



STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
TECHNICAL SPECIFICATIONS FOR

TRUCK, CAB & CHASSIS, 35,000# GVWR WITH HERBICIDE SPRAYER

SERIES NO. 269-000
EQUIPMENT SPECIFICATION 269-000J

REV. 3/19/2024

GENERAL

This specification sets forth the minimum requirements for a truck, cab & chassis, 35,000# GVWR with herbicide sprayer.

Equipment shall be new, a production model of current manufacture, and must meet all state and Federal safety and emission standards in effect at time of order.

REPRESENTATIVE SPECIFICATIONS

An International MV607 chassis and a 1600 gallon herbicide spray system, with appropriate options and standard features, was used to develop these specifications and establish equivalency evaluation criteria.

Equipment of similar style, type, character, quality, features, and purpose conforming to the following detailed requirements/specifications will be considered. For evaluation purposes, bidders proposing an exception/equivalent option/feature to those specified herein, may be required to provide manufacturer/product information (catalogue sheets, detailed specifications, pictures, etc.). This information will be evaluated against the minimum requirements of this specification. Proposed submittals that are determined not to be equivalent to the established criteria will be rejected.

LOUISIANA AUTHORIZED DEALER(S)

Proposed item(s) must be from a manufacturer who has at least one (1) authorized dealer **within the State of Louisiana** where parts and service can be obtained. Authorized dealer(s) must have properly trained technicians plus all other resources necessary to perform warranty and repair services in complete accordance with the manufacturer's requirements. A letter certifying the ability to meet this requirement, inclusive of the company name(s) and address(es) of the Louisiana authorized dealer(s), should be supplied with the bid submittal and may be required prior to award.

DELIVERY & ACCEPTANCE

Vendor shall perform a test run of each unit to verify that all features and capabilities are operating properly at time of delivery. Documentation of testing may be required prior to acceptance by the Department.

Unit(s) must be delivered completely assembled (including all components, accessories, etc.) and ready for operation without any additional preparation including, but not limited to, ensuring all fluid levels are at their full mark, fuel tank(s) is full, all necessary lubrication has been performed, etc. A Louisiana safety inspection shall be performed on each vehicle prior to delivery and a Louisiana safety inspection sticker properly affixed.

Any unit delivered under this specification is subject to rejection if there is evidence of poor workmanship, by either the vendor or the original manufacturer. Noted defects and/or nonconformance findings may



be corrected by the vendor. Corrections must be completed and approved by the Equipment Engineer or his representative prior to final acceptance.

Unit(s) shall be delivered “**on the ground;**” DOTD will not unload nor provide any unloading equipment to the vendor/delivery driver in order to offload the unit(s).

NOTE: The Department will have space available for equipment to be unloaded.

EACH UNIT MUST BE SUPPLIED WITH THE FOLLOWING DOCUMENTATION AT TIME OF DELIVERY:

1. Notarized Bill of Sale
2. Original Certificate of Origin (MSO), (no photocopy)
3. Dealer's Service Policy
4. Owner's/Operator's Manual(s)
 - a. One (1) Hardcopy
 - b. One (1) Digital Copy
 - i. Acceptable Formats: PDF delivered via USB “Flash Drive”, or E-mail
5. Service Manual(s)
 - a. One (1) Hardcopy
 - b. One (1) Digital Copy
 - i. Acceptable Formats: PDF delivered via USB “Flash Drive”, or E-mail
6. Build Sheet(s) – as applicable
 - a. One (1) Hardcopy
 - b. Build sheets should be written in plain language (not company specific codes) and include, at a minimum, all standard & optional features of the delivered unit.

NOTE: Invoices will not be processed for payment until the unit(s) have been inspected by the Equipment Engineer or their representative and deemed in compliance with the specifications.

BID SUBMITTALS

Any additions, deletions, or variations from the specifications should be noted in the "Bidder's Exceptions" page of this specification. Exceptions that are noted to be less than a minimum requirement will not be accepted.

Any additions, deletions or variations from the manufacturer's standard published specifications should be noted on the "Bidder's Exceptions" page of this specification. Unless otherwise noted, any items appearing in the manufacturer's standard published specifications furnished by the Bidder are assumed to be included in the Bidder's submittal.

Bidder should note on their submittal any installation(s) to the equipment that will be performed by the vendor instead of the manufacturer.

