Controls SpreadSmart Rx CAN Bus Spreader Control System with Joy Stick Controller. Installed system shall be functionally equivalent to the system described in sections 2.3.5 and 2.3.6.***

Paragraph Revised by Addendum 001

- mm. ***Air Ride Suspension for Single Axle Truck.***

Paragraph Revised by Addendum 001

- nn. ***Contractor bed with drop down sides: The following specifications and dimensions shall apply to a low profile multipurpose truck mounted dump body and hoist. This dump body shall be used for several different highway maintenance operations where the floor of the body needs to be readily accessible from the side of the truck, from ground level. This accessibility shall be accomplished with fold down sides, and a maximum floor height of 48" when mounted on a chassis with 11R22.5 rear tires. This dump body shall***

be capable of hauling a variety of materials up to the GVWR capacity of the chassis. This dump body shall also accommodate a 10' slip-in material spreader with attached liquid storage tanks.

- **General:** *The dump body provided shall be a multipurpose style, with fold down sides. Underbody cross-members for support will not be allowed. The floor, sides, and main long sills are to be full length with no cross-splices. All boxed areas of the dump body shall be sealed. No wiring or hoses shall be run through any boxed area. All welds shall be continuous. All hinge pins shall be removable.*
 - 1) *10-foot maximum inside length.*
 - 2) *950 minimum outside width.*
- **Material:** *The dump body main long sills, floor, tailgate, sides, front, front rail, rear rail, and corner posts, shall be constructed using a minimum of Corten steel, rated 55,000-psi yield.*
 - 1) *Main Long Sills 1/4-inch*
 - 2) *Floor 3/16-inch*
 - 3) *Front 12-gauge*
 - 4) *Sides 12-gauge*
 - 5) *Tailgate 12-gauge*
 - 6) *Rear posts 3/16-inch*
- **Dump Body Mounting:**
 - 1) *The rear edge of the dump body pivot pin shall be 0 to 1-inch forward from the rear face of the rear hitch plate.*
 - 2) *The dump body pivot, measured from the centerline of the pivot pin to the rear face of the dump body not including the tailgate, shall be a minimum of 9 inches and a maximum of 12 inches.*
 - 3) *The chassis wheel base shall be such that the rear axle is located a maximum of 48-inches from the rear of the dump body, measured from the axle centerline to the rear vertical face of the dump body, not including the tailgate.*
 - 4) *Hydraulic oil reservoir shall be mounted to provide 3 to 4-inch clearance between the cab and reservoir.*
 - 5) *The dump body shall be mounted as close as possible to the hydraulic oil reservoir, with a minimum of 3-inch clearance, excluding the sub frame of the reservoir and hoist.*
 - 6) *A 4-gauge battery cable ground strap shall be installed from the dump body to the truck frame by means of a 5/16-inch cadmium plated bolt. Star washers shall be installed on both sides of the strap eye to insure a good ground.*
- **Platform:** *Constructed of 3/16-inch Corten steel rated at 55,000psi.*
 - 1) *Long Sills: Long sills shall be structural steel or a fabricated tube with a minimum thickness of 1/4". Height shall be such to provide a platform floor height of no more than 48" at the highest point with the bed empty. If boxed construction, long sills must be sealed. No hoses or wiring shall be run through the length of the long sills.*
 - 2) *Cross-sills: None*
 - 3) *Side rails: Fabricated design, forming a box channel. Side rails must have cut-outs for wheel clearance/tire chains.*
 - 4) *Rear rail: Structural or fabricated tube design.*
 - 5) *Front rail: Structural or fabricated tube design.*
 - 6) *Floor: One piece smooth steel.*
 - 7) *Tie downs: Pop-up style tie downs shall be installed in the platform floor, with a minimum of two tie-downs per side. Tie downs shall have reinforced openings. Tie down assemblies shall be adequate to secure a loaded, 5 cubic yard slip-in material spreader, or other similar heavy cargo. The rear tie-down shall be 12 to 14 inches forward from rear of dump body. The front tie down shall be 12 inches forward from the rear edge of front permanent side. Tie-down assemblies shall use 3/8-gr.70 chains.*
- *Hoist shall be a trunnion mount head lift, single-acting cylinder. The hoist should be designed to accept a Model CS90-4-3- MAILHOT cylinder. The cylinder sleeves shall be nitride coated. Sub-frame hoists are not acceptable. A flared body bracket will be attached to either the hoist frame or body understructure to align body in position and keep from moving side to side.*
- *Dump Body Pivots shall facilitate thorough greasing. Bushings shall have an internal radial groove in line with the grease fitting. Pivot pins shall be drilled and cross drilled.*
- **Body Props**

- 1) *A storable body prop shall be provided on each side of the dump body.*
 - 2) *Pivots for the body props shall be greasable.*
 - 3) *Body props shall be constructed to withstand the down-pressure of the hoist without damaging the dump body, chassis, or any related components.*
- *Bulkhead/cab protector shall be non-removable, with a formed doghouse for the trunnion mount head lift cylinder. The cab protector shall be of sufficient height to accommodate a slip in spreader and warning lights. The cab protector shall not interfere with the cab mounted vertical exhaust pipe. The cab protector shall be mounted, welded, and gusseted to prevent flexing or vibration. The cab protector shall have angled material deflector at top to keep dumped material from spilling onto the hydraulic oil reservoir. The cab protector shall extend 12-inches forward from front edge of headboard.*
 - *Permanent Sides*
 - 1) *The permanent side shall extend rearward from the headboard.*
 - 2) *Length shall be such as to have 22" inside from front sheet to rear of the permanent side.*
 - 3) *Side shall be tapered, with the height at the front being 24", and the rear height matching the fold-downside, with no provisions for extension boards.*
 - 4) *Side shall have a backing strip to serve as a stop/seal when side is locked in the upright position. This backing strip shall start two inches above the floor, and go to within one inch of the top of the side.*
 - *Fold down sides shall be one-piece design. The top and bottom of the sides shall be fabricated to form a tubular design. No vertical stiffeners allowed, except on the extreme ends.*
 - 1) *Height of sides shall be a minimum of 14 inches and a maximum of 16 inches above the floor.*
 - 2) *Length of sides shall be 72 inches.*
 - 3) *Top of sides shall be debris-shedding type.*
 - 4) *The end sections shall be constructed using steel of adequate dimension to provide structural integrity, and latch support.*
 - 5) *Fold down sides shall have a minimum of three greasable, stainless steel hinges per side. Hinges shall not protrude outside the width of the platform.*
 - 6) *Neither the sides, nor the hinges shall protrude above surface of platform when the sides are in the lowered position.*
 - 7) *A positive stop to prevent the sides from engaging with the truck's tires when lowered shall be provided.*
 - 8) *Sides shall require no more than 50# of lifting effort throughout their 180-degree travel.*
 - 9) *Sides shall have no provisions for extension boards.*
 - *Fold Down Side Latches: Fold down sides shall have two independent stainless steel latches per side, locking the fold down side in the upright position to the front and rear permanent sides. Latches shall be hand operated, quick release, and positive locking. All latches must be pre-approved.*
 - 1) *Latches shall operate smoothly and easily without the use of tools.*
 - 2) *Latches shall not exceed width of platform.*
 - 3) *Latches shall be a minimum of ½" diameter.*
 - *Ladder: A storable ladder shall be provided each side of the platform. The rear edge of the ladder shall be even with rear edge of the front permanent side. Sides when folded down shall not interfere with the use or stowing of ladder. The horizontal rungs shall be made of galvanized grip-strut steel. Handles shall be installed on the bulkhead/cab protector corner posts to correspond with the ladders, and not exceed the width of the platform. Handles shall be installed to provide three points of contact while using the ladder. A ½" diameter steel rod shall be welded to rear of each bulkhead/cab protector corner post at a height of 32"-34" from floor, extended straight out to the rear 3", then straight down, and welded to the top of the permanent side.*
 - *Tailgate: Shall be double-acting and travel 180 degrees. Tailgate shall be vertically straight when closed. The top and bottom of the tailgate shall be fabricated to form a tubular design. No vertical stiffeners allowed except on extreme ends. Chains shall be provided to control opening width at the bottom of the tailgate, or support tailgate horizontally from the top.*
 - 1) *Tailgate shall require no more than 75 pounds of lifting effort throughout its 180-degree travel.*

- 2) *The end sections shall be constructed using steel of adequate dimension to provide structural integrity and latch support.*
 - 3) *Tailgate shall have a maximum 20 inches height above the floor when closed.*
 - 4) *Tailgate chains shall be 3/8-inch grade 70.*
 - 5) *Tailgate lower pins shall be a minimum of 1-inch stress proof shaft.*
 - 6) *When the tailgate is lowered parallel to body floor, the inside surface of the tailgate shall provide a smooth level joint between the tailgate and the body floor.*
 - 7) *A license plate bracket shall be welded on the left-hand side of the tailgate.*
 - 8) *A hinged "D" ring shall be mounted top and center of the tailgate to provide a lifting hook for removing the tailgate.*
- **Tailgate Latches:**
 - 1) *Upper Latches: Shall have two independent stainless steel latches, one on each side, locking the tailgate in the upright position to the corner posts. Upper latches shall also serve as the pivot for the tailgate when releasing the lower latches. Latches shall be hand operated, quick release, and positive locking. Latch assembly shall prevent the tailgate from shifting sideways. All latches must be pre-approved.*
 - *Latches shall operate smoothly and easily without the use of tools.*
 - *Latches shall be a minimum of 3/4-inch diameter.*
 - *Latches shall have a minimum of 1-inch engagement.*
 - 2) **Lower Latches:**
 - *An over-center locking device on each side of the dump body shall hold the tailgate securely closed. The latching fingers shall be forged steel.*
 - *The tailgate latch cross shaft assembly shall be supported on each end by bushings.*
 - *This locking device shall be operated by an air cylinder, which shall be mounted between the long sills. Air cylinder shall be controlled by a switch in the operator's console.*
 - *Locking device shall be adjustable at each side of the dump body.*
 - *A manual over-ride shall be provided on the outside of the dump body, allowing the operator to lock or unlock the tailgate using a simple adjustable wrench and without removing components.*
 - *Lubrication points on the tailgate latch cross-shaft shall facilitate easier greasing by means of grooved bushings and/or shaft.*
 - *Grease zerks at each end of the tailgate cross-shaft shall be visible and accessible from the outside face of the dump body.*
 - *Rear corner posts shall extend below the side and rear rails to allow for reinforcement of this joint. Rear posts shall be of sufficient size and structure to accommodate all loads imposed on tailgate and side doors. Hydraulic couplers shall be mounted in bottom of rear post, or immediately below it.*
 - 1) *Rear posts shall be made of 3/16-inch structural steel or fabricated tube.*
 - 2) *Rear posts shall not exceed the height of the tailgate.*
 - 3) *Rear posts shall have a backing strip to serve as a stop/seal when side is locked in the upright position. This backing strip shall start two inches above the floor, and go to within one inch of the top of the side.*
 - **Hydraulic Couplers:**
 - 1) *Coupler description specifications are listed in the Hydraulic Section 2.3.5j.*
 - 2) *The curbside of the dump body shall have three, 3/8-inch male couplers. Couplers shall be attached to male pipe X male JIC bulkhead fittings mounted on the rear corner post, or side rail near the rear of the bed. Couplers may be mounted immediately beneath the rear post if space in post or rails will not allow. MoDOT Fleet Manager must approve location at the pilot inspection before the rest of the trucks are built.*
 - 3) *The drivers' side of the dump body shall have three male couplers for the slip-in spreader. Couplers shall be attached to male pipe X male JIC bulkhead fittings mounted on the rear corner post, or side rail near the rear of the bed. Couplers may be mounted immediately beneath the rear post if space in post or rails will not allow. MoDOT Fleet Manager must approve location at the pilot inspection before the rest of the trucks are built.*
 - 4) *The hydraulic lines shall extend from the lowest rub rails to the body's main long sills through a fabricated enclosure on the under- side of the body. The main long sills shall have passageways*

at the rear for the hydraulic lines. Passages through the long sills shall be sealed around the passage to prevent moisture entry into the long sill.

- **Brake, Turn and Taillights:** *Lighting shall meet all Federal and State DOT specifications, which recently includes and requires an independent running light on the rear corners.*
 - 1) *All lights shall be mounted in shockproof rubber grommets.*
 - 2) *All lights, except the backup light, shall be LED.*
 - 3) *All lights shall be connected to a one piece wiring harness with molded connectors.*
 - 4) *Each rear corner post shall have a built in, recessed 2 inch x 6 inch oval stop/turn taillight. Suitable makes and models are Truck Lite Model 60050R or Peterson Model M420R2.*
 - 5) *Backup lights shall be recessed 2-inch x 6-inch oval lights. A protective light enclosure shall be mounted below the rear of the dump body. These lights shall be spaced far enough apart as to be visible when a slip-in material spreader is installed in the dump body.*
 - 6) *A one and one-half (1 1/2) inch pipe shall extend through long sills at the rear for routing of electric wiring. Pipes are to be fully welded, sealing the joint at the long sill.*
- **Raised Body Indicator:** *A sealed proximity switch shall be mounted near the hoist assembly to control a raised body indicator light. The light shall be powered by the chassis electric accessory power supply. A dash mounted indicator light shall be provided, be plainly visible to the seated operator, be red in color, and flash when the dump body is raised.*
- **Spread Light:** *One Truck Lite model 80360 work light shall be mounted below the left rear dump body corner. The light shall be controlled by the chassis electric accessory power supply. Light will not hinder the operations of the material spreader.*
- **Tarp:** *A “window shade” style tarp, such as Aero’s Easy Cover or Pulltarp’s Supershield system shall be provided. The housing for the tarp and spring roller assembly shall be heavy duty steel that is powder coated black. The housing shall rest on the top of the bulkhead and the doghouse. The entire unit shall be bolted on using stainless or zinc plated bolts. A series of stainless or zinc plated body hooks shall be systematically installed on the sides of the body to secure the tarp. The hooks shall not exceed the width of the platform nor interfere with the 180-degree fold-down feature of the sides. The tarp material shall be heavy-duty asphalt and as wide as the inside width of the body. Tarp shall have sections of bungee cord or other type of stretchable material sewn into it that allows for the tarp to be secured to the body’s hooks without the use of independent cords with hooks. Brackets for securing the pull rope and the tarp when extended shall be installed per manufacture’s instructions, but not to interfere with the designed functions of the body.*
- **Mud flaps shall be removable by incorporating 201 or 304 stainless steel removable hinge pin approximately 26 inches long by ½” diameter solid rod. The rod will have a 2 ½” - 90 degree bend for a handle with a 3/16” hole at the opposite end for a lynch pin. There shall be three bushings on the truck side and three bushings on the mud flap side constructed of ½” inside diameter pipe by 1 ½” long. Spaced accordingly on flap and truck bracket that is constructed of 24” long by 2” deep by 3/16” thick steel. Mud Flap removal shall not require any tools. See drawing on Attachment 2.**
- **Conspicuity:** *Dump body shall be outfitted with DOT-C2 11-inch red/7-inch white parabolic retro-reflective conspicuity tape (Reflexite or equal) as per MoDOT guidelines. Layout pattern will be provided to successful Vendor.*

2.7 Delivery Requirements:

2.7.1 The following delivery requirements shall apply:

- a. Unless otherwise specified on the solicitation documents or purchase order, suppliers shall give at least 24 hours advance notice of each delivery. Delivery will only be received between the hours of 8:00 a.m. to 3:00 p.m., Monday through Friday. Deliveries shall not be made on observed holidays as identified in the attached terms and conditions.
- b. Each unit shall be fully operational, with all mechanical adjustments made prior to delivery. The hydraulic and/or spreader control system shall have all hydraulic function controls calibrated for proper operation before inspection and delivery of the completed unit. Calibration of the granular material application and the granular pre-wet system shall be the responsibility of MoDOT.

- c. All chassis, body, component, and snow equipment grease fittings shall be lubricated per manufacturer's specifications prior to delivery.
- d. Chassis driveline universal joints shall be lubricated until fresh grease appears at all four bearing caps prior to delivery.
- e. Each unit shall be pressure washed with hot water and detergent prior to delivery. Units with residual hydraulic oil from assembly on any component will not be accepted.
- f. The bidder shall understand and agree that MoDOT will inspect each unit after delivery to determine if the unit meets specifications, quality and to verify no damage incurred during shipment of the unit. MoDOT shall have five (5) business days after receipt of order to notify the bidder of any visible damage or specification compliance issues. After the five (5) business days, the bidder is still responsible for correction any issues related to specifications or quality.
- g. MoDOT Representative shall have the ability to negotiate the MoDOT requested schedule of work.

2.7.2 The Bidder shall deliver the products specified herein to the following MoDOT locations:

- a. St. Joseph, Missouri 64502
- b. Macon, Missouri 63552
- c. Hannibal, Missouri 63401
- d. Lee's Summit, Missouri 64064-8002
- e. Jefferson City, Missouri 65102
- f. Chesterfield, Missouri 63017-5712
- g. Joplin, Missouri 64802
- h. Springfield, Missouri 65801
- i. Willow Springs, Missouri 65793
- j. Sikeston, Missouri 63801

2.8 Liquidated Damage Requirements:

2.8.1 The bidder is directed to the "*Standard Bid Provisions, General Terms and Conditions and Special Terms and Conditions*" attached to the bid documents, regarding the amount and enforcement of liquidated damages.

2.9 Contract/Purchase Order:

2.9.1 The contract expresses the complete agreement of the parties and performance shall be governed solely by the specifications and requirements contained therein. Any change, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the Bidder and the duly authorized representative of the MHTC, by a modified purchase order prior to the effective date of such modification. The Bidder expressly and explicitly understands and agrees that no other method and/or no other document, including correspondence, acts, and oral communications by or from any person, shall be used or construed as an amendment or modification

2.10 Invoicing and Payment Requirements:

2.10.1 The Bidder shall submit an itemized invoice to the applicable requesting address for the completion of deliverables, as specified herein. MoDOT will make a progress payment of the cab and chassis at the time of confirmed delivery to the body builder. Bidder shall maintain full ownership of the unit until it is complete and delivered to the MoDOT location regardless of progress payments.

2.10.2 Each invoice shall be itemized in accordance with items listed on the purchase order and/or contract. The statewide financial management system has been designed to capture certain receipt and payment information. Therefore, each invoice submitted must reference the purchase order number and must be itemized in accordance with items listed on the purchase order. Failure to comply with this requirement may delay processing of invoices for payment.

- 2.10.3 The Bidder shall understand and agree MoDOT reserves the right to make contract payments to the Bidder through electronic funds transfer (EFT). Therefore, prior to any payments becoming due under the contract, the Bidder must return a completed state Vendor Input ACH/EFT Application, which is downloadable from the Vendor Services Portal at: <https://www.vendorservices.mo.gov/vendorservices/Portal/Default.aspx>. Each Bidder invoice must be on the Bidder's original descriptive business invoice form and must contain a unique invoice number. The invoice number will be listed on the state's Vendor Payment Website to enable the Bidder to properly apply state payments to invoices. The Bidder must comply with all other invoicing requirements stated in the RFB.
- 2.10.4 The Bidder shall be paid in accordance with the firm, fixed prices stated on the pricing page of this document after completion of deliverables specified herein and acceptance by MoDOT.
- 2.10.5 Other than the payment specified above, no other payments or reimbursements shall be made to the Bidder for any reason whatsoever.
- 2.10.6 Unless otherwise provided for in the solicitation documents, payment for all equipment, supplies, and/or services required herein shall be made in arrears. The MHTC shall not make any advance deposits.
- 2.10.7 The MHTC assumes no obligation for equipment, supplies, and/or services shipped or provided in excess of the quantity ordered. Any authorized quantity is subject to the MHTC's rejection and shall be returned at the Bidder's expense.
- 2.10.8 The MHTC reserves the right to purchase goods and services using the state-purchasing card.

2.11 Other Contractual Requirements:

- 2.11.1 Contract Period - The contract shall commence from the date of Notice to Proceed until for one year with up to five (5) one-year renewal option periods, or any portion therein. If the option for renewal is exercised by MoDOT, the Bidder shall agree to all terms and conditions of the RFB and all subsequent amendments. Renewal options are at the sole discretion of MoDOT.
- 2.11.2 Renewal Periods - If the option for renewal is exercised by MoDOT, the Bidder shall agree that the percentages for the renewal period shall not exceed the maximum percentage for the applicable renewal period stated herein.
- If renewal percentages are not provided, the prices during renewal periods shall be the same as during the original contract period.
 - MoDOT does not automatically exercise its option for renewal based upon the maximum percentage of increase without documented justification supporting an increase, and reserves the right to offer or to request renewal of the contract at a percentage less than the maximum percentage stated.
 - In the event MoDOT exercises its option(s) to renew the contract, the requirements for future years shall be basically similar.
- 2.11.3 Escalation Clause - In the event the Bidder requests a price increase during the contract period, either the original contract period or any contract renewal period, the Bidder must provide a written request and documentation justifying the need for a price increase, and the amount of such price increase. MoDOT will review the Bidder's written request and documentation, and decide if a price increase is to be granted at that particular time. The Bidder shall understand and agree that MoDOT's decision shall be final and without recourse.
- No price increase shall be granted during the first 3 months of the original contract period, or if applicable, first 3 months of a contract renewal period.
 - In the event a price increase is granted due to an approved escalation, the renewal percentage shall be based upon the original contract value and any approved escalation in costs.
- 2.11.4 Inspection and Acceptance: MoDOT reserves the right to inspect the material at the point of manufacture, intermediate storage point, or at a destination which shall be at the discretion of MoDOT.

- a. No equipment, supplies, and/or services received by MoDOT pursuant to a contract shall be deemed accepted until MoDOT has had reasonable opportunity to inspect said equipment, supplies, and/or services.
- b. All equipment, supplies, and/or services which do not comply with the specifications and/or requirements or which are otherwise unacceptable or defective may be rejected. In addition, all equipment, supplies, and/or services which are discovered to be defective or which do not conform to any warranty of the Bidder upon inspection (or at any later time if the defects contained were not reasonably ascertainable upon the initial inspection) may be rejected.
- c. The MHTC reserves the right to return any such rejected shipment at the Bidder's expense for full credit or replacement and to specify a reasonable date by which replacements must be received.
- d. The MHTC's right to reject any unacceptable equipment, supplies, and/or services shall not exclude any other legal, equitable or contractual remedies the MHTC may have.

3. BID SUBMISSION

3.1 Bid Submission Information:

- 3.1.1 All bids must be received in a sealed envelope/package clearly marked "**Dump Truck**".
- 3.1.2 All bids must be received at the office of the RFB Coordinator as outlined in Section 1. "INTRODUCTION AND GENERAL INFORMATION".
- 3.1.3 The bidder may withdraw, modify or correct his/her bid after it has been deposited with MoDOT provided such request is submitted in writing and received at the location designated for the bid opening prior to the date and time specified for opening bids. Such a request received as specified will be attached to the bid and the bid will be considered to have been modified accordingly. No bid may be modified after the date and time specified for the opening of bids.
- 3.1.4 Open Competition / Request For Bid Document:
 - a. It shall be the bidder's responsibility to ask questions, request changes or clarification, or otherwise advise MoDOT if any language, specifications or requirements of an RFB appear to be ambiguous, contradictory, and/or arbitrary, or appear to inadvertently restrict or limit the requirements stated in the RFB to a single source. Any and all communication from bidders regarding specifications, requirements, competitive bid process, etc., must be directed to the buyer from MoDOT, unless the RFB specifically refers the bidder to another contact. Such communication should be received at least three (3) working days prior to the official bid opening date.
 - b. Every attempt shall be made to ensure that the bidder receives an adequate and prompt response. However, in order to maintain a fair and equitable bid process, all bidders will be advised, via the issuance of an amendment to the RFB, of any relevant or pertinent information related to the procurement. Therefore, bidders are advised that unless specified elsewhere in the RFB, any questions received less than three (3) working days prior to the RFB opening date may not be answered.
 - c. Bidders are cautioned that the only official position of the MoDOT is that which is issued by MoDOT in the RFB or an amendment thereto. No other means of communication, whether oral or written, shall be construed as a formal or official response or statement.
 - d. MoDOT monitors all procurement activities to detect any possibility of deliberate restraint of competition, collusion among bidders, price-fixing by bidders, or any other anticompetitive conduct by bidders which appears to violate state and federal antitrust laws. Any suspected violation shall be referred to the Missouri Attorney General's Office for appropriate action.
- 3.1.5 Bid Review: Bids will be reviewed to determine if the bid complies with the mandatory requirements.
- 3.1.6 Contract Award: This is a Multiple Award bid. All responsive responses will result in a contract award.
 - a. Notification of award shall be at the time the tabulation is posted to the Internet. It is the sole responsibility for all bidders to check the website for bid results.

3.1.7 Purchase Determination: After determination of award, evaluator(s) shall use both objective and subjective judgment in conducting a comparative assessment of the bid responses in accordance with the evaluation criteria stated below:

- a. Base and Option Costs 50 Points
- b. Location of Parts and Servicing Dealers 20 Points
- c. Warranty Coverage 15 Points
- d. Delivery Timeline 5 Points
- e. Other response information 10 Points

3.1.7.1 The evaluation of cost will be conducted using a scale of fifty (50) possible points based upon a total amount for the base unit and unit options in the original contract period. Cost points shall be calculated based on the sum from the below calculation using the following formula:

$$\frac{\text{Lowest Responsive Price}}{\text{Compared Price}} \times 50 = \text{Cost score points extended to 2 decimal places} - 50.00 \text{ possible}$$

3.1.7.2 Performance and reliability of any unit and/or contractor can be a part of the subjective evaluation in the determination of lowest and best bid award. Final determination of the evaluation shall be at the discretion of the General Services Director.

4. PRICING PAGE

Paragraph Revised by Addendum 001

4.1 The bidder shall provide a firm, fixed price in the table below for the original contract period for providing the deliverables/services in accordance with the provisions and requirements of this RFB. All costs associated with providing the required deliverables/services shall be included in the prices stated below. Prices must be the lowest offered to any governmental or commercial consumer, under the same terms and conditions. Sign where indicated below and return with all required solicitation documents.

Item #	Description	Original Contract Period <i>Firm, Fixed Price</i>
001	Tandem Axle Cab and Chassis	\$
002	Tandem Axle Corten V-Style Long Sill Dump Body – Configuration #1	\$
003	Tandem Axle Stainless Steel I-Beam Long Sill Dump Body – Configuration #2	\$
	Total Cost	\$
004	Single Axle Cab and Chassis	\$
005	Single Axle Corten V-Style Long Sill Dump Body – Configuration #1	\$
006	Single Axle Stainless Steel I-Beam Long Sill Dump Body – Configuration #2	\$
	Total Cost	\$
007	Tow Plow Cab and Chassis	\$
008	Tow Plow Corten V-Style Long Sill Dump Body – Configuration #1	\$
009	Tow Plow Stainless Steel I-Beam Long Sill Dump Body – Configuration #2	\$
	Total Cost	\$
010	Fair Market In-House Labor Rate per Section 2.2.6.d for <i>Cab and Chassis</i>	\$ Per Hour
011	<i>Fair Market In-House Labor Rate per Section 2.2.6d for Body Builder</i>	\$ Per Hour
012	List the Districts Bidding on (NW, NE, KC, CD, SL, SW, SE)	
013	Tandem Axle Extended Warranty Option #1	\$
014	Single Axle Extended Warranty Option #1	\$
015	Tow Plow Extended Warranty Option #1	\$

4.2 Renewal Periods: The bidder shall provide below the maximum percentage of increase or decrease for the renewal periods. The percentage shall be computed against the **original contract period prices** for each renewal period. If a renewal percentage is not provided, the prices for the renewal periods shall be the same as the original contract period.

1st Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

2nd Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

3rd Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

4th Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

5th Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

4.3 MSRP Discount: Bidders should submit a complete parts and options list with detailed pricing information for each unit type bid. An electronic source for this information may be provided as well. (i.e. Internet site, jump drive, CD, etc.) Please indicate below the percent (%) discount off Manufacturers' Suggested Retail Prices (MSRP) for all options other than those priced on the attached Options Pricing Page.

% discount off MSRP for all Data Book or Pricing Guide Options: - % Discount _____

4.4 Delivery After Receipt of Order:

Tandem Axle Dump Truck _____ Calendar Days

Single Axle Dump Truck _____ Calendar Days

Tow Plow Dump Truck _____ Calendar Days

4.5 Standard Warranty: All bidders must provide a description below of the standard warranty offered with each unit for the cab and chassis as well as the dump body. (Refer to Section 2.2.6)

4.5.1 Warranty Dealer and Service Locations: All bidders must attach a list of all warranty and service providers and location information. This shall include but not be limited to the company name, address, standard and emergency contact telephone numbers.

4.6 Optional Equipment: The bidder shall provide pricing for the increased or decreased cost associated with the following optional equipment meeting the minimum specifications identified in Section 2.6. *Bidders must list all makes and models for each optional item offered.*

<i>Optional Equipment Continued</i>		Additional Increase/Decrease to Total Unit Price		
	Option Description	Tandem Axle	Single Axle	Tow Plow
a.	Right and/or Left Hand Wing Plow	\$	\$	\$
b.	Heavy Duty Right Hand 3 Function Front Mount Wing Plow	\$	\$	\$
c.	Underbody Scraper	\$	\$	\$
d.	10' Skid Mounted Material Spreader	\$	\$	\$
e.	10' Skid Mounted Material Spreader with Auger	\$	\$	\$
f.	13' Skid Mounted Material Spreader	\$	\$	\$
g.	13' Skid Mounted Material Spreader with Auger	\$	\$	\$
h.	16' Skid Mounted Material Spreader	\$	\$	\$
i.	16' Skid Mounted Material Spreader with Auger	\$	\$	\$
j.	10 Speed Manual Transmission	\$	\$	\$
k.	6 Speed Manual Transmission	\$	\$	\$
l.	Eaton Ultra Shift Transmission	\$	\$	\$
m.	Pavement Temperature Sensor	\$	\$	\$
n.	Exhaust Brake Engine Retarder	\$	\$	\$
o.	Automatic Tire Chains	\$	\$	\$
p.	Dual Steering	\$	\$	\$
q.	Dump Body Vibrator	\$	\$	\$
r.	Left-/Right-hand Truck Mounted Attenuator Pockets	\$	\$	\$
s.	Cummins ISL9 Engine	\$	\$	\$
t.	Bluetooth Hands-free Technology	\$	\$	\$
u.	Passenger Door Peep Window	\$	\$	\$
v.	Tank Heater	\$	\$	\$
w.	Removal of Base Granular Pre-Wet System	\$	\$	\$
x.	Replace Pre-West System w/a 25 GPM Pre-Wet System	\$	\$	\$
y.	Receive Pintle Hitch	\$	\$	\$
z.	Walk Rail for Stainless Steel Bed	\$	\$	\$
aa.	Walk Rail for Corten Steel Bed	\$	\$	\$
bb.	Back Up Camera and Display	\$	\$	\$
cc.	Installation of MoDOT owned 50 Watt radio	\$	\$	\$
dd.	Installation of MoDOT owned 100 Watt radio	\$	\$	\$
ee.	Heated Windshield	\$	\$	\$
ff.	Vibrating Wiper Blades	\$	\$	\$
gg.	Lug Nut Torque Indicator	\$	\$	\$
hh.	Tire Pressure Monitoring System	\$	\$	\$
ii.	Air Control Operated Tarp	\$	\$	\$
jj.	Air Operated Hydraulic Joy Stick Control Lever	\$	\$	\$

Optional Equipment Continued

Additional Increase/Decrease to Total Unit Price

	Option Description	Tandem Axle	Single Axle	Tow Plow
kk.	Air Control Operated Tail Gate Latch	\$	\$	\$
ll.	Air Control Operated Tire Chains	\$	\$	\$
mm.	Additional Training Modules	\$	\$	\$
nn.	Installation of MoDOT Provided Decals	\$	\$	\$
oo.	Shovel Tool Box	\$	\$	\$
pp.	Stainless Steel Spring Loaded Shovel Bracket	\$	\$	\$
qq.	Crew Cab Option		\$	
rr.	Rexroth CS 550/150 Spreader /Joy Stick Controller	\$	\$	\$
ss.	10-foot Spreader Stand	\$	\$	\$
tt.	13-foot Spreader Stand	\$	\$	\$
uu.	16-foot Spreader Stand	\$	\$	\$
vv.	Force America CAN Bus Spreader Control System	\$	\$	\$
ww.	Single Axle Air Ride Suspension	\$	\$	\$
xx.	Single Axle Contractor Bed with Drop Down Sides	\$	\$	\$

4.7 Additional Bid Response Information:

- a. Does the unit offered feature cowl pedals? _____
- b. Does the unit offered feature side window defrosters? _____
- c. Does the air conditioning unit include self-diagnostic capabilities? _____ If yes, briefly describe:

- d. Does the unit offered feature flush mounted cab marker lights? _____
- e. Does the driveshaft pass through the radiator charge air cooler or air conditioning condenser? _____
- f. Does the unit offered feature a single rail frame system? _____
- g. Does the unit offered feature Truck-Lite model 645 headlights? _____
- h. Does the unit offered feature a ADIP air dryer.
- i. Provide a detailed description of the rear axle suspension offered.
- j. *Are you utilizing AR400 or AR450 in the production of your product?* _____

4.8 Innovative Solutions: All bidders must provide unit pricing in section 4.1 above in accordance with the bid specifications, however, MoDOT is interested in innovative solutions as well. Bidders are encouraged to provide various innovative solutions to the specifications provided and any associated cost adjustments to the unit price should MoDOT chose to purchase the solution on any units ordered for the purposes of testing the performance and reliability of the proposed solution. Each submission should reference the technical section of the original bid to be impacted by the innovative change, the proposed innovative change solution and its' impact to MoDOT and all associated costs or savings. MoDOT is most interested in innovative solutions that will reduce purchase and/or maintenance costs while preserving or increasing unit efficiencies and effectiveness. Bidders may use the space below or provide additional attachments clearly marked "Innovative Solutions"

4.9 Other Submission Information: All bidders must provide additional information related to all aspects of the units offered for the purposes of review and evaluation. This shall include but not be limited to a complete build sheet per unit requested and all options as well as detailed drawings for each unit offered. This shall include but not be limited to the make and model for each component offered. This information shall be organized in the most efficient, clear and concise manner possible for review by the evaluators.

Paragraph Revised by Addendum 001

4.10 Finish: *Provide a detailed description of the cleaning and finishing process including the primer and paint brand and number as well as the process used for the finish of the various components of the Dump Truck. This may include but not be limited to the metal preparation and priming process, number of coats of paint and finish process.*

Paragraph Revised by Addendum 001

4.11. Operator Training:

Cost for Eight Hours of Training accordance with Section 2.2.7 \$ _____

VENDOR INFORMATION & PREFERENCE CERTIFICATION FORM

Vendor Information

All bidders must furnish **ALL** applicable information requested below

Vendor Name/Mailing Address: Email Address:	Vendor Contact Information (including area codes): Phone #: Cellular #: Fax #:									
Printed Name of Responsible Officer or Employee:	Signature:									
For Corporations - State in which incorporated:	For Others - State of domicile:									
If the address listed in the Vendor Name/Mailing Address block above is not located in the State of Missouri, list the address of Missouri offices or places of business: If additional space is required, please attach an additional sheet and identify it as Addresses of Missouri Offices or Places of Business.										
M/WBE INFORMATION: List all certified Minority or Women Business Enterprises (M/WBE) utilized in the fulfillment of this bid. Include <u>percentages</u> for subBidders and identify the M/WBE certifying agency: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;"><u>M/WBE Name</u></th> <th style="text-align: center; width: 33%;"><u>Percentage of Contract</u></th> <th style="text-align: center; width: 33%;"><u>M/WBE Certifying Agency</u></th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> If additional space is required, please attach an additional sheet and identify it as M/WBE Information		<u>M/WBE Name</u>	<u>Percentage of Contract</u>	<u>M/WBE Certifying Agency</u>						
<u>M/WBE Name</u>	<u>Percentage of Contract</u>	<u>M/WBE Certifying Agency</u>								

Preference Certification

All bidders must furnish **ALL** applicable information requested below

GOODS/PRODUCTS MANUFACTURED OR PRODUCED IN USA: If any or all of the goods or products offered in the attached bid which the bidder proposes to supply to the MHTC are not manufactured or produced in the "United States", or imported in accordance with a qualifying treaty, law, agreement, or regulation, list below, by item or item number, the country other than the United States where each good or product is manufactured or produced.	
Item (or item number)	Location Where Item is Manufactured or Produced
If additional space is required, please attach an additional sheet and identify it as Location Products are Manufactured or Produced.	
MISSOURI SERVICE-DISABLED VETERAN BUSINESS: Please complete the following if applicable. Additional information may be requested if preference is applicable. See below definitions for qualification criteria: Service-Disabled Veteran is defined as any individual who is disabled as certified by the appropriate federal agency responsible for the administration of veterans' affairs. Service-Disabled Veteran Business is defined as a business concern: <ol style="list-style-type: none"> a. Not less than fifty-one (51) percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than fifty-one (51) percent of the stock of which is owned by one or more service-disabled veterans; and b. The management and daily business operations of which are controlled by one or more service-disabled veterans. 	
<u>Veteran Information</u>	<u>Business Information</u>
Service-Disabled Veteran's Name (Please Print)	Service-Disabled Veteran Business Name
Service-Disabled Veteran's Signature	Missouri Address of Service Disabled Veteran Business

NOTICE OF COOPERATIVE PURCHASING

MODOT IS INTERESTED IN ASSISTING MISSOURI GOVERNMENTAL ENTITIES, ETC. IN PURCHASING EQUIPMENT, VARIOUS MATERIALS, AND SUPPLIES THAT MEET THE MISSOURI DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

Each bidder is asked to indicate below whether they would be willing to offer **Dump Truck(s)** listed in the attached "Request for Bid" for sale to these local political entities at the same bid price offered to MoDOT.

It is understood MoDOT will not issue purchase orders, accept delivery nor make payment for these items ordered by any of these agencies. It is further understood the price is based on the **Dump Truck(s)** meeting MoDOT specifications. Any added options, deletions, or extra freight costs would be negotiated between the local agency and the successful vendor.

Indicate below whether your company is willing to offer such cooperative purchasing for Missouri counties, cities or other political entities.

YES _____ NO _____

If the price varies throughout the state on MoDOT bids because of different delivery destinations, please indicate the price F.O.B. your location that would be offered as described.

F.O.B. Location _____

Indicate the deadline date that orders will be accepted. _____

COMPANY NAME _____

ADDRESS _____

E-MAIL _____

PHONE NUMBER _____

SIGNATURE _____

TITLE _____

DATE _____

ANTI-COLLUSION STATEMENT

STATE OF _____)

COUNTY OF _____)

SS.

_____ being first

duly sworn, deposes and says that he is _____
Title of Person Signing

of _____

_____ Name of Bidder

that all statements made and facts set out in the bid for the above project are true and correct; and that the bidder (The person, firm, association, or corporation making said bid) has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such bid or any contract which may result from its acceptance.

Affiant further certifies that bidder is not financially interested in, or financially affiliated with, any other bidder for the above project.

By _____

By _____

By _____

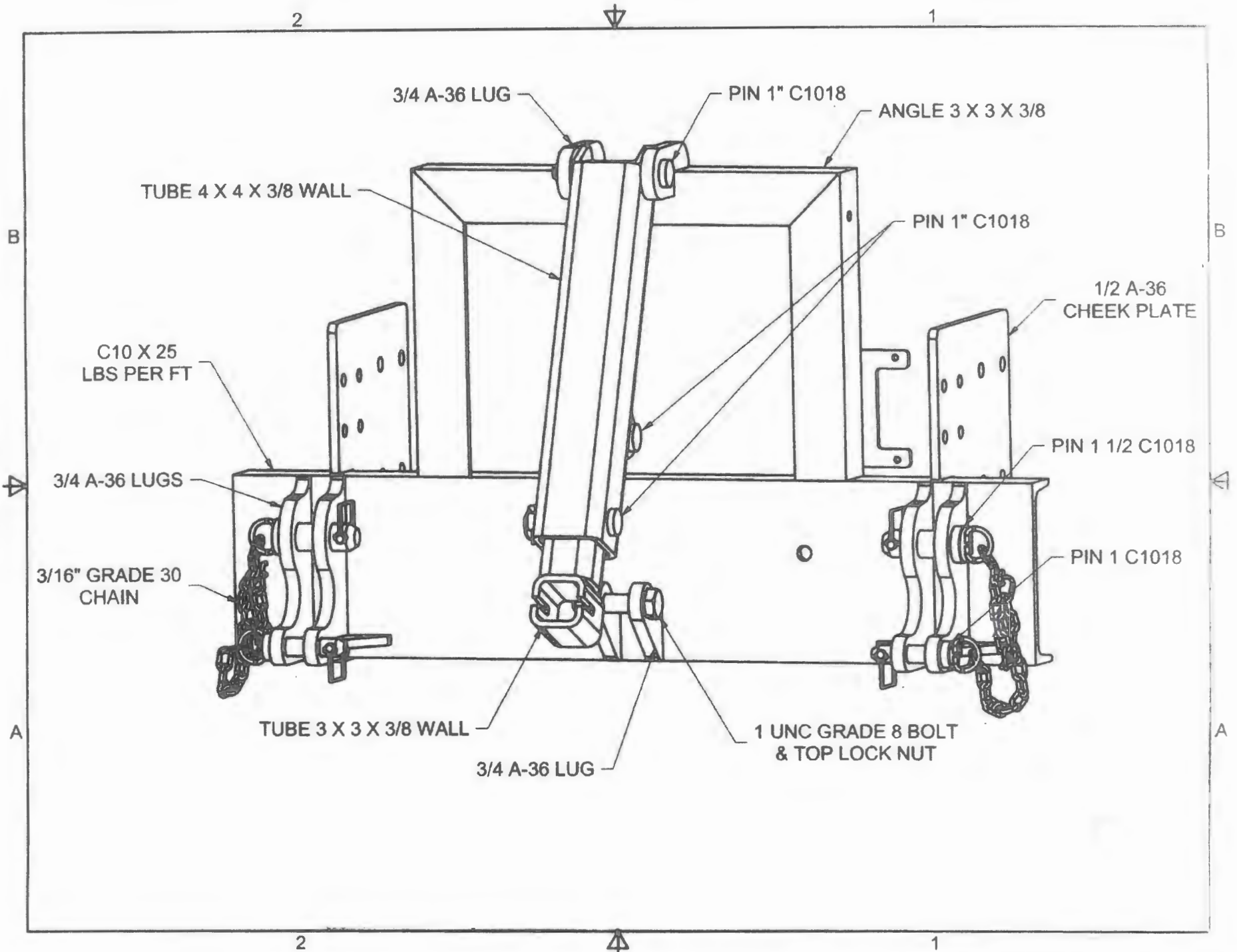
Sworn to before me this _____ day of _____, 20_____.

