

The Johnson County Highway Department will accept bids for (4) heavy duty trucks (see specifications), with (2) Dura Class 15-17 yard 16' long crossmemberless style dump bodies and (2) Dura Class 15-17 yard 16' long beds, with hydraulic lift tailgate and ¼" AR400 steel on the sides, front, floor and tailgate. (See bid specifications for both bodies)

BID SPECIFICATIONS

Vehicle Configuration

2015 Model year specified

Set forward axle – Truck

Straight truck provision

LH primary steering location

General Service

Tuck configuration

Domiciled, USA 50 states (including California and carb opt-in states)

Construction service

Government business segment

Dirt/Sand/Rock Commodity

Terrain/ Duty: 100% (All) of the time, in transit, is spent on paved roads

Maximum 8% expected grade

Smooth concrete or asphalt pavement – most severe in-transit (between sites) road surface

Warranty

Expected front axle(s) load: 16,000 lbs.

Expected rear drive axle(s) load: 40,000 lbs.

Expected pusher axle(s) load: 13,200 lbs.

Expected gross vehicle weight capacity: 69,200 lbs.

Truck Service

Front plow / end dump body

Engine

Detroit DD13 12.8L 450HP @ 1800 RPM, 2080 Governed RPM, 1550 lb. /ft. @ 1100 RPM

Electronic Parameters

65 MPH road speed limit

Cruise control speed limit same as road limit

1650 RPM hard and soft engine limit for progressive shifting

5 minutes idle shutdown with clutch and service brake override

PTO mode engine RPM limit – 900 RPM

PTO mode brake override - service brake applied or park brake not applied

PTO mode clutch override clutch enabled

PTO RPM with cruise set switch – 600 RPM

PTO RPM with cruise resume switch – 600 RPM

PTO Mode cancels vehicle speed – 5 MPH

PTO Mode RPM increment – 25 RPM

PTO Governor Ramp rate – 250 RPM per second

One remote PTO speed

Remote PTO Speed 1 setting – 900 RPM

Soft cruise control enabled

PTO minimum RPM - 600 RPM

Engine Equipment

2013 Onboard diagnostics / 2010 EPA / Carb / GHG14

2008 Carb emission certification - Clean Idle (Includes 6x4 inch label on lower forward corner of driver door)

Standard Oil Pan

Engine Mounted Oil Check and Fill

Side of hood air intake with firewall mounted Donaldson air cleaner and inside/ outside air with snow door

DR 12V 160 amp 28-si quadramount pad alternator with remote battery volt sense

(3) Alliance model 1231, Group 31, 12 volt maintenance free 3375 cca threaded stud batteries

Battery box frame mounted

Standard battery jumpers

Single battery box frame mounted LH side back of cab

Wire ground return for battery cables with additional frame ground return

Non- polished battery box cover

Positive load disconnect with cab mounted control switch mounted outboard driver seat

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

Eaton solo advantage 15-1/2 inch self-adjusting clutch

Torque limiting clutch brake

Zerk fitting with extension hose at clutch release bearing

Hydraulic clutch control

BW model BA-921 19.0 CFM single cylinder air compressor with safety valve

Electronic engine integral shutdown protection system

Jacobs compression brake

RH outboard under step mounted horizontal after-treatment system assembly with RH B-Pillar mounted vertical tailpipe

Engine after-treatment device, automatic over the road regeneration and dash mounted request switch

09 foot 06 inch (114 inch +0/-0.5 inch) exhaust system height

RH curved vertical tailpipe B-Pillar mounted routed from step

13 Gallon diesel exhaust fluid tank

100 percent diesel exhaust fluid fill

Standard diesels exhaust fluid pump mounting

LH medium duty standard diesels exhaust fluid tank location

Standard diesel exhaust fluid tank cap

Stainless steel after-treatment device/muffler/tailpipe shield

Borg warner (KYSOR) rear air on/off engine fan clutch

Automatic fan control with dash switch and indicator light, non-engine mounted

DDC supplied engine mounted fuel filter/fuel water separator with water-in-fuel indicator

Full flow oil filter

DDC supplied coolant filter, engine mounted

1500 Square inch aluminum radiator

Antifreeze to -34F, NOAT extended life coolant

Gates blue strip coolant hoses or equivalent

Constant tension hose clamps for coolant hoses

Radiator drain valves

Phillips –Temro 1500 watt / 115 volt block heater

Chrome engine heater receptacle mounted under LH door

Delco 12V 39MT+ HD/OCP starter with thermal protection and integrated magnetic switch

Transmission

Allison Automatic transmission (4500)

Transmission Equipment.