Failure to note any specification exceptions, manufacturer specification alterations, and/or vendor installations prior to award may result in rejection of the equipment at the time of delivery.

THE NUMBER OF DELIVERY DAYS AFTER RECEIPT OF ORDER (ARO) MAY BE USED AS A FACTOR IN THE AWARD.

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NOTICE TO BIDDERS

Bidder should review the detailed "Equipment Specification" completely and respond to the compliance question at the end of each section by marking "X", in the space provided, for "Yes" or "No". Mark "Yes" to indicate that the equipment bid meets the section exactly as specified. Mark "No" if there are exceptions to any part of that section. Exceptions/deviations to any part of the specification are to be detailed on the "Bidder's Exceptions" page of this specification.

IN ORDER TO BE CONSIDERED FOR AWARD, BIDDER SHOULD RETURN THIS SPECIFICATION, COMPLETED IN FULL, WITH THEIR BID SUBMITTAL.

Note: All values listed below are minimums unless noted otherwise.

1. Cab & Chassis

1.1. GVWR: 35,000 lbs.

Comply: ___ Yes ___ No

1.2. Frame: 2,000,000 RBM (Resisting Bending Moment) - Bidder should list section modulus and yield strength below

Section Modulus: _____ Yield Strength: _____

Comply: ___ Yes ___ No

1.3. Cab & Axle Positions

1.3.1. Front axle: For the purposes of this solicitation, set-forward-axle (SFA) is considered equal to set-back-axle (SBA); however, SBA is the preferred option

1.3.2. Wheelbase: 187"

1.3.3. Cab to Axle (CA):120" clear*

1.3.4. Values given here are minimums. Truck vendor and Herbicide Sprayer manufacturer shall coordinate in selecting a wheelbase and cab to axle dimension that is compatible with the required body length and ensures proper load distribution to the axles in accordance with manufacturer and industry practice.

Comply: ___ Yes ___ No

1.4. Front Bumper

1.4.1. Full width all-steel front bumper

1.4.2. Two (2) frame mounted tow hooks, one on each frame rail

Comply: ___ Yes ___ No

1.5. Cab

1.5.1. Conventional day cab

1.5.2. Tinted safety glass

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- 1.5.3. Full width exterior cab mounted sun shade with integral clearance lights
- 1.5.4. Cab entry handles, driver & passenger side
- 1.5.5. Outside mirrors, driver & passenger side
 - 1.5.5.1. Power adjustable
 - 1.5.5.2. 90 sq. in. minimum
 - 1.5.5.3. Heated with integrated turn signals
 - 1.5.5.4. Two (2) adjustable spot mirrors, one (1) per outside mirror
- 1.5.6. Two (2) roof mounted air horns & one (1) standard electric horn
- 1.5.7. Air ride: driver and passenger seat, cab suspension
- 1.5.8. Driver and Passenger seat to be high back with lumbar support
- 1.5.9. Manufacturer's highest level sound insulation package
- 1.5.10. Wing dash, if available
- 1.5.11. Gauge package including the following gauges:
 - 1.5.11.1. Air cleaner restriction
 - 1.5.11.2. Coolant temperature
 - 1.5.11.3. DEF only DEF is required to meet emission standards
 - 1.5.11.4. Fuel
 - 1.5.11.5. Oil pressure
 - 1.5.11.6. Primary and secondary air pressure
 - 1.5.11.7. Speedometer
 - 1.5.11.8. Tachometer
 - 1.5.11.9. Voltmeter
 - 1.5.11.10. Gear indicator
 - 1.5.11.11. Odometer
 - 1.5.11.12. Total engine hours
 - 1.5.11.13. Trip hours
 - 1.5.11.14. Trip odometer
 - 1.5.11.15. Rear axle oil temperature
 - 1.5.11.16. Auto transmission oil temperature
 - 1.5.11.17. Engine oil temperature
- 1.5.12. Dual sun visors
- 1.5.13. Two (2) cup holders, integral to dash
- 1.5.14. 3-point seat belt for each seat. All seat belt webbing must be manufacturer's high visibility color (Orange, Red, Green, or Yellow).
- 1.5.15. Climate control, including air conditioning, heater, & defroster
- 1.5.16. Power windows & power door locks
- 1.5.17. Tilting and telescoping steering wheel