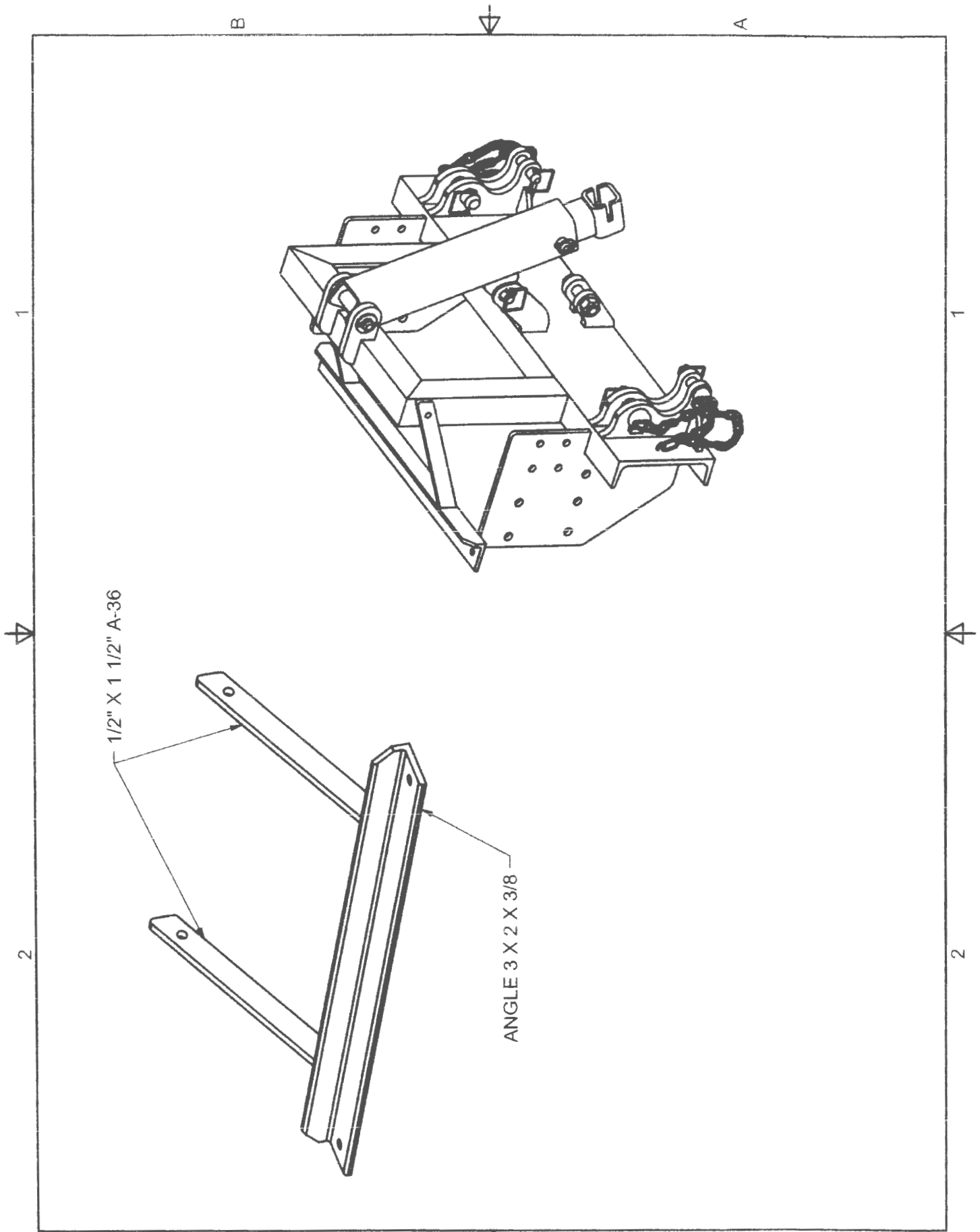
Notary Public

My Commission Expires _____

Front Plow Hitch Assembly

ATTACHMENT 5





Front Plow Hitch Assembly

ATTACHMENT 6

1/2" X 1 1/2" A-36

ANGLE 3 X 2 X 3/8

Missouri Department of Transportation
David B. Nichols, Director

573.751.2551
Fax: 573.751.6555
1.888.ASK MODOT (275.6636)

ADDENDUM 002
Dump Trucks
Request for Bid 3-140214RJ

Offerors should acknowledge receipt of Addendum 002 (TWO) by **signing and including it** with the original proposal. **The due date for receipt of bids is changed by this Addendum to February 21, 2014 at 2:00 p.m. local time.** The following changes shall be included as mandatory requirements for this solicitation. All other terms and conditions remain unchanged and in full force.

Bidders are encouraged to pay special attention to the revised requirements for bid submission in section 3.1.8.

All bid documents are included with this Addendum so bidders do not have to reference any previous documents.

Name and Title of Signer (Print or type)	Name and Title of Department Authority Rebecca L. Jackson, CPPO, CPPB Procurement Manager
Contractor/Offeror Signature <hr/> (Signature of person authorized to sign)	Department of Transportation <i>Rebecca L. Jackson, CPPO, CPPB</i> <hr/> (Authorizing Signature)
Date Signed:	Date Signed: <i>January 30, 2014</i>

Bidders are notified of the following changes.

- Revision of Paragraph 2.1.10;
- Revision of Paragraph 2.3.1h;
- Revision of Paragraph 2.3.6;
- Revision of Paragraph 3.1.8;
- Revision of Paragraph 4.12;
- Revision of Paragraph 2.1.16;
- Revision of Paragraph 2.3.5;
- Revision of Paragraph 2.6.3a;
- Revision of Paragraph 4.7.e;
- Revision of Paragraph 4.13

*Revisions and added language is denoted by ***bold italics***.



Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri.

www.modot.org

Additional questions received and responses are as follows:

- Q. Will we receive a list of omitted items on the original bid?
- A. No. All changes to the original specifications are noted by ***bold italics*** in Addendum 001 and now 002. There was one item deleted with Addendum 002 that is noted in the specifications (Section 2.3.6 – 19th bullet).
- Q. Clarify the points system as it relates to preferred and acceptable items?
- A. Preferred items could impact the 10% other response information evaluation criteria. Bidders may present multiple bid responses to include or exclude the preferred items.
- Q. Section 2.1.10 - Bidder must provide all applicable Material Safety Data Sheets (MSDS) and American Society for Testing and Materials (ASTM) documentation. This could be 10,000 pages. Providing exact vendors and products used to build a specific model could cause issues. Normally they are asked to certify EPA compliance and provide ISO 14000 certifications.
- A. This section is changed to reflect lubricant and fluid MSDS.
- Q. Section 2.2.6.1 Extended Warranty – In the addendum there is only one option to be priced. Is this all that is required and not what was in the original bid?
- A. Yes. Bidders are welcome to submit additional warranty options under the innovative solutions section of the bid in 4.8.
- Q. Section 2.2.7/2.2.7.1 – Was it our intent to include the technical training in the base bid unit price?
- A. Yes.
- Q. Section 2.3.1 d 7th Bullet – Headlights on with wipers is an option, if I exclude from quote, I reduce the price. Will I receive points for including the preferred option?
- A. See answer to the second question above.
- Q. Section 2.3.1 d 11th Bullet - I can provide fuses and circuit breakers. The circuit breakers obviously cost more but provide a benefit to MoDOT. Should I include the circuit breakers and take a hit on points for price and will I receive points for providing the circuit breakers which will offset the loss of price points?
- A. See answer to the second question above.
- Q. Section 2.3.1 d – Addendum 001 no longer requires the chassis manufacture to provide 2-way radio wiring in the base truck spec?
- A. This is correct.
- Q. Section 2.3.1 e 2nd Bullet – Two dry engine filters is preferred. This adds cost to include. How do you equate points value to overall benefit?
- A. See answer to the second question above.

- Q. Section 2.3.1h – Greaseable wheel bearings are unacceptable. I am asking for clarification and acceptance of the maintenance free unitized synthetic grease bearing and seal.
- A. The change is reflected in this addendum.
- Q. Section 2.3.1 j – If a fuel tank offers 70 gallons of usable fuel, will the vendor receive more points in the subjective evaluation?
- A. Answer is unknown until actual evaluation is performed. This issue may be more important to one evaluator versus another.
- Q. Can a print be supplied on the hydraulic reservoir?
- A. No. Submittals must comply with 2.3.5a.
- Q. Section 2.3.5 g.k. Could we get the different combinations that are needed?
- A. Base truck – front plow up/down – left/right, hoist. Optional Equipment – Wing/Scraper up/down – left/right. Third function wing – extend/retract. Tow Plow truck – in/out, up/down.
- Q. Quick disconnect coupler depressurization project. Will this be added to the base specification?
- A. See change to 2.3.5 reflected in this addendum.
- Q. Section 2.6.5 mm Spreader Control System – system shall be functionally equivalent. Does this mean if everything is not exactly the same that the bid can be thrown out?
- A. Functionally equivalent means it must provide the same functions and operations offered in the base bid system. This is an optional item that generally is not used as bid rejection criteria but functionality will play a role in the option selection decision.

Missouri Department of Transportation
David B. Nichols, Director

573.751.2551
Fax: 573.751.6555
1.888.ASK MODOT (275.6636)

ADDENDUM 001
Dump Trucks
Request for Bid 3-140214RJ

Offerors should acknowledge receipt of Addendum 001 (ONE) by **signing** and **including it** with the original proposal. The due date for receipt of proposals is **unchanged** by this Addendum. The following changes shall be included as mandatory requirements for this solicitation. Please see Attachment A, for further clarifications. All other terms and conditions remain unchanged and in full force.

Name and Title of Signer (Print or type)	Name and Title of Department Authority Rebecca L. Jackson, CPPO, CPPB Procurement Manager
Contractor/Offeror Signature <hr/> (Signature of person authorized to sign)	Department of Transportation <i>Rebecca L. Jackson, CPPO, CPPB</i> <hr/> (Authorizing Signature)
Date Signed:	Date Signed: <i>January 23, 2014</i>

Bidders are notified of the following changes.

- Revision of Paragraph 2.2.2a;
- Revision of Paragraph 2.2.3;
- Revision of Paragraph 2.2.4;
- Revision of Paragraph 2.2.6;
- Revision of Paragraph 2.2.6.1;
- Revision of Paragraph 2.2.6.2 deleted;
- Revision of Paragraph 2.2.6.3 deleted;
- Revision of Paragraph 2.2.7;
- Revision of Paragraph 2.2.7.1;
- Revision of Paragraph 2.3.1a;
- Revision of Paragraph 2.3.1b;
- Revision of Paragraph 2.3.1d;
- Revision of Paragraph 2.3.1e;
- Revision of Paragraph 2.3.1f;
- Revision of Paragraph 2.3.1g;
- Revision of Paragraph 2.3.1h;
- Revision of Paragraph 2.3.1i;
- Revision of Paragraph 2.3.1j;



Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri.

www.modot.org

- Revision of Paragraph 2.3.1k;
- Revision of Paragraph 2.3.2c;
- Revision of Paragraph 2.3.2f;
- Revision of Paragraph 2.3.2j;
- Revision of Paragraph 2.3.3a;
- Revision of Paragraph 2.3.3b;
- Revision of Paragraph 2.3.3h;
- Revision of Paragraph 2.3.3i;
- Revision of Paragraph 2.3.3j;
- Revision of Paragraph 2.3.3k;
- Revision of Paragraph 2.3.3t;
- Revision of Paragraph 2.3.3u;
- Revision of Paragraph 2.3.4b;
- Revision of Paragraph 2.3.4d;
- Revision of Paragraph 2.3.4h;
- Revision of Paragraph 2.3.4j;
- Revision of Paragraph 2.3.4k;
- Revision of Paragraph 2.3.4m;
- Revision of Paragraph 2.3.5d;
- Revision of Paragraph 2.3.5f;
- Revision of Paragraph 2.3.6;
- Revision of Paragraph 2.3.6b;
- Revision of Paragraph 2.3.6d;
- Revision of Paragraph 2.3.7a;
- Revision of Paragraph 2.3.7b;
- Revision of Paragraph 2.3.7o;
- Revision of Paragraph 2.4a;
- Revision of Paragraph 2.4c;
- Revision of Paragraph 2.4d;
- Revision of Paragraph 2.4e;
- Revision of Paragraph 2.4f;
- Revision of Paragraph 2.4g;
- Revision of Paragraph 2.6.1a;
- Revision of Paragraph 2.6.1b;
- Revision of Paragraph 2.6.1m;
- Revision of Paragraph 2.6.1o;
- Revision of Paragraph 2.6.2e;
- Revision of Paragraph 2.6.2k;
- Revision of Paragraph 2.6.2n;
- Revision of Paragraph 2.6.2v;
- Revision of Paragraph 2.6.2y;
- Revision of Paragraph 2.6.3a;
- Revision of Paragraph 2.6.4f;
- Revision of Paragraph 2.6.4h;
- Revision of Paragraph 2.6.4i;
- Revision of Paragraph 2.6.4k;
- Revision of Paragraph 2.6.4q;
- Revision of Paragraph 2.6.4r;
- Revision of Paragraph 2.6.5h;
- Revision of Paragraph 2.6.5r;
- Revision of Paragraph 2.6.5u;
- Revision of Paragraph 2.6.5b;
- Revision of Paragraph 2.6.5cc;
- Revision of Paragraph 2.6.5ff;
- Revision of Paragraph 2.6.5ii;
- Revision of Paragraph 2.6.5kk;
- Revision of Paragraph 2.6.5ll;
- Revision of Paragraph 2.6.5mm;
- Revision of Paragraph 2.6.5nn;
- Revision of Paragraph 4.1;
- Revision of Paragraph 4.6;
- Revision of Paragraph 4.7;
- Revision of Paragraph 4.10;
- Revision of Paragraph 4.11;
- Addition of Attachment 5;
- Addition of Attachment 6.

*Revisions and added language is denoted by ***bold italics***.

All accepted pre-approved equal requests received are addressed in this addendum. If a specific request is not noted, this means it was not approved. Bidders may submit items not approved in the base specification, under the Innovative Solutions Section 4.8 as an additional option but must not include said innovative solutions in the base/optional components offered.

All questions received in relation to the technical specifications are addressed within the technical specifications.

Additional generic questions received and responses are as follows:

Q: 3.1.7 – How does a bidder determine how to earn the maximum number of points for all the points shown other than base and option costs?

A: Most evaluation factors are self-explanatory. There is no way to guide a bidder on obtaining maximum points as some may be based upon competitor offerings.

Q: 3.1.7e – What is meant by other response information?

A: MHTC reserves the right to consider historic information and facts, whether gained from the bidder, question and answer conferences, references or other sources.

Q: 3.1.7 – Who are the evaluator(s) that determine the assignment of points?

A: This will vary with each purchase decision.

Q: 3.1.7.1 – Are prices for Other Options included in the formula or is just the pricing for the main base items?

A: The cost of the base unit and chosen options will be used in the cost calculation for the purpose of determining low bidder.

Q: 4.2 – This section shows maximum percentage increases for the five renewal periods yet 2.11.3 escalation clause requires bidder to provide written request and documentation justifying the need for a price increase. Section 4.2 needs to be explained.

A: MHTC commonly requests the same form of documentation for renewal pricing changes to support said changes. Price increases at time of renewal are not arbitrarily accepted and are a part of the decision by the MHTC on whether or not to renew any contract. Price escalations are offered to provide all bidders with assurances they do not have to consider all pricing risks to simply offer a bid. Acceptance of any price increase is at the sole discretion of MHTC and must be justified by the vendor.

Q: Is the MSRP discount required at bid submittal or after award?

A: MSRP discounts must be submitted with the bids.

Q: 4.9 – Other Submission Information: Does the level of detail provided here impact the ten points available under “Other Response Information?”

A: It could.

Q: Is the body builder required to be registered with the Secretary of State of the State of Missouri?

A: As stated, Contractors must be registered with the Secretary of State.

Q: Vendor Information and Preference Certification Form – Is the body builder required to complete this form?

A: The Bidder must complete this form but the information must include any information related to products provided by sub-contractors (i.e. body builders and others).

MISSOURI DEPARTMENT OF TRANSPORTATION
GENERAL SERVICES
830 MoDOT Drive
Jefferson City, MO 65109

REQUEST NO.	3-140214RJ
DATE	January 31, 2014
PAGE NO.	1
NO. OF PAGES	54

SEALED BIDS, SUBJECT TO THE ATTACHED CONDITIONS WILL BE RECEIVED AT THIS OFFICE UNTIL

2:00 pm, Local Time, February 14, 2014

AND THEN PUBLICLY OPENED AND READ FOR FURNISHING THE FOLLOWING SUPPLIES OR SERVICES.

BIDS TO BE BASED F.O.B. MISSOURI DEPARTMENT OF TRANSPORTATION

Submit net bid as cash discount stipulations will not be considered

Various MoDOT Locations

DEFINITE DELIVERY DATE SHOULD BE SHOWN. THE BIDDER MUST SIGN AND RETURN BEFORE DATE AND TIME SET FOR OPENING.

BUYER: Rebecca L. Jackson, CPPO, CPPB
BUYER EMAIL:
Rebecca.Jackson@modot.mo.gov

BUYER TELEPHONE: 573-526-7930

SUPPLIES OR SERVICES

DUMP TRUCKS

To establish a contract to furnish "DUMP TRUCKS" with an effective date of Notice to Proceed and ending in one year with the option to renew for five additional one year periods in accordance with the attached pages.

Schedule of Events:

Pre-Bid Conference – January 13, 2014 – 8:30 a.m to 11:30 a.m. at 830 MoDOT Dr, Blue Conference Room, Jefferson City, MO 65109

Pre-Approved Product Request Deadline - January 17, 2014 before 2:00 p.m. local time.

Issuance of Addendum - Anticipated no later than January 24, 2014

Last Day for Vendor Questions – January 28, 2014 no later than 2:00 p.m. local time.

Bids Due – February 14, 2014 no later than 2:00 p.m. local time.

Return sealed bid to the address shown at the top of this page.

(SEE ATTACHED FOR TERMS, CONDITIONS, AND INSTRUCTIONS)

In compliance with the above Request For Bid, and subject to all conditions thereof, the undersigned bidder agrees to furnish and deliver any or all the items on which prices were bid within the timeframe specified herein, after receipt of formal purchase order.

Date: _____
Telephone No.: _____
Fax No.: _____
Federal I.D. No. _____
Email Address: _____

Firm Name: _____
Address: _____
By (Signature): _____
Type/Print Name _____

Is your firm MBE certified? Yes No

Title: _____
Is your firm WBE certified? Yes No

1. INTRODUCTION AND GENERAL INFORMATION

1.1 Introduction:

- 1.1.1 This Request for Bid (RFB) seeks bids from qualified organizations to provide **DUMP TRUCKS** to the Missouri Highways and Transportation Commission (MHTC) and Missouri Department of Transportation (MoDOT). The contract period shall be from the Notice to Proceed for one year with the option to renew for five additional one year periods. Each bid must be in a sealed envelope, be mailed or delivered by courier to the RFB Coordinator at the below listed address, on or before the date and time listed herein for receipt of bids/proposals. All questions regarding the RFB shall be submitted to the RFB Coordinator. **Bids must be returned to the office of the RFB Coordinator no later than 2:00 p.m., Central Time, February 14, 2014.**

RFB COORDINATOR:

Rebecca L. Jackson, CPPO, CPPB

Procurement Manager

Missouri Department of Transportation, General Services

830 MoDOT Drive

(physical address, zip 65109)

P.O. Box 270

(mailing address, zip 65102)

Jefferson City, MO 65109

PHONE: 573-526-7930

FAX: 573-526-1218

EMAIL: Rebecca.Jackson@modot.mo.gov

1.2 General Information:

- 1.2.1 This document constitutes an invitation for competitive, sealed bids for the procurement of **DUMP TRUCKS** as set forth herein.
- 1.2.2 Organization: This RFB is divided into the following parts:
- 1) Introduction and General Information
 - 2) Scope of Work
 - 3) Bid Submission and Evaluation
 - 4) Pricing Page(s)
 - 5) Vendor Information and Preference Certification Form
 - 6) Notice of Cooperative Purchasing
 - 7) Anti-Collusion Statement
 - 8) Terms and Conditions

2. SCOPE OF WORK

2.1 General Requirements:

- 2.1.1 The bidder shall provide **DUMP TRUCKS** on an as needed, if needed basis for the MHTC and MoDOT, in accordance with the provisions and requirements stated herein and at the sole satisfaction of MoDOT.
- 2.1.2 MoDOT reserves the right to obtain “like or similar” products as specified herein from other manufacturers, exclusive of the contract, when use of such products is deemed in the best interest of MoDOT.
- 2.1.3 Unless otherwise specified herein, the Bidder shall furnish all material, labor, facilities, equipment, and supplies necessary to provide the deliverables/services required herein.
- 2.1.4 MoDOT reserves the right to reject any or all bids, and to accept or reject any items thereon, and to waive technicalities. In case of error in the extension of prices in the bid, unit prices will govern.
- 2.1.5 A MoDOT Purchase Order will be issued identifying the truck configuration for all units purchased.
- 2.1.6 The outfitter or installer of all non-chassis manufacturer installed components shall hereafter be referred to as the “Body Builder.”
- 2.1.7 Units shall be designed for material hauling, trailer towing, and operation of hydraulically controlled snow plows and a material spreader.
- 2.1.8 Units shall comply with all vehicle weight, dimension, and safety requirements of the State of Missouri.
- 2.1.9 Units shall be complete with all standard equipment, plus any optional or special equipment to meet the minimum specifications.

Paragraph Revised by Addendum 002

- 2.1.10 Bidder must provide all **lubricants and fluids** Material Safety Data Sheets (MSDS) and American Society for Testing and Materials (ASTM) documentation.
- 2.1.11 All items not specifically described in the specification, but necessary for the proper and efficient operation of each unit, must be supplied and included in the bid price and described in the bidders response.
- 2.1.12 Each unit must be equipped with all safety components required by the current Federal Motor Vehicle Safety Standards.
- 2.1.13 All units must be electronically governed at a gross speed of 65 miles per hour.
- 2.1.14 Engine idle shutdown timer shall be programmed to shut down engine after 10 minutes of idle time with park brake set. MoDOT shall have the ability to adjust the governed speed intervals.

Paragraph Revised by Addendum 001

- 2.1.15 ***Any reference to stainless steel throughout the specification shall mean grade 201 or 304.***

Paragraph Revised by Addendum 002

- 2.1.16 ***Cab/chassis builder will deliver the unit to the body builder with a minimum of 25 gallons of fuel. A minimum of a quarter tank of fuel shall be maintained in the unit at all times while in the possession of the body builder and until final delivery.***

2.2 Common Requirements:

2.2.1 Pre-Approved and/or Approved Equal Acceptance Process:

- a. Any notation throughout the following specifications that states “**Pre-Approved Equal and/or Equivalent**” requires the bidder to submit a request for acceptance of the item for approval no later than **2:00 p.m., Central Time, January 17, 2014**. All Pre-Approved requests must be submitted to Rebecca Jackson at the above address. These requests may be in the form of a hard copy, email or facsimile. Bidder is responsible to ensure receipt of any request. Acceptance of the Pre-Approved Equal and/or Equivalent product will be issued in an addendum allowing all bidders the opportunity to bid the same item.
- b. Any notation of “**Equal or Equivalent**” allows the bidder to submit the substituted item in their bid without pre-approval. MoDOT at its sole discretion will determine if the item submitted is an equivalent resulting in a responsive bid. Items determined not to be an equivalent could render a bidder’s response as non-responsive. Bidders must identify any time an item included in the bid is an equivalent as required on the pricing page. MoDOT reserves the right to request additional information if required for equivalent determination any time before or after contract award. The following actions may be necessary to evaluate equal and/or equivalent submittals:
 - Demonstration of a typical and/or similar same model machine and/or component shall be provided to MoDOT for up two working days of unimpeded evaluation. A physical use demonstration may be conducted if applicable at a MoDOT Maintenance Facility. Equipment will be operated by MoDOT personnel.
 - Submittal of a contact list including the name, address, and telephone number of other customers using the same equipment within the State of Missouri that can be contacted and a visit arranged upon request.
 - Bidder may be required to facilitate manufacturing facility inspection tours during normal working hours.
 - All costs associated with providing any or all of these items are the sole responsibility of the bidder.
- c. References throughout the bid document requiring MoDOT Representative approval shall mean a request must be submitted in writing to the Central Office General Services Fleet Manager for review, acceptance and approval prior to implementation.

Paragraph Revised by Addendum 001

2.2.2 Manuals and Service publications:

- a. A complete hard copy set of Operator Manuals shall be provided with each delivered unit *at the time of delivery*.
- b. On-Line service system access shall be provided to address all major components identified in sections 2.3 through 2.6 below. Technical information provided shall be comparable to those available to dealerships.
- c. At a minimum, engine, emissions, transmission, chassis, electrical system and Anti-Lock Braking System (ABS) diagnostic software must be provided.
 - Diagnostic software must be provided at fleet pricing to allow MoDOT to acquire the needed software.
 - Software shall be compatible with the following equipment configurations:
 - Standard Laptop (minimum requirements): Windows 7, Windows Internet Explorer 8 (IE8), 32 bit machine, 4 gig RAM.
 - Standard Windows Tablet (minimum requirements): Windows 8, Windows Internet Explorer 10 (IE10), 2 gig RAM.
- d. Bidder must provide access to on-line parts catalog system, comparable to those available to dealerships, with accessibility for 150 concurrent users. Parts system shall be complete for all OEM-installed components. Catalogs shall be fully illustrated. MoDOT must pre-approve on-line systems.
- e. Bidder must provide one hard copy parts manual per delivered unit for all Body Builder installed components including but not limited to, the hydraulic system, spreader control system, warning light system, material spreaders, and all plows. An on-line version may be substituted in lieu of hard copy. The manual shall meet the following minimum requirements:
 - Shall be vehicle identification number (VIN) specific.
 - Shall include make and model of all Body Builder-installed components.
 - Shall include complete, fully illustrated parts listing for all Body Builder-installed components.

- Each add-on electrical accessory circuit shall have its own circuit diagram, showing the complete power and ground sides, routing, wire color and gauge, pin numbers, switches, breaker or fuse location and/or number, and specific ground point locations.
 - Each add-on air powered accessory circuit shall have its own circuit diagram, showing valve location, air-line color, air-line size, and routing.
 - A complete hydraulic schematic of all accessory circuits, including flow specifications and pressure settings for relief valves on each circuit.
 - For each hydraulic hose installed, the diameter and overall length of the hose, including both fittings, and the type and size of each fitting.
- f. Each delivered unit shall include a factory line sheet listing all chassis component codes as installed by the bidder. An electronic or hard copy line sheet is acceptable. An electronic version must be submitted in a platform or version viewable and readable by MoDOT.
- g. Each delivered unit shall include a comprehensive list of all fluids, lubricants, coolants, etcetera required for the maintenance of the dump truck. This list should be provided in the form of a sticker located in the interior rear of the cab.

Paragraph Revised by Addendum 001

- 2.2.3 Finish: Trucks purchased from the resulting contract are for use in roadway maintenance activities including but not limited to snow removal, asphalt maintenance, aggregate material transport, etcetera. Unless otherwise specified, all equipment and all components, with the exception of stainless steel products, shall be thoroughly cleaned, **prepped, primed** and completely finished with a high quality corrosion resistant **paint or powder coat**. **Cab and dump body color** shall be DuPont N2065-Yellow **or Sikkens Akzo Nobel School Bus Yellow 4421**. **Chassis and frame components shall be black. Moldboards shall be orange or yellow, and attaching brackets shall be black.** Finish shall be smooth, shiny, and free of runs, overspray, and/or other defects. No bare ferrous metal components, with the exception of stainless steel products, shall be visible on any OEM and/or Body Builder-installed components.

Paragraph Revised by Addendum 001

- 2.2.4 Pilot Truck Build and Acceptance: After issuance of the first purchase order **for the applicable chassis and body builder combination**, bidder is required to build a pilot truck for use in specification compliance throughout the life of the contract. **Only one pilot truck per chassis and body builder combination is required under the terms of the contract.**
- a. Bidder shall complete the cab and chassis within 120 days of PO issuance. Bidder shall notify MoDOT upon completion of the pilot chassis. Bidder may be required, at MoDOT's discretion, to make arrangements for an inspection of the chassis at the point of manufacture. Discrepancies and/or findings of non-compliance will be listed and must be corrected and/or addressed to the satisfaction of the MoDOT Representative before the rest of the chassis are built.
 - b. Within 60 days after receipt of cab and chassis, the Body Builder shall notify MoDOT of the pilot truck completion, including all Body Builder installed components in the proposed locations. Within two weeks of notification, MoDOT shall complete unit inspection. Discrepancies and/or findings of non-compliance will be listed and must be corrected and/or addressed to the satisfaction of the MoDOT Representative before the rest of the trucks are built or outfitted.
 - c. All costs associated with all pilot inspections, including travel, lodging, and food, for six (6) MoDOT employees must be included in the bid price. In the event that multiple reviews are required prior to final approval of the pilot truck, the costs to MoDOT for those trips are the responsibility of the Bidder as well.
 - d. Any manufacturing specification changes during the pilot inspections will be documented and approved by MoDOT and vendor. Changes must be implemented in the manufacture of this vehicle prior to the pre-delivery inspection and any that are not are subject to the pre-delivery inspection liquidated damages.
- 2.2.5 Pre-Delivery Inspections:
- a. The Bidder and/or Body Builder shall do a thorough pre-delivery inspection of each completed truck to include the chassis and all installed components and snow equipment. Inspection shall be customized to reflect snow removal truck requirements, including but not limited to: hydraulic system individual pressure settings, hydraulic controls operation, spreader control system operation, wing plow and underbody scraper operation, dump bed and tailgate operation, tarp system, warning lights, hydraulic hose and electrical wire routing and

protection. Inspection results shall be recorded on a pre-printed form, which shall include the last 8 digits of the truck VIN. A copy of the completed inspection form signed and dated by the inspector shall be placed in the left door pocket of each delivered unit.

- b. MoDOT reserves the right to complete a thorough pre and/or post-delivery inspection of each unit at the final assembly point and/or MoDOT delivery point. This inspection will include the chassis and all installed components and snow equipment. Bidder shall provide a production and planned delivery schedule to accommodate plant inspections and deliveries to districts.

Paragraph Revised by Addendum 001

2.2.6 *Warranty*

- a. *Upon contract award, bidder agrees to provide bumper to bumper warranty on all components for a minimum of two years or 50,000 miles whichever occurs first. A copy of the warranty shall accompany the bid. Warranty coverage shall include costs of transporting the unit to and from servicing shop, when outside a 100 mile radius of the delivery point. The bidder shall be responsible for pickup and delivery (including fuel) of any units that are found to have defects within the first ninety (90) days of delivery to MoDOT and have to return to dealer for repairs. A breakdown of the standard manufacturer's warranty when it is in excess of the 2 years requested shall be listed for each component of the cab and chassis and included in the manual set.*
- b. *MoDOT is interested in value added solutions in relation to administration of vehicle warranty to ensure units purchased under this contract will be repaired and returned to the roadway as quickly as possible. Such innovative solutions could include more than an in-house warranty program and all bidders are encouraged to submit options for review and evaluation.*
- c. *Truck Chassis: The chassis manufacturer shall guarantee to furnish all warranty services gratis at franchised dealers within the State of Missouri or other adjoining states.*
- d. *Snow Removal Equipment: From the date that MoDOT assigns this equipment to its requesting location, the manufacturer and/or its representative shall provide a no-deductible, all-inclusive warranty (less normal maintenance) for a minimum of two years.*
- e. *Body Builder Manufactured and Installed Components: From the date that MoDOT assigns the completed truck to its requesting location, the Body Builder shall provide a no-deductible, all-inclusive warranty (less normal maintenance) guaranteeing the design, material, installation, and workmanship of the completed unit and all installed components for a minimum of two years. The Body Builder shall provide a list of authorized repair stations that will perform warranty repairs on all Body Builder-installed components on the truck. These stations, shall handle all associated billing directly with the Body Builder.*
- f. *In-House Warranty: Bidder shall establish and honor an in-house warranty program. This program shall cover the entire truck as delivered, including the chassis and all Body Builder-installed components and snow equipment. The in-house warranty shall remain in effect for the warranty periods stated above. There shall be no minimum price restriction for in-house warranty repairs. Bidder shall reimburse all warranty parts supplied by MoDOT. Warranty repair labor provided by MoDOT shall be reimbursed by bidder. Credit is unacceptable. Bidder shall submit an hourly labor rate based on fair market value with the bid. Bidder is responsible for all shipping costs of any warranty parts whether shipped to or from MoDOT. In the event of an in-house warranty charge dispute, bidder shall work with the MoDOT Representative to resolve the dispute.*

Paragraph Revised by Addendum 001

2.2.6.1 *Extended Warranty Option #1: 5 Year/80,000 mile/3600 Hour: Engine, & Engine/Emission Electronics including Fuel System and A/C.*

Paragraph Revised by Addendum 001

- 2.2.7 *Training - Operator Training: Bidder shall provide eight (8) hours of Operator training at any MoDOT location as shown in Attachment 1. Training shall include but not be limited to identification of all cab, chassis, body and optional unit features as well as standard preventative maintenance procedures for all unit components. Costs for this training shall be priced separately on the bid pricing page and shall not be included in the dump truck cost. Training shall meet the following requirements:*

- a. Content shall be tailored to the components of the delivered unit(s). Course shall include hands-on training to reinforce course content.
- b. Trainer must have experience in the area of servicing proposed truck components.
- c. Cab and Chassis system training shall include but not be limited to operational training of the engine, electronic controls, fuel system, emissions, electrical system controllers and automatic transmission.
- d. Body Builder installed component trainings shall include but not be limited to operational training of the hydraulic, electrical accessories, spreader control and warning light systems.
- e. ***Bidder is responsible for all costs associated with training and materials for a maximum number of 20 trainees per training session.***

2.2.7.1 **Technical Training:** Annually, bidder shall provide 24 hours of Technical training in each assigned unit location within each district delivery location as shown in section 2.7.2. Training shall include but not be limited to, major unit components such as engine, transmission, electrical, drive line, emissions, hydraulics and other areas of emphasis as defined by the MoDOT Representative. Bidder is responsible for all costs associated with training and materials for a maximum number of 30 trainees per location and/or 15 per twelve hour session. ***Cost to be included in the base truck bid amount.***

2.3 Tandem Axle Technical Specifications: The following technical specifications are for the manufacture of a 58,000 pound (lb.) Gross Vehicle Weight Rating (GVWR) Set Forward Tandem Axle Dump Truck with two dump bed configurations to accommodate a sixteen foot spreader.

2.3.1 Cab and Chassis: All specified equipment is to be Original Equipment Manufacturer (OEM) installed, either as standard equipment, a line installed option or factory authorized dealer standard option (DSO) or special equipment (SE) installation unless otherwise specifically stated.

Paragraph Revised by Addendum 001

- a. Cab
 - The design shall be the manufacturers' largest standard design, to accommodate two employees, shall be suitable to provide adequate headroom with the specified air-ride seats and other cab installed equipment.
 - Interior trim and insulation package shall include a full headliner and back-of-cab trim panel(s) offering maximum sound reduction.
 - Pedals suspended from the cowl are preferred. Floor mounted pedals are not preferred.
 - Front grille shall be stationary and mounted in a manner to clear front snow plow hitch.
 - Horns shall be air, mounted top-of-cab with snow covers, mounted under hood ***or cab.***
 - Driver window may be manual and passenger window shall be power. Unit must have power locks on both doors.
 - Unit shall have interior sun visors on left and right side of windshield.
 - Grab handles and arm rests must provide the ability to maintain three-points of contact when entering and exiting the cab.
 - Mirrors shall be west coast breakaway type, left and right, powered and heated, set for 102-inch trailer, 7-inch by 16-inch. Integral heated convex, left and right, below primary west coast mirrors, ***approximately*** 8-inch round or ***approximately*** 6-inch by 6-inch rectangular.
 - Heater, air conditioner, and defroster shall be factory-installed, highest British Thermal Unit (BTU) capacity available. Prefer side window defrosters to operate with the windshield defroster system and heater air selection for outside air source or in-cab air re-circulation. Prefer air conditioning system to have self-diagnostic capabilities.
 - Floor covering shall be heavy-duty rubber and/or vinyl with sound deadening backing covering entire floor, dark in color.
 - Driver and passenger seats shall be vinyl covered high-back air suspension with 3-point seat belts, tethered to allow free suspension movement. Each shall have an adjustable inboard armrest. National Cush-N-Aire Hi-Bac 195, ***Bostrom Talladega 915 High Back Air Suspension or Air-National 2000 (Hi Back) Seats.***
 - Seat belts shall be a highly visible color such as red or orange.
 - Steering shall be factory installed tilt column with the smallest diameter steering wheel available for the specified front axle.

- Unit must include map pockets in both doors or other large storage area suitable for manuals and other incidentals. Must not be mounted to or part of back-of-cab interior liner.
- Overhead console is required and must be suitable for installation of a two-way radio.
- Unit must include factory installed air ride rear cab suspension.
- Unit must include a factory installed bug and stone screen behind the grille.
- Unit must include a cab fresh air filter to reduce exposure to particulates.

Paragraph Revised by Addendum 001

b. Chassis:

- There shall be a minimum of 13-inches ground clearance under any frame mounted components, such as the fuel tank and/or its mounting brackets, steps, air tanks, battery box, etcetera.
- Battery Box must not interfere with body builder installed equipment. Spliced cables are not acceptable.
- First cab step height shall not exceed 18-inches from the ground. All steps shall be a minimum of **4.5 - inches wide**. Steps are required on both sides of unit. MoDOT Representative must pre-approve step configuration **after contract award and prior to completion of the pilot truck**.
- Power steering must be integral hydraulic, gear. Ram system is not acceptable.
- Wheelbase shall be determined between the bidder and Body Builder collaboration using the guidelines in section 2.3.3 and 2.3.4 of this request.

c. Brakes:

- Must be a full dual air system with four-channel anti-lock system, rated at or above axle GVWR requirements.
- Compressor shall be 13.2-Cubic Feet per Minute (CFM) or greater.
- Shall be heated air dryer.
- Air dryer must be easy to access and service. Prefer ADIP style or spin on cartridge.
- Front and rear brakes shall be self-adjusting and rated at or above axle GVWR requirements.
- All drive wheel positions shall be equipped with a parking brake.
- Brake systems on the rear drive axle must be located inside the rear tire envelope to prevent any interference with pull-type asphalt spreader rollers.
- Truck shall be equipped to pull a four-wheel trailer with air brakes. Truck shall have a hand control valve, tractor protection valve, and trailer anti-lock provisions. Air-lines must be run to the rear of the frame rails for glad-hand installation by Body Builder.
- Installation of the air tanks and/or dryer shall not inhibit the installation of snow removal equipment anywhere underneath the truck behind the cab for a clear frame configuration.

Paragraph Revised by Addendum 001

d. Electrical:

- Alternator shall be 160-ampere (amp) minimum and capacity shall be rated to handle all chassis and body building requirements.
- Unit shall include three 12-Volt combined 1,950-cold cranking amp (CCA) maintenance free batteries.
- Unit shall include one 12-Volt accessory power outlet in the cab.
- Gauges shall be three-way type; visual, light, and buzzer, dash mounted, easy operator viewing: Oil Pressure, Coolant Temperature, Air Pressure, Speedometer, Transmission Temperature, Ammeter or Voltmeter, Fuel, Tachometer, and Hour meter. The Hour meter must be OEM electronic and provide true engine running hours of operation.
- Low Coolant Level Warning shall be an audible **buzzer and lamp warning**.
- Ignition Switch shall be an automotive key with accessory position. Two sets of keys shall be provided with each unit. Each key set shall have a key tag identifying the MoDOT number, which will be supplied at the time of order.
- Windshield wiper system shall be electric with intermittent operation and electric washer pump. Wipers should be forced to the slowest intermittent speed if left on for a predetermined length of time with the parking brake set. **Headlights which turn on automatically when the wipers are on are preferred.**
- Prefer flush mounted cab marker lights. Light Emitting Diode (LED) is required.

- Each unit shall include an AM/FM stereo with speakers.
- Courtesy lamps shall be OEM interior lights to fully illuminate interior of cab and cab step areas.
- Electrical protection re-settable circuit breakers *are preferred. Fuses are acceptable.*
- Turn signal switch shall be self-canceling.
- Snow plow light connections shall be a factory installed harness with connector for installation of snow plow lights. Harness must provide circuits for high and low beam headlights, marker lights, and turn signals. A factory installed, dash mounted switch shall switch operation from the OEM headlights to the snow plow light headlights. *Prefer marker* lights and turn signals function on plow lights regardless of the dash switch position.
- Trailer light Connection shall be a factory installed 7-way connection socket (J560), anti-lock brake compatible, with sufficient cable to reach the rear of the frame. Socket must be wired for turn signal operation independent of brake lamps.
- The ground speed harness shall be factory installed to provide Body Builder connection point for ground speed signal. Body Builder connection point shall be located inside the cab.
- A power distribution box shall be mounted to the inside rear wall of the cab. This box shall provide an interface point for the following chassis supplied circuits: circuit breaker protected, switched battery power and ground speed signal. Battery power circuits shall be protected by a resettable circuit breaker located inside same box. It is acceptable to have resettable circuit breakers at the origin of the battery circuits, but the resettable circuit breaker at the point of origin must be of higher amperage than the ones inside the power distribution box.

