

## NOTICE TO BIDDERS

**ISSUING ENTITY:** CITY OF COVINGTON, KENTUCKY

**PUBLICATION DATE:** Monday, April 25 2016

**DUE DATE AND TIME:** Friday May 27, 2016 at 3:00PM EST

**STAFF CONTACTS:** Steve Hedger, Fleet Manager, [shedger@covingtonky.gov](mailto:shedger@covingtonky.gov)

**LOCATION:** Submit six (6) copies of the Proposal Binder in sealed package with following statement: **COVINGTON FLEET RFP-DO NOT OPEN WITH REGULAR MAIL”**

City of Covington, Kentucky  
1<sup>st</sup> Floor, Finance Window  
20 W. Pike Street  
Covington, Kentucky 41011

**REVIEW:** All bids will be forwarded to the Selection Committee and reviewed according to the evaluation criteria specified within each Sub-Part.

### SCHEDULE

<b>EVENT</b>	<b>DATE</b>
RFP Issued	April 25
Pre-Bid Meeting	May 9 <sup>th</sup> at 3:00PM Covington City Hall
Deadline to submit intent to bid	May 13
Deadline for clarification	May 20
Deadline to submit Proposals	May 27

### ADDITIONAL SUB-PARTS

**Sub-Part I Introduction**

All Bidders **must** complete separately.

**Sub-Part II Light Duty Vehicles**

Bidders **may** complete if relevant.

**Sub-Part III Pursuit Rated Vehicles**

Bidders **may** complete if relevant.

**Sub-Part IV Ambulances**

Bidders **may** complete if relevant.

**Sub-Part V Fire Apparatus**

Bidders **may** complete if relevant.

**Sub-Part VI Finance**

Bidders offering financing or Financing Partnership Bidders **must** complete separately.

**CITY OF COVINGTON, KENTUCKY FLEET  
REQUEST FOR PROPOSALS (“RFP”)  
PART II LIGHT DUTY VEHICLES**

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**VEHICLE AND EQUIPMENT SPECIFICATIONS**

<b>SECTION 5</b>	(18) 2016 OR NEWER, FORD FUSION SEDAN, OR SIMILAR
<b>SECTION 5.1.1</b>	(18) UNMARKED AFTERMARKET ACCESSORIES
<b>SECTION 6</b>	(1) 2016 OR NEWER, FORD TRANSIT 15 PASSENGER WAGON, OR SIMILAR
<b>SECTION 7</b>	(4) 2016 OR NEWER, FORD F150 4 X 2,REGULAR CAB PICKUP, OR SIMILAR
<b>SECTION 7.1.1</b>	(4) F150, OR SIMILAR, AFTERMARKET ACCESSORIES
<b>SECTION 8</b>	(3) 2016 OR NEWER, FORD F350 WITH PLOW, OR SIMILAR
<b>SECTION 8.1.1</b>	(3) F350, OR SIMILAR, AFTERMARKET ACCESSORIES
<b>SECTION 9</b>	[INTENTIONALLY OMITTED]
<b>SECTION 10</b>	(1) 37,000 LB GVW TRUCK CHASSIS
<b>SECTION 11</b>	(1) 37,000 lb Truck Up-Fit: 10 ft Dump Body;Hydraulic Hooklift System; V-Box Spreader
<b>SECTION 12</b>	(1) 2013 OR NEWER, FORD F550, REGULAR CAB CHIPPER TRUCK
<b>SECTION 13</b>	(1) 2013 OR NEWER, FORD F550, REGULAR CAB, BUCKET TRUCK
<b>SECTION 14</b>	(1) 2013 OR NEWER, FORD F350 FLATBED SIGN TRUCK
<b>SECTION 15</b>	(1) 2013 OR NEWER, FORD F550 REGULAR CAB, MECHANIC TRUCK
<b>SECTION 16</b>	(1) 2016 OR NEWER, FORD F350 REGULAR CAB PICKUP, OR SIMILAR
<b>SECTION 16.1.1</b>	(1) F350 OR SIMILAR, AFTERMARKET ACCESSORIES

## SECTION 1 LIGHT DUTY DEFINITIONS

Whenever the following terms appear in this Sub-Part, the intent and meaning shall be interpreted accordingly:

- 1.1 “**Vehicle Only Bidders**” shall have the meaning set forth in Section 2.5 below.
- 1.2 “**Equipment Only Bidders**” shall have the meaning set forth in Section 2.5 below.
- 1.3 “**Vehicle and Equipment Bidders**” shall have the meaning set forth in Section 2.5 below.
- 1.4 “**Financing Partnership Bidders**” shall have the meaning set forth in Section 2.5 below.
- 1.5 “**Fleet Management Bidders**” shall have the meaning set forth in Section 2.5 below.
- 1.6 “**Factory Authorized Warranty/ Service Center**” shall mean the location where qualified repairs under the scope of each Warranty provided by the Manufacturer can be conducted during the term of the Warranty.

## SECTION 2 INSTRUCTIONS TO BIDDERS

- 2.1 **Purpose.** In addition to the General Purpose set forth in Sub-Part I of this RFP, the City further defines its purpose in relation to the Light Duty Sub-Part as its seeking to procure various light duty vehicles for departments in the City that require transportation to fulfill their day to day functions. Such functions include administrative tasks, transportation to public improvement projects, and police and fire investigations. To this end, in order to identify the vehicles and financing that will best meet its needs, the City will consider all Proposals submitted under this Sub-Part II according to the evaluation criteria set forth in Section 2.9.
- 2.2 **Form of Submission.** Every Proposal must be submitted in a three-ring Proposal Binder tabbed according to the attachments set forth below. All Bidder specifications must correspond to the sequence of the specifications. Failure of a Bidder to comply with these submission requirements may result in a submission being deemed Non-Responsive.
- 2.3 **Provide Description Where Required.** Where descriptions of certain specifications are so required, the Specification Worksheet will state “**PROVIDE DESCRIPTION.**” All Bidders must respond with the requested detail where applicable. Failure to respond, will be grounds for the City to deem a bid Non-Responsive. Responses such as: “Per attached specifications, see attached literature, as specified, meet specifications,” etc. will be considered inadequate. All descriptions shall be attached to the corresponding **Explanatory Addendum** and included in the Proposal Binder under the appropriate Tab.
- 2.4 **A La Carte Bids.** Bidders may submit Proposals to provide any combination of vehicles and equipment set forth in the Specifications.
- 2.5 **Bidder Types.** This Sub-Part contemplates the following Bidder Types who may submit Responses to provide for the vehicles and equipment requested within the Specifications. Each Bidder should indicate on the **Bidder Information Form** the corresponding Bidder type.
- 2.6 **Vehicle Only Bidders:** For purposes of this Sub-Part, Vehicle Only Bidders shall mean Bidders who are able to only provide the vehicles or vehicles and equipment contemplated under the Light Duty Specifications. Vehicle Only Bidders are not able to provide financing options for the acquisition or lease of the vehicles and do not have a Financing Partner. At the conclusion of Phase I, provided a Final Award is not made, the City will select the Vehicle Only Bidder whose response provides the Best Value and submit it to the Finance-Only Bidders for consideration under Phase II.
- 2.7 **Equipment Only Bidders:** For purposes of this Sub-Part, Equipment Only Bidders shall mean Bidders who are able to only provide the equipment contemplated under the Light Duty Specifications. Equipment Only Bidders are not able to provide financing options for

the acquisition or lease of the equipment and do not have a Financing Partner. . At the conclusion of Phase I, the City will assess all variations of equipment pricing options and elect to either (i) select the Equipment Only Bidder that provides the Best Value and provide it to Finance Only Bidders for consideration under Phase II, (ii) reject all Equipment Only Bids pursue an alternative means for procuring equipment, or (iii) make a Final Award to acquire the equipment that provides the Best Value.

- 2.8 **Vehicle and Equipment Bidders.** For purposes of this Sub-Part, Vehicle and Equipment Bidders shall mean Bidders who are able to provide both the Vehicles and Equipment contemplated under the specifications. Vehicle and Equipment Bidders must provide itemized pricing setting forth the combined cost of each fully equipped vehicle.
- 2.9 **Financing Partnership Bidders:** For purposes of this Sub-Part, Financing Partnership Bidders include any Bidders who are able to provide the vehicles or vehicles and equipment that are contemplated under the Light Duty Specifications **and** who have a partnership with a lender, or similar financing entity, to provide financing options for the acquisition or lease of the vehicles and equipment. Financing Partnership Bidders **must** submit a Response under this Sub-Part and under Sub-Part VI. During Phase II, the City will consider the responses under both Sub-Parts to determine which combination provides the Best Value.
- 2.10 **Fleet Management Bidders:** For purposes of this Sub-Part, Fleet Management Bidders include any Bidders who are able to procure the vehicles and equipment contemplated under the Light Duty Specification and provide financing for the vehicles. Fleet Management Bidders **must** submit a response under this Sub-Part and under Sub-Part VI (the "Finance Part").
- 2.11 **Vehicle and Equipment Pricing.** In addition to providing the requested Invoices where applicable, each Bidder shall submit all price quotes upon the **MASTER BID FORM** provided within the Light Duty Specifications. Failure to provide pricing on the forms provided may result in the City deeming a Proposal Non-Responsive.
- 2.12 **Exceptions.** These specifications are based upon design and performance criteria which have been developed by the City as a result of extensive research and careful analysis. Subsequently these specifications reflect the only type of vehicles that are acceptable at this time and all specifications herein contained are considered as minimum. Bidders shall indicate in the "yes/no" column if their bid complies on each item specified. Exceptions shall be allowed if they are equal to or superior to that specified and provided they are listed and fully explained within the space provided in the **LIGHT DUTY SPECIFICATION WORKSHEET**, which shall be included in the Proposal Binder under **TAB II-A** together with all **SPECIFICATION DESCRIPTIONS**. All deviations, no matter how slight, shall be clearly explained in the **Exception Addendum** with said explanation setting forth: (a) how the Proposal deviation is different; (b) how the deviation meets or exceeds the specifications; and (c) why it is necessary. The City reserves the right to require a Bidder to provide proof in each case that a substituted item is equal to that specified. Proposals that are found to have deviations without listing them or bids taking total exceptions to these advertised specifications will be rejected.
- 2.13 **Questions and Answers.** Throughout the Bid Process, Bidders may submit clarifying questions related to the RFP to Steve Hedger via email at [shedger@covingtonky.gov](mailto:shedger@covingtonky.gov).
- 2.14 **Evaluation of Proposals.** The Award(s) shall be made to the Bidder(s) whose Proposal(s) are determined by the City to provide the Best Value according to the process and criteria described in greater detail below:
- Per Unit Vehicle/Equipment Price
  - Total Financed Cost
  - Delivery Timeline AND Schedule

- Length of time in business
  - Distance to Warranty Repair Sites
  - Warranty
  - Consistency with Specifications
  - Understanding of the RFP
  - Acceptance of Light Duty Terms and Conditions
  - Acceptance of Additional Terms and Conditions
  - Experience delivering services under the RFP
  - Manufacturing expertise and capacity, where applicable
- 2.15 **Selection Committee.** The City will establish a Selection Committee to review and evaluate all Proposals submitted in response to the RFP. The Selection Committee will be comprised of representatives from various City Departments so as to provide a range of perspectives to contribute to assessing the Best Value according to the criteria set forth below.
- 2.16 **Negotiation.** After making a Final Award, the City reserves the right to negotiate fair and reasonable terms and conditions based on the information provided in the Prevailing Bidder's Proposal. If after negotiation, the parties fail to reach a Final Agreement, the City reserves the right to proceed to the next highest evaluated Proposal.
- 2.17 **Items to be Negotiated.** Terms and conditions that may be negotiated at the sole discretion of the City include but are not limited to issues related to invoicing, additional fees, and delivery timelines.

### **SECTION 3 LIGHT DUTY ATTACHMENTS**

The following section describes the attachments that must be included in the Proposal Binder for the Light Duty Sub-Part. All attachments must be submitted in the same order and in a form that is substantially similar to the description provided below. Each Bidder **must** verify submission of the requested materials on the attached **BIDDER CHECKLIST**.

- 3.1 **Master Bid Worksheet.** Each Bidder shall complete the Master Bid Worksheet attached to this packet. For any alternate pricing Proposals such as bulk discounts or discounts for tying together multiple vehicles and equipment, the Bidder must complete additional Master Bid Worksheets. The completed Master Bid Worksheet(s) shall be included in the Proposal Binder under **TAB II-A**.
- 3.2 **Bidder Checklist.** Each Bidder shall complete the Bidder Checklist that is attached to this packet to confirm that it has supplied the requested materials. The Bidder Checklist shall be included in the Proposal Binder under **TAB II-A**.
- 3.3 **Specification Worksheet.** The Bidder shall complete the corresponding Specification Worksheet for each Light Duty Vehicle Bid. The completed Specification Worksheet shall be included in the Proposal Binder under **TAB II-A**.
- 3.4 **Exception and Explanatory Addenda.**
- a. **Explanatory Addendum.** Where the Specifications require an explanation or description of certain vehicle components all Bidders shall provide on separate pages the requested explanation with the corresponding specification number as a header. The Explanatory Addendum shall be included in the Proposal Binder under **TAB II-A** immediately following the **SPECIFICATION WORKSHEET**.

- b. **Exception Addendum.** All exceptions and deviations to Specifications shall be explained in a separate addendum. (the "Exception Addendum"). The Exception Addendum shall reference each Specification Number and provide an explanation that addresses each of the following issues: (i) how the Proposal deviation is different; (ii) how the deviation meets or exceeds the specifications; (iii) and why it is necessary. The Exception Addendum, if any, shall be included in the Proposal Binder under **TAB II-A** immediately following the **SPECIFICATION WORKSHEET**.
- 3.5 **Letter of Intent.** Each Bidder shall in not more than one (1) page include a letter that expresses its intent to submit a bid to provide the Light Duty vehicles outlined in the attached Specifications. The Letter of Intent shall be signed by an Authorized Representative of the Bidder and be included in the Proposal Binder under **TAB II-A**.
- 3.6 **Statement of Qualifications and Capacity.** Each Bidder shall in not more than three (3) pages include a statement of its qualifications and capacity to provide the Light Duty Vehicles sought under the Specifications. Said statement should highlight the relevant aspects of the Bidder's business and may note characteristics such as specialized methods or processes, historical track-record, industry recognition, etc... The Statement of Qualifications and Capacity shall be included in the Proposal Binder under **TAB II-A**.
- 3.7 **Similar Contracts.** Each Bidder shall submit a list of three (3) similar contracts that it has been awarded within the last three (3) years. The list shall state (i) the name of the Awarding Entity, (ii) a contact person and information for the Awarding Entity, (iii) the type(s) of vehicles procured for the Awarding Entity, (iv) the timeline from award to delivery under the Contract, and (v) any other relevant information related to the Contract. Such relevant information may include whether any equipment was installed in the vehicles, the various departments that were provided vehicles, and the current status of the contract. The similar contracts list shall be included in the Proposal Binder under **TAB II-A**.
- 3.8 **Letters of Reference.** In addition to the similar contracts provided above, each Bidder shall submit three (3) letters of reference from representatives of Awarding Entities for which Bidder has procured or provided vehicles within the last three (3) years. Upon providing the letters of reference the Bidder shall be solely responsible for notifying the contact person at each Awarding Entity that he or she may be contacted by the City during the Bid Process. The City's inability to contact a reference may result in the Proposal being deemed non-responsive. The letters of reference, may, but do not have to, correlate with the similar contracts described above. The letters of reference shall be included in the Proposal Binder under **TAB II-A**.
- 3.9 **Legal Documents.** All Bidders must attach any Legal Documents that they desire to have considered for incorporation into any Final Agreement. Failure to submit all Legal Documents will be deemed an incomplete bid subject to disqualification for insufficient materials. Legal documents shall be included in the Proposal binder under **TAB II-B**.
- 3.10 **Invoice or Price Quote.** All Bidders shall supply a sample invoice or price quote for each Light Duty Vehicle and/or any Light Duty Equipment for which it submits a Proposal and/or for the procurement of any Equipment. The invoice shall include all fees, charges, pre-payment options, and discounts, including, if any, bulk discounts and the level at which the discount applies. The Bidder may set forth various pricing options on separate sheets. The Invoice or Price Quotes shall be included in the Proposal Binder under **TAB II-B**.
- 3.11 **Cost of Maintenance.** Each Bidder shall provide a statement or statements demonstrating the average cost of maintenance over five (5) years for each vehicle bid under the Light Duty specifications. Preference will be given to Bidders that are able to

provide actual statements and reports demonstrating maintenance provided on vehicles over the five (5) year period. Said statements and reports may, but do not have to, correspond with the Similar contracts provided above. ~~Preference will be given to Bidders that cannot provide average costs and statements related to warranty repairs during the five (5) year period.~~ The cost of maintenance statements and reports shall be included in the Proposal Binder under **TAB II-C**.

- 3.12 **Distance to Warranty Repair Service Center.** For each vehicle bid, the Bidder shall provide a list or statement of the distance to the nearest warranty and repair authorized service center. Preference will be given to Bidders who can demonstrate authorized warranty repair centers within thirty (30) miles of Covington. The distance to warranty repair service center shall be included in the Proposal Binder under **TAB II-C**.
- 3.13 **Delivery Options.** Each Bidder shall provide a description of all delivery options that may be available to the City for any vehicles that the Bidder proposes to provide. Such delivery options may include staggered vehicle delivery and any additional costs associated with a staggered delivery schedule. The description of delivery options shall be included in the Proposal Binder under **TAB II-D**.
- 3.14 **Manufacturer's Specifications.** For each vehicle and all equipment bid, the Bidder must furnish the Manufacturer's Specifications in the Proposal Binder under **TAB II-E**.
- 3.15 **Vehicle Warranties.** Each Bidder shall submit copies of all warranties that are required under the Light Duty Specifications. The corresponding Warranties for each vehicle shall be clearly marked so as to distinguish between the multiple vehicles. In the event a Bidder does not provide one of the Warranties outlined in the specifications, the Bidder shall list this as an Exception to the relevant specification. All warranties shall be included in the Proposal Binder under **TAB II-E**.
- 3.16 **Equipment Warranties.** Equipment warranties shall be included in the Proposal Binder under **TAB II-E**.
- 3.17 **Bid Bond.** All Bidders shall provide a bid bond as security for the bid in the form of a 10% bid bond to accompany their bid. This bid bond shall be issued by a Surety Company who is listed on the U.S. Treasury Departments list of acceptable sureties as published in Department Circular 570. The bid bond shall be issued by an authorized representative of the Surety Company and shall be accompanied by a certified power of attorney dated on or before the date of bid. The bid bond shall include language, which assures that the Bidder/principal shall give a bond or bonds as may be specified in the bidding or contract documents, with good and sufficient surety for the faithful performance of the contract, including the Basic One (1) Year Limited Warranty, and for the prompt payment of labor and material furnished in the prosecution of the contract. **TAB II-E**.
- 3.18 **Performance Bond.** Where applicable the City reserves the right to require a performance bond to secure delivery of the Vehicles and Equipment under this Sub-Part.