Comply: ___ Yes ___ No

1.6. Engine

- 1.6.1. 8.9 L, electronic diesel, turbocharged, liquid cooled, 6-cylinder inline configuration
- 1.6.2. 330 HP, 1000 FT-LBS
- 1.6.3. Engine must include Compression/Turbo Exhaust brake

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- 1.6.4. Emission system must comply with emission standards in effect as of date manufactured
- 1.6.5. DEF tank to be located on driver's side next to fuel tank
- 1.6.6. DEF tank must have a minimum capacity of 7 gallons
- 1.6.7. DEF tank protected with stainless steel or similar cover to prevent corrosion
- 1.6.8. Engine must be biodiesel compatible
- 1.6.9. Horizontal exhaust after-treatment (DPF) with vertical tail pipe with tailpipe guard

Comply: Yes No

1.7. Fuel System

- 1.7.1. Fuel tank shall be metal with drain and a 50-gallon minimum capacity; tank should be located on driver's side; tank straps Stainless Steel to prevent corrosion
- 1.7.2. Davco fuel processor or equal - mounted to outside of frame
- 1.7.3. Visual element change indication that is integral to and non-removable from unit (to be located on driver's side near fuel tank)
- 1.7.4. Water-in-fuel sensor with indicator in cab
- 1.7.5. Entire fuel system must be biodiesel compatible

Comply: Yes No

1.8. Transmission

- 1.8.1. Automatic, Allison 3500 RDS or equal
- 1.8.2. Must include PTO aperture
- 1.8.3. To be filled with manufacturer approved synthetic lubricants
- 1.8.4. Transmission Control Module to be mounted in Cab to protect from corrosion
- 1.8.5. Transmission Cooler lines to be made of Stainless Steel

Comply: Yes No

1.9. Gearing, Speed Governing & Performance

- 1.9.1. Top gear road speed shall be electronically governed at 75 mph maximum
- 1.9.2. Cruise control speed shall be governed at 72 mph maximum
- 1.9.3. Transmission and axle ratio shall be selected for performance to be optimized at 65 while permitting truck to operate up to 75 MPH on highway without excessive engine speed.

Comply: Yes No

1.10. PTO

- 1.10.1. PTO must have pump which meets the requirements of the spray unit that will be mounted to truck
- 1.10.2. PTO must be air shifted and compatible with specified transmission
- 1.10.3. PTO must be activated by dash mounted factory upfitter switch

Comply: Yes No

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1.11. Front Axle

- 1.11.1. 12,000 lbs. GAWR @ ground capacity (6,000 lbs. capacity per spring @ ground)
- 1.11.2. Shock absorbers
- 1.11.3. Integral power steering
- 1.11.4. Wet-type, visible cap axle seals, Stemco or equal
- 1.11.5. Axle should be filled with manufacturer approved synthetic lubricants

Comply: Yes No

1.12. Rear Axle

- 1.12.1. Single speed, 23,000 lbs. GAWR @ ground capacity
- 1.12.2. Air-ride suspension
- 1.12.3. Shock absorbers
- 1.12.4. Axle should be filled with manufacturer approved synthetic lubricants

Comply: Yes No

1.13. Brakes

- 1.13.1. Full air disc brake system, ABS brake system with traction control
- 1.13.2. 18 CFM air compressor
- 1.13.3. Bendix AD-9SI air dryer or equal
- 1.13.4. Advanced driver assistance system, Bendix Wingman[®] or approved equal with the following:
 - 1.13.4.1. Collision mitigation system
 - 1.13.4.2. Stationary vehicle braking system
 - 1.13.4.3. Lane departure warning system

Comply: Yes No

1.14. Wheels & Tires

- 1.14.1. Hub piloted steel disc, size - 8.25 X 22.5
- 1.14.2. First line, first quality tires, size – 11R22.5
- 1.14.3. Front tires - single highway tread
- 1.14.4. Rear tires - dual on/off road tread
- 1.14.5. Load ratings to be compatible with GVWR
- 1.14.6. Spare tire, jack, & lug wrench are NOT required

Comply: Yes No

1.15. Electrical System & Lights

- 1.15.1. 12-volt system
- 1.15.2. 165-amp brushless alternator
- 1.15.3. Batteries with 2200 CCA combined, Maintenance free, Top Threaded Stud
- 1.15.4. Aluminum battery box with plastic cover
- 1.15.5. Remote jump start studs, with tethered protective caps, located outside of the battery box
- 1.15.6. Battery disconnect switch, located inside cab, near driver's seat, similar to the below picture.