Paragraph Revised by Addendum 001

- e. Engine: Shall be a standard production; turbo charged; governed; diesel fueled; a minimum gross torque of 1,150 pound-feet, and a minimum Society of Automotive Engineers (SAE) gross horsepower of 345 when operated within a governed speed as recommended by the engine manufacturer.
- Drain plug must be magnetic.
 - *Prefer the use of* two dry air filters meeting engine manufacturer optimum filtration requirements.
 - Antifreeze shall be extended life, testing to a minimum of minus ~~34~~-degrees Fahrenheit. Meeting the manufacturers' recommendations.
 - Radiator shall be the largest capacity available for provided engine and chassis combination. Radiator shall have an accessible drain petcock. If OEM offers a corrosive resistant radiator coating or treatment, it must be provided.
 - Fan shall be air operated positive on-off temperature controlled clutch type with automatic mechanical failure lockup (on) provision. Viscous drives and electric clutches not acceptable.
 - Engine warning and shut down system shall include an audible buzzer and lamp warning for high engine temperature, low coolant and low engine oil pressure with automatic engine shut down feature.
 - All trucks shall be ordered with an engine crankshaft front drive adapter plate suitable for installation of a Spicer No. 1310 accessory drive connector with clearance provisions for a crankshaft driven, front PTO driveshaft. Driveshaft may run through frame cross members, prefer it does not pass through the radiator, charge air cooler, or air conditioning condenser.
 - Engine block heater shall be a 120-Volt and *1,000-Watt* mounted in an easily accessible location, near the driver door and in a protected from outside elements. Receptacle shall be easily accessible near the driver's door.
 - Unit must include *an in cab air restriction indicator.*

Paragraph Revised by Addendum 001

- f. Exhaust:
- Exhaust stack shall be right-hand vertical, with sweep elbow to direct exhaust away and above cab. If the diesel particulate filter (DPF) is part of the vertical stack, the clearance to the dump body must be pre-approved by the MoDOT Representative *after contract award and prior to the pilot truck build.*
 - Exhaust stack must be shielded the full height of the cab.
 - If flex tubing is used the tubing and clamps shall be stainless steel.
 - Exhaust system design must incorporate a clear frame configuration whereby components shall not hinder the installation of under-frame snow removal equipment anywhere behind the cab.

Paragraph Revised by Addendum 001

g. Frame:

- Single rail system is preferred. Double rail systems must feature anti-corrosive protection.
- Strength must be 120,000 pounds per square inch (psi) minimum.
- Resisting bending movement (RBM) shall be a minimum of **2,470,000** inch pounds minimum.
- ***A 20-inch integral frame extension in front of grille with a continuous cross section.***
- ***Prefer unit cost does not*** include a factory front bumper.
- Spliced after-frame (AF) extensions are not acceptable. Frame configuration to be determined by body builder and bidder.
- Unit shall include factory installed two front and two rear tow hooks located on the outside end of the frame rails. Each tow hook shall meet or exceed unit GVWR.

Paragraph Revised by Addendum 001

Paragraph Revised by Addendum 002

h. Front Axle and Suspension:

- Axle shall be standard manufacture 18,000-lb. rated capacity.
- Axle setting shall be set forward only. Axle set-back not to exceed 32-inches measured from the grille.
- ***Prefer wet lubrication Stemco seals, maintenance free sealed unitized wheel bearing or equivalent. Greaseable wheel bearings are unacceptable.***
- Suspension shall be parabolic or variable-rate springs, rated to axle capacity with highest deflection rate available.

Paragraph Revised by Addendum 001

i. Rear Axle and Suspension:

- MoDOT prefers the most comfortable operator ride whether loaded or unloaded. Air ride suspensions are not preferred. Identified acceptable suspensions include but are not limited to TufTrac, Camel Back, Hendrickson HMX.
- ***Axle shall be standard manufacture 40,000-lb. minimum rated capacity with power divider.***
- Drain plug shall be magnetic.
- Gear ratio to provide adequate grade ability and rear wheel torque, and provide sustained 65 miles per hour (MPH) highway cruise speed at GVWR.

Paragraph Revised by Addendum 001

j. Fuel System:

- Fuel Tank shall be a single left side mounted 70-gallon minimum capacity ***and/or a 65-gallon usable capacity*** non-polished aluminum tank. Fuel and diesel exhaust fluid (DEF) tank placement shall not interfere with any underbody or wing plow option. If any portion of tank is used as a step, it shall have a non-skid grating. Tank shall include a drain port with plug
- Fuel maintenance system shall include a fuel-water separator, with thermostatic fuel temperature controlled electric heater, and fuel filter with restriction and change indicator. Components shall be factory installed ahead of fuel primer and other fuel filter(s).

Paragraph Revised by Addendum 001

k. Transmission:

- Shall be an Allison six-speed automatic transmission.
- Shifter shall be a dash mounted. Lever style with 'Mode' select button ***is preferred.***
- Electronic Control Unit (ECU) shall be mounted inside the cab ***or under the hood on the firewall in a protected casing.***
- Fluids shall be manufacturer approved synthetic transmission fluid.
- Shall utilize extended heavy-duty type oil cooler.
- Unit shall include a magnetic drain plug or magnet in oil pan.

l. Wheels and Tires:

- Front wheels shall be heavy service 9-inch steel hub piloted Budd style 10-bolt. White powder coat finish.

- Rear wheels shall be heavy service 8.25-inch steel hub piloted Budd style 10-bolt. White powder coat finish.
- Wheel guards shall be for metric hub-piloted wheels with flanged mounting nuts and installed between hub and wheel, and between dual wheels.
- Front and rear tires shall not be speed restricted below 65 mph. Front tire size shall be 315/80R22.5, load rating “L”, and 20 ply rating. Rear tire size shall be 11R22.5, load rating “G”, and 14 ply rating. Rear tires shall be on and off road tubeless mud and snow tread.

2.3.2 Body Builder:

a. Threaded Fasteners:

- All threaded fastener components (bolts, washers, nuts) with a diameter designation greater than or equal to SAE ½-inch shall be minimum grade eight composition. Nuts shall be all metal self-locking, lock washers are not acceptable. All bolts 5/8-inch and larger shall be flange head. A minimum of two bolt threads must extend through all nuts. All components shall have grade identifier marks and a registered manufacturer's logo.
- All threaded fastener components (bolts, washers, nuts) with a diameter designation greater than or equal to SAE ¼-inch up to less than SAE ½-inch shall be minimum grade five composition. Nuts shall be self-locking, either poly-lock or all metal. Lock washers are not acceptable. A minimum of two bolt threads must extend through all nuts. All components shall have grade identifier marks and a registered manufacturer's logo.
- All threaded fastener components (screws/bolts, washers/lock washers, nuts) with a diameter designation less than SAE ¼-inch shall be minimum grade two composition.

b. Electrical and Illumination Installation:

- All installed wiring must be of adequate size to handle the anticipated loads of all electrical components. All wiring must be uninterrupted and complete with no splices.
- All wiring must be color-coded.
- All wire terminal ends (spade, ring, etc.) shall be: crimped, soldered to the wires and heat shrunk, or weatherproofed connectors. Scotch-Loc fasteners and/or crimp butt connectors are not acceptable for any connection.
- All electrical connections shall be protected with dielectric silicone grease.
- All wiring shall be enclosed in a protective wiring loom, conduit, or wrapped harness.
- The edges of all holes through which wiring must pass shall be protected with a grommet.
- High current circuits, such as the tarp motor circuit, shall be powered directly from the battery, and protected by a master re-settable breaker, or a fusible link.
- Body Builder installed wiring going to the rear of the frame and dump body shall be grouped together and bound. This bound harness shall then be secured to a painted metal strap, approximately 1-1/4-inch x 1/4-inch in size. This strap shall be secured to the top of the frame cross members away from the side rails.
- All wiring to lamps shall be stress relieved within 6-inches of the component.
- Wiring routed through the hydraulic enclosure sides shall be routed through a sealed compression type strain relief, or a molded bulkhead fitting.

Paragraph Revised by Addendum 001

c. Auxiliary Snow Plow Headlights: ***Bidders must provide bracket and plow light installation drawings for approval prior to installation on the pilot truck. Approval is required for any factory installed snow plow lights or snow plow light bracket.***

- Front auxiliary halogen headlights shall be Truck-Lite model 645 or equivalent. MoDOT prefers the safest visibility with a reduced risk of snow and/or ice accumulation.
- Auxiliary headlights shall not obstruct the driver's vision. Mounting shall be approximately 64-inches from ground level, and at approximately the same width apart as truck's headlamps.
- Light shall be secured to a fender mounted, 3-point assembly bracket. Bracket shall be made from stainless steel.
- All fasteners attaching the bracket to the fender shall be stainless, and be secured using locknuts.

- Reinforced rubber washers or grommets shall insulate the bracket from the hood. Fasteners attaching the bracket to the hood shall be insulated from the hood by a 2-inch minimum diameter rubber washer or grommet and 2-inch minimum diameter plated washer.
 - Auxiliary headlights shall be grounded back to chassis ground; minimum 14-gauge wire shall be used. Drill holes to accommodate wire size.
- d. Hydraulic Installation:
- All hoses shall be routed in a manner to minimize rub points and bends. Critical rub points shall be wrapped for protection.
 - All hoses shall be routed or shielded to protect them from heat sources.
 - Teflon tape shall not be used in the hydraulic system.
 - Hydraulic hoses shall not be secured to any factory-installed chassis wiring, cables, hoses, or lines.
 - Hydraulic hoses shall not be secured in the same bundle with any electrical wiring.
 - Hydraulic hoses shall be bundled together and routed by themselves.
 - Hoses shall be adequately supported and securely fastened to withstand snow and icing conditions.
 - All pressure and return hoses shall be rated for at least 3,000 PSI working pressure.
 - Hydraulic hoses running to the rear of the truck shall be secured to a painted metal strap, approximately 1-1/4-inch x 1/4-inch in size. This strap shall be secured to the top of the frame cross members away from the side rails.
 - Each hose going to the dump body shall have 90-degree bulkhead mounted Joint Industry Council (JIC) elbows installed at the rear of the truck frame near the dump body hinge. These elbows shall split each hose going to the dump body into two hoses, allowing for easier routing and replacement.
- e. Air Powered Accessory Installation:
- All lines shall be routed in a manner to minimize rub points and bends. Critical rub points shall be wrapped for protection.
 - All lines shall be routed or shielded to protect them from heat sources.
 - Air lines shall be colored, identifying individual circuits, with each circuit being a different color. Color-coding shall remain consistent for the duration of the contract.
 - Body Builder installed accessory air lines going to the rear of the frame, and dump body, shall be grouped together and bound with the Body Builder installed wiring going to the rear of the frame and dump body. This bound harness shall then be secured to the same painted metal strap as the body-builder installed electrical wire harness.

Paragraph Revised by Addendum 001

- f. Bumper, Front Snow Plow Hitch and Lift Assembly: *See Attachment 5 and 6 for concept drawings and materials.* Shall be a heavy-duty channel, swept back front bumper. The bumper must be designed to attach a currently used MoDOT snow plow and to evenly transmit the snow plow load to the truck frame under continuous severe service use.
- Bumper shall be secured to the truck frame using fine thread, grade eight, frame-style hardware. Nuts shall be all metal, top-lock style locknuts. Serrated hardware is not acceptable. Hydraulic quick couplers as required elsewhere in the specifications shall be installed on the bumper.
 - Lift assembly shall include a Monarch CS250 hydraulic cylinder or equivalent for lifting the snow plow. It shall be securely welded to the front bumper and fold down when not in use.
 - Front snow plow hitch must be securely welded to the front bumper.
- g. Rear Hitch Plate and Pintle Hitch: A 3/4-inch thick steel rear hitch plate shall be securely welded and gusseted to rear of frame rails. Rear hitch plate shall include the following items:
- Bulkheads for service and emergency trailer glad-hands, positioned away from the center of the rear hitch plate to prevent interference with a trailer tongue when making tight turns, and have 1/2-inch brass plugs installed. Glad-hands with 1/2-inch brass close nipples and tethered, removable covers shall be placed in the frame mounted tool box.
 - The J560 trailer connection furnished with the chassis shall be mounted through the rear hitch plate to the left of the pintle hitch.
 - Two (2) Buyers Products B50 or equivalent Department of Transportation (DOT) "D" rings, with 20-ton capacity each, shall be securely welded to the rear hitch plate.

- A Premier model Saf-Tite 100 rigid pintle hitch shall be installed on the rear hitch plate using grade eight hardware torqued to specifications. Hitch shall be 24-inch centerline height above the ground, plus or minus 1-inch.
 - Back-up alarm shall exceed 105 decibels or 15 decibels above idle engine ambient and shall be installed at the rear of the frame in a protected area.
- h. Tool box shall be approximately 18 by 18 by 24 inches, weather proof stainless steel tool box. It shall be mounted on the right hand outside frame rail while not interfering with any body-builder installed options.
- i. All grease zerks will be threaded. Drive-in zerks are not acceptable. All threaded holes for grease zerks shall be of sufficient depth to prevent the zerk from bottoming out when tightened.

Paragraph Revised by Addendum 001

- j. Air and Electric Powered Body Builder Installed Accessories:
- All controls for body builder installed accessories shall be located within an operator console installed between the driver and passenger seat. *Using dash mounted switches are unacceptable unless otherwise specified.*
 - All body builder harnesses going to the operator console shall pass through weather-proof strain relief(s) mounted in the rear wall of the cab. Wiring shall be configured such that the height of the harnesses outside of the cab decreases as it travels away from the strain relief. Any water following the harnesses shall run away from the strain relief. Harnesses shall have sufficient slack to allow movement of the cab air suspension.
 - Harnesses and airlines for body builder installed accessories shall not pass through the floor of the cab.
 - From the rear wall of the cab towards the rear of the truck, no body builder installed wiring, air lines, or hydraulic hoses shall be located beneath the top flange of the frame.
 - All body builder air lines going to the operator console shall be routed through bulkhead unions located in the rear wall of the cab near the strain relief/s for the electrical wiring. Bulkhead mounting shall be facilitated by matching backup plates located on the inside and outside of the cab wall. Outside plate shall be coated with a polyurethane or silicone sealer before being secured to the rear wall of the cab. All bulkhead locations shall have the function for that bulkhead stamped or etched into the plate for identification of each airline installed.
 - A power distribution box shall be mounted to the inside rear wall of the cab. This box shall provide an interface point for the following chassis supplied circuits: circuit breaker protected, switched battery power and ground speed signal. Battery power circuits shall be protected by a resettable circuit breaker located inside same box. It is acceptable to have resettable circuit breakers at the origin of the battery circuits, but the resettable circuit breaker at the point of origin must be of higher amperage than the ones inside the power distribution box. Air lines shall have sufficient slack to allow movement of the cab air suspension.
- k. Spreader light shall be controlled by a rocker-style switch located in the operator console. Circuit shall operate key-on, and be protected by a resettable circuit breaker located in the power distribution box.
- l. Tarp shall be controlled by a rocker-style switch located in the operator console. Circuit shall operate key-on, and be protected by a resettable circuit breaker located in the power distribution box. The high-current tarp relay shall be supplied from the battery box and protected by a resettable circuit breaker located in the battery box. Tarp relay shall be located on the rear wall inside of the cab, or on the rear wall outside of the cab inside a weather-proof enclosure.
- m. Raised body indicator light shall be a red and console mounted. Light shall flash to indicate a raised body condition. Lamp shall be driven by a sealed proximity switch located in a protected position on the frame near the front of the dump body. Circuit shall be protected by a resettable circuit breaker located in the power distribution box and operate key-on.
- n. LED warning lights shall be controlled by a rocker-style switch located in the operator console. Circuit shall operate key-on and key-off, and be protected by a resettable circuit breaker located in the power distribution box.
- o. Tailgate latch shall be air operated and controlled by rocker-style switch located in the operator's console.

2.3.3 Corten V-Style Long Sill Dump Body with Attached Cab Shield - Configuration #1: The following specifications and dimensions shall apply to the 12-cubic yard maximum capacity truck-mounted dump body and hoist. The complete dump body shall be capable of accommodating a 16-foot, slip-in material spreader with

attached liquid storage tanks. Any ferrous metal materials used in the manufacture of the bed must be welded prior to priming. Bids will not be considered on any dump body and hoist that deviate from these specifications.

Paragraph Revised by Addendum 001

- a. The dump body provided shall be a Western style. No underbody cross-members for support will be allowed. The floor, sides, and main long sill are to be full length with no cross-splices. All boxed areas of the dump body shall be sealed except for long sills. Long sills shall have a 1-1/4" drain hole at the rear to allow draining when the body is in a lowered position. No wiring or hoses shall be run through any boxed area. All welds shall be continuous. All hinge pins shall be removable.
- Dump body capacity shall be twelve cubic yards water level.
 - 15-foot maximum inside length.
 - 100-inch minimum outside width.
 - 86-inch minimum inside width.
 - **36-inch** minimum side height with level ends.

Paragraph Revised by Addendum 001

- b. The dump body main long sills, floor, tailgate, sides, and front shall be constructed using a minimum of Corten, rated 55,000-psi yield.
- Main Long Sills 1/4-inch Corten
 - **Floor, Tailgate 3/16-inch AR 400 or 450**
 - **Formed Intermediate Horizontal Side Brace 10-gauge Corten**
 - Sides, Front 10-gauge Corten
 - Formed Top Rail 3/16-inch Corten
 - Rear Corner post 3/16-inch Corten
- c. Dump Body Mounting:
- The rear edge of the dump body pivot pin shall be 0- to 1-inch forward from the rear face of the rear hitch plate.
 - The dump body pivot, measured from the centerline of the pivot pin to the rear face of the dump body not including the tailgate, shall be 12 inches.
 - The chassis wheel base shall be such that the rear drive axle is located 21-22 inches forward from the rear face of the rear hitch plate, measured from the rear face of the rear hitch plate to the center line of the rear drive axle. Rear drive axle tires shall not extend past the rear face of the rear hitch plate.
 - Hydraulic oil reservoir shall be mounted to provide 3- to 4-inch clearance between the cab and reservoir on passenger side of hoist above the frame.
 - The dump body shall be mounted as close as possible to the hydraulic oil reservoir, with a minimum of 3-inch clearance, excluding the sub frame of the reservoir and hoist.
 - A 4-gauge battery cable ground strap shall be installed from the dump body to the truck frame by means of a 5/16-inch cadmium plated bolt. Star washers shall be installed on both sides of the strap eye to insure a good ground.
- d. Hoist:
- Hoist shall be a trunnion mount, head lift, double-acting cylinder.
 - The hoist housing should be designed to accept a Model CS140-5.5-3DA MAILHOT cylinder or pre-approved equal. The cylinder sleeves shall be nitride coated. Sub-frame hoists are not acceptable.
 - A flared body bracket will be attached to either the hoist frame or body understructure to align body in position and keep from moving side to side.
 - The hoist shall be attached to the chassis by means of an above frame cradle. The cradle shall be designed as such to allow the hydraulic reservoir to be mounted on the passenger side of the hoist and the hydraulic valve unit to be mounted on the driver side of the hoist. The cradle shall also be able to accept grease line extensions that run from the outside of the driver side to the pivot point of the hoist on the cradle.
- e. Dump body pivots shall facilitate thorough greasing. Bushings shall have an internal radial groove in line with the grease fitting. Pivot pins shall be drilled and cross-drilled
- f. A storable body prop shall be provided on each side of the dump body. Pivots for the body props shall be greasable. Body props shall be constructed to withstand the down-pressure of the hoist without damaging the dump body, chassis or any related components.

- g. The cab protector shall be made of 10-gauge Corten material, be a minimum of 18-inches deep and not interfere with the cab-mounted vertical exhaust pipe. The cab protector shall be mounted, welded and gusseted to prevent flexing or vibration.

Paragraph Revised by Addendum 001

h. Sides:

- Sides shall have a formed, debris-shedding top rail.
- ***Intermediate and bottom external supports for sides shall be horizontal.***
- Sides shall have no provisions for extension boards.
- Side heights shall be the same height as rear tailgate.
- Sides shall have a fully welded step on the lowest bottom rubrail in line with pull out ladder.
- Side corner posts shall have a Whelen box recessed and welded in place for Whelen warning strobe light.

Paragraph Revised by Addendum 001

i. Tailgate:

- The tailgate shall be double-acting, and vertically straight with off-set hinges for positive closure.
- The tailgate shall have boxed upper, lower, side, and ***minimum of one*** intermediate horizontal rib supports made of 10 gauge Corten material. The tailgate sheet shall be made of 3/16-inch ***AR 400 or 450*** material. Lift handles shall be welded on each side just above the bottom support rib.
- A hinged "D" ring shall be mounted top and center of the tailgate to provide a lifting hook for removing the tailgate.
- Two 3/8-inch grade 70 spreader/holder chains shall be provided and stowed in boxes that are externally welded on tailgate when not in use.
- Anchor points for the tailgate chains shall be made from 3/8-inch thick steel. These anchor points shall be lapped on the outside of the dump body with a minimum of 1 1/2-inch overlap. Keyhole slot in anchor points shall be configured so that when installed, the link of the tailgate chain nested in the anchor is no more than 1 inch away from the rear face of the dump body at the farthest point.
- The top hinge pin shall be minimum 1 1/4 - inch diameter and pivot through (2) two 1/2-inch thick plates welded to the top of the rear body corner posts. The upper hinge plates must be flush with the top of the rear corner posts, body sides, and tailgate. These pins shall have one end tapered approximately 30 degrees for ease of alignment. 30 degree taper shall be 1/4 - to 3/8-inch in length. Both upper pins are to be fabricated from 1 1/4 - inch cold rolled steel, and have a 1/4-inch thick outer flange stop. The 2-inch flange is to have one side machined to rest against a 3/8-inch x 1 3/4" flat bar welded to the outer hinge plate in order to capture the pin in place and prevent rotation, and pre-mature pin and hinge wear. Each pin is to be drilled and tapped for grease fittings to be installed into outer pin flange. Grease channels are to be included in order to lubricate the tailgate hinge lug.
- The tailgate lower pins shall be a minimum 1 1/4" diameter. Tailgate shall, without assistance from the locking device, seal against the floor/side sheets of the dump body, with no more than a 1/16-inch gap at any point. With the tailgate closed and the locking device open, tailgate lower pins shall have a 1/8-inch minimum, 1/4-inch maximum gap between the forward edge of the pin and the forward edge of the cradle.
- A license plate bracket shall be welded on the left-hand side of the tailgate near the top of the tailgate.
- When tailgate is lowered parallel to body floor, the inside surface of the tailgate shall provide a smooth level joint between the tailgate and the body floor.
- Tailgate height shall be ***36 – inches*** tall measured from the top of the floor to the top of the tailgate sheet.

Paragraph Revised by Addendum 001

j. Tailgate Latch

- An over-center locking device on each side of the dump body shall hold the tailgate securely closed. Latching arms shall be forged steel.
- The tailgate latch cross shaft assembly shall be supported on each end by bushings.
- This locking device shall be operated by an air cylinder, which shall be mounted between the long sills. Air cylinder shall be controlled by a rocker-style switch located in the operator's console.
- Locking device shall be adjustable at each side of the dump body.
- A manual over-ride shall be provided on the outside of the dump body, allowing the operator to lock or unlock the tailgate using a simple adjustable wrench and without removing components.
- Lubrication points on the tailgate latch cross-shaft shall facilitate easier greasing by means of grooved bushings ***and/or shaft.***

- *If tailgate shaft requires greasing*, grease zerks at each end of the tailgate cross-shaft shall be visible and accessible from the outside face of the dump body.

Paragraph Revised by Addendum 001

k. Ladder:

- *A pull-out or fold down style ladder shall be installed on each side of the dump body. The lowest rung shall not be more than 18-inches from the ground. Additional rungs shall have no more than 12-inches spacing between rungs. The top rung shall be no more than 18-inches from the top of the bed. Location of the ladder shall be such that operator does not have to climb over the tarp bow when the tarp is retracted.*
- *Grab handles shall be installed on the outside of the dump body in one continuous piece running from the top to the bottom of the bed and provide for three points of contact while using the ladder.*
- *Ladder shall be shielded to prevent build-up of debris on ladder if exposed to drive wheels. A pull out style two-rung ladder shall be installed on each side of the dump body. Ladders shall be centered between the truck tandem rear axles so that the operator does not have to climb over the tarp bow when the tarp is retracted.*
- *Ladder placement shall not interfere with mounting brackets of wings.*

l. Wiring and Hose Routing:

- Wiring and hoses going to the front of the dump body shall be secured to a 1/2-inch diameter painted steel rod which shall be attached to the inside of the long sill by means of 1/2-inch X 1-inch tall stand-offs. Stand-offs shall be placed no farther than 24 inches apart, and be securely welded to the long sill.
- Wiring inside the rear corner posts shall be secured to 3/16" single chain link attached inside the rear corner posts, securely welded. Height of stand-off to be sufficient to support all of the wiring inside the corner post. Stand-offs shall be positioned to allow wires to be secured away from the tailgate latch mechanism, and within 6 inches of all lamps. A sufficient amount of wire shall be left between the last point of securement and the lamp to allow for the removal of the lamp for replacement.

m. Brake, turn and tail lights shall meet all Federal and State DOT specifications, which recently includes and requires an independent running light on the rear corners.

- All lights shall be mounted in shockproof rubber grommets.
- All lights shall be LED.
- All lights shall be connected to a one piece wiring harness with molded connectors.
- Each rear corner post shall be able to accept a recessed 3-inch x 5-inch rectangular stop/turn taillight. Suitable make and model is Maxxima M42213R or equivalent.
- Each rear corner post shall be to accept a recessed 3-inch X 5-inch rectangular back up light. Suitable make and model is Maxxima M42213 or equivalent.
- Each rear corner post shall have one marker/clearance light on the rear face of the corner post and one marker/clearance light on the outside face of the cornerpost.
- A 3 x 4 inch rectangular tube shall extend through long sills at the rear for routing of electric wiring. Tubes are to be fully welded, sealing the joint at the long sill.

n. Raised Body Indicator: A sealed proximity switch shall be mounted near the hoist assembly to control a raised body indicator light. A dash mounted indicator light shall be provided, be plainly visible to the seated operator, be red in color, and flash when the dump body is raised.

o. One Grote rubber utility halogen spreader spotlight shall be mounted below the left rear dump body corner. The light shall be controlled by a rocker-style switch located in the operator console. Light will not hinder the operations of the material spreader

p. Mud flaps shall be removable by incorporating 201 or 304 stainless steel removable hinge pin approximately 26 inches long by 1/2" diameter solid rod. The rod will have a 2 1/2" - 90 degree bend for a handle with a 3/16" hole at the opposite end for a lynch pin. There shall be three bushings on the truck side and three bushings on the mud flap side constructed of 1/2" inside diameter pipe by 1 1/2" long . Spaced accordingly on flap and truck bracket that is constructed of 24" long by 2" deep by 3/16" thick steel. Mud Flap removal shall not require any tools. See drawing on Attachment 2.

q. Hydraulic Couplers: See Coupler description specifications in the Hydraulic Section 2.3.5.j.

- The passenger side of the dump body shall have three, 3/8" male couplers. Couplers shall be attached to male pipe X male JIC bulkhead fittings mounted on the lowest rub rail near the rear of the bed.

- The driver side of the dump body shall have three male couplers for the slip in spreader. One, 1-inch, one, 3/4 –inch, one 1/2 –inch. Couplers shall be attached to male pipe X male JIC bulkhead fittings mounted on the lowest rub rail near the rear of bed.
 - The hydraulic lines shall extend from the lowest rub rails to the body’s main long sills through a fabricated enclosure on the underside of the body. The main long sills shall have passageways at the rear for the hydraulic lines. Passages through the long sills shall be sealed around the passage to prevent moisture entry into the long sill.
 - All hydraulic lines running from the valve unit shall be secured to a bulkhead plate with accommodating fittings, mounted on the cab side of the rear hinge between chassis frame rails. Hydraulic lines running into body shall start at this bulkhead plate creating a 2 piece hose for ease of service and routing.
- r. Conspicuity: The dump body shall be outfitted with DOT-C2 1 1/2 inch red by 7 inch white prismatic retroreflective conspicuity tape meeting or exceeding Federal Motor Vehicle Safety Standards (FMVSS) 108, DOT-C2 standards. The conspicuity tape shall be applied continuously to the sides of the dump body along the bottom horizontal bed rails. Where there are other fixtures, such as lights, brackets or steps, along the area where the conspicuity tape is to be applied, the tape shall be terminated 1/2 inch from the object and resume 1/2 inch from the far side of the object. The conspicuity tape shall be applied to rear facing surface of the tail gate along all horizontal tail gate bracing including the top and bottom tail gate rails and vertically along both edges of the tail gate. Where Conspicuity tape from a horizontal and vertical application intersects the vertical tape shall be butt spliced to the edge of the horizontal tape application with no overlap or gap. Where these intersections occur at a corner, the horizontal tape shall be trimmed to match the edge of the vertical tape forming a clean box corner. On stainless steel tailgates, the flat recessed areas between the tailgate bracing shall receive yellow 3M Scotchlite® reflective graphic film series 5,000 or equivalent. This sheeting shall not overlap onto the surrounding bed bracing and shall not be any farther away from the joint of the tailgate bracing than 1/2 inch.
- s. Spreader Body Hold Downs: Four storable winches to be welded prior to priming on the bottom side of upper body rail in a fashion not to exceed the overall width of the body, 4-inch x 10-foot of nylon webbing with flat hook to be included. Body Builder must coordinate placement of winches to line up vertically with the spreader hold down brackets.

Paragraph Revised by Addendum 001

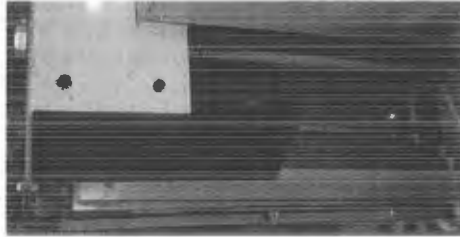
- t. Tarp: ***Must be an Aero 550 Easy Cover or equivalent.***
- Shall be a fully automatic, electric type installed system and controlled by a rocker-style switch located in the operator’s console.
 - Arms and tarp-protecting windshield shall be aluminum.
 - Shall be designed for hot asphalt.
 - Tarp shall be designed as shown in Attachment 4.
 - Arm springs shall be adjustable and designed to mount on the underside of the dump body. Elbows of the tarp arms shall be bolted to the arms.
 - The body shall also be equipped with an air tension bow for the purpose of keeping the tarp at the front of the body down next to the body sides and load during use and transport. The air tension bow shall be operated by an air cylinder, which shall be mounted on the front sheet. Air cylinder shall be controlled by a rocker-style switch located in the operator’s console. The air cylinder shall be attached to a cross shaft that extends thru the cab shield side plates and is able to rotate and actuate the tension bow.
 - Shall have side flaps that fold out over the sides of the dump body.
 - 1) The length and positioning of the flaps shall be such that when deployed and secured, the side flaps fit between the rear edge of the cab shield support gusset and the front edge of the rear corner post.
 - 2) Side flaps shall not be the full length of the tarp.
 - The side flap shall be secured in the covered position by a self-storing bungee rope routed through grommets or “D” rings in the outermost edge of the tarp, and “J” hooks on the bottom side of the middle body rail.

Paragraph Revised by Addendum 001

- u. A paver or asphalt lip shall be mounted on the rear dump body apron. Paver lip shall be mounted 1/2-inch hardware. Holes in kip and dump body shall be dimensional to allow any lip to be installed on any dump body. Welded paver lips are not acceptable. Paver lip shall be mounted at a 24-28 degree angle. Length of

paver lip **shall** be such as to provide 20-inches of overhang, measured from the rear face of the rear hitch plate to the rear edge of the paver lip.

- v. Rear post lower covers are used to keep rear tires from throwing debris up into the inside of the rear posts. The bottoms of the corner posts are to include removable 10-gauge Corten covers. The covers are to allow for drainage and must be designed to remove easily for servicing components inside the body corner posts. The covers shall not interfere with the tailgate latching mechanism. See picture below.



2.3.4 Stainless Steel I-Beam Long Sill Dump Body with Detached Cab Shield - Configuration #2: The dump body provided shall be a 15-foot cross-memberless Western style body.

- No underbody cross-members for support will be allowed.
 - The floor, sides, and main long sill are to be full length with no cross-splices.
 - All boxed areas of the dump body shall be adequately ventilated and drained.
 - No wiring or hoses shall be run through any bed-sides upper and lower rails.
 - All welds shall be continuous.
 - All hinge pins shall be removable.
 - The head sheet shall be flat with no doghouse for the hoist cylinder and shall accommodate tarp mounting. Head sheet shall not extend above the height of the cab with tarp installed
 - Hoist cylinder must be forward of the head sheet.
 - Grease hoses shall be installed to allow remote greasing of all points that are not readily accessible from the ground.
- a. Capacity: Shall be a maximum of 12-cubic yards water level.
- Shall have a 15-foot maximum inside length.
 - Shall have a 100-inch minimum outside width.
 - Shall have an 86-inch minimum inside width.
 - Shall have a 36-inch minimum side height with level ends.

Paragraph Revised by Addendum 001

- b. Construction:
- The tailgate, sides, ladder, hand holds and front shall be constructed using stainless steel.
 - ***Floor shall be 3/16-inch Abrasion Resistant (AR) 400 or 450-plate rated at 145,000 psi yield and 180,000 tensile materials with fully formed radius on each side.***
 - Internal bed sides and tailgate surfaces shall be a minimum of seven gauge stainless sheet material.
 - Remaining sheet steel, including bracing on the tailgate, sides, and front head, shall be a minimum 10-gauge Stainless Steel.
 - Stainless steel wire shall be used for all welds when welding stainless panels together.
 - Structural I-beams shall be one piece 10-inch by 12-lb. per foot minimum structural I-beam longitudinal. Each longitudinal shall be a continuous welded to the floor. The longitudinal must be notched to accept hoist cradle without the need for additional spacers between the longitudinal and the truck frame. If spacer is used, it shall be attached to bed and not truck frame.
- c. Mounting:
- The rear edge of the dump body pivot pin shall be up to 1-inch forward from the rear face of the rear hitch plate.
 - The dump body pivot, measured from the centerline of the pivot pin to the rear face of the dump body, not including the tailgate, shall be 12-inches.

- The chassis wheel base shall be such that the rear drive axle is located 21- to 22-inches forward from the rear face of the rear hitch plate, measured from the rear face of the rear hitch plate to the center line of the rear drive axle. Rear drive axle tires shall not extend past the rear face of the rear hitch plate.
- Hydraulic oil reservoir shall be mounted to provide 3- to 4-inch clearance between the cab and reservoir.
- The dump body shall be mounted as close as possible to the hydraulic oil reservoir, with a minimum of 3-inch clearance, excluding the sub frame of the reservoir and hoist.
- A 4-gauge battery cable ground strap shall be installed from the dump body to the truck frame by means of a 5/16-inch cadmium plated bolt. Star washers shall be installed on both sides of the strap eye to insure a good ground.

Paragraph Revised by Addendum 001

- d. Hoist:
- Shall be a trunnion mount, head lift, double-acting cylinder.
 - Should be designed to accept *CS140-5.5-3DA Mailhot* cylinder or pre-approved equal.
 - The cylinder sleeves shall be nitride coated. Sub-frame hoists are not acceptable.
 - A flared body bracket will be attached to either the hoist frame or body understructure to align body in position and keep from moving side to side.
 - ***Shall be attached to the chassis by means of an above frame cradle. The cradle shall be designed to allow the hydraulic reservoir to be mounted to the passenger side of the hoist and the hydraulic valve enclosure mounted to the driver's side of the hoist.***
- e. Pivots shall facilitate thorough greasing. Bushings shall have an internal radial groove in line with the grease fitting. Pivot pins shall be drilled, cross-drilled, and spiral grooved and made from stainless steel.
- f. Body Props:
- A storable body prop shall be provided on each side of the dump body.
 - Pivots for the body props shall be greaseable.
 - Body props shall be constructed to withstand the down-pressure of the hoist without damaging the dump body, chassis, or any related components.
- g. Cab Protector:
- Cab shield shall cover the rear of the cab and top rear half of roof. Shield shall not be mounted to dump body or cab, but mounted to the frame.
 - 1) Be reasonably close to top of cab but avoid rubbing or bumping of the cab with full cab suspension travel and clear the vertical exhaust pipe.
 - 2) Allow clear visibility from rear cab window.
 - 3) Shall be the same width as widest part of cab above the doors.
 - 4) Standard 8-inch channel will be used as uprights to top part of cab shield and for top cross member. Channel shall be 8-inch and a minimum of 11.5-lbs. per foot. Formed channels may also be used providing they are as strong or stronger than the standard 8-inch channels. Formed channels shall be approved by MoDOT Representative prior to installation.
 - 5) Each upright shall be bolted with minimum of five (5) each of 5/8-inch, grade eight bolts to chassis rail.
 - 6) Upright flanges shall face away from center of chassis.
 - 7) Uprights shall be further stiffened to rail with 8-inch length of 3/8-inch by 3-inch by 3-inch angle irons placed on top of rails and properly welded to uprights. This angle iron may also act as the bottom support for the hydraulic reservoir. This angle iron shall not be welded to frame rails but must rest squarely on chassis rail.
 - 8) All seams shall be continuous. Skip weld is not acceptable.
 - Top cross member shall be adequately welded to uprights and gusseted with two ¼-inch steel plates of 6-inch by 6-inch by approximately 8-1/2-inch dimensions at rear part of assembly.
 - Cab shield shall be welded to uprights and top cross member. Cab shield material shall be a minimum of 10-gauge thickness Stainless Steel material.
 - 1) Reinforced and weld to cross member with two (2) 3-inch by 1-3/8-inch (4.1) channel irons, which extend the full length of cab shield and align with eight inch channel uprights.
 - 2) Shall be gusseted from 3-inch by 4.1-channel iron to 8-inch channel iron in a manner offering highest degree of stability.
 - 3) Shall be welded to 4.1-channel iron with flanges downward.
 - 4) Must meet all OSHA standards

- 5) Must include provisions that do not allow ponding of water and slopes toward bed. (No Drain Holes)
- Heavy duty, expanded steel with approximately 1-inch by 2-inch openings welded to cab shield to protect rear cab window area.
 - 1) Outer skirts of cab shield shall extend a minimum of 6-inches below rear cab window.
 - 2) A 2-inch angle iron will be welded to uprights to support the bottom of the expanded steel.
- Adequately-sized openings with rounded corners which may be necessary may be allowed. Openings will be done in a professional manner with straight sides with minimum one-half inch radius corners..
- Welding to be continuous on both sides of gussets, channels and cross members.
- Unit shall include two strobe light mounting brackets mounted to allow for 360 degree visibility of cab shield lights.
 - 1) Brackets shall be welded prior to painting cab shield.
 - 2) Brackets shall be mounted on top of cab shield, one on each side.

Paragraph Revised by Addendum 001

- h. Sides:
 - Sides shall have a formed, debris-shedding top rail. This shall mean sloped or rounded.
 - ***Intermediate and bottom external supports for sides shall be horizontal.***
 - Sides shall have no provisions for extension boards.
- i. Tailgate:
 - Shall be double-acting, and vertically straight with off-set hinges for positive closure.
 - Shall have boxed upper, lower, side, and intermediate horizontal rib supports. Lift handles shall be welded on each side just above the bottom support rib.
 - A hinged "D" ring shall be mounted top and center of the tailgate to provide a lifting hook for removing the tailgate.
 - Two 3/8-inch grade 70 spreader and/or holder chains shall be provided and stowed in boxes that are externally welded on tailgate when not in use.
 - Anchor points for the tailgate chains shall be made from 3/8-inch thick steel. These anchor points shall be lapped on the outside of the dump body with a minimum of 1-inch overlap. Keyhole slot in anchor points shall be configured so that when installed, the link of the tailgate chain nested in the anchor is no more than 1-inch away from the rear face of the dump body at the farthest point.
 - The top hinge pin shall be 1-inch diameter minimum and pivot through a greasable bushing. These pins shall have one end tapered approximately 30-degrees for ease of alignment. A 30-degree taper shall be 1/4- to 3/8-inch in length.
 - Lower pins shall be a minimum 1-1/8-inch diameter. Tailgate shall, without assistance from the locking device, seal against the floor and side sheets of the dump body, with no more than a 1/16-inch gap at any point. With the tailgate closed and the locking device open, tailgate lower pins shall have a 1/8-inch minimum, 1/4-inch maximum gap between the forward edge of the pin and the forward edge of the cradle.
 - A license plate bracket shall be welded on the left-hand side of the tailgate, at approximately half the height of the tailgate.
 - When tailgate is lowered parallel to body floor, the inside surface of the tailgate shall provide a smooth level joint between the tailgate and the body floor.

Paragraph Revised by Addendum 001

- j. Tailgate Latch:
 - An over-center locking device on each side of the dump body shall hold the tailgate securely closed. Latching arms shall be stainless steel.
 - The tailgate latch cross shaft assembly shall be supported on each end by bushings.
 - This locking device shall be operated by an air cylinder, which shall be mounted between the long sills.
 - Locking device shall be adjustable at each side of the dump body
 - A manual over-ride shall be provided on the outside of the dump body, allowing the operator to lock or unlock the tailgate using a simple adjustable wrench and without removing components.
 - Lubrication points on the tailgate latch cross-shaft shall facilitate easier greasing by means of grooved bushings and/or shaft.
 - ***If tailgate shaft requires greasing***, grease zerks at each end of the tailgate cross-shaft shall be visible and accessible from the outside face of the dump body.

k. Ladder:

- A pull-out or fold down style ladder shall be installed on each side of the dump body. The lowest rung shall not be more than 18-inches from the ground. Additional rungs shall have no more than 12-inches spacing between rungs. The top rung shall be no more than 18-inches from the top of the bed. Location of the ladder shall be such that operator does not have to climb over the tarp bow when the tarp is retracted.
- Grab handles shall be installed on the outside of the dump body in one continuous piece running from the top to the bottom of the bed and provide for three points of contact while using the ladder.
- Ladder shall be shielded to prevent build-up of debris on ladder if exposed to drive wheels.
- **Ladder placement shall not interfere with mounting brackets of wings.**

l. Wiring and Hose Routing:

- Wiring and hoses going to the front of the dump body shall be secured to a 1/2-inch diameter painted steel rod which shall be attached to the inside of the long sill by means of 1/2-inch by 1-inch tall stand-offs. Stand-offs shall be placed no farther than 24-inches apart, and be securely welded to the long sill.
- Wiring inside the rear corner posts shall be secured to 1/4-inch vertical painted steel rods attached inside the rear corner posts by means of 1/4-inch by 1-inch stand-offs, securely welded. Height of stand-off to be sufficient to support all of the wiring inside the corner post. Stand-offs shall be positioned to allow wires to be secured away from the tailgate latch mechanism, and within 6-inches of all lamps. A sufficient amount of wire shall be left between the last point of securement and lamp to allow for the removal of the lamp for replacement.

m. Brake, Turn and Tail Lights:

- Shall meet all Federal and State DOT specifications, which recently includes and requires an independent running light on the rear corners.
- Lights and parts must be readily available and non-proprietary.
- Shall be LED.
- Shall be connected to a one piece wiring harness with molded connectors.
- **Rear and Corner Post Light Assemblies: Must be Whelan 400 Series Square, Super 3, amber, red white triple lights including the Whelan model TIR3 amber side light or pre-approved equivalent. Light heads shall be vertically mounted on each rear corner of the dump body using a stainless steel housing and bracket. Each light head shall have a weathertek connector for connecting to the extension harness from the central controller.**

n. Raised body indicator shall be a sealed proximity switch mounted near the hoist assembly to control a raised body indicator light. A mounted indicator light shall be provided in the operator console, be plainly visible to the seated operator, be red in color, and flash when the dump body is raised.

o. Spreader light shall be a Truck Lite model 80360 work light mounted below the left rear dump body corner. It must not hinder the operations of the material spreader.

p. Mud flaps shall be removable by incorporating 201 or 304 stainless steel removable hinge pin approximately 26 inches long by 1/2" diameter solid rod. The rod will have a 2 1/2" - 90 degree bend for a handle with a 3/16" hole at the opposite end for a lynch pin. There shall be three bushings on the truck side and three bushings on the mud flap side constructed of 1/2" inside diameter pipe by 1 1/2" long constructed of 201 or 304 stainless steel. Spaced accordingly on flap and truck bracket that is constructed of 24" long by 2" deep by 3/16" thick 201 or 304 stainless steel. Mud Flap removal shall not require any tools. See drawing on Attachment 2.

q. Hydraulic Couplers: Must meet the requirements of Section 2.3.5.j.

