State of Illinois

Department of Transportation

Bureau of Business Services

**Specifications and Questionnaire for a Detachable Gooseneck, Three-Axle Trailer**

**Load capacity of 100,000 Lbs.**

July 2019

This specification and questionnaire covers a detachable gooseneck trailer for use by the Department of Transportation to transport heavy highway maintenance equipment. The Department of Transportation is specifying acceptable units by required equipment and accessories as outlined below.

Each bidder shall submit with their bid **two sets** of descriptive literature and specifications describing **all** the equipment proposed. This information shall be clearly marked to indicate the make, model, accessories, and exceptions proposed to be furnished.

Bidders quoting on equipment must submit with their bid written proof of the following:

* The manufacturer of the equipment proposed has been actively involved in the manufacture of the equipment called for in the bidfor a period of not less than 5 years.
* Parts and service for the equipment proposed are readily available within the State of Illinois.

It is the responsibility of each bidder to complete and return this questionnaire with the bid.

**Unless otherwise specified, the proposed equipment shall be complete in all parts and ready for immediate use upon delivery.**

**Bidders are advised to carefully read these specifications as changes have been made since the last solicitation issue.**

**Proposed with this Bid:**

|  |  |
| --- | --- |
| Make: |       |
| Model: |       |
| Manufactured by: |       |
| Bidder: |       |
|       |
| Contact name: |       |
| Telephone: |       |
| Email: |       |

The Illinois Department of Transportation reserves the right to waive minor informalities, deficiencies or technical variances which by their nature are restrictive to a given manufacturer, if in its’ judgement, it would be in the best interest of the State to do so and it would not prejudice the rights of other bidders.

Serviceability will be a factor in award. Successful bidder shall either be able to provide service after purchase or shall indicate other qualified service facilities able to service equipment, within a reasonable period of time at agency locations. Bidder shall provide documentation and enumerating service locations. A Review of the bidder's ability to provide prompt parts and service to the State of Illinois and in particular to the delivery location, will be considered in determining award.

Bids will only be accepted from established manufacturers or their authorized dealers. Any dealer submitting a bid hereby guarantees that it is an authorized dealer of the manufacturer and that the manufacturer has agreed to supply the dealer with all quantities of products required by the dealer in fulfillment of its obligations under any resultant contract with the State. Bidder must submit authorized dealer letter upon request.

**Warranty:**

Manufacturers’ standard warranty shall be provided. **Bidder shall attach copies of warranty with bid****. Warranty shall commence at the Illinois Department of Transportation in-service date.** If any equipment fails to conform to the warranties during the applicable warranty period, the Vendor or Manufacturer will adjust, repair or replace the equipment at no charge to the Department as soon as possible upon notice from the Department. Equipment shall be repaired on-site and will be performed at no additional cost to the Department.

The Vendor may provide or perform warranty service at a dealer location within the Districts geographic region if on-site repair is not possible. Vendor shall facilitate pickup and delivery of equipment at Vendor's cost if warranty repair(s) are made off-site during the warranty period. The contract Vendor is responsible for any failure of their allied or sub-contractors’ fulfillment of said warranties. Failure to provide this service shall result in a “Complaint to Vendor” that could affect future bid awards.

**Delivery:**

It will be the responsibility of the successful vendor to guarantee delivery within the quoted time and to require allied manufacturers or suppliers to complete the installation of auxiliary equipment in accordance with the quoted delivery time.

Failure to comply with the quoted delivery time because of delays resulting from the inability of suppliers of allied equipment such as bodies, snowplows, spreaders, etc., may be reason to refuse to consider similar items from those suppliers on future bids.

All equipment provided by the Vendor and the sub-contractor(s) shall be fully operational when delivery is made. Any noted defects at the time of delivery shall be addressed by Vendor in the first 30 days of in-service.