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1.15.7. Battery Discharge protection

1.15.8. Four (4) dash mounted, rocker-style, factory installed, body circuit switches (upfitter switches) for simple on/off functions for accessories (PTO, warning lights, etc.; one (1) assigned to activate the PTO; one (1) assigned to operate the flashing warning lights; two (2) blank to be assigned by DOTD personnel.

1.15.9. All exterior lighting should be LED

1.15.10. Headlights:

1.15.10.1. Automatic daytime running lights

1.15.10.2. Automatic on if windshield wipers are turned on

1.15.10.3. Automatic on with low ambient light levels

1.15.10.4. Warning buzzer/alarm when headlight switch is on and ignition switch is in off position

1.15.11. Cruise control

1.15.12. Intermittent windshield wipers with washers

1.15.13. Self-cancelling directional signals

1.15.14. Backup alarm, 97 dba

1.15.15. AM/FM/WB radio with auxiliary front input, Bluetooth/hands free function and steering wheel controls

1.15.16. Two (2) 12V accessory power outlets with covers, mounted in dash (for cell phone chargers, GPS devices, etc.)

Comply: ___ Yes ___ No

1.16. Paint

1.16.1. Cab: Manufacturer's standard white

1.16.2. Chassis: Manufacturer's standard black

1.16.3. Cab and Frame treated for Corrosion Mitigation which will include: all access holes created before primer coat application, weld through epoxy sealant applied, Intercoat® Chemguard or equivalent coating applied to all corrosion prone areas, Line-X® or equivalent applied to floor inside cab, corrosion resistant frame rails

Comply: ___ Yes ___ No

1.17. FMCSA/DOT Mandated Safety Items

1.17.1. One (1) UL listed, 5 B:C rated, or higher, fire extinguisher securely mounted in cab

1.17.2. One (1) set of three (3) bidirectional reflective triangles conforming to FMVSS No. 125

1.17.3. At least one (1) spare fuse for each type/size used in the truck

Comply: ___ Yes ___ No

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Note: The truck vendor and attached equipment manufacturer/vendor must mutually resolve any unexpected truck/attached equipment component conflict with a sound and functional solution as a requirement of this specification.

2. Herbicide Sprayer & Safety Lighting/Striping

2.1. The sprayer unit shall consist of stainless steel nozzles capable of applying chemicals for the following vegetation management applications:

2.1.1. Tank mix application of selective type herbicides or foliar applications to control brush made across the right-of-way up to a width of 25'.

2.1.2. Spot application of herbicide to shoulder edges of pavement, curb and gutters, signs, culvert ends, bridge abutments, and narrow or wide medians.

Comply: ___ Yes ___ No

2.2. Spray Head

2.2.1. The unit shall be equipped with one (1) boomless air induction spray head mounted on the right front corner of the front bumper, and be easily transferrable to the left for spraying medians.

2.2.2. The spray head shall have a minimum of 5 individual sections with no less than 15 nozzles located in a fixed position, supplying a spray swath of 25' at 10 MPH to insure a streak-free swath that does not alter due to wear.

2.2.3. Swath widths of 5', 5', 5', 5', and 5' will be achieved with a combination of flat fan and straight stream nozzles.

2.2.4. Flat fan nozzles must be attached to brass or stainless steel (plastic is not acceptable) air injectors to provide large droplets and reduce drift.

2.2.5. The spray head shall be up/down tiltable from the cab for embankment spraying. A 2 1/2" liquid-filled pressure gauge shall be mounted in view of the operator to insure easy monitoring of the system.

2.2.6. The spray head pedestal shall be mounted on an adjustable break socket to avoid damage to the spray head if contacted by an obstruction.

2.2.7. All tips and/or plumbing (except hoses) shall be stainless steel or brass.

2.2.8. No plastic or ceramic tips will be allowed.

2.2.9. The tips in the spray head shall be sized for an application rate of 25 GPA @ 10 MPH.

Comply: ___ Yes ___ No

2.3. Fittings

2.3.1. All fittings shall be brass or stainless steel, or black schedule 80 polypropylene.

2.3.2. No galvanized or nylon fittings shall be acceptable.

2.3.3. All nozzles shall be stainless steel or brass and machined to provide the various spray patterns as required to distribute the spray solutions in the most efficient and safe manner possible.

