

**AGREEMENT BETWEEN  
CITY OF OVERLAND PARK, KANSAS  
AND VENDOR  
FOR  
COMPLETED ASSEMBLY OF  
THREE (3) SINGLE AXLE SNOWPLOW DUMP TRUCKS**

THIS AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, **2013**, by and between the City of Overland Park, Kansas, (hereinafter the "City"), and **American Equipment**, (hereinafter the "Vendor");

WITNESSETH:

WHEREAS, the City desires to purchase all equipment needed in the assembly of three (3) single axle snowplow dump trucks (hereinafter, the "Trucks") and to receive the delivery of the fully assembled Trucks in accordance with the Specifications for the same; and

WHEREAS, the Vendor has submitted to the City, a proposal, in accordance with the requirements of the above-referenced Specifications; and

WHEREAS, the City has selected the Vendor to provide the Trucks upon the terms and conditions and for the sum set forth herein.

NOW, THEREFORE, in consideration of the compensation to be paid the Vendor, and of the mutual agreements herein contained, the parties hereto have agreed as follows:

**ARTICLE 1. DEFINITIONS.**

- a. **"Agreement"** shall mean this Agreement, the Instructions to Vendor, General Conditions, Proposal, Specifications, and any attachments to those documents.
- b. **"Warranty"** shall mean a guarantee by either the manufacturer, the Vendor, or both, that the equipment and assembly of the Trucks being purchased by the City will be in good working order, shall not be faulty or deficient, and shall be in conformity with the standards and specifications as set forth herein.
- c. **"Proposal"** shall mean the offer of the Vendor, submitted on the prescribed form, setting forth the price for the Trucks and delivery thereof.
- d. **"Specifications"** shall mean those portions of the Agreement consisting of written technical descriptions of equipment and quality as applied to the Trucks to be delivered.

**ARTICLE 2. VENDOR'S PERFORMANCE.**

- a. The Vendor shall furnish all labor, tools, equipment, materials, and transportation required to deliver the Trucks to the Overland Park Public Works Shawnee Mission District Facility located at 11300 West 91<sup>st</sup> Street, Overland Park, Kansas 66214, all in accordance with this Agreement; all work to be done in a good and workmanlike manner to the entire satisfaction of the City, and in accordance with all City, State, and Federal

laws applicable thereto. Delivery of the Trucks shall be made **no later than September 15, 2013** by Vendor. City furnished cab and chassis' **approximate** delivery date from the manufacturer is **May 1, 2013**.

- b. Vendor shall be responsible for submitting, to the City's designee, weekly email photos of the Trucks assembly progress.
- c. Vendor shall give the City two (2) weeks notice prior to any inspection points to allow City enough time for travel arrangements, if necessary.

### **ARTICLE 3. VENDOR'S RISK.**

Vendor retains title to and risk of loss or damage to equipment supplied by Vendor prior to the time of delivery and acceptance by the City. Title to and risk of loss or damage will pass to the City upon delivery and acceptance, free of any and all encumbrances.

The Vendor shall assume full responsibility for the proper shipping and offloading of the Trucks and shall, at its own cost, bear any loss, and repair any damage which may occur as a result of these activities.

### **ARTICLE 4. PRICE AND PAYMENT TERMS.**

In exchange for delivery to the City of the Trucks as proscribed in this Agreement, and Warranty on the Trucks delivered, the City agrees to pay the Vendor the sum of **Two Hundred Fifty One Thousand Nine Hundred Nineteen and no/100 dollars (\$251,919.00)**

All compensation due shall be payable to Vendor within thirty (30) days of receipt of Vendor's invoice by City.

### **ARTICLE 5. TERMINATION**

Unless otherwise terminated as provided herein, this Agreement shall be in effect for the **2013** snowplow order. The City shall have the right to renew this Agreement for **one (1) additional one-year period** by accepting each subsequent year's quote for snowplows.

Nothing in this Agreement shall prevent, limit, or otherwise interfere with the right of the City to terminate this Agreement, with or without cause. If City shall terminate the Agreement without cause, it shall compensate Vendor for any work completed prior to Vendor's receipt of the termination notice. Compensation shall not include anticipatory profit or consequential damages, neither of which will be allowed.

### **ARTICLE 6. WARRANTY.**

Vendor shall warrant all parts, equipment, and fabrication used in the assembly of the Trucks, for a minimum of one (1) year after acceptance of the Trucks by the City. This shall include any and all moving and adjustable parts, materials, equipment installed, and workmanship specified under this Agreement. Nothing in the above statements intends or implies that the Warranty shall apply to damage caused by misuse, abuse, improper maintenance, or normal usage by the City. All repairs made under this Warranty shall bear an additional one (1) year Warranty commencing from the date the repairs and/or installation of equipment was completed.

**ARTICLE 7. DESIGNATION OF CONTACT PERSONS.**

The City contact person will be **Bill Hills, Supervisor, Public Works Maintenance**. He can be reached at **913-327-6658**. Vendor will designate a person to coordinate all activities with the City. Both designees will be available during normal business hours.

**ARTICLE 8. INDEPENDENT CONTRACTOR.**

Vendor is an independent contractor and as such is not an employee or agent of the City.

**ARTICLE 9. SUBCONTRACTORS**

Vendor shall have the right to subcontract, in part, the services to be provided under this Agreement, but shall not be relieved of its liability hereunder thereby. Services performed by any subcontractor hired by Vendor will not result in any additional cost to City. Vendor must notify the City of any proposed subcontractors and the City shall have the right of approval thereof. Vendor agrees to the insurance requirements concerning the use of subcontractors as specified herein.

**ARTICLE 10. INDEMNITY.**

a. Definitions - For purposes of indemnification, the following terms shall have the meanings set forth below:

1. "The Vendor" means and includes Vendor, all of its affiliates and subsidiaries, its subcontractors and materialmen and their respective servants, agents and employees; and
2. "Loss" means any and all loss, damage, liability or expense, of any nature whatsoever, whether incurred as a judgment, settlement, penalty, fine or otherwise (including attorney's fees and the cost of defense), in connection with any action, proceeding, demand or claim, whether real or spurious, for injury, including death, to any person or persons or damages to or loss of, or loss of the use of, property of any person, firm or corporation, including the parties hereto, which arise out of or are connected with, or are claimed to arise out of or be connected with, the performance of this Agreement, whether arising before or after the completion of the performance required hereunder.

b. The Indemnity

For purposes of this Agreement, and without in any way limiting indemnification obligations that may be set forth elsewhere in the Agreement, Vendor hereby agrees to indemnify, defend and hold harmless the City from any and all Loss where Loss is caused or incurred or alleged to be caused or incurred in whole or in part as a result of the negligence or other actionable fault of the Vendor, its employees, agents, subcontractors and suppliers.

It is agreed as a specific element of consideration of this Agreement that this indemnity shall apply notwithstanding the joint, concurring or contributory or comparative fault or negligence of the City or any third party and, further, notwithstanding any theory of law including, but not limited to, a characterization of the City's or any third party's joint, concurring or contributory or comparative fault or negligence as either passive or active in nature.

c. General Limitation

Nothing in this section shall be deemed to impose liability on the Vendor to indemnify the City for Loss when the City's negligence or other actionable fault is the sole cause of Loss.

d. Waiver of Statutory Defenses

With respect to the City's rights as set forth herein, the Vendor expressly waives all statutory defenses, including, but not limited to, those under workers compensation, contribution, comparative fault or similar statutes to the extent said defenses are inconsistent with or would defeat the purposes of this section.