- The curbside of the dump body shall have three, 3/8-inch male couplers. Couplers shall be attached to male pipe to male JIC bulkhead fittings mounted on the lowest rub rail near the rear of the bed.
- The drivers' side of the dump body shall have three male couplers for the slip in spreader. Couplers shall be attached to male pipe to male JIC bulkhead fittings mounted on the lowest rub rail near the rear of bed.
- The hydraulic lines shall extend from the lowest rub rails to the body's main long sills through a fabricated enclosure on the under-side of the body. The main long sills shall have passageways at the rear for the hydraulic lines. Passages through the long sills shall be sealed around the passage to prevent moisture entry into the long sill.

- r. **Conspicuity:** The dump body shall be outfitted with DOT-C2 1 1/2 inch red by 7 inch white prismatic retroreflective conspicuity tape meeting or exceeding Federal Motor Vehicle Safety Standards (FMVSS) 108, DOT-C2 standards. The conspicuity tape shall be applied continuously to the sides of the dump body along the bottom horizontal bed rails. Where there are other fixtures, such as lights, brackets or steps, along the area where the conspicuity tape is to be applied, the tape shall be terminated 1/2 inch from the object and resume 1/2 inch from the far side of the object. The conspicuity tape shall be applied to rear facing surface of the tail gate along all horizontal tail gate bracing including the top and bottom tail gate rails and vertically along both edges of the tail gate. Where Conspicuity tape from a horizontal and vertical application intersects the vertical tape shall be butt spliced to the edge of the horizontal tape application with no overlap or gap. Where these intersections occur at a corner, the horizontal tape shall be trimmed to match the edge of the vertical tape forming a clean box corner. On stainless steel tailgates, the flat recessed areas between the tailgate bracing shall receive yellow 3M Scotchlite® reflective graphic film series 5,000 or equivalent. This sheeting shall not overlap onto the surrounding bed bracing and shall not be any farther away from the joint of the tailgate bracing than 1/2 inch.
- s. **Spreader body hold downs** shall consist of four storable winches welded to the upper side of lower body rail in a fashion not to exceed the overall width of the body, 4-inch x 10-foot of nylon webbing with flat hook to be included. Material shall be compatible with the bed's material. Body Builder must coordinate placement of winches to line up vertically with the spreader hold down brackets.
- t. **Tarp:**
 - Shall be a fully automatic, electric type installed system operated from the cab.
 - Arms and tarp-protecting windshield shall be aluminum.
 - Shall be designed for hot asphalt.
 - Tarp shall be designed as shown in Attachment 4.
 - Arm springs shall be adjustable and designed to mount on the underside of the dump body. Elbows of the tarp arms shall be bolted to the arms.
 - Shall have side flaps that fold out over the sides of the dump body.
 - 3) The length and positioning of the flaps shall be such that when deployed and secured, the side flaps fit between the rear edge of the cab shield support gusset and the front edge of the rear corner post.
 - 4) Side flaps shall not be the full length of the tarp.
 - 5) The side flap shall be secured in the covered position by a self-storing bungee rope routed through grommets or "D" rings in the outermost edge of the tarp, and "J" hooks on the bottom side of the middle body rail.
- u. **Paver or Asphalt Lip:**
 - Shall be mounted on the rear dump body apron.
 - Shall be mounted with 1/2-inch hardware. Holes in lip and dump body shall be dimensional to allow any lip to be installed on any dump body. Welded lips are not acceptable.
 - Shall be mounted at an angle of 24 to 28-degrees.
 - Length shall be such as to provide 20-inches of overhang, measured from the rear face of the rear hitch plate to the rear edge of the lip.
- v. **Rear post lower covers** shall keep the rear tires from throwing debris up into the rear body posts. Should allow for drainage and be easily removed for servicing components inside the body post.

Paragraph Revised by Addendum 002

2.3.5 **Hydraulic System:** All components of the hydraulic system, including optional equipment, shall be designed to operate efficiently at a system maximum pressure of 2,300 psi. Hydraulic specifications listed in this section are for the **standard hydraulic configuration**. All components installed on the standard hydraulic configuration shall be capable of easily accepting the necessary additional hydraulic components for the underbody and wing snow plows as listed in the optional equipment section. ***Must have the ability to depressurize hydraulic system with engine running in order to un-couple hydraulic attachments.***

a. **Hydraulic Reservoir:**

- Shall come complete with all mounting hardware; frame mounting angles, bolts with poly locknuts, and springs.
- Shall be a minimum 40-gallon capacity.
- Shall have a full baffle to prevent sloshing.
- Reservoir and baffle shall be constructed of stainless steel.
- Shall have a screened filler neck with a breather cap.

- Shall include an easily visible all-aluminum housed sight and temperature gauge.
 - Bottom shall have a port for suction compatible with hydraulic pump requirements.
 - Suction strainer shall be of adequate size to supply full pump demand with a 3 to 5 psi built-in bypass, and have a full flow ball valve installed at the reservoir suction fitting. A heavy plastic wire tie shall be installed to insure the ball valve remains in the open position unless it is intentionally closed.
 - Shall have a 3/4-inch port with a magnetic plug for draining the reservoir and a 3/4-inch port for the pump case drain.
 - Back shall have a 3/8-inch port for the solenoid drain and 1/2-inch port for the low oil sensor.
 - Top shall come with provision for a tank-mounted filter.
- b. Hydraulic Return Filter Assembly:
- Shall be mounted on the top of the hydraulic reservoir.
 - Shall have a 10-micron replaceable cartridge element.
 - Assembly shall be capable of 80 gallons per minute (GPM) flow capacity. Shall have a 1-1/4-inch NPT port, a built in by-pass and a bypass condition indicator.
- c. Hydraulic Return Manifold:
- Shall allow for easy installation of additional hydraulic hoses.
 - Shall be installed between the frame rails directly behind the hoist support.
 - Unit shall be an aluminum 5-port system. Four ports shall be a #16 O-Ring Boss (ORB) and one shall be a #8 ORB.
 - Return oil from the spreader return coupler and valve stack shall be routed to this manifold.
 - Return oil from the manifold shall be routed to the inlet of the hydraulic oil return filter.
 - Unit shall contain a minimum of two plugged ports for addition of future accessories.

Paragraph Revised by Addendum 001

- d. **Hydraulic Pump: Shall be a Rexroth A10V0100, Series 45 Sauer Danfoss, Danfoss 90cc F Series, or Eaton 620 Series.**
- Shall be axial piston, load-sensing type, and be driven off the engine crankshaft by means of a drive shaft.
 - **Prefer a minimum** 6.1-cubic inch (100 cubic centimeter) displacement, and capable of 66 GPM (theoretical) at 2,500 rotations per minute (RPM) and 4,000 psi.
 - The pump case drain must be positioned as high as possible and directed back to the reservoir without passing through the return line filter.
 - Should have an internal bleed down compensator.
 - Must have a keyed shaft with an SAE mounting flange.
 - Must have side ports. Rear ports are unacceptable.
 - Ports must be of the split flange design, sized accordingly for the displacement of the pump.
 - Suction fitting shall be a flanged, formed elbow hose barb. Fitting shall be of adequate size for the displacement of the pump.
 - Discharge fitting shall be an O-ring thread flange block. Fitting shall be of adequate size for the displacement of the pump.
 - A manual, high-pressure ball valve shall be mounted to pressure port of pump.
 - System shall be performance checked. System standby pressure shall be set. System maximum pressure shall be set at 2,300 psi.
 - A pressure test port shall be provided at the pump by installing a 3/8-inch male Aeroquip FD45-1002-6-6.
- e. Hydraulic Pump Drive:
- Driveline must be 1280 and/or 1310 series solid shaft style and must be installed according to manufacturer's instructions to assure proper alignment.
 - Pump shall be driven off the engine crankshaft with a flange yoke.
 - Pump shaft shall have a flange yoke installed to allow shaft to be un-bolted from pump.
 - Universal joints used in the shaft must have grease zerks in the center of the bearing caps.
 - Hardware used for installation of the pump driveshaft shall be to driveline manufacturer's specification. All drive shaft installation hardware shall be torqued to specifications.

- f. Hydraulic Function Control Valves: Shall be bulkhead fitting mounted in a weather-tight enclosure with the fittings on the bottom of the enclosure. Valves shall be mobile hydraulic, cast iron, stackable, load sensing type. All valves shall be operated with proportional electric coils. Proportional coils shall be compatible with the control system valve driver module pulse width modulation (PWM) outputs. All valves within the valve assembly shall have parallel inlets. Valve assembly inlet and outlet ports shall be 1-inch O-ring. Work ports shall be **a minimum 5/8-inch O-ring**. A and B ports shall be individually flow adjustable.
- Standard Hydraulic Function Control Valve Arrangement:
 - 1) Dump Body Hoist: Double acting cylinder valve, with a work port relief valve for down pressure protection on port “A”. Pressure setting shall be such that the relief valve will protect the dump body components if the hoist is powered down with the dump body props in place. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 30 GPM. Valve shall prevent any up or down movement of a raised dump body when valve is in the neutral position. Valve shall have a manual override for both raise and lower functions.
 - 2) Front Plow Lift: Single acting cylinder valve with counter-balance capability. Valve shall be spring return to neutral, with float capability in the lower position. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - 3) Front Plow Angle: Double acting cylinder valve. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both left and right functions.
 - 4) Spreader: Shall be a 4-circuit motor manifold. The manifold shall be an integral part of the valve assembly. Manifold to contain three solenoid operated, electrically variable, two-port, pressure compensated, direct acting, normally closed when de-energized, proportional flow control cartridges. Each cartridge shall operate by a 12-Volt direct current (DC) coil. Each cartridge shall have a manual override. The flow requirements for each circuit are as follows:
 - Spreader Auger 15 GPM
 - Spreader Spinner 8 GPM
 - Prewet Pump 7 GPM
 - Anti-Ice Pump 15 GPM (cavity plugged if not used for accessory circuit)
 - 5) Hydraulic Accessory: A hydraulic accessory circuit shall be provided. This circuit shall be pressure and flow compensated. Accessory circuit shall have an adjustable flow of 0 to 22-25 GPM. Accessory circuit shall be capable of full pump output at engine idle and regulated to a maximum flow of 22-25 GPM. Accessory circuit shall use the same hose and coupler as the spreader auger circuit. It is permissible to install a proportional flow-control cartridge in the un-used fourth circuit of the spreader manifold and ‘tee’ this circuit into the auger circuit to accomplish this, provided it does not affect the circuit when used as the spreader auger supply. Accessory circuit shall have a manual override.
- g. Hydraulic Function Control Valve Enclosure:
- a. Must be mounted between the cab and dump body outside of the left hand frame rail.
 - b. Must be mounted in a manner to not conflict with potential attachments.
 - c. Shall allow easy access to hose connections.
 - d. Shall be three pieces: the enclosure body, valve mounting plate, and the lid.
 - e. The valve plate shall be constructed of 1/4-inch stainless steel. The sides of the body shall have integral, formed mounting angles.
 - f. The outside lip of the enclosure shall have a gasket all the way around to seal from weather when lid is installed.
 - g. The enclosure body and lid shall be made of 10-gauge stainless steel with a minimum 1-inch lip on all sides. The lid shall be held on with rubber latches on each side. Unit shall have two lifting handles.
 - h. The top and front of the enclosure shall be open with the lid off.
 - i. Valve plate shall bolt to the inside of the enclosure for ease of mounting.
 - j. Must include a formed gasket to seal the valve plate to the enclosure.
 - k. Enclosure shall be large enough to accommodate a valve assembly capable of at least 10 functions.

- h. Snow Plow Cushion Valve:
- A double-relief cushion valve must be installed for front snow plow angle.
 - The valve shall be set at 2,000 psi.
 - The valve shall be constructed of a high-tensile cast iron body with ball and spring style relief that has hardened seats.
 - The valve shall be installed at the front bumper and snow plow hitch.
 - Valve shall have O-ring thread ports.
- i. Hydraulic Hoses:
- Suction hose from the reservoir to the pump shall be SAE 100R4 style of adequate size for the displacement of the pump. Shall be connected to the pump barbed fitting, and double clamped with T-bolt style stainless steel super clamps. Shall be connected to the reservoir ball valve with a king nipple, double clamped with T-bolt style stainless steel super clamps.
 - All hoses, with the exception of the suction hose, shall be rated for a working pressure of 3,000 psi.
 - All hose ends, with the exception of the suction hose, shall be swivel or swivel adapters.
 - Ends connecting to valve assembly shall be 90-degree female JIC swivel.
 - Pressure hose shall be of adequate size for the displacement of the pump, with female JIC swivels at both ends.
 - Return hose shall be of adequate size with female JIC swivels at both ends.
 - Hoist hoses shall be 3/4-inch inside diameter (ID) with female JIC swivels at both ends.
 - Snow plow hoses shall be 3/8-inch ID with female JIC swivels at both ends.
 - Auxiliary hoses to the right rear corner of the dump body shall be 3/8-inch ID with female JIC swivels at each end. The auxiliary hoses shall be “teed” at the control valve enclosure with the front snow plow lift, and left and/or right circuits.
 - Auger hose to the left rear corner of the dump body shall be 3/4-inch ID with female JIC swivels at both ends. The auger circuit shall have a capped “tee” installed at the valve enclosure, enabling later installation of another hose routed to the front of the truck.
 - Spinner hose to the left rear corner of the dump body shall be 1/2-inch ID with female JIC swivels at both ends.
 - Spreader return hose to the left rear corner of the dump body shall be 1-inch ID with female JIC swivels at both ends. The spreader return circuit shall have a capped “tee” installed at the return filter assembly, enabling later installation of another hose routed to the front of the truck.
 - Pump case drain shall be a minimum 3/4-inch ID with female JIC swivels at both ends, and also have a 3/4-inch NPT ball valve installed at the reservoir.
 - Load sense line shall be 3/8-inch ID with female JIC swivels at both ends.
- j. Hydraulic Quick-Disconnect Couplings: All shall be full flow Aeroquip FD45 or Parker 60 series. A dust cap or plug shall be furnished with every male and female coupler. See Dump Body Section 2.3.3q and 2.3.4q for detailed layout and mounting of couplers.
- Front snow plow lift circuit shall be equipped with a male 3/8-inch FD45-1002-6-6 coupler installed in the front bumper. A 3/4-inch by 3/8-inch ID hose with a female 3/8-inch FD45-1003-6-6 coupler shall be installed on the hydraulic lift cylinder.
 - Snow plow cushion valve shall be equipped with a male 3/8-inch FD45-1002-6-6 coupler, and a 3/4-inch by 3/8 inch ID hose with a female 3/8-inch FD45-1003-6-6 coupler.
 - Auxiliary hydraulics at the right rear corner of the dump body shall be equipped with three male 3/8-inch FD45-1002-6-6 couplers.
 - Spinner circuit shall have a 1/2-inch male FD45-1002-8-10 coupler at the left rear corner of the dump body.
 - Auger circuit shall have a 3/4-inch male FD45-1002-12-12 coupler at the left rear corner of the dump body.
 - Spreader return circuit shall have a 1-inch male FD45-1002-16-16 coupler at the left rear corner of the dump body.

2.3.6 Spreader Control System: *System shall be a Certified Power ACS system.*

a. Control System:

- Shall be a complete control system that operates on a Controller Area Network (CAN)-Bus, using CANopen protocol, J1939.
- Shall consist of modules that reside on the BUS, and allow flexibility in mounting configurations.
- Shall be completely expandable and allow for additional modules to be added to the BUS, such as a joy stick control for an optional underbody scraper.
- System controller, or valve driver module, shall control all standard hydraulic functions; dump body hoist, snow plow lift, snow plow left and/or right, auger, spinner, hydraulic driven pre-wet, and optional hydraulic functions.
- Shall be capable of providing ground speed sensing, *open and/or* closed loop spreader and granular pre-wet system operation.
- Shall be capable of applying 200 to 400 lbs. of granular material per lane mile at speeds up to 45 mph. Actual application rate shall be +/- 5% of the selected application rate.
- Shall work equally well whether the truck is driven forward or in reverse.
- All modules shall be software upgradeable using a laptop and interface cable. Shall have an Ethernet port for accessing a built in Web server. The Web server may be used to configure or troubleshoot a system by connecting to a PC. Interface shall utilize Internet Explorer and not require any proprietary software to connect to the system. No external components shall be required to calibrate the system.
- Shall incorporate three levels of security and access that are password protected and defined by the user. The three levels of access shall provide access to the system setup, data, configuration fields, and parameters based upon access given.
- Shall have a built in diagnostic feature allowing technicians to view all input signals in real time. System shall also provide error logging and system status change logging for reviewing operator inputs.
- Shall be capable of both automatic and manual modes, and provide a lock out of manual mode.
- Shall provide 'blast' and 'pause' functions, and be capable of calibration at multiple gate settings.
- Shall be capable of operating at least four different programmed materials.
- System software shall incorporate a "test speed" mode for use in testing the system safely without requiring the truck to be moving or the drive axles engaged.
- Shall provide monitoring, and audible and visual operator warning, for low hydraulic oil level and hydraulic oil overheat conditions.
- Shall suspend operation of the spreader and all hydraulic accessory functions in the event of low hydraulic oil level and/or hydraulic oil overheat condition.
- Shall have an override feature to allow function use in an emergency situation.
- *Auger feedback sensor shall be mounted to the hydraulic feeder/auger motor and a calibration cable from the sensor to the control system for calibration purposes only shall be supplied. This cable shall be designed for easy removal after calibration.*
- *This requirement is deleted.*
- Shall use input from a float-level in the pre-wet enclosure to prevent pre-wet pump run-dry. This shutdown feature shall incorporate a buffer to prevent liquid pump shutdown due to an intermittent signal caused by sloshing material in the supply tanks.
- Shall provide stand-alone operation of the feeder circuit, and spinner circuit, for powering hydraulic accessories other than a slip-in spreader.
- Shall provide stand-alone operation of the pre-wet system, allowing it to be used for other operations.

b. Valve Driver Module:

- Shall be mounted inside the hydraulic control valve enclosure. No portion of the valve driver module may be outside of the hydraulic valve enclosure.
- Shall accept closed loop feedback signals, and digital inputs.

- Shall have a *minimum of 6* pulse width modulation (PWM) output channels *based upon the plow options ordered*.
 - All PWM outputs shall be software configurable, and controlled by closed loop operation, proportional input devices, or digital input devices.
 - Shall have internal over temperature shutdown, over current shutdown, and low voltage shutdown.
 - All electrical connections shall be IP68 sealed when mated utilizing threaded connections for positive retention.
 - Shall reside on the BUS as the “master”, and all truck values and configurations shall be saved in this module.
- c. Operator Controls and Display Modules:
- Shall be resistant to salt and other chemicals used during the snow removal process.
 - Controls shall utilize detented rotary encoders for setting material application rates.
 - Controls shall utilize snap action push buttons for navigation through the system program and function selection.
 - Controls shall be backlit for nighttime operation.
 - Display screen shall be a minimum of 20-square inches.
 - Controls and display shall be mounted in a factory made, painted or powder coated bracket. Display shall be operator adjustable for proper viewing angle.
 - Display shall automatically adjust brightness level for nighttime operation.
 - Display shall show; auto and manual mode, current material, granular rate, pre-wet rate, lane width, system status, error messages, plow float activated, system hydraulic pressure, and pavement temperature sensor information if optioned.

Paragraph Revised by Addendum 001

- d. Hydraulic Function Control Lever Modules:
- Shall be proportional CAN BUS controls and shall be mounted to the right of the driver and be within easy reach.
 - Shall be labeled with decals for operation.
 - Shall be equipped with a single axis control lever with center position dead man lock for the dump body up and/or down.
 - Shall be spring returned to neutral.
 - Shall be equipped with a single axis control lever with center position dead man.
 - Shall be equipped with a dual axis control lever for the snow plow lift, and snow plow left and/or right and shall be spring returned to neutral from all directions.
 - Shall be capable of placing the snow plow lift valve in float when moved to the extreme forward position.
 - Handle shall be equipped with a maintained pass and/or pause switch and a momentary blast switch.
 - Shall be mounted in a factory style stand, spaced for full axis control.
 - Configuration of the center position lock must be pre-approved by the MoDOT Representative *after contract award and prior to pilot truck manufacture*.
- e. Control System Cable: Specifications for all cables associated with the hydraulic and spreader control system.
- Shall meet International Organization for Standardization (ISO) rating Ingress Protection (IP) 68 and National Electrical Manufacturers Association (NEMA) 6.
 - Connectors shall be O-ring sealed.
 - Cable jacket should be Thermoplastic Elastomer (TPE), and molded to the connectors.
 - Connectors and harness shall be rated and tested for a temperature range from minus 30-degrees Celsius to 70-degrees Celsius.
 - Connectors shall be tested to be water tight when submerged in 6-feet of water for 24-hours, in 275-feet of water for 1-hour, and when subjected to a 1,000 psi pressure wash.
 - Connectors shall be designed to have no corrosion after 5,000 hours in 35-degrees Celsius salt spray.
 - Cabling shall be rated excellent in low temperature flexibility and in its resistance to oxidation, heat, oil, sunlight, ozone, abrasion, electrical priorities, flame, gasoline, degreaser solvents, alcohol, and weld slag.

2.3.7 Granular Pre-Wet System:

Paragraph Revised by Addendum 001

- a. Shall be mounted outboard of the truck frame ahead of the rear axle in a location approved by the MoDOT Representative *following contract award and prior to pilot truck manufacture.*

Paragraph Revised by Addendum 001

- b. The suction and discharge hoses shall be routed to the rear of the truck frame and secured with bulkhead mounted cam-lock couplers in a location approved by the MoDOT Representative *following contract award and prior to pilot truck manufacture.*
- c. Shall come complete with mounting hardware. Pump and hydraulic motor shall be mounted in a weather tight enclosure.
- d. Shall be hard-wired to, and completely controlled, by the spreader control system.
- e. Shall be hard-plumbed to, and supplied by the hydraulic valve assembly.
- f. Liquid pump shall be corrosive and abrasive resistant. No plastic pump components acceptable
- g. Pump shall be self-priming, positive displacement design.
- h. A manual bleed valve shall be installed in the suction hose at the enclosure to facilitate easier pump priming.
- i. Shall have a relief valve to protect against over-pressurization.
- j. Pump shall have a maximum pressure rating of 100 psi.
- k. Pump shall be plumbed through a 0 to 15 GPM flow meter, made of a non-corrosive material.
- l. Pump shall be capable of producing 9 GPM at 40 psi, with 4.5 GPM maximum oil flow to the motor. Coupler between the hydraulic motor and pre-wet pump shall be visible and accessible to break loose when stuck.
- m. Hydraulic connections shall be bulkhead mounted in the enclosure.
- n. All hydraulics inside enclosure shall be hard plumbed.

Paragraph Revised by Addendum 001

- o. Shall have a float switch in the *nurse tank*. The spreader control system shall use this switch to shut off the liquid pump to prevent damage to the pump from running dry.
- p. Flow meter sensor wiring and float switch wiring shall utilize a bulkhead mounted connector in the pre-wet enclosure.
- q. Shall include a ¼ turn valve and strainer-filter. MoDOT Representative shall approve location.
- r. Shall include spray nozzles and plumbing for installation on the material spreader. Nozzles shall be of sufficient size and type for the capacity of the pre-wet system. If a material spreader is optioned, components must be installed on the spreader and tested.
- s. If a material spreader is not optioned, nozzles shall be shipped loose, and placed in the frame-mounted tool box.
- t. A nurse tank with a 2.5-gallon minimum capacity shall be mounted with the pre-wet enclosure to facilitate installation of the pre-wet float, priming, and flushing of the pre-wet system.

2.3.8 LED Warning Light System: Each unit shall be equipped with an SAE Class 1 LED warning light system in accordance with the following specifications. System shall be evaluated and approved by the MoDOT Representative.

- a. Centralized Controller:
 - Shall operate on 12-Volt DC and operate through the range of approximately 10 to 16-Volts DC with nominal degradation of performance in either intensity or flash rate.
 - Shall be mounted with the power distribution box between the seats. All standard mounting hardware shall be included.
 - Shall have radio frequency interference (RFI) suppression circuit(s) to prevent radiated, as well as conducted, interference problems.
 - Shall be powered by a factory work light circuit, or the chassis electric accessory power supply. This circuit shall provide key-on and key-off operation of the LED light system. Circuit shall have its own factory-installed circuit protection and switch. A dash mounted indicator light shall indicate when the warning lights are operating.

- Shall have four outputs, one for each of the four individual light heads to be installed on the truck. Outputs shall power each light head by means of a two-wire circuit. Controller connections for the individual light heads shall be made using male and female spade terminals. Controller housing shall also provide strain relief for the individual light head harnesses.
 - Shall produce a burst of four impulses per burst to each light head, at a minimum flash rate of 70, maximum flash rate of 110 bursts per minute. MoDOT Representative must pre-approve flash pattern.
 - Shall be reversed input polarity protected. Shall also provide full output short-to-ground protection to prevent damage to the controller and light heads.
- b. LED Modules: System shall use individual LED modules, approximately 3-inches by 5-inches in size. This module must be used in all installed light heads. Modules shall be easily replaced.
- c. Cab Shield (Top) Light Assemblies: Must be Whelan Micro Freedom 400 or pre-approved equivalent. Two light heads shall be mounted to the cab shield, one on each side of the body. Light heads are to be permanently mounted to a fixed mount, and elevated to provide ample cross-visibility of the light head from the front and rear of the truck. For each light head, one module shall face to the front, one shall face to the rear, and one shall face to the side of the truck. The combination of the two light heads shall provide 360-degrees of visibility in a horizontal plane. The lights shall be amber and white in color. The amber and white LED shall flash in an alternating pattern in sequence with other alternating lighting patterns and in sequence with other alternating truck lighting. Each light head shall have a 12-inch maximum cable with a single weatherpak connector for connecting to the extension harness from the central controller. Each light head shall have protective guards sufficient enough to protect the light head assembly from low hanging tree branches. Protective guards shall not compromise the intensity or visibility of the light head.
- d. Rear and Corner Post Light Assemblies: Must be Whelan 400 Series Square, Super 3, amber, red white triple lights including the Whelan model TIR3 amber side light or pre-approved equivalent. Light heads shall be vertically mounted on each rear corner of the dump body using a stainless steel housing and bracket. Each light head shall have a weatherpak connector for connecting to the extension harness from the central controller.
- e. Cable Harnesses:
- The cable shall be expected to maintain its electrical, mechanical, and environmental integrity for the life of the vehicle on which it is originally installed on, without the need for re-wiring at any future time.
 - The cable shall be flexible in cold weather, and tolerant of hot temperatures.
 - Each power conductor shall meet the circuit requirements for the specified lighting system. Cable shall have an outer insulation jacket enclosing both conductors.
 - Insulation jacket shall be highly resistant to abrasion, corrosion, oil, grease, and normal highway chemicals or environmental abuse for the normal life expectancy of the vehicle.
 - The cable will be available in bulk from the manufacturer.
 - Splices are not acceptable.

2.4 Single Axle Dump Truck Technical Specifications: The unit offered must meet the technical requirements in section 2.3 above as well as the following requirements in this section. The combined specifications are for the manufacture of a 35,000 pound (lb.) Gross Vehicle Weight Rating (GVWR) Set Forward Single Axle Dump Truck with a bed to accommodate a 10 foot spreader.

Paragraph Revised by Addendum 001

- a. Change 2.3.1.e – Minimum gross torque to 660 pound-feet, and a minimum SAE gross *horsepower of 260* when operated within a governed speed as recommended by the engine manufacturer.
- b. Change 2.3.1.h – Axle shall be standard manufacture 14,000 lb. rated capacity.

Paragraph Revised by Addendum 001

- c. Change 2.3.1.i – Axle shall be standard manufacture 21,000 lb. rated capacity *without power divider*.

Paragraph Revised by Addendum 001

- d. *Change 2.3.3.d – Hoist as a minimum shall be a CS90-4.5-3DA.*

Paragraph Revised by Addendum 001

- e. Change **2.3.3a and 2.3.4.a** – Dump body shall be a 10-foot cross-memberless Western style body.

Paragraph Revised by Addendum 001

- f. **Change 2.3.3b and 2.3.4.b to meet the size requirements below.**
- Shall have a 10-foot maximum inside length.
 - Shall have a 100-inch minimum outside width.
 - Shall have an 86-inch minimum inside width.
 - Shall have a 28-inch minimum side height with level ends.

Paragraph Revised by Addendum 001

- g. **Change 2.3.4.d – Hoist as a minimum shall be a CS90-4.5-3DA.**

2.5 Tow Plow Dump Truck Technical Specifications: The unit offered must meet the technical requirements in section 2.3 above as well as the following requirements in this section. The combined specifications are for the manufacture of a 58,000 pound (lb.) Gross Vehicle Weight Rating (GVWR) Set Forward Tow Plow Dump Truck with a bed to accommodate a 16 foot spreader.

- a. Change 2.3.1e – Minimum gross torque to 1,500 pound-feet, and a minimum SAE gross horsepower of 425 when operated within a governed speed as recommended by the engine manufacturer.
- b. Change 2.3.1j – Fuel tank capacity shall be a 100-gallon minimum.
- c. Addition 2.3.2p – Three 1/2-inch male hydraulic couplers for the independent control of tow plow shall be placed on the passenger side of vehicle at the rear of the dump body in the lower rub rail.
- d. Addition 2.3.6d – One additional dual axis tow plow control lever for the tow plow moldboard lift, and tow plow steer left and right and shall be spring returned to neutral from all directions.
- e. Addition 2.3.5f6 -
- Tow Moldboard Lift: Single acting cylinder valve with counter-balance capability. Valve shall be spring return to neutral, with float capability in the lower position. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - Tow Plow Steering: Double acting cylinder valve. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both left and right functions.
- f. Addition 2.3.5i – Tow plow lift and steer hoses shall be 1/2-inch ID with female JIC swivels at both ends.
- g. Addition 2.3.8a – The factory work light circuit shall run to the rear of the truck with a 6 pin trailer-style connector to supply power and ground to the tow plow strobe lights.

2.6 Optional Equipment:

2.6.1 Right hand and/or left hand mid-mount wing plow:

Paragraph Revised by Addendum 001

- a. Right hand wing plow shall be a Henke Model MDPW, Monroe MJW-8, **Henderson HWS or Viking MW025.**

Paragraph Revised by Addendum 001

- b. Left hand wing plow shall be a Henke Model MDPW or Monroe MJW-8L, **Henderson HWS or Viking MW025.**
- c. Shall be built and tested to the latest OSHA requirements and SAE standards.
- d. Shall be designed to plow at a desired height, and be able to float.
- e. The moldboard must fold close to the truck for clearing bridges, transporting, or storing.
- f. Shall have an adjustable plowing angle.
- g. The height of either end shall be hydraulically controlled from the cab.
- h. Wing and assemblies must be easily and quickly attached and removed.
- i. All welds and mounting brackets shall be of high quality construction.
- j. All major assemblies such as moldboard, push tubes, mounting plates etc. shall be designed for rugged use.
- k. Moldboard:

- Moldboard shall be formed from 10-gauge steel, inboard height shall be minimum of 24-inches, outboard height not to exceed 28-inches. Cutting edge shall be a minimum of 1/2-inch by 8-inch and a minimum length of 8-feet. Moldboard top angle shall be a minimum of 2-inch by 2-inch by 5/16-inch and bottom angle minimum of 4-inch by 4-inch by 3/8-inch.
 - There shall be a minimum of five ribs per moldboard to be continuously welded from top moldboard to bottom of moldboard for structural strength.
 - A full moldboard trip shall be provided. Trip mechanism shall perform at plowing speeds up to 45 MPH.
- l. Cutting edge shall have a 45-degree angle mitered leading edge.

Paragraph Revised by Addendum 001

- m. Hydraulics:
- A dual axis control lever shall be installed to operate the wing plow. Control lever shall be CAN BUS proportional electric, and communicate with the valve driver module utilizing the hydraulic/spreader control system cables. Control shall be mounted in the same mounting stand as the standard hydraulic control levers.
 - Hydraulic function control valves shall be bulkhead fitting mounted in a weather tight enclosure, with the fittings on the bottom of the enclosure. Valves shall be mobile hydraulic, stackable, load sensing type. All valves shall be operated with proportional electric coils. Proportional coils shall be compatible with the control system valve driver module PWM outputs. All valves within the valve assembly shall have parallel inlets. Valve assembly inlet and outlet ports shall be 1-inch O-ring. Working ports shall be 3/4-inch O-ring. A and B ports shall be individually flow adjustable.
 - 1) Toe Raise and Lower: Double acting cylinder valve, with a work port relief valve for down pressure protection on port "A". Work port relief valve shall be set at 500 psi. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - 2) Heel Raise and Lower: Double acting cylinder valve. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - Hydraulic Cylinders: A minimum of two double acting cylinders with chrome-plated or black nitrided piston rods shall be included for angling moldboard and applying down pressure to moldboard with *internal or external* counter balanced valves. The hydraulic cylinders shall be industrial quality. ***Bidder shall provide a stop of sufficient size to prevent blade from gouging pavement.***
 - Hydraulic Hoses and Couplers: All hoses shall be rated for a working pressure of 3,000 psi.
 - 1) Wing plow hoses shall be 3/8-inch ID with female JIC swivels at both ends.
 - 2) Hydraulic quick couplers shall be provided, and securely mounted in the wing area to provide easy removal and remounting of the wing.
 - 3) All hydraulic couplers shall be full-flow Aeroquip FD45 or equivalent Parker 60 series. Couplers used shall be: male 3/8-inch FD45-1002-6-6 female 3/8-inch FD45-1003-6-6.
 - 4) A dust cap or plug shall be furnished with every male and female quick coupler
- n. All grease points shall provide adequate lubrication for the greased joint.

Paragraph Revised by Addendum 001

- o. ***Refer to Section 2.2.3 for finishing requirements.***

2.6.2. Heavy Duty Right Hand 3 Function Front Mount Wing Plow:

- a. Truck chassis must come equipped with integral frame extensions allowing adequate clearance to ensure the post will not interfere with hood or plow lights with hood in any position
- b. Front wing plow and mounting shall be removable without the need to remove any front plow mounting components or hitch.
- c. Wing plow assembly shall be mounted in a way as to not interfere with front plowing operations whether the wing is in the deployed or transport position.
- d. Attached transport locks shall be provided to secure the wing toe and heel in the transport position.

Paragraph Revised by Addendum 001

- e. Moldboard shall be **11- feet long** of ribbed design, open backed, constructed of a one piece, continuous welded, minimum 10 gauge, grade 50 high tensile steel.
- f. Moldboard shall feature a punched bolt-on one piece cutting edge with radius cut at the toe to prevent gouging.
- g. The rear of the moldboard must have provisions to allow bolting of a single extendable wing arm. Attaching area must have adjustment forward and back to allow the wing arm to be as close to 90 degrees with cutting edge of the moldboard.
- h. Single front post design with slide to allow benching of at least 24-inches high.
- i. Slide plate must incorporate a float action to accommodate for different cutting edge heights
- j. Must incorporate a float system independent of the post hydraulic cylinder providing a minimum of 3-inches of toe float.

Paragraph Revised by Addendum 001

- k. Slide plate will attach to the hinge by means of a **1-1/2 inch pin minimum**.
- l. Hinge shall be tripping style by way of spring or rubber timbren
- m. Hinge shall be attached to the moldboard by way of 1 ¼- inch minimum, UNC grade eight bolt, slotted nut and cotter key.

Paragraph Revised by Addendum 001

- n. Wing arm brace shall be constructed of an inner and outer tube to allow extension **of approximately 20-inches from fully collapsed to fully extended**.
- o. Arm will attach to the moldboard using a swivel style connection.
- p. Wing heel lift cylinder shall incorporate mounting to allow floating of the moldboard during plowing operation.
- q. Wing shall be operated using a joystick meeting specifications of section 2.3.5.d.
- r. All functions hydraulic, cables are not allowed.
- s. All hydraulic cylinder ports shall be ORB.
- t. All hydraulic cylinders and circuits shall be double acting, with adjustable down pressure relief capability on the toe and heel hydraulic sections. Work port section relief or load sense limiting relief is acceptable. Remote mounted or in-line relief valves are not acceptable.
- u. Hydraulic hoses shall meet specification requirements of 2.3.5.i, and in addition shall incorporate quick disconnect couplings to allow removal of the wing plow. Couplings shall meet specification requirements of 2.3.5.j.

Paragraph Revised by Addendum 001

- v. Wing “out” function shall utilize a counterbalance valve incorporated on the hydraulic cylinder to prevent plow from drifting away from truck when transport lock mechanism is not being used. ***This references the cylinder that brings the wing back against the truck.***
- w. Wing shall operate as a moldboard extension to the front plow when used simultaneously to prevent leaving a berm strip on the road surface.
- x. Selection of this option shall require an additional booster type air spring installed on the wing mounted side of the front axle. This air spring shall be controlled by rocker –style switch in the operator console.

Paragraph Revised by Addendum 001

- y. ***Refer to Section 2.2.3 for finishing requirements.***

2.6.3 Underbody Scraper:

Paragraph Revised by Addendum 001

Paragraph Revised by Addendum 002

- a. ***Unit shall be a 10-foot underbody scraper designed for plowing and cutting snow and ice. Acceptable model shall be a Henke Model UBS10-XH, Henderson UBS, Viking UBPRR 1020 or Monroe Model MS3510.***
The underbody scraper shall be built and tested to the latest OSHA requirements and SAE standards. All welds

and mounting brackets shall be high quality construction. The underbody scraper must be easily detachable from the truck.

- **Hanger brackets shall be attached to the frame by 24 inch by 18 inch by 3/4 inch steel plates, one on each side.**
- Hanger board shall be a minimum of 14-inch top plate width, 10-inch 30-pound S&C channel and 4-inch 13.8-pound S&C channel welded to form a single unit or equivalent.
- Moldboard shall be a minimum length of 10 feet, maximum height of 21-inches, 1-inch thick, high-carbon steel, punched with standard blade holes. Moldboard must be hydraulically angled left and right to achieve the maximum possible angle. The moldboard shall be capable of rising to a horizontal position with a minimum ground clearance of 8-inches when not in use. Moldboard shall be drilled for right-hand and left-hand extensions.
- Hinge shall be a minimum 2-1/2-inch diameter, 96-inch length cold-rolled steel. The hinge shall have multiple grease points to provide full-width lubrication of the hinge. **The hinge or the pin shall be double spiral grooved to facilitate greasing.**
- The circle shall be minimum 1-inch heavy-duty steel, notch-less. The center pin shall be a minimum of 5-inches and a remote mounted grease fitting tube approximately 36-inches long shall be provided. Nylon wear pad required between hold down block and top of circle. Stops shall be welded on after installation of the moldboard to maximize turning radius of the underbody scraper and provide adequate clearance to all truck components. **Scraper moldboard shall be centered under the unit and shall not be more than 102-inches in width while in transport position.**
- Hydraulics:
 - 1) A dual axis control lever shall be installed to operate the underbody scraper. Control lever shall be CAN BUS proportional electric, and communicate with the valve driver module utilizing the hydraulic/spreader control system cables. Control shall be mounted in the same mounting stand as the standard hydraulic control levers.
 - 2) Hydraulic function control valves shall be bulkhead fitting mounted in a weather tight enclosure, with the fittings on the bottom of the enclosure. Valves shall be mobile hydraulic, stackable, load sensing type. All valves shall be operated with proportional electric coils. Proportional coils shall be compatible with the control system valve driver module PWM outputs. All valves within the valve assembly shall have parallel inlets. Valve assembly inlet and outlet ports shall be 1-inch O-ring. Working ports shall be 3/4-inch O-ring. A and B ports shall be individually flow adjustable.
 - Raise and Lower: Double-acting cylinder valve with a work port relief valve for down pressure protection on port A. Work port relief valve shall be set at 500 psi. Valve shall be spring return to neutral. Valve shall be pressure and flow- compensated, with an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - Left and Right: Double-acting cylinder valve. Valve shall be spring return to neutral. Valve shall be pressure and flow-compensated, and have an adjustable flow range of 0 to 15 GPM. Valve shall have a manual override for both raise and lower functions.
 - Cushion Valve: Shall include a double relief cushion valve, mounted on a cross member behind the cab. The valve shall be constructed of a high-tensile cast iron body with ball and spring style relief that has hardened seats. The relief valves shall be set at 750 psi. The valve shall have O-ring thread ports.
 - 3) Cylinders:
 - Raise and Lower: A minimum of two 3-inch diameter double-acting cylinders with chrome-plated or black nitrided piston rods. Shall have integral counter balance valve.
 - Left and Right: A minimum of two 4-inch double-acting cylinders with 2-inch chrome-plated or black anodized rods for the reversing of the moldboard.
 - 4) Hydraulic Hoses and Couplers: All hoses shall be rated for a working pressure of 3,000 psi.
 - Underbody scraper hoses shall be 3/8-inch ID with female JIC swivels at both ends.
 - Hydraulic quick couplers shall be provided, and securely mounted in the underbody scraper area to provide easy removal and remounting of the scraper.
 - All hydraulic couplers shall be full flow Aeroquip FD45 or equivalent Parker 60 series. Couplers used shall be: male 3/8-inch FD45-1002-6-6, female 3/8-inch FD45-1003-6-6.
 - A dust cap or plug shall be furnished with every male and female quick coupler.

5) Trip Springs: A minimum of two heavy-duty compression springs mounted in 6-inch diameter canisters.

- All grease points shall provide adequate lubrication for the greased joint.
- **Refer to Section 2.2.3 for finishing requirements.**

2.6.4 Skid Mounted Material Spreaders and Auger: Unit shall be a hydraulic driven, materials spreader body. The unit shall be a self-contained, stainless steel, V hopper type. It shall be compatible with the Western style dump body specified in sections two of this request. The spreader shall be capable of spreading uniformly all types of granular materials: salt, cinders, chemicals, abrasives, and mixtures of these up to a width of 40-feet.