#### **SECTION 4 LIGHT DUTY TERMS AND CONDITIONS**

- 4.1 **Bidder's Warranties and Representations.** Upon execution of any Agreement, all documents that Bidder has submitted under Section 2 shall be incorporated as Warranties and Representations, which shall survive the completion of the project.
- 4.2 **Term of Offer.** Any Offer made under this Sub-Part shall remain open for 180 days from the close of the Bid Period.
- 4.3 **Payment.** Payment for the Light Duty Vehicles shall be made according to the terms and conditions of any Finance Partner or Finance Bidder.

- 4.4 **Acceptance.** The City shall not be deemed to have accepted any Vehicle under this Sub-Part until the Light Duty Vehicle has been thoroughly inspected for compliance with the specifications by staff within the Department of Public Improvements and the City has had a commercially reasonable period to ascertain consistency with the specifications. Any vehicle not fulfilling the specifications shall be rejected and replaced at no cost to the City.
- 4.5 **Delivery.** Delivery of all Light Duty Vehicles awarded under this Sub-Part shall be made within one hundred (100) days of the parties executing any Final Agreement. Delayed delivery shall be subject to Liquidated Damages in an amount agreed upon by the parties prior to entering into a Final Agreement. Each vehicle shall be delivered to the City's Designated Location with approximately a full tank of fuel.
- 4.6 **Model Year.** Vehicles bid shall be new current production models, complete with all standard equipment, unless otherwise specified and the vehicle shall meet current Department of Transportation and National Highway Traffic and Safety Administration safety requirements. Any item that is standard equipment on the vehicle bid, but not specified below, is not to be removed from the vehicle. Manufacturer's disclaimers indicate that changes in product specifications may occur during the model year and they reserve the right to do so without repercussion.
- 4.7 **Service Area.** All vehicles provided under this Sub-Part shall have a service area that is substantially all of the jurisdictional boundaries of the City of Covington. From time to time, certain vehicles may leave the jurisdictional boundaries as provided in the description within the Vehicle Specifications.

**LIGHT DUTY TERMS AND CONDITIONS EXCEPTION WORKSHEET  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

**Instructions:** After reviewing the terms and conditions provided in Section 4 above, complete the following worksheet to confirm acceptance of all terms and conditions, or, where, applicable indicate rejection and propose substitute terms.

<b>TERM</b>	<b>ACCEPT</b>	<b>REJECT</b>	<b>Basis for rejection; Proposed Substitution</b>
4.1			
4.2			
4.3			
4.4			
4.5			
4.6			
4.7			

**Acknowledgement Of Terms and Conditions**

Bidder acknowledges that it has reviewed the above terms and conditions and has indicated its acceptance or rejection in the spaces provided above.

\_\_\_\_\_  
Entity Name

By:\_\_\_\_\_

Title:\_\_\_\_\_

**TERMS AND CONDITIONS**  
**CUSTOM MANUFACTURED VEHICLES**

The Following terms and conditions shall apply to any Vehicle that is custom-manufactured for the City of Covington under this Light Duty Sub-Part, including without limitation: (1) the F550 Bucket Truck; (2) the F550 Chipper Truck; (3) the F550 Mechanic Truck; (4) the F550 Mechanic Truck; (5) the F350 Sign Truck, (5) the 37,000 lb. Dump Chassis, and (6) the 37,000 lb Dump Body (together “the Custom Manufactured Vehicles”).

1. **Acceptance.** The City shall not be deemed to have accepted any Custom-Manufactured Vehicle constructed under this Sub-Part until it has had a commercially reasonable time to establish that the Vehicle was constructed in compliance with the specifications. In the event the City determines, in its sole discretion, that any Vehicle is determined to not comply with the specifications, the Manufacturer may be provided with an opportunity to address the non-compliant aspect within a reasonable time agreed upon between the parties in writing. The storage of any Vehicle in a City facility shall not be deemed acceptance. The continued failure of any Vehicle to comply with the specifications shall give the City the right to terminate any Agreement prior to final delivery at no cost to the City.
2. **Delivery.** The Prevailing Bidder shall assume responsibility for transportation and insurance for the unit while in transport and until accepted by the City according to Paragraph 1 above.
3. **Construction Inspections.** The Prevailing Bidder shall permit City Staff, or any City Designee, to inspect the Vehicle during manufacturing on no less than two (2) occasions, which shall be determined by the parties for each Apparatus awarded during Final Negotiations. In lieu of an on-site inspection, the Parties may agree to a remote visit conducted via an agreed upon telecommunications medium.
4. **Exception and/or Approved Equal Requests.** All specified equipment is to be Original Equipment Manufacturer (OEM) installed, either as standard equipment, a line installation option, or factory authorized Dealer Special Order/Special Equipment (DSO/SE) installation unless otherwise specified herein, or excepted by the bidder. Any specified items or features that are not available as OEM installations shall be declared as such and will require review and approval from the City of Covington. Any literature and/or data needed to support such a review shall be included as part of the bid.
5. **Legal Requirements.** It shall be the Prevailing Bidder’s responsibility to furnish a completed Vehicle that will comply with all Federal, State and Municipal requirements governing design, noise levels, and safety features.
6. **Approvals.** Any specified items or features that are not available as OEM installations shall be declared as such and will require review and approval from the City of Covington. Any literature and/or data needed to support such a review shall be included as part of the bid.
7. **Warranty.** The chassis manufacturer shall guarantee to furnish all warranty services gratis at any franchised dealer(s) within 75 miles of Covington, Kentucky. Acceptance of warranty services offered are subject to the approval of the Manager of the City of Covington’s Division of Fleet Management.
8. **Warranty Service.** It shall be the Prevailing Bidder’s responsibility to provide for local warranty service for the completed unit and all parts installed. The successful bidder shall handle all warranty issues that may arise between the City of Covington and the manufacturer of the part or item installed by the upfitter. It shall also be required of the bidder to furnish the names of company and contact person for future reference. Acceptance of warranty offered will be contingent upon approval of Fleet Manager of the Division of Fleet Management.

**LIGHT DUTY BIDDER CHECKLIST  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b><u>ATTACHMENT</u></b>	<b><u>PROVIDED (Y/N)</u></b>	<b><u>EXPLANATION If No</u></b>
MASTER BID WORKSHEET (II-A)		
BIDDER CHECKLIST (II-A)		
SPECIFICATION WORKSHEET (II-A)		
EXCEPTION/EXPLANATION ADDENDUM (II-A)		
LETTER OF INTENT (II-A)		
STATEMENT OF QUALIFICATIONS (II-A)		
SIMILAR CONTRACTS (II-A)		
LETTERS OF REFERENCE (II-A)		
LEGAL DOCUMENTS (II-B)		
INVOICE OR PRICE QUOTE (II-B)		
COST OF MAINTENANCE (II-C)		
DISTANCE TO WARRANTY REPAIR (II-C)		
DEVLIERY OPTIONS (II-D)		
MANUFACTURER'S SPECIFICATIONS (II-E)		
VEHICLE WARRANTIES (II-E)		
EQUIPMENT WARRANTIES (II-E)		
BID BOND (II-E)		

**LIGHT DUTY MASTER BID WORKSHEET**  
**INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

COMPANY NAME:	
CONTACT PERSON:	PHONE:
TITLE:	EMAIL:
MAILING ADDRESS:	

**Instructions:** Please indicate each vehicle bid and list Base Price, which must include all fees, charges, profit-markups or other associated costs. Please also provide any Discounted Price based upon pre-payment, bulk, or other associated discounts.

VEHICLE/EQUIPMENT	BID? (Y/N)	PER UNIT Equipped	PER UNIT Unequipped	TOTAL equipped	TOTAL Unequipped
(18) FORD FUSION SEDAN, OR SIMILAR					
(18) UNMARKED POLICE AFTERMARKET EQUIPMENT AND ACCESSORIES		<b>USE QUOTE FORM PROVIDED BELOW.</b>			
(1) FORD WAGON, OR SIMILAR					
(4) F150 PICKUP, OR SIMILAR					
(4) F150 AFTERMARKET EQUIPMENT		<b>USE QUOTE FORM PROVIDED BELOW.</b>			
(3) F350 PICKUP PLOW, OR SIMILAR					
(3) F350 AFTERMARKET EQUIPMENT		<b>USE QUOTE FORM PROVIDED BELOW.</b>			
(1) 37,000 LB CHASSIS					
(1) 37,000 LB DUMP TRUCK UPFIT					
(1) FORD F550 CHIPPER TRUCK					
(1) FORD F550 BUCKET TRUCK					

**LIGHT DUTY MASTER BID WORKSHEET**  
**INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>VEHICLE/EQUIPMENT</b>	<b>BID? (Y/N)</b>	<b>PER UNIT Equipped</b>	<b>PER UNIT Unequipped</b>	<b>TOTAL equipped</b>	<b>TOTAL Unequipped</b>
(1) FORD F550 SIGN TRUCK					
(1) FORD F550 MECHANIC TRUCK					
(1) FORD F350 FIRE TRUCK					
(1) F350 AFTERMARKET EQUIPMENT FIRE		<b>USE QUOTE FORM PROVIDED BELOW.</b>			
<b>TOTAL</b>					

**ACKNOWLEDGEMENT**

Pursuant to and in accordance with the above stated Request for Quotation, the undersigned hereby declares that they have examined the RFQ documents and specifications for the item(s) listed below. The undersigned proposes and agrees, if their quotation is accepted to furnish the item(s) submitted below, including delivery to destination stated on opening page in accordance with the delivery schedule indicated below and according to the prices, products/services information submitted.

SUBMITTED BY: \_\_\_\_\_

DATE SUBMITTED: \_\_\_\_\_

**SECTION 5 (18) 2016 OR NEWER, FORD FUSION SEDANS, OR SIMILAR**

**Vehicle and options**

- 5.1 Code P0G 2016 Ford Fusion Sedan FWD 2.5L I4 Engine
- 5.2 Code 997 Cruise Control, tilt wheel, power windows
- 5.3 Code 44W power locks, select shift, 16" steel wheels
- 5.4 Code 100A AM/FM stereo/MP3/Single CD player
- 5.5 Code 55M All weather floor mats black front and rear
- 5.6 Code KEY Extra programmable key
- 5.7 Code 153 Front license plate bracket
- 5.8 Code YZ Oxford white

**Warranty**

- 5.9 Include warranty information in the Proposal Binder under **TAB II-E.**
  - 5 Year/100,000 mile powertrain warranty minimum
  - 3 Year/36,000 mile Bumper to Bumper warranty minimum

**SPECIFICATION WORKSHEET FORD FUSION SEDAN, OR SIMILAR  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
5.1		
5.2		
5.3		
5.4		
5.5		
5.6		
5.7		
5.8		
5.9		<b>Provide Warranty Information under TAB II-E.</b>

**INCLUDE PRICE QUOTE IN PROPOSAL BINDER UNDER TAB II-A**

**SECTION 5.1.1 (18) UNMARKED AFTERMARKET EQUIPMENT AND ACCESSORIES**

ITEM	QTY	DESCRIPTION	UNIT PRICE	EXTENDED AMOUNT
1.	18 EA	<b>Item Description</b> , Siren Speaker <b>Mfg: Federal Signal Model No.: 750501</b> Mfg. _____ Model No.: _____ <b>Delivery:</b> _____ days after receipt of order SHALL WARRANTY THE ABOVE EQUIPMENT FOR PARTS, FOR _____	\$ _____	\$ _____
2.	18 EA	<b>Item Description</b> , Speaker Bracket <b>Mfg: Federal Signal Model No.: 750501-10</b> Mfg. _____ Model No.: _____ <b>Delivery:</b> _____ days after receipt of order SHALL WARRANTY THE ABOVE EQUIPMENT FOR PARTS, FOR _____	\$ _____	\$ _____
3.	18 EA	<b>Item Description</b> , Red & Blue Corner strobes <b>Mfg: Federal Signal Model No.: 416200-44</b> Mfg. _____ Model No.: _____ <b>Delivery:</b> _____ days after receipt of order SHALL WARRANTY THE ABOVE EQUIPMENT FOR PARTS, FOR _____	\$ _____	\$ _____
4.	18 EA	<b>Item Description</b> , Clear Corner Strobes <b>Mfg: Federal Signal Model No.: 416200-55</b> Mfg. _____ Model No.: _____ <b>Delivery:</b> _____ days after receipt of order SHALL WARRANTY THE ABOVE EQUIPMENT FOR PARTS, FOR _____	\$ _____	\$ _____
5.	36 EA	<b>Item Description</b> , Dash Light <b>.Mfg: Whelen Model No.: AVN2RB</b> Mfg. _____ Model No.: _____ <b>Delivery:</b> _____ days after receipt of order SHALL WARRANTY THE ABOVE EQUIPMENT FOR PARTS, FOR _____	\$ _____	\$ _____
6.	18 EA	<b>Item Description</b> , Undercover Siren <b>.Mfg: SHO-ME Model No.: 30.2504</b> Mfg. _____ Model No.: _____ <b>Delivery:</b> _____ days after receipt of order SHALL WARRANTY THE ABOVE EQUIPMENT FOR PARTS, FOR _____	\$ _____	\$ _____

**INCLUDE PRICE QUOTE IN PROPOSAL BINDER UNDER TAB II-A**

7.	18 EA	<p><b>Item Description</b>, Undercover Siren Switch &amp; Wire Assembly  <b>.Mfg: SHO-ME</b>                      <b>Model No.: 30.2115</b>  Mfg. _____ Model  No.: _____  <b>Delivery:</b> _____ days after receipt of order  SHALL WARRANTY THE ABOVE EQUIPMENT  FOR PARTS, FOR _____</p>	\$ _____	\$ _____
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**SECTION 6 (1) 2016 or Newer, FORD TRANSIT 15 PASSENGER WAGON, OR SIMILAR**

**Engine**

- 6.1 Minimum, 275HP @ 6,000 RPM
- 6.2 Minimum, 3.7L-V6 Ti-VCT Engine
- 6.3 The Van shall be equipped with a heavy-duty radiator.
- 6.4 Long life engine coolant capable of protection to minus 35 degrees Fahrenheit.
- 6.5 Provide Description of engine bid in Proposal Binder under **TAB II-A**, including the following information: Displacement; HP; Torque; EPA Mileage; City/Highway

**Chassis / Powertrain / Functional Minimum GVW rating of 9,000 pounds**

- 6.6 The wheel base shall not be less than 148 inches
- 6.7 Power steering with an oil cooler
- 6.8 Five (5) full size wheels and tires
- 6.9 Fuel tank – 25 gallons
- 6.10 Brakes – 4 wheel disc with ABS
- 6.11 Steering – Hydraulic Power Rack and Pinion
- 6.12 Springs – Front, Independent MacPherson-strut
- 6.13 Springs – Rear, leaf
- 6.14 Spare tire carrier underframe, winch type with safety catch Jack

**Transmission**

- 6.15 The unit shall be equipped with a 6-speed automatic type transmission.
- 6.16 A heavy duty transmission oil cooler.
- 6.17 Provide description of the transmission bid in the Proposal Binder under **TAB II-A**.

**Electrical**

- 6.18 Battery – Maintenance free
- 6.19 Power windows
- 6.20 Power door locks

**Exterior**

- 6.21 Roof height 83.2 inches minimum
- 6.22 Exterior - white
- 6.23 Manufacturer's standard tinted glass in all windows
- 6.24 Heavy duty rear step bumper
- 6.25 Power Telescopic mirrors

**Interior**

6.26 The unit shall have the manufacturer's standard interior that includes the following:

- 5 row seating (2-3-3-3-4)
- Dome light
- Fuel gauge, voltmeter, oil pressure, engine coolant temp, speedometer, tachometer & odometer.
- Glove box
- Grab handles
- Horn – dual note
- Power point - front
- Scuff pad – Driver and front passenger doors
- All weather rubber floor mats
- Tilt/telescoping steering wheel
- Tire pressure monitoring system
- Extra programmable key

#### **Accessories**

6.27 Air conditioning front and rear with fresh air temperature controlled heater and windshield defrosters

6.28 Windshield wipers and washer with adjustable intermittent wipe

6.29 AM/FM radio

6.30 Interior mounted day/night rear view mirror

#### **Safety / Security**

6.31 Airbags

6.32 Safety Canopy side curtain air bags

6.33 Dual stage front seat mounted side airbags

6.34 Seat belts, ARS. Manual lap/shoulder belts with height adjusters, pretensioners & energy management retractors on outside front positions.

6.35 SecuriLock Anti-theft ignition

6.36 AdvancTrac with Roll Stability Control

6.37 Sway Control

#### **Warranty**

6.38 Warranty information will be used in the evaluation of each Proposal and must be included in the Proposal Binder under **TAB II-E**.

- 5 Year/60,000 mile powertrain warranty minimum
- 3 Year/36,000 mile Bumper to Bumper warranty minimum

**2016 OR NEWER, FORD TRANSIT VAN, OR SIMILAR  
SPECIFICATION WORKSHEET—Include under TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
6.1		
6.2		
6.3		
6.4		
6.5		<b>Provide description under TAB II-A</b>
6.6		
6.7		
6.8		
6.9		
6.10		
6.11		
6.12		
6.13		
6.14		
6.15		
6.16		
6.17		
6.18		<b>Provide description under TAB II-A</b>
6.19		
6.20		
6.21		

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
6.22		
6.23		
6.24		
6.25		
6.26		
6.27		
6.28		
6.29		
6.30		
6.31		
6.32		
6.33		
6.34		
6.35		
6.36		
6.37		
6.38		<b>Provide Warranty information under TAB II-E.</b>

**SECTION 7 (4) 2016 OR NEWER FORD F150 4 X 2, REGULAR CAB PICKUP, OR SIMILAR**

**ENGINE**

- 7.1 Minimum, 282HP @ 6,250 RPM
- 7.2 Minimum, 3.5L-V6 Ti-VCT Engine
- 7.3 The truck shall be equipped with a heavy-duty radiator.
- 7.4 Long life engine coolant capable of protection to minus 35 degrees Fahrenheit.

**CHASSIS / POWERTRAIN / FUNCTIONAL**

- 7.5 Minimum GVW rating of 6,100 pounds
- 7.6 The wheel base shall not be less than 141 inches
- 7.7 Power steering with an oil cooler
- 7.8 Five (5) full size wheels and tires
- 7.9 Trailer towing package
- 7.10 Fuel tank – 23 gallons
- 7.11 Brakes – 4 wheel disc with ABS
- 7.12 Steering – Electric Power-Assisted
- 7.13 Springs – Front, coil
- 7.14 Springs – Rear, leaf
- 7.15 Spare tire carrier underframe, winch type with safety catch
- 7.16 Jack
- 7.17 Parking brake – foot operated, hand release
- 7.18 Axle rear – 3.55 non-Limited Slip

**TRANSMISSION**

- 7.19 6-speed automatic type transmission with transfer case; four wheel manual shift.
- 7.20 Heavy duty transmission oil cooler

**ELECTRICAL**

- 7.21 Battery – Maintenance free
- 7.22 Electronic trailer brake controller
- 7.23 Upfitter switches

**EXTERIOR**

- 7.24 Regular Cab
- 7.25 8' Bed
- 7.26 Exterior – white
- 7.27 Body shall be of smooth side construction
- 7.28 Tailgate – removable with key lock
- 7.29 Manufacturer's standard tinted glass in all windows
- 7.30 Heavy duty rear step bumper
- 7.31 Manual Telescopic trailer towing mirrors
- 7.32 Spray in bed-liner
- 7.33 Minimum four (4) cargo tie downs
- 7.34 Cargo lamp – integrated with high mount stop light

**INTERIOR**

- 7.35 The unit shall have the manufacturer's standard interior that includes the following:
  - 40/20/40 front seat
  - Dome light
  - Fuel gauge, voltmeter, oil pressure, engine coolant temp, speedometer, tachometer, odometer.