**ARTICLE 11. DISPUTE RESOLUTION.**

City and Vendor agree that disputes relative to this Agreement shall first be addressed by negotiations between the parties. If direct negotiations fail to resolve the dispute, the party initiating the claim that is the basis for the dispute shall be free to take such steps as it deems necessary to protect its interests; provided, however, that notwithstanding any such dispute Vendor shall proceed with the work as per this Agreement as if no dispute existed; and provided further that no dispute will be submitted to arbitration without the City's express written consent.

**ARTICLE 12. INSURANCE.**

a. General

The Vendor shall maintain, throughout the duration of this Agreement, insurance (on an occurrence basis unless otherwise agreed to) of such types and in at least such amounts as required herein. ***Vendor shall provide certificates of insurance and renewals thereof on standard Acord forms.*** The City shall be notified by receipt of written notice from the insurer at least thirty (30) days prior to material modification or cancellation of any policy listed on the Certificate.

b. Notice of Claim Reduction of Policy Limits

The Vendor, upon receipt of notice of any claim in connection with the Agreement, shall promptly notify the City, providing full details thereof, including an estimate of the amount of Loss or liability.

The Vendor shall promptly notify the City of any reduction in limits of protection afforded under any policy listed in the Certificate in excess of \$10,000.00, whether or not such impairment came about as a result of this Agreement.

In the event the City shall determine that the Vendor's aggregate limits of protection shall have been impaired or reduced to such extent that the City shall determine such limits inadequate for the balance of the project, the Vendor shall, upon notice from the City, promptly reinstate the original limits of liability required hereunder and shall furnish evidence thereof to the City.

c. Garage Liability

Policy shall protect the service provider against claims for bodily injury and/or property damage arising out of an accident and resulting from garage operations.

Limits - \$1,000,000 Each Accident  
\$1,000,000 Aggregate

Policy **MUST** include the following conditions:

1. **City of Overland Park listed as “Additional Insured”**

d. Garagekeepers Legal Liability

Limits - \$500,000 Each Loss

Policy **MUST** include the following conditions:

1. Symbol “30” – Autos left with you for service, repair, storage, or safekeeping
2. Direct Physical Damage (Primary Basis)

e. Workers’ Compensation

This insurance shall protect the Vendor against all claims under applicable state workers' compensation laws. The Vendor shall also be protected against claims for injury, disease or death of employees for which, for any reason, may not fall within the provisions of workers' compensation law. The policy limits shall not be less than the following:

Workers' Compensation: Statutory

Employers Liability -

Bodily Injury by Accident:	\$100,000 Each Accident
Bodily Injury by Disease:	\$500,000 Policy Limit
Bodily Injury by Disease:	\$100,000 Each Employee

f. Industry Ratings

The City will only accept coverage from an insurance carrier who offers proof that it:

1. Is licensed to do business in the State of Kansas;
2. Carries a Best's policyholder rating of A- or better; and
3. Carries at least a Class VIII financial rating, **OR**

Is a company mutually agreed upon by the City and Vendor.

g. Subcontractors Insurance

If a part of the Agreement is to be sublet, the Vendor shall either:

1. Cover all subcontractors in its insurance policies, or
2. Require each subcontractor not so covered to secure insurance which will protect subcontractor against all applicable hazards or risks of Loss as and in the minimum amounts designated.

Whichever option is chosen, Vendor shall indemnify and hold harmless the City as to any and all damages, claims or Losses, including attorney's fees, arising out of the acts or omissions of its subcontractors.

**ARTICLE 13. AFFIRMATIVE ACTION/OTHER LAWS.**

a. The Vendor agrees that:

1. The Vendor shall observe the provisions of the Kansas Act Against Discrimination (K.S.A. 44-1001 et seq.) and shall not discriminate against any person in the performance of work under the present contract because of race, religion, color, sex, disability, national origin, ancestry or age;
2. In all solicitations or advertisements for employees, the Vendor shall include the phrase, "equal opportunity employer," or a similar phrase to be approved by the Kansas Human Rights Commission ("Commission");
3. If the Vendor fails to comply with the manner in which the Vendor reports to the commission in accordance with the provisions of K.S.A. 44-1031 and amendments thereto, the Vendor shall be deemed to have breached the present Agreement and it may be canceled, terminated or suspended, in whole or in part, by the City;
4. If the Vendor is found guilty of a violation of the Kansas Act Against Discrimination under a decision or order of the commission which has become final, the Vendor shall be deemed to have breached the present Agreement and it may be canceled, terminated or suspended, in whole or in part, by the City; and
5. The Vendor shall include the provisions of subsections (1.) through (4.) in every subcontract or purchase order so that such provisions will be binding upon such subcontractor or vendor.

The provisions of this section shall not apply to an Agreement entered into by a Vendor:

1. Who employs fewer than four employees during the term of such contract; or
2. Whose contracts with the City cumulatively total \$5,000 or less during the fiscal year of the City.

b. The Vendor further agrees that the Vendor shall abide by the Kansas Age Discrimination In Employment Act (K.S.A. 44-1111 et seq.) and the applicable provision of the Americans With Disabilities Act (42 U.S.C. 12101 et seq.) as well as all other federal, state and local laws, ordinances and regulations applicable to this project and to furnish any certification required by any federal, state or local governmental agency in connection therewith.

**ARTICLE 14. CONTRACT DOCUMENTS COMPLIMENTARY.**

The Instructions to Vendor, General Conditions, Proposal, Specifications, and Agreement are complementary, and what is called for by any one shall be as binding as if called for by all. The

intention of the Instructions to Vendor, General Conditions, Proposal, Specifications, and Agreement is to include all labor, materials, tools, equipment, and transportation necessary for the workmanlike delivery of the Trucks in accordance with the Instructions to Vendor, General Conditions, Proposal, Specifications, and Agreement. The Agreement supersedes all previous agreements and understandings between the parties, which previous agreements and understandings are of no further force and effect. This Agreement may not be amended or modified except by written agreement of both parties.

**ARTICLE 15. SEVERABILITY.**

The parties agree that should any provision of this Agreement be determined to be void, invalid, unenforceable or illegal for whatever reason such provision(s) shall be null and void but that the remaining provisions of this Agreement shall be unaffected thereby and shall continue to be valid and enforceable.

**ARTICLE 16. APPLICABLE LAW.**

This Agreement is entered into, under and pursuant to, and is to be construed and enforceable in accordance with, the laws of the State of Kansas.

**ARTICLE 17. NOTICE TO PARTIES.**

All notices and demands of any kind which either party may serve upon the other party under this Agreement shall be served by personal service, or by leaving the notice or demand at the address set forth below, or by forwarding a copy thereof by first class mail, postage prepaid, or by telex or Telecopier, addressed as follows:

To City:           City of Overland Park, Kansas  
                      Department of Public Works  
                      11300 West 91<sup>st</sup> Street  
                      Overland Park, Kansas 66214  
                      ATTN: Bill Hills

To Vendor:       American Equipment  
                      3250 Harvester Road  
                      Kansas City, KS 66115

or to such other address as may be specified from time to time by the relevant party. Service shall be deemed complete when the notice or demand is received by the party to whom it is addressed.

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**ARTICLE 18. EXHIBITS.**

The following exhibits form a part of and are incorporated into this AGREEMENT by this reference:

- EXHIBIT A: Instructions to Vendor
- EXHIBIT B: General Conditions
- EXHIBIT C: Proposal
- EXHIBIT D: Specifications for Single Axle

IN WITNESS WHEREOF the parties have executed this AGREEMENT as of the date first written above.