- a. The body and conveyor box shall be manufactured into a common unit in accordance with good commercial practices.
- b. All stainless steel shall be welded using stainless welding wire and shall be left unpainted.
- c. Any carbon steel components shall be chemically cleaned and coated with a lead-free primer and painted with lead-free gray enamel.
- d. The manufacturer's standard warranty against defective parts, material, and workmanship shall be furnished. A copy of the warranty is to be attached to the bid
- e. The body is to be 100% welded on the inside. Cross-member and side-support spacing deviations may be allowed if necessary for component installation.
 - Overall height shall not to exceed 56-inches to the top of the center screen support beam.
 - Top inside width shall not be less than 78-inches.
 - Sidewalls must be sloped at approximately a 45-degree angle.
 - Shall be constructed of a minimum 12-gauge stainless steel.
 - Long sill, cross-members and full-length steel channel skids shall be a minimum of 7-gauge stainless steel.
 - Side supports shall be a minimum of 12-gauge stainless.

Paragraph Revised by Addendum 001

- f. Top Grate Screens:
 - Screens shall be hinged at the center support beam of the spreader body for easy handling.
 - Screens shall be made of either 3/8-inch diameter rods centered on crossbars or 3/8-inch diameter woven wire on heavy-duty frames. Screen openings to be approximately 2-1/2-inches by 2-1/2-inches.
 - The center support beam must be a minimum 2-inch by 6-inch **stainless steel** tube with a minimum 3/16-inch thickness.
 - The center support beam shall be raised above the top of the body to prevent material build-up on top of the screens.
- g. Tie Down and Lifting Brackets:
 - A minimum of four, at least 10-gauge stainless steel hold down brackets designed for 4-inch nylon straps with flat hooks, two on each side. The Bidder must coordinate placement of hold down brackets with dump body manufacturer.
 - A 10-gauge minimum stainless steel lift hook and bracket shall be installed on the front and rear face of the body at each upper corner to allow for easy handling when loading or unloading.

Paragraph Revised by Addendum 001

- h. Conveyor:
 - Conveyor box and floor shall be 7-gauge stainless steel.
 - The conveyor chain shall be a heavy-duty pintle chain, Drives D667X or equal.
 - Crossbars shall be 1-1/2-inch by 1/4-inch by 18-inch minimum welded to the chain links on 4-1/2-inch centers.
 - Chain tensioner shall be screw type, spring loaded, on the front idler shaft.
 - A rear belt type bar wiper shall be provided.
 - Front idler shaft bearings shall have grease zerk lines plumbed to the rear of the body.
 - **Front idler shaft shall have 6- to 8-tooth sprockets.**

- i. Conveyer Gearbox:
 - Ratio shall be 50:1. Gearbox shall have hardened input and output shafts and a bronze bull gear.
 - **Output shaft shall have 6- to 8-tooth sprockets.**
 - Shall have a high torque, low speed, gerotor type hydraulic motor installed. Motor shall be designed to operate effectively at a maximum system pressure of 2,300 psi. Hydraulic motors designed to operate at a pressure above 2,350 psi are unacceptable.
 - Hydraulic motor shall have O-ring thread ports.
- j. Discharge gate shall be located at the rear of the body to properly adjust the flow of material to the spinner.
 - Maximum feed gate opening shall be 11-inches high by 20-inches wide.
 - The discharge gate and track shall be 7-gauge stainless steel.
 - The screw jack adjusting the discharge gate height shall have nylon U-joints and bushings with grease fittings on jack head.
 - The grease zerk on the jack shall be relocated and plumbed to accommodate greasing from ground level.

- k. Drop Chute and Spinner:
 - Drop chute shall be made of a minimum of 12-gauge stainless steel.
 - Drop chute shall bolt to the long sills.
 - The chute shall be fully enclosed and include an operator-adjustable deflector at the bottom to change the flow of material from the middle of the chute to one side or the other.
 - The bottom of the chute shall have a hood with operator-adjustable material deflectors installed on each side and rear of the drop chute.
 - The spinner shall be securely mounted at the bottom of the chute. Spinner motor mounting brackets shall be a minimum of 7-gauge stainless steel.
 - The spinner shall be operated by a high torque, low speed gerotor type hydraulic motor with O-ring thread ports.
 - The height of the spinner disk shall be adjustable with an ideal height of 18-inches above the ground.
 - A 20-inch spinner disk shall be 7-gauge stainless steel or pre-approved equivalent. Spinners made of ferrous metals will not be accepted.
 - **Chute shall have ability to fold out of the way of pintle hitch to attach tow plow.**
- l. Hydraulic Hoses and Couplers
 - All hydraulic hoses shall be rated for 3,000 psi working pressure.
 - Hydraulic hoses shall be long enough to be routed from their respective connection point on the spreader to the male hydraulic couplers mounted in the left rear corner of the dump body.
 - Hoses shall be routed up to the upper left rear corner of the spreader body and secured at a point to allow the hoses to go over the side of the dump body and down to the male couplers at the left rear corner of the dump body.
 - The return circuit for the conveyor and spinner motor shall be “teed” together on the spreader and run together in a common return hose to the truck coupler.
 - Hydraulic hoses shall be sized as follows:
 - 1) Auger hose shall be 3/4-inch ID with female JIC swivels at both ends. Hose shall have a 3/4-inch female FD45-1003-12-12 coupler attached.
 - 2) Spinner hose shall be 1/2-inch ID with female JIC swivels at both ends. Hose shall have a 1/2-inch female FD45-1003-8-10 coupler attached.
 - Spreader return hose shall be 1-inch ID with female JIC swivels at both ends. Hose shall have a 1-inch female FD45-1003-16-16 coupler attached.
- m. Liquid Chemical Storage:
 - Two side-mounted, minimum of 100-gallon polyethylene reservoir tanks, one per side, shall be provided.
 - A minimum of a 3-inch top fill port with splash-proof vent and a 3/4-inch suction port shall be molded into each tank.

- Both tanks shall be plumbed together with a minimum 1-½" ID hose and a tee located at the left rear corner of the spreader.
- n. Conspicuity: Spreader shall be outfitted with DOT-C2 11 inch red by 7 inch white prismatic retroreflective conspicuity tape meeting or exceeding FMVSS 108, DOT-C2 standards. The conspicuity tape shall be applied continuously along the top and vertical sides of the rear of the spreader being inset two inches from the edge. It shall be terminated ½ inch from any object and resume ½ inch from the far side of the object.
- o. 10-Foot Skid-Mounted Materials Spreader – Unit shall meet all minimum requirements of section 2.6.4 a. through n. and in addition offer the following:
- The spreader body shall have a minimum of five cubic yards struck capacity.
 - The spreader shall have an inside body length of 10-feet at the top.
 - The body shall have a minimum of five cross-members and side supports spaced 12-inches from body ends on 24-inch centers.
 - The body is to have a top-grate screen grid, having at least four sections, two on each side.
- p. 13-Foot Skid-Mounted Materials Spreader – Unit shall meet all minimum requirements of sections 2.6.4 a. through n. and in addition offer the following:
- The spreader body shall have a minimum of nine cubic yards struck capacity.
 - The spreader shall have an inside body length of 13-feet at the top.
 - The body shall have a minimum of six cross-members and side supports spaced 12-inches from body ends on 24-inch centers.
 - The body is to have a top-grate screen grid, having at least six sections, three on each side.

Paragraph Revised by Addendum 001

- q. 16-Foot Skid-Mounted Materials Spreader – Unit shall meet all minimum requirements of sections 2.6.4 a. through n. and in addition offer the following:
- The spreader body shall have a minimum of eleven cubic yards struck capacity.
 - The spreader shall have an inside body length of 16-feet at the top.
 - ***It is preferred the body will have a minimum of eight cross-members and side supports spaced 12-inches from body ends on 24-inch centers. The minimum must be seven cross-members and side supports evenly spaced.***
 - The body is to have a top-grate screen grid, having at least eight sections, four on each side.

Paragraph Revised by Addendum 001

- r. Skid Mounted Single Auger – Unit shall meet all minimum requirements of sections 2.6.4. a. through g., k. through n. and in addition offer the following:
- Auger Tube:
 - 1) Shall be 4-inch OD pipe, with a minimum wall thickness of 1/4-inches.
 - 2) The front of the auger tube shall have a 2-inch cold roll end shaft welded to a 3/8-inch minimum thickness end plate. Both shall be continuous welded.
 - 3) The front end shaft of the auger shall be supported by a 4-bolt flange, heavy duty, sealed, self-aligning bearing. Bearing must be greasable from the rear of the spreader body.
 - 4) The rear of the auger tube shall be supported entirely by the hydraulic drive motor by means of a splined, greasable coupler continuous welded to the rear of the auger tube. Grease fitting must grease motor splines and coupler splines.
 - 5) No center support bearings will be allowed.
 - Auger Flighting:
 - 1) Shall have a minimum thickness of ½-inch, and an outside diameter of 7-inches.
 - 2) Shall be continuous welded to the tube.
 - 3) Shall have the outer edge hard-surfaced by an electric arc welding process to a minimum #55 Rockwell hardness.
 - 4) Shall have three different pitches in order for the hopper to unload evenly from the front, middle, and rear.
 - Auger Drive Motor:
 - 1) Shall be a heavy duty roller stator type, have a splined output shaft, 4-bolt mounting, with O-ring ports.

- 2) Shall be rated for a maximum system pressure of at least 2,350 psi, have a displacement of 64-cubic inches, and be rated for a maximum of 25 GPM oil flow.
- 3) Shall be mounted using a floating mount to prevent minimal differences in spline alignment between the auger and motor from damaging either component.
- 4) ***Spreader shall incorporate a safety interlock to disable the motor when top grates are open.***
- 5) ***Gear reduction or direct drive motor is acceptable.***
- Auger Feed Rate:
 - 1) The rear wall of the spreader shall have a feed opening size of approximately 63-square inches.
 - 2) The auger assembly shall have a minimum theoretical output of .135-cubic feet of material per revolution.
 - 3) The auger and motor assembly shall produce a minimum theoretical output of 7.29-cubic feet per minute of material at 15 GPM oil flow.

2.6.5 Other Options: Bidder shall provide the price for the following change options. Some options may be a change to the base vehicle specified or the request for additional items. Bid price shall include all associated parts and labor for installation and operation of the optional item. All units shall be delivered with all ordered options fully installed, mounted and operational.

- a. Manual Transmission:
 - Ten speed manual transmission, with “double low” low gear.
 - Transmission shall be rated to meet or exceed horsepower and torque of engine.
 - Starter system shall include a neutral start switch.
- b. Manual Transmission:
 - Six speed manual transmission.
 - Transmission shall be rated to meet or exceed horsepower and torque of engine.
 - Starter system shall include a neutral start switch.
- c. Eaton Ultra Shift Transmission or equivalent.
- d. Quixote Pavement Temperature Sensor: Shall have the ability to calibrate. Sensor information shall be displayed on the spreader control display. Shall be mounted in a location to provide accurate operation.
- e. Exhaust Brake Engine Retarder: Shall be OEM factory installed.
- f. Automatic Tire Chains: INSTA-CHAIN or ONSPOT brand chain systems complete with universal mounting brackets and to include an inline safety valve from air tank to the automatic tire chains. Automatic tire chains shall be air operated, and shall be controlled by a rocker-style rocker switch inside the operator’s console. These shall be installed on the rear drive axle.
- g. Dual Steering: Provide dual steering and controls to allow the vehicle to be steered and driven from either side in the cab. Option shall also include right-hand instrument panel.

Paragraph Revised by Addendum 001

- h. Dump Body Vibrator:
 - Shall be a Cougar model DC3200, #160181 or pre-approved equal.
 - Bearings used to support the vibrator shaft must be fitted with grease zerks, easily lubricated without removing the protective cover.
 - Shall be controlled by a switch located in the ***operator console.***
 - Shall not operate unless the raised body indicator is activated.
 - Shall be operated by a two-position, momentary-on switch.
- i. Left-hand and right-hand Truck Mounted Attenuator Pockets (TMA) pockets to be incorporated with the rear hitch plate and welded to the rear of the truck frame per Attachment 3.
- j. Replace base engine with a Cummins ISL9 engine.
- k. Bluetooth Handsfree Technology with interior speakers, microphone and voice activated calling.
- l. A fixed peep window to be installed on the lower portion of the passenger door to allow for extra visibility.
- m. Tank Heater – In tank fuel heater, engine coolant type. Must have a factory installed manual shut-off valve for summer operation. A body builder installed shut-off valve may be substituted upon approval of the chassis manufacturer and MoDOT Representative.
- n. Remove Base Pre-Wet system included in Section 2.3.7 above.

- o. Upgrade Granular Pre-Wet system from a 9 GPM Flow Meter and Pump to a 25 GPM Flow Meter and Pump. All other performance requirements identified in Section 2.3.7 above must be altered to accommodate this change.
- p. Receiver style pintle Hitch compatible with the Saf-Tite 100 rigid pintle hitch and associated installation requirements.
- q. Heavy Duty Seat with five point harness system offering safety from a rear end collision.

Paragraph Revised by Addendum 001

- r. Walk Rail for Stainless Steel Beds: The optional bed side walk platform is intended to provide a working platform along the entire length of the dump body from front to back on the outside of the bed. It shall be within the maximum width requirements for the dump body. This platform shall function with the bed side ladders to allow easy access from the ground, up the ladder and onto the platform and shall not interfere with the tarp system. The platform shall support 400 lbs., with a minimum tread width of 2 ½” and be a minimum of 2 ½” from the bed side. The surface of the platform shall be constructed of McNichols Quality GRIP STRUT or equivalent material. Adhesive or painted slip resistant materials are not acceptable. On trucks equipped with the optional bed side walk platform, a hand rail system shall also be added to the top of the bed rail. The hand rails shall be round in shape, approximately 1 1/2” outside dimension (OD) x ¼ wall thickness and supported sufficiently along its length to the top bed rail to support the weight of the operator using the hand hold. The hand rail shall be mounted to provide a 4” gap between the top of the bed rail and the bottom of the hand rail. ***Taper the ends of the hand rail in a manner that does not interfere with tarp and to eliminate catch points on the front or rear of the dump body.*** The platform and hand rail shall be constructed of material matching that of the dump body.
- s. Walk Rail for Corten Steel Beds: To be constructed in the same manner as the Walk Rail for Stainless Steel Beds option and shall be constructed of material matching that of the dump body and coated appropriately for corrosion resistance.
- t. Back up camera with a cab mounted video display.

Paragraph Revised by Addendum 001

- u. Installation of MoDOT owned 50 Watt 2-way radio. Radio shall be wired to an electrical power source. To be mounted in the overhead console. The radio antenna shall be mounted to the center of the cab roof. ***The two-way radio wiring shall be factory installed ten-gauge wire with a single 30-amp circuit protection. Factory installed wiring to support 50-Watt state owned radio. Wires to terminate in the overhead console and power distribution box between the seats. Coax cable shall be RG58. Coax cable end connections shall be PL259. No wires or coax shall have splices. Wire ends shall be heat-shrunk to prevent accidental grounding and shall include the proper protection from circuit overload. Wiring configuration must allow continued operation of radio even when ignition is off.***

Paragraph Revised by Addendum 001

- v. Installation of MoDOT owned 100 Watt 2-way radio. Radio shall be wired to an electrical power source. Remote head shall be wired to the ignition. Terminal connections shall be heatshrunk and sealed. The radio antenna shall be mounted to the center of the cab roof. ***The two-way radio wiring shall be factory installed ten-gauge wire with a single 30-amp circuit protection. Remote radio head shall be installed in the overhead console and radio body shall be installed on the rear cab wall. Coax cable shall be RG58. Coax cable end connections shall be PL259. No wires or coax shall have splices. Wire ends shall be heat-shrunk to prevent accidental grounding and shall include the proper protection from circuit overload.***
- y. Heated Windshield.
- z. Vibrating Wiper Blades.
- aa. Lug Nut Torque Indicator.
- bb. Tire Pressure Monitoring System.

Paragraph Revised by Addendum 001

- cc. Air Powered Accessories: Air powered accessories shall be supplied from the trucks air supply, originating at a “dry tank.” Air supply shall originate at a protection valve which will close at approximately 70 psi to protect the truck air system in the event of a leak in a body builder installed accessory. All body builder air

lines going to the operator's console shall be routed through bulk head unions located at the rear wall of the cab near the strain reliefs for electrical wiring. Bulk head mounting shall be facilitated by matching backup plates located on the inside and outside of the cab wall. All bulk head locations shall have the function of that bulk head stamped or etched into the plate for identification of each air line installed. Air supply shall be routed to the operator console and routed through an oil injector installed inside the cab.

- Air Control Operated Tarp with rocker-style air valve located in the operator console shall meet the same specifications as in section 2.3.3.t and 2.3.4.t with the exception it shall be air operated type, not electric.
 - Air Operated Hydraulic Joy Stick Control Lever: The hoist control shall be a single axis control with lock in the center position to prevent accidental actuation. **All other hydraulic controls shall be a dual axis feathering remote air control with air shift actuator for the valve.** There shall be a Pressure Protection Valve to protect against loss of pressure in the primary system caused by a broken line or an air leak somewhere in the auxiliary system. There shall also be a FLR (filter, lubricator, and regulator) plumbed into the auxiliary air system to protect the air controls from contamination and being over pressurized. All the air tubing will be color coded to identify each individual hydraulic function.
 - Air control operated tail gate latch shall meet the same specifications as in section 2.3.3.j and 2.3.4j in addition, shall be controlled by a rocker-style air valve located in the operator's console, not electric over air.
 - Air control operated tire chains shall meet the same specifications as in section 2.6.5.f with the exception it shall be air operated rocker-style valve located in the operator's console, not electric over air.
- dd. Additional Training Modules: Training must be classroom and/or hands on. Training session shall take place at a location within each district and/or central office. Use of MoDOT owned space may be permitted based upon availability. Modules shall be related to various components and operations of the delivered units. A module is defined as a one day training course and may include subjects such as emissions, electrical, hydraulic, engines, etcetera. Cost shall be per module, per employee.
- ee. Installation of MoDOT Provided Decals. Decals include two MoDOT logo decals and two locations for vehicle four digit vehicle number.

Paragraph Revised by Addendum 001

- ff. Shovel tool box to be installed on underside of bed and above standard tool box. **Shall be constructed of the same materials as well as latch style and key as the standard tool box.** Size shall be consistent with the necessary requirements related to clearance and location when combined with standard tool box. **Overall dimensions are 8.5-inches tall, 64-inches wide and 24-inches deep. Door opening shall be 5-inches by 42-inches.**
- gg. Stainless steel spring loaded shovel bracket equivalent to Buyers product #SH675SS.
- hh. Crew Cab on the Single Axle Dump Truck Option.

Paragraph Revised by Addendum 001

- jj. **Replace the Spreader Control System identified in section 2.3.6 with a Rexroth CS 550/150 Spreader /Joy Stick Controller. Installed system shall be functionally equivalent to the system described in sections 2.3.5 and 2.3.6.**
- kk. Steel Material Spreader Stand for the 10-foot, 13-foot and 16-foot spreaders. Units shall be constructed to handle the proposed spreaders in accordance with the following requirements.
- Steel must be hot rolled, mild steel, new with no rust.
 - Stand must have ladder with proper hand holds off the back and out of the way of the operation for workers access to top of spreader.
 - Guide caster rollers on stand for ease of stand/spreader to slip in and out of dump bed.
 - Folding front legs (lockable while used for storage) to aide in the loading of the stand/spreader into dump bed.
 - Rotational, folding, pivoting or telescoping rear legs to keep out of the way of operation (lockable while used for storage).
 - Stands must be painted black over one coat of primer.
 - Spreader stand shall be manufactured in a way to center itself inside the dump body, preventing damage to the liquid saddle tanks during spreader installation.

Paragraph Revised by Addendum 001

- ll. *Replace the Spreader Control System identified in section 2.3.6 with a Force America SSC6100 CAN Bus Spreader Control System. Installed system shall be functionally equivalent to the system described in sections 2.3.5 and 2.3.6.*

Paragraph Revised by Addendum 001

- mm. *Replace the Spreader Control System identified in section 2.3.6 with a Cirus Controls SpreadSmart Rx CAN Bus Spreader Control System with Joy Stick Controller. Installed system shall be functionally equivalent to the system described in sections 2.3.5 and 2.3.6.*

Paragraph Revised by Addendum 001

- nn. *Air Ride Suspension for Single Axle Truck.*

Paragraph Revised by Addendum 001

- oo. *Contractor bed with drop down sides: The following specifications and dimensions shall apply to a low profile multipurpose truck mounted dump body and hoist. This dump body shall be used for several different highway maintenance operations where the floor of the body needs to be readily accessible from the side of the truck, from ground level. This accessibility shall be accomplished with fold down sides, and a maximum floor height of 48" when mounted on a chassis with 11R22.5 rear tires. This dump body shall be capable of hauling a variety of materials up to the GVWR capacity of the chassis. This dump body shall also accommodate a 10' slip-in material spreader with attached liquid storage tanks.*
- *General: The dump body provided shall be a multipurpose style, with fold down sides. Underbody cross-members for support will not be allowed. The floor, sides, and main long sills are to be full length with no cross-splices. All boxed areas of the dump body shall be sealed. No wiring or hoses shall be run through any boxed area. All welds shall be continuous. All hinge pins shall be removable.*
 - 1) *10-foot maximum inside length.*
 - 2) *950 minimum outside width.*
 - *Material: The dump body main long sills, floor, tailgate, sides, front, front rail, rear rail, and corner posts, shall be constructed using a minimum of Corten steel, rated 55,000-psi yield.*
 - 1) *Main Long Sills 1/4-inch*
 - 2) *Floor 3/16-inch*
 - 3) *Front 12-gauge*
 - 4) *Sides 12-gauge*
 - 5) *Tailgate 12-gauge*
 - 6) *Rear posts 3/16-inch*
 - *Dump Body Mounting:*
 - 1) *The rear edge of the dump body pivot pin shall be 0 to 1-inch forward from the rear face of the rear hitch plate.*
 - 2) *The dump body pivot, measured from the centerline of the pivot pin to the rear face of the dump body not including the tailgate, shall be a minimum of 9 inches and a maximum of 12 inches.*
 - 3) *The chassis wheel base shall be such that the rear axle is located a maximum of 48-inches from the rear of the dump body, measured from the axle centerline to the rear vertical face of the dump body, not including the tailgate.*
 - 4) *Hydraulic oil reservoir shall be mounted to provide 3 to 4-inch clearance between the cab and reservoir.*
 - 5) *The dump body shall be mounted as close as possible to the hydraulic oil reservoir, with a minimum of 3-inch clearance, excluding the sub frame of the reservoir and hoist.*
 - 6) *A 4-gauge battery cable ground strap shall be installed from the dump body to the truck frame by means of a 5/16-inch cadmium plated bolt. Star washers shall be installed on both sides of the strap eye to insure a good ground.*
 - *Platform: Constructed of 3/16-inch Corten steel rated at 55,000psi.*
 - 1) *Long Sills: Long sills shall be structural steel or a fabricated tube with a minimum thickness of 1/4". Height shall be such to provide a platform floor height of no more that 48" at the highest*

point with the bed empty. If boxed construction, long sills must be sealed. No hoses or wiring shall be run through the length of the long sills.

- 2) *Cross-sills: None*
 - 3) *Side rails: Fabricated design, forming a box channel. Side rails must have cut-outs for wheel clearance/tire chains.*
 - 4) *Rear rail: Structural or fabricated tube design.*
 - 5) *Front rail: Structural or fabricated tube design.*
 - 6) *Floor: One piece smooth steel.*
 - 7) *Tie downs: Pop-up style tie downs shall be installed in the platform floor, with a minimum of two tie-downs per side. Tie downs shall have reinforced openings. Tie down assemblies shall be adequate to secure a loaded, 5 cubic yard slip-in material spreader, or other similar heavy cargo. The rear tie-down shall be 12 to 14 inches forward from rear of dump body. The front tie down shall be 12 inches forward from the rear edge of front permanent side. Tie-down assemblies shall use 3/8-gr. 70 chains.*
- *Hoist shall be a trunnion mount head lift, single-acting cylinder. The hoist should be designed to accept a Model CS90-4-3- MAILHOT cylinder. The cylinder sleeves shall be nitride coated. Sub-frame hoists are not acceptable. A flared body bracket will be attached to either the hoist frame or body understructure to align body in position and keep from moving side to side.*
 - *Dump Body Pivots shall facilitate thorough greasing. Bushings shall have an internal radial groove in line with the grease fitting. Pivot pins shall be drilled and cross drilled.*
 - *Body Props*
 - 1) *A storable body prop shall be provided on each side of the dump body.*
 - 2) *Pivots for the body props shall be greasable.*
 - 3) *Body props shall be constructed to withstand the down-pressure of the hoist without damaging the dump body, chassis, or any related components.*
 - *Bulkhead/cab protector shall be non-removable, with a formed doghouse for the trunnion mount head lift cylinder. The cab protector shall be of sufficient height to accommodate a slip in spreader and warning lights. The cab protector shall not interfere with the cab mounted vertical exhaust pipe. The cab protector shall be mounted, welded, and gusseted to prevent flexing or vibration. The cab protector shall have angled material deflector at top to keep dumped material from spilling onto the hydraulic oil reservoir. The cab protector shall extend 12-inches forward from front edge of headboard.*
 - *Permanent Sides*
 - 1) *The permanent side shall extend rearward from the headboard.*
 - 2) *Length shall be such as to have 22" inside from front sheet to rear of the permanent side.*
 - 3) *Side shall be tapered, with the height at the front being 24", and the rear height matching the fold-downside, with no provisions for extension boards.*
 - 4) *Side shall have a backing strip to serve as a stop/seal when side is locked in the upright position. This backing strip shall start two inches above the floor, and go to within one inch of the top of the side.*
 - *Fold down sides shall be one-piece design. The top and bottom of the sides shall be fabricated to form a tubular design. No vertical stiffeners allowed, except on the extreme ends.*
 - 1) *Height of sides shall be a minimum of 14 inches and a maximum of 16 inches above the floor.*
 - 2) *Length of sides shall be 72 inches.*
 - 3) *Top of sides shall be debris-shedding type.*
 - 4) *The end sections shall be constructed using steel of adequate dimension to provide structural integrity, and latch support.*
 - 5) *Fold down sides shall have a minimum of three greasable, stainless steel hinges per side. Hinges shall not protrude outside the width of the platform.*
 - 6) *Neither the sides, nor the hinges shall protrude above surface of platform when the sides are in the lowered position.*
 - 7) *A positive stop to prevent the sides from engaging with the truck's tires when lowered shall be provided.*
 - 8) *Sides shall require no more than 50# of lifting effort throughout their 180-degree travel.*
 - 9) *Sides shall have no provisions for extension boards.*

- *Fold Down Side Latches:* Fold down sides shall have two independent stainless steel latches per side, locking the fold down side in the upright position to the front and rear permanent sides. Latches shall be hand operated, quick release, and positive locking. All latches must be pre-approved.
 - 1) Latches shall operate smoothly and easily without the use of tools.
 - 2) Latches shall not exceed width of platform.
 - 3) Latches shall be a minimum of ½” diameter.
- *Ladder:* A storable ladder shall be provided each side of the platform. The rear edge of the ladder shall be even with rear edge of the front permanent side. Sides when folded down shall not interfere with the use or stowing of ladder. The horizontal rungs shall be made of galvanized grip-strut steel. Handles shall be installed on the bulkhead/cab protector corner posts to correspond with the ladders, and not exceed the width of the platform. Handles shall be installed to provide three points of contact while using the ladder. A ½” diameter steel rod shall be welded to rear of each bulkhead/cab protector corner post at a height of 32”-34” from floor, extended straight out to the rear 3”, then straight down, and welded to the top of the permanent side.
- *Tailgate:* Shall be double-acting and travel 180 degrees. Tailgate shall be vertically straight when closed. The top and bottom of the tailgate shall be fabricated to form a tubular design. No vertical stiffeners allowed except on extreme ends. Chains shall be provided to control opening width at the bottom of the tailgate, or support tailgate horizontally from the top.
 - 1) Tailgate shall require no more than 75 pounds of lifting effort throughout its 180-degree travel.
 - 2) The end sections shall be constructed using steel of adequate dimension to provide structural integrity and latch support.
 - 3) Tailgate shall have a maximum 20 inches height above the floor when closed.
 - 4) Tailgate chains shall be 3/8-inch grade 70.
 - 5) Tailgate lower pins shall be a minimum of 1-inch stress proof shaft.
 - 6) When the tailgate is lowered parallel to body floor, the inside surface of the tailgate shall provide a smooth level joint between the tailgate and the body floor.
 - 7) A license plate bracket shall be welded on the left-hand side of the tailgate.
 - 8) A hinged “D” ring shall be mounted top and center of the tailgate to provide a lifting hook for removing the tailgate.
- *Tailgate Latches:*
 - 1) *Upper Latches:* Shall have two independent stainless steel latches, one on each side, locking the tailgate in the upright position to the corner posts. Upper latches shall also serve as the pivot for the tailgate when releasing the lower latches. Latches shall be hand operated, quick release, and positive locking. Latch assembly shall prevent the tailgate from shifting sideways. All latches must be pre-approved.
 - Latches shall operate smoothly and easily without the use of tools.
 - Latches shall be a minimum of 3/4-inch diameter.
 - Latches shall have a minimum of 1-inch engagement.
 - 2) *Lower Latches:*
 - An over-center locking device on each side of the dump body shall hold the tailgate securely closed. The latching fingers shall be forged steel.
 - The tailgate latch cross shaft assembly shall be supported on each end by bushings.
 - This locking device shall be operated by an air cylinder, which shall be mounted between the long sills. Air cylinder shall be controlled by a switch in the operator’s console.
 - Locking device shall be adjustable at each side of the dump body.
 - A manual over-ride shall be provided on the outside of the dump body, allowing the operator to lock or unlock the tailgate using a simple adjustable wrench and without removing components.
 - Lubrication points on the tailgate latch cross-shaft shall facilitate easier greasing by means of grooved bushings and/or shaft.
 - Grease zerks at each end of the tailgate cross-shaft shall be visible and accessible from the outside face of the dump body.

- *Rear corner posts shall extend below the side and rear rails to allow for reinforcement of this joint. Rear posts shall be of sufficient size and structure to accommodate all loads imposed on tailgate and side doors. Hydraulic couplers shall be mounted in bottom of rear post, or immediately below it.*
 - 1) *Rear posts shall be made of 3/16-inch structural steel or fabricated tube.*
 - 2) *Rear posts shall not exceed the height of the tailgate.*
 - 3) *Rear posts shall have a backing strip to serve as a stop/seal when side is locked in the upright position. This backing strip shall start two inches above the floor, and go to within one inch of the top of the side.*
- *Hydraulic Couplers:*
 - 1) *Coupler description specifications are listed in the Hydraulic Section 2.3.5j.*
 - 2) *The curbside of the dump body shall have three, 3/8-inch male couplers. Couplers shall be attached to male pipe X male JIC bulkhead fittings mounted on the rear corner post, or side rail near the rear of the bed. Couplers may be mounted immediately beneath the rear post if space in post or rails will not allow. MoDOT Fleet Manager must approve location at the pilot inspection before the rest of the trucks are built.*
 - 3) *The drivers' side of the dump body shall have three male couplers for the slip-in spreader. Couplers shall be attached to male pipe X male JIC bulkhead fittings mounted on the rear corner post, or side rail near the rear of the bed. Couplers may be mounted immediately beneath the rear post if space in post or rails will not allow. MoDOT Fleet Manager must approve location at the pilot inspection before the rest of the trucks are built.*
 - 4) *The hydraulic lines shall extend from the lowest rub rails to the body's main long sills through a fabricated enclosure on the under- side of the body. The main long sills shall have passageways at the rear for the hydraulic lines. Passages through the long sills shall be sealed around the passage to prevent moisture entry into the long sill.*
- *Brake, Turn and Taillights: Lighting shall meet all Federal and State DOT specifications, which recently includes and requires an independent running light on the rear corners.*
 - 1) *All lights shall be mounted in shockproof rubber grommets.*
 - 2) *All lights, except the backup light, shall be LED.*
 - 3) *All lights shall be connected to a one piece wiring harness with molded connectors.*
 - 4) *Each rear corner post shall have a built in, recessed 2 inch x 6 inch oval stop/turn taillight. Suitable makes and models are Truck Lite Model 60050R or Peterson Model M420R2.*
 - 5) *Backup lights shall be recessed 2-inch x 6-inch oval lights. A protective light enclosure shall be mounted below the rear of the dump body. These lights shall be spaced far enough apart as to be visible when a slip-in material spreader is installed in the dump body.*
 - 6) *A one and one-half (1 1/2) inch pipe shall extend through long sills at the rear for routing of electric wiring. Pipes are to be fully welded, sealing the joint at the long sill.*
- *Raised Body Indicator: A sealed proximity switch shall be mounted near the hoist assembly to control a raised body indicator light. The light shall be powered by the chassis electric accessory power supply. A dash mounted indicator light shall be provided, be plainly visible to the seated operator, be red in color, and flash when the dump body is raised.*
- *Spread Light: One Truck Lite model 80360 work light shall be mounted below the left rear dump body corner. The light shall be controlled by the chassis electric accessory power supply. Light will not hinder the operations of the material spreader.*
- *Tarp: A "window shade" style tarp, such as Aero's Easy Cover or Pulltarp's Supershield system shall be provided. The housing for the tarp and spring roller assembly shall be heavy duty steel that is powder coated black. The housing shall rest on the top of the bulkhead and the doghouse. The entire unit shall be bolted on using stainless or zinc plated bolts. A series of stainless or zinc plated body hooks shall be systematically installed on the sides of the body to secure the tarp. The hooks shall not exceed the width of the platform nor interfere with the 180-degree fold-down feature of the sides. The tarp material shall be heavy-duty asphalt and as wide as the inside width of the body. Tarp shall have sections of bungee cord or other type of stretchable material sewn into it that allows for the tarp to be secured to the body's hooks without the use of independent cords with hooks. Brackets for securing the pull rope and the tarp when extended shall be installed per manufacture's instructions, but not to interfere with the designed functions of the body.*

- *Mud flaps shall be removable by incorporating 201 or 304 stainless steel removable hinge pin approximately 26 inches long by ½” diameter solid rod. The rod will have a 2 ½” - 90 degree bend for a handle with a 3/16” hole at the opposite end for a lynch pin. There shall be three bushings on the truck side and three bushings on the mud flap side constructed of ½” inside diameter pipe by 1 ½” long . Spaced accordingly on flap and truck bracket that is constructed of 24” long by 2” deep by 3/16” thick steel. Mud Flap removal shall not require any tools. See drawing on Attachment 2.*
- *Conspicuity: Dump body shall be outfitted with DOT-C2 11-inch red/7-inch white parabolic retro-reflective conspicuity tape (Reflexite or equal) as per MoDOT guidelines. Layout pattern will be provided to successful Vendor.*

2.7 Delivery Requirements:

2.7.1 The following delivery requirements shall apply:

- Unless otherwise specified on the solicitation documents or purchase order, suppliers shall give at least 24 hours advance notice of each delivery. Delivery will only be received between the hours of 8:00 a.m. to 3:00 p.m., Monday through Friday. Deliveries shall not be made on observed holidays as identified in the attached terms and conditions.
- Each unit shall be fully operational, with all mechanical adjustments made prior to delivery. The hydraulic and/or spreader control system shall have all hydraulic function controls calibrated for proper operation before inspection and delivery of the completed unit. Calibration of the granular material application and the granular pre-wet system shall be the responsibility of MoDOT.
- All chassis, body, component, and snow equipment grease fittings shall be lubricated per manufacturer’s specifications prior to delivery.
- Chassis driveline universal joints shall be lubricated until fresh grease appears at all four bearing caps prior to delivery.
- Each unit shall be pressure washed with hot water and detergent prior to delivery. Units with residual hydraulic oil from assembly on any component will not be accepted.
- The bidder shall understand and agree that MoDOT will inspect each unit after delivery to determine if the unit meets specifications, quality and to verify no damage incurred during shipment of the unit. MoDOT shall have five (5) business days after receipt of order to notify the bidder of any visible damage or specification compliance issues. After the five (5) business days, the bidder is still responsible for correction any issues related to specifications or quality.
- MoDOT Representative shall have the ability to negotiate the MoDOT requested schedule of work.

2.7.2 The Bidder shall deliver the products specified herein to the following MoDOT locations:

- St. Joseph, Missouri 64502
- Macon, Missouri 63552
- Hannibal, Missouri 63401
- Lee’s Summit, Missouri 64064-8002
- Jefferson City, Missouri 65102
- Chesterfield, Missouri 63017-5712
- Joplin, Missouri 64802
- Springfield, Missouri 65801
- Willow Springs, Missouri 65793
- Sikeston, Missouri 63801

2.8 Liquidated Damage Requirements:

2.8.1 The bidder is directed to the “*Standard Bid Provisions, General Terms and Conditions and Special Terms and Conditions*” attached to the bid documents, regarding the amount and enforcement of liquidated damages.

2.9 Contract/Purchase Order:

- 2.9.1 The contract expresses the complete agreement of the parties and performance shall be governed solely by the specifications and requirements contained therein. Any change, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the Bidder and the duly authorized representative of the MHTC, by a modified purchase order prior to the effective date of such modification. The Bidder expressly and explicitly understands and agrees that no other method and/or no other document, including correspondence, acts, and oral communications by or from any person, shall be used or construed as an amendment or modification

2.10 Invoicing and Payment Requirements:

- 2.10.1 The Bidder shall submit an itemized invoice to the applicable requesting address for the completion of deliverables, as specified herein. MoDOT will make a progress payment of the cab and chassis at the time of confirmed delivery to the body builder. Bidder shall maintain full ownership of the unit until it is complete and delivered to the MoDOT location regardless of progress payments.
- 2.10.2 Each invoice shall be itemized in accordance with items listed on the purchase order and/or contract. The statewide financial management system has been designed to capture certain receipt and payment information. Therefore, each invoice submitted must reference the purchase order number and must be itemized in accordance with items listed on the purchase order. Failure to comply with this requirement may delay processing of invoices for payment.
- 2.10.3 The Bidder shall understand and agree MoDOT reserves the right to make contract payments to the Bidder through electronic funds transfer (EFT). Therefore, prior to any payments becoming due under the contract, the Bidder must return a completed state Vendor Input ACH/EFT Application, which is downloadable from the Vendor Services Portal at: <https://www.vendorservices.mo.gov/vendorservices/Portal/Default.aspx>. Each Bidder invoice must be on the Bidder's original descriptive business invoice form and must contain a unique invoice number. The invoice number will be listed on the state's Vendor Payment Website to enable the Bidder to properly apply state payments to invoices. The Bidder must comply with all other invoicing requirements stated in the RFB.
- 2.10.4 The Bidder shall be paid in accordance with the firm, fixed prices stated on the pricing page of this document after completion of deliverables specified herein and acceptance by MoDOT.
- 2.10.5 Other than the payment specified above, no other payments or reimbursements shall be made to the Bidder for any reason whatsoever.
- 2.10.6 Unless otherwise provided for in the solicitation documents, payment for all equipment, supplies, and/or services required herein shall be made in arrears. The MHTC shall not make any advance deposits.
- 2.10.7 The MHTC assumes no obligation for equipment, supplies, and/or services shipped or provided in excess of the quantity ordered. Any authorized quantity is subject to the MHTC's rejection and shall be returned at the Bidder's expense.
- 2.10.8 The MHTC reserves the right to purchase goods and services using the state-purchasing card.

2.11 Other Contractual Requirements:

- 2.11.1 Contract Period - The contract shall commence from the date of Notice to Proceed until for one year with up to five (5) one-year renewal option periods, or any portion therein. If the option for renewal is exercised by MoDOT, the Bidder shall agree to all terms and conditions of the RFB and all subsequent amendments. Renewal options are at the sole discretion of MoDOT.

- 2.11.2 Renewal Periods - If the option for renewal is exercised by MoDOT, the Bidder shall agree that the percentages for the renewal period shall not exceed the maximum percentage for the applicable renewal period stated herein.
- a. If renewal percentages are not provided, the prices during renewal periods shall be the same as during the original contract period.
 - b. MoDOT does not automatically exercise its option for renewal based upon the maximum percentage of increase without documented justification supporting an increase, and reserves the right to offer or to request renewal of the contract at a percentage less than the maximum percentage stated.
 - c. In the event MoDOT exercises its option(s) to renew the contract, the requirements for future years shall be basically similar.
- 2.11.3 Escalation Clause - In the event the Bidder requests a price increase during the contract period, either the original contract period or any contract renewal period, the Bidder must provide a written request and documentation justifying the need for a price increase, and the amount of such price increase. MoDOT will review the Bidder's written request and documentation, and decide if a price increase is to be granted at that particular time. The Bidder shall understand and agree that MoDOT's decision shall be final and without recourse.
- a. No price increase shall be granted during the first 3 months of the original contract period, or if applicable, first 3 months of a contract renewal period.
 - b. In the event a price increase is granted due to an approved escalation, the renewal percentage shall be based upon the original contract value and any approved escalation in costs.
- 2.11.4 Inspection and Acceptance: MoDOT reserves the right to inspect the material at the point of manufacture, intermediate storage point, or at a destination which shall be at the discretion of MoDOT.
- a. No equipment, supplies, and/or services received by MoDOT pursuant to a contract shall be deemed accepted until MoDOT has had reasonable opportunity to inspect said equipment, supplies, and/or services.
 - b. All equipment, supplies, and/or services which do not comply with the specifications and/or requirements or which are otherwise unacceptable or defective may be rejected. In addition, all equipment, supplies, and/or services which are discovered to be defective or which do not conform to any warranty of the Bidder upon inspection (or at any later time if the defects contained were not reasonably ascertainable upon the initial inspection) may be rejected.
 - c. The MHTC reserves the right to return any such rejected shipment at the Bidder's expense for full credit or replacement and to specify a reasonable date by which replacements must be received.
 - d. The MHTC's right to reject any unacceptable equipment, supplies, and/or services shall not exclude any other legal, equitable or contractual remedies the MHTC may have.

3. BID SUBMISSION

3.1 Bid Submission Information:

- 3.1.1 All bids must be received in a sealed envelope/package clearly marked "Dump Truck".
- 3.1.2 All bids must be received at the office of the RFB Coordinator as outlined in Section 1. "INTRODUCTION AND GENERAL INFORMATION".
- 3.1.3 The bidder may withdraw, modify or correct his/her bid after it has been deposited with MoDOT provided such request is submitted in writing and received at the location designated for the bid opening prior to the date and time specified for opening bids. Such a request received as specified will be attached to the bid and the bid will be considered to have been modified accordingly. No bid may be modified after the date and time specified for the opening of bids.
- 3.1.4 Open Competition / Request For Bid Document:
- a. It shall be the bidder's responsibility to ask questions, request changes or clarification, or otherwise advise MoDOT if any language, specifications or requirements of an RFB appear to be ambiguous, contradictory, and/or arbitrary, or appear to inadvertently restrict or limit the requirements stated in the RFB to a single source. Any and all communication from bidders regarding specifications, requirements, competitive bid process, etc., must be directed to the buyer from MoDOT, unless the RFB specifically refers the bidder to

another contact. Such communication should be received at least three (3) working days prior to the official bid opening date.

