



COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA COMMERCIAL ITEM DESCRIPTION (PCID)

Four Wheel Drive Commercial Vehicles
(Supersedes PCID 1105 eff. July 26, 2016)

PCID NO. 1105
Eff, July 31, 2019

1. **Scope:** This PCID covers four wheel drive commercial type vehicles commonly used by Agencies in the Commonwealth. Unless otherwise noted, the following shall indicate the minimum requirements including all genuine parts, accessories, equipment and safety features considered standard, whether mentioned herein or not.

2. **Classification:** The following vehicles are included in this PCID.

Class 2, Type 2, 9,900 lb. GVWR Four Wheel Drive Regular Cab & Chassis, with Optional Bodies

Class 2, Type 2A, 9,900 lb. GVWR Four Wheel Drive Regular Cab Pick-Up

Class 3, Type 2, 11,000 lb. GVWR Four Wheel Drive Regular or Crew Cab & Chassis, with Optional Bodies.

Class 3, Type 2A, 11,000 lb. GVWR Four Wheel Drive Gas Engine Regular or Crew Cab Dump Body.

Class 3, Type 2B, 11,000 lb. GVWR Four Wheel Drive Diesel Engine Regular or Crew Cab Dump Body

Class 5, Type 2A, 17,500 lb. GVWR Four Wheel Drive Gas Engine Regular Cab Dump Body.

Class 5, Type 2B, 18,500 lb. GVWR Four Wheel Drive Diesel Engine Regular Cab Dump Body.

Class 6, Type 2, 26,000 lb. GVWR Four Wheel Drive Regular Cab & Chassis with Dump Body.

Class 8, Type 2, 37,000 lb. GVWR Four Wheel Drive Regular Cab & Chassis with Dump Body.

3. **Applicable Documents:**

The following standards, or applicable parts of the issue in effect on date of Invitation-Bid Proposal, shall apply at the discretion of interested Commonwealth agencies.

Commonwealth of Pennsylvania Motor Vehicle Code
Federal Motor Vehicle Safety Standards
NTEA Dump Body and Conversion Hoist Chart

4. **Requirements:**

Unless otherwise stated in the bid, delivery requirements and required equipment shall be in accordance with PCID 1067, General Requirements for Delivery of Vehicles, most current version in effect at the time and date of bid opening. In addition, the following items shall be included:

- 1) Emergency warning triangle kit.
- 2) First aid kit, ten-person with mountable cabinet.

- 3) Fire extinguisher, 2A:10B:C, five-pound.
 - 4) OSHA approved back-up alarm.
 - 5) Manufacturer's standard AM-FM radio.
 - 6) Paint color to be selected by ordering agency from manufacturer's standard color choices.
 - 7) Radial, all-terrain type tires.
 8. One cigar lighter/power port.
5. **Material Master** – No Material Masters established for these commodities.

Quality Assurance Specialist: Gerald Grecek, CPPB

Quality Assurance Supervisor: Brian Vulgaris

Class 2, Type 2, Regular Cab, Single Rear Wheel
9,900# GVWR Four Wheel Drive Cab and Chassis

- CHASSIS
 - 9,900 lb. GVWR
 - Wheelbase compatible with specified body and cab-to-axle
 - Standard front bumper
- ENGINE
 - Eight (8) cylinder gasoline
 - 300 HP net rating
- TRANSMISSION
 - Automatic transmission with auxiliary oil cooler
 - Hi-Lo range transfer case
 - Part time 4-wheel drive
- FRONT AXLE
 - GAWR for specified GVWR and application
 - HD front shock absorbers
 - Power steering
- REAR AXLE
 - GAWR for specified GVWR and application
 - HD rear shock absorbers
 - Limited slip differential (rear only)
 - Single rear wheel
- BRAKES
 - Power, four-wheel anti-lock system.
- ELECTRICAL
 - 12 volt maintenance free battery - 600 CCA @ 0°F.
- CAB
 - Conventional cab
 - Mirrors, manufacturer's standard or optional, non-corrosive trailer tow type
 - Air conditioning integral with the heater & defrosters

OPTIONS:

1. Diesel engine with automatic transmission. Manufacturer's standard diesel engine with highest available horsepower and torque rating and engine block heater.
2. Trailer Towing Package to include as minimum: Class III trailer hitch (7,000 lb. weight carrying capacity) after market installation if necessary, 7 - wire harness with male & female plug, HD battery, HD flasher, HD alternator, HD front suspension. Front & rear stabilizer bar (if available). HD front & rear shock absorbers, Manufacturer's maximum capacity engine oil, transmission oil, engine cooling available for model bid.
3. Snowplow, 8 ft., steel with power angling blade, 6" replaceable/reversible high carbon steel cutting edge, safety trip action, adjustable swivel runners, live power hydraulic pump or electronic power pack, controls conveniently located in the cab, auxiliary light kit mounted on lift frame including directional signals. Must have mount feature Ref: Meyer MD II, Western Ultra Mount or approved equal so that removal of lift frame shall also remove auxiliary snowplow lights and electric-hydraulic snowplow control unit. Vehicle bumper shall

remain in same position as originally installed by vehicle manufacturer. Ref: Meyer Model MD-II, Western Model IUTP-80 or approved equal. (Vendor shall include factory installed heavy duty front suspension, heavy duty front and rear shock absorbers, front and rear stabilizer bars (if available), heavy duty battery, heavy duty flasher, heavy duty alternator, manufacturer's maximum capacity engine oil, transmission oil, engine cooling available for model bid and other required items for proper snowplow operation. Plow may be installed locally.

4. Heavy-duty 9' x 80" (minimum) stake body. Platform constructed of seasoned and weather protected 1 1/8" hardwood or 2" (nominal) treated dense pine, tongue and groove or shiplap, attached to cross sills with flush, self-tapping screws. Five (5) inch structural steel longsills with 18" crossmember spacing. Steel platform rubrail. Removable, interlocking stake sections, 26" minimum height, constructed of formed metal with formed metal uprights and spring-loaded rack connectors. Spring loaded mechanism to securely lock stake section into stake pocket. Frame mounted ICC step type rear bumper constructed of 4" structural steel channel. DOT approved lighting. All body lighting shall be LED. Rectangular drop in bulkhead with screened window cut-out, approximate cab height.

5. Standard Utility Body constructed from 12, 14 or 16 gauge galvanized steel and welded into one integral unit, 9' length, 48" inside width, 25" (approximate) height above floor. Safety tread floor, standard safety step bumper w/bottom plated recess (plate drilled for ball for trailer hitch). One (1) removable right side mount ladder rack, three (3) weathertight compartments each side, recessed paddle handles, slam action locks keyed alike, two (2) removable shelves with adjustable dividers in left and right front compartments, one (1) removable shelf with adjustable dividers in each horizontal compartment. Compartment layout to be selected by ordering agency from manufacturer's standard configurations. All body lighting shall be LED.

Class 2, Type 2A, Regular Cab, Single Rear Wheel
9,900# GVWR Four Wheel Drive Pick-Up

- CHASSIS
 - 9,900 lb. GVWR
 - Wheelbase compatible with specified body and cab-to-axle
 - Standard front bumper
 - Skid plates as available from OEM

- ENGINE
 - Eight (8) cylinder gasoline
 - 300 HP net rating

- TRANSMISSION
 - Automatic transmission with auxiliary oil cooler
 - Hi-Lo range transfer case
 - Part time 4-wheel drive

- FRONT AXLE
 - GAWR for specified GVWR and application
 - HD front shock absorbers
 - Power steering

- REAR AXLE
 - GAWR for specified GVWR and application
 - HD rear shock absorbers
 - Limited slip differential (rear only)
 - Single rear wheel

- BRAKES
 - Power, four-wheel anti-lock system.