**CITY OF OVERLAND PARK, KANSAS**

ATTEST:

By: \_\_\_\_\_  
Carl Gerlach  
Mayor

\_\_\_\_\_  
Marian Cook  
City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
Tammy M. Owens  
Senior Assistant City Attorney

**AMERICAN EQUIPMENT**

By: \_\_\_\_\_  
Authorized Signatory

\_\_\_\_\_  
Title



## EXHIBIT A

### INSTRUCTIONS TO VENDOR FOR COMPLETED ASSEMBLY OF THREE (3) SINGLE AXLE SNOWPLOW DUMP TRUCKS

Vendor shall submit nomenclature and specifications of their equipment. Vendor agrees to guarantee their equipment to be new 2013, or current production models, and free from defects in workmanship and material for the period stated in the standard manufacturer's warranty (**or as otherwise stated on the attached specifications**) for equipment offered from date of delivery to the City, and to replace or repair defective parts at no cost to the City.

The vendor shall include the conditions, as provided by the manufacturer, of the **standard warranty, with their proposal package**.

Vendor shall submit an estimated schedule and a sequence of assembly with their proposal. City will determine appropriate inspection points from this information.

Payment will be made in full after final acceptance, and upon delivery to the City Facility listed in the Proposal documents.

The equipment specifications shall not be construed as recommending any manufacturer's equipment over any other make, provided that equal quality, parts, supply and availability, reliability, and durability may be expected in performance.

The City reserves the right to hold all proposals for a period of forty-five (45) days after receipt; likewise the City reserves the right to reject any or all proposals. The City also reserves the right to waive any or all technicalities on proposals. Proposals cannot be altered or changed after they have been received by the City.

Vendor submitting proposals on equipment not conforming to the detailed specifications must **state variances on the proposal form where applicable**. All proposals shall be filled out and returned, with the requested documentation, to Bill Hills, 11300 West 91<sup>st</sup> Street, Overland Park, KS 66214 (913/327-6658).

**INSURANCE:** The Vendor shall comply with Article 12 of the Agreement.

**INDEMNIFICATION:** The Vendor shall comply with Article 10 of the Agreement.

**NON-DISCRIMINATION, AFFIRMATIVE ACTION AND SEXUAL HARASSMENT:** The Vendor shall comply with Article 13 of the Agreement.

## EXHIBIT B

### GENERAL CONDITIONS FOR COMPLETED ASSEMBLY OF THREE (3) SINGLE AXLE SNOWPLOW DUMP TRUCKS

1. Scope of work involves the purchase of specified equipment and the assembly of same, for completion of three (3) snowplow dump trucks, using the cab and chassis to be furnished by the City. Successful proposal will be required to attend a pre-assembly meeting within 15 working days after contract award, at a mutually agreed upon location, to discuss specifications. Successful Vendor will be required to submit weekly email photos of the assembly progress to the City's representative for the duration of the contract.
2. All equipment shall be new **2013** or current production models.
3. Appurtenances and/or accessories for the equipment not herein mentioned, but necessary to furnish a complete unit ready for use upon delivery, shall be included.
4. These specifications shall be construed as minimum. Should the manufacturer's current published data or specifications exceed these, they shall be considered minimum and furnished.
5. The City reserves the right to waive or take exception to any Vendor submitted specifications.
6. The successful Vendor shall authorize the City to perform minor warranty work after the Truck is delivered and accepted by the City. The City shall be reimbursed for parts and labor. All paperwork and instructions on how to set up warranty claims shall be delivered with the snowplow dump truck.
7. Vendor must submit with their proposal the latest printed specifications and advertising literature on the equipment they propose to furnish.
8. Vendor shall supply one (1) parts book, one (1) service and repair manual, and one (1) operator's manual (**or as otherwise stated on the attached specifications**) for each piece of equipment. Please submit any of the above information on CD-Rom if available.
9. If the Vendor assigns all, or any part, of the monies due or to become due under this Agreement, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due the Vendor shall be subject to all prior claims of all persons, firms, and corporations for services rendered or materials supplied for the performance of the work called for in this Agreement and that no money shall be paid assignee on behalf of the Vendor by the City until such time as the Vendor has discharged its obligations to the City under the Agreement. It is expressly understood and agreed that no assignment shall be effective as against the City unless it complies with the foregoing.
10. Should any subcontractor fail to perform in a satisfactory manner, the work undertaken by such subcontractor shall be immediately terminated by the Vendor. The Vendor shall be fully responsible to the City for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as Vendor is for the acts and omissions of persons directly employed by it. Approval by the City of any subcontractor

shall not constitute a waiver of any right of the City to reject defective work, material, or equipment not in compliance with the requirements of the Agreement Documents. The Vendor shall not make any substitution for any subcontractor accepted by the City unless the City so agrees in writing.

11. The Vendor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Vendor by the terms of the Agreement Documents insofar as applicable to the work of the subcontractor and to give the Vendor the same power to terminate any subcontract as the City has to terminate the Vendor under any provisions of the Agreement Documents.
12. Nothing contained in the Agreement Documents shall create any contractual relationship between any subcontractor and the City, nor shall anything contained in the Agreement Documents create any obligation on the part of the City to pay to or to see to the payment of any sums due any subcontractor.

EXHIBIT C

PROPOSAL FOR COMPLETED ASSEMBLY OF  
THREE (3) SINGLE AXLE SNOWPLOW DUMP TRUCKS

The undersigned proposes to furnish and deliver to the City of Overland Park, Kansas, three (3) single axle snowplow dump trucks as described above and as indicated below and in accordance with the general conditions and specifications.

**SINGLE AXLE TRUCK:**

10' SPREAD & DUMP TRUCK BED WITH REAR DISCHARGE COST	\$ <u>40,510.<sup>00</sup></u>
TRUCK MOUNTED CALCIUM SYSTEM COST	\$ <u>1,957.<sup>00</sup></u>
CENTRAL HYDRAULIC SYSTEM COST	\$ <u>22,861.<sup>00</sup></u>
LIGHT SYSTEM COST	\$ <u>1,973.<sup>00</sup></u>
FRONT MOUNTED REVERSIBLE PLOW COST	\$ <u>9,775.<sup>00</sup></u>
8' RIGHT HAND WING PLOW COST	\$ <u>6,897.<sup>00</sup></u>
TOTAL COST PER EACH SINGLE AXLE TRUCK:	\$ <u>83,973.<sup>00</sup></u>

TOTAL COST FOR THREE SINGLE AXLE TRUCK ASSEMBLIES: \$ 251,919.<sup>00</sup>

The City shall be set up to do limited warranty work. The City shall be reimbursed for parts and labor. Warranty information for any equipment Vendor is providing shall be submitted as part of the proposal package. All paperwork and instructions on how to set up warranty claims shall be delivered with the snowplow dump truck.

Delivery of the <sup>Three (3)</sup> ~~one (1)~~ single axle snowplow truck described above will be made no later than September 15, 2013. Delivery will be made to the Overland Park Public Works Dennis Garrett Facility located at 11300 West 91<sup>st</sup> Street, Overland Park, Kansas.

It is understood that the City pays no Federal or State taxes and the net price quoted includes all transportation for completed trucks, dealer preparation, and handling charges. The City will pay promptly upon delivery and acceptance of the equipment included in this proposal, after submittal of appropriate invoice.

Vendor's proposal cannot be altered or changed after it has been received by the City and opened. The City of Overland Park, Kansas, reserves the right to reject any and all proposals and to waive any technicalities or irregularities therein.



