

## Lot 1 - Dump Bodies

		Estimated Quantity	Unit Price	Estimated Extended Price	Days ARO
<b>1</b>	<b>Body, Dump, 1-1/2 Cubic Yard</b>	<b>12</b>	<b>\$10,320.00</b>	<b>\$123,840.00</b>	<b>30</b>
	<b>Vendor Product Number</b>	<b>184U-SC</b>			
	INSTALLATION OF BODY & HOIST SYSTEMS	Add:	\$2,885.00		
	PULL TARP ASSEMBLY (ONLY)	Add:	\$655.00		
	PULL TARP ASSEMBLY WITH INSTALLATION	Add:	\$845.00		
	CRANK TARP ASSEMBLY (ONLY)	Add:	\$943.00		
	CRANK TARP ASSEMBLY (WITH INSTALLATION)	Add:	\$1,395.00		
	11 FT. BODY IN LIEU OF 9' (REQUIRES 84" CA)	Add:	\$945.00		
	AMBER ROTATING OR FLASHING STROBE LIGHT MOUNTED ON CAB SHIELD	Add:	\$400.00		
	TOOL BOX, UNDER BODY, 36" X 18" X 18", WITH INSTALLATION	Add:	\$495.00		
		Estimated Quantity	Unit Price	Estimated Extended Price	Days ARO
<b>2</b>	<b>Body, Dump, 5 Cubic Yard</b>	<b>16</b>	<b>\$13,285.00</b>	<b>\$212,560.00</b>	<b>30</b>
	<b>Vendor Product Number</b>	<b>300U-SC</b>			
	INSTALLATION OF BODY AND HOIST SYSTEMS	Add:	\$3,450.00		
	ELECTRIC DRIVE TARP ASSEMBLY (DONOVAN MODEL 7000ELD)	Add:	\$1,385.00		
	ELECTRIC DRIVE TARP ASSEMBLY (DONOVAN MODEL 7000ELD) WITH INSTALLATION	Add:	\$1,979.00		
	PULL TARP ASSEMBLY (ONLY)	Add:	\$664.00		
	PULL TARP ASSEMBLY WITH INSTALLATION	Add:	\$938.00		
	CRANK TARP ASSEMBLY (ONLY)	Add:	\$943.00		
	CRANK TARP ASSEMBLY WITH INSTALLATION	Add:	\$1,395.00		
	3 STEP "EZ-STEP" (ONLY)	Add:	\$325.00		
	3 STEP "EZ-STEP" WITH INSTALLATION	Add:	\$375.00		
	AIR TAILGATE KIT WITH INSTALLATION (TRUCK MUST HAVE AIR BRAKES)	Add:	\$555.00		

	AMBER ROTATING OR FLASHING STROBE LIGHT MOUNTED ON CAB SHIELD	Add:	\$400.00		
	ASPHALT SPREADER APRON WITH INSTALLATION	Add:	\$425.00		
	TOOL BOX, UNDER BODY, 36" X 18" X 18", WITH INSTALLATION	Add:	\$495.00		
	SLOPING REAR TAILGATE	Add:	\$285.00		
	FLOOR, 3/16" STEEL IN-LIEU-OF 10 GA.	Add:	\$985.00		
	HYDRAULIC HIGH LIFT TAILGATE, HEIL MODEL 701-8294 OR EQUAL	Add:	\$1,336.00		
	DEDUCT - MANUAL SHIFT PUMP IN-LIEU-OF AIR SHIFT	Deduct:	\$375.00		
	DEDUCT - CABLE SHIFT P.T.O. IN-LIEU-OF AIR SHIFT	Deduct:	\$675.00		
		<b>Estimated Quantity</b>	<b>Unit Price</b>	<b>Estimated Extended Price</b>	<b>Days ARO</b>
<b>3</b>	<b>Body, Dump, 8 Cubic Yard</b>	<b>16</b>	<b>\$18,280.00</b>	<b>\$292,480.00</b>	<b>30</b>
	<b>Vendor Product Number</b>	<b>400U-SC</b>			
	INSTALLATION OF BODY AND HOIST SYSTEMS	Add:	\$3,450.00		
	ELECTRIC DRIVE TARP ASSEMBLY (DONOVAN MODEL 7000ELD)	Add:	\$1,385.00		
	ELECTRIC DRIVE TARP ASSEMBLY (DONOVAN MODEL 7000ELD) WITH INSTALLATION	Add:	\$1,979.00		
	PULL TARP ASSEMBLY	Add:	\$664.00		
	PULL TARP ASSEMBLY WITH INSTALLATION	Add:	\$938.00		
	CRANK TARP ASSEMBLY	Add:	\$943.00		
	CRANK TARP ASSEMBLY WITH INSTALLATION	Add:	\$1,395.00		
	3 STEP "EZ-STEP"	Add:	\$325.00		
	3 STEP "EZ-STEP" WITH INSTALLATION	Add:	\$375.00		
	AIR TAILGATE KIT WITH INSTALLATION (TRUCK MUST HAVE AIR BRAKES)	Add:	\$555.00		
	AMBER ROTATING OR FLASHING STROBE LIGHT MOUNTED ON CAB SHIELD	Add:	\$400.00		
	ASPHALT SPREADER APRON WITH INSTALLATION	Add:	\$425.00		
	TOOL BOX, UNDER BODY, 36" X 18" X 18", WITH INSTALLATION	Add:	\$495.00		
	SLOPING REAR TAILGATE	Add:	\$285.00		