Bidder/Vendor acknowledges the requirements above. Yes [ ]  No [ ]

|  |  |  |  |
| --- | --- | --- | --- |
| Bidder/Vendor Initials: |       | Date: |       |

**Note: If the equipment proposed exceeds the minimums called for in the specification please do not mark NO. Mark YES and explain with a short comment on how it exceeds.**

**The trailer shall include the following standard or optional accessories and equipment:**

**Trailer Configuration:**

Drop deck type (lowboy) with hydraulically removable gooseneck including three (3) axles with twelve (12) pneumatic tires.

|  |  |
| --- | --- |
| Number of tires:  |       |
| Number of axles:  |       |

The first pair or tandem axles shall be fixed, air suspended axles.

Complies: Yes [ ]  No [ ]

The trailers third axle shall be air lift capable functioning as a deployable tag axle.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| Describe axle configuration:  |       |
|       |
|       |

The overall deck width of the trailer shall be approximately 102”.

Complies: Yes [ ]  No [ ]

|  |  |  |
| --- | --- | --- |
| Deck width:  |       | Inches |

Platform length: From the back of gooseneck to rear of drop deck (clear deck load space) shall not be less than 24’. The weight of the trailer equipped as specified shall be approximately 21,000 pounds.

|  |  |  |
| --- | --- | --- |
| Deck length:  |       | Feet |
| Trailer weight equipped as specified:  |       | Lbs. |

**The trailer's capacity shall be calculated as:**

The ability to transport 100,000 lbs. concentrated load in 12'-0" at 60 mph.

Complies: Yes [ ]  No [ ]

|  |  |  |
| --- | --- | --- |
| List rating:  |       | Lbs. |
|       | Ft. in length @  |       | MPH |

This trailer shall comply with all current Federal and State Safety Standards.

Complies: Yes [ ]  No [ ]

**Gooseneck:**

The gooseneck shall be height adjustable, accepting 5th wheel heights from 48" to 51".

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| If No Describe:  |       |

The pin shall be located approximately 15” from the front edge of the gooseneck.

Complies: Yes [ ]  No [ ]

The gooseneck shall be an extended style and provide a minimum of 102" swing clearance.

|  |  |  |
| --- | --- | --- |
| Swing clearance:  |       | Inches |

The gooseneck shall be hydraulically operated.

Complies: Yes [ ]  No [ ]

The gooseneck support shall be self-contained.

Complies: Yes [ ]  No [ ]

**Deck:**

Cambered deck must provide a maximum transport height of 24" when loaded.

|  |  |  |
| --- | --- | --- |
| Loaded deck height:  |       | Inches |

**Note:** To comply with specifications, height must be measured when coupled to the truck, and loaded to capacity. The trailer must also provide adequate ground clearance for normal highway operations.

Deck beams and structural members shall be constructed of a minimum T-1 (100,000 psi.) “I” beam steel.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| Describe steel beams:  |       |
|       |

The outside deck beams shall include flange reinforcement.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| If No Describe:  |       |
|       |
|       |

Trailer shall have an open center load deck with a minimum 2" nominal Apitong hardwood floor material (no substitution) drilled and bolted to structural members. The center shall allow for additional plank storage. (“Cat Walks" or raised center beams do not meet these requirements). The floor of the well shall be “heavy duty” expanded metal for drainage.

Complies: Yes [ ]  No [ ]

|  |  |  |
| --- | --- | --- |
| Deck material:  |       |  |
| Deck thickness:  |       | Inches |
| Describe method of attachment:  |       |
|       |

A knuckle/boom well, including the final three (3) deck cross-members and the cross-members at the rear axles shall be notched to provide “well” type storage.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| Describe cross-member configuration:  |       |
|       |
|       |

The area above the rear axles shall be “open grated” to store such items as cribbing, chains, and binders to ensure they will drain and not retain water.

Complies: Yes [ ]  No [ ]

A minimum of 12 heavy-duty outriggers per side shall be provided, mounted on a maximum of 24" centers for the length on both sides of the deck. The outriggers shall be swinging, pin-able style.