**EXHIBIT D  
DETAILED SPECIFICATIONS  
FOR  
10-FOOT SPREAD & DUMP TRUCK BED  
WITH REAR DISCHARGE**

The dump body (bed) shall be a Monroe RSD 304 stainless steel barrel design with a drag chain in the floor to spread snow and ice control materials. The bed and hoist will be installed at the Monroe factory on a standard 96" C/A single axle truck chassis and will have the following minimum specifications:

**BODY:** Body floor shall be stainless steel equivalent to AR 400 ¼" steel. The body shall be 10' long and 96" wide maximum. Body sides shall be a minimum of 36" high and have boxed self-cleaning top rails. Top rails shall have pockets at the front and rear with a support halfway in between for a 2" x 8" sideboard. The sideboards shall be made of a solid plastic material. Tailgate height shall be a minimum of 48". Body welding shall be continuous throughout, no skip welding. Understructure shall include twelve (12) inch minimum longitudinal members. There shall be a fold-up ladder mounted on the driver's side front of the bed. The ladder shall be mounted so that it is operational with the tarp in the open position. An angle iron step shall be on the inside of the bed to help the operator get out. Angle iron step shall line up with the outside ladder. The rear of the bed shall have a bolt –on asphalt lip. The asphalt lip shall be a minimum of eight inches wide. The bed shall be mounted in such a way that the bed can be fully raised with the spinner mounted on the truck.

**HOIST:** The hoist shall be a telescopic lift type with trunion mounting, double acting in top stage, fully designed for the above body, and to operate on 2000 PSI. Bed safety props shall be steel tubing (square or round) with a heavy steel hinge mechanism on one end mounted on the driver's side of the truck.

**CONVEYOR AND SPINNER:** The bed shall have a hydraulically operated 34" conveyor between body longitudinals and variable height gate above the spinner for control of delivery of material to the rear mounted spinner. Conveyor floor shall be stainless steel equivalent to 1/4" AR-400. A spillage plate under the conveyor shall run from rear of bed to a crossmember approximately 30" forward. The dump body floor shall be so formed that it fully covers the pintle chain links. A ¼" stainless steel slide-in cover shall be supplied to cover the conveyor chain when chain is not in use. The bar flight shall be ½" x 1-1/2" and welded to every link. Conveyor hydraulic motor shall have a motor with conveyor speed sensor built-in. Conveyor motor and 6:1 gearbox or planetary shall be mounted at the rear of the left (driver's) side. The conveyor chain adjustment shall be easily adjustable at the front or rear of the bed. The spinner shall include a motor, spinner disc, deflector flaps, and a mounting bracket. Spinner mounting shall be built so that the spinner does not tip with the bed. The spinner shall have a slide-in type mount for easy mounting and removal. Spinner shall have handles to help make mounting removal easier. The spinner shall be mounted low enough so the bed can be fully raised with the spinner installed. All hydraulic and prewet connections at the spinner shall have plastic or stainless steel quick couplers. The spinner motor shall be mounted on top of spinner with a stainless steel shaft driving the spinner disc. One or two stainless steel bearing shall be used to support the shaft. There shall be a plastic deflector mounted on the front of the spinner to direct material from the chain to the spinner. See attached spinner drawing. All hydraulic components shall have o-ring ports, if possible.

**TAILGATE:** The tailgate shall be 7-gauge stainless steel minimum with 11/4" hinges and a movable tailgate material door extending at least 6" into body to facilitate convenient conveying operation. An air operated tailgate release shall be supplied.

The valve (Velvac 320154) to control the tailgate cylinder shall be mounted on the cylinder. DOT

air fittings shall be used to run the airlines. The air supply shall come from an air tank. A protection valve shall be used in the supply line. A dash switch has been provided to operate the tailgate valve.

TAILGATE MATERIAL DOOR: The material door shall be removable so a flat plate can be installed. A flat plate the same thickness as the tailgate will insert flush into the opening. The material door shall be easily opened and be able to be locked at a desired opening.

REAR OF BED: Rear apron of bed shall have a bolt-on plate to cover center opening (see drawing). Conveyor shall be flush or forward of the back edge of floor to allow complete coverage by the plate.

GREASE SYSTEM: The bed shall have centralized grease fittings at the front and rear of the bed so all pivot points can be easily greased.

CAB PROTECTOR: To be 10-gauge stainless steel, 22" inches deep with integral channel at front end, side gussets to extend over inside sideboard gussets 2". Cab-guard shall be mounted so the tarp housing can be mounted behind it. The cab-guard is welded continuous all the way around it with the center cut out for hydraulic cylinder movement.

TARP: The tarp shall be a manually operated PullTarp. The tarp housing shall be open face. The tarp shall have side arms with pivots mounted at the bottom of the bed. The tarp shall be mounted behind the cab protector, on top of the front of the bed. Tarp shall be installed following manufacture's instructions. Tarp arms shall be positioned to allow the fold up ladder to work when the tarp is in the open position. Tarp material shall be for asphalt.

UNDER BED PAN: A 1/8" pan shall bolt in under the chain to help keep the material from falling on the rear truck cross member. The pan shall be cut-off so the material will fall on or in front of the truck rear end.

MUD FLAPS: Four 36" long anti-sail mud flaps shall be installed on the bed, two in front of the rear wheels and two right behind rear wheels. The mud flaps in front of the rear wheels shall have a chain attached to keep the flaps from getting into the tires when truck is moving. If there are any questions as to mounting the mud flaps, Please contact City mechanics.

LIGHTS: Rear corner posts shall have rear facing oval holes (3 holes on each side) cut in them to accept sealed bulbs, Truck-Lite # TL 60201Y. The openings shall be centered in the bedpost with one light above the others. The side of the rear corner posts shall have an oval hole cut in it (one each side). More on lighting is covered in the lighting specifications.

PAINTING: The bed shall not be painted. Any part that is not stainless steel shall be painted silver.

MOUNTING: Bed shall be mounted on truck following manufacture's instructions. Bed is mounted as close to the cab as possible. The rear hinge of the bed shall be mounted as close to the rear of the bed as possible so that the bed can be fully raised with the spinner on the truck.

HITCH: A 3/4" hitch plate shall be welded to the back frame of the truck. The plate shall be drilled for an 8 ton pintle hitch. The plate shall be drilled so the pintle hitch can be adjusted up/down from 18" from the ground to 24" from the ground. Pintle hitch shall come with truck. Hitch can be used to mount spinner if needed. The hitch plate shall have a 6-pole trailer plug.

NUMBERING: Any part that can be removed from the truck shall be numbered with the truck

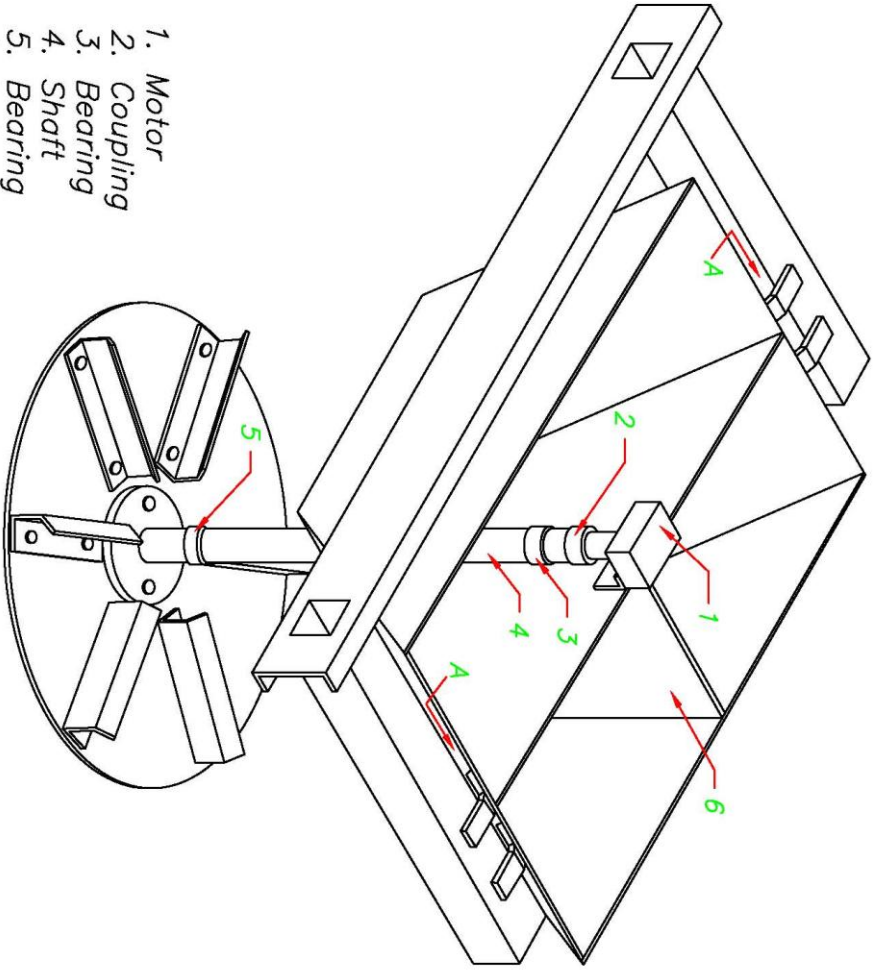
number welded to it such as the spinner assembly, floor plate, ect. The city will provide the truck numbers at the prebuild meeting. **Truck Numbers will be 8105, 8117, 8118.**