- Glove box
- Grab handles
- Horn – dual note
- Power point – front
- Scuff pad – Driver and front passenger doors.
- All weather rubber floor mats
- Tilt/telescoping steering wheel
- Tire pressure monitoring system
- Extra programmable key

### **ACCESSORIES**

- 7.36 Air conditioning with fresh air temperature controlled heater and windshield defrosters
- 7.37 Windshield wipers and washer with adjustable intermittent wipe
- 7.38 AM/FM radio
- 7.39 Interior mounted day/night rear view mirror

### **SAFETY / SECURITY**

- 7.40 Airbags
- 7.41 Safety Canopy side curtain air bags
- 7.42 Dual stage front seat mounted side airbags
- 7.43 Seat belts, ARS. Manual lap/shoulder belts with height adjusters, pretensioners & energy management retractors on outside front positions.
- 7.44 SecuriLock Anti-theft ignition
- 7.45 AdvancTrac with Roll Stability Control
- 7.46 Trailer Sway Control

### **WARRANTY**

- 7.47 Warranty information will be used in the evaluation of each Proposal and must be included in the Proposal Binder under **TAB II-E**.
  - 5 Year/100,000 mile powertrain warranty minimum
  - 3 Year/36,00 mile Bumper to Bumper warranty minimum

**FORD TRANSIT VAN SPECIFICATION WORKSHEET  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
7.1		
7.2		
7.3		
7.4		
7.5		
7.6		
7.7		
7.8		
7.9		
7.10		
7.11		
7.12		
7.13		
7.14		
7.15		
7.16		
7.17		
7.18		
7.19		
7.20		

**FORD TRANSIT VAN SPECIFICATION WORKSHEET  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
7.21		
7.22		
7.23		
7.24		
7.25		
7.26		
7.27		
7.28		
7.29		
7.30		
7.31		
7.32		
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7.36		
7.37		
7.38		
7.39		
7.40		

**FORD TRANSIT VAN SPECIFICATION WORKSHEET  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
7.41		
7.42		
7.43		
7.44		
7.45		
7.46		
7.47		<b>Provide warranty information under TAB II-E.</b>

**INCLUDE PRICE QUOTE IN PROPOSAL BINDER UNDER TAB II-A**

**SECTION 7.1.1 AFTERMARKET ACCESSORIES**

- 7.1.1 Amber LED roof mounted mini light bar
- 7.1.2 Headache Rack ( stainless steel preferred)
- 7.1.3 Two (2) clear front corner led strobe lights
- 7.1.4 Go light Stryker model # 3100 or equivalent
- 7.1.5 Two (2) amber taillight mounted strobe lights, must be clear if installed behind a red lens

**AFTERMARKET ACCESSORIES PRICE WORKSHEET**

<b>SPEC #</b>	<b>EQUIPMENT COST</b>	<b>INSTALLATION COST</b>	<b>TOTAL COST</b>
7.1.1			
7.1.2			
7.1.3			
7.1.4			
7.1.5			

**ACKNOWLEDGEMENT**

Pursuant to and in accordance with the above stated Request for Quotation, the undersigned hereby declares that they have examined the RFQ documents and specifications for the item(s) listed below. The undersigned proposes and agrees, if their quotation is accepted to furnish the item(s) submitted below, including delivery to destination stated on opening page in accordance with the delivery schedule indicated below and according to the prices, products/services information submitted.

SUBMITTED BY: \_\_\_\_\_

DATE SUBMITTED: \_\_\_\_\_

**SECTION 8 (3) 2016 OR NEWER FORD F350, WITH SNOW PLOW PICKUP, OR SIMILAR**

**Engine**

- 8.1 Minimum, 385 HP @ 5,500 RPM
- 8.2 Minimum, 6.2L-V8 FFV Engine
- 8.3 The truck shall be equipped with a heavy-duty radiator.
- 8.4 Long life engine coolant capable of protection to minus 35 degrees Fahrenheit.
- 8.5 Provide description of Engine in Proposal Binder under **TAB II-A.**

**Chassis / Powertrain / Functional**

- 8.6 Minimum GVW rating of 10,000 pounds
- 8.7 The wheel base shall not be less than 142 inches
- 8.8 Heavy duty pay load capacity of 11,500 GVWR
- 8.9 Power steering with an oil cooler
- 8.10 Five (5) full size wheels and tires with all-terrain tread design
- 8.11 Trailer towing package capable of towing 12,000 pounds
- 8.12 Fuel tank – 35 gallons
- 8.13 Brakes – 4 wheel disc with ABS
- 8.14 Steering – power rack and pinion
- 8.15 Springs – Front, coil
- 8.16 Springs – Rear, leaf: two stage variable rate
- 8.17 Spare tire carrier underframe, winch type with safety catch
- 8.18 Jack – 2 Ton
- 8.19 Parking brake – foot operated, hand release
- 8.20 Axle front – snow plow prep package mono beam
- 8.21 Axle rear – 3.73 Limited Slip

**Transmission**

- 8.22 The unit shall be equipped with a 6-speed automatic type transmission
- 8.23 with transfer case, and four wheel manual shift.
- 8.24 A heavy duty transmission oil cooler shall be provided.
- 8.25 Provide description of Transmission in Proposal Binder under **TAB II-A.**

**Electrical**

- 8.26 Alternator - Minimum 200 amp
- 8.27 Battery – Maintenance free 650 CCA
- 8.28 Electronic brake controller
- 8.29 Upfitter switches

**Exterior**

- 8.30 Super Cab
- 8.31 6.5' Bed
- 8.32 Exterior - white
- 8.33 Body shall be of smooth side steel construction
- 8.34 Tailgate – removable with key lock
- 8.35 Manufacturer's standard tinted glass in all windows
- 8.36 Heavy duty rear step bumper

- 8.37 Manual Telescopic trailer towing mirrors
- 8.38 Spray in bed-liner
- 8.39 Minimum four (4) cargo tie downs
- 8.40 Cargo lamp – integrated with high mount stop light

**Interior**

The unit shall have the manufacturer’s standard interior that includes the following:

- 9. Minimum seating for four (4)
- 10. Dome light
- 11. Fuel gauge, voltmeter, oil pressure, engine coolant temp, speedometer, tachometer & odometer.
- 12. Glove box
- 13. Grab handles
- 14. Horn – dual note
- 15. Power point - front
- 16. Scuff pad – Driver and front passenger doors.
- 17. Rubber floor mats – front and rear
- 18. Tilt steering wheel
- 19. Tire pressure monitoring system
- 20. Extra programmable key

**Accessories**

- 8.41 Air conditioning with fresh air temperature controlled heater and
- 8.42 windshield defrosters
- 8.43 Windshield wipers and washer with adjustable intermittent wipe
- 8.44 AM/FM radio
- 8.45 Interior mounted day/night rear view mirror

**Safety / Security**

- 8.46 Airbags
- 8.47 Safety Canopy side curtain air bags
- 8.48 Dual stage front seat mounted side airbags
- 8.49 Seat belts, ARS. Manual lap/shoulder belts with height adjusters, pretensioners & energy management retractors on outside front positions. Include auto lock feature for child seats.
- 8.50 SecuriLock Anti-theft ignition
- 8.51 SOS Post Crash Alert System
- 8.52 AdvancTrac with Roll Stability Control
- 8.53 Trailer Sway Control

**Warranty**

- 8.54 Warranty information will be used in the evaluation of each Proposal and must be included in the Proposal Binder under **TAB II-E**.
  - 5 Year/100,000 mile powertrain warranty minimum
  - 3 Year/36,00 mile Bumper to Bumper warranty minimum

**SPECIFICATION WORKSHEET FORD F350 PICKUP, OR SIMILAR  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
8.1		
8.2		
8.3		
8.4		
8.5		<b>Provide Description under TAB II-A.</b>
8.6		
8.7		
8.8		
8.9		
8.10		
8.11		
8.12		
8.13		
8.14		
8.15		
8.16		
8.17		
8.18		
8.19		
8.20		
8.21		

**SPECIFICATION WORKSHEET FORD F350 PICKUP, OR SIMILAR  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
8.22		
8.23		
8.24		
8.25		<b>PROVIDE DESCRIPTION UNDER TAB II-A.</b>
8.26		
8.27		
8.28		
8.29		
8.30		
8.31		
8.32		
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8.34		
8.35		
8.36		
8.37		
8.38		
8.39		
8.40		
8.41		
8.42		

**SPECIFICATION WORKSHEET FORD F350 PICKUP, OR SIMILAR  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
8.43		
8.44		
8.45		
8.46		
8.47		
8.48		
8.49		
8.50		
8.51		
8.52		
8.53		
8.54		<b>PROVIDE WARRANTY INFORMATION UNDER TAB II-E.</b>

**INCLUDE QUOTE IN PROPOSAL BINDER UNDER TAB II-A**

**SECTION 8.1.1 (3) 2016 Ford F350 AFTER-MARKET PLOW ACCESSORIES**

Please provide a price for the per unit cost and installation of the following aftermarket accessories for the above-reference vehicle:

- 8.1.1** Amber LED roof mounted mini light bar
- 8.1.2** Western 8' Pro Plus Plow with rubber deflector
- 8.1.3** Headache Rack ( stainless steel preferred)
- 8.1.4** Two (2) clear front corner led strobe lights
- 8.1.5** Go light Stryker model # or equivalent
- 8.1.6** Two (2) amber taillight mounted strobe lights ( strobe lights must be clear if installed behind a red lens)

**AFTERMARKET ACCESSORIES PRICE WORKSHEET**

<b>SPEC #</b>	<b>EQUIPMENT COST</b>	<b>INSTALLATION COST</b>	<b>TOTAL COST</b>
<b>8.1.1</b>			
<b>8.1.2</b>			
<b>8.1.3</b>			
<b>8.1.4</b>			
<b>8.1.5</b>			
<b>8.1.6</b>			

**ACKNOWLEDGEMENT**

Pursuant to and in accordance with the above stated Request for Quotation, the undersigned hereby declares that they have examined the RFQ documents and specifications for the item(s) listed below. The undersigned proposes and agrees, if their quotation is accepted to furnish the item(s) submitted below, including delivery to destination stated on opening page in accordance with the delivery schedule indicated below and according to the prices, products/services information submitted.

SUBMITTED BY: \_\_\_\_\_

DATE SUBMITTED: \_\_\_\_\_

**INCLUDE QUOTE IN PROPOSAL BINDER UNDER TAB II-A**

**SECTION 10 (1) 37,000 GVW CONVENTIONAL TRUCK CHASSIS SPECIFICATIONS**

**Engine**

- 10.1 Electronic diesel in line 6 cylinders
- 10.2 Minimum 224KW (300 gross horsepower)
- 10.3 Minimum 800 lb-ft torque @1200 RPM
- 10.4 Minimum engine displacement 6.6L (400 cu. in.)
- 10.5 Heated fuel filter/water separator Racor model 325R, Racor model 330R or approved equal.
- 10.6 No sections of the exhaust system may extend below the frame rail.
- 10.7 Muffler must be mounted underneath cab-or-Muffler must be frame mounted vertically on the passenger side rear corner.
- 10.8 Muffler must not extend past the rear of the cab more than 7 inches and must not extend past the passenger's side of the truck by more than 11 inches.
- 10.9 Exhaust pipe must not extend past the rear of the cab by more than 6 inches.
- 10.10 Exhaust system single, horizontal, after treatment device frame mounted outside right rail under cab.
- 10.11 Exhaust pipe must cross over the frame; exhaust pipes crossing under the frame are not acceptable.
- 10.12 Vertical exhaust stack and guard on the passenger side, chrome finish.
- 10.13 Cab mounted mufflers or exhaust systems are not acceptable.
- 10.14 Exhaust height 10 ft. (+/- 1 inch), based upon empty chassis with standard components.
- 10.15 Air cleaner restriction gauge (filter-minder) mounted in instrument panel.
- 10.16 Air intake system to include inside/outside air cleaner valve.
- 10.17 Electronic throttle, governor, idle shut down (30 minutes).
- 10.18 Oil pans must be either powder coated or made of non-corrosive material.
- 10.19 By-pass type engine oil filter.
- 10.20 Engine block heater, 120 volt rated outlet flush mounted under the driver's door. Heater will be rated 1250 watts.
- 10.21 Heavy-Duty Cooling system.
- 10.22 Long-life coolant.
- 10.23 Coolant filter.
- 10.24 Ethylene Propylene Diene Monomer (EPDM) coolant hoses.
- 10.25 Constant torque radiator hose clamps.
- 10.26 Thermostatically controlled clutch fan.
- 10.27 Single serpentine accessory drive belt.
- 10.28 Charge air cooler.
- 10.29 Engine or exhaust brake: Electronically activated.
- 10.30 Air compressor air supply line, naturally aspirated.
- 10.31 Cold starting equipment, intake manifold electric grid heater.
- 10.32 Provide description of Engine in Proposal Binder under **TAB II-A**.

**Transmission**

- 10.33 Allison 3000 RDS P, 4<sup>th</sup> generation controls with push button type gear selector.
- 10.34 Close ratio, 6-speed, with double overdrive; on/off highway.
- 10.35 Oil level sensor, with PTO provision.
- 10.36 80,000 lb GVW & GCW Max.
- 10.37 Auxiliary speed sensor lead.
- 10.38 Heavy duty transmission cooler.

## INCLUDE QUOTE IN PROPOSAL BINDER UNDER TAB II-A

### Frame

- 10.39 94 inch C.A
- 10.40 63 inch A.F.
- 10.41 8,436 kg/cm<sup>2</sup> (120,000 PSI) yield strength
- 10.42 Frame strength and section modulus to provide a minimum reinforced resisting bending moment of 29,866 kg m or 2,590,000 inch pounds
- 10.43 Frame section modulus to be between 344.1 cm<sup>3</sup> (21.00 in<sup>3</sup>) and 376.9 cm<sup>3</sup> (23.00 in<sup>3</sup>)
- 10.44 Full depth single rails.

### Front Axle

- 10.45 Meritor MFS-16-122A-N or approved equal.
- 10.46 7,257.48 kg (16,000 lb.) **setback front axle**.
- 10.47 7,257.48 kg (16,000 lb.) tapered leaf springs
- 10.48 Front shock absorbers.
- 10.49 Oil lubricated hubs

### Rear Axle

- 10.50 Meritor RS-23-160 or approved equal.
- 10.51 10,432 kg (23,000 lb.) capacity.
- 10.52 11,793 kg (26,000 lb.) rear multi-leaf springs.
- 10.53 6.83 gear ratio.

### Wheels, Tires and Brakes

- 10.54 315/80R22.5 front tires.
- 10.55 11R22.5 rear tires.
- 10.56 Hub piloted steel wheels with powder coat finish.
- 10.57 Nylon separators that fit between the wheel and hub.
- 10.58 Automatic slack adjusters, front and rear.
- 10.59 Brake lines, color and size coded nylon.
- 10.60 Gauge, air pressure located on instrument panel.
- 10.61 Parking brake control, yellow knob located on instrument panel.
- 10.62 Quick release valve, Bendix on rear axle for spring brake release.
- 10.63 Air dryer, Bendix model AD-9 with heater, or approved equal.
- 10.64 Drain valve, automatic Bendix DV-2 with heater, or approved equal.
- 10.65 Spring actuated parking brakes.
- 10.66 Air compressor: 16.5 CFM Bendix Tu-Flo 750
- 10.67 Low pressure warning buzzer.
- 10.68 Front brakes: Air cam S-Cam; 419.1 mm (16.5 inch) x 127 mm (5.0 inch) and 508 mm (20 inch) long stroke brake chambers.
- 10.69 Rear brakes: Air cam S-Cam; 419.1 mm (16.5 inch) x 177.8 mm (7.0 inch) and 762 mm (30 inch) brake chambers.
- 10.70 Traction control: Bendix AntiLock brake system, full vehicle wheel control system (4 channel) with automatic traction control.

### Cab and Chassis

- 10.71 Aluminum cab
- 10.72 Grill: Center mounted stationary chrome to be of sufficient size to clear plow frame.
- 10.73 Hood: when the plow hitch is in the assembly position, the hood must be capable of tilting forward 50 degrees from its stationary position.
- 10.74 Hood tilting assist: Hood must need a minimum force of 23 kg (50 lb.) applied at the top of the grill opening, dead center, to reset the hood.
- 10.75 Conventional cab with tinted safety glass throughout the entire cab.

## INCLUDE QUOTE IN PROPOSAL BINDER UNDER TAB II-A

- 10.76 Ignition and doors keyed the same. All trucks keyed alike. Two keys must be supplied with each truck.
- 10.77 Rear license plate bracket.
- 10.78 Dual sun visors.
- 10.79 Drivers seat: Air suspension, high back with integral headrest, vinyl.
- 10.80 Passenger seat: Air suspension, high back with integral headrest, vinyl with fixed back.
- 10.81 Seatbelts: Driver and passenger; 3 point, lap and shoulder belt type.
- 10.82 Armrest, both doors.
- 10.83 Factory installed AM/FM radio.
- 10.84 Tachometer
- 10.85 Hourmeter
- 10.86 Ammeter or voltmeter.
- 10.87 Transmission temperature gauge.
- 10.88 Engine coolant temperature gauge with high temp / low coolant level protection system.
- 10.89 Engine oil pressure gauge with low-pressure warning buzzer.
- 10.90 2- speed electric wipers with intermittent feature (5 pre-set delays) integrated into turn signal lever. Windshield washer with minimum capacity of 3.785 liters (one gallon). Wiper blades to be winter/snow type.
- 10.91 Windshield wiper speed control which will force wipers to slowest intermittent speed when park brake is set and wipers are left on for a predetermined time.
- 10.92 Headlights on windshield wipers: headlights will automatically turn on if windshield wipers are turned on.
- 10.93 Windshield wipers, single motor, electric, cowl mounted.
- 10.94 Air horn, to be located under the cab or hood.
- 10.95 Cab sound insulation sufficient enough to reduce noise inside the cab to a maximum 75 decibels at any time.
- 10.96 Temperature controlled fresh air heater and defrosters, both left and right.
- 10.97 Grab handles on both left and right side of cab.
- 10.98 Lang-Mekra rectangular "West Coast" style mirror or accepted equal with integrated main mirror and convex mirror. Main mirror will be approximately 178 mm (7 inches) x 406 mm (16 inches), with a minimum surface area of 100 in<sup>2</sup>. The convex may be square or round, with a minimum surface area of 44 in<sup>2</sup>. Convex mirror will mount below the main mirror. Both left and right main and convex mirrors will be heated and controlled by one switch located in the cab dash. The left and right main mirrors will be independently power adjusted by controls located on the driver's door. These controls will allow for horizontal and vertical axis adjustment. Mirror assemblies will be retractable and of the breakaway style.
- 10.99 Independent power left and right windows, adjusted by controls accessible to the driver.
- 10.100 Power door locks, left and right doors which includes the express down feature.
- 10.101 Air conditioner with integral heater and defroster.
- 10.102 Fresh air filter
- 10.103 Premium heater hoses.
- 10.104 Refrigerant Hydrofluorocarbon HFC-134A
- 10.105 Adjustable tilt steering wheel.
- 10.106 Fuel tank: Will be aluminum top draw tank, D style, 50 U.S. gallons, 189 liter capacity. 16 inch tank depth with quick connect outlet, mounted on left side under cab.
- 10.107 Steps into cab: Two steps per door
- 10.108 Turn signals must be self canceling with brake override.
- 10.109 Cab must have air-ride suspension.
- 10.110 Rubber fender extension – front axle.
- 10.111 Cab floor pass through for upfitter wiring.