- ELECTRICAL
 - 12 volt maintenance free battery - 600 CCA @ 0°F.

- CAB
 - Conventional cab
 - Mirrors, manufacturer's standard or optional, non-corrosive trailer tow type
 - Air conditioning integral with the heater & defrosters

- BODY
 - OEM standard 8 ft. fleetside bed

OPTIONS:

1. Diesel engine with automatic transmission. Manufacturer's standard diesel engine with highest available horsepower and torque rating and engine block heater.

2. Trailer Towing Package to include as minimum: Class III trailer hitch (7,000 lb. weight carrying capacity) after market installation if necessary, 7 - wire harness with male & female plug, HD battery, HD flasher, HD alternator, HD front suspension. Front & rear stabilizer bar (if available). HD front & rear shock absorbers, Manufacturer's maximum capacity engine oil, transmission oil, engine cooling available for model bid.

3. Snowplow, 8 ft., steel with power angling blade, 6" replaceable/reversible high carbon steel cutting edge, safety trip action, adjustable swivel runners, live power hydraulic pump or electronic power pack, controls conveniently located in the cab, auxiliary light kit mounted on lift frame including directional signals. Must have mount feature Ref: Meyer MD II, Western Ultra Mount or approved equal so that removal of lift frame shall also remove auxiliary snowplow lights and electric-hydraulic snowplow control unit. Vehicle bumper shall remain in same position as originally installed by vehicle manufacturer. Ref: Meyer Model MD-II, Western Model IUTP-80 or approved equal. (Vendor shall include factory installed heavy duty front suspension, heavy duty front and rear shock absorbers, front and rear stabilizer bars (if available), heavy duty battery, heavy duty flasher, heavy duty alternator, manufacturer's maximum capacity engine oil, transmission oil, engine cooling available for model bid and other required items for proper snowplow operation. Plow may be installed locally.

4. Standard Bed Hopper Tailgate Spreader constructed from polyethylene with a hopper capacity of 1.5 cu. yd. The overall dimensions shall be approximately 84" length, 44' (bottom)-50" (top) width and 37" height. The spreader shall have a variable speed control unit and a material spinner on the back center of the hopper. Reference: Western Tornado Spreader or approved equal.

5. Under-bed Frame Mounted Spreader constructed from polyethylene with a hopper capacity of 10 cu. ft. The spreader shall have a variable speed control unit and an adjustable material spinner on the bottom of the hopper. The spreader shall be an under-bed frame mount by using a receiver hitch. Reference: Western Pro-Flo 2 Spreader or approved equal.

Class 3, Type 2, Regular Cab, Dual Rear Wheel,
11,000# GVWR Four Wheel Drive Cab and Chassis
(Regular or crew cab as specified in invitation to bid)

- CHASSIS
- 11,000 lb. GVWR
 - Wheelbase and cab-to-axle compatible with specified body
 - Standard front bumper
 - Front & rear tow hooks (aftermarket installation if necessary)
- ENGINE
- Eight (8) cylinder gasoline (minimum)
 - 300 HP net rating (minimum)
- TRANSMISSION
- Automatic Transmission with auxiliary oil cooler
 - Hi-Lo range transfer case
 - Part time 4-wheel drive
- FRONT AXLE
- GAWR for specified GVWR and application
 - HD front shock absorbers
 - Power steering
- REAR AXLE
- Manufacturer's highest capacity, with single leaf auxiliary helper spring, if available from manufacturer.
 - HD rear shock absorbers
- BRAKES
- Power, four-wheel anti-lock system.
 - Limited slip differential (rear only)
- ELECTRICAL
- 12 volt maintenance free battery - 600 CCA @ 0°F.
- CAB
- Conventional or crew cab, as indicated in the line item description
 - Mirrors, manufacturer's standard or optional, non-corrosive trailer tow type
 - Air conditioning integral with the heater & defrosters
 - Cloth seats, 40/20/40
 - Rear cloth bench (crew cab only)
 - Interior courtesy lamps activate with all doors
- FUEL TANK
- Manufacturer's standard unless otherwise noted in the body upfit section.

OPTIONS:

1. Diesel engine with automatic transmission. Manufacturer's standard diesel engine with highest available horsepower and torque rating and engine block heater.
2. Trailer Towing Package to include as minimum: Class III trailer hitch (7,000 lb. weight carrying capacity) after market installation if necessary, 7 - wire harness with male & female plug, HD battery, HD

flasher, HD alternator, HD front suspension, Front & rear stabilizer bar (if available), HD front & rear shock absorbers, Manufacturer's maximum capacity engine oil, transmission oil, engine cooling available for model bid.

3. Snowplow (for stake body and utility body upfit only), 8 ½ ft., steel with power angling blade, 6" replaceable/reversible high carbon steel cutting edge, safety trip action, adjustable swivel runners, live power hydraulic pump or electronic power pack, controls conveniently located in the cab, auxiliary light kit mounted on lift frame including directional signals. Must have mount feature Ref: Western Ultra Mount or approved equal so that removal of lift frame shall also remove auxiliary snowplow lights and electric-hydraulic snowplow control unit. Vehicle bumper shall remain in same position as originally installed by vehicle manufacturer. Ref: Western Model IUTPP-8.5 or approved equal. (Vendor shall include factory installed heavy duty front suspension, heavy duty front and rear shock absorbers, front and rear stabilizer bars (if available), heavy duty battery, heavy duty flasher, heavy duty alternator, manufacturer's maximum capacity engine oil, transmission oil, engine cooling available for model bid and other required items for proper snowplow operation.

4. Heavy-duty 9' x 96" (minimum) stake body. Platform constructed of seasoned and weather protected 1 1/8" hardwood or 2" (nominal) treated dense pine, tongue and groove or shiplap, attached to cross sills with flush, self-tapping screws. Five (5) inch structural steel longsills with 18" crossmember spacing. Steel platform rubrail. Removable, interlocking stake sections, 26" minimum height, constructed of formed metal with formed metal uprights and spring-loaded rack connectors. Spring loaded mechanism to securely lock stake section into stake pocket. Frame mounted ICC step type rear bumper constructed of 4" structural steel channel. DOT approved lighting. All body lighting shall be LED. Rectangular drop in bulkhead with screened window cut-out, approximate cab height.

5. Standard Utility Body constructed from 12, 14 or 16 gauge galvanized steel and welded into one integral unit, 108" length, 48" inside width, 25" (approximate) height above floor. Safety tread floor, standard safety step bumper. One (1) removable right side mount ladder rack, three (3) weathertight compartments each side, recessed paddle handles, slam action locks keyed alike, two (2) removable shelves with adjustable dividers in left and right front compartments, one (1) removable shelf with adjustable dividers in each horizontal compartment. Compartment layout to be selected by ordering agency from manufacturer's standard configurations. All body lighting shall be LED.