WARRANTY: Bed - one-year parts and labor. Cylinder - Two years parts and labor. All warranty work to be done locally. The City of Overland Park shall be setup to do limited warranty work. The City shall be reimbursed for parts and labor. All paperwork and instructions on how to setup warranty claims shall be delivered with the beds.

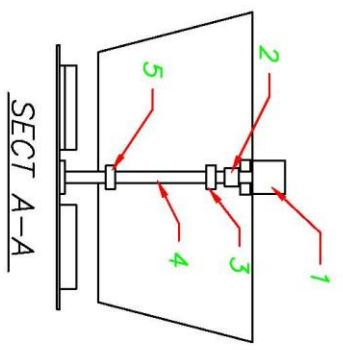
DELIVERY: After trucks have been inspected and accepted by city personnel at the dealership, they shall be delivered to 11300 W. 91st Street, Overland Park, Kansas.



- 1. Motor
- 2. Coupling
- 3. Bearing
- 4. Shaft
- 5. Bearing
- 6. Deflector



SPINNER



SECT A-A

CITY OF OVERLAND PARK DEPARTMENT OF PUBLIC WORKS			
SPINNER DETAIL			
DESIGNER: <b>1</b>	LAST REVISED: <b>08/02/12</b>	SCALE: <b>1/2" = 1'-0"</b>	SHEET: <b>1</b>
DRAWN: <b>BT</b>			OF: <b>1</b>
CHECKED: <b>BT</b>			
APPROVED: <b>BT</b>			

**EXHIBIT D  
DETAILED SPECIFICATIONS  
TRUCK MOUNTED CALCIUM SYSTEM  
FOR  
SINGLE AXLE TRUCK**

**GENERAL:** This specification is to describe a Component Technologies truck mounted calcium system for prewetting winter snow removal materials as it comes out of the truck bed. The system shall be ground speed controlled and the flow rates shall be adjustable. All the materials to build the calcium system shall be plastic. A Monroe Truck calcium tank shall be mounted on the driver's side bed fender. A single plastic tank preferred.

**TANK:** The tank shall be mounted on the driver's side of the bed. The baffled plastic tank shall be mounted on the side of the bed using stainless steel hardware and brackets. The tank capacity shall be a minimum of 75 gallons. The tank fill ports shall be four-inch minimum. The tank walls shall be a minimum of .350 inches thick. The tank shall have a bulk fill ball valve and quick fitting in one end for use to bulk fill or drain the tank. Mount tank according to manufacturer's instructions. **The tank lids shall seal and the vent shall be mounted so the tank does not leak when the bed is raised with the tank full. The tank vent shall have a hose going to the front of the bed and anchored near the ladder.**

**PUMP:** The calcium pump shall be hydraulically driven and be able to deliver 6 GPM minimum. The pump and hydraulic motor shall be housed in a sealed fiberglass box. The box shall be mounted as low as possible to allow for a flooded inlet of the pump. **The box shall be mounted laying flat on the passenger side bed fender.** Consult with City mechanics if there are any questions about box mounting. The pump shall be bronze with stainless steel shaft, bronze bushings, grease fitting and adjustable internal by-pass. The pump shall be directly coupled to the hydraulic motor. The hydraulic lines shall be quick coupled for easy removal of the pump box.

**PLUMBING:** All plumbing shall be plastic, brass, or stainless steel. The tank shall have a three way ball valve that will shut the tank off, open to the pump, and shut the tank off but open a suction line to the pump for clean out. The plumbing shall have quick couplers at the pump box. The plumbing shall have a quick coupler at the spray nozzles. There shall be a stainless steel filter between the tank outlet and the pump. The filter shall be mounted so that it can be easily cleaned.

**ELECTRICAL:** The calcium system shall be controlled from the control console in the cab. The controls shall turn the system on/off, be programmable for rate of output, and be ground speed controlled. There shall be a low-pressure indicator at the control console. Electrical connection shall be made inside the control console and pump box. All connections shall be sealed Weather Pak connectors.

**SPRAY NOZZLE:** The spray nozzle(s) shall be mounted at the material chute or at the spinner. The nozzle(s) shall have a check valve to prevent siphoning. The spray nozzles shall be mounted so the tips can be easily removed.

**TRAINING:** Training shall be done at the same time as the control console.

**WARRANTY:** Warranty shall be one year or manufacturer's standard, whichever is longer. The warranty shall cover parts and labor. The warranty shall cover all hydraulic components and the electrical systems for hydraulics. The City of Overland Park shall be setup to do limited warranty work. The City shall be reimbursed for parts and labor. All paperwork and instructions on how to setup warranty claims shall be delivered with the truck.

**EXHIBIT D  
SPECIFICATIONS  
FOR  
CENTRAL HYDRAULIC SYSTEM**

**GENERAL:** The hydraulic system shall be a Component Technologies Freedom system. This specification will describe how the hydraulic system needs to function. The hydraulic system shall operate at as low a pressure as possible (around 2000 psi preferred). The controls need to be easy to program, calibrate, and operate. System will be installed at the body factory.

**CONTROL CONSOLE:** The console shall be of one-piece design with armrest. Console controls shall be with-in easy reach of the operator. Consult city mechanics for the location of the console. The console shall have three joysticks to operate the front plow, wing plow, and dump bed. Indicator lights by the joysticks shall indicate which joysticks are in use. The joysticks shall be mounted with the front plow on the left, the wing plow in the middle, and the dump bed on the right. The joysticks for the plows shall have a float feature in the down position. There shall be a switch with indicator light mounted by the joysticks to power either the dump joystick or the snow console/plow joysticks but not both at the same time. The dispensing of granular and anti-icing materials shall be controlled by a ground speed system mentioned above. The control has separate programmable rates for granular and liquid. The control shall have a programmable blast function. The console shall have a control for the spinner speed. The control shall store data that can be retrieved at the end of storms. The console shall have switches to control auxiliary functions such as warning lights, PTO, etc. The console shall have indicator lights to signal hydraulic filter in by-pass, low hydraulic oil level, and high hydraulic oil temperature.

**THIRD GEAR HOLD:** The transmission shall be programmed to hold in third gear whenever the PTO is on. When wiring to the transmission wires 153 and 161 shall be used. If a relay is used to connect these wires the relay shall be mounted in the cab. When the PTO is on the transmission indicator will show third and shall be able to go to lower gears from third.

