STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
TECHNICAL SPECIFICATIONS FOR

TRUCK, CAB & CHASSIS, 25,500 LBS. GVWR WITH 16' STAKE BODY & PINTLE HITCH

SERIES NO. 170-000
EQUIPMENT SPECIFICATION 170-000U **REV. 10/8/2026**

GENERAL

This specification sets forth the minimum requirements for a 25,500 GVWR truck and chassis with a stake body and pintle hitch.

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

A Freightliner M2-106 Truck and a Truck and Transportation EHD 16' x 96" body, 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.

EQUIPMENT SPECIFICATIONS

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 shall 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 shall 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 shall 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 shall 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.

EQUIPMENT SPECIFICATIONS

NOTICE TO BIDDERS

Bidder shall 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 SHALL 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: 25,500 lbs.

Comply: ____Yes ____No

1.2. Frame: 800,000 RBM (Resisting Bending Moment) – Bidder must provide 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. Cab to Axle (CA): 120"clear*

1.3.3. Center of rear axle to end of frame (AF): 82"*

*Values given here are minimums. The space between cab and body shall not exceed 10 inches. Truck vendor and body manufacturer/upfitter shall coordinate in selecting a cab to axle dimension that works with the specified body and ensures proper load distribution to the front and rear axles in accordance with manufacturer specifications and industry practice. The required AF must be achieved with factory frame rails. Frame extensions to meet the required AF are not allowed. The AF must be sufficient to allow support of the full length of the body.

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

EQUIPMENT SPECIFICATIONS

1.5. Cab
- **1.5.1.** Conventional day cab
- **1.5.2.** Tinted safety glass
- **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
  - **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.** Manufacturer's highest-level sound insulation package
- **1.5.9.** Wing dash, if available
- **1.5.10.** Gauge package including the following gauges:
  - **1.5.10.1.** Air cleaner restriction
  - **1.5.10.2.** Coolant temperature
  - **1.5.10.3.** DEF
  - **1.5.10.4.** Fuel
  - **1.5.10.5.** Oil pressure
  - **1.5.10.6.** Primary and secondary air pressure
  - **1.5.10.7.** Speedometer
  - **1.5.10.8.** Tachometer
  - **1.5.10.9.** Voltmeter
  - **1.5.10.10.** Gear indicator
  - **1.5.10.11.** Odometer
  - **1.5.10.12.** Total engine hours
  - **1.5.10.13.** Trip hours
  - **1.5.10.14.** Trip odometer
  - **1.5.10.15.** Rear axle oil temperature
  - **1.5.10.16.** Engine oil temperature
- **1.5.11.** Dual sun visors
- **1.5.12.** Two (2) cup holders, integral to dash
- **1.5.13.** 3-point seat belt for each seat. All seat belt webbing must be manufacturer's high visibility color (Orange, Red, Green, or Yellow).
- **1.5.14.** Climate control, including air conditioning, heater, & defroster
- **1.5.15.** Power windows & power door locks
- **1.5.16.** Tilting and telescoping steering wheel

Comply: ____Yes ____No

1.6. Engine
- **1.6.1.** 6.7 L, Electronic diesel, turbocharged
- **1.6.2.** Liquid cooled
- **1.6.3.** 6-cylinder inline configuration

EQUIPMENT SPECIFICATIONS

1.6.4. 300 HP, 660 ft.-lbs.
1.6.5. Engine to include turbo exhaust brake
1.6.6. Emission system must include DEF
1.6.6.1. DEF tank located on driver's side next to fuel tank
1.6.6.2. DEF must have a minimum capacity of 7 gallons
1.6.7. Engine must be biodiesel compatible
1.6.8. Horizontal exhaust

Comply: ____Yes ____No

1.7. Fuel System
1.7.1. Metal fuel tank with 50-gallon capacity & drain
1.7.1.1. Tank to be located on driver's side
1.7.2. Davco fuel processor or equal - mounted to outside of frame
1.7.2.1. Visual element change indication that is integral to and non-removable from unit (to be located on driver's side near fuel tank)
1.7.3. Water-in-fuel sensor with indicator in cab
1.7.4. Entire fuel system to be biodiesel compatible