Vehicle interface wiring with body builder connector mounted end of frame

Magnetic plugs, engine drain, transmission fill and drain, axle(s) fill and drain

Painted shift lever, solid linkage

Water to oil transmission cooler, in radiator end tank

Front Axle and Equipment

Detroit DA-F-16.0 16,000# FL1 71.0 KPI/3.74 drop single front axle

Meritor 16.5x6 Q+ Cast spider cam front brakes, double anchor, fabricated shoes

Non-asbestos front brake lining

Conmet cast iron front brake drums

SKF Scotseal plus XL front oil seals

Vented front hub caps with window center and side plugs – oil

Bendix Versajust automatic front slack adjusters

Standard Kingpin bushings

TRW THP-60 power steering with RCH45 auxiliary gear

Power steering pump

4 Quart power steering reservoir

Oil/Air power steering cooler

Organic SAE 80/90 front axle lube

Front Suspension

16,000# Flat leaf front suspension

Graphite bronze bushings with seals – front suspension

Front shock absorbers

Rear Axle and Equipment

MT-40-14X 40,000# R-Series tandem rear axle

Top speed at max torque 71 mph with 4.11 ratio

Iron rear axle carrier with optional heavy duty axle housing

MXL 176T Meritor extended lube main driveline with half round yokes

MXL 17T Meritor extended lube interaxle driveline with half round yokes

Driver controlled traction differential – both tandem rear axles

(1) Interaxle lock valve , (1) Driver controlled differential lock forward-rear and rear-rear axle valve

Blinking lamp with each mode switch, interaxle unlock default with ignition off

Blinking lamp with each mode switch, interaxle unlock default with ignition off

Blinking lamp with each mode switch, differential unlock with ignition off, active <5mph

Meritor 16.5X7 Q+ cast spider cam rear brakes, double anchor, fabricated shoes

Non-asbestos rear brake lining

Brake cams and chambers on forward side of drive axle(s)

Conmet cast iron rear brake drums

SKF scotseal plus XL rear oil seals

Bendix eversure longstroke 2- drive axles spring parking chambers

Bendix versajust automatic rear slack adjusters

Synthetic 75w-90 rear axle lube

Rear Suspension

Tuftrac 46,000# rear spring suspension

Tuftrac standard ride height

Axle clamping group

56 inch axle spacing

Fore/Aft and transverse control rods

Rear shock absorbers – two axles (Tandem)

Pusher / Tag equipment

Hendrickson SC13 coposilite 13,200# Air lift steerable pusher suspension, 15x4 brakes and FF1 axle

