



## Ocean County Board of Commissioners

OFFICE OF THE  
OCEAN COUNTY COMMISSIONERS

Director Gary Quinn  
Deputy Director Gerry P. Little  
Commissioner Virginia E. Haines  
Commissioner John P. Kelly  
Commissioner Joseph H. Vicari

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Toms River, New Jersey  
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### Board Meeting Agenda

Date: November 17, 2021 - 4:00 PM  
Location: Administration Building  
Room 119  
101 Hooper Avenue  
Toms River, NJ 08754

Agenda: Awarding a Contract for the furnishing and delivery of MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER to Robert H. Hoover and Sons, Inc., the sole qualified bidder. (B2021-192)

<b>Official Resolution#</b>	<b>2021001588</b>						
Meeting Date	11/17/2021						
Introduced Date	11/17/2021						
Adopted Date	11/17/2021						
Agenda Item	k-4						
CAF #							
Purchase Req. #	B2021-192						
Result	Adopted						
<b>COUNTY COMMISSIONER</b>	<b>PRES.</b>	<b>ABS.</b>	<b>MOVE</b>	<b>SEC</b>	<b>AYE</b>	<b>NAY</b>	<b>ABST.</b>
Quinn	<				<		
Little	<				<		
Haines	<		<		<		
Kelly	<				<		
Vicari	<			<	<		

I HEREBY CERTIFY THAT THIS DOCUMENT IS A TRUE, COMPLETE AND ACCURATE COPY OF THIS RESOLUTION, ADOPTED BY OCEAN COUNTY BOARD OF COMMISSIONERS, NJ AT THE MEETING REFERENCED THEREON

*Michelle I. Gunther*

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Clerk Of The Board

CONTRACT NO. MUST BE ON ALL  
PAPERS, DOCUMENTS, INVOICES, VOUCHERS  
No. B2021-192

RESOLUTION

November 17, 2021

WHEREAS, on October 26, 2021, pursuant to legal advertisements therefor, sealed bids were received for the furnishing and delivery of MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER for the County of Ocean; and

WHEREAS, at the advertised time, one response was received from the following bidder:

<u>Name of Bidder</u>	<u>Address of Bidder</u>
Robert H. Hoover and Sons, Inc.	149 Gold Mine Road Flanders, NJ 07836 (973) 347-4210

; and

WHEREAS, after the receipt and examination of same, the County Purchasing Agent has now recommended to this Board that the sole qualified bid, according to specifications, namely that of, ROBERT H. HOOVER AND SONS, INC. be accepted.

NOW, THEREFORE, BE IT RESOLVED by the BOARD OF COMMISSIONERS of the COUNTY OF OCEAN, STATE OF NEW JERSEY, as follows:

1. The Director and Clerk of this Board are hereby authorized and directed to enter into a contract accepting the bid for the furnishing and delivery of MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER for the County of Ocean, for the contract period from date of award through November 16, 2022, a period of one (1) year or until delivery is complete unless otherwise stated. The County reserves the right to extend the term of the contract pursuant to N.J.S.A. 40A:11-15, as follows:

ROBERT H. HOOVER & SONS, INC. for nine (9) items, to wit:

ITEM NOS. 1, 1a, 1b, 1c, 1d, 1e, 1f, 1g and 1h.

For a Total Lump Sum Award of Item #'s 1 - 1h of \$2,108,363.50.

This vendor has extended this contract to County Cooperative Contract System Participants.

2. Payments for the equipment and services to be acquired by this contract shall be made upon the approval of vouchers submitted by the successful bidders in accordance with the requirements of the Board of Commissioners and subject to the Board of Commissioners customary procedures. Delivery shall be made upon receipt of a Purchase Order issued by the Ocean County Department of Purchase, upon which delivery locations and needed quantities shall be indicated.

3. Funds for the equipment and services shall be available within the following funding Source: County Road Department and Vehicle Services Department O.E.

4. The contract number must be placed on all papers, documents, invoices and vouchers pertaining to said contract, the number being B2021-192.

5. BE IT FURTHER RESOLVED that certified copies of this Resolution shall be made available to the County Auditor, County Department of Purchasing, Department of Finance, County Road Department, Vehicle Services and Robert H. Hoover & Sons, Inc., the successful bidder.

PROPOSAL DOCUMENT REPORT

Bid No. TBD

MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

Confirmed

14. Submission of Bid Package\*

By submitting a response to this solicitation, the Vendor understands and acknowledges that all required documents to this solicitation must be submitted and that failure to do so may be cause for rejection.

Bidder also understands that only one (1) bid submission shall be considered. Please DO NOT Submit a manual bid response. Submitting a manual response in addition to the electronic response is cause for rejection of your bid.

Confirmed

PRICE TABLES

ITEM # 1 - MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL

Line Item	Description	Qty.	Max Qty.	Unit of Measure	Unit Cost	Total	Comments
✓ 1	Model Year 2022, or Newer, 6 Yard Dump with Plow and Spreader, As Specified, or Equal	1	10	EA	\$186,786.00	\$1,867,860.00	
OPTIONS							
✓ 1a	Freedom 2.2 Spreader Control, As Specified	1	10	EA	\$2,812.50	\$28,125.00	
✓ 1b	Larger Dump Body, As Specified	1	10	EA	\$795.00	\$7,950.00	
✓ 1c	Paint for Dump Body, As Specified	1	10	EA	\$2,651.75	\$26,517.50	
✓ 1d	Road Department Paint Color Scheme, As Specified	1	10	EA	\$1,426.00	\$14,260.00	
✓ 1e	Diagnostic Tools/Test Equipment, As Specified	1	3	SET	\$20,417.00	\$61,251.00	
✓ 1f	Two-Way Radio Power and Wiring Requirements for New Vehicles, As Specified	1	10	EA	\$500.00	\$5,000.00	

Introduced on: November 17, 2021  
 Adopted on: November 17, 2021

Official Resolution # 2021-00158 SMALL DUMP TRUCK WITH PLOW AND SPREADER

PROPOSAL DOCUMENT REPORT

Bid No. TBD

MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

Line Item	Description	Qty.	Max Qty.	Unit of Measure	Unit Cost	Total	Comments	
✓ 1g	Installation of County-Supply Two Way Radio Accessories, As Specified	1	10	EA	\$740.00	\$7,400.00		
✓ 1h	Technical Support, As Specified	1	180	EA	\$500.00	\$90,000.00		
TOTAL							\$2,108,363.50	

MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL**

Year, Mfr., Model: 2023 Freightliner 114SD  
Engine: Cummins L9  
Transmission: Allison 3500 RDS  
Delivery, A.R.O.: 300 Days  
Warranty: 1 Year Basic and Extended  
Warranty Per Specs

**STAINLESS STEEL  
DUMP BODY**

Mfr., Model: Galion 433FT  
Warranty: 1 Year

**PLOW SYSTEM**

Mfr., Model: ARM SPX 050  
Warranty: 1 Year

**UNDER TAILGATE  
SPREADER**

Mfr., Model: Meyer BL960  
Warranty: 1 Year

**HYDRAULIC  
SYSTEM**

Mfr., Model: Certified Power  
Hydraulics  
Warranty: 1 Year

**COMPLIANCE**  
**YES**                      **NO**

**CAB AND CHASSIS SPECIFICATIONS**

**General**

Chassis designed for heavy-duty general use of a dump, snow plow and spreader truck with appurtenances

                    

Set back axle truck package with a minimum bumper-to-back-of cab measurement of 114". Axle setback to provide the best turning radius possible.

                    

Intended Service: Dump Truck

                    

Cab to Body Clearance: 3 inches

                    

Front Axle Capacity: 16,000 lbs.

                    

Rear Axle Capacity: 25,000 lbs.

                    

Expected GVW Capacity: 40,020 lbs.