## INCLUDE QUOTE IN PROPOSAL BINDER UNDER TAB II-A

### Electrical

- 10.112 Batteries, 12-volt maintenance free, 1,800 CCA
- 10.113 Battery box mounted under cab. Steel with fiberglass cover.
- 10.114 Master battery disconnect mounted in the cab.
- 10.115 Remote jump-start terminals located in such a way that the battery box cover does not need to be removed to perform a jump-start.
- 10.116 Data link connector for vehicle programming and diagnostics to be located in cab.
- 10.117 Fuses, electrical SAE blade-type
- 10.118 Hazard switch, push on / push off
- 10.119 Headlight dimmer switch integrated with the turn signal lever.
- 10.120 Headlights, two sealed beam halogen.
- 10.121 Running day-time lights, two integrated with headlights.
- 10.122 Horn, single electric.
- 10.123 Parking light, integrated with front turn signal and rear tail light.
- 10.124 Stop, turn, tail and back-up lights, dual, rear combination with reflector.
- 10.125 Turn signal switch, self cancelling.
- 10.126 Turn signals front, includes reflectors and auxiliary side turn signals, solid state flashers, flush mounted.
- 10.127 Power source, cigar type receptacle.
- 10.128 Alternator: Leece-Neville BLP2356H brushless. 12 volt 185 amperes, pad mounted.
- 10.129 Body builder wiring, back of cab at left frame, includes sealed connectors for tail/ amber turn/marker/backup/accessory power/ground and sealed connector for stop/turn.
- 10.130 Trailer brake and lights, wiring package to rear of frame; for separate trailer stop/tail/turn/marker light circuits. Includes electric trailer brake wiring with cab connections for mounting electric brake unit.
- 10.131 2-way radio wiring package, wiring with 20 amp fuse protection, includes ignition wire with 5 amp fuse, wire ends heat shrink and routed to center of header console in cab.
- 10.132 Radio, Am/FM includes multiple speakers and auxiliary input.
- 10.133 Back-up alarm, electric, 102 dBA
- 10.134 Stop, Turn, Tail and back-up lights. All LED with power module.
- 10.135 Trailer auxiliary feed circuit, for electric trailer brake wiring. Air trailer ABS; with 30 amp fuse and relay, controlled by ignition switch.
- 10.136 Auxiliary harness for auxiliary front head lights and turn signals for front plow applications. 5.0 feet long.
- 10.137 Exterior light test, pre-trip inspection which will cycle exterior lamps with the exception of the back-up lights.
- 10.138 **Starter:** Delco Remy 39MT or Paccar Brand, 12 volt, gear reduced with thermal over crank protection.
- 10.139 Indicator, low coolant level with audible alarm.
- 10.140 Headlight warning buzzer, sounds when headlight switch is on and ignition switch is in "off" position.

### Type

- 10.141 Diesel powered, single rear axle, conventional truck chassis with setback front axle. The specified chassis will be upfitted as a dump truck with de-icing equipment.
- 10.142 Provide Make and Model of unit bid in Proposal Binder under **TAB II-A.**

### GVW

- 10.143 Minimum GVW rating 37,000 pounds.
- 10.144 Provide GVW rating of unit bid under **TAB II-A.**

## **INCLUDE QUOTE IN PROPOSAL BINDER UNDER TAB II-A**

### **DIMENSION AND WHEEL BASE**

- 10.145 The cab-to-axle (C.A.) shall be approximately **94** inches and the after-frame (A.F.) shall be a minimum of **63** inches. The front axle shall be setback approximately 14 inches further than the standard conventional truck chassis and the wheel base shall be approximately 14 inches shorter than the standard conventional truck chassis as a result of the setback front axle.
- 10.146 Provide C.A. dimension of unit bid; A.F. dimension of unit bid; and Wheelbase of unit bid in Proposal Binder under **TAB II-A**.

### **TURNING RADIUS**

- 10.147 Provide the outside turning radius of the unit bid in Proposal Binder under **TAB II-A**.

### **FRONT AXLE AND SPRINGS**

- 10.148 Minimum **16,000** pound rated front axle, with heavy-duty shock absorbers, tapered front leaf springs rated at a minimum **16,000** pounds, and oil lubricated hubs. (Tapered springs preferred, but not mandatory).
- 10.149 Provide Front axle rating of unit bid and Front spring rating of unit bid in Proposal Binder under **TAB II-A**.

### **POWER STEERING**

- 10.150 Hydraulic power assist on both front wheels using either dual power steering gears or combination power steering gear and hydraulic assist cylinder.
- 10.151 Provide description of power steering bid in Proposal Binder under **TAB II-A**.

### **REAR SUSPENSION**

- 10.152 Minimum rear spring rating of 26,000 pounds with multi-leaf auxiliary.
- 10.153 Provide description of Rear spring rating of unit in Proposal Binder under **TAB II-A**.

### **REAR AXLE**

- 10.154 The rear axle shall have a minimum rated capacity of **23,000** pounds and the rear wheel hubs shall be equipped with stemco seals or approved equal. The differential shall be a single reduction, pressure lubricated unit with a gear ratio of approximately **6.83 to 1**.
- 10.155 Provide description of rear axles bid in Proposal Binder under **TAB II-A**.

### **FRAME**

- 10.156 The frame rails shall be manufacturer's heavy-duty, on/off highway type, preferably of the super single type. Frame rails reinforced by the addition of an inner or outer liner must have the liner extend from the front of the front spring rear hanger to the rear of the rear spring rear hanger (other frame and reinforcement arrangements may be considered based on application and R.B.M.). The frame bid shall provide for a minimum section modulus between 344.1 cm<sup>3</sup> (21.00 in<sup>3</sup>) and 376.9 cm<sup>3</sup> (23.00 in<sup>3</sup>), an RBM of 29,866 kg m or 2,590,000 inch pounds, and be assembled using **Huck-Spin** fasteners. In addition, the frame shall be equipped with two front tow hooks.
- 10.157 Provide Description of frame bid including configuration, type of reinforcement, type of fastener, tensile strength, section modulus, and RBM in Proposal Binder under **TAB II-A**.

### **TIRES**

- 10.158 The units shall be equipped with tires properly sized for axle loads specified. Front tires shall be a minimum size of 315/80R22.5, Goodyear G287 MSA or equivalent. Rear tires shall be a minimum size of 11R22.5 Goodyear G328 or equivalent. One assembled spare tire and wheel for each size and type shall be supplied with the unit.

**INCLUDE QUOTE IN PROPOSAL BINDER UNDER TAB II-A**

10.159 Provide Front tire size and type bid and Rear tire size and type bid in Proposal Binder under **TAB II-A**

**WHEELS**

10.160 Hub piloted disc type wheels with a white powder coat finish and nylon separators between the wheel and hub.

**COOLING SYSTEM**

10.161 The system is to be the manufacturer's largest capacity system available, equipped with a coolant filter and coolant recovery system. All hoses shall be silicone heavy-duty types with constant tension clamps and the system shall be filled with extended life coolant.

10.162 Provide description of Colling System bid in Proposal Binder under **TAB II-A**.

**TRANSMISSION**

10.163 Allison 3000 RDS P with PTO provision, configured as close ratio, 6-speed, with double overdrive; on/off highway. 4<sup>th</sup> generation controls with push button type gear selector, external transmission filter, auxiliary speed sensor lead and heavy-duty transmission cooler.

**FUEL TANK**

10.164 Minimum capacity **50** gallon aluminum tank, with step tank mounted under the cab.

10.165 Provide Fuel tank capacity bid in Proposal Binder under **TAB II-A**.

**BRAKES**

10.166 Service brake shall be the maximum size available, Meritor Q-Plus air brakes, for the axle used. The brake system shall include automatic slack adjusters, spring type safety brake with mechanical screw type release and dust shields on all wheels. The system shall include a minimum **16.5** CFM water cooled air compressor, Bendix Model AD-9 air dryer, and drain valve Bendix DV-2 with heater.

10.167 Provide Description of the brake system bid in Proposal Binder under **TAB II-A**.

**CAB EQUIPMENT**

10.168 The unit shall have an aluminum cab construction with the following equipment.

- a. Break-away type, outside heated rearview mirrors with convex spot mirrors and adjustable mount arms.
- b. Grab handles on the cab.
- c. Dual speed windshield wipers with intermittent wiper and washers.
- d. Air horn.
- e. Electric street horn.
- f. Hood tilting assist.
- g. Body upfitter wiring harness package.
- h. Cab floor pass-through for upfitter wiring.
- i. Daytime running lights.
- j. LED lights where available.
- k. Electronic 102 db back up alarm.

**INTERIOR EQUIPMENT**

10.169 The interior equipment shall include the following:

**INCLUDE QUOTE IN PROPOSAL BINDER UNDER TAB II-A**

- a. Manufacturer installed air conditioning with high output hot water heater with dual defrosters, fresh air vent with ventilation filter.
- b. Dual sun visor
- c. Cab dome light
- d. AM/FM radio.
- e. Two way radio mounting location and wiring accommodation.
- f. Instruments: speedometer, tachometer, air pressure, engine oil pressure, engine temperature, transmission temperature, voltmeter, engine hour meter and fuel level.
- g. Warning lights: air pressure, oil pressure, coolant temperature, coolant level.
- h. Manual reset circuit breakers in place of fuses.
- i. Air suspension type driver's seat.
- j. Single passenger's seat.
- k. Vinyl seat coverings.
- l. Three (3) point seat belts with retractors
- m. Neoprene floor covering.
- n. Ignition and doors keyed the same.
- o. Two (2) sets of keys.

**ALTERNATOR**

10.170 12 volt charging system capable of charging 40 amps at curb idle and maximum output of not less than 185 amps.

10.171 Provide Alternator type and output bid in Proposal Binder under **TAB II-A**.

**BATTERY**

10.172 Multiple 12 volt battery pack providing a minimum combined CCA rating of 1,800 at 0° F with a master battery disconnect switch located inside the cab. In addition there shall be remote jump-start terminals located in such a way that the battery box cover does not need to be removed to perform a jump start.

10.173 Provide Description of batteries, switch and terminals bid in Proposal Binder under **TAB II-A**.

**PAINT**

10.174 Complete unit to be painted **white** with an E-coat primer and polyurethane base coat/clear coat finish DuPont Centuri® 5000 Low VOC 3.5, or equivalent.

**RUSTPROOFING**

10.175 Complete cab, including both sides of the cab floor, treated by the Ziebart System, or approved equal. (To qualify as an approved equal, the process and material must adhere to the Ziebart Specifications).

**EXCEPTIONS AND DESCRIPTION WORKSHEET 37,000LB GVW TRUCK CHASSIS  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
10.1		
10.2		
10.3		
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10.21		

**EXCEPTIONS AND DESCRIPTION WORKSHEET 37,000LB GVW TRUCK CHASSIS  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
10.22		
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10.32		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
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**EXCEPTIONS AND DESCRIPTION WORKSHEET 37,000LB GVW TRUCK CHASSIS  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
10.43		
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**EXCEPTIONS AND DESCRIPTION WORKSHEET 37,000LB GVW TRUCK CHASSIS  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
10.63		
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**EXCEPTIONS AND DESCRIPTION WORKSHEET 37,000LB GVW TRUCK CHASSIS  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
10.84		
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**EXCEPTIONS AND DESCRIPTION WORKSHEET 37,000LB GVW TRUCK CHASSIS  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
10.105		
10.106		
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10.111		
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10.113		
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10.124		
10.125		

**EXCEPTIONS AND DESCRIPTION WORKSHEET 37,000LB GVW TRUCK CHASSIS  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
10.126		
10.127		
10.128		
10.129		
10.130		
10.131		
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10.134		
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10.141		
10.142		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
10.143		
10.144		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
10.145		
10.146		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>

**EXCEPTIONS AND DESCRIPTION WORKSHEET 37,000LB GVW TRUCK CHASSIS  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
10.147		
10.148		
10.149		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
10.150		
10.151		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
10.152		
10.153		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
10.154		
10.155		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
10.156		
10.157		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
10.158		
10.159		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
10.160		
10.161		
10.162		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
10.163		
10.164		
10.165		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
10.166		
10.167		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>

**EXCEPTIONS AND DESCRIPTION WORKSHEET 37,000LB GVW TRUCK CHASSIS  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
10.168		
10.169		
10.170		
10.171		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
10.172		
10.173		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
10.174		
10.175		

## **SECTION 11 10 FT DUMP BODY;HYDRAULIC HOOKLIFT SYSTEM; V-BOX SPREADER**

### **WARREN W450 SEVERE DUTY STAINLESS STEEL DUMP BODY**

- 11.1 Furnish and install a 10 ft long, 8 yard capacity dump body, 30" sides, 36" ends.
- 11.2 The dump body shall be constructed of 304 stainless steel 7 gauge throughout.
- 11.3 Sidewall is to be one piece with integral dirt shedding rubrail sloping 30 degrees.
- 11.4 The floor is to be one piece with cove corners, fully welded. Top rail is to be 4X4X1/4" boxed tubing.
- 11.5 Side braces shall be 3 per side 7 gauge with 6" wide vertical face. Rear corner post shall be minimum 7 gauge full depth tied to 1/4" rear apron.
- 11.6 Understructure is to be crossmemberless with one piece 1/4" thick AR400 steel floor.
- 11.7 Gusset plates for side boards to be minimum of 2 1/2" wide by 10" high front and rear. 10" high, 2.5" thick oak sideboards are to be furnished.
- 11.8 Furnish 1/2 cab shield with sufficient structural bracing, notch center of cab shield to allow clearance for hoist jib hook, install LED marker lights in cab shield per FMVSS108 with conduit.
- 11.9 Furnish a slide out ladder with grab handles on each side. Tailgate shall have 2 vertical end box braces and boxed top rail bracing, be of 6 panel type, with two full length horizontal dirt shedding braces.
- 11.10 Tailgate is to be of the double acting design with heavy duty offset top hardware and 1 1/4" pins.
- 11.11 Tailgate shall have 3/8" spreader chains and be air operated. Tailgate shall have (1) coal door with handle extended to each side. Tailgate shall have a D-ring installed to facilitate tailgate removal.
- 11.12 All tailgate hardware including coal door shall be 304 stainless steel. Cast stainless steel is not acceptable. Front headsheet to have at least 1 die formed corrugation reinforcement.
- 11.13 Body shall have full length grip strut on each side. Tarp rod located on each side full length. LED Lighting to be per FMVSS108 rubber mounted with lexan lenses and completely waterproof.
- 11.14 All wiring is to be encased in plastic wire loom laced through steel channel within the body subframe. Backup alarm to be installed with minimum 97db.
- 11.15 Body up light as required per OSHA to be installed.
- 11.16 Underbody is to be properly undercoated thoroughly. Entire body to be continuous exterior welded. Body shall be integrated to a Swaploader 10 ft subframe/A frame assembly.
- 11.17 One pair of heavy duty greasable Swaploader rollers are to be provided at rear of body.

### **TRUCK TRAILER HITCH**

- 11.18 The hitch shall be a minimum of 5/8" thick hi tensile steel plate, 34" wide X 24" high, fully K braced and bolted to truck frame, hitch shall be fully welded to frame rail at rear of

truck on both sides of plate and be reinforced with a 3" X 28" fully welded steel band to provide additional bracing of hitch to truck frame.

- 11.19 All welds to be continuous and be of AWS standards minimum. A 20 ton pintle hitch and suitable welded safety D-rings to be furnished.
- 11.20 Hitch is to be properly cleaned, prepped, primed, and painted black for long life. Hitch shall be mounted 20" from the ground to bottom of pintle loop.

#### **TRAILER WIRING**

- 11.21 A 7 way RV style electrical trailer plug is to be furnished and installed.
- 11.22 An adjustable trailer brake control shall be provided within easy reach of driver.
- 11.23 Control shall be electronic, allow various mounting angles and be easily adjustable.
- 11.24 Plug must have weatherseal boot at rear and utilize multi conductor trailer cord suitable for a 7 way plug.
- 11.25 Sealite connections to be used. Any splices are to be heat shrink type connections for maximum weather proofing.

#### **SPREADER LIGHT**

- 11.26 An LED light with cast aluminum housing to be provided and installed. Light is to be mounted on spreader and have a Weatherpack plug and protected cord for easy disconnect.
- 11.27 Light circuit is to be properly fused and wired to switch in cab. Switch should be placed in dash in a mutually agreeable location.

#### **WARNING LIGHTS**

- 11.28 Super LED oval grommet mount light system consisting of 3 lights recessed into rear corner post of dump body each side. (2) amber rear facing LED warning lights, high intensity for wide angle visibility and feature fully encapsulated electronics for long life. Lights should be capable of adjustable flash patterns and be synchronized.
- 11.29 (2) LED stop/tail/turn lights and (2) LED backup lights are to be furnished recessed into rear corner post.
- 11.30 All lighting per Federal Motor Vehicle standard 108 are to be furnished and installed.
- 11.31 Lights on dump bodies and spreader bodies shall connect to chassis via EZ Connector brand plug featuring a magnetic coupler with minimum 7 conductors of 14 gauge wire.
- 11.32 Coupler is designed to automatically disconnect in event operator fails to unplug prior to removing body from chassis.
- 11.33 Coupler shall be sealed to prevent environmental contamination of the plug.
- 11.34 A dummy storage plug shall be provided and a holder on each body to secure wire pigtailed when not in use.
- 11.35 A Whelen L31 LED amber cab beacon is to be furnished and installed on center of cab roof
- 11.36 Whelen aluminum cross bar.
- 11.37 Dump body shall have LED marker lights per FMVSS108 and be grommet mounted.
- 11.38 The V box hopper salt spreader shall have stainless steel light enclosures one each side with Super LED oval grommet mount stop, tail lights and Super LED amber warning lights.

- 11.39 All warning lights shall be wired to a dash mounted factory switch pack.
- 11.40 Furnish and install 12 V body up light in cab. Furnish and install Whelen WBUA112 self adjusting backup alarm.