Hendrickson SC13/SC013 13,200# FF1 Steerable 15x4 brake integral pusher axle

(1) Dash valve and (1) gauge for single lift axle

Reverse lift axle wiring with last state retention with ignition off

Air piping for (1) lift/non-lift axle with regulator chassis mounted

Hendrickson 15x4 cam pusher /tag brakes, double anchor, fabricated shoes

Non-asbestos pusher /tag brake lining

Conmet cast iron pusher/tag brake drums

SFK Scotseal plus XL Pusher/Tag oil seals

Vented pusher/tag hub caps with window, center and side plugs- oil

Haldex long stroke pusher/tag axle service chambers

Haldex automatic pusher/tag slack adjusters

Hendrickson SC13 coposilite 13,200# steerable air lift pusher suspension

51 inch axle spacing pusher/tag

Brake System

Wabco 4S/4M ABS without traction control

Reinforced nylon, fabric braid and wire braid chassis air lines

Fiber braid parking brake hose

Standard brake system valves

Standard air system pressure protection system

Std U.S. Front brake valve

(2) 3-4.5 PSI Relay Valves, one for tandem axle and one for pusher/tag

Wabco SS-1200 plus air dryer with integral air governor and heater

Wabco oil coalescing filter for air dryer

Air dryer frame mounted

Steel air brake reservoirs

Pull cable on wet tank, petcock drain valves on all other tanks

Trailer Connections

Upgraded chassis multiplexing unit

Wheelbase and Frame

5850MM (230 inch) wheelbase

7/16x3-9/16x11-1/8 inch steel frame (11.11mmx282.6mm/0.437x11.13inch) 120KSI

Partial inner frame reinforcement at front suspension

Body company installed additional front frame reinforcement for snow plow

1600mm (63 inch) rear frame overhang

Frame overhang range: 61 inch to 70 inch

24 inch integral front frame extension with front mounted PTO

Calculated back of cab to rear suspension c/l (ca): 146.54in

Calculated effective back of cab to rear suspension c/l (ca): 143.54in

Calculated frame length – overall: 344.69in

Calculated space for available deck plate: 146.54in

Calculated frame space LH side: 14.52in

Calculated frame space RH side: 61.22in

Square end of frame

Front closing cross member

Standard weight engine cross member

Standard midship #1 cross member(s)

Standard rearmost cross member

Heavy duty suspension cross member

Chassis Equipment

16.5 inch painted steel straight bumper

Front tow hooks – frame mounted

Bumper mounted for single license plate

Huck-spin round collar chassis fasteners suspensions only

Fuel Tanks

80 Gallon/302 liter aluminum fuel tank-LH

25 inch diameter fuel tank(s)

Plain aluminum/painted steel fuel/hydraulic tank(s) with painted bands

Fuel tank(s) forward

Plain step finish

Fuel tank cap(s)

Equiplo inboard fuel system

High temperature reinforced nylon fuel line

Tires

Michelin XZY-3 385/65R22.5 18ply radial front tires

Michelin XDE M/S 11R22.5 16ply radial rear tires

Michelin XZA3+ 275/80R22.5 16ply radial pusher/tag tires

Hubs

Conmet preset plus iron front hubs

Conmet preset plus iron rear hubs

Conmet preset plus iron pusher/tag hubs

Wheels

Maxion wheels 10035 22.5x12.5 10-hub pilot 4.75 inset 5-hand steel disc front wheels

Maxion wheels 90260 22.5x8.25 10-hub pilot 2-hand HD steel disc rear wheels

Maxion wheels 90541 22.5x8.25 10-hub pilot 2-hand steel disc pusher tag wheels

Cab Exterior

114 inch bbc flat roof aluminum conventional cab

Air cab mounts

Non-removable bug screen mounted behind grill

3-1/2 inch fender extensions

LH and RH grab handles

Stationary black grill

Black hood mounted air intake grille

Fiberglass hood

Single 14 inch round Hadley air horn under LH deck

Single electric horn

Single Horn shield

Door locks and ignition switch keyed the same

Rear license plate mount end of frame

Halogen composite headlamps with black bezels

(5) Amber marker lights

Integral stop/tail/backup lights

Standard front turn signal lamps

Dual west coast bright finish heated mirrors

Door mounted mirrors

102 inch equipment width

LH and RH 8 inch bright finish convex mirrors mounted under primary mirrors

Standard Side/Rear reflectors

RH after treatment system cab access with steel shielding

63x14 inch tinted rear window

Tinted door glass LH and RH with tinted operating wing windows

Manual door window regulators

Tinted windshield

8 liter windshield washer reservoir, cab mounted, without fluid level indicator

Cab Interior

Opal gray vinyl interior

Molded plastic door panels

Black mats with single insulation

Dash mounted ash tray(s) without lighter

Forward roof mounted console with upper storage compartments without netting

In dash storage bin

(2) Cup holders LH and RH dash

Gray/Charcoal flat dash

Smart switch expansion module

Heater, defroster, and air conditioner

Standard HVAC ducting

Main HVAC controls with recirculation switch

Standard heater plumbing

Denso heavy duty air conditioner compressor

Binary control, R-134A

Standard insulation

Solid-state circuit protection and fuses

12V negative ground electrical system

Dome light with 3-way switch activated by LH and RH doors

Cab door latches with manual door locks

(1) 12 volt power supply in dash

Basic high back air suspension driver seat with mechanical lumbar and integrated cushion extension

Basic high back non suspension passenger seat

LH and RH integral door panel armrests

Gray mordura cloth driver seat cover

Gray mordura cloth passenger seat cover

3 point fixed d-ring retractor driver and passenger seat belts

Adjustable tilt and telescoping steering column

4-spoke 18 inch (450mm) steering wheel

Driver and passenger interior sun visor

Instruments and Controls

Gray driver instrument panel

Gray center instrument panel

Black gauge bezels

Low air pressure light and buzzer

2 inch primary and secondary pressure gauges

Intake mounted air restriction indicator without graduations

Electronic cruise control with switches in LH switch panels

Key operated ignition switch and integral start position; 4 position
off/run/start/accessory