                    

**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**                      **NO**

**CAB AND CHASSIS SPECIFICATIONS (CONT'D)**

**Engine**

Cummins L9, minimum 300 HP @ 2,200 RPM and 860 lb.-ft. torque @ 1,200 RPM. Shall be in-line 6 cylinder of wet sleeve design, and 50 State certification and electronics for simple service and diagnosis when needed. Minimum displacement shall be 8.9 liters. Engine must comply with latest federal mandate for diesel emissions. Should an alternate power plant be offered, the bidder shall provide all necessary technical data to show proof of equality.

                    

Stainless steel oil pan and hardware

                    

**Engine Equipment**

Engine must have latest diesel emission certification and OBD

                    

Regen inhibit speed threshold-5 MPH

                    

PTO engine RPM Limit 2,400 RPM

                    

Enable regeneration in PTO mode

                    

No PTO mode cancel vehicle speed

                    

Oil check and fill: engine mounted

                    

Alternator: 160 amp DR 28 SI brushless Quadra-mount with remote battery volt sense

                    

Batteries: Two (2) 12-volt GNB Maintenance Free 2050 CCA

                    

Battery Box: Plastic, frame-mounted, left side under cab

                    

Positive and negative posts for jumpstart located on frame next to starter

                    

Positive load disconnect switch mounted outboard of driver seat. Must be protected from bottom of cab.

                    

Compressor: 18.7 CFM

                    

Discharge line: Teflon

                    

Engine Protection: electronic engine-integral warning system with shut down function

                    

Engine brake: Cummins exhaust brake

                    

Exhaust: Single right-hand under step mounted horizontal after-treatment system with diamond plate cover and cab access steps

                    

Fan Drive: Horton air on/off drive automatic fan control

                    

Oil filter: full-flow

                    

Fuel filter

                    

13 gallon diesel exhaust fluid tank shall be full of fluid at delivery

                    

Non-polished aluminum diamond plate diesel exhaust fluid tank cover

                    

✓ **ITEM #1 MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

EMC dated on November 17, 2021  
Adopted on November 17, 2021  
Official Resolution #: 2021001538

**COMPLIANCE**  
**YES NO**

**CAB AND CHASSIS SPECIFICATIONS (CONT'D)**

**Engine Equipment (Cont'd)**

Radiator	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy-duty coolant: -34 degrees Fahrenheit extended life with coolant filter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Constant-torque clamps: constant torque for coolant hoses 1-3" diameter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Engine Heater: Phillips 1,000W/115V	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Chrome heater receptacle: mounted under driver's door	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Flywheel housing: Aluminum	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air intake warmer	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Starter: Delco 12V 39 MT HD with OCP and magnetic switch	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Transmission and Equipment**

Transmission: Allison World RDS 3500 six-speed electronic automatic with PTO provision, six (6) forward gears and one (1) reverse gear. Six-speed transmission programming (223) Programmed to unlimited output speed	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vehicle interface wiring, Magnetic engine drain, transmission and rear axle fill and drain plugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vehicle interface wiring with body builder connector mounted back of cab	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electronic transmission customer access connector	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Underslung or overslung frame cross-member at transmission mount	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Trans oil check and fill with electronic oil level check	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transmission cooler: heavy-duty water-to oil in radiator end tank	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PTO mounting LH side of transmission	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Front Axle and Equipment**

Detroit DA-FS-16.0-572KPI/3.74 drop, minimum capacity @ ground of 16,000 lbs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Set Back Front Axle Design	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front brakes: Meritor cam 16.5 x 6" Q+ cast spider cam with dust shields	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front brake lining: non-asbestos	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front brake drums: Conmet outboard-mounted cast-iron	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front oil seals	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Synthetic 75W-90 front axle lube	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front hubcap: Vented oil-type with window center and side plugs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front slack adjusters: Meritor	<input checked="" type="checkbox"/>	<input type="checkbox"/>

✓ **ITEM #1 - MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**



**COMPLIANCE**  
**YES**                      **NO**

**CAB AND CHASSIS SPECIFICATIONS (CONT'D)**

**Front Axle and Equipment (Cont'd)**

Power steering pump: TRW TAS-85	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Power steering reservoir: 4-quart	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Suspension bushings: graphite bronze with seals	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front suspension: flat-leaf springs rated @ 16,000 lbs. minimum	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front shock absorbers	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Rear Axle and Equipment**

Meritor RS-25-160 series with .63 thickness housing, 25,000 lbs. with 18" ring gear minimum	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear axle ratio: 5.63	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear axle carrier housing: heavy-duty iron	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Main driveline: MXL176T Meritor extended lube with half-round yokes	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Driver controlled traction differential with driver controlled differential lock rear valve with dash-mounted switch and blinking indicator lamp, differential unlock with ignition off, active @ 5 MPH	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lubrication: Synthetic 75W-90 rear axle lube	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear Brakes: Meritor cam 16.5 x 7" P cast spider heavy duty double anchor fabricated shoes	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear axle brake linings: non-asbestos with dust shields	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear brake drums: Webb HW outboard-mounted cast iron	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Brake cams and chambers on forward side of drive axle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear axle oil seals	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parking brake chambers: Bendix Eversure Longstroke spring parking brake chambers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear axle Automatic slack adjusters: Haldex	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear Suspension: 26,000 lbs. Flat leaf with helper and radius rod	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fore and aft control rods	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Axle clamp: Standard U-bolt pad	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Brake System Equipment**

Brake Package: Full air	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Anti-lock brake system: Wabco four-channel, 4-sensor/4 modulator, with-out traction control enhancement	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Introduced on November 17, 2001  
Adopted on: November 17, 2021  
Sponsor: Robert Hoover  
**ITEM #1: MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES NO**

**CAB AND CHASSIS SPECIFICATIONS (CONT'D)**

**Brake System and Equipment (Cont'd)**

Chassis air lines: reinforced nylon, fabric braid and wire braid depending on location	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Brake relay valve with 5-8 PSI crack pressure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air dryer: Bendix AD9SI heated air dryer mounted inboard on LH rail	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air reservoirs: Aluminum	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air tank drain valves: Pull cables on all air tanks	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Clear frame rails BOC to front of rear suspension both rails outboard	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Quick disconnect fitting w/50' of 200 PSI hose for tire inflation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Trailer airbrake package with airlines to back of truck	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Frame and Wheelbase**

Wheelbase: 150"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cab-to-Axle: 84"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Frame: 2,592,000 RBM, 7/16" x 3 9/16" x 11 1/8" heat treated steel, 120,000 KSI yield strength single channel, double frame is not acceptable due to rust perforation of inner frame splayed frame shape at front with 24" front frame extension	<input checked="" type="checkbox"/>	<input type="checkbox"/>
End of frame: Square-cut	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear Suspension Cross Member: Standard heavy-duty C-channel	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Chassis Equipment**

Front bumper: 14" steel 3/8" or Custom for snow plow mounting	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front tow hooks: Two (2) frame mounted	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fender and front of hood mounted front mud flaps	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front license plate bracket included	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Chassis Fasteners: Grade 8 threaded Hex	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Fuel Tanks and Equipment**

Left hand fuel tank: 60-gallon, must be constructed of aluminum to preclude exterior corrosion and interior fuel contamination	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fuel tank: 25" diameter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fuel tank and band finish: Polished stainless steel bands with plain aluminum tank	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fuel tank orientation: Forward mounted under cab	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fuel tank cap: Standard, non-locking	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fuel/water separator: With heated bowl and primer pump	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**                      **NO**

**CAB AND CHASSIS SPECIFICATIONS (CONT'D)**

**Fuel Tanks and Equipment (Cont'd)**

Fuel hoses: Nylon high temperature reinforced

**Front Tires, Hubs and Wheels**

Front Tires: Michelin XZU-S 315/80R x 22.5 20 Ply

Front Hubs: Conmet pre-set bearing iron (aluminum hubs are not acceptable)