- b. Every attempt shall be made to ensure that the bidder receives an adequate and prompt response. However, in order to maintain a fair and equitable bid process, all bidders will be advised, via the issuance of an amendment to the RFB, of any relevant or pertinent information related to the procurement. Therefore, bidders are advised that unless specified elsewhere in the RFB, any questions received less than three (3) working days prior to the RFB opening date may not be answered.
- c. Bidders are cautioned that the only official position of the MoDOT is that which is issued by MoDOT in the RFB or an amendment thereto. No other means of communication, whether oral or written, shall be construed as a formal or official response or statement.
- d. MoDOT monitors all procurement activities to detect any possibility of deliberate restraint of competition, collusion among bidders, price-fixing by bidders, or any other anticompetitive conduct by bidders which appears to violate state and federal antitrust laws. Any suspected violation shall be referred to the Missouri Attorney General's Office for appropriate action.

3.1.5 Bid Review: Bids will be reviewed to determine if the bid complies with the mandatory requirements.

3.1.6 Contract Award: This is a Multiple Award bid. All responsive responses will result in a contract award.

- a. Notification of award shall be at the time the tabulation is posted to the Internet. It is the sole responsibility for all bidders to check the website for bid results.

3.1.7 Purchase Determination: After determination of award, evaluator(s) shall use both objective and subjective judgment in conducting a comparative assessment of the bid responses in accordance with the evaluation criteria stated below:

- | | |
|--|-----------|
| a. Base and Option Costs | 50 Points |
| b. Location of Parts and Servicing Dealers | 20 Points |
| c. Warranty Coverage | 15 Points |
| d. Delivery Timeline | 5 Points |
| e. Other response information | 10 Points |

3.1.7.1 The evaluation of cost will be conducted using a scale of fifty (50) possible points based upon a total amount for the base unit and unit options in the original contract period. Cost points shall be calculated based on the sum from the below calculation using the following formula:

$$\frac{\text{Lowest Responsive Price}}{\text{Compared Price}} \times 50 = \begin{array}{l} \text{Cost score points extended to} \\ \text{2 decimal places - 50.00} \\ \text{possible} \end{array}$$

3.1.7.2 Performance and reliability of any unit and/or contractor can be a part of the subjective evaluation in the determination of lowest and best bid award. Final determination of the evaluation shall be at the discretion of the General Services Director.

Paragraph Revised by Addendum 002

3.1.8 Bid copies: The Bidder must include an original hardcopy document plus fifteen (15) complete electronic copies of their proposal in Microsoft compatible format or in .pdf on CD(s) or flash drive(s). The Bidder must ensure the electronic copy and all media are identical to the hardcopy original bid. In case of a discrepancy, the original hardcopy proposal document shall govern.

4. PRICING PAGE

Paragraph Revised by Addendum 001

- 4.1 The bidder shall provide a firm, fixed price in the table below for the original contract period for providing the deliverables/services in accordance with the provisions and requirements of this RFB. All costs associated with providing the required deliverables/services shall be included in the prices stated below. Prices must be the lowest offered to any governmental or commercial consumer, under the same terms and conditions. Sign where indicated below and return with all required solicitation documents.

Item #	Description	Original Contract Period <i>Firm, Fixed Price</i>
001	Tandem Axle Cab and Chassis	\$
002	Tandem Axle Corten V-Style Long Sill Dump Body – Configuration #1	\$
003	Tandem Axle Stainless Steel I-Beam Long Sill Dump Body – Configuration #2	\$
	Total Cost	\$
004	Single Axle Cab and Chassis	\$
005	Single Axle Corten V-Style Long Sill Dump Body – Configuration #1	\$
006	Single Axle Stainless Steel I-Beam Long Sill Dump Body – Configuration #2	\$
	Total Cost	\$
007	Tow Plow Cab and Chassis	\$
008	Tow Plow Corten V-Style Long Sill Dump Body – Configuration #1	\$
009	Tow Plow Stainless Steel I-Beam Long Sill Dump Body – Configuration #2	\$
	Total Cost	\$
010	Fair Market In-House Labor Rate per Section 2.2.6.d for <i>Cab and Chassis</i>	\$ Per Hour
011	<i>Fair Market In-House Labor Rate per Section 2.2.6d for Body Builder</i>	\$ Per Hour
012	List the Districts Bidding on (NW, NE, KC, CD, SL, SW, SE)	
013	Tandem Axle Extended Warranty Option #1	\$
014	Single Axle Extended Warranty Option #1	\$
015	Tow Plow Extended Warranty Option #1	\$

4.2 **Renewal Periods:** The bidder shall provide below the maximum percentage of increase or decrease for the renewal periods. The percentage shall be computed against the **original contract period prices** for each renewal period. If a renewal percentage is not provided, the prices for the renewal periods shall be the same as the original contract period.

1st Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

2nd Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

3rd Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

4th Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

5th Renewal Period _____% of maximum increase and/or _____% of maximum decrease.

4.3 **MSRP Discount:** Bidders should submit a complete parts and options list with detailed pricing information for each unit type bid. An electronic source for this information may be provided as well. (i.e. Internet site, jump drive, CD, etc.) Please indicate below the percent (%) discount off Manufacturers' Suggested Retail Prices (MSRP) for all options other than those priced on the attached Options Pricing Page.

% discount off MSRP for all Data Book or Pricing Guide Options: - % Discount _____

4.4 **Delivery After Receipt of Order:**

Tandem Axle Dump Truck _____ Calendar Days

Single Axle Dump Truck _____ Calendar Days

Tow Plow Dump Truck _____ Calendar Days

4.5 **Standard Warranty:** All bidders must provide a description below of the standard warranty offered with each unit for the cab and chassis as well as the dump body. (Refer to Section 2.2.6)

4.5.1 **Warranty Dealer and Service Locations:** All bidders must attach a list of all warranty and service providers and location information. This shall include but not be limited to the company name, address, standard and emergency contact telephone numbers.

4.6 Optional Equipment: The bidder shall provide pricing for the increased or decreased cost associated with the following optional equipment meeting the minimum specifications identified in Section 2.6. *Bidders must list all makes and models for each optional item offered.*

<i>Optional Equipment Continued</i>		Additional Increase/Decrease to Total Unit Price		
	Option Description	Tandem Axle	Single Axle	Tow Plow
a.	Right and/or Left Hand Wing Plow	\$	\$	\$
b.	Heavy Duty Right Hand 3 Function Front Mount Wing Plow	\$	\$	\$
c.	Underbody Scraper	\$	\$	\$
d.	10' Skid Mounted Material Spreader	\$	\$	\$
e.	10' Skid Mounted Material Spreader with Auger	\$	\$	\$
f.	13' Skid Mounted Material Spreader	\$	\$	\$
g.	13' Skid Mounted Material Spreader with Auger	\$	\$	\$
h.	16' Skid Mounted Material Spreader	\$	\$	\$
i.	16' Skid Mounted Material Spreader with Auger	\$	\$	\$
j.	10 Speed Manual Transmission	\$	\$	\$
k.	6 Speed Manual Transmission	\$	\$	\$
l.	Eaton Ultra Shift Transmission	\$	\$	\$
m.	Pavement Temperature Sensor	\$	\$	\$
n.	Exhaust Brake Engine Retarder	\$	\$	\$
o.	Automatic Tire Chains	\$	\$	\$
p.	Dual Steering	\$	\$	\$
q.	Dump Body Vibrator	\$	\$	\$
r.	Left-/Right-hand Truck Mounted Attenuator Pockets	\$	\$	\$
s.	Cummins ISL9 Engine	\$	\$	\$
t.	Bluetooth Hands-free Technology	\$	\$	\$
u.	Passenger Door Peep Window	\$	\$	\$
v.	Tank Heater	\$	\$	\$
w.	Removal of Base Granular Pre-Wet System	\$	\$	\$
x.	Replace Pre-West System w/a 25 GPM Pre-Wet System	\$	\$	\$
y.	Receive Pintle Hitch	\$	\$	\$
z.	Walk Rail for Stainless Steel Bed	\$	\$	\$
aa.	Walk Rail for Corten Steel Bed	\$	\$	\$
bb.	Back Up Camera and Display	\$	\$	\$
cc.	Installation of MoDOT owned 50 Watt radio	\$	\$	\$
dd.	Installation of MoDOT owned 100 Watt radio	\$	\$	\$
ee.	Heated Windshield	\$	\$	\$
ff.	Vibrating Wiper Blades	\$	\$	\$
gg.	Lug Nut Torque Indicator	\$	\$	\$
hh.	Tire Pressure Monitoring System	\$	\$	\$
ii.	Air Control Operated Tarp	\$	\$	\$
jj.	Air Operated Hydraulic Joy Stick Control Lever	\$	\$	\$

Optional Equipment Continued

Additional Increase/Decrease to Total Unit Price

	Option Description	Tandem Axle	Single Axle	Tow Plow
kk.	Air Control Operated Tail Gate Latch	\$	\$	\$
ll.	Air Control Operated Tire Chains	\$	\$	\$
mm.	Additional Training Modules	\$	\$	\$
nn.	Installation of MoDOT Provided Decals	\$	\$	\$
oo.	Shovel Tool Box	\$	\$	\$
pp.	Stainless Steel Spring Loaded Shovel Bracket	\$	\$	\$
qq.	Crew Cab Option		\$	
rr.	Rexroth CS 550/150 Spreader /Joy Stick Controller	\$	\$	\$
ss.	10-foot Spreader Stand	\$	\$	\$
tt.	13-foot Spreader Stand	\$	\$	\$
uu.	16-foot Spreader Stand	\$	\$	\$
vv.	Force America CAN Bus Spreader Control System	\$	\$	\$
ww.	Single Axle Air Ride Suspension	N/A	\$	N/A
xx.	Single Axle Contractor Bed with Drop Down Sides	N/A	\$	N/A

Paragraph Revised by Addendum 001

Paragraph Revised by Addendum 002

4.7 Additional Bid Response Information:

- a. Does the unit offered feature cowl pedals? _____
- b. Does the unit offered feature side window defrosters? _____
- c. Does the air conditioning unit include self-diagnostic capabilities? _____ If yes, briefly describe:

- d. Does the unit offered feature flush mounted cab marker lights? _____
- e. Does the **Engine Mounted PTO** driveshaft pass through the radiator charge air cooler or air conditioning condenser? _____
- f. Does the unit offered feature a single rail frame system? _____
- g. Does the unit offered feature Truck-Lite model 645 headlights? _____
- h. Does the unit offered feature a ADIP air dryer.
- i. Provide a detailed description of the rear axle suspension offered.
- j. **Are you utilizing AR400 or AR450 in the production of your product?** _____
- k. **Does the unit include side window defrosters?** _____
- l. **Does the unit have an ADIP air dryer?** _____
- m. **Does the air conditioning system have self-diagnostic capabilities?** _____
- n. **Do the headlights turn on automatically when wipers are on?** _____
- o. **Does the unit offer flush mounted cab marker lights?** _____
- p. **Does the unit utilize resettable circuit breakers?** _____ *If yes, provide a brief description of the application.* _____
- q. **Do the marker lights and turn signals on plow lights operate regardless of the dash switch position?** _____
- r. **Does the unit utilize two air filters?** _____
- s. **Does the unit utilize a single or double rail frame system?** _____
- t. **Does the unit utilize Wet Stemco Seals or unitized wheel bearing or equivalent?** _____
- u. **Is the transmission shifter a lever style with "Mode" select button?** _____
- v. **How many cross-members and side supports on the 16' skid-mounted materials spreader?** _____

4.8 Innovative Solutions: All bidders must provide unit pricing in section 4.1 above in accordance with the bid specifications, however, MoDOT is interested in innovative solutions as well. Bidders are encouraged to provide various innovative solutions to the specifications provided and any associated cost adjustments to the unit price should MoDOT chose to purchase the solution on any units ordered for the purposes of testing the performance and reliability of the proposed solution. Each submission should reference the technical section of the original bid to be impacted by the innovative change, the proposed innovative change solution and its' impact to MoDOT and all associated costs or savings. MoDOT is most interested in innovative solutions that will reduce purchase and/or maintenance costs while preserving or increasing unit efficiencies and effectiveness. Bidders may use the space below or provide additional attachments clearly marked "Innovative Solutions"

4.9 Other Submission Information: All bidders must provide additional information related to all aspects of the units offered for the purposes of review and evaluation. This shall include but not be limited to a complete build sheet per unit requested and all options as well as detailed drawings for each unit offered. This shall include but not be limited to the make and model for each component offered. This information shall be organized in the most efficient, clear and concise manner possible for review by the evaluators.

Paragraph Revised by Addendum 001

4.10 Finish: *Provide a detailed description of the cleaning and finishing process including the primer and paint brand and number as well as the process used for the finish of the various components of the Dump Truck. This may include but not be limited to the metal preparation and priming process, number of coats of paint and finish process.*

Paragraph Revised by Addendum 001

4.11. Operator Training:
Cost for Eight Hours of Training accordance with Section 2.2.7 \$ _____

Paragraph Revised by Addendum 002

4.12 Diagnostic Software:
Fleet pricing for diagnostic software in accordance with Section 2.2.c \$ _____

Paragraph Revised by Addendum 002

4.13 Manual and Service Publications
Bidders should provide examples, samples or screen shots related to the items referenced in Section 2.2.2. Please do not excel ten double sided pages.

VENDOR INFORMATION & PREFERENCE CERTIFICATION FORM

Vendor Information

All bidders must furnish ALL applicable information requested below

Vendor Name/Mailing Address: Email Address:	Vendor Contact Information (including area codes): Phone #: Cellular #: Fax #:									
Printed Name of Responsible Officer or Employee:	Signature:									
For Corporations - State in which incorporated:	For Others - State of domicile:									
If the address listed in the Vendor Name/Mailing Address block above is not located in the State of Missouri, list the address of Missouri offices or places of business: <i>If additional space is required, please attach an additional sheet and identify it as Addresses of Missouri Offices or Places of Business.</i>										
M/WBE INFORMATION: List all certified Minority or Women Business Enterprises (M/WBE) utilized in the fulfillment of this bid. Include <u>percentages</u> for subBidders and identify the M/WBE certifying agency: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;"><u>M/WBE Name</u></th> <th style="text-align: center; width: 33%;"><u>Percentage of Contract</u></th> <th style="text-align: center; width: 33%;"><u>M/WBE Certifying Agency</u></th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		<u>M/WBE Name</u>	<u>Percentage of Contract</u>	<u>M/WBE Certifying Agency</u>						
<u>M/WBE Name</u>	<u>Percentage of Contract</u>	<u>M/WBE Certifying Agency</u>								
<i>If additional space is required, please attach an additional sheet and identify it as M/WBE Information</i>										

Preference Certification

All bidders must furnish ALL applicable information requested below

GOODS/PRODUCTS MANUFACTURED OR PRODUCED IN USA: If any or all of the goods or products offered in the attached bid which the bidder proposes to supply to the MHTC are <u>not</u> manufactured or produced in the "United States", or imported in accordance with a qualifying treaty, law, agreement, or regulation, list below, by item or item number, the country other than the United States where each good or product is manufactured or produced.	
Item (or item number)	Location Where Item is Manufactured or Produced
<i>If additional space is required, please attach an additional sheet and identify it as Location Products are Manufactured or Produced.</i>	
MISSOURI SERVICE-DISABLED VETERAN BUSINESS: Please complete the following if applicable. Additional information may be requested if preference is applicable. See below definitions for qualification criteria: Service-Disabled Veteran is defined as any individual who is disabled as certified by the appropriate federal agency responsible for the administration of veterans' affairs. Service-Disabled Veteran Business is defined as a business concern: <ol style="list-style-type: none"> a. Not less than fifty-one (51) percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than fifty-one (51) percent of the stock of which is owned by one or more service-disabled veterans; and b. The management and daily business operations of which are controlled by one or more service-disabled veterans. 	
<u>Veteran Information</u>	<u>Business Information</u>
Service-Disabled Veteran's Name (Please Print)	Service-Disabled Veteran Business Name
Service-Disabled Veteran's Signature	Missouri Address of Service Disabled Veteran Business

NOTICE OF COOPERATIVE PURCHASING

MODOT IS INTERESTED IN ASSISTING MISSOURI GOVERNMENTAL ENTITIES, ETC. IN PURCHASING EQUIPMENT, VARIOUS MATERIALS, AND SUPPLIES THAT MEET THE MISSOURI DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

Each bidder is asked to indicate below whether they would be willing to offer **Dump Truck(s)** listed in the attached "Request for Bid" for sale to these local political entities at the same bid price offered to MoDOT.

It is understood MoDOT will not issue purchase orders, accept delivery nor make payment for these items ordered by any of these agencies. It is further understood the price is based on the **Dump Truck(s)** meeting MoDOT specifications. Any added options, deletions, or extra freight costs would be negotiated between the local agency and the successful vendor.

Indicate below whether your company is willing to offer such cooperative purchasing for Missouri counties, cities or other political entities.

YES _____ NO _____

If the price varies throughout the state on MoDOT bids because of different delivery destinations, please indicate the price F.O.B. your location that would be offered as described.

F.O.B. Location _____

Indicate the deadline date that orders will be accepted. _____

COMPANY NAME _____

ADDRESS _____

E-MAIL _____

PHONE NUMBER _____

SIGNATURE _____

TITLE _____

DATE _____

ANTI-COLLUSION STATEMENT

STATE OF _____)

COUNTY OF _____)

SS.

_____ being first

duly sworn, deposes and says that he is _____
Title of Person Signing

of _____
Name of Bidder

that all statements made and facts set out in the bid for the above project are true and correct; and that the bidder (The person, firm, association, or corporation making said bid) has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such bid or any contract which may result from its acceptance.

Affiant further certifies that bidder is not financially interested in, or financially affiliated with, any other bidder for the above project.

By _____

By _____

By _____

Sworn to before me this _____ day of _____, 20_____.

Notary Public

My Commission Expires _____

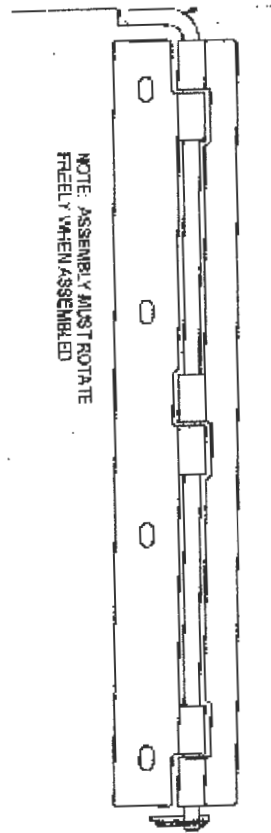
FACILITY NAME	DISTRICT	ADDRESS	CITY	ZIP
Boonville	CD	16803 Hwy 5	Boonville	65233
California	CD	801 West Buchanan	California	65018
Camdenton	CD	586 Pier Thirty One Rd	Camdenton	65020
Columbia	CD	4201 Paris Rd	Columbia	65202
Cuba	CD	7149 Old Hwy 66	Cuba	65453
Drake	CD	1972 Hwy 50	Owensville	65066
Edgar Springs	CD	27800 CR 9150	Edgar Springs	65462
Eldon	CD	30 Hwy Y	Eldon	65026
Fayette	CD	871 State Hwy 240	Fayette	65248
Fulton	CD	4975 CR 304	Fulton	65251
Hallsville	CD	870 E Hwy 124	Hallsville	65255
Iberia	CD	790 E Hwy 42	Iberia	65486
Jefferson City	CD	5607 Red Eagle Dr	Jefferson City	65109
Jefferson City Bridge	CD	744 MoDOT Drive	Jefferson City	65109
Jefferson City Facilities	CD	5606 Raptor Drive	Jefferson City	65109
Jefferson City Striping	CD	740 MoDOT Drive	Jefferson City	65109
Lebanon	CD	1120 Ivey Lane	Lebanon	65536
Linn	CD	1201 E Main	Linn	65051
Mokane	CD	10165 State Rd C	Mokane	65059
Nebo	CD	37998 Hwy 32	Falcon	65470
Osage Beach	CD	749 Hwy 42	Lake Ozark	65049
Potosi	CD	10681 E Hwy E	Potosi	63630
Rolla	CD	351 Salley Rd	Rolla	65401
Salem	CD	Rt 1 Box 2785	Salem	65560
ST. James Project Office	CD	17855 South HWY 8	St. James	65559
St. Robert	CD	375 Old Route 66	St Roberts	65583
Steelville	CD	69 East Highway 8	Steelville	65565
Versailles	CD	501 Jefferson Rd	Versailles	65084
Vienna	CD	702 Hwy 63 N	Vienna	65582
Williamsburg	CD	3949 County Road 1005	Williamsburg	63388
Belton	KC	324 Peculiar Dr.	Belton	64012
Concordia	KC	601 N. Main	Concordia	64020
Harrisonville	KC	27821 S. St. Hwy. 7	Harrisonville	64701
Independence	KC	910 N. 291 Hwy.	Independence	64051
Kansas City - District Garage	KC	2050 NE Independence Ave	Lees Summit	64086
Kansas City - Truman Road Constr	KC	908 East Truman Rd	Kansas City	64106
Kearney	KC	301 W. Hwy. 92	Kearney	64060
Knob Noster	KC	143 NE 23 Hwy.	Knob Noster	65336
Lee's Summit	KC	3050 NE Independence Ave	Lees Summit	64064
Lee's Summit -Construction	KC	521 NE Town Centre Dr	Lees Summit	64086
Marshall	KC	1595 West Arrow St.	Marshall	65340
Motorist Assist Main Office	KC	3503 East 18 Street	Kansas City	64127
Mulberry	KC	650 Mulberry St.	Kansas City	
Nashua	KC	1910 NW Cookingham	Kansas City	64155
Northmoor	KC	5248 Waukomis Dr.	Kansas City	64151
Odessa	KC	7353 Outer Road	Odessa	64076

FACILITY NAME	DISTRICT	ADDRESS	CITY	ZIP
Platte City	KC	16105 Elm Grove Rd.	Platte City	64079
Richmond	KC	42896 Old Hwy. 10	Richmond	64085
Sedalia	KC	2200 S Limit	Sedalia	65301
Skiles	KC	3800 Skiles	Kansas City	64161
Stadium	KC	9101 E 40th Terrace	Kansas City	64133
Warrensburg - Striping	KC	660 NE 375	Warrensburg	64093
Bowling Green	NE	1416 Bus. Hwy. 54	Bowling Green	63334
Canton	NE	17365 Hwy. 81	Canton	63435
Center	NE	22447 Hwy. 19, 63436	Center	63436
Edina	NE	St. Rte. 3, Box 180	Edina	63537
Elsberry	NE	3329 N. HWY 79	Elsberry	63343
Hannibal	NE	1711 E. Hwy 61 South	Hannibal	63401
Kirksville	NE	22777 Potter Trail	Kirksville	63501
Lancaster	NE	Hwy. 63 N.	Lancaster	63548
Macon	NE	26988 US Hwy. 63	Macon	63552
Macon-Bridge	NE	26826 US Hwy. 63	Macon	63552
Macon-Co	NE	26824 US Hwy. 63	Macon	63552
Memphis	NE	Rt. 1, Box 139A	Memphis	63555
Mexico	NE	1600 Christopher Dr.	Mexico	65265
Moberly	NE	1501 East Hwy. 24	Moberly	65270
New Cambria	NE	29992 State Hwy. P	New Cambria	63558
New Florence	NE	540 Tree Farm Rd.	New Florence	63363
Palmyra	NE	4945 County Road 288	Hannibal	63401
Paris	NE	25191 Bus. Hwy. 24	Paris	65275
Shelbina	NE	213 N. Douglas	Shelbina	63468
Troy	NE	121 Francis Drive	Troy	63379
Troy - AE/RE Offices	NE	111 Francis Drive	Troy	63379
Warrenton	NE	800 W. Boonslick	Warrenton	63383
Wayland	NE	Rt. 3, Box 45A	Kohoka	63445
Albany	NW	5753 E. US Hwy. 136	Albany	64402
Bethany	NW	3101 Miller St.	Bethany	64424
Brookfield	NW	28877 Hwy. 11	Brookfield	64628
Cameron	NW	513 E. Grand	Cameron	64429
Carrollton	NW	215 S. Mason	Carrollton	64633
Chillicothe	NW	1301 Mitchell Ave.	Chillicothe	64601
Clearmont	NW	18826 State Hwy. C	Clearmont	64431
Gallatin	NW	19335 Pepper Ave.	Gallatin	64640
Grant City	NW	Rte. 3, Box 15A	Grant City	64456
Hamilton	NW	1001 S. Hughes	Hamilton	64644
Keytesville	NW	220 E. Jackson	Keytesville	65261
King City	NW	9990 NW Hwy169	King City	64463
Lathrop	NW	100 North St.	Lathrop	64465
Maryville	NW	28320 250th St.	Maryville	64468
Milan	NW	1800 North Pearl	Milan	63556
Mound City	NW	24876 Hwy. 118	Mound City	64470
Princeton	NW	RR 2, Box 316B	Princeton	64673

FACILITY NAME	DISTRICT	ADDRESS	CITY	ZIP
Rushville	NW	Rte. 116	Rushville	64484
Savannah	NW	11791 Bus. 71 Highway	Savannah	64485
St. Joseph	NW	4718 S. Hwy 169	St. Joseph	64507
Tarkio	NW	US 136, Box 26874	Tarkio	64491
Trenton	NW	230 East Hwy. 6	Trenton	64683
Unionville	NW	2653 Main St.	Unionville	63565
Advance	SE	28275 St. Hwy. 25	Advance	63730
Alton	SE	Rt. 1, Box 1822	Alton	65606
Bellview	SE	2633 Highway 21	Belleview	63623
Bunker	SE	Rte. 2, Box 124C	Bunker	63629
Cape Girardeau	SE	3359 East Outer Rd. North	Scott City	63780
Centerville	SE	Route 1, Box 99	Lesterville	63654
Charleston	SE	6712 N. Outer Rd.	Charleston	63834
Dexter	SE	1111 Hickory Log Dr.	Dexter	63841
Doniphan	SE	Rt. 3, Box 2277	Doniphan	63935
Dora	SE	Box 3830	Dora	65637
Ellington	SE	Route 4, Box 800	Ellington	63638
Ellsinore	SE	Rt. 2, Box 2198	Elsinore	63937
Fredricktown	SE	1001 Madison 200	Fredericktown	63645
Gainesville	SE	Rt. 1, Box 1C	Gainesville	65655
Hartville	SE	5804 Hwy. 5	Hartville	65667
Hayti	SE	301 W High, (RR1, Box 41A	Hayti	63851
Houston	SE	1540 N. Hwy 63	Houston	65783
Jackson	SE	200 State Hwy. Y	Jackson	63755
Kennett	SE	1600 Southwest Dr.	Kennett	63857
Kewanee	SE	Rte. W	New Madrid	63869
Malden	SE	4005 North Douglas St.	Malden	63863
Marble Hill	SE	Rte. 2, Box 1655	Marble Hill	63764
Mountain Grove	SE	8675 Old Hwy. 60	Mountain	65711
Park Hills	SE	2240 Conway Rd	Park Hills	63601
Park Hills	SE	105 Industrial Drive	Park Hills	63601
Patton	SE	Rte. 1, Box 2490	Patton	63662
Peidmont	SE	Rt. 2 box 2636A	Piedmont	63957
Perryville	SE	754 Lake Dr.	Perryville	63775
Poplar Bluff	SE	2568 Hwy. 67 North	Poplar Bluff	63901
Poplar Bluff	SE	3568 Hwy 67 N	Poplar Bluff	63901
Puxico	SE	240 Hwy. 51 South	Puxico	63960
Quilin	SE	13148 HWY 53	Quilin	63961
Sikeston	SE	111 Edwards Street	Sikeston	63801
Sikeston	SE	2675 North Main Street	Sikeston	63801
Silva	SE	301 Main St.	Silva	63964
Saint Genevieve	SE	17651 Hwy 32	Ste. Genevieve	63670
Summersville	SE	235 S. Hwy. 17	Summersville	65571
Van Buren	SE	HCR 1, Box 99	Van Buren	63965
West Plains	SE	1287 County Road 8690	West Plains	65775
Willow Springs	SE	3952 East Main	Willow Springs	65793

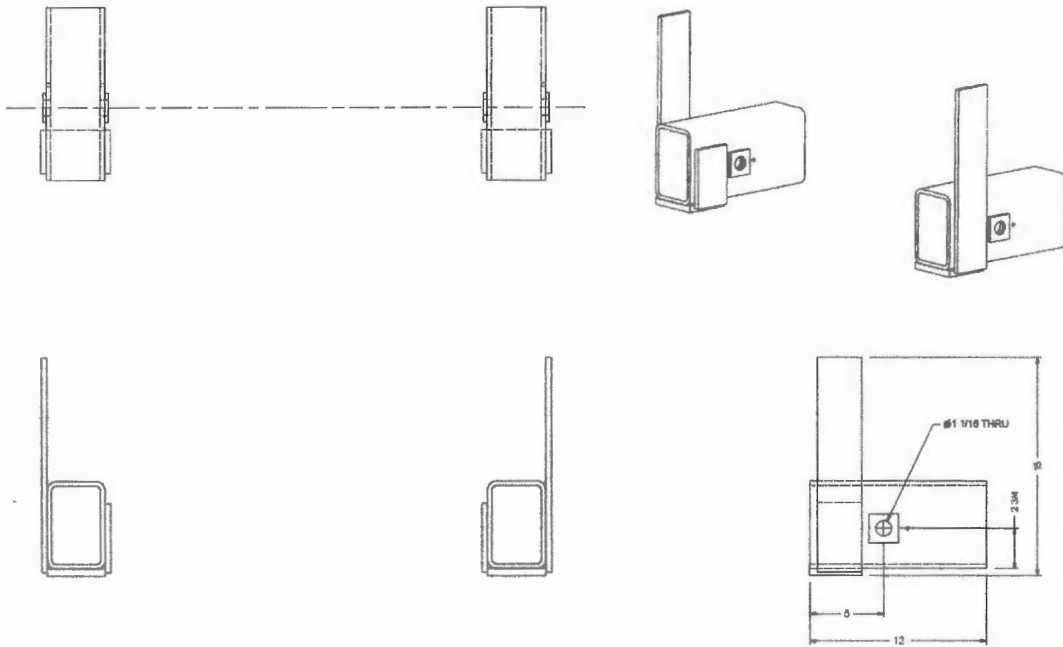
FACILITY NAME	DISTRICT	ADDRESS	CITY	ZIP
Willow Springs Bridge	SE	3954 East Main Street	Willow Springs	65793
Willow Springs Garage -	SE	3956 East Main Street	Willow Springs	65793
Winona	SE	106 Industrial Drive	Winona	65588
Ava	SE	Rt. 3, Box 23B	Ava	65608
Ballas Complex	SL	12001 N Forty Dr	Town &	63131
Barrett Station Complex	SL	2309 Barrett Station Rd Bldg	St. Louis	63021
Beaufort	SL	6697 Hwy 185 South	Beaufort	63013
Bellefontaine Complex	SL	10601 Lewis & Clark Blvd	St. Louis	63136
Broadway Complex	SL	1200 S. Broadway	St. Louis	63104
Cedar Hill	SL	8400 Local Hillsboro Road	Cedar Hill	63016
Chesterfield Project Office	SL	601 Salt Mill Rd	Chesterfield	63017
Desoto	SL	4400 Highway 110	Desoto	63020
Eureka	SL	615 Viola Lane	Eureka	63025
Festus	SL	1000 Airport Road	Festus	63028
Festus Project Office	SL	3595 Plass Rd	Festus	63028
Hampton Complex	SL	6138 Wilson Ave Bldg A	St. Louis	63139
Lemay	SL	4185 Hoffmeister Ave	St Louis	63125
Maryland Height PO	SL	2620 Adie Rd	Maryland	63043
Normandy Complex	SL	1005 Bermuda Ave	St. Louis	63121
O'Fallon Project Office	SL	6780 Old Hwy N	St. Charles	63304
St. Charles	SL	2360 Old Hwy. 94 S	St Charles	63303
St. Clair Complex	SL	2273 N Service Road	St. Clair	
Sunset Hills	SL	10220 Rahning Road	Sunset Hills	63127
Wentzville Complex	SL	1211 Granville Dr	Wentzville	63385
Anderson	SW	5511 Hwy 59 North	Goodman	64843
Bolivar	SW	2816 W. Broadway	Bolivar	65613
Bradleyville	SW	20907 E. Hwy. 76	Taneyville	65759
Branson	SW	275 S.W. Outer Rd.	Branson	65616
Branson RE	SW	251 SW Outer Rd	Branson	65616
Buffalo	SW	215 N. Ash St.	Buffalo	65622
Building Crew - Springfield	SW	3025 E Kearney	Springfield	65803
Butler	SW	RR4, Box 623	Butler	64730
Carthage	SW	16623 Inca Road	Carthage	64836
Carthage - Construction	SW	16619 Inca Rd	Carthage	64836
Cassville	SW	20622 State Hwy. 37	Cassville	65625
Eldorado Springs	SW	3865 E. Hwy. 54	El Dorado	64744
Galena	SW	Rt. 4, Box 555, (1889 St Hwy	Galena	65656
Greenfield	SW	70 N. State Hwy. 39	Springfield	65661
Joplin - GENERAL SERVICES	SW	2915 Doughboy Dr	Joplin	64804
Joplin - MAINT.	SW	2800 Stevens Blvd	Joplin	64804
Lamar	SW	67 SE 1st Lane	Lamar	64759
Lampe	SW	HCR1, Box 352, (1063 West	Lampe	65681
Marshfield	SW	331 Pin Oak Loop	Marshfield	65706
Monett	SW	4478 W. Hwy. 60	Monett	65708
Mount Vernon	SW	1001 Spring Park Blvd	Mt Vernon	65712
Neosho	SW	1300 S. Neosho Blvd.	Neosho	64850

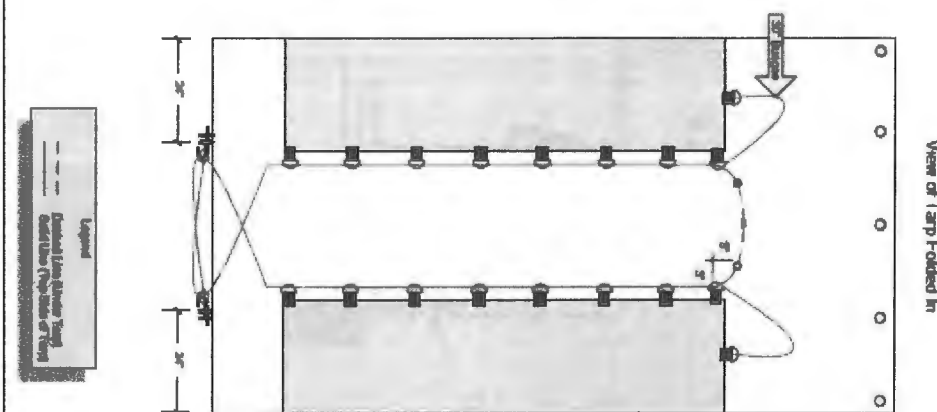
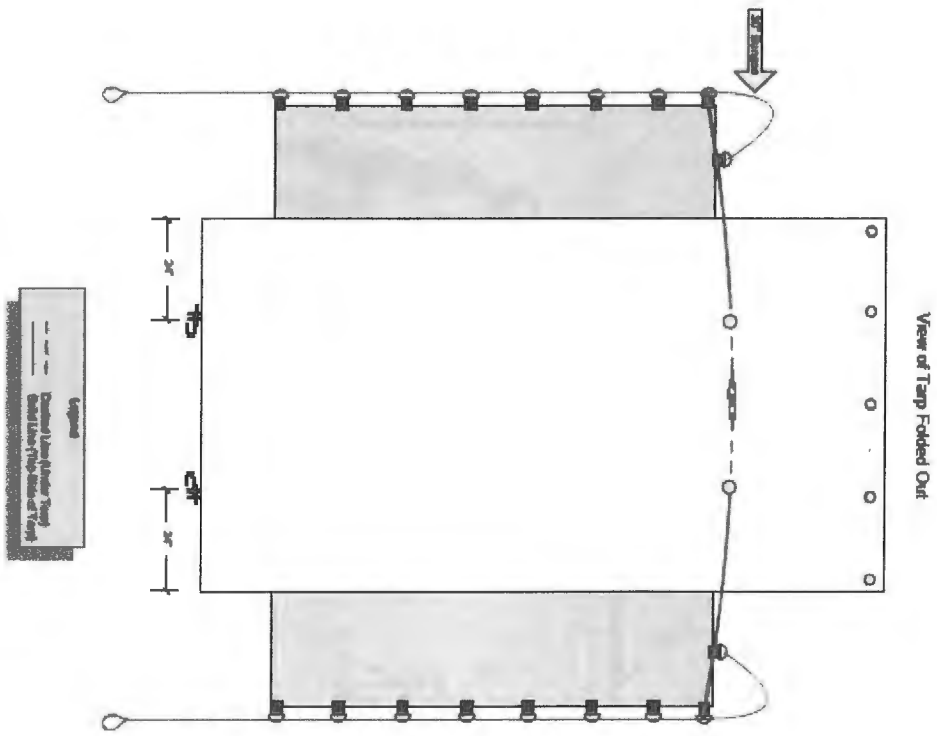
FACILITY NAME	DISTRICT	ADDRESS	CITY	ZIP
Nevada	SW	Rte. 71 WOR, 0.3 Mi. N of	Nevada	64772
Nevada - Construction	SW	601 W Outer Rd North	Nevada	64772
Osceola	SW	5371 NE Bus. Hwy. 82	Osceola	64776
Ozark	SW	Farm Rd. 14-101, 0.2 Mi. S of	Ozark	65721
Preston	SW	Rt. 1, Box 124	Preston	65732
Seymour	SW	Rt. 1, Box 1056 (500 St Hwy	Seymour	65746
Stockton	SW	509 W. Hwy. 32	Stockton	65785
Warsaw	SW	1551 East Main St.	Warsaw	65355
Republic	SW	1925 S. St. Hwy. N	Springfield	65802



NOTE: ASSEMBLY MUST ROTATE
FREELY WHEN ASSEMBLED

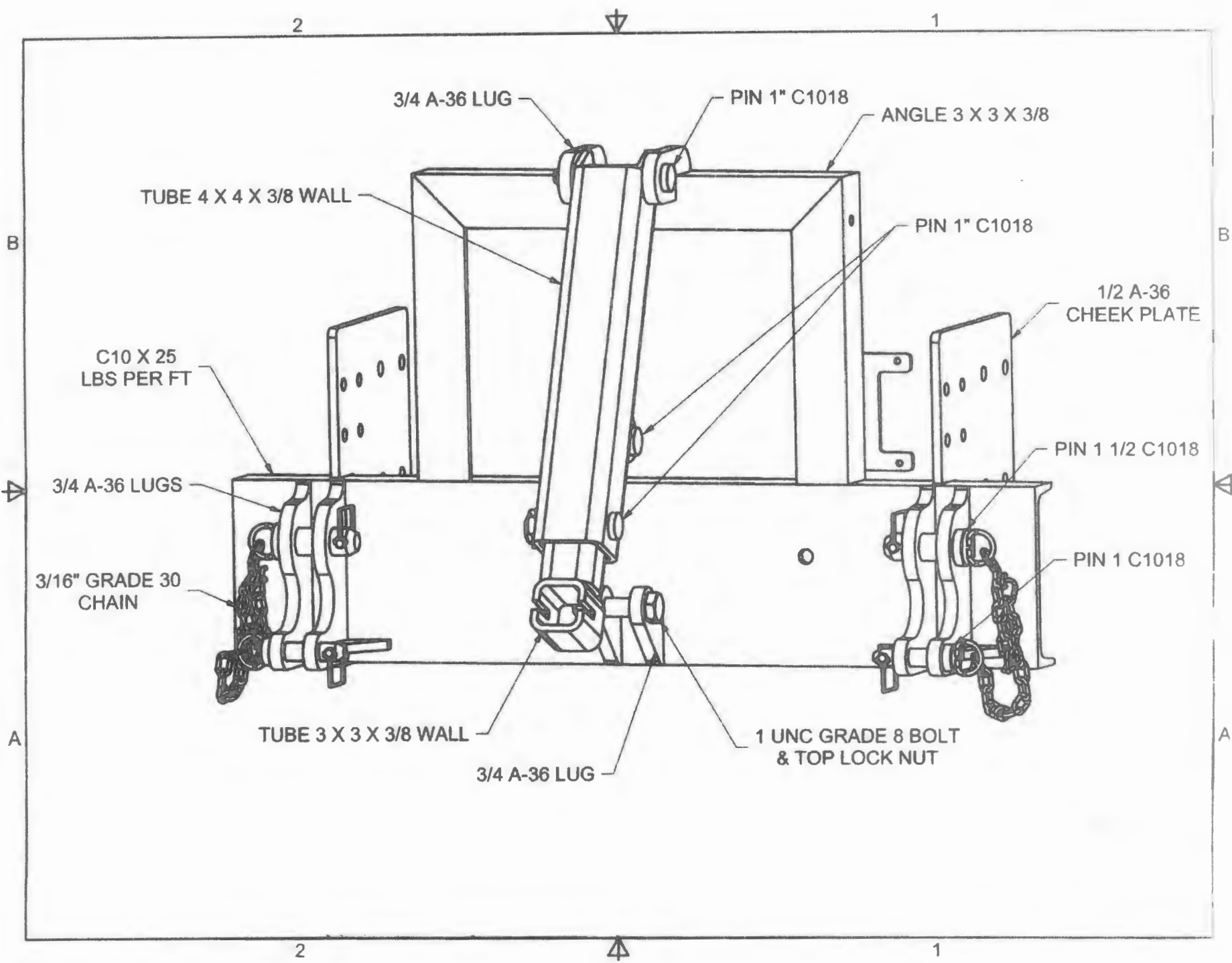
TMA Pockets

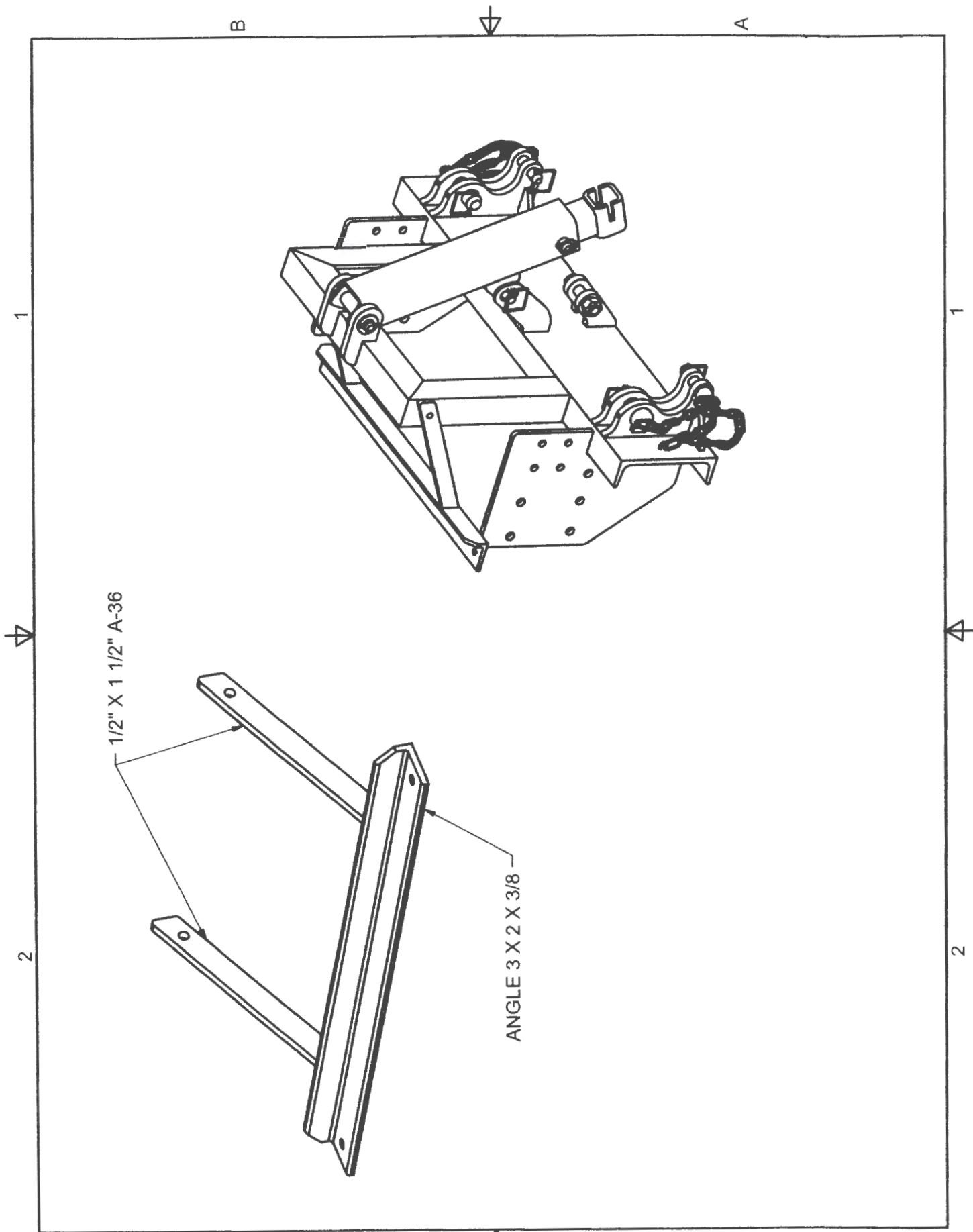




Front Plow Hitch Assembly

ATTACHMENT 5





Front Plow Hitch Assembly

ATTACHMENT 6

1/2" X 1 1/2" A-36

ANGLE 3 X 2 X 3/8

Missouri Highways and Transportation Commission
Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions

STANDARD SOLICITATION PROVISIONS

- a. The solicitation for the procurement of the supplies referenced therein, to which these "Standard Bid Provisions, General Terms and Conditions and Special Terms and Conditions" are attached, is being issued under, and governed by, the provisions of Title 7 – Missouri Department of Transportation, Division 10 – Missouri Highways and Transportation Commission, Chapter 11 – Procurement of Supplies, of the Code of State Regulations. The Missouri Highways and Transportation Commission (MHTC), acting by and through its operating arm, the Missouri Department of Transportation (MoDOT), draws the Bidder's attention to said 7 CSR 10-11 for all the provisions governing solicitation and receipt of bids/quotes and the award of the contract pursuant to this solicitation.
- b. All bids/quotes must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.