	FLOOR, 3/16" STEEL IN-LIEU-OF 10 GA.	Add:	\$1,185.00		
	HYDRAULIC HIGH LIFT TAILGATE, HEIL MODEL 701-8294 OR EQUAL	Add:	\$1,336.00		
	DEDUCT - MANUAL SHIFT PUMP IN-LIEU-OF AIR SHIFT	Deduct:	\$375.00		
	DEDUCT - CABLE SHIFT P.T.O. IN-LIEU-OF AIR SHIFT	Deduct:	\$675.00		
		<b>Estimated Quantity</b>	<b>Unit Price</b>	<b>Estimated Extended Price</b>	<b>Days ARO</b>
<b>4</b>	<b>Body, Dump, 10 Cubic Yard</b>	<b>24</b>	<b>\$19,450.00</b>	<b>\$466,800.00</b>	<b>30</b>
	<b>Vendor Product Number</b>	400U-SC			
	INSTALLATION OF BODY AND HOIST SYSTEMS	Add:	\$3,450.00		
	ELECTRIC DRIVE TARP ASSEMBLY (DONOVAN MODEL 7000ELD)	Add:	\$1,518.00		
	ELECTRIC DRIVE TARP ASSEMBLY (DONOVAN MODEL 7000ELD) WITH INSTALLATION	Add:	\$2,120.00		
	PULL TARP ASSEMBLY (ONLY)	Add:	\$725.00		
	PULL TARP ASSEMBLY WITH INSTALLATION	Add:	\$960.00		
	CRANK TARP ASSEMBLY (ONLY)	Add:	\$970.00		
	CRANK TARP ASSEMBLY WITH INSTALLATION	Add:	\$1,495.00		
	3 STEP "EZ-STEP" (ONLY)	Add:	\$325.00		
	3 STEP "EZ-STEP" WITH INSTALLATION	Add:	\$375.00		
	AIR TAILGATE KIT WITH INSTALLATION (TRUCK MUST HAVE AIR BRAKES)	Add:	\$555.00		
	AMBER ROTATING OR FLASHING STROBE LIGHT MOUNTED ON CAB SHIELD	Add:	\$400.00		
	ASPHALT SPREADER APRON WITH INSTALLATION	Add:	\$425.00		
	TOOL BOX, UNDER BODY, 36" X 18" X 18", WITH INSTALLATION	Add:	\$495.00		
	SLOPING REAR TAILGATE	Add:	\$285.00		
	FLOOR, 3/16" STEEL IN-LIEU-OF 10 GA.	Add:	\$1,290.00		
	HYDRAULIC HIGH LIFT TAILGATE, HEIL MODEL 701-8294 OR EQUAL	Add:	\$2,400.00		
	DEDUCT - MANUAL SHIFT PUMP IN-LIEU-OF AIR SHIFT	Deduct:	\$375.00		
	DEDUCT - CABLE SHIFT P.T.O. IN-LIEU-OF AIR SHIFT	Deduct:	\$675.00		

## **SPECIFICATIONS FOR BODY, DUMP, 1 1/2 CU. YD.**

SCDOT Spec. No. B101.18 - 07/15/21

**DESCRIPTION:** The dump bodies shall be heavy-duty body and hoist assemblies designed and constructed for handling stone, dirt, and asphalt in highway maintenance applications over a very long life-cycle (10 + years). Additional uses will include tailgate and hopper type material spreader installations for snow removal. One size of body is covered in this specification.