Class 3, Type 2A, Gas Engine Regular Cab, Dual Rear Wheel,
11,000# GVWR Four Wheel Drive Cab and Dump Body
(Regular or crew cab as specified in invitation to bid)

CHASSIS	<ul style="list-style-type: none"> - 11,000 lb. GVWR - Wheelbase and cab-to-axle compatible with specified body - Standard front bumper - Front tow hooks (aftermarket installation if necessary) - Snow plow prep package - Auxiliary switches convenient to driver
ENGINE	<ul style="list-style-type: none"> - Eight (8) cylinder gasoline (minimum) - 300 HP net rating (minimum)
TRANSMISSION	<ul style="list-style-type: none"> - Automatic Transmission with auxiliary oil cooler - Hi-Lo range transfer case - Part time 4-wheel drive
FRONT AXLE	<ul style="list-style-type: none"> - GAWR for specified GVWR and application - HD front shock absorbers - Power steering
REAR AXLE	<ul style="list-style-type: none"> - Manufacturer's highest capacity, with single leaf auxiliary helper spring, if available from manufacturer. - HD rear shock absorbers
BRAKES	<ul style="list-style-type: none"> - Power, four-wheel anti-lock system. - Limited slip differential (rear only)
ELECTRICAL	<ul style="list-style-type: none"> - 12 volt maintenance free battery - 600 CCA @ 0°F. - Single alternator, highest available amperage available from the manufacturer
CAB	<ul style="list-style-type: none"> - Conventional or crew cab, as indicated in the line item description - Mirrors, manufacturer's standard or optional, non-corrosive trailer tow type - Air conditioning integral with the heater & defrosters - Cloth seats, 40/20/40 - Interior courtesy lamps activate with all doors
FUEL TANK	<ul style="list-style-type: none"> - Manufacturer's standard unless otherwise noted in the body upfit section.

Dump Body/Central Hydraulics Upfit: 10 ga. steel dump body, 9 ft. long – 84" wide inside, manual hand crank tarp, 12 in. high steel sides, 18 in. high double acting removable tailgate, ½ cab protector, double gussets for upper sideboards, OSHA safety props, quick release upper tailgate, back-up warning alarm in compliance with OSHA regulations and the most current SAE J-994 requirements for the type equipment specified. Amber

comet flash strobe on cab shield in swing bracket with brush guard. Hoist: *Class 30 - 8.5 ton capacity, with specified body, underbody double lift arm or arm/scissors type with subframe and double acting cylinder, cab mounted controls, positive backstop. * Performance range and ton capacity as determined by NTEA Dump Body Hoist rating method using a minimum dump angle of 50° and a body overhang of 12". Hoist offered which is not listed in the latest edition of the NTEA Dump Body Hoist Chart will not be accepted. All body lighting shall be LED. 19 gallon fuel tank acceptable.

Central hydraulics: shall have all functions to be operated by single pump, to include all body and spreader functions. The hydraulic pump shall be the largest pump available to match engine output, belt driven gear pump with electric clutch. The main valve shall be fully proportional in all functions, electric over hydraulic. No hydraulic lines or valves to be installed in the cab. The spreader shall be equipped with a variable blast, reverse and pause button feature.

Trailer Towing Package to include as minimum: Class V trailer hitch shall be installed on a 3/4" thick steel pull plate properly supported to frame and crossmember; heavy duty B40 type pull rings; after market installation if necessary, 7 - wire harness with male & female plug, HD battery, HD flasher, HD alternator, HD front suspension, Front & rear stabilizer bar (if available), HD front & rear shock absorbers, Manufacturer's maximum capacity engine oil, transmission oil, engine cooling available for model bid.

OPTIONS:

1. Snowplow: 8 ½ ft., steel with power angling blade, 6" replaceable/reversible high carbon steel cutting edge, safety trip action, adjustable swivel runners, electronic power pack, controls conveniently located in the cab, auxiliary light kit mounted on lift frame including directional signals. Must have mount feature Ref: Western Ultra Mount or approved equal so that removal of lift frame shall also remove auxiliary snowplow lights and electric-hydraulic snowplow control unit. Vehicle bumper shall remain in same position as originally installed by vehicle manufacturer. Ref: Western Model IUTPP-8.5 or approved equal.
2. Tailgate Spreader: Screw auger, cross conveyor under tailgate type spreader with a full drop bottom trough and fully adjustable mechanical self-leveling spinner assembly. All welds to be continuous and shall be cleaned and deburred on all sharp edges. Overall dimensions approximately 96" long x 17" wide. Auger to be minimum 6" in diameter. Trough to be approximately 10" wide by 9" deep. Trough frame to be constructed of 7 gauge, 2 channel design running full length with welded-on offset spinner assembly mounting hardware. Trough cover to be 7 gauge full drop type with offset hinges and shall have a full 250 degree opening frame for easy clean out maintenance. Lifting handle and cover latch assemblies to be T304 stainless steel. Trough end plates to be offset ¼" plates with all cutouts for top cover latches, bottom trough latches, chain lifting eyes, bearing, motor and gearbox mounting plates. Bottom trough to be 7 gauge full drop down design with stainless steel safety stop latches for easy and safe clean out and one person safe operation. Bottom trough to be mounted to top trough by means of a welded hinge design utilizing all T304 stainless steel hardware. Auger flighting shall be 6" diameter with 3/8" thick flighting mounted to a 2" pipe complete with a 1 ¼" diameter stub shaft UHMU expansion bushings in a side pipe ends (for ease of maintenance and screw auger removal). The auger shall be supported by two heavy duty industrial malleable iron two hole flange ball bearings. Bi-directional flighting. Auger drive, whether direct, gear-box or chain/sprocket, must match up with specified spreader controls. The spinner assembly shall be a self leveling swing away all-in-one full height adjustable

spinner assembly. The spinner device must have a minimum of 10" horizontal adjustment. Spinner assembly must have sufficient vertical adjustment so as to not hit the ground when the bed is raised. The spinner itself must be an 18" diameter polyurethane disc with molded bi-directional flights. The entire assembly must be able to swing fully out of the way to clear the bottom drop trough when trough is open. The spinner disc shall be direct drive by a Char-Lynn hydraulic motor. An electronic controller shall be installed inside of the cab.

3. Hinged Drop Body Sides (steel body): 12 in. high steel hinged drop body sides in lieu of fixed sides.
4. Aluminum Dump Body: 3/16" #5052 Aluminum construction, 9 ft. long – 84" wide inside. 12" high aluminum sides, 18" high double acting removable aluminum tailgate. ½ cab protector, double gussets for upper side boards, manual hand crank tarp, OSHA safety props, double panel sides, fully boxed top rail. Hand-pull pin release upper tailgate, vertical tailgate braces, back-up warning alarm in compliance with OSHA regulations and the most current SAE J-994 requirements for the type equipment specified. Amber comet flash strobe on cab shield in swing bracket with brush guard. Hoist: *Class 30 - 8.5 ton capacity, with specified body, underbody double lift arm or arm/scissors type with subframe and double acting cylinder, cab mounted controls, positive backstop. * Performance range and ton capacity as determined by NTEA Dump Body Hoist rating method using a minimum dump angle of 50° and a body overhang of 12". Hoist offered which is not listed in the latest edition of the NTEA Dump Body Hoist Chart will not be accepted. All body lighting shall be LED. 19 gallon fuel tank acceptable.

