



**CITY OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS**

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Chapin Spencer
DIRECTOR OF PUBLIC WORKS

Dave Hammond
FLEET MANAGER

The City of Burlington VT, Dept. of Public Works, respectfully requests a quote on a new single axle Plow Truck that meets the following specifications. The truck will be used mostly for winter snow operations and summer construction. The truck will be equipped with a side discharge dump body. The city may be trading in a 2008 International 7500 dump truck with approx. 6000 hrs. Included would be a snow plow, wing plow and rear discharge sander. Try to meet the following specifications as close as possible. Explain any exceptions to the specifications and identify any proposed alternatives. Please include delivery time. Quotes can be emailed to Dhammond@burlingtonvt.gov or mailed to Attention: Dave Hammond, Burlington Public Works 645 Pine Street, Burlington VT 05401. All quotes must be received by 6/30/2022. All Quotes must be valid for a minimum of 180 days. The City of Burlington, VT has the right to accept or refuse any and all quotes and award to the vendor that best suits the needs of the City. Any question please contact Dave Hammond at 802-865-7243 or DHammond@burlingtonvt.gov

- Cab to axle and wheelbase to be coordinated between body and chassis vendors chosen.
- Frame rails heat treated alloy steel heavy duty 120,000 psi single frame rail construction.
- Front frame extensions approximately 24" long must be an integral part of frame.
- Bumper, front steel
- Axle, front, set forward axle, I beam type, 20,000lb capacity.
- Suspension, front, spring multi leaf, shackle type: 20,000lb capacity, shock absorbers. Auxiliary right front air bag controlled by driver.
- Wheels, front, disc; 9 inch 22.5" painted steel, 10 stud hub piloted, flange nut heavy duty
- Tires, front, 315/80R22.5, load range H, 20 ply, with aggressive steering tread for plowing.
- Brake system, air dual system for straight truck application. Air tanks must be mounted on right side of chassis for clean cab axle
- Brakes, front, air s-cam; 16.5" x 6.0" quick change type shoes, outboard hubs and drums. With 24 sq. in. long stroke brake chambers, and automatic slack adjusters.
- Brakes, rear, air s-cam 16.5" x 7.0" quick change type shoes, with 30 sq. in. long stroke spring actuated parking brake chambers and automatic slack adjusters.
- Stainless steel brake clevis pins
- Brake dust shields

An Equal Opportunity Employer

This material is available in alternative formats for persons with disabilities. To request an accommodation, please call 802.863.9094 (voice) or 802.863.0450 (TTY).

- Air brake ABS as required by DOT.
- Air dryer Wabco, heated with spin on cartridge and extended purge
- Air compressor, minimum 13 CFM.
- Steering column tilting and telescoping
- Power steering gear.
- Engine, Cummins L9 Diesel, 350 hp.(1150 LB) torque minimum, must meet current Emission standards. Low NOx idle
- Jacob engine brake with selector switch.
- Stainless Steel oil pan
- Provisions for front mounted PTO
- Air cleaner with optional Integral snow valve and in-cab control
- Throttle, hand control electronic
- Radiator, largest available.
- Radiator and Heater hoses, all molded silicone.
- Coolant Filter if available.
- Fan drive, Horton Drivemaster, direct drive type, two speed with residual torque device for disengaged fan speed. Fan override manual, with electric switch on instrument panel. (fan on with switch on).
- Exhaust, single, horizontal particulate filter with right side vertical tailpipe, frame mounted right side back of cab As clean a cab to axle for body builder.
- Transmission, Automatic, push button type Allison 3000 RDS P close ratio, 6 speeds, Synthetic oil. Control module to be located in cab.
- Transmission oil cooler
- Stainless steel transmission cooler lines
- Axle, Meritor rear, single, single reduction, 26,000lb capacity; driver controlled locking differential, filled with Synthetic Gear oil. 65 MPH top speed. 6:83 Ratio.
- Suspension, rear, spring type vari-rate, 31,000lb with a 4500lb auxiliary spring.
- Wheels, rear dual disk, 22.5" painted steel, 10-stud hub piloted, flanged nut, heavy duty.
- Tires, rear, 12R22.5 load range H, 16 ply, high traction tread.
- Electrical system, 12 volt
- Auxiliary harness for front snow plow lights
- Body Builder wiring , auxiliary switches used to control the Snow plow lights, Warning lights, Wing light, Salter light, Load cover, PTO on/off.
- Remote power module with 6 inputs and 6 outputs
- Electronic brake controller wiring for trailer brakes
- Cigar or power accessory outlet.
- Horn; air (2) Grover (preferred) with snow shields, and electric on steering wheel.
- Alternator, 12 volt, 145 amp min.
- Battery system, 3 maintenance free 12 volt 2775CCA total. Batteries to be mounted inside, cab under passenger seat in battery box. (this allows clean cab axle)
- Jump Start studs remote mounted.
- Battery disconnect switch, located inside the cab.
- Radio, am/fm stereo, BLUE TOOTH
- USB ports in dash