**CAPACITY:** Minimum one and one-half (1 1/2) cubic yards, water level.

**DIMENSIONS:** The inside width of the body shall be not less than 78 inches, and the inside length 9 feet. The height of the body sides shall be proportioned to secure the specified minimum 1 1/2 cubic yards capacity. Front end and tailgate corners shall be three (3) inches higher than the sides and equipped with pockets for 2" x 4" side boards.

**MATERIAL:** The body shall be constructed of not lighter than 10 gauge high tensile steel. All steel body construction shall be a minimum 50,000 psi mill certified steel. Body shall be completely seam welded on exterior, stitch welding is not acceptable.

**CAB SHIELD:** The body shall be equipped with an all-steel cab shield strongly constructed of not less than 10 gauge steel and adequately braced. The shield shall be 24"

**BODY:** The body shall be of welded construction with full-length running boards. Body shall have a double acting tailgate equipped with heavy-duty offset type hinges, chains, and hooks for lowering to any position, together with adjustable spreader chains. The body shall be designed with raised sides at floor for easy cleaning. The tailgate operating lever shall have a protective rubber cover and be located at the left front end of the body for convenient operation from the driver's position in the cab, and it shall be adequately supported to insure positive action. The tailgate lever control shall have adjustment on each side at rear. Front gate to be reinforced with V-Bend or U-Bend brace for added durability.

The top rail shall be fully enclosed utilizing radius bends to form a dirt shedding design. Cross members shall be interlaced or equal through the long rails so that both cross members and long rails are welded to the floor of body to minimize "wash board" effect and maximize floor support.

Rear tailgate shall be one piece 10 gauge steel. Upper tailgate pins shall have steel quick release handles. The tailgate shall have a dirt shedding type reinforcing rib running horizontally as well as on sides, top, and bottom. When lowered to the horizontal position, the tailgate shall form a continuous platform with the bed of the body, allowing for only a negligible amount of gap. The tailgate shall be equipped with the quick release latch system,

There shall be no "dog-house" or other encroachment within the body.

All pivot points on body shall have screw in grease zerks

Safety devices as required by OSHA regulations Section 1926.601 (6) (10) (11) and (12) shall be furnished. Two (2) body safety props, one on each side, shall be provided.

Additional safety equipment shall include body raised warning light, and OSHA-type lever lock for the body control lever. All hose, fittings, and connectors shall be provided to completely install the unit.

A complete lighting package shall be furnished with lights and reflectors to meet South Carolina Motor Vehicle Laws, as well as FMVSS and DOT requirements. Mounting locations (recessed) shall be pre-punched and drilled. Lights shall be the shock-mounting type and recessed in rubber grommets. Custom one piece sealed wiring harness shall be furnished with all wiring in plastic loom. All lights shall be the LED type.

## **SPECIFICATIONS FOR BODY, DUMP, 1 1/2 CU. YD.**

**HOIST:** The hoist shall be the manufacturer's latest double arm, under body type or single stage scissors type and shall include hoist assembly, electric pump, control valve assembly, electric cab control for hoist pump and dump with single push button control suitable for dash mounting, hinges, body guides and full-length steel sub-frame constructed of mill certified 100,000 psi completely assembled and ready for installation. The hydraulic system shall be filled with hydraulic oil, or adequate oil furnished in bulk to fill the system. The hoist assembly shall be completely assembled and ready for operation.

Hoist construction shall consist of a frame with full length, formed channel, with minimum yield strength of 50,000 psi. The body hinge to hoist link pin distance shall be not less than 24 inches. Body overhang past the body hinge shall be approximately 6 inches. The body hinge to hoist lift arm pin (at body) distance (horizontally) shall be not less than 27 inches. The lift cylinder shall be minimum 5.0 inches in diameter, and shall have a 15 - 20 inch stroke.

The cylinder shall be equipped with a cushion valve or internal by-pass circuit. The chrome-plated cylinder piston rod shall be two (2) inches in diameter.

The scissors hoist shall have lower frame arms constructed of 1/4" inch Domex steel plate and upper arms constructed of 1/4" inch Domex steel plate. Hoist arms shall be constructed of minimum 100,000 psi steel.

The body hinges shall be integrated by welding into a sub-frame rear cross member. The rear cross member shall be engineered for capacity of the hoist. The hinges, brackets, and pins shall be heavy-duty in design and construction. The body hinges shall be suitable for welding the hinge to the body.

The hoist rating shall be NTEA Class 20 (minimum) and not less than 9 tons with 9 ft. body and approximately 6 inch overhang. The hoist manufacturer shall be a current member of the National Truck Equipment Association and the hoist system shall be listed on the current NTEA Dump Body & Conversion Hoist Chart.