Class 3, Type 2B, Diesel Engine Regular Cab, Dual Rear Wheel,
11,000# GVWR Four Wheel Drive Cab and Dump Body
(Regular or crew cab as specified in invitation to bid)

- CHASSIS**
- 11,000 lb. GVWR
 - Wheelbase and cab-to-axle compatible with specified body
 - Standard front bumper
 - Front & rear tow hooks (aftermarket installation if necessary)
 - Snow plow prep package
 - Auxiliary switches convenient to driver
- ENGINE**
- Diesel engine, manufacturer's standard with highest available horsepower and torque.
 - Manufacturer's maximum capacity engine cooling available for model bid.
 - Engine block heater
- TRANSMISSION**
- Automatic Transmission with auxiliary oil cooler
 - Hi-Lo range transfer case
 - Part time 4-wheel drive
- FRONT AXLE**
- GAWR for specified GVWR and application
 - HD front shock absorbers
 - Power steering
- REAR AXLE**
- Manufacturer's highest capacity, with single leaf auxiliary helper spring, if available from manufacturer.
 - HD rear shock absorbers
- BRAKES**
- Power, four-wheel anti-lock system.
 - Limited slip differential (rear only)
- ELECTRICAL**
- 12 volt maintenance free battery(s)
 - Alternator(s), highest available amperage available from the manufacturer
- CAB**
- Conventional or crew cab, as indicated in the line item description
 - Mirrors, manufacturer's standard or optional, non-corrosive trailer tow type
 - Air conditioning integral with the heater & defrosters
 - Cloth seats, 40/20/40
 - Interior courtesy lamps activate with all doors
- FUEL TANK**
- Manufacturer's standard unless otherwise noted in the body upfit section.

Dump Body/Central Hydraulics Upfit: 10 ga. steel dump body, 9 ft. long – 84" wide inside, 12 in. high steel sides, 18 in. high double acting removable tailgate, ½ cab protector, double gussets for upper sideboards, manual hand crank tarp, OSHA safety props, quick release upper tailgate, back-up warning alarm in compliance

with OSHA regulations and the most current SAE J-994 requirements for the type equipment specified. Amber comet flash strobe on cab shield in swing bracket with brush guard. Hoist: *Class 30 - 8.5 ton capacity, with specified body, underbody double lift arm or arm/scissors type with subframe and double acting cylinder, cab mounted controls, positive backstop. * Performance range and ton capacity as determined by NTEA Dump Body Hoist rating method using a minimum dump angle of 50° and a body overhang of 12". Hoist offered which is not listed in the latest edition of the NTEA Dump Body Hoist Chart will not be accepted. All body lighting shall be LED. 19 gallon fuel tank acceptable.

Central hydraulics: shall have all functions to be operated by single pump or PTO driven (for diesel engines) to include all plow, body and spreader functions. The hydraulic pump shall be the largest pump available to match engine output, belt driven gear pump with electric clutch. The main valve shall be fully proportional in all functions, electric over hydraulic. No hydraulic lines or valves to be installed in the cab. The spreader shall be equipped with a variable blast, reverse and pause button feature.

Trailer Towing Package to include as minimum: Class V trailer hitch shall be installed on a 3/4" thick steel pull plate properly supported to frame and crossmember; heavy duty B40 type pull rings; after market installation if necessary, 7 - wire harness with male & female plug, HD battery, HD flasher, HD alternator, HD front suspension, Front & rear stabilizer bar (if available), HD front & rear shock absorbers, Manufacturer's maximum capacity engine oil, transmission oil, engine cooling available for model bid.

OPTIONS:

1. Snowplow: 8 ½ ft., steel with power angling blade, 6" replaceable/reversible high carbon steel cutting edge, safety trip action, adjustable swivel runners, live power hydraulic pump, controls conveniently located in the cab, auxiliary light kit mounted on lift frame including directional signals. Must have mount feature Ref: Western Ultra Mount or approved equal so that removal of lift frame shall also remove auxiliary snowplow lights and electric-hydraulic snowplow control unit. Vehicle bumper shall remain in same position as originally installed by vehicle manufacturer. Ref: Western Model IUTPP-8.5 or approved equal.
2. Tailgate Spreader: Screw auger, cross conveyor under tailgate type spreader with a full drop bottom trough and fully adjustable mechanical self-leveling spinner assembly. All welds to be continuous and shall be cleaned and deburred on all sharp edges. Overall dimensions approximately 96" long x 17" wide. Auger to be minimum 6" in diameter. Trough to be approximately 10" wide by 9" deep. Trough frame to be constructed of 7 gauge, 2 channel design running full length with welded-on offset spinner assembly mounting hardware. Trough cover to be 7 gauge full drop type with offset hinges and shall have a full 250 degree opening frame for easy clean out maintenance. Lifting handle and cover latch assemblies to be T304 stainless steel. Trough end plates to be offset ¼" plates with all cutouts for top cover latches, bottom trough latches, chain lifting eyes, bearing, motor and gearbox mounting plates. Bottom trough to be 7 gauge full drop down design with stainless steel safety stop latches for easy and safe clean out and one person safe operation. Bottom trough to be mounted to top trough by means of a welded hinge design utilizing all T304 stainless steel hardware. Auger flighting shall be 6" diameter with 3/8" thick flighting mounted to a 2" pipe complete with a 1 ¼" diameter stub shaft UHMU expansion bushings in a side pipe ends (for ease of maintenance and screw auger removal). The auger shall be supported by two heavy duty industrial malleable iron two hole flange ball bearings. Bi-directional flighting. Auger drive, whether direct, gear-box or chain/sprocket, must match up with specified spreader controls. The spinner assembly shall be a self leveling swing away all-in-one full height adjustable

spinner assembly. The spinner device must have a minimum of 10" horizontal adjustment. Spinner assembly must have sufficient vertical adjustment so as to not hit the ground when the bed is raised. The spinner itself must be an 18" diameter polyurethane disc with molded bi-directional flights. The entire assembly must be able to swing fully out of the way to clear the bottom drop trough when trough is open. The spinner disc shall be direct drive by a Char-Lynn hydraulic motor. An electronic controller shall be installed inside of the cab.

3. Hinged Drop Body Sides (steel body): 12 in. high steel hinged drop body sides in lieu of fixed sides.
4. Aluminum Dump Body: 3/16" #5052 Aluminum construction, 9 ft. long – 84" wide inside. 12" high aluminum sides, 18" high double acting removable aluminum tailgate. ½ cab protector, double gussets for upper side boards, manual hand crank tarp, OSHA safety props, double panel sides, fully boxed top rail. Hand-pull pin release upper tailgate, vertical tailgate braces, back-up warning alarm in compliance with OSHA regulations and the most current SAE J-994 requirements for the type equipment specified. Amber comet flash strobe on cab shield in swing bracket with brush guard. Hoist: *Class 30 - 8.5 ton capacity, with specified body, underbody double lift arm or arm/scissors type with subframe and double acting cylinder, cab mounted controls, positive backstop. * Performance range and ton capacity as determined by NTEA Dump Body Hoist rating method using a minimum dump angle of 50° and a body overhang of 12". Hoist offered which is not listed in the latest edition of the NTEA Dump Body Hoist Chart will not be accepted. All body lighting shall be LED. 19 gallon fuel tank acceptable.