- Radio, 2-way, Motorola 4 channel (can be purchased at Burlington Communication and installed by them. (Antenna to be mounted forward of cab shield).
- Fuel tank, top draw, ALUMINUM, 50 US gallons, with center step, mounted on the left side, under the cab.
- Stainless Steel Fuel tank straps and aluminum steps
- Windshield wipers, intermittent electric wipers.
- Indicator, low oil pressure/ high coolant temperature, light and audible; electronic controlled.
- Gauges, fuel, air, oil pressure, transmission temp, hour meter, speedometer, DEF fluid level and tachometer.
- Headlights, halogen.
- Circuit breakers in place of fuses.
- Backup alarm.
- Cab, conventional, 80" wide with stainless grab handles on left side only.
- Front end, fiberglass tilting hood with service hatches
- Front fender extensions
- Paint, premium class, DARK GREEN in color.
- Glass, all windows tinted and must have a rear window.
- Power windows.
- Heated Windshield
- Mirrors, 16" x 7" power and heated with integral convex mirrors, and convex mirrors on both side of hood. (Heated)
- Cab rear suspension, air bag type
- Cab interior, deluxe trim, heavy duty vinyl flooring, heavy duty rubber floor mats.
- Seat drivers, 3 lumbar, air suspension seat available with arm rest with Cordura seat cover. Fixed passenger seat.
- Interior storage and 2-way radio mounting provision located in overhead console.
- Heat, defroster and air conditioning.
- DOT safety and first aid kits.
- Vermont Municipal registration, title, lien and all related fees.
- Service Manuals including electrical diagnostics and schematics (electronic)
- Two sets of spare keys. (fleet keyed alike).
- Warranties, extended 5-6 year warranties on engine, transmission and emissions.

Requests to use Viking Cives as the upfitter for the following.

1. Dump Body:

- 120" length 5-7 yard capacity
- 1/4" steel floor 180,000 psi.
- 3/16" high tensile steel sides with approximately a 41" height. The sides MUST NOT have any sideboard pockets.
- All body hinge points to be grease able and have centralized lube point.

- 20-ton double action telescopic hoist cylinder with nitrated rod. Must have power up and Power down. Side dump cylinders (2) must be removable for service.
- Electric load cover, (Donovan Bullet) with asphalt tarp, using truck installed switch to operate cover.
- ½ cab protector.
- Safety support strut.
- Pneumatic tailgate locks.
- Tailgate chains and grab hooks.
- Rear wheel splash guards in place of mud flaps. Must have clearance for tire chains.
- Body to be epoxy primed and painted Gloss black. Painting to be done after any cut outs or welding to body.
- 20-ton pintle hitch and plate in rear with multiple vertical adjustment holes, with D rings. Hitch to be mounted for trailer tongue at 24" high.
- DOT reflective tape on body.
- Price options: quote the following items separately.
 - ¼" steel body construction
 - Stainless steel body construction.
 - Asphalt doors in tail gate (three)

2. Front Hitch:

- 36" front hydraulic wing post must have full lock tire clearance with plow in travel mode
- 31" plow pin centers with 3 pin heights.
- Must be fully detachable. All hydraulic hose ends to have quick release couplers.
- (4)- 1-1/4" diameter pins attaching hitch to truck frame.
- Plow lift cylinder will be a double action cylinder
- The chassis will have 24" front frame extensions supplied.

3. All Angle Plow – **Quantity of 2 (1 for a spare)**

- 11' power reversing plow, 42" height, single piece trip edge style **center punched 8" and 12"**.
- (2) moldboard shoes
- Compression spring trip edge
- Plow markers on both ends of plow so the driver can locate both ends of the plow.
- Rubber snow foil mounted across the entire top of plow.
- Front blade to be Built Carbide Sabre blade system with carbide blades, shoes and curb Shoes.

4. Side Wing - **Quantity of 2 (1 for a spare)**

- 10ft. blade length.
- Steel moldboard

- Center punched to accept 8" and 12" blades
- Wing arm cylinder to be nitrated
- Twenty degree trip mechanism
- Safety chain to retain wing
- Wing marker located on rear of wing
- Wing blade to be Built Carbide Sabre system with carbide, blades, shoes and curb shoe
- When in travel position wing must not come in contact with any part of truck cab or body

5. Rear Wing Attachment:

- Rear patrol style.
- Push arms to be 2-3/4" diameter.
- Hydraulic lift cylinder with nitrated rod
- Safety chain for wing.