The maximum dumping angle shall be not less than 47 degrees.

The design of the pump shall be such that in its relation to the hoist cylinder there will be no high-pressure oil line on which any swivel action occurs.

**TRUCK CHASSIS-CAB:** The truck cab-chassis will be furnished and bodies installed by the Department. If optional installation is required, the successful bidder will take delivery of the Department's truck at the SCDOT Equipment Depot, 1500 Shop Road, Columbia, SC. The body vendor shall deliver the truck to his facility from the Department's Equipment Depot and return it after installation of the body. The vendor shall accept full responsibility and liability in transporting the truck, relieving the Department of any loss, liability, or claim whatsoever incurred enroute. The truck chassis cab application shall be current year model and later Chevrolet, Dodge, Ford, and GMC, 60" CA, 11,000-15,000 lbs. GVWR, and automatic transmission.

During the contract period for bodies, it is expected that the separate state contracts for truck chassis-cabs will result in different year models, manufacturers, and vehicle models. These changes should not significantly affect the body contract.

**EQUIPMENT:** The unit shall be complete with all standard equipment and accessories normally furnished. In addition, equipment and/or services shall be furnished as follows:

- 1- The unit shall meet all applicable OSHA requirements.
- 2- Electric/hydraulic power unit

## **SPECIFICATIONS FOR BODY, DUMP, 1 1/2 CU. YD.**

- 3- Lighting package with lights and reflectors to meet DOT/FMVSS regulations and South Carolina motor vehicle laws. Wiring to be in plastic loom. All lights to be LED
- 4- Body raised warning light.
- 5- All necessary mounting materials and hardware.

**EQUIPMENT/SERVICES OPTIONAL:** When requested during the contract term, the following optional equipment and/or services shall be provided.

- 1- Body and hoist optional equipment additions, deletions and/or substitutions of equipment required by this specification, based on terms found under the special conditions of the bid invitation.
- 2- Optional dump body and associated hardware installation as may be required during the contract term.
- 3- ElectricTarp System with in-cab controls and asphalt rated tarp compatible with body size. All tarp hardware to be installed prior to primer and paint process. Donovan 7000ELD or equal.
- 4- 2 or 3 step retractable access ladder with grab handle and positive latch to secure ladder while in horizontal stowed position. Godwin Hide-A-Step Model HAS or equal.
- 5- Light brackets, fixed type, shall be attached to wind deflector to allow installation of warning light.

**SERIAL NUMBER:** Each unit shall be provided with a manufacturer's serial number, unique to each unit, permanently attached by plate or engraving, and easily identified. The serial number shall be used by the Department and the manufacturer to identify units for recall, to aid in recovery of stolen units, to establish ownership, and for other similar reasons.

**COLOR:** The unit shall be painted or powder coated gloss black. All oil, grease, dirt, etc. shall be removed chemically or whatever means necessary and primed prior to application of the finish paint. All dump body surfaces (top, underneath, inside and outside perimeter) to be 100% abraded by sandblasting or shot blasting to remove all surface rust and mill scale/slag. Any blast media residue shall be removed before painting. Partial abrading of inside and outside corners only is not acceptable. All surfaces shall be abraded to a SP-10 finish. Serial and data plates shall be protected from being painted over.

There shall be a zinc/epoxy primer used that is to be certified for a minimum of 4000 hours in an SAEB-117 salt spray test. In addition, the finish paint shall be certified for 1000 hours for this same test for a combined total of 5000 hours of testing. The under coating is to be certified for 800 hours for the salt test.

A zinc rich epoxy primer shall be applied to accommodate a 4000 hour certification. (If using a liquid primer a sealer must be applied to prevent out gassing and pinholes in finish paint)

A black high gloss top coat shall be applied to accommodate a 1000 hour certification. It shall have a gloss rating of 90% or higher.

The combined paint system finish shall pass an SAEB-117 accelerated salt spray test for no less than 5000 hours. Any methods, practices, or products must abide and be certified to meet this specification prior to bid opening. Paint systems and material certification must be made available upon request.

All manufacturer's standard warning, safety, instructional, and identification decals shall be provided; however, there shall be no vendor or dealer identification or advertising decals allowed.