Class 5, Type 2A, Gas Engine Regular Cab, Dual Rear Wheel,
17,500# GVWR Four Wheel Drive with Dump Body

- CHASSIS
- 17,500 lb. GVWR, minimum
 - Wheelbase compatible with specified body and cab-to-axle
 - Standard front bumper.
 - Dual front tow hooks
 - Snow plow prep package
 - Auxiliary switches convenient to driver
- ENGINE
- Gasoline engine, manufacturer's standard with highest available horsepower and torque.
 - Manufacturer's maximum capacity engine cooling available for model bid.
- TRANSMISSION
- Automatic with synthetic fluid and auxiliary transmission oil cooler.
 - Two (2) speed heavy duty transfer case.
 - Part time four wheel drive.
- FRONT AXLE
- Manufacturer's maximum capacity front GAWR with steering damper
 - Heavy duty front shock absorbers.
 - Power steering.
- REAR AXLE
- Manufacturer's highest capacity GAWR with single leaf auxiliary helper spring if available from manufacturer.
 - Heavy duty rear shock absorbers.
 - Limited Slip Differential
- BRAKES
- Hydro boost four wheel ABS
 - Front & Rear Disc
- ELECTRICAL
- 12 volt maintenance free battery - 600 CCA @ 0°F.
 - Single alternator, highest available amperage available from the manufacturer
 - Manufacturer's standard gauge package
- CAB
- Air conditioning integral with the heater & defrosters
 - Cloth seats, 40/20/40
 - Conventional cab with dome light or interior lights.
 - Fresh air hot water heater and defrosters.
 - Dual electric windshield wipers with intermittent feature.
 - Dual windshield washers including antifreeze type solvent.
 - Left and right door locks - Dual sun visors.
 - Non-glare inside mirror.

- Mirrors, trailer tow

WHEELS AND TIRES

- Radial, BSW All-Terrain (dual rear wheels) on steel wheels, all positions.

Dump Body/Central Hydraulics Upfit: 10 ga. steel dump body, 9 ft. long –84” wide inside, 12 in. high steel sides, 18 in. high double acting removable tailgate, ½ cab protector, double gussets for upper sideboards, manual hand crank tarp, OSHA safety props, quick release upper tail gate hardware, back-up warning alarm in compliance with OSHA regulations and the most current SAE J-994 requirements for the type equipment specified. Amber comet flash strobe on cab shield in swing bracket with brush guard. Hoist: *Class 30 - 8.5 ton capacity, with specified body, underbody double lift arm or arm/scissors type with subframe and double acting cylinder, cab mounted controls, positive backstop. * Performance range and ton capacity as determined by NTEA Dump Body Hoist rating method using a minimum dump angle of 50° and a body overhang of 12”. Hoist offered which is not listed in the latest edition of the NTEA Dump Body Hoist Chart will not be accepted. All body lighting shall be LED.

Central hydraulics: shall have all functions to be operated by single pump, to include all body and spreader functions. The hydraulic pump shall be the largest pump available to match engine output, belt driven gear pump with electric clutch. The main valve shall be fully proportional electric over hydraulic. No hydraulic lines or valves to be installed in the cab. The ground speed function shall be included in the hydraulic system.

Trailer Towing Package to include as minimum: Class V trailer hitch shall be installed on a 3/4” thick steel pull plate properly supported to frame and crossmember; heavy duty B40 type pull rings; after market installation if necessary, 7 - wire harness with male & female plug, HD battery, HD flasher, HD alternator, HD front suspension, Front & rear stabilizer bar (if available), HD front & rear shock absorbers, Manufacturer’s maximum capacity engine oil, transmission oil, engine cooling available for model bid.

OPTIONS:

1. Snowplow: 9 ft., steel with power angling blade, 6” replaceable/reversible high carbon steel cutting edge, safety trip action, adjustable swivel runners, electronic power pack, controls conveniently located in the cab, auxiliary light kit mounted on lift frame including directional signals. Must have mount feature Ref: Western Ultra Mount or approved equal so that removal of lift frame shall also remove auxiliary snowplow lights. Vehicle bumper shall remain in same position as originally installed by vehicle manufacturer. Ref: Western Model IUTPP-90 or approved equal.
2. Tailgate Spreader: Screw auger, cross conveyor under tailgate type spreader with a full drop bottom trough and fully adjustable mechanical self-leveling spinner assembly. All welds to be continuous and shall be cleaned and deburred on all sharp edges. The spreader shall have ground speed included in the system. Overall dimensions approximately 96” long x 17” wide. Auger to be minimum 6” diameter. Trough to be approximately 10” wide by 9” deep. Trough frame to be constructed of 7 gauge, 2 channel design running full length with welded-on offset spinner assembly mounting hardware. Trough cover to be 7 gauge full drop type with offset hinges and shall have a full 250 degree opening frame for easy clean out maintenance. Lifting handle and cover latch assemblies to be T304 stainless steel. Trough end plates to be offset ¼” plates with all cutouts for top cover latches, bottom trough latches, chain lifting eyes, bearing, motor and gearbox mounting plates. Bottom trough to be 7 gauge full drop down design with stainless steel safety stop latches for easy and safe clean out and one person safe operation. Bottom trough to be mounted to top trough by means of a welded

hinge design utilizing all T304 stainless steel hardware. Auger flighting shall be 6" diameter with 3/8" thick flighting mounted to a 2" pipe complete with a 1 1/4" diameter stub shaft UHMU expansion bushings in a side pipe ends (for ease of maintenance and screw auger removal). The auger shall be supported by two heavy duty industrial malleable iron two hole flange ball bearings. Bi-directional flighting. Auger drive, whether direct, gear-box or chain/sprocket, must match up with specified spreader controls. The spinner assembly shall be a self leveling swing away all-in-one full height adjustable spinner assembly. The spinner device must have a minimum of 10" horizontal adjustment. Spinner assembly must have sufficient vertical adjustment so as to not hit the ground when the bed is raised. The spinner itself must be an 18" diameter polyurethane disc with molded bi-directional flights. The entire assembly must be able to swing fully out of the way to clear the bottom drop trough when trough is open. The spinner disc shall be direct drive by a Char-Lynn hydraulic motor. An electronic controller shall be installed inside of the cab.

3. Hinged Drop Body Sides (steel body): 12 in. high steel hinged drop body sides in lieu of fixed sides.
4. Aluminum Dump Body: 3/16" #5052 Aluminum construction, 9 ft. long – 84" wide inside. 12" high aluminum sides, 18" high double acting removable aluminum tailgate. 1/2 cab protector, double gussets for upper side boards, manual hand crank tarp, OSHA safety props, double panel sides, fully boxed top rail. Hand-pull pin release upper tailgate, vertical tailgate braces, back-up warning alarm in compliance with OSHA regulations and the most current SAE J-994 requirements for the type equipment specified. Amber comet flash strobe on cab shield in swing bracket with brush guard. Hoist: *Class 30 - 8.5 ton capacity, with specified body, underbody double lift arm or arm/scissors type with subframe and double acting cylinder, cab mounted controls, positive backstop. * Performance range and ton capacity as determined by NTEA Dump Body Hoist rating method using a minimum dump angle of 50° and a body overhang of 12". Hoist offered which is not listed in the latest edition of the NTEA Dump Body Hoist Chart will not be accepted. All body lighting shall be LED. 19 gallon fuel tank acceptable.