Comply: ___ Yes ___ No

2.4. Water Tank

2.4.1. The tank shall be an elliptical leg shaped 1600 gallon capacity unit.

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- 2.4.2. The tank shall be UV stabilized black polyethylene.
- 2.4.3. The tank shall be secured to a chassis mounted flatbed with four (4) heavy duty, galvanized tubular steel bands.
- 2.4.4. The base plate for each band shall be constructed with bolts that pass through the flatbed deck and bed cross member.
- 2.4.5. The bands shall provide adequate support for continuous off road operation.
- 2.4.6. The tank lid shall be a minimum 16" diameter, positive locking type with an air vent to prevent damage from excessive pressures or vacuum.
- 2.4.7. 1 ½" ball valve installed at each end of the tank as close as possible to the tank bottom. Suction shall be closest to the cab (lower end) and return on the opposite end to ensure proper agitation.
- 2.4.8. The hose between the tank and the water pump shall be 1 ½" non-collapsible suction type.

Comply: ___Yes ___No

2.5. Truck Bed & Tank Support

- 2.5.1. 1" X 3/16" welded steel grating. Minimum load capacity 1,029 lbs. per square foot when placed over a 2' span. Floor joists on approximately 18" centers, steel stake pockets. A 2.0' X 5.0' X 10 gauge galvanized plate is to be used in each wheel well area, to be installed under the grating with the leading edge 2.0' forward of centerline of axle. Mud flap brackets are to be a permanent part of the body. Entire body to be hot dipped galvanized after fabrication. Sprayed on type coatings are not acceptable.
- 2.5.2. The bed shall be a minimum of 8' X 16' 6" dimensions.
- 2.5.3. The bed shall have a headache rack and contain safety lighting as per the attached safety lighting requirements section.
- 2.5.4. The bed shall have all LED stop and running lights and reflectors installed per Federal highway specifications.
- 2.5.5. The bed shall have mud flaps.
- 2.5.6. Minor surfaces of the bed that cannot be galvanized shall have two (2) coats of primer, two (2) coats of industrial black paint.

Comply: ___Yes ___No

2.6. Sign Panel

- 2.6.1. The sign panel size shall be 30" vertical X 60" horizontal.
- 2.6.2. The sign panel shall be constructed of aluminum and shall be adequately framed and braced for transporting and when erected for operation.
- 2.6.3. There shall be twenty-five (25) PAR 46 LED amber lamps arranged and wired to produce the following indications when flashing. The lamp shall be 12-volt and shall have visors that extend at least 5" beyond the lamp face and that encompass 180 degrees or more of the lamp circumference.
- 2.6.4. The lamps shall provide a minimum legibility distance of one mile.
- 2.6.5. Maximum overall height shall not exceed 10'
- 2.6.6. The sign panel shall be powered by the truck electrical system.
- 2.6.7. The sign controller shall be an electronic unit mounted in the cab. The control panel of the controller shall have an on-off switch selector, selector for various display modes, and a manual "bright-dim" lamp intensity adjustment. All active components shall be solid state.

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Comply: Yes No

2.7. Spray Pump System

- 2.7.1. The main system shall have a hydraulically driven centrifugal pump (Hypro 9303S-HM1C or equivalent) powered by a pressure and flow compensated load sensing hydraulic system.
- 2.7.2. The system will be sized to drive the water pump and spray system in excess of the required flows and pressures when the truck engine is operated at 1,000 RPM.
- 2.7.3. The hydraulic pump must be a variable displacement piston pump driven "live" from the truck transmission.
- 2.7.4. The "on-off" control switches for sprayer pump will be located in the cab control center.
- 2.7.5. Sprayer pump speed control will be a manually adjustable flow control valve installed between hydraulic pump and the drive motor.
- 2.7.6. A 2 1/2" liquid filled pressure gauge for easy viewing to adjust water pump speed control.
- 2.7.7. A hydraulic reservoir with 30 gallons capacity will be included and have a suction strainer, return filter, sight gage, filler breather and cut-off ball valve in the return suction lines.
- 2.7.8. Mounting location for the reservoir will be below the flat bed in an area that allows easy access.

Comply: Yes No

2.8. Quick Fill System

- 2.8.1. There shall be a 2" air gap quick fill system mounted in the top of the tank lid.
- 2.8.2. A 2" ball valve and "Y" strainer with a male quick disconnect and dust cap shall be installed on the right hand side of the truck bed.
- 2.8.3. A 2" X 25' quick disconnect fire hose with standard 2 1/2" fire hydrant female swivel shall be mounted by the fill system for easy access.