GENERAL TERMS AND CONDITIONS

Definitions

Capitalized terms as well as other terms used but not defined herein shall have the meaning assigned to them in section 7 CSR 10-11.010 Definition of Terms.

Nondiscrimination

- a. The Contractor shall comply with all state and federal statutes applicable to the Contractor relating to nondiscrimination, including, but not limited to, Chapter 213, RSMo; Title VI and Title VII of Civil Rights Act of 1964 as amended (42 U.S.C. Sections 2000d and 2000e, *et seq.*); and with any provision of the "Americans with Disabilities Act" (42 U.S.C. Section 12101, *et seq.*).
- b. **Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, MHTC shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - i. withholding of payments to the Contractor under the contract until the Contractor complies, and/or,
 - ii. cancellation, termination or suspension of the contract, in whole or in part.

Contract/Purchase Order

- a. By submitting a bid/quote, the Bidder agrees to furnish any and all equipment, supplies and/or services specified in the solicitation documents, at the prices quoted, pursuant to all requirements and specifications contained therein.
- b. A binding contract shall consist of: (1) the solicitation documents, amendments thereto, and/or Best and Final Offer (BAFO) request(s) with any changes/additions, (2) the Contractor's bid response, and (3) the MHTC's acceptance of the bid by post-award contract or purchase order.
- c. A notice of award does not constitute an authorization for shipment of equipment or supplies or a directive to proceed with services. Before providing equipment, supplies and/or services, the Contractor must receive a properly authorized notice to proceed and/or purchase order.

Applicable Laws and Regulations

- a. The contract shall be construed according to the laws of the State of Missouri. The Contractor shall comply with all local, state, and federal laws and regulations related to the performance of the contract. The exclusive venue for any legal proceeding relating to or arising, out of the contract shall be in the Circuit Court of Cole County, Missouri.
- b. The Contractor must be registered and maintain good standing with the Secretary of State of the State of Missouri, Missouri Department of Revenue, and other regulatory agencies, as may be required by law or regulations. Prior to the issuance of a purchase order and/or notice to proceed, the Contractor may be required to submit to MHTC a copy of their current Authority Certificate from the Secretary of State of the State of Missouri and/or a copy of their Certificate of No Tax Due from the Missouri Department of Revenue.
- c. Prior to the issuance of a purchase order and/or notice to proceed, all **out-of-state** Contractors **providing services** within the state of Missouri must submit to MHTC a copy of their current Transient Employer Certificate from the Missouri Department of Revenue, in addition to a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.

Executive Order:

The Contractor shall comply with all the provisions of Executive Order 07-13, issued by the Honorable Matt Blunt, Governor of Missouri, on the sixth (6th) day of March, 2007. This Executive Order, which promulgates the State of Missouri's position to not tolerate persons who contract with the state engaging in or supporting illegal activities of employing individuals who are not eligible to work in the United States, is incorporated herein by reference and made a part of this Agreement.

- 1) "By signing this Agreement, the Contractor hereby certifies that any employee of the Contractor assigned to perform services under the contract is eligible and authorized to work in the United States in compliance with federal law."
- 2) In the event the Contractor fails to comply with the provisions of the Executive Order 07-13, or in the event the Commission has reasonable cause to believe that the contractor has knowingly employed individuals who are not eligible to work in the United States in violation of federal law, the Commission reserves the right to impose such contract sanctions as it may determine to be appropriate, including but not limited to contract cancellation, termination or suspension in whole or in part or both.
- 3) The Contractor shall include the provisions of this paragraph in every subcontract. The Contractor shall take such action with respect to any subcontract as the Commission may direct as a means of enforcing such provisions, including sanctions for noncompliance.

Preferences

- a. In the evaluation of bids/quotes, preferences shall be applied in accordance with 7 CSR 10-11.020(7). Contractors should apply the same preferences in selecting subcontractors. The attached document entitled "**VENDOR INFORMATION AND PREFERENCE CERTIFICATION FORM**" must be completed and returned with the solicitation documents.
- b. Bidders are encouraged to obtain minority business enterprise (MBE) and women business enterprise (WBE) participation in this work through the use of subcontractors, suppliers, joint ventures, or other arrangements that afford meaningful participation for M/WBEs. Bidders are encouraged to obtain 10% MBE and 5% WBE participation.

Missouri Highways and Transportation Commission
Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions

Cancellation of Contract

The MHTC may cancel the Contract at any time for a material breach of contractual obligations or for convenience by providing Contractor with written notice of cancellation. Should the MHTC exercise its right to cancel the contract for such reasons, cancellation will become effective upon the date specified in the notice of cancellation sent to the Contractor.

Bankruptcy or Insolvency

Upon filing for any bankruptcy or insolvency proceeding by or against the Contractor, whether voluntarily, or upon the appointment of a receiver, trustee, or assignee, for the benefit of creditors, the Commission reserves the right and sole discretion to either cancel the Agreement or affirm the Agreement and hold the Contractor responsible for damages.

Warranty

The Contractor expressly warrants that all equipment, supplies, and/or services provided shall: (1) conform to each and every specification, drawing, sample or other description which was furnished to or adopted by the MHTC, (2) be fit and sufficient for the purpose expressed in the solicitation documents, (3) be merchantable, (4) be of good materials and workmanship, and (5) be free from defect.

Status of Independent Contractor

The Contractor represents itself to be an independent Contractor offering such services to the general public and shall not represent itself or its employees to be an employee of the MHTC. Therefore, the Contractor shall assume all legal and financial responsibility for taxes, FICA, employee fringe benefits, workers' compensation, employee insurance, minimum wage requirements, overtime, etc., and agrees to indemnify, save and hold the MHTC, its officers, agents and employees harmless from and against any and all losses (including attorney fees) and damage of any kind related to such matters.

Non-Waiver

If one of the parties agrees to waive its right to enforce any term of this Contract, that party does not waive its right to enforce such term at any other time or to enforce any or all other terms of this Contract.

Indemnification

The Contractor shall defend, indemnify and hold harmless MHTC, including its members and department employees, from any claim or liability whether based on a claim for damages to real or personal property or to a person for any matter relating to or arising out of the Contractor's performance of its obligations under the contract awarded pursuant to this solicitation.

SPECIAL TERMS AND CONDITIONS

Tax Exempt Status:

MHTC is exempt from paying Missouri Sales Tax, Missouri Use Tax and Federal Excise Tax. However, the Contractor may themselves be responsible for the payment of taxes on materials they purchase to fulfill the contract. A Project Tax Exemption Certificate will be furnished to the successful Bidder upon request if applicable.

Delivery – Additional Requirements

- a. The Contractor shall furnish the Missouri Department of Transportation with a planned delivery schedule at least 24 hours before starting delivery.
 - 1) Notification should be during the normal workday preceding the day on which the Contractor desires to initiate delivery.
 - 2) It will be necessary for a representative of the Missouri Department of Transportation to be present when the unit(s) is delivered.
- b. The following days shall be construed as **official holidays** under the terms of the contract:

January 1	New Year's Day
Third Monday in January	Martin Luther King, Jr.'s Birthday
February 12	Lincoln's Birthday
Third Monday in February	Washington's Birthday
May 8	Truman's Birthday
Last Monday in May	Memorial Day
July 4	Independence Day
First Monday in September	Labor Day
Second Monday in October	Columbus Day
November 11	Veteran's Day
Fourth Thursday in November	Thanksgiving Day
December 25	Christmas Day
- c. When any of the above **holidays falls** on a **Sunday**, the holiday will be observed on the following **Monday**; when any of the above **holidays falls** on a **Saturday**, the **holiday** will be observed on the immediately preceding **Friday**.

Liquidated Damages

- a. In the event the successful Contractor fails to deliver **a fully functioning unit(s) in accordance with the specifications and purchase order**, the Department and the public will sustain damages because of such delay in delivery, the exact extent of which would be difficult to ascertain, and in order to liquidate such damage in advance it is agreed that the **sum of \$300.00 per day, per unit**, for each assessable calendar day on which the delivery has not been completed, is reasonable and the best estimate which the parties can arrive at as liquidated damages, and it is therefore agreed that said amount will be withheld from payments due the Contractor or otherwise collected from the Contractor as liquidated damages.
- b. **Saturdays, Sundays, holidays and days whereas the Department has suspended work** shall not be assessable days.

Missouri Department of Transportation
David B. Nichols, Director

573.751.2551
Fax: 573.751.6555
1.888.ASK MODOT (275.6636)

ADDENDUM 003
Dump Trucks
Request for Bid 3-140214RJ

Offerors should acknowledge receipt of Addendum 003 (THREE) by **signing and including it** with all documents contained in Addendum 002. **The due date for receipt of bids is February 21, 2014 at 2:00 p.m. local time.** The following changes shall be included as mandatory requirements for this solicitation. All other terms and conditions remain unchanged and in full force.

Name and Title of Signer (Print or type)	Name and Title of Department Authority Rebecca L. Jackson, CPPO, CPPB Procurement Manager
Contractor/Offeror Signature <hr/> (Signature of person authorized to sign)	Department of Transportation <i>Rebecca L. Jackson, CPPO, CPPB</i> <hr/> (Authorizing Signature)
Date Signed:	Date Signed: <i>February 11, 2014</i>

Bidders are notified of the following changes:

Section 2.1.10.

Delete section.

Replace with - Bidder must provide Material Safety Data Sheets (MSDS) and American Society for Testing and Materials (ASTM) document reference numbers for all lubricants and fluids.

Section 2.3.3 – Paragraph k. – Ladder - 3rd bullet point

Delete the last two sentences. Only the first sentence remains.

Section 2.3.3 – Paragraph p. – At the beginning of this paragraph, add the following:

Mudflaps in front of rear tires shall be attached to bottom of bed, not by bracket attached to frame. Bracket shall be angle iron, welded to underside of bed. Mudflap shall not drag on belly plow when rotated.



Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri.

www.modot.org

Section 2.3.4 – Paragraph p. – At the beginning of this paragraph, add the following:
Mudflaps in front of rear tires shall be attached to bottom of bed, not by bracket attached to frame. Bracket shall be angle iron, welded to underside of bed. Mudflap shall not drag on belly plow when rotated.

Section 2.6.5 – Paragraph u.

Delete the first sentence – “Installation of MoDOT owned 50-Watt 2-way radio.”
Replace with - “Installation of MoDOT owned 50-Watt 2-way radio and antenna.”

Section 2.6.5 – Paragraph v.

Delete the first sentence – “Installation of MoDOT owned 100-Watt 2-way radio.”
Replace with - “Installation of MoDOT owned 100-Watt 2-way radio and antenna.”

Section 4 – Pricing Page - Attached is a pricing page for use in all submissions. Bidders can submit multiple sheets per unit type for units offered. These fillable sheets replace the information required in Sections 4.1, 4.2, 4.3, 4.4, 4.6, 4.7, 4.11 and 4.12. Bidders shall provide the information requested in Sections 4.5, 4.5.1, 4.8 4.9, 4.10 and 4.13 on separate sheets in numerical order for review. Bidders must also provide the Vendor Information and Preference Certification Form, Notice of Cooperative Purchasing, Anti-Collusion Statement and Addendum Acknowledgements.

Other Information:

- Q. Does the Body builder/equipment supplier MSRP discount need to be the same as each truck vendor’s discount or can it be shown independently?
- A. The Body Builder/equipment may supply a different MRSP discount from the Cab and Chassis builder but the discounts must be provided in the same location on the pricing page.
- Q. Will MoDOT allow the submission of a unit with a set-back axle?
- A. No, due to the additional equipment added to each unit, MoDOT has concerns regarding the amount of weight distribution on each axle. Bidders may submit bids for units with a set-back axle under Section 4.8 entitled Innovative Solutions. MoDOT may consider testing a unit at a later date to determine if a set-back axle will meet our needs at a reduced cost overall.
- Q. 3M recommends the 3430 Series in lieu of the 5000 series, are these equivalent?
- A. No this is a sign sheeting and not a vehicular sheeting. Based upon the conditions these units work in, the 3430 series would not withstand the elements and cleaning procedures.
- Q. The McNichols stainless steel grip strut material requested for the dump body walk rail is not available from McNichols.
- A. The specification states “The surface of the platform shall be constructed of McNichols Quality GRIP STRUT or equivalent material.”

Missouri Department of Transportation
David B. Nichols, Director

573.751.2551
Fax: 573.751.6555
1.888.ASK MODOT (275.6636)

ADDENDUM 004
Dump Trucks
Request for Bid 3-140214RJ

Offerors should acknowledge receipt of Addendum 004 (FOUR) by **signing and including it** with all documents contained in Addendum 002 as well as Addendum 003. **The due date for receipt of bids has been extended to Monday, February 24, 2014 at 2:00 p.m. local time. No further extensions may be granted. MoDOT encourages all suppliers under this bid to communicate the required pricing to the prime respondent in a timely fashion to ensure the greatest degree of competition.** The following changes shall be included as mandatory requirements for this solicitation. All other terms and conditions remain unchanged and in full force.

Name and Title of Signer (Print or type)	Name and Title of Department Authority Rebecca L. Jackson, CPPO, CPPB Procurement Manager
Contractor/Offeror Signature <hr/> (Signature of person authorized to sign)	Department of Transportation <i>Rebecca L. Jackson, CPPO, CPPB</i> <hr/> (Authorizing Signature)
Date Signed:	Date Signed: <i>February 14, 2014</i>

Bidders are notified of the following changes and clarifications:

- Q. On the pricing spreadsheet, can you elaborate a little more on what you are looking for in these sections: Wheel configuration (all dimensions), Lighting, Air System, and Brake system? These are broad terms and just needed some clarification.
- A. We are looking for measurements, makes, models, and any other descriptive information you can provide related to the products offered in your unit.
- Q. Section 2.3.6a 18th Bullet - This has been changed in addendum 2, are you saying you want a hydraulic motor with a built in sensor shipped loose with every truck you buy? Can you please try to explain this with more detail so bidders really know what you are looking for?
- A. When the unit is ordered with a spreader, the sensor block shall be installed in the spreader driver motor assembly and cost of this must be included with the spreader option pricing. When the unit is ordered without a spreader, MoDOT will determine the need to purchase a sensor if required, utilizing the MSRP discount. The calibration cable must be provided with each dump truck unit ordered whether or not the spreader option is exercised.



Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri.

www.modot.org

Delete Section 2.1.5 and replace with the following:

- 2.1.5 ***A MoDOT Purchase Order will be issued identifying the truck configuration for all units purchased. The number of days for delivery shall be in accordance with the bidders' response in the General Price Information.***
- a) ***When multiple units are ordered, the bidder must contact the Central Office General Services Fleet Manager no later than 24 hours after receipt of a purchase order if the bidder is unable to fill an order per the terms of the bid. In the event this action is taken the bidder shall understand and agree that MoDOT reserves the right to either negotiate an extended delivery time for a specified number of units, or divert all or part of an order to another bidder who is capable of delivering the order in a more timely fashion, whichever is determined to be in the best interest of the department.***

Add the following Sentence to Section 2.10.8

- 2.10.8 The MHTC reserves the right to purchase goods and services using the state-purchasing card. ***The purchasing card will not be used for the purchase of a vehicle, but may be used for the purchase of parts and service after the vehicle has been put into service.***

Missouri Department of Transportation
David B. Nichols, Director

573.751.2551
Fax: 573.751.6555
1.888.ASK MODOT (275.6636)

**ADDENDUM 005
Dump Trucks
Request for Bid 3-140214RJ**

Offerors should acknowledge receipt of Addendum 005 (FIVE) by **signing** and **including it** with the original proposal. The due date for receipt of proposals is **Monday, February 24, 2014 at 2:00 p.m. local time**. The following changes shall be included as mandatory requirements for this solicitation. All other terms and conditions remain unchanged and in full force.

Name and Title of Signer (Print or type)	Name and Title of Department Authority Rebecca L. Jackson, CPPO, CPPB Procurement Manager
Contractor/Offeror Signature <hr/> (Signature of person authorized to sign)	Department of Transportation <i>Rebecca L. Jackson, CPPO, CPPB</i> <hr/> (Authorizing Signature)
Date Signed:	Date Signed: <i>February 20, 2014</i>

Delete Section 2.2.7.1 and replace with the following:

2.2.7.1 **Technical Training:** Annually, bidder shall provide 24 hours of Technical training in each assigned unit location within each district delivery location as shown in section 2.7.2. Training shall include but not be limited to, major unit components such as engine, transmission, electrical, drive line, emissions, hydraulics and other areas of emphasis as defined by the MoDOT Representative. Bidder is responsible for all costs associated with training and materials for a maximum number of 30 trainees per location and/or 15 per twelve hour session. ***Cost shall not be included in the base truck bid amount and must be priced below.***

Technical Training	Cost Per Location
Cost for 24 Hours of annual Technical Training in accordance with Section 2.2.7.1	\$



Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri.

www.modot.org

CERTIFIED COPY OF ORDER

STATE OF MISSOURI



ea.

April Session of the April Adjourned

Term. 20 16

County of Boone

In the County Commission of said county, on the

28th

day of

April

20

16

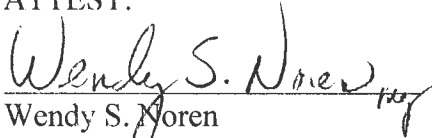
the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby award bid 79-15DEC15 – Law Enforcement Boots Term and Supply to Alamar Uniforms of Kansas City, LLC.

The terms of the bid award are stipulated in the attached Purchase Agreement. It is further ordered the Presiding Commissioner is hereby authorized to sign said Purchase Agreement.

Done this 28th day of April, 2016.

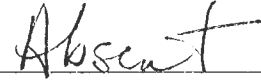
ATTEST:



Wendy S. Noren
Clerk of the County Commission



Daniel K. Atwill
Presiding Commissioner



Karen M. Miller
District I Commissioner



Janet M. Thompson
District II Commissioner

207-2016

Boone County Purchasing

Jacob M. Garrett
Buyer



613 E. Ash Street, Room 111
Columbia, MO 65201
Phone: (573) 886-4393
Fax: (573) 886-4390

MEMORANDUM

TO: Boone County Commission
FROM: Jacob M. Garrett, Buyer
DATE: April 20, 2016
RE: 79-15DEC15 – Law Enforcement Boots Term and Supply

The Bid for Law Enforcement Boots – Term and Supply closed on December 14, 2015. Three bids were received. Purchasing and the Sheriff's department recommend award to Alamar Uniforms of Kansas City, L.L.C. for offering the lowest and best bid for the County. A sample of all boots were tested and sampled for a thirty (30) day demo trail.

Term and Supply contract invoices will be paid from department 1255 – Corrections, budgeted \$33423.00, 1251 – Sheriff, budgeted \$48,156.00, 2901 – Sheriff Operations – LE Sales Tax, budgeted \$7,582.00, 2902 – Corrections – LE Sales Tax, budgeted \$3,886.00 account 23300– Uniforms.

Attached is a copy of the bid tabulation for your review.

ATT: Bid Tabulation

cc: Captain German, Sheriff Dept.
Leasa Quick, Sheriff Dept.
Bid File

267-2016

79-15DEC15 - Law Enforcement Boots

BID TABULATION		Ray O'Herron Co., Inc	Southern Uniform & Equipment	Alamar Uniforms
	Item	Unit Price	Unit Price	Unit Price
4.12.1.	Boots: Danner Acadia 8" Men's/Women's waterproof GORE-TEX, Style #21210 • No steel toe • Color-Black • NO SUBSTITUTIONS ALLOWED	\$235.00	\$229.99	\$214.80
4.12.2.	Boots: Danner Striker 2 GTX. Style #42980 • 100% waterproof and breathable GORE-TEX* • Full-grain leather • 1000 Denier nylon upper • TERRA FORCE™ X Lite platform • Danner TFX® Lite outsole • Nylon shank • 8" height	\$174.00	\$154.55	\$165.00 Discounted New #43003 Striker Torrent
4.12.3.	Boots: Magnum Stealth Force 8.0 SZ Style #5198 • Full Grain Leather/1680 Denier Ballistic Nylon Mesh Upper • Circular Side Zipper • Cambrelle Moisturo Wicking Lining • Agion Antimicrobial treatment • Coats Barbour Anti Fraying Stitching Thread • EN ISO 20347 Certified • Composite Shank • M-Pact Contoured Sockliner with Memory Foam • Flex-Zone with Siping for Traction and Control • X-Traction Zone Outsole	\$91.00	\$97.99	\$96.70
4.12.4.	Boots: UnderArmour Valsetz Tactical Boot. Style #1224003 • Lightweight, water-resistant air mesh upper helps to resist moisture • Fully-gusseted tongue keeps out debris • High strength nylon upper lace locks are stitched in to allow quick on or off lacing • Lower eyelets have welded TPU reinforcements for increased durability • Molded TPU toe guard helps protect against bumps and abrasion in rough terrain • Amourbound and Armourlastic EVA foam midsole • Ortholite insole antimicrobial and odor fighting performance and comfort • Armourguide TPU heel cups foot for added protection • High abrasion rubber outsole • Built in flex grooves for aggressive traction	\$99.00	\$83.15	\$88.00 Discounted New Style # 250234
4.12.5.	Boots: 5.11 A.T.A.C. 8" Shield CSA/ASTM boot, Style #12026, women's Style #12217 • ASTM F2413-05 M C/75 I/75 EH PR certified • CSA Certified • Waterproof and polishable full grain leather • Waterproof/breathable bloodborne pathogen resistant membrane* • Composite safety toe • Puncture resistant midsole board • YKK Side zipper • Antibacterial and moisture-wicking • Shock Mitigation System* • Oil & slip-resistant, quiet outsole	\$103.00	\$115.15	\$109.34

207-2016

BID TABULATION				
4.12.6.	<p>Boots: Original SWAT WINX2 8" Tactical boot. Style #1010</p> <ul style="list-style-type: none"> • Uniform code, full-grain leather with plishable toe • Removable molded orthotic footbed • Molded Thermoplastic Heel Counter and toe box • Rear heel kickplate • Tough and durable moisture-wicking lining 	NB	\$66.99	\$67.85
4.12.7.	<p>Boots: Rocky AlphaForce Composite Toe Duty Boot. Style #6169</p> <ul style="list-style-type: none"> • Guaranteed Rocky Waterproof construction • Non-Metallic Stabilizer • Oil and Slip-Resistant RigiTrac Molded EVA • Rubber Outsole in Non-Marking • Airport Footbed Provides Support and Cushioning • ASTM Approved Xiremium Toe • Full-Grain Water-Resistant Leather and Lightweight 1000 Denier Nylon 	\$94.00	\$85.30	\$91.00
4.12.8.	<p>Boots: Rocky First Med Boot. Style #0911180</p>	NB	NB	\$121.35
4.12.8.	<p>Boots: : Bates GX-8 GoreTex Insulated Side Zip Boot. Style #EO2488. Women's Style #EO2788</p> <ul style="list-style-type: none"> • GX-8 GORE_TEX* 8" Insulated Side Zip Boots • YKK* side zipper with nylon tab cover and interior gusset for easy on-off • Full grain leather and 1680 ballistic nylon upper with a breathable waterproof GORE-TEX* membrane • Waterproof • Molded EVA shock absorbing midsole-comfort from toe to heel • Nylon shank • 200 gr Thinsulate™ insulation • Oil and slip-resistant Ultra-Lites* Xtreme rubber outsole • Perfect for passing through security checkpoints • Flap inside of zipper 	\$105.50	\$112.99	\$114.00
4.12.9.	<p>Boots: Bates 8" Ultralite Enforcer Water Resistant Tactical Boot. Style #2280</p> <ul style="list-style-type: none"> • Waterproof leather with ballistic nylon upper • Breathable mesh lining • Cushioned removable insert • Slip resistant rubber outsole • Athletic cement construction 	\$99.00	NB	\$75.00
4.10.	Max % Increase 1st Renewal	3.00%	2.50%	3.00%
4.10.	Max % Increase 2nd Renewal	3.00%	5.00%	3.00%
4.11.	Delivery days ARO	21-28 Days	30 Days	14-30 Days
4.9.	COOP? (Yes or NO)	YES	YES	YES
	Total:	\$1,000.50	\$946.11	\$1,143.00

**PURCHASE AGREEMENT
FOR
LAW ENFORCEMENT BOOTS – TERM & SUPPLY**

THIS AGREEMENT dated the 28th day of April 2016 is made between Boone County, Missouri, a political subdivision of the State of Missouri through the Boone County Commission, herein "County" and **Alamar Uniforms of Kansas City, L.L.C.**, herein "Contractor."

IN CONSIDERATION of the parties performance of the respective obligations contained herein, the parties agree as follows:

1. Contract Documents - This agreement shall consist of this Purchase Agreement for **Law Enforcement Boots Term & Supply**, County of Boone Request for Bid for **Law Enforcement Boots Term & Supply**, bid number **79-15DEC15**, Introduction and General Conditions of Bidding, Primary Specifications, Response Presentation and Review, any applicable addenda, the unexecuted Response Form, Work Authorization Certification, Certification Regarding Debarment, Standard Terms and Conditions, as well as the Contractor's bid response dated **December 10, 2015** and executed by **Steve Zalkin** on behalf of the Contractor. All such documents shall constitute the contract documents which are attached hereto and incorporated herein by reference. Service or product data, specification and literature submitted with bid response may be permanently maintained in the County Purchasing Office bid file for this bid if not attached. In the event of conflict between any of the foregoing documents, this Purchase Agreement, the Introduction and General Conditions of Bidding, Primary Specifications, Response Presentation and Review, the unexecuted Response Form, the Standard Terms and Conditions, and all applicable Addenda shall prevail and control over the Contractor's bid response.

2. Contract Duration - This agreement shall commence on **date of award and extend through December 31, 2016** subject to the provisions for termination specified below. This agreement may be extended beyond the expiration date by order of the County for **two (2) additional one-year periods** subject to the pricing clauses in the Contractor's bid response and thereafter on a month to month basis for a maximum of six (6) months in the event the County is unable to re-bid and/or award a new contract prior to the expiration date.

3. Basic Services - The County agrees to purchase from the Contractor and the Contractor agrees to supply the County with **Law Enforcement Boots** as required in the bid specifications and in conformity with the contract documents for the prices set forth in the Contractor's bid response, as needed and as ordered by County.

4. Delivery - Contractor agrees to provide the items and service as specified and as agreed to in the bid specifications, and within **14-30** days after receipt of order. Delivery shall be made FOB Destination, inside delivery, with freight charges fully included and prepaid. The seller pays and bears the freight cost. All requested items shall be delivered between the hours of 8:00 a.m. and 4:00 p.m., local time, Monday through Friday, excluding county holidays to the Boone County Sheriff's Department, 2121 County Drive, Columbia, MO 65202.

5. Billing and Payment - All billing shall be invoiced to Boone County Sheriff Department, Attn: Leasa Quick, 2121 County Dr. Columbia, MO 65202. Billings may only include the prices listed in the Contractor's bid response. No additional fees for delivery or extra services not included in the bid response or taxes shall be included as additional charges in excess of the charges in the Contractor's bid response to the specifications. The County agrees to pay all correct monthly statements within thirty days of receipt. All monthly statements must also have copies of applicable invoices; Contractor agrees to honor any cash or prompt payment discounts offered in its bid response if county makes payment as

207-2016

provided therein. In the event of a billing dispute, the County reserves the right to withhold payment on the disputed amount; in the event the billing dispute is resolved in favor of the Contractor, the County agrees to pay interest at a rate of 9% per annum on disputed amounts withheld commencing from the last date that payment was due.

6. **Binding Effect** - This agreement shall be binding upon the parties hereto and their successors and assigns for so long as this agreement remains in full force and effect.

7. **Entire Agreement** - This agreement constitutes the entire agreement between the parties and supersedes any prior negotiations, written or verbal, and any other bid or bid specification or contractual agreement. This agreement may only be amended by a signed writing executed with the same formality as this agreement.

8. **Termination** - This agreement may be terminated by the County upon thirty days advance written notice for any of the following reasons or under any of the following circumstances:

- a. County may terminate this agreement due to material breach of any term or condition of this agreement, or
- b. County may terminate this agreement if in the opinion of the Boone County Commission if delivery of products are delayed or products delivered are not in conformity with bidding specifications or variances authorized by County, or
- c. If appropriations are not made available and budgeted for any calendar year.

IN WITNESS WHEREOF the parties through their duly authorized representatives have executed this agreement on the day and year first above written.

ALAMAR UNIFORMS OF KANSAS CITY, L.L.C.

BOONE COUNTY, MISSOURI

by: Monica Beck

by: Boone County Commission
Daniel K. Atwill

title: Store Manager

Daniel K. Atwill, Presiding Commissioner

address: 207 Armour Road

N. Kansas City, MO 64116

APPROVED AS TO FORM:

ATTEST:

by: [Signature]
County Counselor

Wendy S. Noren
Wendy S. Noren, County Clerk

AUDITOR CERTIFICATION

In accordance with RSMo 50.660, I hereby certify that a sufficient unencumbered appropriation balance exists and is available to satisfy the obligation(s) arising from this contract. (Note: Certification of this contract is not required if the terms of this contract do not create a measurable county obligation at this time.)

1251, 1255, 2901, 2902 / 23300 Term and Supply

Signature June Pitchford Date 04/21/2016 by jj Appropriation Account

STANDARD TERMS AND CONDITIONS - BOONE COUNTY, MISSOURI

1. Contractor shall comply with all applicable federal, state, and local laws and failure to do so, in County's sole discretion, shall give County the right to terminate this Contract.
2. Responses shall include all charges for packing, delivery, installation, etc., (unless otherwise specified) to the Boone County Department identified in the Request for Bid and/or Proposal.
3. The Boone County Commission has the right to accept or reject any part or parts of all bids, to waive technicalities, and to accept the offer the County Commission considers the most advantageous to the County. Boone County reserves the right to award this bid on an item-by-item basis, or an "all or none" basis, whichever is in the best interest of the County.
4. Bidders must use the bid forms provided for the purpose of submitting bids, must return the bid and bid sheets comprised in this bid, give the unit price, extended totals, and sign the bid. The Purchasing Director reserves the right, when only one bid has been received by the bid closing date, to delay the opening of bids to another date and time in order to revise specifications and/or establish further competition for the commodity or service required. The one (1) bid received will be retained unopened until the new Closing date, or at request of bidder, returned unopened for re-submittal at the new date and time of bid closing.
5. When products or materials of any particular producer or manufacturer are mentioned in our specifications, such products or materials are intended to be descriptive of type or quality and not restricted to those mentioned.
6. Do not include Federal Excise Tax or Sales and Use Taxes in bid process, as law exempts the County from them.
7. The delivery date shall be stated in definite terms, as it will be taken into consideration in awarding the bid.
8. The County Commission reserves the right to cancel all or any part of orders if delivery is not made or work is not started as guaranteed. In case of delay, the Contractor must notify the Purchasing Department.
9. In case of default by the Contractor, the County of Boone will procure the articles or services from other sources and hold the Bidder responsible for any excess cost occasioned thereby.
10. Failure to deliver as guaranteed may disqualify Bidder from future bidding.
11. Prices must be as stated in units of quantity specified, and must be firm. Bids qualified by escalator clauses may not be considered unless specified in the bid specifications.
12. No bid transmitted by fax machine or e-mail will be accepted.
13. The County of Boone, Missouri expressly denies responsibility for, or ownership of any item purchased until same is delivered to the County and is accepted by the County.
14. The County reserves the right to award to one or multiple respondents. The County also reserves the right to not award any item or group of items if the services can be obtained from a state or other governmental entities contract under more favorable terms. The resulting contract will be considered "Non-Exclusive". The County reserves the right to purchase from other vendors.

15. The County, from time to time, uses federal grant funds for the procurement of goods and services. Accordingly, the provider of goods and/or services shall comply with federal laws, rules and regulations applicable to the funds used by the County for said procurement, and contract clauses required by the federal government in such circumstances are incorporated herein by reference. These clauses can generally be found in the Federal Transit Administration's Best Practices Procurement Manual – Appendix A. Any questions regarding the applicability of federal clauses to a particular bid should be directed to the Purchasing Department prior to bid opening.
16. In the event of a discrepancy between a unit price and an extended line item price, the unit price shall govern.
17. Should an audit of Contractor's invoices during the term of the Agreement, and any renewals thereof, indicate that the County has remitted payment on invoices that constitute an over-charging to the County above the pricing terms agreed to herein, the Contractor shall issue a refund check to the County for any over-charges within 30-days of being notified of the same.
18. **For all titled vehicles and equipment the dealer must use the actual delivery date to the County on all transfer documents** including the Certificate of Origin (COO,) Manufacturer's Statement of Origin (MSO,) Bill of Sale (BOS,) and Application for Title.
19. **Equipment and serial and model numbers** - The contractor is strongly encouraged to include equipment serial and model numbers for all amounts invoiced to the County. If equipment serial and model numbers are not provided on the face of the invoice, such information may be required by the County before issuing payment.

4. Response Form

4.1. Company Name: Alanna Uniforms

4.2. Address: 207 Alanna Road

4.3. City/Zip: North Kansas City, MO 64116

4.4. Phone Number: 816-363-6100

4.5. Fax Number: 816-363-6173

4.6. E-Mail Address: NAIMALE@ALNA.COM

4.7. Federal Tax ID: 47-0833359

402-391-8790
Cell

- 4.7.1. Corporation
- Partnership - Name _____
- Individual/Proprietorship - Individual Name _____
- Other (Specify) _____

4.8. The undersigned offers to furnish and deliver the articles or services as specified at the prices and terms stated and in strict accordance with all requirements contained in the Request for Bid which have been read and understood, and all of which are made part of this order. By submission of this bid, the vendor certifies that they are in compliance with Section 34.353 and, if applicable, Section 34.359 ("Missouri Domestic Products Procurement Act") of the Revised Statutes of Missouri.

4.8.1. Authorized Representative (Sign By Hand):  Date: 12-10-15

4.8.2. Print Name and Title of Authorized Representative: Steve Zalkin Date: 12-10-15

4.9. Will you honor the submitted prices for purchase by other entities in Boone County who participate in cooperative purchasing with Boone County, Missouri? Yes No

4.10. Maximum Percentage Increase for 3 % 1st Renewal 3 % 2nd Renewal

4.11. Delivery Days After Receipt of Order: 14-30 Days

4.12. Submit three (3) complete copies of your Response in a single sealed envelope, clearly marked on the outside, left corner with your company name and return address, the bid number and the due date and time.

**PRICING-NO SUBSTITUTIONS WILL BE ALLOWED WHERE NO ~~ED~~ ED
VENDOR MUST COME TO DEPARTMENT TO MEASURE OFFICE ~~RS.~~ RS.**

Item	Unit Price	Qty	Extended Price
4.12.1. Boots: Danner Acadia 8" Men's/Women's waterproof GORE-TEX. Style #21210 • No steel toe • Color-Black • NO SUBSTITUTIONS ALLOWED	\$ <u>214.80</u>		\$ <u>214.80</u>
4.12.2. Boots: Danner Striker 2 GTX, Style #42980 • 100% waterproof and breathable GORE-TEX® <i>Discontinued</i> • Full-grain leather <i>New #43003</i> • 1000 Denier nylon upper <i>Strike Torquet</i> • TERRA FORCE™ X Lite platform • Danner TFX® Lite outsole • Nylon shank • 8" height	\$ <u>115.00</u>		\$ <u>115.00</u>
4.12.3. Boots: Magnum Stealth Force 8.0 SZ Style #5198 • Full Grain Leather/1680 Denier Ballistic Nylon Mesh Upper • Circular Side Zipper • Cambrelle Moisture Wicking Lining • Agion Antimicrobial treatment • Coats Barbour Anti-Frying Seitchung Thread • EN ISO 20347 Certified • Composite Shank • Compression Molded EVA Midsole • M-Pact Contoured Shockliner with Memory Foam • Flex-Zone with Spring for Traction and Control • X-Traction Zone Outsole	\$ <u>96.70</u>		\$ <u>96.70</u>
4.12.4. Boots: Under Armour Valsiz Tactical Boot, Style #122400 <i>Discontinued New style #</i> • Lightweight, water-resistant air mesh upper helps to reduce moisture • Fully-gusseted tongue keeps out debris • High-strength nylon upper lace locks are stitched in to allow quick on or off lacing • Lower eyelets have welded TPU reinforcement for increased durability • Molded EVA ice guard helps protect against bumps and abrasions on rough terrain • Amourbe mid and Amourbe out EVA shock midsole • OrthoLite insole softens impact and fighting performance and comfort • Carbon fiber heel for extra support and stability • High abrasion-resistant outsole	\$ <u>88.00</u>	250234	\$ <u>88.00</u>

- Built in flex grooves for aggressive traction

4.12.5. **Boots:** 5.11 A.T.A.C. 8" Shield CSA/ASTM boot. Style #12026, women's Style #12217

\$ 109.34

\$ 109.34

- ASTM F2413-05 M C-75 I/75 EH PR certified
- CSA Certified
- Waterproof and polishable full grain leather
- Waterproof/breathable bloodborne pathogen resistant membrane*
- Composite safety toe
- Puncture resistant midsole board
- YKK Side zipper
- Antibacterial and moisture-wicking
- Shock Mitigation System[®]
- Oil & slip-resistant, quiet outsole

4.12.6. **Boots:** Original SWAT WINX2 8" Tactical boot, Style #1010

\$ 67.85

\$ 67.85

- Uniform code, full-grain leather with polishable toe
- Removable molded orthotic footbed
- Molded Thermoplastic Heel Counter and toe box
- Rear heel kickplate
- Tough and durable moisture-wicking lining

4.12.7. **Boots:** Rocky AlphaForce Composite Toe Duty Boot, Style #5162

\$ 91.00

\$ 91.00

- Guaranteed Rocky Waterproof construction
- Non-Metallic Stabilizer
- Oil and Slip-Resistant Rig-Tec[®] Midsole EVA
- Rubber Outsole in Non-Marking
- Airport Footbed Provides Support and Cushioning
- ASTM approved Metanium[®] Toe
- Full-Grain Water-Resistant Leather and Lightweight 1000 Denier Nylon

4.12.8. **Boots:** Rocky First Med Boot, Style #0911180

\$ 121.35

\$ 121.35

New Style #911113

4.12.9. **Boots:** Bates GX-8 GoreTex Insulated Side Zip Boot, Style #102483, Women's Style #102708
GX-8 GORE-TEX[®] 8" Insulated Side Zip Boots

\$ 114.00

\$ 114.00

- YKK[®] side zipper with nylon tab cover and interior gusset for easy on/off
- Full grain leather and polyester/nylon upper with a breathable waterproof GORE-TEX[®] membrane
- Waterproof

- Molded EVA shock absorbing midsole-comfort from toe to heel
- Nylon shank
- 200 gr Thinsulate™ insulation
- Oil and slip-resistant Ultra-Lites® Xtreme rubber outsole
- Perfect for passing through security checkpoints
- Flap inside of zipper

4.12.10. **Boots:** Bates 8" Ultralite Enforcer Water Resistant Tactical Boot, Style #2280

- Waterproof leather with ballistic nylon upper
- Breathable mesh lining
- Cushioned removable insert
- Slip resistant rubber outsole
- Athletic cement construction

\$ 75.00


\$ 75.00

COUNTY OF BOONE - MISSOURI
WORK AUTHORIZATION CERTIFICATION
PURSUANT TO 285.530 RSMo
(FOR ALL AGREEMENTS IN EXCESS OF \$5,000.00)

County of De Kalb)
State of NE)

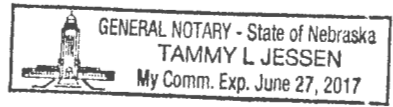
My name is Steve Zarkin am an authorized agent of Alamogordo Uniforms (Bidder). This business is enrolled and participates in a federal work authorization program for all employees working in connection with services provided to the County. This business does not knowingly employ any person that is an unauthorized alien in connection with the services being provided. Documentation of participation in a federal work authorization program is attached to this affidavit.