Complies: Yes [ ]  No [ ]

|  |  |  |
| --- | --- | --- |
| Quantity provided:  |       |  |
| Describe outriggers:  |       |
|       |

Two (one for each side) extra heavy-duty or double outriggers shall be provided for the front of the deck at the loading ramps. The single outriggers shall be easily removable and capable of supporting loads at the trailer's capacity.

Complies: Yes [ ]  No [ ]

Front loading ramps shall be a minimum 16" wide. They shall be double hinged and include welded on grouser bars to provide traction for track type equipment. A full width center ramp with apitong hardwood insert shall also be provided.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| If No Describe:  |       |
|       |
|       |

Wheel bolsters/openings shall be reinforced, load bearing diamond tread plate over all three (3) axles.

Complies: Yes [ ]  No [ ]

Each wheel bolster shall have a side mounted reinforced "D" ring tie down loop.

Complies: Yes [ ]  No [ ]

A minimum of six (6) reinforced “Bent” lashing tie down loops shall be evenly positioned between the outriggers on each side of the trailer.

Complies: Yes [ ]  No [ ]

Two (2) additional reinforced tie down loops shall be mounted to the top frame rails of the gooseneck.

Complies: Yes [ ]  No [ ]

**Axles:**

Three (3) axles with a minimum capacity of 25,000 lbs. each shall be provided and spaced not less than 54" or more than 60” apart.

|  |  |  |
| --- | --- | --- |
| Number of axles:  |       |  |
| Axle spacing:  |       | Inches center to center |

The first two axles shall be fixed, air suspended. The third axle shall be an air operated deployable tag axle.

Complies: Yes [ ]  No [ ]

|  |  |  |
| --- | --- | --- |
| Axle rating:  |       | Lbs. |

The axles shall be mounted to the trailer frame in such a way as to reduce twist and strain on trailer when road irregularities are encountered.

Complies: Yes [ ]  No [ ]

The trailer shall have adjustable air-ride height control for all axles including an operator controlled dump valve. The controls shall be located for convenient operator access.

Complies: Yes [ ]  No [ ]

**Hydraulic Attachment/Detachment:**

The gooseneck attachment and detachment must be accomplished entirely at full capacity using a tractor mounted hydraulic "wet pack."

Complies: Yes [ ]  No [ ]

Non-ground pressure style lifting device shall be provided.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| Describe lifting method:  |       |
|       |

**Tires and Wheels:**

Tires shall be tubeless radial 255/70R22.5H. These tires shall be rated to meet or exceed the GVWR of the axles and suspension.

|  |  |
| --- | --- |
| Size: |       |
| Load rating: |       |
| Tread type: |       |
| Manufacturer: |       |

Wheels shall be steel, hub piloted, disc type.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| Size: |       |

One spare tire and wheel provided and mounted according to manufacturer’s standard.

Complies: Yes [ ]  No [ ]

Oil type wheel bearing seals shall be provided in all hubs.

Complies: Yes [ ]  No [ ]

Hub assemblies shall provide for visual indication of oil level.

Complies: Yes [ ]  No [ ]

One of the right wheels shall also be equipped with a hub-odometer, designed for the size of wheel and tire proposed to be furnished. The hub-odometer hub assembly shall also allow easy oil level checking.

Complies: Yes [ ]  No [ ]

Component:

|  |  |
| --- | --- |
| Make:  |       |
| Model: |       |

Each set of dual wheels shall include a Crossfire Dual Tire Pressure equalization system (or IDOT approved equal) to equalize tire pressure between the dual tires. This feature shall also provide isolation should one tire experience a 10 psi loss.

Complies: Yes [ ]  No [ ]

Component:

|  |  |
| --- | --- |
| Make:  |       |
| Model: |       |

Rear anti-sail mud flaps behind the third axle shall be provided.

Complies: Yes [ ]  No [ ]

**Brakes:**

The axles shall be equipped with ABS air brakes to be of a size and design that will provide adequate control for a full capacity load under all circumstances. The parking brake shall be spring design.