Class 5, Type 2B, Diesel Engine Regular Cab, Dual Rear Wheel,
18,500# GVWR Four Wheel Drive with Dump Body

CHASSIS	<ul style="list-style-type: none">- 18,500 lb. GVWR, minimum- Wheelbase compatible with specified body and cab-to-axle- Standard front bumper.- Dual front tow hooks or eyes- Snow plow prep package- Auxiliary switches convenient to driver
ENGINE	<ul style="list-style-type: none">- Diesel engine, manufacturer's standard with highest available horsepower and torque.- Manufacturer's maximum capacity engine cooling available for model bid.- Engine block heater
TRANSMISSION	<ul style="list-style-type: none">- Automatic with synthetic fluid and auxiliary transmission oil cooler.- Two (2) speed heavy duty transfer case.- Part time four wheel drive.
FRONT AXLE	<ul style="list-style-type: none">- Manufacturer's maximum capacity front GAWR with steering damper- Heavy duty front shock absorbers.- Power steering.
REAR AXLE	<ul style="list-style-type: none">- Manufacturer's highest capacity GAWR with single leaf auxiliary helper spring if available from manufacturer.- Heavy duty rear shock absorbers.- Limited Slip Differential
BRAKES	<ul style="list-style-type: none">- Hydro boost four wheel ABS- Front & Rear Disc
ELECTRICAL	<ul style="list-style-type: none">- 12 volt maintenance free battery (s)- Alternator(s), highest available amperage available from the manufacturer- Manufacturer's standard gauge package
CAB	<ul style="list-style-type: none">- Air conditioning integral with the heater & defrosters- Cloth seats, 40/20/40- Conventional cab with dome light or interior lights.- Fresh air hot water heater and defrosters.- Dual electric windshield wipers with intermittent feature.- Dual windshield washers including antifreeze type solvent.- Left and right door locks - Dual sun visors.

- Foam padded seat cushion.
- Non-glare inside mirror.
- Mirrors, trailer tow

WHEELS AND TIRES

- Radial, BSW All-Terrain (dual rear wheels) on steel wheels, all positions.

Dump Body/Central Hydraulics Upfit: 10 ga. steel dump body, 9 ft. long –84” wide inside, 12 in. high steel sides, 18 in. high double acting removable tailgate, ½ cab protector, double gussets for upper sideboards, manual hand crank tarp, OSHA safety props, Quick release upper tail gate hardware, back-up warning alarm in compliance with OSHA regulations and the most current SAE J-994 requirements for the type equipment specified. Amber comet flash strobe on cab shield in swing bracket with brush guard. Hoist: *Class 30 - 8.5 ton capacity, with specified body, underbody double lift arm or arm/scissors type with subframe and double acting cylinder, cab mounted controls, positive backstop. * Performance range and ton capacity as determined by NTEA Dump Body Hoist rating method using a minimum dump angle of 50° and a body overhang of 12”. Hoist offered which is not listed in the latest edition of the NTEA Dump Body Hoist Chart will not be accepted. All body lighting shall be LED.

Central hydraulics: shall have all functions to be operated by single pump or PTO driven (for diesel engines) to include all plow, body and spreader functions. The hydraulic pump shall be the largest pump available to match engine output, belt driven gear pump with electric clutch. The main valve shall be fully proportional electric over hydraulic. No hydraulic lines or valves to be installed in the cab. The ground speed function shall be included in the hydraulic system.

Trailer Towing Package to include as minimum: Class V trailer hitch shall be installed on a 3/4” thick steel pull plate properly supported to frame and crossmember; heavy duty B40 type pull rings; after market installation if necessary, 7 - wire harness with male & female plug, HD battery, HD flasher, HD alternator, HD front suspension, Front & rear stabilizer bar (if available), HD front & rear shock absorbers, Manufacturer’s maximum capacity engine oil, transmission oil, engine cooling available for model bid.

OPTIONS:

1. Snowplow: 9 ft., steel with power angling blade, 6” replaceable/reversible high carbon steel cutting edge, safety trip action, adjustable swivel runners, full hydraulic control conveniently located in the cab, auxiliary light kit mounted on lift frame including directional signals. Must have mount feature Ref: Western Ultra Mount or approved equal so that removal of lift frame shall also remove auxiliary snowplow lights. Vehicle bumper shall remain in same position as originally installed by vehicle manufacturer. Ref: Western Model IUTPP-90 or approved equal.
2. Tailgate Spreader: Screw auger, cross conveyor under tailgate type spreader with a full drop bottom trough and fully adjustable mechanical self-leveling spinner assembly. All welds to be continuous and shall be cleaned and deburred on all sharp edges. The spreader shall have ground speed included in the system. Overall dimensions approximately 96” long x 17” wide. Auger to be minimum 6” diameter. Trough to be approximately 10” wide by 9” deep. Trough frame to be constructed of 7 gauge, 2 channel design running full length with welded-on offset spinner assembly mounting hardware. Trough cover to be 7 gauge full drop type with offset hinges and shall have a full 250 degree opening frame for easy clean out maintenance. Lifting

handle and cover latch assemblies to be T304 stainless steel. Trough end plates to be offset ¼” plates with all cutouts for top cover latches, bottom trough latches, chain lifting eyes, bearing, motor and gearbox mounting plates. Bottom trough to be 7 gauge full drop down design with stainless steel safety stop latches for easy and safe clean out and one person safe operation. Bottom trough to be mounted to top trough by means of a welded hinge design utilizing all T304 stainless steel hardware. Auger flighting shall be 6” diameter with 3/8” thick flighting mounted to a 2” pipe complete with a 1 ¼” diameter stub shaft UHMU expansion bushings in a side pipe ends (for ease of maintenance and screw auger removal). The auger shall be supported by two heavy duty industrial malleable iron two hole flange ball bearings. Bi-directional flighting. Auger drive, whether direct, gear-box or chain/sprocket, must match up with specified spreader controls. The spinner assembly shall be a self leveling swing away all-in-one full height adjustable spinner assembly. The spinner device must have a minimum of 10” horizontal adjustment. Spinner assembly must have sufficient vertical adjustment so as to not hit the ground when the bed is raised. The spinner itself must be an 18” diameter polyurethane disc with molded bi-directional flights. The entire assembly must be able to swing fully out of the way to clear the bottom drop trough when trough is open. The spinner disc shall be direct drive by a Char-Lynn hydraulic motor.

3. Hinged Drop Body Sides (steel body): 12 in. high steel hinged drop body sides in lieu of fixed sides.
4. Aluminum Dump Body: 3/16” #5052 Aluminum construction, 9 ft. long – 84” wide inside. 12” high aluminum sides, 18” high double acting removable aluminum tailgate. ½ cab protector, double gussets for upper side boards, manual hand crank tarp, OSHA safety props, double panel sides, fully boxed top rail. Hand-pull pin release upper tailgate, vertical tailgate braces, back-up warning alarm in compliance with OSHA regulations and the most current SAE J-994 requirements for the type equipment specified. Amber comet flash strobe on cab shield in swing bracket with brush guard. Hoist: *Class 30 - 8.5 ton capacity, with specified body, underbody double lift arm or arm/scissors type with subframe and double acting cylinder, cab mounted controls, positive backstop. * Performance range and ton capacity as determined by NTEA Dump Body Hoist rating method using a minimum dump angle of 50° and a body overhang of 12”. Hoist offered which is not listed in the latest edition of the NTEA Dump Body Hoist Chart will not be accepted. All body lighting shall be LED. 19 gallon fuel tank acceptable.