**TANK:** The baffled tank shall hold 40 gallons and be mounted above the frame rails behind the cab. The tank shall be approximately 10 inches wide and shall not extend behind the cab any farther than the truck exhaust. The tank shall be bolted to the truck. The tank shall have the fill and sight gauge on the driver's side of the truck. The tank shall be equipped with a return line filter, outlet ball valve, low fluid sender, and a high temperature sender. Tank shall be painted gloss black.

**PTO and PUMP:** A clutch drive PTO shall be installed on the transmission. PTO on/off switch shall be at the control console. A direct PTO mounted load sensing piston pump or gear pump with rear o-ring ports shall provide 35 GPM flow minimum at maximum RPMs.

**VALVES:** The valves shall have sections to operate the hoist lift, front plow lift and reverse, wing plow lift and in/out, auger, spinner, pre-wet system, and trailer circuit. Both the front plow lift and the wing plow lift shall have a float feature in the down position. All valves shall be electrically operated. Each function shall be adjustable for the flow it will put out. The lift circuits of the front and wing plows shall have an internal pilot operated check valve to prevent the plows from drifting down.

**BOX:** A weather tight box shall enclose the valves. The box shall be frame mounted behind the cab on the driver's side. The box shall have easy access. There shall be holes in the

bottom of the box to access any fittings that may need to be removed. Box shall be painted gloss black.

HOSES and FITTINGS: All hoses and fittings shall be 37 degree JIC. If possible all valves, cylinders, and motors shall have o-ring ports. All quick couplers shall be stainless steel.

TRAINING: One day diagnostic and repair training shall be provided for city mechanics. Training shall be conducted at the City of Overland Park. Training shall be provided on the operation, calibration, and programming of the control console. Up to 8 hours of training shall be provided in October when the City does snow plow training. Training shall be done at the City of Overland Park. Training shall be for operators and supervisors. The city will have an October training date for your scheduling by August 1<sup>st</sup>.

WARRANTY: Warranty shall be one year or manufacturer's standard, which ever is longer. The warranty shall cover parts and labor. The warranty shall cover all hydraulic components and the electrical systems for hydraulics. The City of Overland Park shall be setup to do limited warranty work. The City shall be reimbursed for parts and labor. All paperwork and instructions on how to setup warranty claims shall be delivered with the truck.

**EXHIBIT D  
SPECIFICATIONS  
FOR  
LIGHT SYSTEMS**

The intent of this specification is to describe how the lighting systems are to be laid out and where everything connects. City mechanics will be available to answer any questions about the lighting systems. All electrical power shall come on with the ignition switch unless specified to be battery power. The specification will list wire size and color codes. All connections shall be crimp and seal wire ends or Weatherpack connections. Any wiring that goes through the cab metal, hood fiberglass, or frame metal shall be run through rubber grommets. Any wiring that goes through the cab floor shall be kept close to a seat so the center of the floor is as open as possible. System will be installed by body manufacturer.

PLOW AND SPINNER LIGHTS: The front plow lights (631W Signal Stat) shall be mounted on bracket on the truck hood. City mechanics can help determine how the lights will be mounted. The wing plow light (623W Signal Stat) shall be mounted on the right side mirror facing the rear. All mounting brackets shall be stainless steel. The front plow and wing plow lights shall be wired separately to the control console in the cab. The plow lights and spinner light shall be on separate switches on the snow control console.

The spinner light (623W Signal Stat) shall be mounted at the left rear corner of the bed. The light shall have a six-pole trailer pigtail to connect to the trailer plug in the rear post of the bed. The light shall have its own switch on the snow control console.

JUNCTION BOX: The junction box shall be a Truck Lite (part number 50400) and is installed, at the rear of the truck, inside the driver side frame rail. The factory taillight wiring shall be connected to the terminals inside the junction box. The wiring color code from the junction box to the taillights shall be;

1. Black- taillights/ clearance lights
2. Brown- taillights/ clearance lights
3. Red- stop
4. Green- right turn
5. Yellow- left turn
6. White- ground
7. Blue- auxiliary

A ground wire shall run from the ground terminal of the box to the truck frame. The rear warning light wires shall go through the box. If there are enough terminals in the box use them for the warning light wires other wise the wires are butt connected together.

TAILLIGHTS: Taillights and clearance lights shall meet DOT requirements. All tail lights and rear warning lights shall be connected through a sealed junction box. The taillights that come with the truck or LED taillight/turn signals (Peterson 420R) and oval back-up lights shall be installed on each side of the frame, even with the end of the frame. The taillight wiring shall be wired from the taillight connector to the junction box using the color code listed above. Splicing the wiring harness together will not be accepted. A LED taillight/turn signals (Peterson 420R) shall be installed in the bottom oval opening of each rear bed post (one light on each side). The opening shall be as low as possible in the bed post. Each taillight/turn signal is wired separately to the junction box. There shall be four Trucklite 10205R red round corner clearance lights (two on each side of the bed). The two clearance lights on each side of the bed are wired together and then wired to the junction box. Each

side of the bed wiring can be loomed together going to the junction box. The lights on the bed can be grounded to the bed but a ground wire has to run from the bed to the ground terminal in the junction box. A back up alarm shall be bolted to the rear cross member of the truck. The back up alarm shall be wired to the junction box.

**WARNING LIGHTS:** A LED amber strobe shall be mounted on each door mirror. Mirror mounting brackets shall be stainless steel. The strobes shall be a Federal Signal LED UltraStar part # 252650-02. Two LED amber strobes (Peterson 4353A-1 and 4353A-3 on the curbside and 4353A-2 and 4353A-4 on the streetside LED oval strobe and rear turn signal) shall be installed in the two top oval openings in each rear bed post. The strobe opening need to be as high in the bed post as possible. The lights in each bed post facing the rear are wired so they will alternately flash up and down and change to turn signals when the turn signal is activated. One LED amber strobe (Peterson 420SA-1) shall be mounted on each side of the rear bed post. The power for the strobes shall come through the junction box. The mirror lights and the rear strobes are connected to switches at the control console in the cab. The mirror strobes shall be connected to their own switch. All the rear strobes shall be connected to their own switch. Wing plow mounted warning light. The light shall be a Grote part # 77913 360 degree battery operated mounted to an angle iron bracket. The angle iron bracket shall be mounted on the outside upper corner of the wing plow. There shall be a plastic bracket mounted over the light with two bolts to help hold the light in place.

**TRAILER PLUGS:** A six-pole trailer plug shall be mounted to the front side of the bed hinge angle iron. The plug shall be mounted to a 1/4" steel bracket and hang below the angle iron. The plug shall be centered in the angle iron. The plug shall have all of the standard taillight/turn signal wiring. The plug ground pole shall be grounded in the junction box. The plug shall be sealed with shrink tubing where the wires come out.

A second six-pole trailer plug shall be mounted in the driver side rear bedpost. The plug is mounted in the front center of the rear post. The plug is wired for taillight, spinner light and ground. The wires are connected to the junction box. The back of the plug is sealed with shrink tubing.