Comply: ____Yes ____No

1.8. Transmission
1.8.1. Automatic, Allison 2500 RDS or equal, with PTO Port
1.8.2. To be filled with manufacturer approved synthetic lubricants

Comply: ____Yes ____No

1.9. Front Axle
1.9.1. 8,000 lbs. GAWR @ ground capacity (4,000 lbs. capacity each spring @ ground)
1.9.2. Heavy duty shock absorbers
1.9.3. Wet-type, visible cap axle seals, Stemco or equal
1.9.4. To be filled with manufacturer approved synthetic lubricants

Comply: ____Yes ____No

1.10. Rear Axle
1.10.1. Single speed, 17,500 lbs. GAWR @ ground capacity,
1.10.2. Air ride suspension
1.10.3. Shock absorbers
1.10.4. To be filled with manufacturer approved synthetic lubricants
Comply: ____Yes ____No

1.11. Gearing, Speed Governing & Performance
1.11.1. Transmission and axle ratio shall be selected for performance to be optimized at 65 MPH
1.11.2. Top gear road speed shall be electronically governed at 75 mph maximum

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1.11.3. Cruise control speed shall be governed at 72 mph maximum
1.11.4. Axle gear ratio shall optimize performance at 65 MPH while permitting truck to operate up to 75 MPH on highway without excessive engine speed. Bidder shall list the RPM @ 65 MPH in the space below.

RPM @ 65 MPH_____

Comply: ____Yes ____No

1.12. Brakes
1.12.1. Full air disc brake system, ABS brake system with traction control
1.12.2. 18 CFM air compressor
1.12.3. Bendix AD-9 air dryer or approved equal
1.12.4. Bendix Wingman® Fusion™ Advanced Driver Assistance System, or approved equal

Comply: ____Yes ____No

1.13. Wheels and Tires
1.13.1. Hub piloted steel disc, size - 8.25 X 22.5
1.13.2. First line, first quality tires, size – 11R22.5
1.13.3. Front tires - single highway tread
1.13.4. Rear tires - dual on/off road tread
1.13.5. Load ratings to be compatible with GVWR

Comply: ____Yes ____No

1.14. Electrical System and Lights
1.14.1. 12-volt system
1.14.2. 180-amp alternator
1.14.3. Batteries with 2200 CCA combined
1.14.4. Aluminum battery box
1.14.5. Remote jump start studs, with tethered protective caps, located outside of the battery box
1.14.6. Battery disconnect switch, conveniently located inside cab, near driver's seat, similar to the below picture.



EQUIPMENT SPECIFICATIONS

1.14.7. Four (4) additional rocker style body circuit switches (upfitter switches) mounted in cab (dash). Switches are intended to be used for simple on/off functions for accessories (warning lights, etc.).
1.14.8. All exterior lighting, except headlights, shall be LED
1.14.9. Headlights:
1.14.9.1. Automatic daytime running lights
1.14.9.2. Automatic on if windshield wipers are turned on
1.14.9.3. Automatic on with low ambient light levels
1.14.9.4. Warning buzzer/alarm when headlight switch is on and ignition switch is in off position
1.14.10. Cruise control
1.14.11. Intermittent windshield wipers with washers
1.14.12. Self-cancelling directional signals
1.14.13. Backup alarm, 97 dba
1.14.14. AM/FM radio with auxiliary front input, Bluetooth/hands free function and steering wheel controls
1.14.15. Two (2) 12V accessory power outlets with covers, mounted in dash (for cell phone chargers, GPS devices, etc.)
1.14.16. Backup camera system with in-cab color monitor. Camera to be mounted in an area as protected and obscure as possible.