Class 6, Type 2, Regular Cab, Dual Rear Wheel,
26,000# GVWR, Diesel Engine, Four Wheel Drive Cab and Dump Body

- CHASSIS
- 25,500 lb. GVWR, not to exceed 26,000 lbs.
 - Wheelbase and cab-to-axle compatible with specified body
 - High tensile steel or reinforced frame, 80,000 psi, minimum
 - Standard front bumper
 - Two front tow hooks or eyes
 - Aftermarket four wheel drive is acceptable
- ENGINE
- Diesel
 - 250 HP – 660 lb.-ft. torque (minimum)
 - Temperature controlled fan clutch
 - Engine block heater
 - Engine exhaust with vertical stack, right rear of cab with curb-side turnout
 - Premium coolant and heater hoses
- TRANSMISSION
- Allison 3500RDS series automatic transmission or approved equal, with oil cooler and synthetic transmission fluid.
- FRONT AXLE
- 10,000 lb. capacity with oil lubricated wheel hubs
 - HD front shock absorbers
 - Power steering
- REAR AXLE
- 19,000 lb. capacity single speed with leaf springs, shock absorbers and stabilizer bar.
 - Gear ratio to be selected from manufacturer’s standard available ratios after receipt of order.
- BRAKES
- Full-air system, with four-channel antilock braking system.
 - Warning lights and buzzer
 - Air dryer with heater
 - Automatic slack adjusters, front and rear
- ELECTRICAL
- Three 12 volt maintenance free batteries – totaling 1950 CCA @ 0°F (min)
 - Full gauge package with hourmeter.
 - 160 amp alternator (local installation acceptable)
- CAB
- Conventional w/tilting hood and fenders
 - Dual 6”x16” heated corrosion resistant with integral convex or convex mounted below mirror
 - Cab grab handles left and right side
 - Cruise control
 - Adjustable high back cloth air suspension seat with fixed base cloth passenger seat.

FUEL TANK	- 45 gallon aluminum tank
TIRES (front & rear)	- 11R 22.5 tubeless radial, all-terrain type tread, rated appropriately for GVWR, GAWR and application, all positions, mounted on 22.5 x 8.25 one piece hub piloted rims.
GRILL	- Fixed (stationary) grill.
DUMP BODY UPFIT	10 ga. steel dump body, 10 ft. long - 7 ft. wide inside, 26 in. high steel sides, 32 in. high double acting, removable tailgate, ½ cab protector, double gussets for upper sideboards, electric tarp system, OSHA safety props, back-up warning alarm in compliance with OSHA regulations and the most current SAE J-994 requirements for the type equipment specified. Amber comet flash strobe mounted on cab shield in swing bracket with brush guard. Recessed stop/turn/tail backup and strobe lights on corner posts. All body lighting shall be LED. Air operated Tailgate: Tailgate must be operated via an in-cab dash mounted switch (switch mounted under dash is not acceptable). A pump, cable cab control and a double acting valve shall be provided. Body hoist: *Class 40 - 14 ton capacity with specified body, underbody double lift arm or arm/scissors type with subframe and double acting cylinder, cab mounted controls, positive backstop.

OPTIONS:

1. Snow plow and Hydraulics Upfit: Full hydraulic (no electric motor), 10' wide by approximately 33" high. Plow to include deflector and blade guides. Blade to have replaceable high carbon cutting edge and cast iron shoes. Reference: Western Heavyweight.

Hydraulics: Automatic transmission with hot shift PTO. Three electric solenoid valves, body-up/down, plow lift with plow float down and power angle with cushion valves. Electric proportional dual spreader control for auger and spinner. Cab console is pedestal mounted with lighted rocker switches for: pump on/off; strobes on/off; spinner work light on/off; and spreader unit on/off. Self-centering rocker switch for body up/down. Plow lift button is self-centering for up and will lock in float/down position. Auger and spinner dial is labeled 1 to 10. Spreader has blast button feature. Each circuit has individual external in-line fuse. Dump "body-up" light is built in console. Compact console mounted on an adjustable pedestal for operator ease of use and adjustment. No hydraulic hoses in the cab. Twenty-five (25) gallon hydraulic reservoir and Dextron II MP hydraulic oil. Valve bank is mounted under body, behind cab, or in protective enclosure outside of frame rails. Ten (10) micron spin-on filter, oil sight level gauge, suction line gate valve. Heavy-duty hoses must use quick couplers to front and rear of truck.

2. Tailgate Spreader: T-304 stainless steel construction; screw auger, cross conveyor under tailgate type spreader with a full drop bottom trough and fully adjustable mechanical self-leveling spinner assembly. All welds to be continuous and shall be cleaned and deburred on all sharp edges. Overall dimensions approximately 96" long x 17" wide. Auger to be minimum 6" in diameter. Trough to be approximately 10"

wide by 9" deep. Trough frame to be constructed of 7 gauge, 2 channel design running full length with welded-on offset spinner assembly mounting hardware. Trough cover to be 7 gauge full drop type with offset hinges and shall have a full 250 degree opening frame for easy clean out maintenance. Lifting handle and cover latch assemblies to be T304 stainless steel. Trough end plates to be offset 1/4" plates with all cutouts for top cover latches, bottom trough latches, chain lifting eyes, bearing, motor and gearbox mounting plates. Bottom trough to be 7 gauge full drop down design with stainless steel safety stop latches for easy and safe clean out and one person safe operation. Bottom trough to be mounted to top trough by means of a welded hinge design utilizing all T304 stainless steel hardware. Auger flighting shall be 6" diameter with 3/8" thick flighting mounted to a 2" pipe complete with a 1 1/4" diameter stub shaft UHMU expansion bushings in a side pipe ends (for ease of maintenance and screw auger removal). The auger shall be supported by two heavy duty industrial malleable iron two hole flange ball bearings. Bi-directional flighting. Auger drive, whether direct, gear-box or chain/sprocket, must match up with specified spreader controls. The spinner assembly shall be a self leveling swing away all-in-one full height adjustable spinner assembly. The spinner device must have a minimum of 10" horizontal adjustment. Spinner assembly must have sufficient vertical adjustment so as to not hit the ground when the bed is raised. The spinner itself must be an 18" diameter polyurethane disc with molded bi-directional flights. The entire assembly must be able to swing fully out of the way to clear the bottom drop trough when trough is open. The spinner disc shall be direct drive by a Char-Lynn hydraulic motor.

3. High Capacity Trailer Tow Package: Combo 2" ball and pintle combination hook 10,000 lb. Gross Trailer Weight shall be installed on a 3/4" thick steel pull plate properly supported to frame and crossmember; heavy duty "D" rings. Package to include trailer wire connections per SAE standards.

Class 8, Type 2, Regular Cab, Dual Rear Wheel,
37,000# GVWR, Diesel Engine, Four Wheel Drive Cab and Dump Body

- CHASSIS
- 37,000 lb. GVWR
 - Cab to axle, wheelbase and wheel cut to create the most maneuverable truck for the application
 - High tensile steel single frame, 120,000 psi minimum
 - Front frame extension
 - Standard front bumper
 - Two front tow hooks or eyes
- ENGINE
- Six (6) cylinder turbocharged after/inter cooled diesel
 - 300 HP (min) – 860 lbs./ft torque (min)
 - Temperature controlled fan clutch
 - Engine block heater
 - Engine exhaust with vertical stack, rear of cab with curbside-turnout.
 - Premium coolant and heater hoses
 - Crankshaft access.
- TRANSMISSION
- Allison 3000 series automatic transmission or approved equal, with oil cooler and synthetic transmission fluid.
- FRONT AXLE
- 14,000 lb. GAWR
 - Heavy duty front shock absorbers
 - Power steering
 - Oil seals
- REAR AXLE
- 23,000 lb. GAWR with single leaf auxiliary helper spring
 - Gear ratio to be selected from manufacturer’s standard available ratios after receipt of order.
 - Limited slip differential, or driver controlled locking differential
 - Oil seals
- BRAKES
- Full-air system, with four-channel antilock braking system.
 - Warning lights and buzzer
 - Air dryer with heater
 - Automatic slack adjusters, front and rear
- ELECTRICAL
- Two or Three 12 volt maintenance free batteries – totaling 1800 CCA @ 0°F (min)
 - Full gauge package with hourmeter.
 - 160 amp alternator (local installation acceptable)