**TRAILER BRAKE BOX:** A Tekonsha Voyager brake controller shall be mounted in the truck cab.

**SNOW CONTROL CONSOLE:** All warning lights and plow lights shall be connected at the control console.

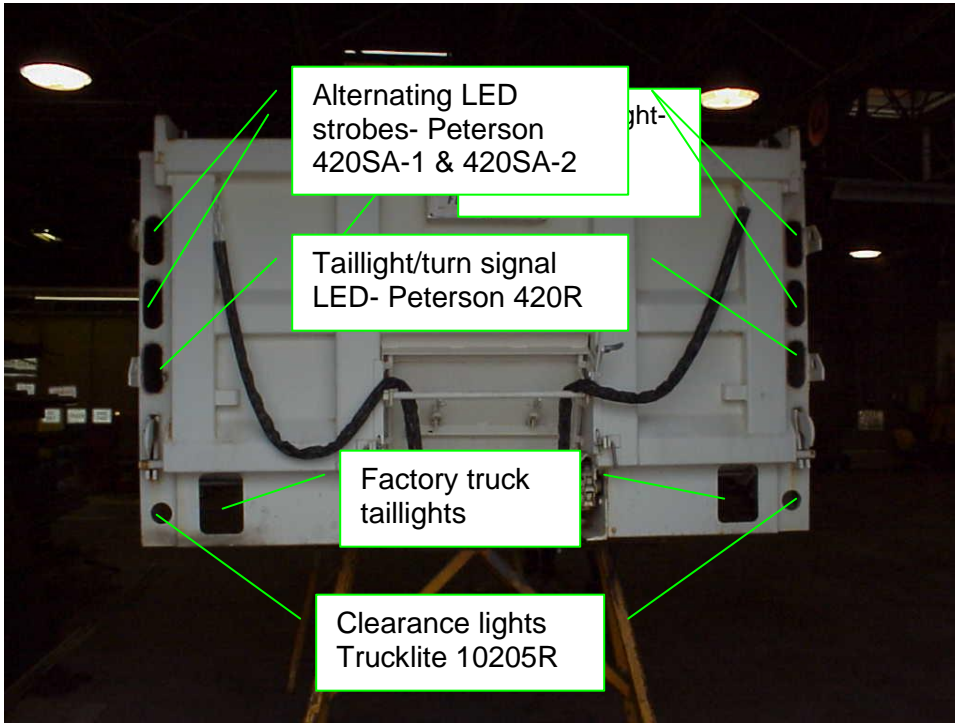
**PARTS LISTS**

**ALL LIGHTS:**

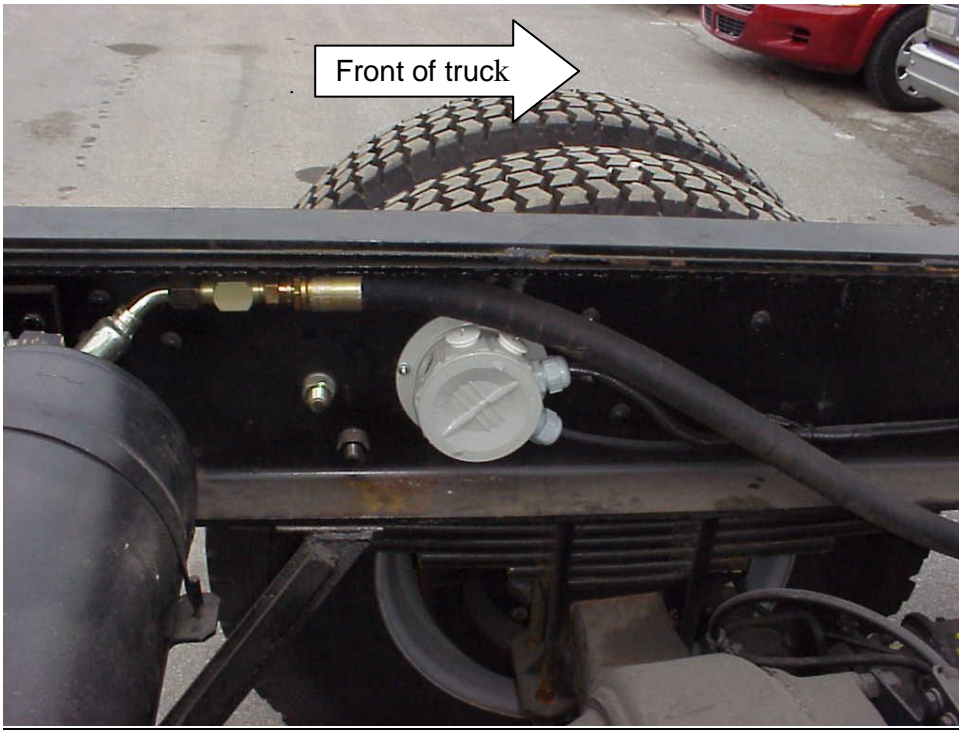
1.	Plow lights	631W Signal stat	2
2.	Wing Plow Light	623W Signal Stat	1
3.	Spinner Light	623W Signal Stat	1
4.	Oval LED Tail Light	420R Peterson	2
5.	Round Clearance Light	10205R Trucklite	4
6.	Mirror LED Lights	Federal Signal LED UltraStar part # 252650-02	2
7.	LED Oval Amber Strobe	420SA-1 Peterson	2
8.	LED Oval Amber Strobe	4353A-1 Peterson	1
9.	LED Oval Amber Strobe	4353A-2 Peterson	1

- |     |                       |                  |   |
|-----|-----------------------|------------------|---|
| 10. | LED Oval Amber Strobe | 4353A-3 Peterson | 1 |
| 11. | LED Oval Amber Strobe | 4353A-4 Peterson | 1 |
| 12. | Wing Plow LED Strobe  | 77913 Grote      | 1 |

JUNCTION BOX: Junction Box 50400 Trucklite 1 Box connectors as needed to install and seal all wiring.



Taillights and rear warning lights



Junction Box



**EXHIBIT D  
DETAILED SPECIFICATIONS  
FOR  
FRONT-MOUNTED REVERSIBLE SNOWPLOW  
(36" BY 11' W/QUICK HITCH)**

It is the intent of these specifications to describe a Monroe reversible trip blade snowplow with a truck frame mounted hitch. The truck portion of the hitch shall be mounted according to the manufacture's instructions.

1. Moldboard length - 11 feet, and shall angle each direction up to 42 degrees.
2. Moldboard height including 8" cutting edge shall be 36" minimum with integral flare shield and a 12" rubber snow deflector. There shall be 36" tall plow corner markers (Winter Equipment # KT-PM36) at the top front corner of each end of the moldboard.
3. Moldboard material shall be minimum of 10-gauge steel. The cutting edge shall be standard punched with carbide reinforced edge (Kenmetal 101842 and 1011844). The carbide cutting edge shall have a steel backup cutting edge to reinforce it. Plow shall have carbide reinforced curb shoes on each side (Kenmetal 2040089). Curb shoes shall be carbide reinforced where the shoe hits the curb and where it touches the ground.
4. Plow skids shall be floater mushroom type Monroe part number 0061209.
5. Tilt of moldboard shall be adjustable.
6. Gusseted bottom blade support angle shall be a minimum 4" X 4" X 5/8" and at least eight (8) vertical ribs 1/2" thick shall support the moldboard. All welds shall be continuous.
7. Two 3" double-acting hydraulic reversing cylinders and 3/8" hoses shall be provided with 3/8" stainless steel quick disconnect. Cylinders must have an adjustable rod end casting and vee pack seals and must incorporate Gresen DXV-10-2000 cushion valves. Hoses must withstand 2000 psi operating pressure. A 3" single- acting hydraulic cylinder shall be used to raise the plow. The cylinder shall have 3/8" stainless steel quick disconnects at the cylinder.
8. An adjustable enclosed spring type moldboard trip device shall be provided.
9. Attachment to plow frame shall be by a universal quick hitch device, thus eliminating drive pins. The universal quick hitch plow portion shall have two self-aligning receiving jaws, which allow the truck portion, when pulling into the plow portion, to self-align and automatically lock. The locking devices shall be two 1 1/2" square hardened steel and shall automatically lock behind the fixed welded pin in the truck lift frame. The two receding self-aligning plow portion jaws shall be spaced within a maximum outside dimension of 33" and a minimum inside dimension of 27 1/4". Decoupling shall be accomplished by removal of a vertical pin and the tripping of a lever, which automatically opens the receptacles and allows the truck to back away from the plow unit. The plow portion of the universal quick hitch shall be affixed to the plow on the A-frame bearing plate on an oscillating pivot bolt.
10. Plow and hydraulics shall not weigh less than 1600 pounds.
11. The plow and the lift arm shall have the truck number welded on it before it is painted.