Comply: ____Yes ____No

1.15. FMCSA/DOT Mandated Safety Items
1.15.1. One (1) UL listed, 5 B:C rated, or higher, fire extinguisher securely mounted in cab
1.15.2. One (1) set of three (3) bidirectional reflective triangles conforming to FMVSS No. 125
1.15.3. At least one (1) spare fuse for each type/size used in the truck

Comply: ____Yes ____No

1.16. Paint
1.16.1. Cab: Manufacturer's standard, white
1.16.2. Chassis: Manufacturer's standard, black

Comply: ____Yes ____No

1.17. Mud Flaps
1.17.1. Heavy duty 3/8" x 24" W x 36" L rubber rear wheel mud flaps with full width steel angle sandwich type anti-sail mounting brackets (plastic flaps not acceptable).

Comply: ____Yes ____No

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.

EQUIPMENT SPECIFICATIONS

2. Attached Equipment – Stake Body and Warning Lights

2.1. Stake Body

2.1.1. Load Area – 16’ Long x 96” Wide

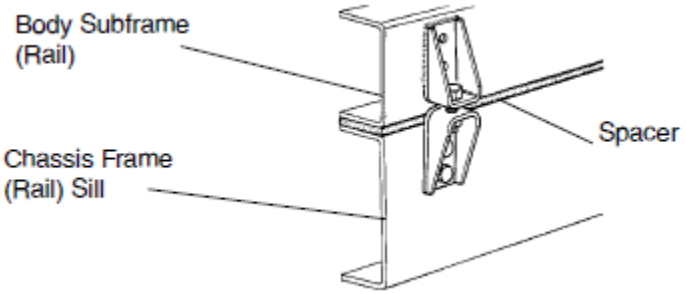
2.1.2. Body Installation

2.1.2.1. A sill spacer is not required; however, a rubber or plastic (nylon or Delrin) sill spacer is allowed between the frame & body sills. WOOD SPACERS ARE NOT ALLOWED!

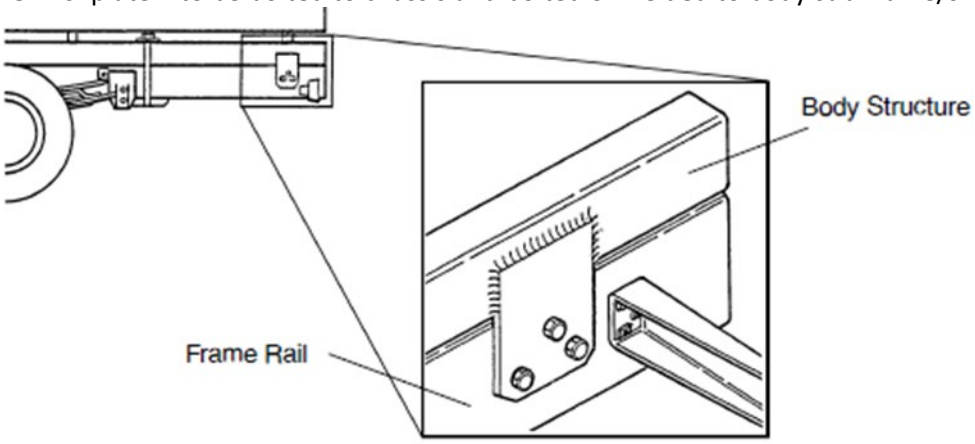
2.1.2.2. Body shall be bolted to frame using brackets or flat bar strapping. U-BOLTS ARE NOT ALLOWED!

2.1.2.3. Where possible, the upfitter shall use existing holes in chassis frame web.

2.1.2.4. Brackets



2.1.2.5. Fishplate – to be bolted to chassis and bolted or welded to body sub-frame/sill.



Comply: ____Yes ____No

2.1.3. Long Sills

2.1.3.1. Two (2) full length 6” structural steel channels (C6x8.2), solid welded to cross sills.

2.1.4. Cross Members

2.1.4.1. Full width 3” structural steel channels (C3x4.1), spaced 16” OC, solid welded to side rails and long sills, chain welded to flooring.