Comply: Yes No

2.9. Fresh Water Supply

- 2.9.1. A fresh water supply source (9 gallon polyethylene tank)
- 2.9.2. 3/4" cut off valve shall be truck mounted with the cut off valve under the truck bed.
- 2.9.3. This supply is for washing hands and to rinse equipment when loading chemical

Comply: Yes No

2.10. Plumbing and Filters

- 2.10.1. All hoses (except where stated) shall be of 150 PSI operating pressure.
- 2.10.2. All plumbing and filters shall be brass, stainless or polypropylene construction, sized and placed to complete the operation of the unit.
- 2.10.3. A 1 1/2" 20-mesh strainer shall be placed between the tank and spray pump and a 1" 40-mesh strainer shall be placed on the pressure side of the pump.
- 2.10.4. Placement of plumbing and filters shall allow easy access for cleaning and repairs.

Comply: Yes No

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2.11. Application Control System (without injection)

- 2.11.1. The computerized control system shall be a Mid-Tech, Tee Jet TASC 6100 or approved equivalent.
- 2.11.2. The system shall contain a flow meter, auto range valve and speed sensing equipment necessary to automatically maintain the preset gallons per acre.
- 2.11.3. It shall be mounted on a swivel device to allow operation from either the driver or passenger side of the vehicle.
- 2.11.4. It shall automatically control gallons per acre (boomless air induction heads, flexible boom extension, or handgun) within a range of plus or minus 2% of the preprogrammed rates.
 - 2.11.4.1. System Display
 - 2.11.4.1.1. Vehicle actual and simulated test speed – up to 15 MPH
 - 2.11.4.1.2. Distance traveled in feet and miles
 - 2.11.4.1.3. Total area sprayed in acres and the width of each spray section
 - 2.11.4.2. Control Console
 - 2.11.4.2.1. The console shall be no greater in size than 9" X 16".
 - 2.11.4.2.2. It shall contain all switches for the spray head tilt (up-down) and swing (in-out), beacon lights, water pump on/off, boom valves
 - 2.11.4.2.3. The console shall control a 5 valve TeeJet electronic ball valve manifold or equivalent
 - 2.11.4.2.4. No solenoid valve manifold system will be accepted
 - 2.11.4.2.5. No hard wiring to the console shall be accepted.
 - 2.11.4.2.6. All wiring shall be adequate to safely carry maximum amperage required by the system units.
 - 2.11.4.2.7. All wiring shall be of a standard code and color for each model unit.
 - 2.11.4.2.8. All wiring schematics shall be identical from vehicle to vehicle.
 - 2.11.4.2.9. All fuses shall be centrally located in the cab and identified as to what each one controls.

Comply: ___Yes ___No

2.12. Chemical Jug Emptying Tank

- 2.12.1. The unit shall be equipped with one (1) 30 gallon or smaller polyethylene cone-type chemical holding tank with a 16" opening lid.
- 2.12.2. The tank shall be mounted into the bed as close to the edge as to allow jug emptying from ground level.
- 2.12.3. The chemical tank shall be plumbed for easy draining of chemical into the suction line before the centrifugal pump.
- 2.12.4. The tank shall have a shut off valve as close to the bottom of the tank as practical to close off flow once the chemical is added to the main tank.
- 2.12.5. The tank shall include a Chem - Blade Original or equivalent to open, empty and rinse 2.5gal chemical jugs.
- 2.12.6. The rinse system plumbing shall be plumbed to receive a garden hose for fresh water to rinse the jugs.

Comply: ___Yes ___No

2.13. Handgun and Hose Reel

- 2.13.1. The unit shall be equipped with one manual hose reel (Hanney 15141718 or equal), with a minimum of 100' of ½" X 600 PSI spray hose and with a #43 spraying systems handgun or equivalent.

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2.13.2. The hose reel shall be equipped with a shut-off valve.