**WARRANTY:** The unit shall be warranted against defects in materials and workmanship for a period of not less than twelve (12) months. The warranty start date shall be based on the unit's in-service date

**SPECIFICATIONS FOR BODY, DUMP, 1 1/2 CU. YD.**

as established by its issue from the Department's Equipment Depot to the using field custodian, and the vendor shall perform all the administrative work necessary to accomplish this following notification by the Department.

In the event there is not an authorized parts and service dealership within a reasonable distance of the unit's place of assignment, there shall be a procedure for the Department to make a claim for recovering the cost of parts and labor incurred in performing repairs which otherwise would have been covered by the warranty. Instructions and forms needed for warranty claims should be attached to the bid.

The unit shall be furnished with a copy of the warranty statement and any necessary cards, booklets, or certificates needed to receive warranty repairs at a dealership.

**SERVICE LITERATURE:** An illustrated parts book and installation instructions manual shall be furnished with each hoist and body. CD format is preferred and shall be provided if available. Two (2) additional copies shall be furnished to the South Carolina Department of Transportation's Director of Supply and Equipment at the time of delivery of the initial order.

**SALES LITERATURE, SPECIFICATIONS, QUESTIONNAIRE:** It is the bidder's responsibility to ensure sales literature, specifications, questionnaire, and deviations (if any) submitted with the bid are accurate, complete and sufficiently clear as these will be used to evaluate the bid. Each bidder shall attach to his bid illustrated catalog data sheets with manufacturer's complete printed specifications covering the class or type of equipment covered by the bid. This material shall show reasonable evidence of having been printed and publically available over the internet before publication of the bid notice and shall be sufficiently detailed to permit the Department's engineers and/or staff to properly evaluate the bid. Each bidder shall attach to his bid a completed questionnaire. Any deviation from these specifications must be clearly pointed out; otherwise it will be considered that items offered are in strict compliance with these specifications, and the successful bidder will be held responsible therefore. Deviations must be explained in detail on separate attached sheet(s).

**PILOT MODEL:** A body and hoist shall be furnished for installation by the Department as a pilot model to verify dimensional and other requirements. This installation shall be used to determine mounting details or minor changes needed. All subsequent units shall be manufactured and furnished to match the approved pilot model and the approved changes. Should the pilot model be found unacceptable to the Department, the contract may be terminated upon written notification.

**GENERAL:** The body and hoist shall be of the latest design and in current production. It shall operate efficiently in dumping the body of maximum dimensions specified herein and will form a satisfactory unit in connection with the body and truck chassis. The right is reserved to reject any and all bids proposing to furnish equipment which in the opinion of the Department's engineers and/or staff is not satisfactory for the Department's use in the proposed application.

**No Bulk packaging of components- Components for each individual body must be packaged per unit.**

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## **SPECIFICATIONS FOR BODY, DUMP, 5-10 CU. YD.**

SCDOT Spec. No. B110.13 - 07/07/20

**DESCRIPTION:** The dump bodies shall be heavy-duty body and hoist assemblies designed and constructed for handling stone, dirt, and asphalt in highway maintenance applications over a very long life-cycle (15 + years). Additional uses will include tailgate and hopper type material spreader installations for snow removal. Three sizes of body are covered in this specification.

**CAPACITY:** Three sizes, measured in cubic yards, water level: 5, 8, and 10 cu. yd.

**DIMENSIONS:** The inside width of the body and the inside length shall meet the minimum requirements in the chart below. The height of the body sides shall be proportioned to secure the specified cubic yard capacity. Front end and tailgate corners shall be six (6) inches higher than the sides and equipped with pockets for 2" x 6" side boards.

<u>Body size</u>	<u>Inside width</u>	<u>Inside length</u>
5	84"	120"
8	84"	144"
10	84"	156"

**MATERIAL:** The body shall be constructed of not lighter than 10 gauge high tensile sheet steel. Under-structure to be minimum 8-gauge mill certified high tensile strength steel. All steel used in body construction shall be minimum 50,000 psi yield. Body shall be completely seam welded on exterior. Stitch welding is not acceptable.

**CAB SHIELD:** The body shall be equipped with an all-steel cab shield strongly constructed of not less than 10 gauge steel and adequately braced. The shield shall be of proper proportions to afford what is commonly referred to as one-half coverage, minimum 23 inches. The shield shall be installed prior to prime and paint process, SCDOT to provide dimensional data. Pre-punched holes for tarp hardware shall be provided.