2.1.5. Side Rails

2.1.5.1. Two full length 5” structural steel channels (C5x6.7).

2.1.6. Pockets & Rail

2.1.6.1. Outside stake pockets on 2’ centers with 3/8” x 2.5” chain rails down each side and internal stake pockets across the rear.

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2.1.6.2. 3/8” x 2.5” steel plates welded between side sills and chain rail at midpoint between each stake pocket to prevent damage from side loading.

2.1.7. Flooring

2.1.7.1. Heavy duty, ¼” steel safety tread plate floor, 11.3 lbs. per square foot, solid welded, one piece.

2.1.8. Steps & Grab Handle

2.1.8.1. Driver & passenger side heavy duty step-ups and grab handle on bulkhead at front corners of flatbed

2.1.9. Bulkhead

2.1.9.1. Square design bulkhead, heavy duty load supporting.

2.1.9.2. Four (4) vertical posts.

2.1.9.3. Outer two (2) vertical posts 4” x 2” x 0.1875” structural steel tube framing. These post to extend 12” above cab.

2.1.9.4. Inner two (2) vertical posts 2” x 2” x 0.1875” structural steel tube framing.

2.1.9.5. Must have horizontal 4” x 2” x 0.1875” structural steel tube framing connecting the outer two (2) vertical post at 6” above cab

2.1.9.6. Bulkhead framing to be covered with solid ¼” steel tread plate below rear window and full width No. 3 expanded metal above for complete visibility.

2.1.9.7. Bulkhead to have 6” outside station for load retention.

2.1.9.8. Bulkhead to have reverse bottom reinforcement gussets to allow flush loading against bulkhead.

Comply: ____Yes ____No

2.2. Stake Racks

2.2.1. Heavy duty 42” high steel stake and four-rack sides down both sides

2.2.2. Automatic quick release lock downs on each section, interlocking connectors

2.2.3. Full height steel reinforced end guards on each section

Comply: ____Yes ____No

2.3. Cargo Controls

2.3.1. Full length under body heavy duty winch binder slide tracks under passenger side of flatbed except over rear tires with five (5) heavy duty sliding ratchet winch binders.

2.3.2. Winch binders to be filled with 27’ of 4” wide nylon straps with flat hook ends.

2.3.3. Winch binder tensioner/tightener handle to be included

Comply: ____Yes ____No

2.4. Storage Box

2.4.1. 48” L x 18” H x 18” D frame mounted storage box

2.4.2. 14-gauge steel construction, single horizontal hinged door with weather-tight seals and stainless-steel hardware and lock

2.4.3. Installed on street side of chassis frame rail with heavy duty mounting brackets

Comply: ____Yes ____No

EQUIPMENT SPECIFICATIONS

2.5. Trailer Hitch*

2.5.1. A 25-ton forged pintle hook mounted on a ¾" (min.) steel backing plate with two (2) ¾" weld-on D-rings for safety chains. The backing plate shall be adequately gusseted and braced for the rated capacity of the pintle hook. In addition, the backside of the ¾" backing plate shall be stiffened by a ¾" X 5" bar/plate welded to the backing plate, spanning the full width of the backing plate, centered with the pintle hook. (See the included figure(s) below).

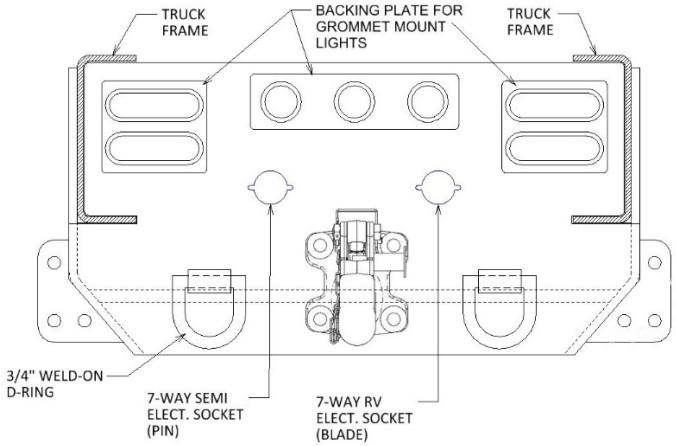
2.5.1.1. Pintle hitch mounting height: 27.5" from ground to center of lunette eye