The city will provide the truck numbers at the prebuild meeting. **Truck numbers will be 8105, 8117, 8118.**

11. Paint - Flat black powder coat.
12. Bumper and Front plate- 12" wide channel steel bumper with sweptback ends painted gloss black. Disregard if truck bumper meets above specification, check with city mechanics to verify. The front frame extensions shall be 12 inches from the truck grill maximum. Extensions may have to be cut-off more so the hood opening will clear the plow frame without the lift arm installed. A ½" plate shall be welded flush with the ends of the frame extensions for reinforcement to bolt the plow frame to.
13. Warranty- shall be one (1) year or factory standard, which ever is greater and shall start from the first use. The City of Overland Park shall be setup to do limited warranty work. The City shall be reimbursed for parts and labor. All paperwork and instructions on how to setup warranty claims shall be delivered with the plow.

**EXHIBIT D  
DETAIL SPECIFICATIONS  
FOR  
8' RIGHT HAND WING PLOW**

It is the intent of these specifications to describe a right-hand mounted wing plow with mounting frames. The wing plow shall be a Monroe Mid-mount Extendible Patrol Wing. A tapered moldboard is preferred. If the tapered moldboard has a curl the curl can not extend out anymore than 13 inches from the face of the moldboard. Picture and drawings are provided of special equipment.

Moldboard length: 8 feet

Moldboard height: Taper from inner end at 24" to outer end of 35" including cutting edge.

Moldboard material: Shall be 10 gauge with minimum of five vertical ribs and shall be braced horizontally with 1/2" thick angle iron placed just above the cutting edge. Top seam of bottom reinforcing angle shall be welded continuously to moldboard.

Cutting edge: The cutting edge shall be standard punched with carbide reinforced edge (Kenmetal 101842 and 1011844). The carbide cutting edge shall have a steel backup cutting edge to reinforce it.

Curb Guard: Carbide reinforced curb shoes on each side (Kenmetal 2040089). Curb shoes shall be carbide reinforced where the shoe hits the curb and where it touches the ground

Plow Marker: 36" tall plow corner markers (Winter Equipment # KT-PM36) at the top curbside corner

Number: The truck number shall be welded to the moldboard before it is painted. The city will provide the truck numbers at the prebuild meeting.

Weight of moldboard and cutting edge: Minimum 625 lbs. Moldboard shall have grease zerks at all pivot points.

TRUCK MOUNTING FRAME: Shall be designed for permanent mounting under the truck frame at the rear of the cab and will not exceed legal width of truck. Lift cylinder and extending cylinder shall be permanently installed on mounting frame. Side plates that bolt to the truck frame shall be approximately 21 inches tall on the passenger side and 16 1/2 inches on the driver's side including the one-inch spacers. One-inch spacers shall be welded under driver's side plate to raise the plate off of the plow frame attaching angle irons so hydraulic hoses can be run under side plate. A Micro switch (Omron ZE-N22-2S) mounted to the plow frame shall be connected to a light (light on when tube is out) on the console in the cab to notify the operator when the wing plow is out. Wiring from the Micro switch to the control console shall be enclosed and clamped to the frames to prevent rubbing. Where wiring goes into the cab must be sealed.

CYLINDERS: Plow lift cylinder shall be a double acting with a 3" bore and 5" stroke minimum. Lift cylinder shall have grease zerks in each pivot location. Extending cylinder shall have a 3" bore with a 1 3/4" rod and 27" stroke minimum with the retracting side of cylinder having a cubic displacement of 159 cubic inches or less.

MOLDBOARD FLOAT LINK: A float link at the heel of the plow to control the angle of the

moldboard shall be supplied and attached to moldboard. A hydraulic cylinder will not be accepted. The float link shall consist of a length of 3/8" chain and an adjustment bolt with a keyhole catch on the end.

ATTACHMENT OF MOLDBOARD: Shall be of quick attach design requiring no more than ten minutes for hook-up to truck frame. The quick attach shall be a two inch solid shaft that slides into the truck mounted frame. Plow shall fold close to the truck in a near horizontal position to allow maximum maneuverability and visibility. Plow shall have a stabilizer linkage with a sheer bolt to help pivot plow. Stabilizer linkage shall have grease zerks in the swivel portion and pivot points. The City uses a one-inch alignment pin mounted in the moldboard mounting plate and a corresponding hole in the truck-mounted frame to help prevent wear of the mounting surfaces, please state what type of system is used. See pictures.

GENERAL: Plowing angle shall be adjustable from 60 to 30 degrees using the system hydraulics. At 30 degree angle the leading edge of plow shall be approximately 34" from truck's right frame rail.

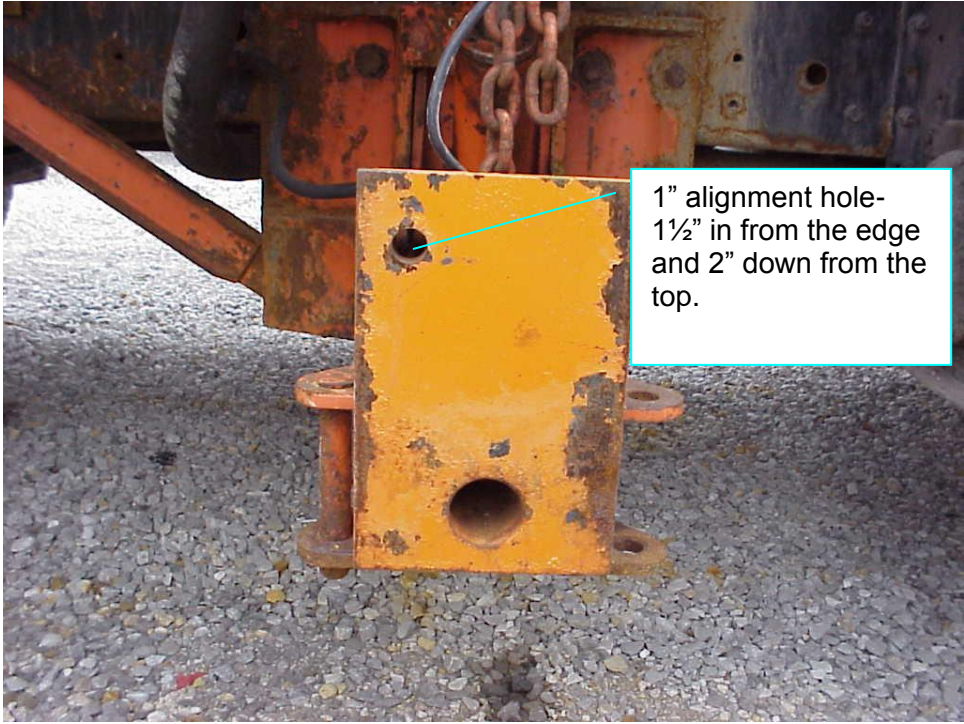
MOUNTING: The wing plow shall be mounted, to the truck, according to manufacture's instructions except for the height, which shall be as high as the plow can be mounted without interfering with the drive shaft or other mounted equipment.

PAINT: Orange powder coat.

WARRANTY: Shall be one (1) year or factory standard, which ever is greater and shall start from the first use. The City of Overland Park shall be setup to do limited warranty work. The City shall be reimbursed for parts and labor. All paperwork and instructions on how to setup warranty claims shall be delivered with the plow.



Micro Switch



Alignment Hole



Alignment Pin