Front Wheels: Accuride model 29039 5-hand 5.25 inset 10-bolt hub-pilot 22.5" x 9.00" steel disc

Front wheel nuts: Hub-pilot with flat flange

**Rear Tires, Hubs and Wheels**

Rear Tires: Michelin XDS-2 11R22.5 16-ply

Rear hubs: Conmet pre-set bearing iron (aluminum hubs are not acceptable)

Rear wheels: Accuride model 28828 2-hand hole 10-bolt hub-pilot 22.5" x 8.25" steel disc wheel

Rear wheel nuts: hub pilot with flat flange

Wheel check high visibility green loose wheel nut indicator on all wheels

**Spare Tires to be Included**

One (1) spare front tire mounted to wheel to match specified front wheels and tires

One (1) spare rear tire mounted to wheel to match specified rear wheels and tires

**Cab Exterior**

Cab: 114" BBC conventional aluminum and/or steel cab, one-piece heated windshield, adjustable doors with concealed hinges, fiberglass hood and split fenders with splash shields that lift away from the engine compartment when the hood is tilted. Entry and egress shall be made via a 3-point system consisting of self-cleaning non-slip steps and a minimum of two (2) grab handles on each side for the operator and passengers to utilize, one on the inside of the door, and one on the cab exterior to the rear of the door. The steps shall be a minimum of 4" wide and the grab handles must be large enough to be safely grasped by one wearing heavy-duty work gloves.

Cab mounts: Air

Bug Screen: Non-removable mounted behind grille

Grab handles: Exterior LH/RH

Grille: Stationary Grille

Hood: Fiberglass

Air Horn under deck

Electronic horns: Dual

**ITEM #1 INTRODUCED ON OR AFTER NOVEMBER 10, 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER AS SPECIFIED, OR EQUAL (CONT'D)**

Adopted on November 17, 2021  
Resolution No. 2021-0488

**COMPLIANCE**  
**YES**                      **NO**

**CAB AND CHASSIS SPECIFICATIONS (CONT'D)**

**Cab Exterior (Cont'd)**

Key and Lockset: All trucks and all locks keyed the same with six (6) keys per unit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Headlights: Single halogen composite with bright bezels, headlights on with wipers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Marker lights: aerodynamic LED	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Stop/Tail/Turn lamps at end of frame LED integral	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Primary mirrors: Dual west coast bright finish with heater LH & RH remote	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mirror Mounting: Mirrors mounted on doors	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Auxiliary mirrors: 8" convex bright finish mounted under primary mirrors both sides	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear window: Tinted safety glass	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Door windows: Tinted with lowered bottom beltline for increased sideward visibility and operating wing windows LH & RH	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Door window regulators: Electric	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Windshield: 1 piece tinted and heated	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Windshield washer reservoir with fluid level indicator	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Cab Interior**

Interior Level: Gray vinyl interior	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Interior convenience package roof mounted console with additional center compartment with CB provision	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LH upper door trim: Molded door panel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RH upper door trim: Molded door panel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Map pockets: LH door, forward roof mounted console, and upper storage compartments	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dash mounted 12 volt power supply	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Smart switch expansion module	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cup Holder	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air Conditioning	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Main heater/vent control: Main HVAC with recirculation switch	<input checked="" type="checkbox"/>	<input type="checkbox"/>
HVAC ducting for fresh air intake with snow shield	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heater plumbing: Standard without ball shut off valves	<input checked="" type="checkbox"/>	<input type="checkbox"/>
A/C compressor: heavy-duty	<input checked="" type="checkbox"/>	<input type="checkbox"/>
A/C condenser: Radiator mounted	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Introduced on: November 17, 2021  
 Adopted on: November 17, 2021  
 Official Resolution#: 2021001588

MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)

COMPLIANCE  
YES                      NO

CAB AND CHASSIS SPECIFICATIONS (CONT'D)

Cab Interior (Cont'd)

A/C plumbing; binary control with R134A refrigerant	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cab Insulation Package: Standard	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12V negative ground electrical system	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Interior lights: Dome door activated LH & RH	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cab door locks: Electric	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Driver seat: Elite high-back air suspension with 2 chamber air lumbar/heat, integrated cushion extension forward and rear cushion tilt, adjustable shock absorber with dual driver seat arm rest	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Passenger seat: Elite high-back air suspension with 2 chamber air lumbar/heat, integrated cushion extension forward and rear cushion tilt, adjustable shock absorber with dual arm rest	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Driver seat cover: Vinyl	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Seat belts: 3-point adjustable D-ring retractor for outboard seating positions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Steering column: Tilt	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Interior sun visors: Standard driver and passenger	<input checked="" type="checkbox"/>	<input type="checkbox"/>
First Aid kit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5 lb. Fire extinguisher	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Triangular Reflector kit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Instrument Panel and Controls</u>		
Gauge package: Electronic	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gauge finish: Black bezels	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Low air pressure warning: Light and buzzer	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air system pressure gauge with primary and secondary gauges	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cruise control	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Starter control: key-controlled	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LCD odometer, trip odometer, hour meter and voltmeter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Diagnostic Interface connector: Located below dash	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fuel level gauge: Electric	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Coolant temperature gauge: Electric	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Introduced on: November 17, 2021  
 Adopted on: November 17, 2021  
 Official Resolution#: 2021001588

MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**                      **NO**

**CAB AND CHASSIS SPECIFICATIONS (CONT'D)**

**Instrument Panel and Controls (Cont'd)**

Transmission temperature gauge	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hour meter: Integral with driver display	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Engine oil pressure gauge: Electric switch with indicator lamp	<input checked="" type="checkbox"/>	<input type="checkbox"/> PTO
Radio: AM/FM WB with front auxiliary input	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Radio speakers: Two (2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Radio antenna	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Speedometer: Electronic, MPH scale	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tachometer: Electronic, 3000 RPM	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Digital Voltage Display: Integral with driver display	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Windshield wiper control: Electric 2-speed with variable intermittent settings	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Snow plow light must be activated through OEM chassis wiring	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Six (6) on/off rocker switches in the dash with indicator lights	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parking brake system: 2-valve system with warning indicator	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Turn signal switch: Self-cancelling with brake overriding stop lamps	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Paint**

Paint type and color: Basecoat clear coat paint; color to be selected from standard color chart at time of order	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Paint design: Standard	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Chassis color: Black Polyurethane	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bumper color: Black	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front and Rear wheel color: Powder-coated black	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Undercoating**

Entire truck chassis, underside of cab and underside of added body, oil pan (dump, utility, platform) to be coated with Tectyl 2423 haps free black Which is a low VOC, high solids, emulsion corrosion preventive coating, or equal	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Accessories**

One (1) complete set of filters for cab/chassis, drive train and upfit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Five (5) gallons of recommended-use hydraulic fluid	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Introduced on: November 17, 2021  
 Adopted on: November 17, 2021  
 Official Resolution#: 2021001588

MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**                      **NO**

**DUMP BODY SPECIFICATIONS – GALION HEAVY DUTY CROSS-MEMBER-LESS MODEL 433U STAINLESS DUMP BODY**

**Manuals**

The end unit shall be delivered with the following items:

- One (1) fire extinguisher, interior mounted
- One (1) complete set of all fluid filters, air filters and belts for engine, transmission, final drives, mounted equipment, optional equipment, and all accessories that have replaceable filters
- Three (3) complete sets of mechanic’s “shop”, service and troubleshooting USB’s for chassis, engine, transmission, optional equipment, mounted equipment and accessories, including wiring diagrams. Parts manuals shall be in USB format (First ordered unit only)
- Three (3) sets of Manufacturer’s Line Setting Sheets for chassis, mounted equipment, and optional equipment
- One (1) “Build Book” per unit ordered. This Build Book shall include the brand, model, part number and serial number for the following items/systems: Hydraulic Control Valve; Hydraulic Control Cables; Hydraulic Reservoir; Plow; Spreader; Optional Freedom 2.2 Spreader Control (if ordered); PTO and Pump; Tarp System; Dump Body. A sample of this build book will be available to view during pre-build meeting.