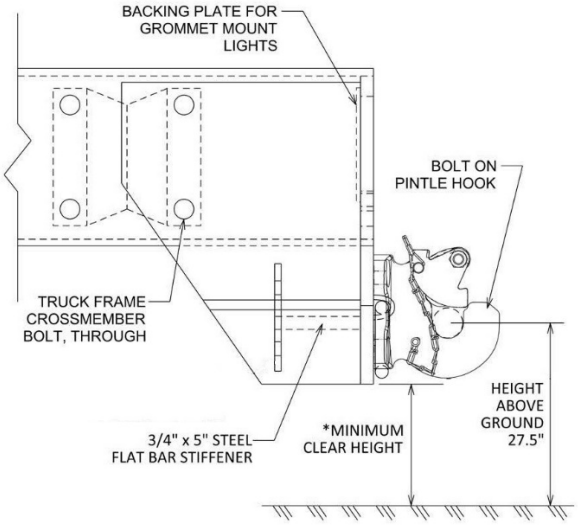
2.5.1.2. Recessed grommet mount stop/tail/turn/reverse/clearance lights with plug-in connectors

2.5.1.3. Two (2) trailer electrical connection sockets: 7-pole semi & 7-pole RV style

2.5.1.4. Filler plate to be primed and painted black

***Note:** The intent of this specification item and the included figure(s) is to get a single steel plate coped to fit between the truck frame rails and welded to the frame, hitch/bumper. This plate shall serve as the mount for the aforementioned lights, electrical connections.





* NO PART OF THE TRAILER HITCH (PINTLE HOOK. MOUNTING PLATE. D-RINGS. CONNECTIONS, ETC.) SHALL BE LESS THAN 22" ABOVE GROUND LEVEL

EQUIPMENT SPECIFICATIONS

Comply: ____Yes ____No

2.6. Body Prep and Paint
- **2.6.1.** Remove all weld spatter and slag, round sharp corners, grind sharp edges, buff all surfaces.
- **2.6.2.** Prepare all metal surfaces (under structure and body) per paint manufacturer's requirements.
- **2.6.3.** Prime all metal surfaces with high solids epoxy primer compatible with finish coat,
  - **2.6.3.1.** Primer to be 2-3 mils DFT
- **2.6.4.** Apply finish coat of PPG Concept (DCC) Acrylic Urethane or equal
  - **2.6.4.1.** Bed color to be PPG No. 920247 gray or equal
  - **2.6.4.2.** Frame & underbody color to be painted black
  - **2.6.4.3.** Finish coat to be 3-4 mils DFT
- **2.6.5.** DOT C2 approved conspicuity tape, 2" wide 6" x 6", is to be placed continuously on both sides plus rear of body in accordance with current NHTSA regulations.

Comply: ____Yes ____No

2.7. Safety Lighting and Striping
- **2.7.1.** Truck must be delivered with warning lights & high visibility, reflective conspicuity tape installed in accordance with these specifications and the illustrated layout below
- **2.7.2.** 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
- **2.7.3.** All wiring and cables shall 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.
- **2.7.4.** All warning lights must be controlled by a single in-cab, dash-mounted upfitter switch. The switch must be labeled to read "Warning Lights".
- **2.7.5.** Installer must contact the DOTD Equipment Section prior to programming to confirm intended flash pattern(s).
- **2.7.6.** Mid-size Light Bars - Two (2) mid-size (24") light bars that satisfy the following requirements, mounted to the cab protector as shown below
  - **2.7.6.1.** SoundOff Signal nRoads Mid-Size or equal
  - **2.7.6.2.** Length is nominal and +/- 1" is acceptable.
  - **2.7.6.3.** Dual color - 12 diodes per module (equal number of green & amber)
  - **2.7.6.4.** All pods/modules must be capable of fully displaying both colors.
  - **2.7.6.5.** Flash pattern must be capable of alternating between an asymmetric, low frequency, "wig-wag" pattern and a low-frequency double or quad flash.
  - **2.7.6.6.** UV resistant clear polycarbonate lens
  - **2.7.6.7.** 10-16 VDC
  - **2.7.6.8.** Light bars shall meet all applicable federal/state laws and regulations
  - **2.7.6.9.** Shall be SAE J845 360-degree Class 1 certified
- **2.7.7.** Perimeter Lights - Two (2) perimeter lights, mounted at grill level
  - **2.7.7.1.** Brooking Industries M16 surface mount perimeter lighthead or equal