**BODY:** The body shall be of welded construction with full-length running boards sloping and reinforced by V- bend braces in sides. 5 yard shall have 1 brace and 8 & 10 yd bodies shall have 2 v-bends in the sides. Body to have box type rear corner posts; with double acting tailgate equipped with heavy duty off-set type hinges, 3/8" chains and hooks for lowering to any position, together with adjustable 3/8" spreader chains. It shall be adequately supported to insure positive action. Tailgate latch control shall have adjustment on each side at rear. Body shall have air tailgate release operated by a 3" bore with 6" stroke.

The top rail to be fully enclosed utilizing radius bends to form a dirt shedding design. Cross members to be interlaced or equal through long rails so that cross members and long rails are welded to floor of body to minimize "wash board" effect and maximize floor support.

Rear tailgate shall be one-piece minimum 10 gauge steel. Tailgate pins shall be CRS machined steel, tapered to insure easy use. The tailgate shall have a box or radius dirt shedding type, reinforcing rib running horizontally as well as on sides, top, and bottom. When lowered to the horizontal position, the tailgate shall form a continuous platform with the bed of the body, allowing for only a negligible amount of gap. There shall be no "dog-house" or other encroachment within the body.

All pivot points to have grease zerks with screw in fittings.

Safety devices as required by OSHA regulations Sect. 196.60l (6) (10) (11) and (12) shall be furnished. Two (2) body safety props, one on each side, shall be provided. Safety props shall be designed so operator does not have to reach inside of hoist frame to operate prop.

## **SPECIFICATIONS FOR BODY, DUMP, 5-10 CU. YD.**

Additional safety equipment shall include PTO warning light, body raised warning light, and spring centered air shift toggle switch suitable for dash mounting. All hose, fittings, and connectors shall be provided to completely install unit.

A complete lighting package shall be furnished with lights and reflectors to meet South Carolina Motor Vehicle Laws, as well as FMVSS and DOT requirements. Mounting locations (recessed) shall be pre-punched and drilled. Lights shall be the shock-mounting type and recessed in rubber grommets. Stop, tail, and turn oval lights provided for each side rear body corner post. All lights shall be LED type and have custom one piece sealed wiring harness.

**HOIST:** The hoist shall be the manufacturer's latest double arm, under body type and shall include hoist assembly, Muncie power take-off (PTO) with complete installation kit and hardware. Unit to be a CS24 Series (or latest design) with drag brake, air shift compatible, gear-type hydraulic pump rated at not less than 30 gpm at 2000 psi, and dash mounted air toggle switch allowing full feathering of load in lower position, driveshaft, electric shift control for PTO, hinges, body guides and full-length steel sub-frame, completely assembled and ready for installation. The hydraulic hoist system shall be filled with hydraulic oil, or adequate oil furnished in bulk to fill the system. The hoist assembled shall be completely assembled and ready for final installation on the truck chassis.

Hoist construction shall consist of a frame with full length, formed channel, per chart below, with minimum yield strength of 100,000 psi mill certified steel. The body hinge to hoist link pin distance shall be not less than the minimum per chart below. Body overhang past the body hinge shall be 12 inches. The body hinge to hoist lift arm pin (at body) distance (horizontally) shall be not less than the minimum per chart below. Lift cylinder(s) shall be provided as described in chart below.

The frame cross-member used to attach the base of the hoist cylinder shall be of box construction, utilizing minimum 3/8" steel, and approximately 5" X 7" in size. This cross-member may be utilized as a hydraulic reservoir. Welded braces or gussets shall be used where the cross-member joins the frame.

The body hinges shall be integrated by welding into a sub-frame rear cross member. The rear cross member shall be engineered for the capacity of the hoist. The hinges, brackets, and pins shall be heavy-duty in design and construction. The body hinges shall be suitable for welding the hinge to the body. All pins and bushings shall be machined, flame or torch cut holes are not acceptable.

The maximum dumping angle shall be not less than 47 degrees.

The design of the gear type pump shall be such that in its relation to the hoist cylinder there will be no high pressure oil line on which any swivel action occurs. Renewable wearing plates shall be furnished. All pipe fittings used in high pressure lines shall be schedule 80 type. All pins and bushings in hoist system shall be interchangeable between hoists of same model. Flame or torch cut hinges, pins, or bushings are not acceptable.

The hoist rating shall be per chart below. The hoist manufacturer shall be a current member of the National Truck Equipment Association (NTEA) and hoist system shall be listed on the current NTEA Dump Body & Conversion Hoist Chart.

5 cu. yd. body: Hoist frame – minimum 5-3/4" x 2-1/4" x .25". Body hinge to hoist link pin distance, min. - 32". Body hinge to hoist lift arm pin distance, min. - 35". Lift cylinder 7.5 - 8.0 inches in diameter, and 20-25 inch stroke. Hoist rating - NTEA Class 50 (minimum) and not less than 16 tons with 10 ft. body. Godwin 300U-SC or equal.