**General**

The dump body required under these specifications shall be constructed of 304-2B stainless steel. Unit shall consist of a heavy duty body, hydraulic hoist, hydraulic pump, cab shield, safety accessories, and all other components necessary to make up a complete operating unit. The body and hydraulic hoist shall be manufactured by the same company. Hoist shall be Class 50 NTEA rated telescopic.                      

**Minimum Body Dimensions**

- Inside Length: 10’6”
- Inside Width: 84”
- Overall Width: 96”
- Side Height: 26”
- End Height: 36”
- Rear Post Height: 36”
- Capacity: 5.9/6.8 Cubic yards water level
- Cab Shield: 10 Gauge 304-2B, ½” x 90” Integral cab shield

**Minimum Body Construction**

- Sides: 7 gauge 304-2B stainless steel with formed sloping dirt shedding bottom rail
- Board Pockets: 10” 2021 Class 304-2B side board pockets for 4” wood

Introduced on: November 17, 2021

Adopted on: November 17, 2021

Board Resolution: 2021-01-33

MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**      **NO**

**DUMP BODY SPECIFICATIONS – GALION HEAVY DUTY CROSS-MEMBER-LESS MODEL 433U STAINLESS DUMP BODY (CONT'D)**

**Minimum Body Construction (Cont'd)**

Front/Tailgate: 7 GA 304-2B stainless steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Floor: Hardox 3/16" AR450 180,000 PSI steel with 2" side to floor radius	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Top Rail: 7 GA 304-2B stainless steel with formed in dirt shedding box top rail	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Side Braces: One (1) pressed outward "V" per side	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Oak Wood Side Boards: 2" x 4" side boards shall be placed on both sides of dump body	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front Corner Post: 6" wide x 7 GA 304-2B	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1 1/4" x 3/8" Tarp Rail: Full length stainless both sides (round bar not acceptable)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Grip strut stainless steel rail – length of body at base	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear Corner Post: 15" wide full depth x 7 GA 304-2B	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15" Full Depth Rear Bolster: 7 GA 304-2B stainless steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tailgate: 7 GA 304-2B stainless steel. Full perimeter box bracing, two intermediate vertical braces and one intermediate horizontal brace	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Six (6) panel double-acting tailgate with two sets of stainless steel banjo plates and long chains to allow tailgate to lie down horizontal with floor (Banjo eyes punched in rear post not acceptable). Steel D-ring inside top center of tailgate for removing tailgate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy duty stainless steel "tarp friendly" top hardware with grease fittings and chains on top pins to prevent loss of them if removed. 1" overshot lower hardware	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tailgate release handle left front corner with chain & ring to lock handle closed. 5/8" release rod down left side alongside of long sills with enough gussets to prevent sagging	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3/8" spreader chains to be bright zinc plated steel covered with Naltex protection covering	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Crossmembers: None	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Longsills: 10" @ 25.5# I-beam long sills	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lighting: STD FMVSS 108 LED lights/reflectors. Must have one (1) oval LED Stop/Tail/Turn in each rear corner post. Three (3) 1" clearance lights mounted in pull plate in back of truck	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Body Up Indicator Light: As required by OSHA	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Underbody: Black	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Welding: Continuous exterior welding required (skip welding or caulking not acceptable). All welds must be cleaned at factory to remove all burn marks.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Adopted on: November 17, 2021  
Official Resolution#: 2021001588



MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**                      **NO**

**DUMP BODY SPECIFICATIONS – GALION HEAVY DUTY CROSS-MEMBER-LESS MODEL 433U STAINLESS DUMP BODY (CONT'D)**

**Minimum Hoist Requirements**

Hoist shall be Class 50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Trunnion mounted to the body with the largest diameter of the cylinder at the bottom for increased stability	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The front head sheet of the body shall be of one piece and be of a height sufficient for hoist and have a dog house 10" deep by 20" wide	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All tubing sections of the cylinder shall be salt bath nitrided for superior corrosion resistance, increased hardness and durability	<input checked="" type="checkbox"/>	<input type="checkbox"/>
U-cup type seals shall be positioned in the gland nuts of each section with a wiper installed above each seal to keep contaminants out	<input checked="" type="checkbox"/>	<input type="checkbox"/>
When the tubes retract, they shall be surrounded by oil below the U-cup seals	<input checked="" type="checkbox"/>	<input type="checkbox"/>
An outer cover shall enclose the cylinder while not in use	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Through means of the oscillating collar attached to the bottom of the outer cover, the body can be offset to one side 5 to 7 degrees without side loading the cylinder	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cylinder first moving stage, 4 ½" O.D.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Three (3) stages with 100" stroke	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operating pressure, 2,000 PSI	<input checked="" type="checkbox"/>	<input type="checkbox"/>
One (1) body prop	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b><u>Miscellaneous</u></b>		
Tailgate spreader chain kit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
One (1) oval Stop/Tail/Turn light cutouts in rear corner post	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wiring for standard dump body lights enclosed in a sealed waterproof wiring harness. Split loom not acceptable	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Body and hoist shall come complete with manufacturer's safety decals and operating Instructions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Body and hoist warranted to be free from defects in material and workmanship under normal use and service for a period of five (5) years	<input checked="" type="checkbox"/>	<input type="checkbox"/>
One (1) stainless steel grab handle, driver side front	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Stainless steel side ladder; slide out; 2 step. Location to be determined by County.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3M reflective tape on both sides of body and on 6-panel tailgate	<input checked="" type="checkbox"/>	<input type="checkbox"/>



MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**                      **NO**

**PIONEER MODEL EDD 1500D 8/15' TARP SPECIFICATIONS (CONT'D)**

Worm & Wheel Configuration: Permanently lubricated sealed gearbox. 90 to 1 Ratio

                    

Output shaft shall be supported by ball bearings on both ends. Output shaft shall be directly coupled to left side roller. Electric motor is .85 horsepower. Aluminum gearbox housing. Plastic protective cover. 3/4" O.D. output shaft. Motor is thermally protected by automatic resetting circuit breaker.

                    

**Pivot Arm Framework**

Pivot Arms: 1.745" O.D. x 1.405" I.D. 6105-T6 Aluminum Extrusion with .250 W X .94 L reinforcing fin on one side and .75 W x .50 L reinforcing block on other side. Overall height to be 3.185"

                    

Rear Section: 1 3/4" O.D. x 170 wall 6061-T6 Aluminum Extrusion

                    

Bows: 1 3/8" O.D. x .125 wall 6105-T4 Aluminum Extrusion

                    

Arm Mounting Brackets: Steel Weldment

                    

Base Plate: 1/4" H.R.S.

                    

Mounting Hub: 4" O.D. steel tube

                    

Spring: Reverse wound torsion spring – 1/2" diameter wire

                    

Wire per ASTM A229 Class I

                    

**Fabric**

100% Polyester, 1000 Denier, Black HD mesh, 13 oz. per square yard

                    

**Construction**

Seamless front to rear, rectangular in shape, 85" wide, grommets on front & sides, pocket at rear

                    

**Wiring and Electrical**

All wire shall be 8 gauge stranded cable, all connectors shall be ring type. High amperage self-centering rotary switch (Momentary On/Off – Momentary On). Thermal reset circuit breaker (Auto Reset).

MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**                      **NO**

**CENTRAL HYDRAULIC MANUAL SYSTEM – STAINLESS ENCLOSURE**

**PTO**

**CHELSEA RESE MTCA 3301000175 MTCA3301**

The PTO shall be of a hot shift design driven off the Allison automatic transmission. The PTO shall have a direct mount rotatable pump flange. There shall be a console mounted rocker switch to engage and disengage the PTO.