#### **PLOW LIGHTS**

- 11.41 Trucklite ATL snowplow lights or equal are to be furnished and installed on upper fender/hood of chassis via stainless steel mounting brackets.
- 11.42 Brackets should be capable of distributing stress over a large surface area to minimize cracking.
- 11.43 Lights must have hi/low beam and integral turn signals with marker lights.
- 11.44 Plow lights are to be wired to switch in dash in a mutually suitable location. In addition one pair of Trucklite ATL plow lights shall be installed to a Whelen aluminum detachable cab crossbar mounted on top of cab and wired independently to switch in cab.

#### **PAINTING**

- 11.45 All steel surfaces are to be properly cleaned, prepped, epoxy primed and painted with a minimum of (2) coats of urethane paint.
- 11.46 Paint shall be PPG automotive urethane equal in quality to factory chassis finish. 304 Stainless steel components shall remain unpainted.

#### **ELECTRICAL SYSTEM**

- 11.47 All wiring is to be of automotive quality and be completely sealed from weather.
- 11.48 All splices are to be solder heat shrink and should be continuous wherever possible.
- 11.49 Wiring must be run in loom and protected with proper mounting hardware to prevent chafing.
- 11.50 Wiring is to be of suitable size and conform to ASE standards.
- 11.51 All circuits are to be protected with manually trip resettable circuit breakers or ATC fuses.
- 11.52 All fuses and circuit breakers are to be located in a protected environment with easy access.
- 11.53 Under no conditions will twisted wires, taped wires, butt connectors, exposed wires, or snap lock connectors be accepted. **(NO EXCEPTIONS)**.
- 11.54 The entire breaker panel shall be protected by a main 150 amp resettable circuit breaker that is mounted under the hood or inside the battery compartment.

#### **POLY FENDERS**

- 11.55 Rear wheel shall be covered with Fleet poly fender splash shields and be installed with Fleet mounting brackets properly secured to truck. Mudflaps are to be furnished.

#### **PRESSURE FILTER, HOSES, AND FITTINGS**

- 11.56 The hydraulic system shall be equipped with an Internorman high pressure filter on the system to prevent damage to the pump.
- 11.57 Filter shall have an indicator that will light in cab to indicate filter is operating in bypass mode. Filter housing shall accommodate a replaceable cartridge type filter.
- 11.58 A return line manifold is to be used to route return oil to tank. No T connections are to be used.

- 11.59 All fittings are to be JIC swivel type. Hose disconnects for spreader and other hydraulic bodies are to be bulkheaded at rear of truck on a steel plate mounted to hoist subframe.
- 11.60 Bulkhead fittings are to be used in order to serve as a breakaway device so as to prevent hoses from becoming damaged in case operator does not disconnect hoses prior to sliding body off. No welded fittings or black pipe are to be used.
- 11.61 Hose and fittings are to be Parker and all hose must be heavy duty jacketed designed for tight bend radius.

#### **SNOWPLOW**

- 11.62 The Plow and plow hitch will be supplied by the City of Covington and installed prior to body upfitter receiving chassis.
- 11.63 The plow will need to have hydraulics plumbed by upfitter.
- 11.64 The hydraulics shall consist of bulkhead mounted quick couplers with ½” Parker hydraulic hose located in a convenient and easily accessible location under truck bumper.
- 11.65 Hydraulic circuits provided shall be for lift double acting and angle cylinders double acting.
- 11.66 In the event the snowplow does not have a crossover cushion angle relief one will need to be provided and installed as close to the snowplow as practical.

#### **HYDRAULIC PUMP AND PTO**

- 11.67 The hydraulic pump shall be an axial piston pressure and flow compensated load-sensing type.
- 11.68 The pump shall have a displacement of 5.61 cubic inches per revolution at maximum stroke which will deliver 23.7 GPM @ 1000 engine RPM.
- 11.69 The pump shall have a minimum 2” inch suction line and ½” control drain line plumbed directly back to the reservoir.
- 11.70 The pumps compensator shall have rear facing adjustments.
- 11.71 The pump shall be rated for 5800 PSI maximum and 4800 PSI continuous.
- 11.72 The pump shall have a Din type-mounting flange and a Din 5462 8-tooth shaft.
- 11.73 The pump shall be **Force America TXV92** or prior approved equal. An **OMFB series hot shift PTO** that is mounted to the transmission shall drive the pump.
- 11.74 Provide description of Hydraulic Pump and PTO bid in Proposal Binder under **TAB II-A**.

#### **SHUT DOWN SYSTEM**

- 11.75 The system shall be designed so that when the float contacts close, the PTO will disengage and stop pump flow.
- 11.76 An enunciator in the control center will alert the driver that the PTO has been disengaged.
- 11.77 The control center will also incorporate a momentary guarded toggle switch wired to de-energize the shutdown system to facilitate diagnostics and equipment storage.
- 11.78 Provide description of shutdown system bid in Proposal Binder under **TAB II-A**.

#### **HIGH PRESSURE FILTER.**

- 11.79 There shall be a high-pressure filter plumbed between the hydraulic pump and the control valve assembly.
- 11.80 The hydraulic filter shall be a 25-micron absolute and rated for 6000 psi.
- 11.81 The filter shall be model **HP17125VG30EPUG5S2AE7050P** or prior approved equal and be equipped with a visual and electrical bypass indicator.
- 11.82 An audible and visual warning shall be displayed on the spreader LCD display.
- 11.83 Provide Description of High Pressure Filter bid in Proposal Binder under **TAB II-A.**

#### **RESERVOIR/ VALVE ENCLOSURE**

- 11.84 The hydraulic reservoir will be of 35 gallons nominal capacity.
- 11.85 The hydraulic reservoir will be constructed of 10-gauge steel and be internally baffled.
- 11.86 The valve enclosure lid will protect from both road and pressure washer spray and for ease of removal by a single person, the valve enclosure lid shall weigh less than 22 lbs . The valve enclosure lid shall be black high density polyethylene with stainless steel reinforcements.
- 11.87 The valve enclosure lid shall have molded integrated handle for ease of removal.
- 11.88 The valve enclosure lid shall be attached to the reservoir via (4) rubber straps that can be removed without the use of any tools.
- 11.89 Mounting bracket is to be designed and supplied by the reservoir supplier.
- 11.90 Mounting system should allow for a 1" frame clearance for frame obstructions. Shall be mounted in a manner as to not transmit any truck torsional loads thru the tank.
- 11.91 The enclosure will use a gasket-less passive technology. (No rubber seals, gaskets, or weather stripping.
- 11.92 The enclosure lid will be removable within seconds by one person without the use of tools.
- 11.93 All valve fittings, hose ends, filter, filler breather, sending units and any electrical connections are to be protected by enclosure cover.
- 11.94 The reservoir supplier will provide all valve fittings (JIC connections) and plumb the return line from the valve to the filter.
- 11.95 The cover will protect from both road and pressure washer spray.
- 11.96 The use of bulkhead fittings is not permitted.
- 11.97 The directional control valve must be easily accessible from all (6) sides without the use of tools.
- 11.98 Hose exit and entrance must allow for components to be mounted adjacent to the enclosure.
- 11.99 A 2" full flow brass ball valve shall be plumbed at the suction port of the tank.
- 11.100 A low oil/high temp sending unit shall be mounted in the reservoir.
- 11.101 The valve/tank assembly shall be a **Force America model "VT35G2 Valve/Tank Assembly"** or prior approved equal.
- 11.102 Provide Description of Reservoir/ Valve Enclosure bid in Proposal Binder under **TAB II-A.**

## FILTER

- 11.103 Hydraulic oil filter shall be mounted in the reservoir.
- 11.104 Hydraulic filter shall be a 16-micron absolute and rated for no less than 70 GPM.
- 11.105 Filter shall be model **TS1600251S0/ZSRE40910** or prior approved equal and include visual and electrical bypass indicators.
- 11.106 The filter cartridge shall be constructed of a synthetic media.
- 11.107 The return port in the filter shall be SAE #20 or larger.
- 11.108 A warning light shall be mounted in the cab and wired to the electrical filter bypass indicator.
- 11.109 The system shall be delivered with one spare filter element.
- 11.110 Provide Description of filter bid in Proposal Binder under **TAB II-A**.

## HYDRAULIC CONTROL VALVE

- 11.111 The hydraulic valve shall be of modular manifold design. Each hydraulic function requires an individual manifold stacked together to form the manifold base. The manifold base shall consist of an inlet section with SAE #16 inlet porting, SAE #20 outlet porting, and SAE #4 load sense porting.
- 11.112 There shall be a main system relief in the inlet section to protect the system from high pressure in case the pump compensators fail.
- 11.113 The hydraulic control valves shall be pulse-width modulated, proportionally controlled.
- 11.114 Each hydraulic valve segment shall be individually mounted to the manifold base assembly and be serviceable without removing any hydraulic hoses or any other hydraulic valve segments.
- 11.115 Each hydraulic valve segment shall have individual pressure compensation to achieve independent simultaneous operations.
- 11.116 All segments shall have heavy-duty continuous duty coils and connections shall be with Din connectors.
- 11.117 All coils shall operate at 12 VDC and require a maximum of 1400 mille-amps. Each segment shall be equipped with a manual override except for the auger and spinner sections.
- 11.118 The dump body segment shall be rated to 40 GPM, with all other segments rated to 20 GPM.
- 11.119 If a double acting hoist is utilized, the dump body segment shall be equipped with a down side relief to protect the body down function. This relief shall be set to the hoist manufacturer's specifications. Valve segments shall be **Force America Add-A-Fold® 4020** model or prior approved equal.
- 11.120 The valve is to be arranged as follows:
  - i. Hoist 21 GPM 4-way motor spool
  - ii. Jib 21 GPM 4-way motor spool
  - iii. Plow lift 21 GPM 4-way cylinder spool with 12VDC float sandwich block
  - iv. Plow angle 21 GPM 4-way cylinder spool
  - v. Prewet 7 GPM proportional 2-way cartridge
  - vi. Auger 14 GPM proportional 2-way cartridge

11.121 Provide Description of Hydraulic Control Valve bid in Proposal Binder under **TAB II-A.**

#### **HYDRAULIC LINES AND PLUMBING**

11.122 All hydraulic lines and plumbing shall be of sufficient capacity so as not to create heat or turbulence within hydraulic system. Suction line between reservoir and pump shall be a minimum of 2 in. I.D. with a minimum SAE 100-R4 rating and shall be secured on both ends via heavy duty banding straps, radiator hose clamps unacceptable. All pressure hoses, including signal sense to pump shall have swivel fittings on both ends and have a minimum SAE 100-R2 rating. Return lines and case drain shall have minimum SAE 100-R1 rating.

11.123 Hydraulic lines shall be routed to minimize interference with equipment and chassis components requiring periodic servicing. Support brackets, grommets, and tie wraps shall be provided where appropriate to protect lines from damage by abrasion, cutting or impact.

11.124 Hoses shall not be routed near exhaust manifolds pipes, bolts, sharp edges, and exhaust system to prevent wear, fatigue, or fire. Pipe fittings are not acceptable in any high-pressure line. Maximum distance between support clamps on all hydraulic lines shall be 24in.

11.125 Provide Description of Hydraulic Lines and Plumbing bid in the Proposal Binder under **TAB II-A.**

#### **CONTROL CENTER GENERAL**

11.126 Controls for all valve functions, electronic spreader control, and auxiliary lighting will be integrated into a single, self-contained control center. The control center shall be a padded armrest style that is ergonomically designed. Control center shall be modular in design for ease of installation and service, and wiring and connectors shall be color coded throughout. A sealed, pre-wired harness for all valve controls must be provided. All components must be durable for long life and trouble free operation.

11.127 The controller shall have a single joystick handle with integrated miniature joysticks. The hoist and jib control shall be fully proportional and operated with a mechanical lift-to-operate interlock for safety. There shall be a momentary button on the joystick handle to switch functionality of the single joystick between hoist and jib. The standard operation of the joystick shall be for the hoist. The single joystick handle shall accommodate up to 4 miniature dual axis thumb operated joysticks for controlling up to (8) hydraulic valve functions simultaneously. A two-step select-and-operate system is unacceptable. There will also be 2 momentary switches; one for spreader stand-by and the other for hoist/jib functionality. Controls for spreader must be located on armrest at the operator's fingertips. The control center must also include switch controls for up to 8, 15 amp auxiliary functions. Spreader display unit shall be a modular "heads up" display, mounted to truck dash in easy view of the operator. The heads up display will also provide four warning light options illuminated in red for low oil, body up, oil temp, and filter bypass.

11.128 The electronic spreader control shall be designed for precise, closed-loop application of a minimum of four granular materials and a pre-wet liquid material as a standard, and shall have the ability to control direct liquid anti-icing application separately or

simultaneously with granular application when optional equipment is selected. Each granular material shall be configurable with a unique material name, and material usage, distance traveled and time of operation for each granular material shall be recorded separately and available for download or printout from the spreader.

11.129 Spreader display unit shall be a “heads up” display, mounted within easy view of the operator. It shall be a 7” diagonal LCD with a viewing area of 3.5” X 6”, TFT type, color display. The viewing angle shall be at least +/- 45 degrees horizontal and +/- 30 degrees vertical and is to be viewed from the 6 o’clock position. The display contrast ratio shall be at least 200:1. The LCD shall have an anti-reflective coating. To avoid driver distraction the display shall have no integrated dials or pushbuttons and shall not be touch screen. The display must be protected against ingress of spilled or splashed liquids as well as dust. One USB port shall be included for purposes of programming and upgrading the firmware of the display. The operating temperature range shall be a minimum of -20°C to +70°C. The display shall automatically reduce the brightness of the LCD for nighttime operation by the use of one analog input that monitors the vehicle dash setting. The display shall communicate with the spreader control via CANBUS. The screen shall include the following spreader information:

- i. Granular application spread rate – Set application rate and actual application rate;
- ii. Prewet application spread rate – Set application rate and actual application rate
- iii. Anti-Ice application spread rate – Set application rate and actual application rate
- iv. Application rates available in standard or metric units
- v. Graphical representation of spinner set rate
- vi. Mode of spreader operation
- vii. Indication of spreader status to differentiate between spreading, standby, and blast
- viii. Plain text error messaging of active errors
- ix. Road temperature (°F or °C) – (If appropriate sensors are present on vehicle)
- x. Ambient temperature (°F or °C) – (If appropriate sensors are present on vehicle)
- xi. Current date and time
- xii. Data menu to include the following items:
- xiii. Current output readings to valve coil for the auger, spinner, prewet, and anti-ice functions
- xiv. Season cumulative spreader information including material weight and volume, distance, and time for each material and operation mode
- xv. Current cumulative spreader information including material weight and volume, distance, and time for each material and operation mode
- xvi. Error log in plain text to include the last 125 errors associated with the spreader control including the date and time of each error
- xvii. Truck battery voltage
- xviii. Truck speed (miles per hour or kilometers per hour)
- xix. All of the above items to be displayed simultaneously if so desired

11.130 The display screen shall also include four warning options to include body up, low oil, oil temp, and filter bypass with an optional audible alarm. These warnings shall be in plain English text and are to be red in color. These alarms are to be functional regardless of spreader operation and status.

- 11.131 The spreader operator interface shall include an eleven-position "Spreader" rotary switch for selecting material application rates 0-10 on-the-fly, with a built-in pushbutton for Standby operation. There shall also be an eleven-position "Spinner" rotary switch for selecting spinner speeds 0-10, which shall be customizable within the spreader calibration menus. The Spinner switch shall have a built-in pushbutton for Blast operation. Three smaller menu select encoders shall also be provided for navigating menus and selecting optional spreader features.
- 11.132 The electronic spreader control shall have a field replaceable back up battery that protects memory functions. Data memory shall be 512K RAM. For data logging, unit shall retain a minimum of four thousand (4000) events. The electronic spreader firmware shall be upgradeable by downloading files from the supplier's web site at no charge to the municipality for the life of the unit. The unit must be protected from reverse polarity, as well as be over-voltage protected by using a 10A resettable circuit breaker. The spreader control is to be capable of self-diagnostics for system errors and correction procedures. Error log shall be in plain text. Coded error messages that require an additional document to interpret are not acceptable. The log shall include the last 125 errors associated with the spreader control including the date and time of each error.
- 11.133 As standard, the control unit shall have password protection to prevent unauthorized access to the calibration parameters. The password shall be programmable.
- 11.134 The unit shall also utilize iButton technology that is capable of using a Supervisor key to provide access to the parameters without the access code.
- 11.135 As an option, iButton technology shall be available for saving and loading of calibration parameters through the use of a Calibration key.
- 11.136 The control unit shall be capable of self-calibration of auger/conveyor feed rates and require no additional timepieces to calibrate. Programming shall allow for blast function to be set one of three ways: momentary, timed or by distance traveled.
- 11.137 The unit must also be capable of spreading up to four different granular materials and ten programmable spread rates.
- 11.138 Controller shall have programmable nomenclatures for granular and pre-wet materials. Programming shall provide for automatic default to open loop in the event of a feedback sensor failure.
- 11.139 The unit must provide three operational modes: manual, open loop (ground speed only) and closed loop (ground speed with auger/conveyor feedback). Programming shall also provide for two-speed axle input as required.
- 11.140 The unit must be capable of downloading data to a serial printer or PC computer through the use of a bi-directional RS232 port when complete data is required.
- 11.141 The unit must have the ability to control four compensated valve outputs. Unit shall have a standby (pass) and blast feature as standard.
- 11.142 Unit shall provide stationary unload functions on granular, pre-wet and direct functions.
- 11.143 The unit shall also be upgradeable for event logging and temperature compensation.
- 11.144 The control shall have a programmable jump-start speed feature to provide immediate material flow at one MPH.
- 11.145 The unit must be programmable to interface with road temperature sensors, direct liquid application systems, and AVL/data management equipment. For other seasonal use,

the control must have the ability of measuring distance driven in feet or meters, using a start, stop, and reset method. It shall also be upgradeable for dust control application.

- 11.146 The control center shall be a **FORCE America CC5100-1MJ-DIN-LED-LCD** or prior approved equal.

### **HYDRAULIC HOOK HOIST MECHANISM**

#### **LIFTING CAPACITY**

- 11.147 Minimum of 24000 pounds dumping and lifting capacity of 18000 pounds with a minimum of 57 degree dump angle, with at least a 41" truck frame height.

- 11.148 Hook lift must be able to handle skid mounted containers/bodies with subframe lengths of 10 to 13 ft.

#### **HYDRAULIC SYSTEM**

- 11.149 Hydraulic system to be low pressure hydraulics.

#### **LIFT SYSTEM**

- 11.150 The complete mechanism, including hydraulics to be made in the U.S.A. with service and parts readily available.

- 11.151 Dump/load cylinders are double acting, twin cylinders, sized for unit capacity with double integral counterbalance valves. Dump/load cylinders to be a minimum 5 ½ inch bore by 39" inch stroke.

- 11.152 Telescoping jib section shall be double acting, single cylinder sized to unit capacity with a single counterbalance valve. Jib cylinder to be minimum 4 inch bore by 24 inch stroke. Jib must be capable of hydraulically sliding the body/container horizontally on the chassis, without lifting, to adjust weight distribution while remaining in the body locks.

- 11.153 Must have a positive jib safety lock valve to prevent jib operation while in the dump mode.