## **SPECIFICATIONS FOR BODY, DUMP, 5-10 CU. YD.**

**8 cu. yd. body:** Hoist frame - minimum 5-3/4" x 2-1/4" x .25". Body hinge to hoist link pin distance, min. - 32". Body hinge to hoist lift arm pin distance, min. - 35". Lift cylinders (2 each) 7.0 - 8.0 inches in diameter, and 20-25 inch stroke. Hoist rating - NTEA Class 70 (minimum) and not less than 23 tons with 12 ft. body. Godwin 400U-SC or equal.

**10 cu. yd. Body:** Hoist frame – minimum 5-3/4" x 2-1/4" x .25". Body hinge to hoist link pin distance, min. – 32". Body hinge to hoist lift arm pin distance, min. – 35". Lift cylinders (2 each) - 8.0 inches in diameter, and 20-25 inch stroke. Hoist rating – NTEA Class 90 (minimum) and not less than 29 tons with 13 ft. body. Godwin 400U-SC or equal.

**TRUCK CHASSIS-CAB:** The body and hoist shall be furnished for subsequent installation by the South Carolina Department of Transportation. If optional installation is required, the successful bidder will take delivery of the Department's truck at the SCDOT Equipment Depot, 1500 Shop Road, Columbia, SC. The body vendor shall deliver the truck to his facility from the Department's Equipment Depot and return it after installation of the body. The vendor shall accept full responsibility and liability in transporting the truck, relieving the Department of any loss, liability, or claim whatsoever incurred enroute.

The truck chassis-cab applications shall be as follows:

**5 cu. yd. body:** Current Model Year Ford F-750 or equal, 84" CA, 158" WB, with Allison Model 3500 RDS transmission.

**8 cu. yd. body:** Current Model Year Freightliner M2106 or equal, 84" CT, 172" WB, with Allison Model 3500 RDS transmission.

**10 cu. Yd. Body:** Current Model Year Freightliner M2106 or equal, 104" CT, 172" WB, with Allison Model 3500 RDS transmission.

During the contract period for bodies, it is expected that the separate state contracts for truck chassis-cabs will result in different year models, manufacturers, and vehicle models. These changes should not significantly affect the body contract.

**EQUIPMENT:** The unit shall be complete with all standard equipment and accessories normally furnished. In addition, equipment shall be furnished as follows:

1. The unit shall meet all applicable OSHA requirements.
2. PTO warning light.
3. Body raised warning light.
4. The leading edge of the cab shield shall be equipped with a wind deflector designed to protect automatic-type load covers (tarps).

**EQUIPMENT/SERVICES OPTIONAL:** When required during the contract term, the following optional equipment and/or services shall be provided.

1. Electric direct drive tarp system with all hardware and cab mounted controls, and asphalt rated tarp compatible with 5, 8, or 10 cubic yard bodies. All tarp hardware to be installed prior to primer and paint process. Donovan Model 7000ELD or equal.
2. Dump bodies and associated hardware installations as may be required during the contract term.
3. Air-operated tailgate system with in-cab controls.
4. 2 or 3 step retractable access ladder with grab handle and positive latch to secure ladder while in horizontal stowed position. Godwin Hide-A-Step Model HAS or equal.
5. Pneumatic high lift tailgate, configured to fit 8 or 10 cubic yard bodies.

## **SPECIFICATIONS FOR BODY, DUMP, 5-10 CU. YD.**

6. Body and hoist optional equipment additions, deletions and/or substitutions of equipment as may be required by this specification, based on terms found under special conditions of the bid invitation.
7. Rear corner post mounting location (recessed) shall be pre-punched and drilled on each post to allow oval LED warning lights to be installed using shock-mounting type rubber grommets.
8. Light bracket, fixed type, shall be attached to wind deflector to allow installation of warning light.
9. Flat or round bar tie rails shall be attached outside body extending full length of sides and tailgate. Flat bar minimum ¼" x 2" and round bar minimum ½".
10. Bracket for tailgate assist rod and stud (SCDOT to provide sample).

All optional mounting brackets, hardware, studs, tie rails, shall be installed prior to primer and paint process.

**SERIAL NUMBER:** Each unit shall be provided with a manufacturer's serial number, unique to each unit, permanently attached by plate or engraving, and easily identified. The serial number shall be used by the Department and the manufacturer to identify units for recall, to aid in recovery of stolen units, to establish ownership, and for other similar reasons.