                    

**Pump**

**PARKER P20A346JEAL17-25**

The pump shall be a cast iron, positive displacement, gear type pump. The pump shall feature pressure balanced, bronze wear plates and Teflon bushings. Pump shaft shall be a 7/8" 13 spline shaft to couple with PTO. Pump size shall be 3.44 cubic inches of displacement.

                    

**Control Valve**

The control valve shall be a cast iron, sectional type spool valve. Valve shall have a priority inlet with adjustable flow control and adjustable main relief. The hoist section shall incorporate an auxiliary relief for the dump hoist down function. The Priority flow from inlet shall run to a combined flow section upstream of spreader section to ensure seamless operation of spreader during winter operations. The valve shall have a nominal flow rating of 20 GPM with flows to 30 GPM available with a pressure drop not to exceed 140 PSI.

                    

Valve shall be a Parker-Gresen model V-20. Use of external flow dividers is unacceptable.

                    

Valve shall be arranged as follows: 1 – Priority flow inlet; 2 – DA Hoist with 500 down side relief; 3 – DA Plow Raise; 4 – DA Plow Angle; 5 – Combined flow section; 6 – Spreader with detent and reverse

                    

**Spreader Control**

The spreader control shall be a dual knob valve with on/off handle. The spreader valve shall have individual flow adjustment knobs for the spinner and auger. Spreader valve shall include a relief cartridge to protect the motors in the event of a material jam. Valve shall feature spinner priority to reduce material pile up from the auger at low flow conditions. 1/2" JIC Bulkhead fittings shall be drilled through frame rail to accommodate a short jumper hose with quick disconnects mounted to body.

MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**                      **NO**

**CENTRAL HYDRAULIC MANUAL SYSTEM – STAINLESS ENCLOSURE (CONT'D)**

**Cable Controls**

The control valve shall be shifted via sealed cable assemblies. The cable assembly shall feature a polyethylene conduit with armor over braid and Teflon liner. Cable assembly shall be rated for a minimum of 100 lbs. pull and 80 lbs. push. Cables shall be attached to the hydraulic valve by a bonnet type connection with clevis pin and locking clips. Cable shall be attached to an in cab handle. The handle shall be mounted in a location convenient to the operator. The handle shall feature cast base construction with steel internal parts and be rated for 80 lbs. of output force. A knob with identification label shall be attached to the end of the handle.

**Reservoir/Valve Enclosure**

Reservoir must be constructed of 7 GA stainless steel. Reservoir/valve enclosure must be 30-gallon capacity with an integrated covered mounting area for the valve. All plumbing for the hydraulic valve inside the enclosure shall be SAE rated stainless steel tubing and terminate on the front of the reservoir with JIC bulkhead connectors. The breather cap shall be mounted to an inspection lid. Inspection lid shall also provide for an in-tank mounted return line filter. The filter assembly shall incorporate a 10 micron 50 GPM filter element with a 25 PSI bypass. The reservoir shall include a twist off filler/breather assembly with 40 micron vent filter and a fill screen. Reservoir shall be complete with a sight temperature gauge and a magnetic drain plug. Suction port shall allow for installation of a 2" NPT 50 GPM suction screen. Suction screen shall have a 3 to 5 PSI by-pass spring. A 2" full flow ball valve shall be installed in the suction line. Removing of a lid to access the filter and breather cap is not acceptable. The reservoir shall have a float switch to control PTO operation in the event of low oil.

**SPX 050 AMERICAN ROADS TRITON SNOW PLOW STEEL MOLDBOARD TUBE TABLE POWER INFINITE REVERSING FULL PLOW SPECIFICATIONS**

**Moldboard Specifications**

Moldboard length of 11 feet

Moldboard height of 42 inches

Moldboard material shall be 10 gauge carbon steel smooth rolled profile providing ultra-smooth surface for snow deflection

MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<b><u>STEEL MOLDBOARD TUBE TABLE POWER INFINITE REVERSING FULL PLOW SPECIFICATIONS (CONT'D)</u></b>		
<b><u>Moldboard Specifications (Cont'd)</u></b>		
Overhang from cutting edge shall have minimum 12" overhang with 10 degree attack angle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Top of moldboard shall be reinforced by 2 ½" x 2 ½" x 3/8" angle iron	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bottom of moldboard shall be reinforced by 4 x 4 x ¾" angle iron and drilled to accommodate AASHTO standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ribs shall be reinforced with 2 x 2 x 3/8 angle as well as the upper and lower reinforcement angles. Ribs shall be 5" at the trip edge and 3" tall at the top edge by ½" wide. Ribs shall be spaced to match support arm locations as well as provide adequate support of the moldboard. A total of 12 ribs shall be used per moldboard assembly. Three sets of double ribs and 6 single ribs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Each rib shall have a ½" relief at the corners where they attach to the reinforcement angles. This allows water to drain off the back of the moldboard during storage.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
At the bottom of each rib there shall be three 1 5/16" holes spaced at 1 7/8" center to center to allow for semi-circle height adjustment	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Two sets of double ribs shall have three 1 5/16" holes spaced at 2 ¼" center to center to allow for attack angle adjustment	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Weldments on the moldboard shall be continuous	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outer rigs of moldboard shall be drilled for marker installation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Two (2) curb guards mounted each side of moldboard	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b><u>Trip Mechanism Construction</u></b>		
Plow shall be full trip design consisting of two (2) coil springs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Springs shall be ¾" wire with a coil OD of 5 9/16", consisting of 16 full coils	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bottom angle shall be reinforced by eleven (11) ½" thick gussets spaced evenly to avoid interference with cutting edge attachment hardware	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cutting edge shall be 6" x 5/8" x 11' long and is drilled to AASHTO standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cutting edge shall be secured using 5/8" grade 8 carriage bolts	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Introduced on: November 17, 2021  
 Adopted on: November 17, 2021  
 Official Resolution#: 2021001588

MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

✓ ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)

COMPLIANCE  
YES                      NO

STEEL MOLDBOARD TUBE TABLE POWER INFINITE REVERSING FULL PLOW SPECIFICATIONS (CONT'D)

Push Frame

Push frame shall be designed to hydraulically reverse the moldboard in an arc at any angle from 35 degrees left to 35 degrees right from a centered position

Push frame shall be constructed from a ½” plate

Push frame shall be supported above and below the semi-circle with 2 x 4 x 3/16” tubing

Push frame shall be drilled to accept 1 ½” bolt at the semi-circle connection. At this connection, welded to the push frame is the female portion of the socket connection. This connection distributes the pushing load directly from the push frame to semi-circle and moldboard relieving stress on the bolted connection. The female socket connection is made from 1” plate steel and contoured to match the male portion on the semi-circle.

Rear of push frame shall be drilled to accept a removable QCP adapter. Three sets of 1 3/16” holes shall be drilled on 2” centers to allow for installation on a variety of trucks and hitches

Two holes shall be located on the top and bottom push frame plates drilled to accept 1 ½” bolts for hydraulic cylinder attachment.

All welds must be continuously welded, no exceptions.

Semi-Circle Construction

Semi-circle shall be constructed from 5 x 5 x 3/16” tubing. The main tube or “push beam 5 x 5 x 5 1/16” is 120” long spanning the entire width of the moldboard. This tube shall be constructed from one continuous piece.

There shall be two stops placed appropriately to prevent the plow from turning past 35° left or right.

Crank style jackleg (part #0091215) to be mounted on backside of semi-circle    
Hydraulic cylinder mounting points shall be ½” plates welded to the top and bottom of the semi-circle. Plates shall be drilled to accept 1 ½” bolts for hydraulic cylinder attachment. These plates also serve as locators for support arm shackles and gussets to provide additional support from the “push beam” to the rest of the semi-circle.

In the center of the semi-circle, a hole shall be drilled to accept the 1 ½” Grade 8 bolt that acts as the pivot point for the push frame. Also, at this point above and below the semi-circle shall be the male portion of the socket that relieves stress from the bolted connection. This shall be made from 1” plate steel and contoured to match the female portion on the push frame.