Complies: Yes [ ]  No [ ]

The brakes provided shall comply with all State and Federal regulations for trailers of the capacity specified.

Complies: Yes [ ]  No [ ]

A minimum 8’-0” long, bright colored, coiled air lines at the gooseneck.

Complies: Yes [ ]  No [ ]

One standard air brake connector kit shall be provided with each trailer. The glad hands shall be Meritor Wabco part number 952 201 018 0 filtered units or IDOT approved equal

Complies: Yes [ ]  No [ ]

**Wiring and Lights:**

**Electrical System:**

Type - 12 volt

Complies: Yes [ ]  No [ ]

**Lights (LED):**

Combination Rear Tail, Turn and Stop Signal:

Type - Dual combination Class A, sealed, shock mounted, LED 4” minimum Truck Lite Super 44 or equal.

Location - Rear of trailer, recessed for protection

LensColor - Red

Complies: Yes [ ]  No [ ]

**License Plate Lamp:**

Type- Sealed LED Truck-Lite Model 15 series or equal.

LensColor - Clear

Complies: Yes [ ]  No [ ]

**Rear Identification Lights (3-Bar):**

Type-Shock mounted LED Model 15 or 35 Truck-Lite ID bar series or equal.

Location - Rear of trailer, recessed for protection

Lens Color - Red

Complies: Yes [ ]  No [ ]

**Clearance Lights:**

Type - LED Truck-Lite Model 15, 18 or 21 series or equal

Location - As required

Complies: Yes [ ]  No [ ]

**Lights and Reflectors:**

Must meet all federal and SAE regulations and comply with the Illinois Law and Vehicle Code in effect at the time of manufacture.

Complies: Yes [ ]  No [ ]

DOT approved reflective conspicuity tape shall run entire length of trailer.

Complies: [ ]  Yes [ ]  No

**Wiring:**

Wiring shall be complete 12 volt with sealed modular wiring harness. All connections shall be in a weatherproof junction box. Quick-disconnected splices, soldered and covered with shrink-wrap are not acceptable.

All lights, wiring, and junction boxes shall combine to form a sealed waterproof system, Truck-Lite's 50800 series or equal for commercial vehicles utilizing standard production wiring harnesses where practical.

Component:

|  |  |
| --- | --- |
| Make:  |       |
| Model: |       |

All lamp connections and all junction box post connections shall be treated with a corrosion inhibitor.

Complies: Yes [ ]  No [ ]

All wiring passing through metal shall be protected by formed rubber grommets.

Complies: Yes [ ]  No [ ]

**Note**: Use of garden or other styles of hose as grommeting is ***not*** acceptable.

All wiring not in conduit shall be secured utilizing nylon or coated clamps bolted to the frame at 18" minimum spacing.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| If NO, please explain:  |       |
|       |

**Truck Connection for Lighting and Electrical:**

Type – Heavy all-weather cord with 7-way connector, utilizing round pins and sockets, SAE/ATA approved, plug portion installed on trailer with lead long enough to allow for turning movements of the trailer. The pin portion or socket is provided with the truck installation.

Complies: Yes [ ]  No [ ]

Amber strobe lights shall be included in the tail-plates behind the rear axle located in the far outside corners to be operator activated when the trailer is to be used to transport over-width loads.

Complies: Yes [ ]  No [ ]

Component:

|  |  |
| --- | --- |
| Make:  |       |
| Model: |       |

**Other Equipment and Accessories:**

Removable “Wide Load” signs and holder brackets shall be included in the tail-plates behind the rear axle.

Complies: Yes [ ]  No [ ]

Standard tool kit shall be supplied, if required.

Complies: [ ]  Yes [ ]  No [ ]  Not required

**Paint/Finish:**

All parts normally painted shall be cleaned, prepped, primed and painted or powder coated manufacturer’s standard color.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| Describe Paint/Finish: |       |

**Additional Accessories:**

The following optional equipment shall only be quoted when specifically called for in the **“Bid”**.