6. Hydraulic System:

- The hydraulic system will be used to operate the all angle plow, wing, dump and side dump functions, sander and spinner.
- Hydraulic pump to be a minimum of 98cc, load sensing variable displacement driven by front power take off (hot shift) that can be turned on and off from body builder switch.
- Stainless steel Hydraulic tank will be a minimum 40-gallon tank mounted on the trucks frame, exact Location to be determined. The tank will have a sight gauge, an external 10-micron filter, and a shut off valve on the suction side of tank. **THERE WILL NO OPENING ON THE TOP OF THE TANK.**
- Low oil shut down system. A float switch must be installed in the hydraulic tank that will turn the operator's controls off and activate an indicator light mounted at control panel once oil level falls below a safe level. A bypass switch must be incorporated for technician access if needed.
- Hydraulic valves: Electro-hydraulic. They are needed for the following functions; dump body up and down, side dump, plow up and down, and plow angle, wing toe up and down, and wing heel up and down. All the coils will be proportional type because all the joysticks will be proportional type. There will be 2 valves for the sander operation. All valves must have the manual overrides. These valves must be located in an enclosed weather tight compartment and be accessible with the dump body down.
- All hydraulic plumbing shall be of a stainless steel design where run on dump body and truck frame. All hydraulic hoses shall be a quality 2 wire hose routed neatly. Quick disconnects will be used at all areas needed to aid removal of equipment such as plows and sanders.
- There must be no down pressure on the wing when in the plow position.

7. Hydraulic controls:

- All controls will be located on a master control console located in the cab. The control
- Panel will consist of 2 joysticks with 2-axis (X & Y) proportional controls. The levers must be able to control 2 proportional valve functions simultaneously.
- The proportional joysticks will control plow up/down, plow angle, wing toe up/down,
- Wing heel up/down, dump body up/down and side dump functions if applicable. They must be clearly marked to be visible both day and night
- The Hydraulic system for the spreader to be electronically controlled by a ground speed based closed loop system such as Cirrus Spread Smart RX, Force America or Certified Power. Must be AVL/GPS compatible.
- The control console will be a pedestal mount armrest console that will hold all sander controls, display, and joysticks. It must be fully adjustable armrest and mounted to the floor. The control location will be to the satisfaction of DPW personal

8. Conveyor system:

- Left side discharge.
- Removable rear panel for servicing conveyor system.
- Conveyor drive system to be mounted at front head board panel to be removable for ease of service and repair.
- Removable lower conveyor tray.
- Upper conveyor cover to be hinged and latch to left side of body. Hinges to be replaceable.
- The spinner shall be of a poly design
- Adjustable conveyor gate.
- Sander to be controlled by the closed loop system and come initially calibrated

9. Liquid system:

- poly tank mounted behind the cab (aprox 160 gallon)
- Electric pump to be frame mounted
- Spray nozzle to be at spinner for anti-ice operations
- System must be tied into closed loop spreader system

10. Electrical:

- LED Whelen 400 series or equivalent stop, turn, parking lights center mounted in a 3 gang DOT box located in the corner post
- All marker and clearance lamps to be LED style mounted in rubber grommets
- (4) LED Whelen 400 series amber flashing lights or equivalent mounted in a 3 gang DOT box located in the corner posts. (center light assembly is the park turn brake)
- Roof mounted strobe light to be a Whelen model L10HAP or latest model available in LED style
- License plate bracket and light

- LED Whelen PAR36 or equivalent 12 diode work lights for spinner and wing using OEM truck switches to turn on and off. Lights must have harness connectors for easy removal
- Reverse lamp to be a Whelen PAR36 or equivalent 12 diode work lamp mounted in the pintle plate
- Quote LED plow headlights.
- Plow lights to operate off of the truck manufacturer's switch in cab wired to manufacturer specifications. Plow lights must have harness connectors at front plow frame for easy removal
- 7 wire round and 7 wire RV style trailer connectors (pintle plate mounted)
- All wiring to have weather proof connectors and in wiring loom, junction box in rear and neatly routed to Public Works satisfaction.

11. Misc

- Truck will be undercoated with a wax based coating to include inner doors and jambs, frame, underside of cab and dump body underside.
- All wiring and hoses to be in a protective loom and labeled for easy identification
- All manuals to include owners, operators, parts, service and electrical.
- Training to include operator and technicians on installed equipment operation, maintenance and diagnosing.
- Software including any needed harness and adapters for unrestricted access to hydraulics and spreader programming.