**COLOR:** The unit shall be painted or powder coated gloss black. All oil, grease, dirt, etc. shall be removed chemically or whatever means necessary and primed prior to application of the finish paint. All dump body surfaces (top, underneath, inside and outside perimeter) to be 100% abraded by sandblasting or shot blasting to remove all surface rust and mill scale/slag. Any blast media residue shall be removed before painting. Partial abrading of inside and outside corners only is not acceptable. All surfaces shall be abraded to a SP-10 finish. Serial and data plates shall be protected from being painted over.

There shall be a zinc/epoxy primer used that is to be certified for a minimum of 4000 hours in an SAE B-117 salt spray test. The finish paint shall be certified for 1000 hours for this same test. The undercoating is to be certified for 800 hours for the salt test.

A zinc rich epoxy primer shall be applied to accommodate a 4000 hour certification. (If using a liquid primer a sealer must be applied to prevent out gassing and pinholes in finish paint.)

A black high gloss top coat shall be applied to accommodate a 100 hour certification. It shall have a gloss rating of 90% or higher.

The underneath of the dump bed shall have paintable water based rubberized undercoating applied to accommodate an 800 hour certification.

The combined paint system finish shall pass an SAE B-117 accelerated salt spray test for no less than 4000 hours. Any methods, practices, or products must abide and be certified to meet this specification prior to bid opening. Paint systems and material certification must be made available upon request.

All manufacturer's standard warning, safety, instructional, and identification decals shall be provided; however, there shall be no vendor or dealer identification or advertising decals allowed.

**WARRANTY:** The unit shall be warranted against defects in materials and workmanship for a period of not less than twelve (12) months. The warranty start date shall be based on the unit's in-service date as established by its issue from the Department's Equipment Depot to the using field custodian, and the vendor shall perform all the administrative work necessary to accomplish this following notification by the Department.

**SPECIFICATIONS FOR BODY, DUMP, 5-10 CU. YD.**

In the event there is not an authorized parts and service dealership within a reasonable distance of the unit's place of assignment, there shall be a procedure for the Department to make a claim for recovering the cost of parts and labor incurred in performing repairs which otherwise would have been covered by the warranty. Instructions and forms needed for warranty claims should be attached to the bid.

The unit shall be furnished with a copy of the warranty statement and any necessary cards, booklets, or certificates needed to receive warranty repairs at a dealership.

**SERVICE LITERATURE:** An illustrated parts book and installation instructions manual shall be furnished with each hoist and body. CD format is preferred and shall be provided, if available. Two additional copies shall be furnished to the South Carolina Department of Transportation's Director of Supply and Equipment at the time of delivery of the units.

**SALES LITERATURE, SPECIFICATIONS, AND QUESTIONNAIRE:** It is the bidder's

responsibility to ensure sales literature, specifications, questionnaire, and deviations (if any) submitted with the bid are accurate, complete and sufficiently clear as these will be used to evaluate the bid. Each bidder shall attach to his bid illustrated catalog data sheets with manufacturer's complete printed specifications covering the class or type of equipment covered by the bid. This material shall show reasonable evidence of having been printed and publically available over the internet before publication of the bid notice and shall be sufficiently detailed to permit the Department's engineers and/or staff to properly evaluate the bid. Each bidder shall attach to his bid a completed questionnaire. Any deviation from these specifications must be clearly pointed out; otherwise it will be considered that items offered are in strict compliance with these specifications, and the successful bidder will be held responsible therefore. Deviations must be explained in detail on separate attached sheet(s).

**PILOT MODEL:** A body and hoist shall be furnished for installation by the Department or the successful bidder as a pilot model to verify dimensional and other requirements. This installation shall be used to determine the lengths of the two pump driveshaft sections and other mounting details or minor changes needed. All subsequent units shall be manufactured and furnished to match the approved pilot model and the approved changes. Should the pilot model or installation by the successful bidder be found unacceptable to the Department, the contract may be terminated upon written notification.

**GENERAL:** The body and hoist assembly shall be of the latest design and in current production. It shall operate efficiently in dumping the body of maximum dimensions specified herein and must form a satisfactory unit upon installation on the truck chassis. The right is reserved to reject any and all bids proposing to furnish equipment in which, in the opinion of the Department's engineers and/or staff, is not satisfactory for the Department's use in the proposed application.

**No Bulk packaging of components- Components for each individual body must be packaged per unit.**

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