- 11.154 Jib hook to be capable of reaching rearward to A-frame eye by double articulating hinge points in the hoist mechanism.

- 11.155 All lift sections must lock into a common rigid full length frame to support the body/container when dumping. This must be accomplished by positive mechanical latches, which lock the mast without relying on gravity, or hydraulic locks.

#### **HOOK ASSEMBLY**

- 11.156 Hook height 54" inches from the bottom of the long sills to the bottom of the hook.

- 11.157 Hook lift must be able to pick up body or container resting on a grade 21" inch below the grade the truck is on (assuming a truck frame height of 41").

- 11.158 Jib hook to be so designed to secure body to hoist without the need of a security safety latch.

#### **BODY/CONTAINER A FRAME**

- 11.159 Constructed to allow hook lift to engage up to 60 degrees off center.

11.160 Must have integral slide through lock down plates to secure body to hook lift in dump and transport positions and to accommodate different length bodies or weight distribution changes while remaining in the body locks.

### **WARRANTY**

11.161 The complete mechanism, including hydraulics, will be factory warranted free of defects in material and workmanship for a period of thirty six months (36 months on parts, 12 months on labor) from date of installation.

11.162 Hoist must be capable of properly being mounted to a truck chassis of 84" to 102" cab to axle dimension **Hooklift System:**

### **Specifications For Spreader Liquid Application System**

#### **PLUMBING AND HARDWARE**

11.163 The system shall include a 1 ½" polypropylene quick fill port with shut off ball valve and integral camlock and cap.

11.164 The above quick fill shall be tied into the crossfeed line between the two tanks in order to fill both tanks from one port.

11.165 The pump inlet plumbing shall include a Y-strainer with a serviceable screen filter cartridge.

11.166 The inlet plumbing must also have a cleanout device that allows for the connection of a ¾" male garden hose thread for proper pump maintenance, no exceptions.

11.167 The bypass plumbing shall include a ¾" polypropylene bypass valve with adjustable pressure relief and 60 PSI pressure gauge.

11.168 All hose, which is supplied, shall be nylon reinforced PVC hose with a working pressure of no less than 200 PSI and a maximum temperature rating of 100 degrees F.

11.169 All fasteners in this kit shall be 316 stainless steel.

11.170 Provide description of Plumbing and Hardware bid in Proposal Binder under **TAB II-A.**

#### **DISCHARGE NOZZLES**

11.171 The spray system shall utilize three nozzles to apply solution on material being conveyed to the spinner.

11.172 The brass spray nozzles shall be mounted in brass nozzle bodies and shall include a three foot piece of ½" PVC pipe with nozzle body clamps for spreader chute mounting.

11.173 The discharge line must include an inline check valve to prevent siphoning and also needs to incorporate a poly quick disconnect fitting to aid in spreader removal.

#### **LIQUID TANKS VB200**

11.174 The system shall include two 100-gallon V-box style tanks constructed of UV stabilized polyethylene plastic.

- 11.175 The tanks shall have a specific gravity rating of no less than 1.9 and shall weigh approximately 80 pounds per tank.
- 11.176 The dimensions should be 23 ½" H x 19 ½" W x 90" L.
- 11.177 Each tank shall include a molded in enclosure with a polyethylene removable cover, two molded in internal baffles, a 5" vented lid with a neoprene gasket and a positive ventilation device, which is splash proof.
- 11.178 The tanks are held in place with three stainless steel mounting straps per tank.
- 11.179 All tank fittings must be replaceable polypropylene bulkhead adapters; spin weld fittings are unacceptable.
- 11.180 Provide description of Liquid Tanks bid in Proposal Binder under **TAB II-A**.

### **VB System Power Units (HCL)**

#### **General**

- 11.181 The closed loop hydraulic liquid dispensing system is designed for a constant application rate of deicing solution directly onto the granular material spread by tailgate or V-box type spreaders.
- 11.182 The system calibration and programmable application rates are accomplished by the use of a micro-processor based controller.
- 11.183 The system comes complete with a liquid spray pump, sprayer tank, tank mounting straps, discharge nozzles, closed loop flow meter that is accurate + or – 1% on flows from .5 to 10 GPM, plumbing, and hardware.
- 11.184 The hydraulic pump and motor are to be mounted in a stainless steel enclosure that is 17" W x 13" H x 6" D.
- 11.185 The enclosure must have a removable lid for easy access for maintenance and calibration, a latching mechanism that allows for a lock, and a pocket handle for easy lid removal.
- 11.186 Provide Description of VB System Power Units (HCL) bid in Proposal Binder under **TAB II-A**

#### **LIQUID PUMP**

- 11.187 Pump shall be constructed of a bronze corrosion resistant casting with special cast bronze gears.
- 11.188 The pump shall have ½" NPT ports and shall include self-lubricating bearings.
- 11.189 The pump shall be coupled to a 5 GPM hydraulic motor via a tooth and jaw style coupler and shall incorporate a stainless steel coupler guard that will also serve as a flowmeter mount.
- 11.190 This pump and motor combination shall be capable of producing 10 GPM at 1800 RPM. The entire assembly shall be mounted on a stainless steel plate in order to be mounted in the above mentioned stainless steel enclosure.
- 11.191 Provide Description of Liquid Pump bid in Proposal binder under **TAB II-A**.

**SELF-CONTAINED HEAVY DUTY 304 STAINLESS STEEL HOPPER TYPE SPREADER  
Highway Model E2020xt**

**GENERAL**

- 11.192 The spreader required under these specifications shall be of a heavy duty, self-contained, hopper-type design.
- 11.193 This unit shall consist of a 304 stainless steel body, feed conveyor, spinner disc, power drive, and all components necessary to make a complete operating unit.
- 11.194 It shall be capable of uniformly spreading sand, cinders, salt, calcium chloride, or mixtures of each up to a width of forty feet.
- 11.195 Bidders must submit with their bid complete specifications on the unit they propose to furnish.
- 11.196 Bids with exceptions to these specifications shall be considered informal.
- 11.197 All sheet steel gauges and bar stock sizes listed throughout this specification will conform to ASTM standards.
- 11.198 The use of any other standards will not be considered.

**BODY**

- 11.199 The body shall be of all welded steel construction and not less than 6.4 cubic yards struck capacity.
- 11.200 The inside length is not to be less than 10 feet.
- 11.201 The overall height of the body is to be not greater than 56".
- 11.202 The inside width to be not less than 82". The body sides shall have not less than forty-five (45) degree pitch to insure free flow of material to the conveyor.
- 11.203 The sides and endgates are to be a minimum of 12-gauge 304 stainless steel.
- 11.204 Both front and rear end gates shall be tapered 23 degrees to relieve pressure to the conveyor.
- 11.205 The body shall be rigidly constructed and the entire top of the body is to be 2-1/4" x 1-1/8" channel-formed for additional support.
- 11.206 It is also required that the lower portions of the side sheets are in contact with the sills for the entire length of the sills.
- 11.207 The body sills shall be of at least 10-gauge 304 stainless steel with longitudinal flanges supported on 3" x 1-1/2" x 7-gauge 304 stainless rectangular tubing cross sills.
- 11.208 There shall be an adequate number of 12-gauge 304 stainless steel body supports rigidly tying in the tubular cross sill with the body sides to give the highest degree of resistance to warping or twisting under heavy loads.
- 11.209 The body shall be provided with four lifting hooks, one at each corner of the body.
- 11.210 An adjustable, heavy-duty, discharge gate of the screw jack type shall be located at the body rear to properly adjust the flow of material to the spinner.
- 11.211 The maximum feed gate opening shall be 12" high x 18" wide. Heavy-duty, replaceable, "bolt-on" 304 stainless steel feed gate slides will reinforce the gate opening.
- 11.212 All necessary hardware shall be 304 stainless steel.

11.213 Provide description of the V-Box bid, including make, model, gauge and type of stainless steel used. Also list components not constructed of stainless steel in Proposal Binder under **TAB II-A**.

## **CONVEYOR**

### **#2 CONVEYOR-PINTLE**

- 11.214 The conveyor system shall be of the chain bar flight type running longitudinally with the body, feeding materials to the distributor disc.
- 11.215 The overall width of the conveyor shall be approximately 24".
- 11.216 The conveyor chain shall be pintle, 2-1/4" pitch, and heat-treated formed links with locked non-turning pins. The tensile strength shall be 21,000 pounds per strand.
- 11.217 Chain bar flights shall have a cross section of 3/8" x 1-1/2" and be welded on both the top and bottom of each bar. Each bar should be located on approximately 4-1/2" centers.
- 11.218 The conveyor gearbox shall have a 6:1 reduction and be of the spur gear type having aluminum alloy housing with a removable "bolt-on" torque arm mount.
- 11.219 Conveyor drive sprockets shall be 8-tooth, drop forged steel, keyed to a 2" diameter (minimum) C-1045 shaft mounted in sealed anti-friction bearings.
- 11.220 The drive shaft bearings shall not be bolted to the longitudinal sills but will be held into position by heavy-duty bearing retainers.
- 11.221 These retainers shall allow for ease in replacement of the bearings without the need to disassemble the conveyor chain.
- 11.222 The idler sprockets shall be 8-tooth, drop forged steel, keyed, and mounted on not less than a 1-1/2" C-1045 shaft.
- 11.223 The idler bearings shall be of an actual "take-up" design, capable of being lubricated, and mounted into a screw type, positive adjustment, anti-corrosive adjustment fixture with at least 4" of full travel for proper tension at all times.
- 11.224 Flange or pillow block bearings used for the purpose of chain adjustment will not be accepted. 12-gauge 304 stainless steel "bolt-in" replaceable conveyor chain shields, properly formed, and of sufficient strength to resist binding, shall be provided.
- 11.225 The conveyor bottom shall be a minimum of 10-gauge steel, flange type construction, and adequately braced, with 1/4" x 1-1/2" stainless bars, on 12" centers to provide rigidity to the conveyor chain floor.

### **DISTRIBUTOR SPINNER ASSEMBLY REAR MOUNT/TOP DIRECT DRIVE**

- 11.226 The distributor disc shall be 20" in diameter equipped with six removable fins designed to obtain a controlled spread of four feet to forty feet.
- 11.227 The hydraulic motor will directly couple to the distributor disc with the hydraulic motor mounted to the outside of the chute.
- 11.228 Material shall be guided from the conveyor end to the distributor disc through a fully enclosed chute. The spinner chute is to be vertically adjustable 12", providing a 20" to 32" spinner position in 3" increments, below the mounting surface.
- 11.229 The adjustment of the material spread pattern will be accomplished through two adjustable material flow deflectors within the chute.

- 11.230 These deflectors will control the placement of material on the distributor disc.
- 11.231 To control the direction and width of the material being spread, the spinner shall come equipped with baffles in the front, rear, and on both sides of the spinner.
- 11.232 These baffles are to be equipped with flexible rubber shields at each corner.
- 11.233 The shields will be designed to prevent material from exiting the corners of the spinner and striking the underside of the truck or a trailing vehicle.
- 11.234 Adjustment of the baffles shall be accomplished with out the use of tools.
- 11.235 The chute and baffles shall be no less than 12-gauge 304 stainless steel.
- 11.236 The spinner chute shall also contain a deflector baffle which, when properly positioned will allow material to be unloaded with out striking the distributor disc.
- 11.237 The spinner shall be a swing-up design, hinged at the top rear of the long sills.
- 11.238 Raising and lowering the spinner shall be accomplished through means of a winch assembly mounted to the left lower portion of the body.
- 11.239 The winch shall be manual “crank” type and be of sufficient strength to accommodate the weight of the spinner.

## **MOUNTING**

### **Swap Loader Sub-frame Mount**

- 11.240 The mounting supplied shall provide for solid mounting points onto a Swaploader subframe/ A-Frame suitable for a SL2418 hoist.
- 11.241 In addition greasable rollers shall be furnished at rear to allow for easy loading and unloading of spreader, Chute shall tilt up to accommodate this procedure.

## **POWER DRIVE**

- 11.242 To be hydraulic and having two hydraulic motors. One powering the spinner and the other the conveyor. The spinner hydraulic motor shall be mounted in accordance with the type of spinner selected.
- 11.243 The conveyor hydraulic motor shall be of the orbital, low speed, hi-torque type, integrally mounted to the conveyor gearbox.

## **OPERATION AND MAINTENANCE MANUAL**

- 11.244 Manual is to be furnished with each unit covering the operation, maintenance, and parts listing for the unit.

## **OPERATING AND MAINTENANCE SAFETY MANUAL**

- 11.245 Manual is to be furnished with each unit to promote safe operation and maintenance procedures.

## **PAINT**

- 11.246 Prior to the assembly of the unit, all components are to be individually cleaned with an iron phosphate treatment.
- 11.247 All 304 stainless steel components shall be left unpainted.

- 11.248 All non-304 stainless steel components are then prime painted.
- 11.249 Next, the non-304 components are painted with a plural-component urethane finish coat in Hi-Way black.
- 11.250 Finally, painted components are to be oven cured prior to complete assembly of the unit.

#### **OILER**

- 11.251 For lubricating each side of the conveyor chain. Two-quart capacity oil tank. Petcock turns flow of oil off and on. (Standard with # 4 belt over chain conveyor)

#### **INVERTED "V"**

- 11.252 A height adjustable 12-gauge 304 stainless steel inverted "V" steel shield supported from a minimum of two vertical positions shall be provided to reduce the load pressure on the conveyor.
- 11.253 This "V" shall be design to allow a swinging motion to eliminate material bridging while protecting the conveyor from excessive load pressure.

#### **SCREENS**

- 11.254 Sectional screens with a maximum length per section of six feet shall be hinged to a 6" x 9.0LB I-beam running longitudinally the full length of the spreader hopper.
- 11.255 The screen sections are to have 3/8" diameter rod welded to a 1/4" x 2" angle frame forming 2-3/8" x 2-1/2" openings.
- 11.256 At the outer most edge of the screens, along the side sheets of the body, the screens shall nest into the body. This nesting will lock the screens from movement.

#### **CALIBRATION**

- 11.257 The vendor shall provide personnel to assist the Divisions of Fleet Management and Street maintenance at the Dept of Public Improvements yard for final calibration of the unit using deicing materials during the entire calibration process.
- 11.258 It shall be the vendor's responsibility to ensure that all functions of the unit are fully operational including manual and automatic modes, ground speed orientation, data logging and collection and any other features the system is capable of, as installed per the specifications.

#### **BILL OF MATERIALS**

- 11.259 The unit shall be delivered complete with a comprehensive bill of materials that lists all the components used in the construction of the unit.
- 11.260 The Bill of materials shall list a description of the part, part #, and where applicable the original manufacturer's part number.

#### **MANUALS AND WIRING DIAGRAMS**

- 11.261 Two (2) copies of the parts list and service manuals along with (2) copies of the operators manuals, (2) copies of the wiring diagrams and (2) copies of the hydraulic circuit diagrams shall be provided to the City of Covington at time of delivery.

#### **WARRANTY**

- 11.262 Equipment dealer shall be open and available 24 hours a day/7 days for parts and service during any snow event. Provide equipment dealer information under **TAB II-E**.
- 11.263 Hydraulics are to be covered by a 3 year parts and labor warranty with the balance of the truck equipment one year from date of acceptance covering against defects in material or workmanship. Provide hydraulic warranty information under **TAB II-E**.

11.264 Equipment dealer shall be located within 75 miles of City of Covington in order to provide warranty, efficient parts and service, and provide for pickup and delivery of unit should any needs arise. Preference shall be given to any Equipment dealer within thirty (30) miles of Covington. Provide equipment dealer location information under **TAB II-A**.

**SPECIFICATION WORKSHEET DUMP BODY  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
11.1		
11.2		
11.3		
11.4		
11.5		
11.6		
11.7		
11.8		
11.9		
11.10		
11.11		
11.12		
11.13		
11.14		
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11.19		
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**SPECIFICATION WORKSHEET DUMP BODY  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
11.22		
11.23		
11.24		
11.25		
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**SPECIFICATION WORKSHEET DUMP BODY  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
11.43		
11.44		
11.45		
11.46		
11.47		
11.48		
11.49		
11.50		
11.51		
11.52		
11.53		<b>NO EXCEPTIONS.</b>
11.54		
11.55		
11.56		
11.57		
11.58		
11.59		
11.60		
11.61		
11.62		
11.63		

**SPECIFICATION WORKSHEET DUMP BODY  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
11.64		
11.65		
11.66		
11.67		
11.68		
11.69		
11.70		
11.71		
11.72		
11.73		
11.74		<b>PROVIDE DESCRIPTION UNDER TAB II-A.</b>
11.75		
11.76		
11.77		
11.78		<b>PROVIDE DESCRIPTION UNDER TAB II-A.</b>
11.79		
11.80		
11.81		
11.82		
11.83		<b>PROVIDE DESCRIPTION UNDER TAB II-A.</b>
11.84		

**SPECIFICATION WORKSHEET DUMP BODY  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
11.85		
11.86		
11.87		
11.88		
11.89		
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11.92		
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11.100		
11.101		
11.102		<b>PROVIDE DESCRIPTION UNDER TAB II-A.</b>
11.103		
11.104		
11.105		

**SPECIFICATION WORKSHEET DUMP BODY  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
11.106		
11.107		
11.108		
11.109		
11.110		<b>PROVIDE DESCRIPTION UNDER TAB II-A.</b>
11.111		
11.112		
11.113		
11.114		
11.115		
11.116		
11.117		
11.118		
11.119		
11.120		
11.121		<b>PROVIDE DESCRIPTION UNDER TAB II-A.</b>
11.122		
11.123		
11.124		
11.125		<b>PROVIDE DESCRIPTION UNDER TAB II-A.</b>

**SPECIFICATION WORKSHEET DUMP BODY  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
11.126		
11.127		
11.128		
11.129		
11.130		
11.131		
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11.133		
11.134		
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11.136		
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11.142		
11.143		
11.144		
11.145		
11.146		

**SPECIFICATION WORKSHEET DUMP BODY  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
11.147		
11.148		
11.149		
11.150		
11.151		
11.152		
11.153		
11.154		
11.155		
11.156		
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11.164		
11.165		
11.166		
11.167		

**SPECIFICATION WORKSHEET DUMP BODY  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
11.168		
11.169		
11.170		<b>PROVIDE DESCRIPTION UNDER TAB II-A.</b>
11.171		
11.172		
11.173		
11.174		
11.175		
11.176		
11.177		
11.178		
11.179		
11.180		<b>PROVIDE DESCRIPTION UNDER TAB II-A.</b>
11.181		
11.182		
11.183		
11.184		
11.185		
11.186		<b>PROVIDE DESCRIPTION UNDER TAB II-A.</b>
11.187		

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
11.188		
11.189		
11.190		
11.191		PROVIDE DESCRIPTION UNDER TAB II-A.
11.192		
11.193		
11.194		
11.195		
11.196		
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11.206		
11.207		
11.208		

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
11.209		
11.210		
11.211		
11.212		
11.213		<b>PROVIDE DESCRIPTION UNDER TAB II-A.</b>
11.214		
11.215		
11.216		
11.217		
11.218		
11.219		
11.220		
11.221		
11.222		
11.223		
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SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
11.230		
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11.237		
11.238		
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11.250		

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
11.251		
11.252		
11.253		
11.254		
11.255		
11.256		
11.257		
11.258		
11.259		
11.260		
11.261		
11.262		<b>PROVIDE SERVICE INFORMATION UNDER TAB II-A.</b>
11.263		<b>PROVIDE WARRANTY INFORMATION UNDER TAB II-E.</b>
11.264		<b>PROVIDE LOCATION INFORMATION UNDER TAB II-A.</b>

## **SECTION 12 2013 or newer, FORD F550 REGULAR CAB CHIPPER TRUCK**

### **Vehicle Specifications**

Vehicles bid shall be new current production models, complete with all standard equipment, unless otherwise specified and the vehicle shall meet current Department of Transportation and National Highway Traffic and Safety Administration safety requirements. Any item that is standard equipment on the vehicle bid, but not specified below, is not to be removed from the vehicle. Manufacturer's disclaimers indicate that changes in product specifications may occur during the model year and they reserve the right to do so without repercussion.