Introduced on: November 17, 2021  
Adopted on: November 17, 2021  
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MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**                      **NO**

**STEEL MOLDBOARD TUBE TABLE POWER INFINITE REVERSING FULL PLOW SPECIFICATIONS (CONT'D)**

**Semi-Circle Construction (Cont'd)**

Tabs shall be welded on the push frame to accept 1/2" screw type chain shackles. These tabs shall be made from 1/2" plate steel 5 1/4" long and 2 1/2" wide. They shall be welded to the back side of the 5" tubular push beam to increase the weld surface area. They shall be welded at 55 degrees from the bottom of the semi-circle to match the chain angle going to the lift arm on the hitch. ☒                      ☐

There shall be seven sets of 3/4" thick moldboard mounting ears installed along the push beam for attachment of the moldboard. Moldboard shall pivot at these points on 1 1/4" diameter rivet pins with a washer and cotter pin on the opposite side of the rivet head. ☒                      ☐

Four sets of the moldboard mounting ears (two outer sets on either side of the push beam) shall have an inside spacing of 3/4" to accept a single 1/2" moldboard rib. Three sets of the moldboard mounting ears (the center sets) shall have an outside spacing of 2 3/4" to fit inside double moldboard ribs. ☒                      ☐

Moldboard attachment ears shall be gusseted with 4" triangular steel gussets. The push frame shall connect to upper portion of the moldboard using two support arms. The center of the support arm shall be made from 2 x 2 x 1/4" square box tube. Actual mounting points are 1" schedule 40 pipe fully welded through the box tubing. The box tubing shall be drilled through to accept the pipe, the actual connection point is a 7/8" bolt. ☒                      ☐

**Adjustable Cast Mushroom Shoes**

Plow to be fitted with adjustable cast steel mushroom shoes mounted left and right on rear of semi-circle ☒                      ☐

A 1/2" steel plate to be welded onto the semi-circle rear with five (5) adjusting holes for overall height ☒                      ☐

Adjusting handle crank to be stowable against the shoe housing and allow up and down movement of the shoe via threaded screw ☒                      ☐

A 1 1/4" screw with adjusting nut are housed in a 3" square shoe housing with a welded on 5-hole mounting plate ☒                      ☐

Cast steel mushroom plow shoe has 6" bolt centers, 3/4" square holes and is 10.625" in diameter and 2.34 inches thick. ☒                      ☐

Grade 8 hardware shall be used throughout ☒                      ☐

Introduced on:            November 17, 2021  
Adopted on:                November 17, 2021  
Official Resolution#:    2021001588



MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

✓ **ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**      **NO**

**STEEL MOLDBOARD TUBE TABLE POWER INFINITE REVERSING FULL PLOW SPECIFICATIONS (CONT'D)**

**Hydraulics**

Plow angle shall be controlled by two double acting hydraulic cylinders	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Each cylinder shall have a 4" bore with an 8" rod diameter with a maximum operating pressure of 3000 PSI	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Retracted cylinder length shall be 21" with both the rod and cylinder ends accepting 1 ½" bolts/pins for connecting to the semi-circle and push frame.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Plow shall be equipped with one crossover relief valve. Valve shall use ½" ports and be set to a relief pressure of 1000 PSI.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**QCP**

Push frame shall be equipped with a removable QCP adapter for quick hitch applications	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The side of the removable QCP shall be drilled to allow for three different mounting heights	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Base of the QCP shall be made from MC4 x 13.8# channel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
QCP side plate shall be ½" formed plate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
QCP loop diameter shall be 2"	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Paint**

Paint shall be of high quality, free of runs, overspray, and defects	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard paint type shall be epoxy	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard paint color shall be safety orange	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SPH A-152 ARM**  
**BUMPER-TO-FRAME PLOW HITCH SPECIFICATIONS**

**Hitch Frame**

Frame shall be heavy duty, low profile, front frame mounted style, designed for use with trucks equipped with a tilt hood and stationary grille - snow plow hitch must clear hood when open	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The frame shall be capable of self-storing the hydraulic cylinder when not in operation thus allowing the lift arm to fold down parallel to the rest of the frame.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vertical supports of the hitch shall be constructed from 4 x 4 x 3/8" square tubing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Introduced on: November 17, 2021  
Adopted on: November 17, 2021  
Official Resolution#: 2021001588

MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**                      **NO**

**SPH A-152 ARM**

**BUMPER-TO-FRAME PLOW HITCH SPECIFICATIONS (Cont'd)**

**Hitch Frame (Cont'd)**

Cylinder support bracket on the hitch shall be constructed from 3 1/2" x 3 1/2" x 1/2" angle fully welded to both vertical supports. The two cylinder mounting tabs shall be 1/2" steel placed in the center of support bracket and spaced at 2 1/8" apart. Each tab shall be drilled to accept a 1" pin. ☒                      ☐

The upper horizontal support of the hitch shall be constructed of two pieces. The first is a formed 3/8" plate that wraps the top and upper back portion of the vertical supports. This plate also acts as a stop when the lift cylinder is stored as well as one of two points the lift arms connection tabs are welded. The second horizontal support is a 1/2" contoured plate that allows the lift cylinder to be stored and provides a second mounting point for the lift arm connection tabs. ☒                      ☐

There shall be two pairs of lift arm support shackles. Each pair shall be made from 1/2" x 9 3/4" plate and drilled to accept 1 1/4" pins. ☒                      ☐

Fully welded to the vertical supports shall be two C 8 x 18.75 channels with 1/2" thick end plates. The end plates shall be drilled to accept six 5/8" grade 8 bolts for attaching the hitch between the frame rails. ☒                      ☐

Support of the lower portion of the hitch shall be provided by left and right hitch side plates constructed of 5/8" plate and securely bolted to the truck frame where appropriate. ☒                      ☐

**Pin Lock QCP**

Plow attachment shall be made by a pin lock QCP assembly ☒                      ☐

Top and bottom of the assembly shall be made from 1/2" contoured plate. Both plates shall be drilled to accept the 2" lock pin. ☒                      ☐

Welded to the bottom plate shall be a 5/8" chamfered plate that both provides support to the lock pin and helps to guide the QCP loop into the hitch ☒                      ☐

Welded to the top of the top plate shall be a formed 3/8" plate drilled for the 2" lock pin that both provides support and protects the pin in the event a plow is set too high while hitching ☒                      ☐

In front of the QCP assembly shall be two 1/2" thick form bumpers. These bumpers are the resting/pushing point for the plow. They shall be curved to allow the plow to raise and lower smoothly. ☒                      ☐

Lock pin shall be 2", tapered at one end for ease in guiding into position, and has tabs welded to the other for the lift bar attachment. ☒                      ☐

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**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**                      **NO**

**SPH A-152 ARM**

**BUMPER-TO-FRAME PLOW HITCH SPECIFICATIONS (Cont'd)**

**Heavy Duty Lift Arm Assembly**

Heavy duty lift arm shall be an extendable style with seven different extended positions.                      

Frame of the lift arm shall be constructed from ½” x 4” steel plate that is formed to contour the outer tube of the extendable arm. This frame is also the connection point to the hitch and hydraulic cylinder.                      

The external tube shall be constructed of 4” heavy wall square tubing. On each end of the tube are 1” wide bushings ground to fit the inner tube. This ensures a tight long lasting fit                      

Top plate on the lift arm shall be 3/16” and is used to prevent “racking” of the frame.                      

The inner tube shall be constructed of 3” heavy wall square tubing. Tubing is drilled to allow for the seven different extended positions.                      

Lift arm assembly shall be welded to the square tubing. Tubing shall be drilled to allow for the seven different extended positions.                      

Welded to the front of the inner tube shall be a formed ½” plate with notches to accept standard ½” link chain. When required this plate can be changed to match different level lift systems.                      