EQUIPMENT SPECIFICATIONS

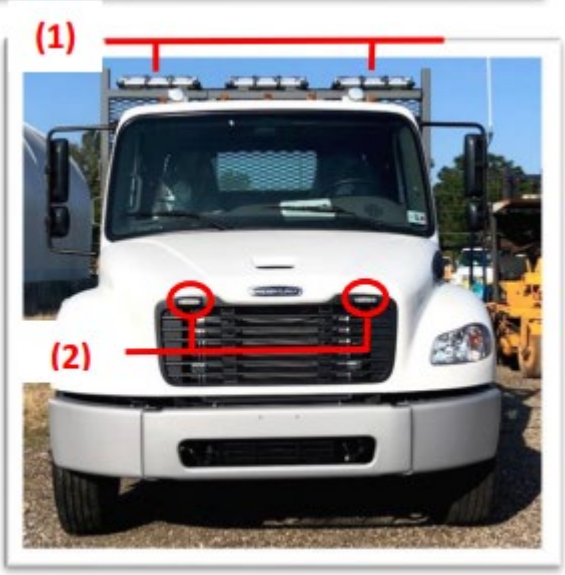
2.7.7.2. Size: Length: 4.5-5.5 in., Height: 1.0-2.0 in., Depth: 0.3-0.5 in.
2.7.7.3. 12-24 VDC
2.7.7.4. UV resistant clear polycarbonate lens, black bezel trim
2.7.7.5. 16 diodes, dual color, equal number of green & amber (interleaved 8x8)
2.7.7.6. Lighthead must be capable of displaying each color across full length
2.7.7.7. Capable of alternating between an asymmetric, low-frequency, “wig-wag” pattern and a low-frequency double or quad flash
2.7.7.8. Lighthead shall meet all applicable federal/state laws and regulations
2.7.7.9. Shall be SAE J595 Class 1 certified

2.7.8. Four (4) 6” rear facing oval lights mounted under backup lights.
2.7.8.1. 6” L x 2¼“ W , recessed, grommet, snap-in mount, LED
2.7.8.2. Polycarbonate lens
2.7.8.3. Dual color – half amber, half green
2.7.8.4. Must be capable of double or quad flash pattern
2.7.8.5. 12-24 VDC, with plug-in connector
2.7.8.6. Shall be SAE J595 Class 2 certified

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2.7.9. High Visibility Reflective Tape

2.7.9.1. 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.

2.7.9.2. High visibility conspicuity tape, 2” wide, with alternating 6” segments of green and high visibility yellow, shall be placed on the rear of the body.

Comply: ____Yes ____No

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

EQ. SPEC. **170-000U**
REV. **10/8/2026**

BIDDER'S EXCEPTIONS

Instructions: Bidder shall note all exceptions in space provided below. List the detail number from the aforementioned specification in the column to the left and the exception in the column to the right. Responses may be typed or hand-written. Handwritten responses must be legible. If additional space is needed, please print a duplicate copy of this sheet. "Bidder's Exceptions" page(s) shall be returned with the bid submittal.

Examples:

1.6	Engine has 325 horsepower
1.18.3	Batteries have 2000 CCA combined.
2.2.8	Crossmembers are 4" channel on 12" centers.

Spec./Detail Reference	**Exception**