### **Engine**

- 12.1 Minimum, 300 HP @ 2,800 RPM
- 12.2 Minimum, 660 TQ @ 1,600 RPM
- 12.3 Minimum, 6.7L Diesel Engine
- 12.4 The truck shall be equipped with a heavy-duty radiator.
- 12.5 Long life engine coolant capable of protection to minus 35 degrees Fahrenheit.
- 12.6 Provide description of Description of the following in Proposal Binder under **TAB II-A:** Displacement; HP; Torque; EPA Mileage City/Highway.

### **Chassis / Powertrain / Functional**

- 12.7 The Cab to Axle shall not be less than 84 inches
- 12.8 Heavy duty pay load capacity of 19,500 GVWR
- 12.9 Power steering with an oil cooler
- 12.10 Fuel tank – 40 gallons
- 12.11 Brakes – 4 wheel disc with ABS
- 12.12 Springs – Front, coil
- 12.13 Springs – Rear, leaf
- 12.14 Parking brake – foot operated, hand release
- 12.15 Axle rear – 4.88 Limited Slip
- 12.16 Dual rear wheel
- 12.17 Tow package with T-60 pintle hook

### **Transmission**

- 12.18 The unit shall be equipped with a 6-speed automatic type transmission. A heavy - duty transmission oil cooler shall be provided.

### **Electrical**

- 12.19 Alternator - Minimum 200 amp
- 12.20 Battery – Maintenance free 750 CCA
- 12.21 Electronic brake controller
- 12.22 Upfitter switches

- 12.23 Electronic backup alarm
- 12.24 Engine block heater
- 12.25 4 head LED amber flashing light system (2) front (2) rear
- 12.26 Light package with 7 way blade trailer plug

**Exterior**

- 12.27 Regular Cab
- 12.28 Exterior - white
- 12.29 Manufacturer's standard tinted glass in all windows
- 12.30 Manual Telescopic trailer towing mirrors
- 12.31 Cargo lamp – integrated with high mount stop light
- 12.32 “L” –shaped tool box with 24” underbody boxes including: Adjustable shelves and eight
- 12.33 rope hooks locking doors with door seal and security rods
- 12.34 132” L x 66” H x 96” W chip box with cutout including: LH interior ladder box with pruner
- 12.35 shelf, 24” H swing to the side tailgate, Coal tar interior, undercoated, prime and painted white in color
- 12.36 Subframe hoist with hydraulics
- 12.37 Hose and fitting installation
- 12.38 Fuel fill mounting bracket

**Interior**

- 12.39 The unit shall have the manufacturer's standard interior that includes the following:
  - a. 40/20/40 front seat
  - b. Dome light
  - c. Fuel gauge, voltmeter, oil pressure, engine coolant temp, speedometer, tachometer & odometer
  - d. Glove box
  - e. Grab handles
  - f. Horn – dual note
  - g. Power point – front
  - h. Scuff pad – Driver and front passenger doors.
  - i. Rubber floor mats
  - j. Tilt steering wheel
  - k. Tire pressure monitoring system
  - l. Extra programmable key

**Accessories**

- 12.40 Air conditioning with fresh air temperature controlled heater and
- 12.41 windshield defrosters
- 12.42 Windshield wipers and washer with adjustable intermittent wipe

- 12.43 AM/FM radio
- 12.44 Interior mounted day/night rear view mirror
- 12.45 Two (2) wheel chock holders
- 12.46 Two (2) rubber wheel chocks

#### **Safety / Security**

- 12.47 Airbags
- 12.48 Safety Canopy side curtain air bags
- 12.49 Dual stage front seat mounted side airbags
- 12.50 Seat belts, ARS. Manual lap/shoulder belts with height adjusters,
- 12.51 pretensioners &
- 12.52 Energy management retractors on outside front positions. Include auto
- 12.53 lock feature for child seats.
- 12.54 SecuriLock Anti-theft ignition
- 12.55 SOS Post Crash Alert System
- 12.56 AdvancTrac with Roll Stability Control
- 12.57 Trailer Sway Control

#### **WARRANTY**

- 12.58 Warranty information will be used in the evaluation of each Proposal and must be included in the Proposal Binder under **TAB II-E.**
  - 5 Year/100,000 mile powertrain warranty minimum
  - 3 Year/36,00 mile Bumper to Bumper warranty minimum

**SPECIFICATION WORKSHEET FORD F550 REGULAR CAB CHIPPER TRUCK  
INCLUDE IN PROPOSA BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
12.1		
12.2		
12.3		
12.4		
12.5		
12.6		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
12.7		
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**SPECIFICATION WORKSHEET FORD F550 REGULAR CAB CHIPPER TRUCK  
INCLUDE IN PROPOSA BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
12.22		
12.23		
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**SPECIFICATION WORKSHEET FORD F550 REGULAR CAB CHIPPER TRUCK  
INCLUDE IN PROPOSA BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
12.43		
12.44		
12.45		
12.46		
12.47		
12.48		
12.49		
12.50		
12.51		
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12.56		
12.57		
12.58		<b>Provide Warranty Information under TAB II-E.</b>

**SPECIFICATION WORKSHEET FORD F550 REGULAR CAB CHIPPER TRUCK  
INCLUDE IN PROPOSA BINDER UNDER TAB II-A**

**SECTION 13 2013 OR NEWER, FORD F350 FLATBED SIGN TRUCK**

**Vehicle Specifications**

Vehicles bid shall be new current production models, complete with all standard equipment, unless otherwise specified and the vehicle shall meet current Department of Transportation and National Highway Traffic and Safety Administration safety requirements. Any item that is standard equipment on the vehicle bid, but not specified below, is not to be removed from the vehicle. Manufacturer's disclaimers indicate that changes in product specifications may occur during the model year and they reserve the right to do so without repercussion.

**Engine**

- 13.1 Minimum, 385 HP @ 5,500 RPM
- 13.2 Minimum, 6.2L-V8 FFV Engine
- 13.3 The truck shall be equipped with a heavy-duty radiator.
- 13.4 Long life engine coolant capable of protection to minus 35 degrees Fahrenheit.
- 13.5 Provide Description of engine, including Displacement; HP;Torque;EPA Mileage: City;Highway.Include description in Proposal Binder under **TAB II-A**.

**Chassis / Powertrain / Functional**

- 13.6 Minimum GVW rating of 10,000 pounds
- 13.7 The wheel base shall not be less than 142 inches
- 13.8 Heavy duty pay load capacity of 11,500 GVWR
- 13.9 Power steering with an oil cooler
- 13.10 Five (5) full size wheels and tires with all-terrain tread design
- 13.11 Trailer towing package capable of towing 12,000 pounds
- 13.12 Fuel tank – 35 gallons
- 13.13 Brakes – 4 wheel disc with ABS
- 13.14 Steering – power rack and pinion
- 13.15 Springs – Front, coil
- 13.16 Springs – Rear, leaf: two stage variable rate
- 13.17 Spare tire carrier underframe, winch type with safety catch
- 13.18 Jack – 2 Ton
- 13.19 Parking brake – foot operated, hand release
- 13.20 Axle front – snow plow prep package mono beam
- 13.21 Axle rear – 3.73 Limited Slip

**Transmission**

- 13.22 The unit shall be equipped with a 6-speed automatic type transmission with transfer case, and four wheel manual shift. A heavy duty transmission oil cooler shall be provided.

**SPECIFICATION WORKSHEET FORD F550 REGULAR CAB CHIPPER TRUCK  
INCLUDE IN PROPOSA BINDER UNDER TAB II-A**

**Electrical**

- 13.23 Alternator - Minimum 200 amp
- 13.24 Battery – Maintenance free 650 CCA
- 13.25 Electronic brake controller
- 13.26 Upfitter switches

**Exterior**

- 13.27 Regular Cab
- 13.28 Exterior - white
- 13.29 Body shall be of smooth side steel construction
- 13.30 Manufacturer's standard tinted glass in all windows
- 13.31 Manual Telescopic trailer towing mirrors
- 13.32 Cargo lamp – integrated with high mount stop light

**Interior**

- 13.33 The unit shall have the manufacturer's standard interior that includes the following:
  - a. Minimum seating for three (3)
  - b. Dome light
  - c. Fuel gauge, voltmeter, oil pressure, engine coolant temp, speedometer, tachometer & odometer.
  - d. Glove box
  - e. Grab handles
  - f. Horn – dual note
  - g. Power point - front
  - h. Scuff pad – Driver and front passenger doors.
  - i. Rubber floor mats – front and rear
  - j. Tilt steering wheel
  - k. Tire pressure monitoring system
  - l. Extra programmable key

**Accessories**

- 13.34 Air conditioning with fresh air temperature controlled heater and windshield defrosters
- 13.35 Windshield wipers and washer with adjustable intermittent wipe
- 13.36 AM/FM radio
- 13.37 Interior mounted day/night rear view mirror

**SPECIFICATION WORKSHEET FORD F550 REGULAR CAB CHIPPER TRUCK  
INCLUDE IN PROPOSA BINDER UNDER TAB II-A**

**Safety / Security**

- 13.38 Airbags
- 13.39 Safety Canopy side curtain air bags
- 13.40 Dual stage front seat mounted side airbags
- 13.41 Seat belts, ARS. Manual lap/shoulder belts with height adjusters, pretensioners & energy management retractors on outside front positions. Include auto lock feature for child seats.
- 13.42 SecuriLock Anti-theft ignition
- 13.43 SOS Post Crash Alert System
- 13.44 AdvancTrac with Roll Stability Control
- 13.45 Trailer Sway Control

**Flat bed and Accessories**

- 13.46 Knapheide PVMX-968C Platform body with BHR series bulkhead
- 13.47 Two (2) Knapheide TBAB10216A toolboxes one (1) mounted on curbside and one (1) mounted on roadside
- 13.48 VMAC underhood vehicle mounted air compressor capable of 150CFM continuous airflow with a minimum 30 gallon air receiver tank
- 13.49 Two (2) retractable hose reels equipped with minimum 50 foot of ¾ inch air hose, crows foot couplers, one (1) installed curbside and one (1) installed roadside
- 13.50 Two (2) clear LED strobe lights installed the front grill
- 13.51 Two (2) amber LED strobe light installed in the rear of the body
- 13.52 Federal signal VPX Signal Master directional lighting or equivalent mounted at the Top of the body near the cab of the chassis
- 13.53 One (1) amber LED mini light bar mounted on the center of the roof of the cab
- 13.54 Ladder rack installed on the top edge of curbside box with full length side rails. Rack to mount flush with rear and outside edge of side box, Includes a roller and tie down strap
- 13.55 Ladder rack installed on the top edge of side box with full length side rails. Rack to mount flush with rear and outside edge of roadside box, Includes a roller and tie down strap

**Warranty**

- 13.56 Warranty information will be used in the evaluation of each Proposal and must be included in the Proposal Binder under **TAB II-E.**
  - 5 Year/100,000 mile powertrain warranty minimum
  - 3 Year/36,00 mile Bumper to Bumper warranty minimum

**SPECIFICATION WORKSHEET FLATBED SIGN TRUCK  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
13.1		
13.2		
13.3		
13.4		
13.5		<b>PROVIDE DESCRIPTION UNDER TAB-A</b>
13.6		
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13.21		

**SPECIFICATION WORKSHEET FLATBED SIGN TRUCK  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
13.22		
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13.24		
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13.26		
13.27		
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**SPECIFICATION WORKSHEET FLATBED SIGN TRUCK  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
13.43		
13.44		
13.45		
13.46		
13.47		
13.48		
13.49		
13.50		
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13.52		
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13.54		
13.55		
13.56		<b>Provide Warranty Information under TAB II-E.</b>

## SECTION 14 2013 OR NEWER, FORD F550 REGULAR CAB BUCKET TRUCK

### VEHICLE SPECIFICATIONS

Vehicles bid shall be new current production models, complete with all standard equipment, unless otherwise specified and the vehicle shall meet current Department of Transportation and National Highway Traffic and Safety Administration safety requirements. Any item that is standard equipment on the vehicle bid, but not specified below, is not to be removed from the vehicle. Manufacturer's disclaimers indicate that changes in product specifications may occur during the model year and they reserve the right to do so without repercussion.

#### Engine

- 14.1 Minimum, 300 HP @ 2,800 RPM
- 14.2 Minimum, 660 TQ @ 1,600 RPM
- 14.3 Minimum, 6.7L Diesel Engine
- 14.4 The truck shall be equipped with a heavy-duty radiator.
- 14.5 Long life engine coolant capable of protection to minus 35 degrees Fahrenheit.
- 14.6 Provide Description of engine bid in Proposal Binder under **TAB II-A.**

#### Chassis / Powertrain / Functional

- 14.7 The Cab to Axle shall not be less than 84 inches
- 14.8 Heavy duty pay load capacity of 19,500 GVWR
- 14.9 Power steering with an oil cooler
- 14.10 Fuel tank – 40 gallons
- 14.11 Brakes – 4 wheel disc with ABS
- 14.12 Springs – Front, coil
- 14.13 Springs – Rear, leaf
- 14.14 Parking brake – foot operated, hand release
- 14.15 Axle front – snow plow prep package mono beam
- 14.16 Axle rear – 4.88 Limited Slip
- 14.17 Dual rear wheel

#### Transmission

- 14.18 The unit shall be equipped with a 6-speed automatic type transmission. A heavy - duty transmission oil cooler shall be provided.
- 14.19 Provide Description of transmission bid in Proposal Binder under **TAB II-A.**

#### Electrical

- 14.20 Alternator - Minimum 200 amp
- 14.21 Battery – Maintenance free 750 CCA
- 14.22 Electronic brake controller
- 14.23 Upfitter switches
- 14.24 Electronic backup alarm
- 14.25 Engine block heater

#### Exterior

- 14.26 Exterior - white
- 14.27 Body shall be of smooth side steel construction
- 14.28 Manufacturer's standard tinted glass in all windows
- 14.29 Manual Telescopic trailer towing mirrors
- 14.30 Cargo lamp – integrated with high mount stop light

## **INTERIOR**

14.31 The unit shall have the manufacturer's standard interior that includes The following:

- Minimum seating for four (4)
- Dome light
- Fuel gauge, voltmeter, oil pressure, engine coolant temp, speedometer, tachometer & odometer.
- Glove box
- Grab handles
- Horn – dual note
- Power point - front
- Scuff pad – Driver and front passenger doors.
- Rubber floor mats – front and rear
- Tilt steering wheel
- Tire pressure monitoring system
- Extra programmable key

## **CAB AND CHASSIS ACCESSORIES**

- 14.32 Air conditioning with fresh air temperature controlled heater and windshield defrosters
- 14.33 Windshield wipers and washer with adjustable intermittent wipe
- 14.34 AM/FM radio
- 14.35 Interior mounted day/night rear view mirror

## **SAFETY / SECURITY**

- 14.36 Airbags
- 14.37 Safety Canopy side curtain air bags
- 14.38 Dual stage front seat mounted side airbags
- 14.39 Seat belts, ARS. Manual lap/shoulder belts with height adjusters,
- 14.40 pretensioners & energy management retractors on outside front positions.
- 14.41 Include auto lock feature for child seats.
- 14.42 SecuriLock Anti-theft ignition
- 14.43 SOS Post Crash Alert System
- 14.44 AdvancTrac with Roll Stability Control
- 14.45 Trailer Sway Control

## **AERIAL TOWER AND ACCESSORIES**

- 14.46 Height to platform 40' minimum
- 14.47 Working Height 45' minimum
- 14.48 Horizontal side reach 27' 9" minimum
- 14.49 Standard platform capacity 300lbs. minimum
- 14.50 Fully insulated, tested and rated for ANSI category C voltages up to 46KV
- 14.51 minimum
- 14.52 Pedestal base to be center mounted at the front of cargo area, with
- 14.53 booms stowed to the rear

- 14.54 Pedestal base shall have easy access panels on each side for ease of
- 14.55 service and maintenance
- 14.56 Unit to be equipped with two (2) hydraulically operated outriggers that
- 14.57 stabilize the aerial tower in all positions at the manufacturers recommended
- 14.58 maximum rated load
- 14.59 The outriggers are to be located between the back of the cab and the front of the
- 14.59 body
- 14.59 Unit to be equipped with one (1) 24" x 30" x 42" single end hung fiberglass
- 14.60 platform, fully enclosed, with inside/outside step
- 14.60 Platform shall be equipped with a cover
- 14.61 Platform shall be capable for storage in either the work ready or dumped
- 14.62 positions with the boom fully rested
- 14.62 Hydraulic platform leveling system to keep floor of the platform parallel with the
- 14.63 ground at any boom angle
- 14.63 Hydraulic platform leveling control located at the platform to allow leveling
- 14.64 adjustment and tilting for clean out or rescue
- 14.64 360 degree continuous rotation
- 14.65 Gearbox shall have an external hex drive for manual rotation in the event of a
- 14.66 hydraulic failure
- 14.66 Unit to have single control handle at the platform with a safety trigger device
- 14.67 incorporated into handle capable of providing operation of three (3) functions.
- 14.67 Upper control group to be located on the outside of platform, and shall
- 14.68 include a dump valve and tool selector valve with a protective guard
- 14.68 Lower control group with selector to override upper controls located on the side
- 14.69 of the turret with a protective guard
- 14.69 Hydraulic system to be open center type, requiring no more than 3GPM @ 2250
- 14.70 PSI operating pressure
- 14.70 Remote start/stop controls for the truck engine located at the platform and lower
- 14.71 control station
- 14.71 Emergency 12 volt hydraulic power system remotely operated from the platform
- 14.72 and lower control station
- 14.72 Non-lube bearings shall be used at all pivot points. The rotation bearing shall be
- 14.73 the only component requiring periodic lubrication
- 14.73 All pins shall be chrome plated and bolted in place
- 14.74 Safety belt attachment on boom. Includes safety harness and lanyard
- 14.75 ANSI-A92.2 data plate installed in a conspicuous location on turret
- 14.76 Complete installation and testing with final adjustments to factory recommended
- 14.77 specifications
- 14.77 Training for proper operation and maintenance to be provided by qualified
- 14.77 personnel at our location in Covington, Ky.