**STAINLESS STEEL 8’ UNDER TAILGATE SPREADER SPECIFICATIONS**

**MEYER BL-960**

**Specifications**

Body Width: 96”                      

Hopper Height: 19”                      

Hopper Width: 96”                      

Hopper Depth: 18”                      

Spread Width: 4’-40’                      

Empty Weight: 450 lbs.                      

Spinner Diameter: 18”                      

Material Movement: Auger                      

Introduced on: November 17, 2021  
Mounting Method: Under Tailgate                         
Adopted on: November 17, 2021

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**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**                      **NO**

**STAINLESS STEEL 8' UNDER TAILGATE SPREADER SPECIFICATIONS (Cont'd)**  
**MEYER BL-960**

**Specifications (Cont'd)**

Hopper Material: Stainless Steel                      

Spreader Material: Salt or Salt/Sand Mix                      

**General**

This under tailgate shall be of the bottom opening design                      

The spreader shall fasten to the corner posts of the dump body using spreader manufacturers' brackets and quick disconnect pins for quick mounting and removal without the use of special tools                      

This mounting shall allow the dumping of materials without interference from the Spreader                      

This unit shall spread free flowing granular materials, abrasives and chemicals                      

This unit shall be factory adapted to accept automatic control systems (only with a sensed motor)                      

All stainless steel used in the production of this unit shall be corrosion resistant, non-magnetic stainless steel                      

The manufacturing and production of this unit shall be of the best commercial practices, and only materials of the finest quality shall be used                      

**Trough**

Rigid 10 GA stainless steel one piece end plates shall be continuously welded to a 10 gauge stainless steel auger trough & 3" x 1 1/2" formed channel stainless steel rear member                      

The unit shall have a 10 gauge stainless steel three point hinged bottom door that when released, exposes the entire length of the auger for easy cleanout                      

This hinged bottom shall be held in place by two replaceable heavy duty cam locks with a lift handle for convenient one man operation                      

The anti-flow cover over the discharge opening shall be manufactured of 10 gauge stainless steel and removable without the use of tools                      

The 10 GA stainless steel trough cover/backplate shall be one piece hinged integral part of the unit that may be raised when spreading and lowered for dumping operations                      

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**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**                      **NO**

**STAINLESS STEEL 8' UNDER TAILGATE SPREADER SPECIFICATIONS (Cont'd)**

**Trough (Cont'd)**

This cover shall be capable of being locked in either the raised or lowered position by two replaceable captivated latches

**Drive**

A direct drive coupled hydraulic motor shall be provided for driving the auger

This hydraulic motor shaft shall mount directly to the auger pipe by a non-corrosive sleeve and a 1/2" grade 8 bolt

The hydraulic motor shall mount directly to the end plate

There shall be two separate hydraulic "orbital type" motors capable of delivering high torque at low speeds to power both the auger and the spinner

The auger feed rate and spinner speed are both variable

**Feed Mechanism**

The 6" diameter (nominal) heavy duty auger shall consist of flights with outer edge at not less than .150 thickness, which is welded to a 2 7/8" diameter ERW pipe size tube

This auger shall have continuous and reverse flighting to the discharge port for more uniform dump body unloading, and shall be supported by 1 1/4" idler end shaft

The auger idler shaft shall be supported in sealed self-aligning precision single row radial ball bearing with grease fitting

The discharge port shall be located on the left side of the trough, approximately 21" in from the edge of the bottom door

The spreader shall be equipped with a safety interlock device to positively prevent power from reaching the auger motor when the top cover and bottom door are opened beyond the normal operation position

**Spinner**

The spinner shall consist of a disc and six (6) fins molded into a single polyurethane unit, resulting in a flat trajectory and uniform spread pattern from 4 to 40 feet in width

The spinner assembly shall be adjustable side to side, allowing for variable spread patterns left, right, and center of vehicle

This shall be accomplished by sliding the hinged frame sideways on the shaft so that the point at which the material hits the spinner disc is varied

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**COMPLIANCE**  
**YES**                      **NO**

**STAINLESS STEEL 8' UNDER TAILGATE SPREADER SPECIFICATIONS (Cont'd)**

**Spinner (Cont'd)**

The entire spinner assembly shall be easily removed by pulling two pins, and uncoupling two hydraulic quick disconnect hoses                      

The spinner disc shall be mounted directly onto the hydraulic motor shaft by means of a cast iron spinner hub                      

The spinner shall be linked to the truck frame with a universally mounted parallel arm to keep the spinner horizontal to the road surface at all dump body angles                      

A spinner shield shall be provided to prevent material from striking the truck                      

The spinner shall be adjustable in height in four positions                      

The entire spinner assembly shall be made of stainless steel except for the motor and the spinner disc                      

**Mounting**

This spreader shall fasten to the side of the dump box using quick disconnect pins for quick mounting and removal without the use of special tools                      

**Painting**

All stainless steel shall be chemically cleaned, but remain un-painted. Carbon steel components shall be chemically cleaned and coated with a lead free rust inhibitive primer and painted with lead free black                      

**WARRANTY DETAILS**

Cab and Chassis: Extended Warranty: 5 year/150,000 mile engine warranty with unlimited hours to include turbo, injectors and ATS; 5 year transmission warranty with unlimited mileage; 5 year towing for warrantable repairs warranty                      

Stainless Steel Dump Body: 5 year warranty on hoist and body structure                      

Tarp: 1 year warranty on motor and moving parts                      

Central Hydraulic Manual System: 1 year warranty parts and labor                      

Complete Plow System: 1 year warranty                      

Under Tailgate Spreader: 1 year warranty                      

**Warranty shall start on date of acceptance of vehicle by the County.**  
**Vendor shall submit all warranty details with bid submission.**                      

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ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)

COMPLIANCE  
YES                      NO

OPTIONS

✓ 1A. Freedom 2.2 Spreader Control

Controller shall have 3 Pulse Width Modulation (PWM) output channels for liquid and granular spreader controller

                    

The controller shall be a microprocessor type capable of PWM control of three hydraulic valves

                    

Controller must be automotive grade for durability. Any gaming type controllers are unacceptable.

                    

The controller must offer ground speed control from vehicle signal. No GPS antenna can be used for ground speed signal input.

                    

The controller must have three channels to operate an auger/conveyor and liquid system.

                    

PWM signal must be adjustable for a wide range of implement functionality.

                    

The controller shall be capable of ground speed oriented spreading, ground speed triggered, and manual mode.

                    

The system shall offer a manual mode lock out option

                    

The spreader controller shall operate in open or closed loop configuration.

                    

Controller shall offer remote pause, unload mode, liquid float input, test speed, and on-screen error with alarms and message reporting

                    

Sensor short detection with message and alarm

                    

System must have 2 auxiliary output channels available

                    

System shall offer spinner configurable MPH shut off, storm totals on screen or with USB.

                    

Operator screen shall offer knobs or touch screen to control granular and liquid outputs.