Furthermore, all subcontractors working on this contract shall affirmatively state in writing to their connects that they are not in violation of Section 285.530.1, shall not thereafter be in violation and submit a sworn affidavit under penalty of perjury that all employees are lawfully present in the United States.


Affiant Date: 12-10-15
Steve Zarkin
Printed Name

Subscribed and sworn to before me this 10 day of December, 2015.


Notary Public



(Please complete and return with Contract)

Certification Regarding
Debarment, Suspension, Ineligibility and Voluntary Exclusion
Lower Tier Covered Transactions

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 29 CFR Part 98, Section 98.510, Participants' responsibilities. The regulations were published as Part VII of the May 26, 1988, Federal Register (pages 19160-19211).

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS FOR CERTIFICATION)

- (1) The prospective recipient of Federal assistance funds certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective recipient of Federal assistance funds is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Steve Zaskin Owner
Name and Title of Authorized Representative

[Signature]
Signature

12-10-15
Date



Company ID Number: 212428

To be accepted as a participant in E-Verify, you should only sign the Employer's Section of the signature page. If you have any questions, contact E-Verify at 888-464-4218.

Employer Alamar Uniforms

Steve Zalkin

President

Department of Homeland Security – Verification Division

USCIS Verification Division



Boone County Purchasing
613 E. Ash Street
Columbia, MO 65201

Request for Bid (Bid)

Jacob M. Garrett, Buyer
Phone: (573) 886-4393 Fax: (573) 886-4390
Email: JGarrett@boonecountymmo.org

Bid Data

Bid Number: **79-15DEC15**
Commodity Title: **Law Enforcement Boots Term and Supply**

DIRECT BID FORMAT OR SUBMISSION QUESTIONS TO THE PURCHASING DEPARTMENT

Bid Submission Address and Deadline

Day / Date: **Tuesday, December 15, 2015**
Time: **1:30 P.M.** (Bids received after this time will be returned unopened)
Location / Mail: Boone County Purchasing Department
Address: Boone County Annex Building
613 E. Ash Street, Room 111
Columbia, MO 65201

Directions: The Purchasing office is located on the Southeast corner at 7th Street and Ash Street. Enter the building from the South side. Wheel chair accessible entrance is available.

Bid Opening

Day / Date: **Tuesday, December 15, 2015**
Time: **1:30 P.M.** (Bids received after this time will be returned unopened)
Location / Address: Boone County Annex Conference Room
613 E. Ash Street
Columbia, MO 65201

Bid Contents

- 1.0: **Introduction and General Conditions of Bidding**
- 2.0: **Primary Specifications**
- 3.0: **Response Presentation and Review**
- 4.0: **Response Form**
 - Work Authorization Certification**
 - Debarment Form**
 - Certification of Individual Bidder**
 - Individual Bidder Affidavit**
 - Standard Terms and Conditions**
 - No-Bid Response Form**

1. Introduction and General Conditions of Bidding

- 1.1. **INVITATION** - The County of Boone, through its Purchasing Department, invites responses, which offer to provide the goods and/or services identified on the title page, and described in greater detail in Section 2.
- 1.2. **DEFINITIONS**
- 1.2.1. **County** - This term refers to the County of Boone, a duly organized public entity. It may also be used as a pronoun for various subsets of the County organization, including, as the context will indicate:
Purchasing - The Purchasing Department, including its Purchasing Director and staff.
Department/s or Office/s - The County Department/s or Office/s for which this Bid is prepared, and which will be the end user/s of the goods and/or services sought.
Designee - The County employee/s assigned as your primary contact/s for interaction regarding Contract performance.
- 1.2.2. **Bidder / Contractor / Supplier** - These terms refer generally to businesses having some sort of relationship to or with us. The term may apply differently to different classes of entities, as the context will indicate.
Bidder - Any business entity submitting a response to this Bid. Suppliers, which may be invited to respond, or which express interest in this bid, but which do not submit a response, have no obligations with respect to the bid requirements.
Contractor - The Bidder whose response to this bid is found by Purchasing to meet the best interests of the County. The Contractor will be selected for award, and will enter into a Contract for provision of the goods and/or services described in the Bid.
Supplier - All business/s entities which may provide the subject goods and/or services.
- 1.2.3. **Bid** - This entire document, including attachments. A Bid may be used to solicit various kinds of information. The kind of information this Bid seeks is indicated by the title appearing at the top of the first page. An "Invitation For Bid" is used when the need is well defined. An "Invitation For Proposal" is used when the County will consider solutions, which may vary significantly from each other or from the County's initial expectations.
- 1.2.4. **Response** - The written, sealed document submitted according to the Bid instructions.
- 1.3. **BID CLARIFICATION** - Questions regarding this Bid should be directed in writing, by e-mail or fax, to the Purchasing Department. Answers, citing the question asked but not identifying the questioner, will be distributed simultaneously to all known prospective Bidders. Note: Written requirements in the Bid or its Amendments are binding, but any oral communications between County and Bidder are not.
- 1.3.1. **Bidder Responsibility** - The Bidder is expected to be thoroughly familiar with all specifications and requirements of this Bid. Bidder's failure or omission to examine any relevant form, article, site or document will not relieve them from any obligation regarding this Bid. By submitting a Response, Bidder is presumed to concur with all terms, conditions and specifications of this Bid.
- 1.3.2. **Bid Amendment** - If it becomes evident that this Bid must be amended, the Purchasing Department will issue a formal written Amendment to all known prospective Bidders. If necessary, a new due date will be established.
- 1.4. **AWARD** - Award will be made to the Bidder(s) whose offer(s) provide the greatest value to the County from the standpoint of suitability to purpose, quality, service, previous experience, price, lifecycle cost, ability to deliver, or for any other reason deemed by Purchasing to be in the best interest of the County. Thus, the result will not be determined by price alone. The County will be seeking the least costly outcome that meets the County needs as interpreted by the County. The County also reserves the right to not award any item or group of items if the services can be obtained from cooperative MMPPC or other governmental contracts under more favorable terms. Boone County reserves the right to award this bid on an item by item basis, or an "all or none" basis, whichever is in the best interest of the County.
- 1.5. **CONTRACT EXECUTION** - This Bid and the Contractor's Response will be made part of any resultant Contract and will be incorporated in the Contract as set forth, verbatim.

1.5.1. **Precedence** - In the event of contradictions or conflicts between the provisions of the documents comprising this Contract, they will be resolved by giving precedence in the following order:

- 1) the provisions of the Contract (as it may be amended);
- 2) the provisions of the Bid;
- 3) the provisions of the Bidder's Response.

1.6. **COMPLIANCE WITH STANDARD TERMS AND CONDITIONS** - Bidder agrees to be bound by the County's standard "boilerplate" terms and conditions for Contracts, a sample of which is attached to this Bid.

2. Primary Specifications

- 2.1. **ITEMS TO BE PROVIDED** – Boone County, hereafter referred to as “County”, proposes to contract with an individual(s) or organization(s), hereinafter referred to as “Contractor” for a Term and Supply contract for the furnishing of **Law Enforcement Boots** to the Boone County Sheriff’s Department on an *as needed* basis as detailed in the following specifications.
 - 2.1.1. The County reserves the right to award to one or multiple respondents. The County reserves the right to award on an ‘all or none’ basis or by ‘group.’ The County realizes awarding on a ‘group’ basis may be impossible for some or all groups. Price compared to convenience of one vendor per group will be evaluated and award shall be based on the best value to the County. Vendors are encouraged to bid on those items they can provide and are not required to bid on all items requested.
 - 2.2. **CONTRACT DURATION** - The contract shall be effective from **January 1, 2016 through December 31, 2016**. This contract is subject to **renew annually for two (2) additional one (1) year periods** following expiration of the first contract period.
 - 2.2.1. The unit prices for the items identified on the Response Form shall remain fixed for the identified original contract period. If the County exercises the option for renewal, the contractor shall agree that the prices for the items listed on the Response Form shall not increase by more than the maximum percent proposed on the Response Form.
 - 2.2.2. If renewal percentages are not provided for the items listed on the Response Form, then prices during any renewal period shall be the same as during the original contract period.
 - 2.3. **CONTRACT DOCUMENTS** - The successful bidder(s) shall be obligated to enter into a written contract with the County within 30 days of award on contract forms provided by the County. If bidders desire to contract under their own written agreement, any such proposed agreement shall be submitted in blank with their bid. County reserves the right to modify any proposed form agreement or withdraw its award to a successful bidder if any proposed agreement contains terms and conditions inconsistent with its bid or are unacceptable to county legal counsel.
 - 2.4. **CONTRACT EXTENSION** - The County Purchasing Director may exercise the option to extend the contract on a month-to-month basis for a maximum of 6 months from the date of termination if it is deemed to be in the best interest of Boone County.
 - 2.5. **PRICING** – All prices shall be as indicated on the Response Form. The County shall not pay nor be liable for any other additional costs including but not limited to: taxes, packing, handling, shipping and freight, insurance, interest, penalties, termination payments, attorney fees, liquidated damages, etc. Additionally, the County shall not be subject to any minimum order quantities or total prices.
 - 2.6. **QUANTITY** – All orders shall be placed based upon need. The County estimates that a total of 80 boots will be needed per year but reserves the right to deviate from this estimate based upon actual need.
 - 2.7. **ADDITIONAL INSTRUCTIONS AND CONDITIONS**
 - 2.7.1. **Samples:** Boone County reserves the right to request samples after bids are opened and before the award is made. When samples are called for, they must be furnished free of expense and if not destroyed in testing will, upon request, be returned at the bidder’s expense. A request for the return of samples must be made within ten days following County’s receipt of sample. Each individual sample must be labeled with the bidder’s name and manufacturer’s brand name and number.
 - 2.7.2. Prior to delivery, all items must be labeled with the officer’s name, size, and date of purchase with indelible ink that will remain and not wash/wear out during the life of the boot.
 - 2.7.3. Bidder(s) requesting substitute products wherever a specific manufacturer or model number is referenced must provide certification that the item submitted meets or exceeds the minimum specifications. Submission of technical product information with bid response is required. Substitutions are not allowed where noted in the response section of this request.
 - 2.7.4. Vendors must come to the department and measure officers for proper fit of boots.
 - 2.8. **DELIVERY** – Delivery shall be made FOB Destination, inside delivery, with freight charges fully

included and prepaid. The seller pays and bears the freight charges.

- 2.8.1. **Delivery Address** – All requested items shall be delivered to the Boone County Sheriff's Department, 2121 County Drive, Columbia, MO 65202.
- 2.8.2. **Delivery Time:** All deliveries shall be made between the hours of 8:00 a.m. and 4:00 p.m., local time Monday through Friday, excluding county holidays.
- 2.9. **BILLING AND PAYMENTS** – Invoices shall be submitted to the Sheriff's Department, Attn: Leasa Quick, 2121 County Drive, Columbia, MO 65202. Payment will be made within 30 days from receipt of an accurate **monthly statement**.
- 2.10. **Insurance Requirements:** The Contractor shall not commence work under this contract until they have obtained all insurance required under this paragraph and such insurance has been approved by the County, nor shall the Contractor allow any subcontractor to commence work on their subcontract until all similar insurance required of subcontractor has been so obtained and approved. All policies shall be in amounts, form and companies satisfactory to the County which must carry an A-6 or better rating as listed in the A.M. Best or equivalent rating guide. Insurance limits indicated below may be lowered at the discretion of the County.
 - 2.10.1. **Compensation Insurance** - The Contractor shall take out and maintain during the life of this contract, **Employee's Liability and Worker's Compensation Insurance** for all of their employees employed at the site of work, and in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor. Worker's Compensation coverage shall meet Missouri statutory limits. Employers' Liability limits shall be \$1,000,000.00 each employee, \$1,000,000.00 each accident, and \$1,000,000.00 policy limit. In case any class of employees engaged in hazardous work under this Contract at the site of the work is not protected under the Worker's Compensation Statute, the Contractor shall provide and shall cause each subcontractor to provide Employers' Liability Insurance for the protection of their employees not otherwise protected.
 - 2.10.2. **Comprehensive General Liability Insurance** - The Contractor shall take out and maintain during the life of this contract, such comprehensive general liability insurance as shall protect them and any subcontractor performing work covered by this contract, from claims for damages for personal injury including accidental death, as well as from claims for property damages, which may arise from operations under this contract, whether such operations be by themselves or for any subcontractor or by anyone directly or indirectly employed by them. The amounts of insurance shall be not less than \$2,000,000.00 combined single limit for any one occurrence covering both bodily injury and property damage, including accidental death. If the Contract involves any underground/digging operations, the general liability certificate shall include X, C, and U (Explosion, Collapse, and Underground) coverage. If providing Comprehensive General Liability Insurance, then the Proof of Coverage of Insurance shall also be included.

The Contractor has the option to provide **Owner's Contingent or Protective Liability and Property Damage** instead of the **Comprehensive General Liability Insurance**- The Contractor shall provide the County with proof of Owner's Protective Liability and Property Damage Insurance with the County as named insured, which shall protect the County against any and all claims which might arise as a result of the operations of the Contractor in fulfilling the terms of this contract during the life of the Contract. The minimum amounts of such insurance will be \$2,000,000.00 per occurrence, combined single limits. Limits can be satisfied by using a combination of primary and excess

- coverage's. Should any work be subcontracted, these limits will also apply.
- 2.10.3. **COMMERCIAL Automobile Liability** – The Contractor shall maintain during the life of this contract, automobile liability insurance in the amount of not less than \$2,000,000.00 combined single limit for any one occurrence, covering both bodily injury, including accidental death, and property damage, to protect themselves from any and all claims arising from the use of the Contractor's own automobiles, teams and trucks; hired automobiles, teams and trucks; and both on and off the site of work.
- 2.10.4. **Proof of Carriage of Insurance** - The Contractor shall furnish the County with Certificate(s) of Insurance which name the County as additional insured in an amount as required in this contract, contain a description of the project or work to be performed, and requiring a thirty (30) day mandatory cancellation notice. In addition, such insurance shall be on occurrence basis and shall remain in effect until such time as the County has made final acceptance of the facility contracted.
- 2.10.5. **INDEMNITY AGREEMENT:** To the fullest extent permitted by law, Contractor shall indemnify, hold harmless and defend the County, its directors, officers, agents, and employees from and against all claims, damages, losses and expenses (including but not limited to attorney's fees) arising by reason of any act or failure to act, negligent or otherwise, of Contractor, of any subcontractor (meaning anyone, including but not limited to consultants having a contract with contractor or a subcontract for part of the services), of anyone directly or indirectly employed by contractor or by any subcontractor, or of anyone for whose acts the contractor or its subcontractor may be liable, in connection with providing these services. This provision does not, however, require contractor to indemnify, hold harmless, or defend the County of Boone from its own negligence
- 2.11. **NON-EXCLUSIVITY** - The County reserves the right to obtain "like or similar" products of this or other manufacturers, exclusive of this contract, when use of such products is deemed to be in the best interest of the County.
- 2.12. **DESIGNEE** – Boone County Sheriff's Department
- 2.12.1. **Bid Clarification** – Jacob M. Garrett, Buyer, 613 E. Ash Street, Columbia, MO 65201. Telephone: (573) 886-4393; Facsimile (573) 886-4390 or email: jgarrett@boonecountymo.org.

3. Response Presentation and Review

- 3.1. **RESPONSE CONTENT** - In order to enable direct comparison of competing Responses, Bidder must submit Response in strict conformity to the requirements stated herein. Failure to adhere to all requirements may result in Bidder's Response being disqualified as non-responsive. All Responses must be submitted using the provided Response Sheet. Every question must be answered and if not applicable, the section must contain "N/A." Manufacturer's published specifications for the items requested shall be included with the response.
- 3.2. **SUBMITTAL OF RESPONSES** - Responses MUST be received by the date and time noted on the title page under "Bid Submission Information and Deadline." NO EXCEPTIONS. The County is not responsible for late or incorrect deliveries from the US Postal Service or any other mail carrier.
 - 3.2.1. **Submittal Package** - Submit, to the location specified on the title page, **three (3) complete copies** of your Response in a single sealed envelope, clearly marked on the outside with your company name and return address, **the proposal number and the due date and time.**
 - 3.2.2. **Web Page**- Vendors may view Bids, Bid Tabulations, and Bid Awards on the Boone County Web Page at <http://www.showmeboone.com>.
- 3.3. **BID OPENING** - On the date and time and at the location specified on the title page under "Bid Opening", all Responses will be opened in public. Brief summary information from each will be read aloud.
 - 3.3.1. **Removal from Vendor Database** - If any prospective Bidder currently in our Vendor Database to whom the Bid was sent elects not to submit a Response and fails to reply in writing stating reasons for not bidding, that Bidder's name may be removed from our database. Other reasons for removal include unwillingness or inability to show financial responsibility, reported poor performance, unsatisfactory service, or repeated inability to meet delivery requirements.
- 3.4. **RESPONSE CLARIFICATION** – The County reserves the right to request additional written or oral information from Bidders in order to obtain clarification of their Responses.
 - 3.4.1. **Rejection or Correction of Responses** – The County reserves the right to reject any or all Responses. Minor irregularities or informalities in any Response which are immaterial or inconsequential in nature, and are neither affected by law nor at substantial variance with Bid conditions, may be waived at our discretion whenever it is determined to be in the County's best interest.
- 3.5. **EVALUATION PROCESS** – The County's sole purpose in the evaluation process is to determine from among the Responses received which one is best suited to meet the County's needs at the lowest possible cost. Any final analysis or weighted point score does not imply that one Bidder is superior to another, but simply that in our judgment the Contractor selected appears to offer the best overall solution for our current and anticipated needs at the lowest possible cost.
 - 3.5.1. **Method of Evaluation** – The County will evaluate submitted Responses in relation to all aspects of this Bid.
 - 3.5.2. **Acceptability** – The County reserves the sole right to determine whether goods and/or services offered are acceptable for County use.
 - 3.5.3. **Endurance of Pricing** – Bidder's pricing must be held until contract execution or 60 days, whichever comes first.

4. Response Form

4.1. Company Name: _____

4.2. Address: _____

4.3. City/Zip: _____

4.4. Phone Number: _____

4.5. Fax Number: _____

4.6. E-Mail Address: _____

4.7. Federal Tax ID: _____

- 4.7.1. () Corporation
- () Partnership - Name _____
- () Individual/Proprietorship - Individual Name _____
- () Other (Specify) _____

4.8. **The undersigned offers to furnish and deliver the articles or services as specified at the prices and terms stated and in strict accordance with all requirements contained in the Request for Bid which have been read and understood, and all of which are made part of this order.** By submission of this bid, the vendor certifies that they are in compliance with Section 34.353 and, if applicable, Section 34.359 ("Missouri Domestic Products Procurement Act") of the Revised Statutes of Missouri.

4.8.1. Authorized Representative (Sign By Hand):

_____ Date: _____

4.8.2. Print Name and Title of Authorized Representative

_____ Date: _____

4.9. Will you honor the submitted prices for purchase by other entities in Boone County who participate in cooperative purchasing with Boone County, Missouri? _____ Yes _____ No

4.10. Maximum Percentage Increase for _____% 1st Renewal _____% 2nd Renewal

4.11. Delivery Days After Receipt of Order: _____ Days

4.12. **Submit three (3) complete copies of your Response in a single sealed envelope, clearly marked on the outside, left corner with your company name and return address, the bid number and the due date and time.**

**PRICING-NO SUBSTITUTIONS WILL BE ALLOWED WHERE NOTED
VENDOR MUST COME TO DEPARTMENT TO MEASURE OFFICERS.**

Item	Unit Price	Qty	Extended Price
4.12.1. Boots: Danner Acadia 8" Men's/Women's waterproof GORE-TEX. Style #21210 <ul style="list-style-type: none"> • No steel toe • Color-Black • NO SUBSTITUTIONS ALLOWED 	\$ _____		\$ _____
4.12.2. Boots: Danner Striker 2 GTX, Style #42980 <ul style="list-style-type: none"> • 100% waterproof and breathable GORE-TEX® • Full-grain leather • 1000 Denier nylon upper • TERRA FORCE™ X Lite platform • Danner TFX® Lite outsole • Nylon shank • 8" height 	\$ _____		\$ _____
4.12.3. Boots: Magnum Stealth Force 8.0 SZ Style #5198 <ul style="list-style-type: none"> • Full Grain Leather/1680 Denier Ballistic Nylon Mesh Upper • Circular Side Zipper • Cambrelle Moisture Wicking Lining • Agion Antimicrobial treatment • Coats Barbour Anti Fraying Stitching Thread • EN ISO 20347 Certified • Composite Shank • Compression Molded EVA Midsole • M-Pact Contoured Sockliner with Memory Foam • Flex-Zone with Siping for Traction and Control • X-Traction Zone Outsole. 	\$ _____		\$ _____
4.12.4. Boots: UnderArmour Valsetz Tactical Boot, Style #1224003 <ul style="list-style-type: none"> • Lightweight, water-resistant air mesh upper helps to resist moisture • Fully-gusseted tongue keeps out debris • High strength nylon upper lace locks are stitched in to allow quick on or off lacing • Lower eyelets have welded TPU reinforcements for increased durability • Molded TPU toe guard helps protect against bumps and abrasion in rough terrain • Amourbound and Armourelastic EVA foam midsole • Ortholite insole antimicrobial and odor fighting performance and comfort • Armourguide TPU heel cups foot for added protection • High abrasion rubber outsole 	\$ _____		\$ _____

	<ul style="list-style-type: none"> Built in flex grooves for aggressive traction 		
4.12.5.	Boots: 5.11 A.T.A.C. 8" Shield CSA/ASTM boot, Style #12026, women's Style #12217 <ul style="list-style-type: none"> ASTM F2413-05 M C/75 I/75 EH PR certified CSA Certified Waterproof and polishable full grain leather Waterproof/breathable bloodborne pathogen resistant membrane* Composite safety toe Puncture resistant midsole board YKK Side zipper Antibacterial and moisture-wicking Shock Mitigation System[®] Oil & slip-resistant, quiet outsole 	\$ _____	\$ _____
4.12.6.	Boots: Original SWAT WINX2 8" Tactical boot, Style #1010 <ul style="list-style-type: none"> Uniform code, full-grain leather with polishable toe Removable molded orthotic footbed Molded Thermoplastic Heel Counter and toe box Rear heel kickplate Tough and durable moisture-wicking lining 	\$ _____	\$ _____
4.12.7.	Boots: Rocky AlphaForce Composite Toe Duty Boot, Style #6169 <ul style="list-style-type: none"> Guaranteed Rocky Waterproof construction Non-Metallic Stabilizer Oil and Slip-Resistant RigiTrac Molded EVA Rubber Outsole in Non-Marking Airport Footbed Provides Support and Cushioning ASTM Approved Xtremium Toe Full-Grain Water-Resistant Leather and Lightweight 1000 Denier Nylon 	\$ _____	\$ _____
4.12.8.	Boots: Rocky First Med Boot, Style #0911180	\$ _____	\$ _____
4.12.9.	Boots: Bates GX-8 GoreTex Insulated Side Zip Boot, Style #EO2488, Women's Style #EO2788 <ul style="list-style-type: none"> GX-8 GORE-TEX[®] 8" Insulated Side Zip Boots YKK[®] side zipper with nylon tab cover and interior gusset for easy on-off Full grain leather and 1680 ballistic nylon upper with a breathable waterproof GORE-TEX[®] membrane Waterproof 	\$ _____	\$ _____

	<ul style="list-style-type: none"> • Molded EVA shock absorbing midsole-comfort from toe to heel • Nylon shank • 200 gr Thinsulate™ insulation • Oil and slip-resistant Ultra-Lites® Xtreme rubber outsole • Perfect for passing through security checkpoints • Flap inside of zipper • 		
4.12.10.	<p>Boots: Bates 8" Ultralite Enforcer Water Resistant Tactical Boot, Style #2280</p> <ul style="list-style-type: none"> • Waterproof leather with ballistic nylon upper • Breathable mesh lining • Cushioned removable insert • Slip resistant rubber outsole • Athletic cement construction 	\$ _____	\$ _____

INSTRUCTIONS FOR COMPLIANCE WITH HOUSE BILL 1549

House Bill 1549 addresses the Department of Homeland Security's and the Social Security Administration's E-Verify Program (Employment Eligibility Verification Program) that requires the County to verify "lawful presence" of individuals when we contract for work/service; verify that contractor has programs to verify lawful presence of their employees when contracts exceed \$5,000; and a requirement for OSHA safety training for public works projects.

The County is required to obtain certification that the bidder awarded the attached contract participates in a federal work authorization program. To obtain additional information on the Department of Homeland Security's E-Verify program, go to:

<http://www.uscis.gov/portal/site/uscis/menuitem.eb1d4c2a3e5b9ac89243c6a7543f6d1a/?vgnextoid=75bce2e261405110VgnVCM1000004718190aRCRD&vgnnextchannel=75bce2e261405110VgnVCM1000004718190aRCRD>

Please complete and return form *Work Authorization Certification Pursuant to 285.530 RSMo* if your contract amount is in excess of \$5,000. **Attach to this form the *E-Verify Memorandum of Understanding that you completed when enrolling*.** The link for that form is:

<http://www.uscis.gov/files/nativedocuments/save-mou.pdf>

Additional information may be obtained from:

[http://www.uscis.gov/USCIS/E-Verify/Customer%20Support/Employer%20MOU%20\(September%202009\).pdf](http://www.uscis.gov/USCIS/E-Verify/Customer%20Support/Employer%20MOU%20(September%202009).pdf)

If you are an Individual/Proprietorship, then you must return the attached *Certification of Individual Bidder*. On that form, you may do one of the three options listed. Be sure to attach any required information for those options as detailed on the *Certification of Individual Bidder*. If you choose option number two, then you will also need to complete and return the attached form *Affidavit*.

CERTIFICATION OF INDIVIDUAL BIDDER

Pursuant to Section 208.009 RSMo, any person applying for or receiving any grant, contract, loan, retirement, welfare, health benefit, post secondary education, scholarship, disability benefit, housing benefit or food assistance who is over 18 must verify their lawful presence in the United States. Please indicate compliance below. Note: A parent or guardian applying for a public benefit on behalf of a child who is citizen or permanent resident need not comply.

- _____1. I have provided a copy of documents showing citizenship or lawful presence in the United States. (Such proof may be a Missouri driver’s license, U.S. passport, birth certificate, or immigration documents). Note: If the applicant is an alien, verification of lawful presence must occur prior to receiving a public benefit.

- _____2. I do not have the above documents, but provide an affidavit (copy attached) which may allow for temporary 90 day qualification.

- _____3. I have provided a completed application for a birth certificate pending in the State of _____. Qualification shall terminate upon receipt of the birth certificate or determination that a birth certificate does not exist because I am not a United States citizen.

Applicant

Date

Printed Name

AFFIDAVIT
(Only Required for Certification of Individual Bidder (Option #2))

State of Missouri)
)SS.
County of _____)

I, the undersigned, being at least eighteen years of age, swear upon my oath that I am either a United States citizen or am classified by the United States government as being lawfully admitted for permanent residence.

Date

Signature

Social Security Number
or Other Federal I.D. Number

Printed Name

On the date above written _____ appeared before me and swore that the facts contained in the foregoing affidavit are true according to his/her best knowledge, information and belief.

Notary Public

My Commission Expires:

(Please complete and return with Contract)

Certification Regarding
Debarment, Suspension, Ineligibility and Voluntary Exclusion
Lower Tier Covered Transactions

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 29 CFR Part 98 Section 98.510, Participants' responsibilities. The regulations were published as Part VII of the May 26, 1988, Federal Register (pages 19160-19211).

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS FOR CERTIFICATION)

- (1) The prospective recipient of Federal assistance funds certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective recipient of Federal assistance funds is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Name and Title of Authorized Representative

Signature

Date



Boone County Purchasing
613 E. Ash Street
Columbia, MO 65201

Standard Terms and Conditions

Jacob M. Garrett, Buyer
(573) 886-4393 - FAX (573) 886-4390

STANDARD TERMS AND CONDITIONS - BOONE COUNTY, MISSOURI

1. Contractor shall comply with all applicable federal, state, and local laws and failure to do so, in County's sole discretion, shall give County the right to terminate this Contract.
2. Responses shall include all charges for packing, delivery, installation, etc., (unless otherwise specified) to the Boone County Department identified in the Request for Bid and/or Proposal.
3. The Boone County Commission has the right to accept or reject any part or parts of all bids, to waive technicalities, and to accept the offer the County Commission considers the most advantageous to the County. Boone County reserves the right to award this bid on an item-by-item basis, or an "all or none" basis, whichever is in the best interest of the County.
4. Bidders must use the bid forms provided for the purpose of submitting bids, must return the bid and bid sheets comprised in this bid, give the unit price, extended totals, and sign the bid. The Purchasing Director reserves the right, when only one bid has been received by the bid closing date, to delay the opening of bids to another date and time in order to revise specifications and/or establish further competition for the commodity or service required. The one (1) bid received will be retained unopened until the new Closing date, or at request of bidder, returned unopened for re-submittal at the new date and time of bid closing.
5. When products or materials of any particular producer or manufacturer are mentioned in our specifications, such products or materials are intended to be descriptive of type or quality and not restricted to those mentioned.
6. Do not include Federal Excise Tax or Sales and Use Taxes in bid process, as law exempts the County from them.
7. The delivery date shall be stated in definite terms, as it will be taken into consideration in awarding the bid.
8. The County Commission reserves the right to cancel all or any part of orders if delivery is not made or work is not started as guaranteed. In case of delay, the Contractor must notify the Purchasing Department.
9. In case of default by the Contractor, the County of Boone will procure the articles or services from other sources and hold the Bidder responsible for any excess cost occasioned thereby.
10. Failure to deliver as guaranteed may disqualify Bidder from future bidding.
11. Prices must be as stated in units of quantity specified, and must be firm. Bids qualified by escalator clauses may not be considered unless specified in the bid specifications.

12. No bid transmitted by fax machine or e-mail will be accepted.
13. The County of Boone, Missouri expressly denies responsibility for, or ownership of any item purchased until same is delivered to the County and is accepted by the County.
14. The County reserves the right to award to one or multiple respondents. The County also reserves the right to not award any item or group of items if the services can be obtained from a state or other governmental entities contract under more favorable terms. The resulting contract will be considered "Non-Exclusive". The County reserves the right to purchase from other vendors.
15. The County, from time to time, uses federal grant funds for the procurement of goods and services. Accordingly, the provider of goods and/or services shall comply with federal laws, rules and regulations applicable to the funds used by the County for said procurement, and contract clauses required by the federal government in such circumstances are incorporated herein by reference. These clauses can generally be found in the Federal Transit Administration's Best Practices Procurement Manual – Appendix A. Any questions regarding the applicability of federal clauses to a particular bid should be directed to the Purchasing Department prior to bid opening.
16. In the event of a discrepancy between a unit price and an extended line item price, the unit price shall govern.
17. Should an audit of Contractor's invoices during the term of the Agreement, and any renewals thereof, indicate that the County has remitted payment on invoices that constitute an over-charging to the County above the pricing terms agreed to herein, the Contractor shall issue a refund check to the County for any over-charges within 30-days of being notified of the same.
18. **For all titled vehicles and equipment the dealer must use the actual delivery date to the County on all transfer documents** including the Certificate of Origin (COO,) Manufacturer's Statement of Origin (MSO,) Bill of Sale (BOS,) and Application for Title.
19. **Equipment and serial and model numbers** - The contractor is strongly encouraged to include equipment serial and model numbers for all amounts invoiced to the County. If equipment serial and model numbers are not provided on the face of the invoice, such information may be required by the County before issuing payment.



Boone County Purchasing
613 E. Ash Street
Columbia, MO 65201

“No Bid” Response Form

Jacob M. Garrett, Buyer
(573) 886-4393 - FAX (573) 886-4390

“NO BID RESPONSE FORM”

**NOTE: COMPLETE AND RETURN THIS FORM ONLY IF YOU DO NOT WANT TO
SUBMIT A BID**

If you do not wish to respond to this bid request, but would like to remain on the Boone County vendor list for this service/commodity, please remove form and return to the Purchasing Department by mail or fax.

If you would like to FAX this “No Bid” Response Form to our office, the FAX number is (573) 886-4390.

Bid: 79-15DEC15 - Law Enforcement Boots Term and Supply

Business Name: _____

Address: _____

Telephone: _____

Contact: _____

Date: _____

Reason(s) for not bidding:

CERTIFIED COPY OF ORDER

STATE OF MISSOURI

April Session of the April Adjourned

Term. 20 16

County of Boone

} ea.

In the County Commission of said county, on the

28th

day of

April

20

16

the following, among other proceedings, were had, viz:

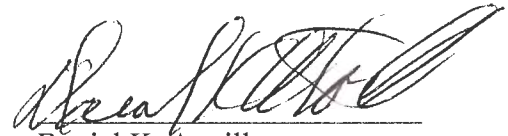
Now on this day the County Commission of the County of Boone does hereby approve the attached Contract Amendment Number One – MM65, Sodium Chloride.

The terms of this amendment are stipulated in the attached Contract Amendment. It is further ordered the Presiding Commissioner is hereby authorized to sign said Contract Amendment Number One.

Done this 28th day of April, 2016.

ATTEST:

Wendy S. Noren
Wendy S. Noren
Clerk of the County Commission



Daniel K. Atwill
Presiding Commissioner

Absent

Karen M. Miller
District I Commissioner



Janet M. Thompson
District II Commissioner

208-2016

Boone County Purchasing

Melinda Bobbitt, CPPB
Director



613 E. Ash St, Room 110
Columbia, MO 65201
Phone: (573) 886-4391
Fax: (573) 886-4390

MEMORANDUM

TO: Boone County Commission
FROM: Melinda Bobbitt, CPPB
DATE: April 21, 2016
RE: Amendment Number One – *MM65 – Sodium Chloride (Salt)*

Contract *MM65 – Sodium Chloride (salt)* was approved by commission for award to Independent Salt Company on June 24, 2014, commission order 301-2014. The attached amendment adds the University of Missouri to our cooperative agreement.

cc: Bid File

**CONTRACT AMENDMENT #1
SODIUM CHLORIDE (SALT)**

The Contract Agreement **MM65** dated June 24, 2014 made by and between Boone County, Missouri and **Independent Salt Company** for and in consideration of the performance of the respective obligations of the parties set forth herein, is amended as follows:

1. Add an additional participating member from the Mid-Missouri Purchasing Cooperative to our contract:
University of Missouri
Delivery Address: 916 East Champions Drive, Columbia, MO 6521.

Invoice: Pete Millier, UMC Campus Facilities, 181 General Services Building, Columbia, MO 65211. Phone: (573) 239-1010. E-mail: millier@missouri.edu.


Usage will be as follows for 2016:

	<u>Unit</u>	<u>Qty</u>	<u>Unit Price</u>	<u>Extended Price</u>
Sodium Chloride Pre-Fill	Tons	150	\$61.24 \$65.14	\$9186.00 \$9771.00
Sodium Chloride Replenishment	Tons	200	\$61.24 \$67.20	\$12248.00 \$13440.00

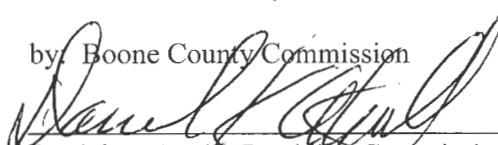
2. Except as specifically amended hereunder, all other terms, conditions and provisions of the original agreement shall remain in full force and effect.

IN WITNESS WHEREOF the parties through their duly authorized representatives have executed this agreement on the day and year first above written.

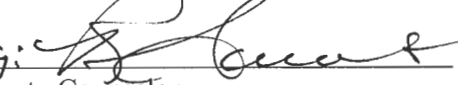
INDEPENDENT SALT COMPANY

by 
title VP-Distribution

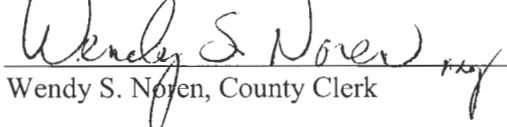
BOONE COUNTY, MISSOURI

by Boone County Commission

Daniel K. Atwill, Presiding Commissioner

APPROVED AS TO FORM:

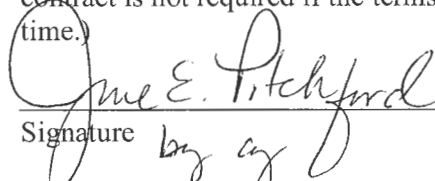
by: 
County Counselor

ATTEST:


Wendy S. Noren, County Clerk

AUDITOR CERTIFICATION

In accordance with RSMo 50.660, I hereby certify that a sufficient unencumbered appropriation balance exists and is available to satisfy the obligation(s) arising from this contract. (Note: Certification of this contract is not required if the terms of this contract do not create a measurable county obligation at this time.)


Signature by ay

4/21/16
Date

No County Obligation
Appropriation Account

CERTIFIED COPY OF ORDER

STATE OF MISSOURI

April Session of the April Adjourned

Term. 20 16

County of Boone

} ea.

In the County Commission of said county, on the

28th

day of

April

20

16

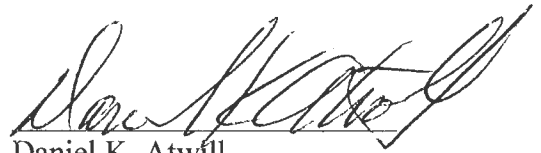
the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby authorize Resource Management to redirect class 9 savings to make additional class 9 purchases as described in the attached memorandum.

Done this 28th day of April, 2016.

ATTEST:

Wendy S. Noren
Wendy S. Noren
Clerk of the County Commission



Daniel K. Atwill
Presiding Commissioner

Absent

Karen M. Miller
District I Commissioner



Janet M. Thompson
District II Commissioner



Boone County Resource Management

ROGER B. WILSON BOONE COUNTY GOVERNMENT CENTER
801 E. WALNUT ROOM 315 COLUMBIA, MO 65201-7730
(573) 886-4480 FAX (573) 886-4340

STAN SHAWVER, DIRECTOR

PLANNING – INSPECTIONS – ENGINEERING

DERIN CAMPBELL, PE; CHIEF ENGINEER

To: Boone County Commission

From: Stan Shawver

Date: April 15, 2016

Re: Redirection of approved funds

Dear Commissioners:

Boone County Resource Management would like to request authorization to redirect class 9 savings to make additional class 9 purchases. The approved budget for Department 2045 included \$4500 to purchase a rugged laptop for the surveyor & \$3400 for surveyor software to use on the laptop. Current quotes for these two items are \$2810 for the computer & \$1700 for the software resulting in savings of \$1690 & \$1700 respectively. With these savings would would like to be allowed to purchase a video card for the surveyor's desk top computer and the GPS module to the current surveyor robot.

When we requested a current quote on the suvey software we were informed the application comes with 2 licenses so we would like to install on the laptop and the desktop. We have checked with IT to review the specficiations and they have determined the desktop may or may not require a video card. We will not know for sure until the program is installed on the computer. A quick search on line shows video cards ranging from \$100-\$375 and IT found us a graphic card for \$122 in 2014 so we are confident IT would be able to find a suitable card for \$500 or less.

We would like to use up to \$1,500.00 of the savings on the software to purchase the GPS module for the surveyors robot. (We do not expect the module to cost this much, but have not yet received an updated quote.) This will allow the surveyor to add GPS coordinates to his surveys making them more accurate.

If the Commission agrees to allow these two purchases and the items cost the maximum amount requested of \$2,000 the County will still realize a \$1,390 savings.

CERTIFIED COPY OF ORDER

STATE OF MISSOURI

April Session of the April Adjourned

Term. 20 16

County of Boone

} ea.

In the County Commission of said county, on the

28th

day of

April

20

16

the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby approve the following board applications:

Appoint

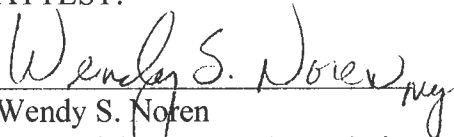
Name	Board	Period
Michael Foster	Judicial & Law Enforcement Task Force	May 1, 2016 through May 1, 2019

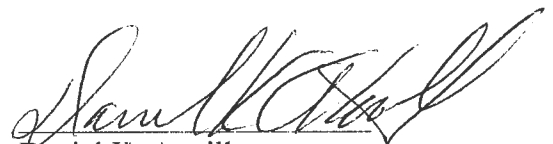
Reappoint

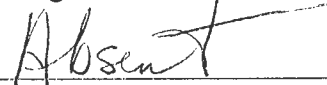
Name	Board	Period
Jay Creasy	Building Code Commission	May 1, 2016 through May 1, 2018
Jean Sax	Energy & Environment Commission	June 1, 2016 through June 1, 2019
Boyd Harris	Planning & Zoning	May 1, 2016 through May 1, 2020

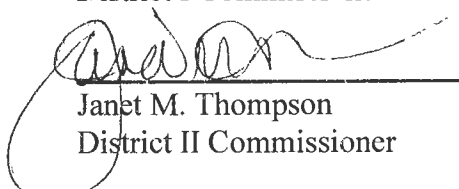
Done this 28th day of April, 2016.

ATTEST:


Wendy S. Noren
Clerk of the County Commission


Daniel K. Atwill
Presiding Commissioner


Karen M. Milier
District I Commissioner


Janet M. Thompson
District II Commissioner