**Fiberglass Service Body**

- 14.78 Body is to be fabricated with gelcoated fiberglass side boxes
- 14.79 White gelcoat side compartments to match chassis
- 14.80 Overall body width 92" minimum
- 14.81 Overall compartment length 107" minimum
- 14.82 Body compartment depth 18" minimum
- 14.83 Body compartment height 40"
- 14.84 Compartment doors are to be double laminated
- 14.85 Body substructure, cargo area floor, tail shelf and front bulkhead to be
- 14.86 constructed of aluminum, with floor and tail shelf made of a tread plate
- 14.86 Stainless steel recessed paddle handles with rotary action latches
- 14.87 All paddle handles to have an individual key lock. All locks to be keyed the same

- 14.88 Chrome plated door hinges
- 14.89 Full length aluminum drip rails above side compartment doors
- 14.90 Body bin doors to be sealed with an automotive type rubber seal on all four (4) sides
- 14.91 Cable type door stops on all vertical doors
- 14.92 Non-skid finish on compartment doors

#### **Curbside Compartmentation**

- 14.93 First vertical – Two (2) adjustable fiberglass shelves with adjustable dividers
- 14.94 Second horizontal – Single horizontal drop down door. Two (2) full length shelves with eight (8) adjustable dividers each, one (1) in center and one (1) on the bottom of the compartment
- 14.95 (1) on the bottom of the compartment
- 14.96 Third vertical – Five (5) swivel material hooks, 1-3-1

#### **Street side Compartmentation**

- 14.97 Full length through shelf installed in top of street side box, with drop down rear door for access
- 14.98 First vertical – Two (2) adjustable fiberglass shelves with adjustable dividers
- 14.99 Second horizontal – Single horizontal drop down door. Two (2) full length shelves with eight (8) adjustable dividers each, one (1) in center and one (1) on the bottom of the compartment
- 14.100 Third vertical – Five (5) swivel material hooks, 1-3-1

#### **Service Body Accessories**

- 14.101 Full width 26" minimum tread plate tail shelf installed at rear, level with cargo area floor. Tail shelf to have a 6" riser panel and side skirts which taper up from bottom rear edge of body to bottom rear edge of riser panel
- 14.102 Grab rail installed curbside at the rear outside edge of body, running from the rear body panel and tapering down to rear edge of tail shelf
- 14.103 Grip strut step assembly at curbside rear, suspended under tail shelf.
- 14.104 Assembly to consist of a rigid mounted step placed 20" above ground
- 14.105 Pintle hook/2" ball combo installed at rear with frame reinforcements and safety chain eyes. Hook mounting channel to be recessed 6" from rear edge of tail shelf. Hook to be mounted 20" from ground to throat
- 14.106 Fiberglass ladder rack installed on the top edge of side box with full length side rails. Rack to mount flush with rear and outside edge of side box, Includes a roller and tie down strap
- 14.107 Two (2) wheel chock holders, one (1) on each side under front section of tail shelf, includes drain hole in bottom rear of each holder, and a swinging type retainer bar installed over each holder opening, Includes 2 rubber wheel chocks
- 14.108 Mud flaps installed behind rear wheels

#### **Electrical Accessories**

- 14.109 All in cab controls shall be wired to factory Ford upfitters switches when possible.
- 14.110 Any controls that cannot be wired into factory switches shall be in a Dash mounted switch panel with heavy duty lighted control switches.
- 14.111 All 12 volt wiring to be color coded, protected with loom, and secured at regular intervals
- 14.112 Body lighting package to comply with all federal safety regulations for clearance, identification, side markers lights and reflectors. All lights to be LED shock mounted type
- 14.113 All body lighting connections to be terminated in a weatherproof junction box located in an accessible position at rear under body
- 14.114

- 14.115 Two (2) amber LED mini light bars installed at front of body, visible above
- 14.116 cab wired into single factory upfitter switch along with the corner strobe lights
- 14.117 Two (2) clear front corner mounted led strobe lights wired into single
- 14.118 factory upfitter switch along with the amber mini light bars
- 14.119 Two (2) amber rear corner mounted led strobe lights wired into single
- 14.120 factory upfitter switch along with the amber mini light bars
- 14.121 Heavy duty 7 blade trailer receptacle installed near pintle hook.

### **Warranty**

- 14.122 Warranty information will be used in the evaluation of each Proposal and must be included in the Proposal Binder under **TAB II-E.**

**SPECIFICATION WORKSHEET BUCKET TRUCK  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
14.1		
14.2		
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14.6		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
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14.19		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
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**SPECIFICATION WORKSHEET BUCKET TRUCK  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
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**SPECIFICATION WORKSHEET BUCKET TRUCK  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
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SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
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SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
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14.122		<b>Provide Warranty Information under TAB II-E.</b>

**SECTION 15** 2013 or newer, FORD F550 REGULAR CAB, MECHANIC TRUCK

**Engine**

- 15.1 Minimum, 300 HP @ 2,800 RPM
- 15.2 Minimum, 660 TQ @ 1,600 RPM
- 15.3 Minimum, 6.7L Diesel Engine
- 15.4 The truck shall be equipped with a heavy-duty radiator.
- 15.5 Long life engine coolant capable of protection to minus 35 degrees Fahrenheit.
- 15.6 Provide Description of engine bid in Proposal Binder under **TAB II-A**, including the following: Displacement; HP; Torque; EPA Mileage: City/Highway.

**Chassis / Powertrain / Functional**

- 15.7 The Cab to Axle shall not be less than 84 inches
- 15.8 Heavy duty pay load capacity of 19,500 GVWR minimum
- 15.9 Power steering with an oil cooler
- 15.10 Fuel tank – 40 gallons
- 15.11 Brakes – 4 wheel disc with ABS
- 15.12 Springs – Front, coil
- 15.13 Springs – Rear, leaf
- 15.14 Parking brake – foot operated, hand release
- 15.15 Axle front – snow plow prep package mono beam
- 15.16 Axle rear – 4.88 Limited Slip
- 15.17 Dual rear wheel

**Transmission**

- 15.18 The unit shall be equipped with a 6-speed automatic type transmission. A heavy duty transmission oil cooler shall be provided.

**Electrical**

- 15.19 Alternator - Minimum 200 amp
- 15.20 Battery – Maintenance free 750 CCA
- 15.21 Electronic brake controller
- 15.22 Upfitter switches
- 15.23 Electronic backup alarm
- 15.24 Engine block heater

**Exterior**

- 15.25 Exterior - white
- 15.26 Body shall be of smooth side steel construction
- 15.27 Manufacturer's standard tinted glass in all windows
- 15.28 Manual Telescopic trailer towing mirrors
- 15.29 Cargo lamp – integrated with high mount stop light

**Interior**

- 15.30 The unit shall have the manufacturer's standard interior that includes the following:
  - Minimum seating for three (3)
    - Dome light
    - Fuel gauge, voltmeter, oil pressure, engine coolant temp, speedometer, tachometer & odometer.
    - Glove box
    - Grab handles

- Horn – dual note
- Power point - front
- Scuff pad – Driver and front passenger doors.
- Rubber floor mats – front and rear
- Tilt steering wheel
- Tire pressure monitoring system
- Extra programmable key

#### **Cab and Chassis Accessories**

- 15.31 Air conditioning with fresh air temperature controlled heater and windshield defrosters
- 15.32 Windshield wipers and washer with adjustable intermittent wipe
- 15.33 AM/FM radio
- 15.34 Interior mounted day/night rear view mirror

#### **Safety / Security**

- 15.35 Airbags
- 15.36 Safety Canopy side curtain air bags
- 15.37 Dual stage front seat mounted side airbags
- 15.38 Seat belts, ARS. Manual lap/shoulder belts with height adjusters, pretensioners & energy management retractors on outside front positions. Include auto lock feature for child seats.
- 15.39 SecuriLock Anti-theft ignition
- 15.40 SOS Post Crash Alert System
- 15.41 AdvancTrac with Roll Stability Control
- 15.42 Trailer Sway Control

#### **Crane and Accessories**

- 15.43 Liftmoore model 3200REE-15 or equivalent
- 15.44 Installed at curbside rear on top of body, with boom stowed to the front over curbside compartments
- 15.45 Minimum 10,000 ft./lb. rating at 3200 lbs. capacity at a 3' radius
- 15.46 360 degree continuous hydraulic rotation
- 15.47 Minimum Hydraulic boom extension from 7' to 11' with manual extension to 15'
- 15.48 Minimum hydraulic boom elevation from -5 degrees to +75 degrees
- 15.49 Integral 12 volt DC hydraulic pump reservoir
- 15.50 Minimum 1600 capacity 12 volt DC planetary gear winch with anti two-block feature
- 15.51 Minimum ¼" x 62' galvanized winch aircraft type cable with 2-part traveling block
- 15.52 Electric pendant style removable remote control with minimum 18' cable
- 15.53 Load limit sensor on boom elevation cylinder for overload protection
- 15.54 Stellar manual pull-out curbside outrigger assembly or equivalent
- 15.55 #20861 Front boom rest for storage above curbside side box or equivalent
- 15.56 Crane owner's manual
- 15.57 Standard white paint
- 15.58 Complete installation and testing of crane and accessories
- 15.59 Training for proper operation and maintenance to be provided by qualified personnel at our location in Covington, Ky.

#### **Crane Service Body**

- 15.60 Knapheide model 6132DLR-38J heavy duty crane body, 132" long, 94" wide, with

- 22" deep, 44" high side compartments, suitable for mounting on a 19,500 lb. GVWR dual rear wheel chassis having an 84" C.A. dimension or equivalent
- 15.61 Heavy duty torsion box understructure with tubular cross sills and shear plate rear mounting
  - 15.62 Heavy duty reinforced crane mounting structure in curbside rear compartment with pedestal isolated from side box
  - 15.63 A-40 galvaneal side compartments and double panel compartment doors
  - 15.64 1/8" treadplate floor, compartment tops and cargo walls
  - 15.65 60" tall curbside front vertical gas bottle compartment with retainer and vents
  - 15.66 Crane body package "C" with shelves, drawers, and cabinets or equivalent
  - 15.67 Double overlapping doors on front vertical and horizontal compartments
  - 15.68 Stainless steel 3-point T-handle paddle latches
  - 15.69 Double spring over center door closures
  - 15.70 Automotive type neoprene door seals
  - 15.71 Stainless steel heavy duty continuous door hinges
  - 15.72 Complete undercoating
  - 15.73 Four (4) 6000lb. capacity D-ring tie downs in cargo floor
  - 15.74 Two (2) chrome grab handles
  - 15.75 Bolt-on slam action tailgate
  - 15.76 38J heavy duty rear bumper with work surface, through compartment, vise bracket, and hitch receiver
  - 15.77 LED style FMVSS 108 lighting package with wiring harness
  - 15.78 Rear lights recessed in aluminum light boxes
  - 15.79 Interior compartment lights in each compartment
  - 15.80 Three (3) Ecco LED swivel work lights installed on body
  - 15.81 Two (2) white LED strobes mounted in the front grill
  - 15.82 Two amber LED strobes
  - 15.83 Dimensions TMC-12/1800N pure sine wave inverter with reelcraft retractable cord reel and GFI receptacle or equivalent
  - 15.84 Ingersoll Rand 2475F13GH self-contained air compressor with electric start and separate battery, installed in cargo area
  - 15.85 Miller Bobcat 225 welder/generator with cables, electrode holder, ground clamp, electric start and separate battery, and cover, installed on top side of box
  - 15.86 Reese style removable combination ball / pintle hook assembly
  - 15.87 Fire extinguisher, first aid kit, and triangle reflector kit
  - 15.88 7 way blade rear trailer receptacle
  - 15.89 Rear mud flaps
  - 15.90 Light gray mar – resistant compartment interiors
  - 15.91 Finish paint exterior standard white to match chassis cab
  - 15.92 Linex spray-on cargo bed liner applied to cargo floor, side walls, and compartment tops
  - 15.93 Right rear chassis spring buildup as required
  - 15.94 Complete installation of body and accessories
  - 15.95 Ziebart rustproof chassis cab and body understructure

### **WARRANTY**

- 15.97 Warranty information will be used in the evaluation of each Proposal and must be included in the Proposal Binder under **TAB II-E**.

**SPECIFICATION WORKSHEET 2016 FORD F550 REGULAR CAB MECHANIC TRUCK  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
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15.6		<b>PROVIDE DESCRIPTION UNDER TAB II-A</b>
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**SPECIFICATION WORKSHEET 2016 FORD F550 REGULAR CAB MECHANIC TRUCK  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
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**SPECIFICATION WORKSHEET 2016 FORD F550 REGULAR CAB MECHANIC TRUCK  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
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**SPECIFICATION WORKSHEET 2016 FORD F550 REGULAR CAB MECHANIC TRUCK  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
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**SPECIFICATION WORKSHEET 2016 FORD F550 REGULAR CAB MECHANIC TRUCK  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
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15.97		<b>Provide Warranty Information In Proposal Binder under TAB II-E</b>

**SECTION 16 FORD F350, REGULAR CAB, OR SIMILAR FIRE DEPARTMENT VEHICLE  
ENGINE**

- 16.1 Minimum, 440 HP @ 2,800 RPM
- 16.2 Minimum 860 ft./tq. @ 1600 RPM
- 16.3 Minimum, 6.7L Diesel Engine
- 16.4 Block Heater
- 16.5 The truck shall be equipped with a heavy-duty radiator.
- 16.6 Long life engine coolant capable of protection to minus 35 degrees Fahrenheit.
- 16.7 Provide Description of engine bid: Displacement;HP; Torque;EPA Mileage;City;Highway in the Proposal Binder under **TAB II-A**.

**Chassis / Powertrain / Functional**

- 16.8 Minimum GVW rating of 10,000 pounds
- 16.9 The wheel base shall not be less than 142 inches
- 16.10 Heavy duty pay load capacity of 11,500 GVWR
- 16.11 Power steering with an oil cooler
- 16.12 Five (5) full size wheels and tires with all-terrain tread design
- 16.13 Trailer towing package capable of towing 12,000 pounds
- 16.14 Fuel tank – 35 gallons
- 16.15 Brakes – 4 wheel disc with ABS
- 16.16 Steering – power rack and pinion
- 16.17 Springs – Front, coil
- 16.18 Springs – Rear, leaf: two stage variable rate
- 16.19 Spare tire carrier underframe, winch type with safety catch
- 16.20 Jack – 2 Ton
- 16.21 Parking brake – foot operated, hand release
- 16.22 Axle front – snow plow prep package mono beam
- 16.23 Axle rear – 3.73 Limited Slip

**Transmission**

- 16.24 The unit shall be equipped with a 6-speed automatic type transmission with transfer case, and four wheel manual shift. A heavy duty transmission oil cooler shall be provided.
- 16.25 Provide description of transmission bid in the Proposal Binder under **TAB II-A**.

**Electrical**

- 16.26 Alternator - Minimum 200 amp
- 16.27 Battery – Maintenance free 650 CCA
- 16.28 Electronic brake controller
- 16.29 Upfitter switches

**Exterior**

- 16.30 Crew Cab
- 16.31 6.5' Bed
- 16.32 Exterior - white
- 16.33 Body shall be of smooth side steel construction
- 16.34 Tailgate – removable with key lock
- 16.35 Manufacturer's standard tinted glass in all windows

- 16.36 Heavy duty rear step bumper
- 16.37 Manual Telescopic trailer towing mirrors
- 16.38 Spray in bed-liner
- 16.39 Minimum four (4) cargo tie downs
- 16.40 Cargo lamp – integrated with high mount stop light

### **Interior**

16.41 The unit shall have the manufacturer’s standard interior that includes the following:

- Minimum seating for four (4)
- Dome light
- Fuel gauge, voltmeter, oil pressure, engine coolant temp, speedometer tachometer & odometer.
- Glove box
- Grab handles
- Horn – dual note
- Power point - front
- Scuff pad – Driver and front passenger doors.
- Rubber floor mats – front and rear
- Tilt steering wheel
- Tire pressure monitoring system
- Extra programmable key

### **Accessories**

- 16.42 Air conditioning with fresh air temperature controlled heater and windshield defrosters
- 16.43 Windshield wipers and washer with adjustable intermittent wipe
- 16.44 AM/FM radio
- 16.45 Interior mounted day/night rear view mirror

### **Safety / Security**

- 16.46 Airbags
- 16.47 Safety Canopy side curtain air bags
- 16.48 Dual stage front seat mounted side airbags
- 16.49 Seat belts, ARS. Manual lap/shoulder belts with height adjusters, pre-tensioners & energy management retractors on outside front positions. Include auto lock feature for child seats.
- 16.50 SecuriLock Anti-theft ignition
- 16.51 SOS Post Crash Alert System
- 16.52 AdvancTrac with Roll Stability Control
- 16.53 Trailer Sway Control

### **Warranty**

- 16.54 5 Year/100,000 mile powertrain warranty minimum
- 16.55 3 Year/36,000 mile Bumper to Bumper warranty minimum

Please provide the terms of the manufacturer’s standard warranty in the Proposal Binder under **TAB II-E.**

**SPECIFICATION WORKSHEET FORD F350 FIRE DEPARTMENT VEHICLE  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
16.1		
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16.7		<b>PROVIDE DESCRIPTION UNDER TAB II-A.</b>
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**SPECIFICATION WORKSHEET FORD F350 FIRE DEPARTMENT VEHICLE  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

SPEC #	MEETS Y/N	DESCRIPTION/EXCEPTION
16.22		
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**SPECIFICATION WORKSHEET FORD F350 FIRE DEPARTMENT VEHICLE  
INCLUDE IN PROPOSAL BINDER UNDER TAB II-A**

<b>SPEC #</b>	<b>MEETS Y/N</b>	<b>DESCRIPTION/EXCEPTION</b>
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16.54		<b>Provide Warranty Information under TAB II-E.</b>
16.55		<b>Provide Warranty Information under TAB II-E.</b>

**INCLUDE QUOTE IN PROPOSAL BINDER UNDER TAB II-A**

**SECTION 16.1.1 F350 FIRE DEPARTMENT, AFTERMARKET ACCESSORIES**

**16.1.1** Red LED roof mounted light bar

**16.1.2** Tonneau Cover

**16.1.3** Two (2) clear front corner led strobe lights

**16.1.4** Two (2) Red taillight mounted strobe lights ( strobe lights must be clear if installed behind a red lens)

**AFTERMARKET ACCESSORIES PRICE WORKSHEET**

<b>SPEC #</b>	<b>EQUIPMENT COST</b>	<b>INSTALLATION COST</b>	<b>TOTAL COST</b>
<b>16.1.1</b>			
<b>16.1.2</b>			
<b>16.1.3</b>			
<b>16.1.4</b>			

**ACKNOWLEDGEMENT**

Pursuant to and in accordance with the above stated Request for Quotation, the undersigned hereby declares that they have examined the RFQ documents and specifications for the item(s) listed below. The undersigned proposes and agrees, if their quotation is accepted to furnish the item(s) submitted below, including delivery to destination stated on opening page in accordance with the delivery schedule indicated below and according to the prices, products/services information submitted.

SUBMITTED BY: \_\_\_\_\_

DATE SUBMITTED: \_\_\_\_\_