                    

There shall be nine (9) independently programmable feeder output channels for accurate lbs. per mile output

                    

The system shall also offer 9 programmable speeds for the spinner

                    

System shall maintain up to 4 different granular material types

                    

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**COMPLIANCE**  
**YES NO**

**OPTIONS (Cont'd)**

**1A. Freedom 2.2 Spreader Control (Cont'd)**

There shall be an integrated blast mode with instant off to stop output if necessary	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Blast must be programmable for flow rate and material distance	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Unit shall provide an unload mode at speeds of up to 5 MPH	<input checked="" type="checkbox"/>	<input type="checkbox"/>
A standby (pass) mode shall be provided to allow for momentary interrupt of the spreader without changing the feeder/spinner/liquid output	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All programming and calibration shall be accomplished using the touch screen of the controller. Detachable key board is not acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Modular Granular and Liquid Valve</b>		
The modular manifold must be constructed of 6061 anodized aluminum	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Modular manifold must have an adjustable pressure of up to 3500 PSI with multiple flow, pressure, performance, and function configurations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Each function shall be equipped with screw adjustable manual overrides protected by jacketed debris covers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The modular manifold shall operate in either open center (fixed displacement) or closed center (variable displacement) hydraulic circuits	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The auger/conveyor must be rated at 15 GPM and feature a cartridge valve design for precision spreading	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The spinner valve must provide 10 GPM and also feature a cartridge design valve with manual override	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pre-wet or anti-ice implements shall be available as a 10 GPM hydraulic circuits if necessary	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Additional cartridge valve required for liquid system	<input checked="" type="checkbox"/>	<input type="checkbox"/>
These functions shall be proportional controlled, pulse width modulated, pressure and flow compensated, with heavy duty 12 VDC coils	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Spreader control “outside the cab” harnessing shall meet IP 68 standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Connections must be NEMA x6 standards for dust protection	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

**ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)**

**COMPLIANCE**  
**YES**                      **NO**

**OPTIONS (Cont'd)**

**1A. Freedom 2.2 Spreader Control (Cont'd)**

Outside the cab connections shall be rated as NEMA “x8” – protected against the effects of a permanent submersion in water as well as able to show no corrosion after 500 hours in a 35C salt spray

                    

The entire hydraulic system shall be completely serviceable without removing from the enclosure or disassembling sections

                    

The electronics and hydraulics shall be manufactured by the same company

                    

The hydraulic system shall be pressure and flow tested before the installation process

                    

The modular spreader valve manifold shall be mounted in a weather resistant enclosure

                    

Enclosure shall be vented to reduce moisture

                    

Five (5) year warranty on spreader valve, Two (2) year warranty on controller

                    

**1B. Larger Dump Body**

Larger dump body shall have same specifications as indicated in base vehicle, but with 30” sides to maintain a water capacity of 6.8 cubic yards

                    

**1C. Paint for Dump Body**

Paint specified dump body in a single stage paint a single color (i.e. School Bus Yellow or other paint color from color chart)

                    

**1D. Road Department Paint Color Scheme**

School Bus Yellow from the bottom of the windows down. Bahama Blue from the bottom of the windows up to and including cab roof and back, on hood from bottom of windshield to a point on the hood to make a “V” and match the Road Department fleet. Shall be base coat clear coat. (Note: Not all Vehicles will be painted this way)

                    

**1E. Diagnostic Tools / Test Equipment**

Cummins Quickserv Unlimited Service plan, with renewals, shall be provided at no cost to the county for a period of five (5) years from the acceptance of the equipment

1. Successful bidder may be required to supply between one (1) to three (3) complete sets of test/diagnostic/ programming equipment (i.e. laptop, software, cabling, and adapters) and special tools required to perform the full range of diagnostic and maintenance actions necessary to maintain vehicle operability. This equipment will cover the vehicle chassis, engine, transmission, brakes, hydraulics, and all additional equipment (if applicable).

                    

2. All laptop computers will be of the newest available technology and have sufficient storage and memory to operate all required software.

MOTOR VEHICLE: SMALL DUMP TRUCK WITH PLOW AND SPREADER

ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)

COMPLIANCE  
YES                      NO

OPTIONS (Cont'd)

1E. Diagnostic Tools / Test Equipment (Cont'd)

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 3. Provide a list of all test/diagnostic/programming equipment and special tools being supplied at the time of bid.  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4. All software installations and activations will be completed by the successful bidder at no cost to the County.   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5. All software updates and renewal will be provided at no cost to the County for a period of five (5) years from the acceptance of the equipment.   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 6. All technical issues relating to test/diagnostic/programming equipment and special tools shall be resolved by the successful bidder at no cost to the County for a period of five (5) years from the acceptance of the equipment. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. Training shall be provided on all items in this section at a County location.   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8. This equipment shall be the OEM equipment as available by the chassis manufacturer.   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

1F. Two-Way Radio Power and Wiring Requirements for New Vehicles

For the purpose of installing two-way radios into new County vehicles and equipment, the following power and wiring components shall be included:

1. #12 AWG RED wire connected to 12VDC Battery Source rated at 20 Amps.
2. #12 AWG BLACK wire connected to chassis ground.
3. #16 AWG YELLOW wire connected to 12VDC Ignition Sense rated at 5 Amps.

These wires shall be encased in plastic wire loom and routed from their source into the cab of the vehicle and secured in the vicinity of the operator. The wiring harness shall be clearly labeled "TWO-WAY RADIO". The wires shall be unterminated. The 12VDC sources shall be protected from making contact with grounded metal surfaces.

                    

1G. Installation of County Supplied Two Way Radio and Accessories

Install is to include but not limited to antenna cable, mounts, speakers, brackets, etc. For the purpose of installing two-way radios into new County vehicles and equipment, the following power and wiring components shall be included:

1. #12 AWG RED wire connected to 12VDC Battery Source rated at 20 Amps.
2. #12 AWG BLACK wire connected to chassis ground.
3. #16 AWG YELLOW wire connected to 12VDC Ignition Sense rated at 5 Amps.

                    

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ITEM #1 – MODEL YEAR 2022, OR NEWER, 6 YARD DUMP TRUCK WITH PLOW AND SPREADER, AS SPECIFIED, OR EQUAL (CONT'D)

COMPLIANCE  
YES                      NO

OPTIONS (CONT'D)

✓ 1G. Installation of County Supplied Two Way Radio and Accessories (Cont'd)

These wires shall be encased in plastic wire loom and routed from their source into the cab of the vehicle. The wiring harness shall be clearly labeled "TWO-WAY RADIO". The 12VDC sources shall be protected from making contact with grounded metal surfaces.

                    

✓ 1H. Technical Support

Technical Support is to be provided by factory authorized technical representatives and is to be the original equipment Manufacturers' industry standard technical presentation in a classroom setting.

                    

The support provided shall be at the journeyman/equipment technician level and should address limited theory, fault diagnosis and repair pertaining specifically to the equipment supplied under this specification.

                    

Technical support may be requested in the following areas:

- 1. Engine (cooling, fuel, ignition, lubrication systems) – 1 day at each location.
- 2. Transmission – 1 day at each location
- 3. Electrical – 1 day at each location
- 4. Brakes – 1 day at each location
- 5. Hydraulic system (dump body, spreader, snow plow) – 1 day at each location
- 6. Upfitter (dump body, sweeper, etc.) – 1 day at each location

                    

A technical representative(s) shall be made available for a total of 180 training/support hours (anticipated to be scheduled in six (6) hour blocks). Shorter training days will be allowed only with consent of Vehicle Services. The total training hours will be required to be provided and no additional compensation will be considered. The actual time to be spent on each area will be by mutual agreement of the Vehicle Services Department and the successful bidder.

                    

For the purposes of determining materials and other training costs, class size is anticipated to be comprised of six (6) to ten (10) Vehicle Services Department personnel. Actual class size will be determined by the Vehicle Services Department at the time the classes are scheduled.

                    

Before the training is scheduled, Vehicle Services and the contractor will agree on the scope of the training, and the type and quantity of manuals, etc. that are necessary for proper coverage.

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COMPLIANCE  
YES                      NO

OPTIONS (CONT'D)

IH. Technical Support (Cont'd)

Technical Support for Vehicle Services may be provided at the following fleet maintenance facility location as scheduled by a Vehicle Services Department representative:

- a. Toms River, 152 Chestnut Street, Toms River, N.J. 08753 (Two (2) sessions will be provided at this location. One beginning at 7 am and another beginning at 1:30 pm)
- b. Manahawkin, 379 Haywood Road, Bldg. 109, Manahawkin, N.J. 08050

                    

Technical Support for other Departments will be held at a location within Ocean County. The requesting Department will notify the successful bidder of the location.

                    

Training at the successful bidder's site, rather than the designated locations, will be by mutual consent only.

                    

Technical support will be requested and scheduled on an as needed basis up to but not exceeding the 180 hours total during a period not to exceed twelve (12) months from the date of placing the last unit in service.