CAB	<ul style="list-style-type: none"> - Conventional w/tilting hood and fenders - Corrosion resistant, heated west coast type mirrors - Down view mirror over passenger door - Two-speed wipers with intermittent feature - Right hand electric window - Cab grab handles left and right side - Air conditioning integral with the heater & defrosters - Cloth high back suspension seat with inboard armrests for driver, ref. Bostrom Talladega 915 or approved equal - Fixed base bucket passenger seat. Cloth surface. - Tinted glass, all windows - Dual electric horns - Dual air horns - Cruise control - CB radio mounting plate with hot post, ground and wired single antenna
TIRES (front & rear)	- 12R 22.5 all-terrain type tread, rated appropriately for GVWR, GAWR and application, all positions, mounted on 22.5 x 8.25 one piece hub piloted rims
FUEL TANK	- 70-gallon <u>aluminum</u> total capacity, safety type with dash mounted gauge (dual tanks are acceptable)
GRILL	- Fixed (stationary) grill.
Dump Body	<p>Galion 400-U, or approved equal, 120" length x 96" outside width (84" interior width) x 29" side height. 39" tailgate height. All 8 gauge high tensile strength steel construction. 6-8 cubic yard capacity; 5" @ 6.7# longsills; 4" @ 4.5# crossmembers on 15" centers. 2" floor to side radius; 8 gauge full depth rear corner posts, 15" wide. 3/16" rear bolster, 9" deep. Pedestal type rear hinge on hoist assembly. Boxed top rail, tarp rail, inside step each side at front. Three steel vertical braces per side. Six panel reinforced tailgate with dirt shedding braces. Continuous welded construction. Coal door. Grip-step catwalk both sides of body. Forward braced steel splash shields mounted with adequate space for tire chains, bottom 6" of splash shield to be rubber. Half-cab shield. Galion, or approved equal, U850C-DA, class 50, 17 ton capacity under body hoist, double acting, 50 degree dump angle. Body safety prop. Grip strut ladder, roadside front. Body to be grit blasted, high solids urethane primed and finish painted to match cab color. Under side of body to be continuously coated with uniform thickness coating to protect steel against rust. Electric tarp system (Aero 575 or approved equal. Stop, turn, tail, backup lamps and strobe lights to be recessed in rear corner posts. LED marker and clearance lamps per DOT requirements. Back up lights shall be LED. Air</p>

operated Tailgate: Tailgate must be operated via an in-cab dash mounted switch (switch mounted under dash is not acceptable).

A pump, cable cab control and a double acting valve shall be provided.

OPTIONS:

1. Plow Hitch and Hydraulics Upfit: Plow frame shall be furnished and installed in accordance with Pennsylvania Department of Transportation hitch specifications for Class II dump trucks. Plow frame to be approved by the truck manufacturer's engineering department. Reference; Commonwealth of Pennsylvania, Department of Transportation drawing numbers: EQN-50, Low Profile Plow Mounting and EQN-124, Auxiliary Snow Plow Light Mounting (most current drawings available at the time of the bid opening).

-- OR --

Custom hitch as manufactured by a recognized snowplow manufacturer in such a way as to allow the hood of the chassis fitted with a tilt engine cowl and stationary grill to tilt forward over the upper portion of such an attachment and to be compatible with PennDOT style quick hitch plows. Attachment shall include ½" side plates reinforced and bolted as far back on the truck frame as feasible. Top cross member and vertical risers shall be fabricated from a minimum of 4" x 3" x ½" angle. Horizontal member to which the base of the lift cylinder pins shall be fabricated from a minimum 4" x 4" x ¾" angle. Push lug weldment 30.5" spacing for PennDOT quick hitch attachment shall be fabricated from ¾" x 4" x ¾" x 7" x 5/16" hardened steel (¾" steel for quick hitch coupler). 1.25" x 7" attachment pins must be vertically mounted and secured to hitch. The quick hitch arrangement also referred to as PennDOT style hitch pin jaws.

Hydraulics: Rexroth ATV-071 variable displacement pump, or approved equal with 25 gallon reservoir (minimum). The pressure compensated, load sensing hydraulic system shall operate all functions (plows, dump body and spreader) from a hydraulic system independently and simultaneously, without interruption of any hydraulic functions. Valving system of mobile design to withstand exposure to deicing chemicals and severe weather conditions *without* use of a watertight enclosure. Cast iron construction, horizontally stackable and serviceable without disassembly. Each section must have a built-in flow and pressure compensator to allow simultaneous operation of any piece of equipment regardless of any other system function (load sensing). Sections for hoist, plow lift and plow angle must be operated manually and be adjustable to 15 gpm. Spinner and auger sections must be incorporated into main valve assembly. Both auger and spinner sections are to be pilot operated and have manual overrides and must also be adjustable to 15 gpm. All valving must be mounted in one main valve assembly. Multiple valve assemblies are unacceptable. Reservoir to have suction line gate valve, oil sight gauge, breathable filler cap, ten micron spin-on type filter and a baffle between return and outlet ports. Dextron II MP hydraulic oil. Suction, pressure and return hoses to be DAYCO SAE-100-R4 or 100-R42AT extreme duty hoses, or approved equal.

NOTE: Snowplows are available from contract 2540-02, Snow Plows and Attachments, which is available at www.dgs.state.pa.us.

2. T-304 stainless steel tailgate spreader, screw auger, cross conveyor under tailgate type spreader with a full drop bottom trough and fully adjustable mechanical self-leveling spinner assembly. All welds to be

continuous and shall be cleaned and deburred on all sharp edges. Overall dimensions approximately 96" long x 17" wide.

Auger to be minimum 6" in diameter. Trough to be approximately 10" wide by 9" deep. Trough frame to be constructed of 7 gauge, 2 channel design running full length with welded-on offset spinner assembly mounting hardware. Trough cover to be 7 gauge full drop type with offset hinges and shall have a full 250 degree opening frame for easy clean out maintenance. Lifting handle and cover latch assemblies to be T304 stainless steel. Trough end plates to be offset 1/4" plates with all cutouts for top cover latches, bottom trough latches, chain lifting eyes, bearing, motor and gearbox mounting plates.

Bottom trough to be 7 gauge full drop down design with stainless steel safety stop latches for easy and safe clean out and one person safe operation. Bottom trough to be mounted to top trough by means of a welded hinge design utilizing all T304 stainless steel hardware. Auger flighting shall be 6" diameter with 3/8" thick flighting mounted to a 2" pipe complete with a 1 1/4" diameter stub shaft UHMU expansion bushings in a side pipe ends (for ease of maintenance and screw auger removal). The auger shall be supported by two heavy duty industrial malleable iron two hole flange ball bearings. Bi-directional flighting. Auger drive, whether direct, gear-box or chain/sprocket, must match up with specified spreader controls. The spinner assembly shall be a self leveling swing away all-in-one full height adjustable spinner assembly. The spinner device must have a minimum of 10" horizontal adjustment. Spinner assembly must have sufficient vertical adjustment so as to not hit the ground when the bed is raised. The spinner itself must be an 18" diameter polyurethane disc with molded bi-directional flights. The entire assembly must be able to swing fully out of the way to clear the bottom drop trough when trough is open. The spinner disc shall be direct drive by a Char-Lynn hydraulic motor.

3. High Capacity Trailer Tow Package: Combo 2" ball and pintle combination hook 10,000 lb. Gross Trailer Weight shall be installed on a 3/4" thick steel pull plate properly supported to frame and crossmember; heavy duty "D" rings. Package to include trailer wire connections per SAE standards.