Odometer/trip/hour/diagnostic/voltage display: 1x7 character, 26 warning lamps, data
linked, ICU3

Diagnostic interface connector, 9 pin, sae j1939, located below dash

2 inch electric fuel gauge

Fuel filter restriction indicator

Programmable RPM control electronic engine

Electrical engine coolant temperature gauge

Engine and trip hour meters integral within driver display

Electric engine oil pressure gauge

AM/FM radio with front and rear auxiliary inputs and j1939

Dash mounted radio

(2) Radio speakers in cab

AM/FM antenna mounted on forward LH roof

Electronic MPH speedometer with secondary KPH scale, without odometer

Electronic 3000 RPM tachometer

Detroit connect virtual technician remote engine diagnostics (Detroit Engines Only)

2 year service contract included with virtual technician

Ignition switch controlled engine stop

Pre-flight, all outputs flash with smart switch

Digital voltage display integral with driver display

Single electric windshield wiper motor with delay

Marker light switch integral with headlight switch and dual connectors and switch for customer furnished snow plow lights, low beams off with high beams

One valve parking brake system with warning indicator

Self-canceling turn signal switch with dimmer, washer/wiper and hazard in handle

Integral electronic turn signal flasher with hazard lamps overriding stop lamps

Design

Paint: one solid color

Color

Cab color a: L0006EB

Black, high solids polyurethane chassis paint

Maxion wheels W powder white (N0006EA) front wheels/rims

Maxion wheels W powder white (N006EA) rear wheels/rims

Maxion wheels W powder white (N0006EA) pusher/tag wheels/rims

Standard black bumper paint

Certification and compliance

U.S. FMVSS certification , Except sales cabs and glider kits

Extended Warranty

EW4: DD13 GHG14 VOC. \$0 deductible 7 yr. /250k mile. Full coverage. See DDCSN

Towing extended/roadside service warranty, 5 year/unlimited miles/KM, \$550 CAP

Bed specifications

2 each

Bed

Dura class 15/17 yd. 16' dump body, crossmemberless style 87" inside width 44" sides, 54" tailgate, and 58" head

Floor and tailgate 3/16" Hi-ten (50,000 PSI)

Sides and Front 10ga (50,000 PSI)

LED stop, tail, turn lights in rear corner post

Double acting tailgate

Air operated tailgate

1/2 cab protector

Asphalt lip (bolt on)

Backup alarm

Front flaps 1/2"x24"x24" rear flaps 1/2"x24"x36"

Front and rear steps

(4) Winches for spreader tie downs

(4) 6" oval amber strobes, (2) at rear (2) at front

Paint one color acrylic enamel

Aluminum tarp system with housing and mesh tarp

Hoist

Dura Class Hoist, 38 ton capacity, less hydraulics (3 year warranty on hoist)

Hydraulic system

Central hydraulic system for hoist, plow and spreader

Front crankshaft driven, load sense system

Control Valve to operate

Hoist single acting w/single control

Plow raise with float on down and angle, control by wobble control

Spreader valve, dual knob

All controls mounted on pedestal beside driver

30 gallon steel hydraulic reservoir (outside frame mount)

1 1/4" return line filter with gauge and gate valve

Sight and Temperature gauge on reservoir

Hydraulic hoses and couplers for plow and spreader

All spreader couplers on left rear corner of dump body

2 each

Bed

15-17 yard 16' dump body, crossmemberless style, 87" inside width, 44" sides, 54" tailgate, 58" head

1/4" AR400 floor and tailgate (180,000 PSI)

1/4" AR400 sides and front (180,000 PSI)

LED stop, tail, turn lights in rear corner post

High-lift tailgate, hydraulic controlled, single control

1/2 cab protector

Asphalt lip (bolt on)

Back up alarm

Front flaps 1/2" x24"x24"

Rear flaps 1/2"X24X36"

Front and rear steps

(4) Winches for spreader tie-down

(4) 6" oval amber strobes (2) at rear (2) at front

Painted one color to match truck color

Aluminum tarp system with housing, mesh tarp, and electric tarp roller

Hoist

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