**Gooseneck Upper Deck: [ ]**

The unit shall include upper deck for gooseneck to haul additional items. It shall include tie down rails on both sides.

Complies: Yes [ ]  No [ ]

**Power Pack: [ ]**

Lifting capability shall be provided by a minimum 12 horsepower gasoline engine with a selector valve for switching to wet kit hydraulics.

Complies: Yes [ ]  No [ ]

This unit must be capable of operation at full trailer capacity and capable of adapting to a tractor mounted "wet pack."

Complies: Yes [ ]  No [ ]

Hydraulic reservoir shall be as required by manufacturer.

|  |  |  |
| --- | --- | --- |
| Capacity:  |       | Gallons |

**Full Coverage rear deck: [ ]**

This option shall provide a full load bearing reinforced coverage rear deck with a reduced approach angle for loading wheeled or drum equipped equipment.

Complies: Yes [ ]  No [ ]

**Manuals:**

Two (2) copies of all operators’ manuals, parts lists, and warranty information shall be provided at time of delivery to each district receiving one or more units.

Complies: Yes [ ]  No [ ]

One (1) set of “Service or Shop” Manuals shall be provided to each delivery location.

Complies: Yes [ ]  No [ ]

***Note:*** The manuals, parts lists, and service or shop manuals listed above may be furnished on CD/DVD or Flash drive in lieu of paper.

Instruction must be performed by qualified factory or dealer personnel covering the operation and routine service and maintenance of the equipment shall be provided upon delivery. The training shall be for all personnel in the assigned headquarters location of the equipment.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| Describe Training:  |       |
|       |
|       |

***Note:*** This is not a sales call. Training not meeting IDOT expectations will be cause to generate a “Complaint-to-Vendor”.

**Requirements Covering Items Detailed Above:**

The trailer shall be furnished complete with all safety components that are required by the current Federal Safety Standards for the size trailer proposed.

Complies: Yes [ ]  No [ ]

All equipment cataloged as standard or safety related shall be furnished and in place and shall be included in the purchase price of the unit. Any parts, tools, and/or accessories not specifically called for but required for proper operation shall be provided.

Complies: Yes [ ]  No [ ]

The component parts of the unit shall be of proper size and design to safely withstand maximum stresses imposed by a capacity load, and the manufacturers rated loads for chains and bearings shall not be exceeded when the unit is loaded with such loads.

Complies: Yes [ ]  No [ ]

Standard tool kits shall be supplied if required.

Complies: Yes [ ]  No [ ]  [ ]  Not required

Full coverage warranty for a minimum of **12 months** shall be provided. Bidder shall attach copy of warranty with bid.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| Describe warranty:  |       |

Transportation to complete any warranty repair required for the equipment and/or specified accessories or options shall be the responsibility of the bidder or dealer acting as his agent.

Complies: Yes [ ]  No [ ]

**Repair Parts and Service:**

Since continuous operation of this trailer is of the utmost importance and many times of an emergency nature, it is necessary that the successful bidder be in a position to render prompt parts and service within the State of Illinois.

|  |  |
| --- | --- |
| List sources for parts and service :  |       |
|       |
|       |
|       |

The vendor or manufacturer of the unit which is considered for award shall, at the request of the State of Illinois, demonstrate this equipment within the receiving District in the State of Illinois in the presence of authorized state personnel to prove out any features which may be in question.

Complies: Yes [ ]  No [ ]

**Delivery:**

This equipment is to be delivered in first-class operating condition with acceptance subject to Department of Transportation inspection and approval.

Complies: Yes [ ]  No [ ]

The trailer shall be delivered oiled, greased, serviced and ready for operation.

Complies: Yes [ ]  No [ ]

|  |  |
| --- | --- |
| If NO to any portion, please explain:  |       |
|       |
|       |

**Bid Package:**

If not quoting in BidBuy, bidders will need to send two copies of each of the following with their bid response.

a) Specification Questionnaire

b) Descriptive Literature