Comply: ___ Yes ___ No

2.14. Safety Lighting and Striping

- 2.14.1. Truck must be delivered with warning lights & high visibility, reflective conspicuity tape installed in accordance with these specifications and the illustrated layout below
- 2.14.2. Warning lights shall be installed by an upfitter who is experienced in and regularly engages in the installation of automotive electronics & warning lights. Installer shall use vehicle & lighting manufacturers' guidance along with industry best practices and techniques to ensure that lights are installed in a safe and neat manner
- 2.14.3. All wiring and cables should be logically routed, secured, and protected with convoluted loom where possible. Rubber grommets shall be used where wires and cables penetrate any cab panels, body panels, or chassis structure. All cab and body penetrations shall be adequately sealed to prevent water from entering.
- 2.14.4. All warning lights must be controlled by a single in-cab, dash-mounted upfitter switch. The switch must be labeled to read "Warning Lights".
- 2.14.5. Installer must contact the DOTD Equipment Section prior to programming to confirm intended flash pattern(s).
- 2.14.6. Mid-size Light Bars - Three (3) mid-size (24") light bars that satisfy the following requirements, mounted to the cab protector (**See label #1 in picture below**)
 - 2.14.6.1. SoundOff Signal nRoads Mid-Size or equal
 - 2.14.6.2. Length is nominal and +/- 1" is acceptable.
 - 2.14.6.3. Dual color - 12 diodes per module (equal number of green & amber)
 - 2.14.6.4. All pods/modules must be capable of fully displaying both colors.
 - 2.14.6.5. Flash pattern must be capable of alternating between an asymmetric, low frequency, "wig-wag" pattern and a low-frequency double or quad flash.
 - 2.14.6.6. UV resistant clear polycarbonate lens
 - 2.14.6.7. 10-16 VDC
 - 2.14.6.8. Light bars shall meet all applicable federal/state laws and regulations
 - 2.14.6.9. Shall be SAE J845 360-degree Class 1 certified
- 2.14.7. Perimeter Lights - Four (4) perimeter lights, front mounted at grill level (**See label #2 in picture below**)
 - 2.14.7.1. Brooking Industries M16 surface mount perimeter lighthouse or equal
 - 2.14.7.2. Size: Length: 4.5-5.5 in., Height: 1.0-2.0 in., Depth: 0.3-0.5 in.
 - 2.14.7.3. 12-24 VDC
 - 2.14.7.4. UV resistant clear polycarbonate lens, black bezel trim
 - 2.14.7.5. 16 diodes, dual color, equal number of green & amber (interleaved 8x8)
 - 2.14.7.6. Lighthouse must be capable of displaying each color across full length
 - 2.14.7.7. Capable of alternating between an asymmetric, low-frequency, "wig-wag" pattern and a low-frequency double or quad flash
 - 2.14.7.8. Lighthouse shall meet all applicable federal/state laws and regulations
 - 2.14.7.9. Shall be SAE J595 Class 1 certified
- 2.14.8. Two (2) 6" rear facing oval lights mounted under backup lights. (**See label #4 in picture below**)
 - 2.14.8.1. 6" L x 2¼" W , recessed, grommet, snap-in mount, LED
 - 2.14.8.2. Polycarbonate lens

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- 2.14.8.3. Dual color – half amber, half green
- 2.14.8.4. Must be capable of double or quad flash pattern
- 2.14.8.5. 12-24 VDC, with plug-in connector
- 2.14.8.6. Shall be SAE J595 Class 2 certified
- 2.14.9. High Visibility Reflective Tape
 - 2.14.9.1. DOT C2 approved high visibility reflective conspicuity tape, 2" wide, with alternating 6" segments of red and white, shall be placed along the length of the bed on both sides of the truck.



2.14.10.

Note: This image only represents locations for safety lighting.

Comply: ___ Yes ___ No

2.15. Tool Box

- 2.15.1. A tool box with a minimum of 18" X 18" X 24" shall be securely mounted under the bed of the unit, with lockable hasp, weatherproof and of the mentioned size.

Comply: ___ Yes ___ No

3. Manuals/Training

- 3.1. The supplier shall provide one printed version and one electronic version of the Operators' manual for the truck.
- 3.2. The supplier shall provide one printed version and one electronic version of the Operators' manual for the herbicide spray bed.
- 3.3. The supplier shall provide one printed version and one electronic version of the parts manual for the herbicide spray bed.
- 3.4. Installation shall be completed at the supplier's location. It shall be the responsibility of the supplier to insure that all unit items are properly located and installed.

Comply: ___ Yes ___ No

EQUIPMENT SPECIFICATIONS

4. Warranty

4.1. Minimum of 12 months on total unit. Warranty repairs to be made at user location or vendor will make arrangements to pick up and return unit.

Comply: ___ Yes ___ No

