State of Maine



Master Agreement

Effective Date: 09/09/19 Expiration Date: 09/30/23

Master Agreement Description: Plow Gear, Attachments and Dump Bodies

Buyer Information

William Allen 207-624-7871 **ext.** NULL WJE.Allen@maine.gov

Issuer Information

Jessica Norton 207-624-8226 **ext.** Jessica.h.norton@MAINE.GOV

Requestor Information

Cheryl Whittington 207-624-8261 ext. Cheryl.A.Whittington@Maine.gov

Agreement Reporting Categories

Reason For Modification: Extend for first optional extension period

Authorized Departments

17D MOTOR TRANSPORT17A TRANSPORTATION

Vendor Information

Vendor Line #: 1

Vendor ID Vendor Name

VC1000036943 HOWARD P FAIRFIELD INC

Alias/DBA

Vendor Address Information

9 GREEN ST

SKOWHEGAN, ME 04976

US

Vendor Contact Information

Dan Matchett 207-474-9836 **ext.**

danmatchett@hpfairfield.com

Commodity Information

Vendor Line #: 1

Vendor Name: HOWARD P FAIRFIELD INC

Commodity Line #: 1

Commodity Code: 76561

Commodity Description: Plow Gear, Attachments and Dump Bodies

Commodity Specifications: As per the specifications attached made part of this Master Agreement

Commodity Extended Description: Plow Gear, Attachments and Dump Bodies. Items contained on this Master Agreement

were awarded based on the bid results for RFQ 17D 190521-352 and RFQ 17D

200117-216

 Quantity
 UOM
 Unit Price

 0.00000
 0.000000

Delivery Days Free On Board

0 FOB Dest, Freight Prepaid

Contract Amount Service Start Date Service End Date

0.00

Catalog Name Discount
HP Fairfield 0.0000 %

Discount Start Date Discount End Date

09/09/19 09/30/23

Please see authorized signatures displayed on the next page

Each signatory below represents that the person has the requisite authority to enter into this Contract. The parties sign and cause this Contract to be executed.

State of Maine - Department of Administrative and Financial Services

Docusigned by:

Jaime C. Schorr

6D6437754DD0459...

Signature

Date

Jaime C. Schorr, Chief Procurement Officer

HOWARD P FAIRFIELD INC

—Docusigned by: Dan Matchett

and

VM Μπτιμπτ 10/15/2021 -856F3DDB10534D3

Signature Date

Dan Matchett, Regional Sales Manager

Bureau of Business Management – Division of Procurement Services State of Maine – Department of Administrative and Financial Services 9 State House Station Augusta, Maine 04333-0009 Contract Number MA 190814*020

Tel. (207) 624-7340 Fax.# (207) 287-6578

EXTENSION OF MASTER AGREEMENT CONTRACT

Commodity Item: Plow Gear, Attachments and Dump Bodies

Contractor: Howard P Fairfield INC

Mater Agreement Competitive Bid RFQ: 17D 190521-352, 17D 200117-216, 17D 201118-113

Contract Period Extended Through: September 30, 2023

Extended Contract Pricing: Extended with DOT approved price increases

Scope Change: ADD: All contracted prices and rates must be guaranteed for and must remain firm for minimally one year. Any approved price or rate adjustments after this period must be held firm for minimally one year or the remainder of the contract period. Price adjustment requests must be made by the vendor at least sixty (60) days prior to the effective date. Requests for price adjustments must include sufficient documentation from the manufacture supporting the request. The price adjustment will not go into effect until the contract amendment has been fully approved by the State of Maine.

Dollar value the vendor has recorded that State of Maine has spent on commodities and/or services covered by this contract over the last twelve months: \$

State of Maine – Department of Administrative and Financial Services

—DocuSigned by:

Jaime C. Schore

---6D6437754DD0459...

Jaime C. Schorr, Chief Procurement Officer Date 10/15/2021

and

Howard P Fairfield INC

-DocuSigned by:

Dan Matchett, Regional Sales Manager

Date 10/15/2021

RIDERS

V	The following riders are hereby incorporated into this Contract and made part of it by reference: (check all that apply)
\boxtimes	Rider A – Scope of Work and/or Specifications
\boxtimes	Rider B – Terms and Conditions
	Rider C - Exceptions
\boxtimes	Bid Cover Page and Debarment Form – Appendix A from RFQ
	Municipality Political Subdivision and School District Participation Certification (Appendix D from RFQ)
	Price sheet (attach excel spreadsheet to post on website)
	MaineDOT Certifications (Appendix E from RFQ) and Terms and Conditions (Appendix F from RFQ)

RIDER A Scope of Work and/or Specifications MA 190814-020

Commodity: Plow Gear, Attachments and Dump Bodies

Master Agreement Competitive Bid RFQ: 17D 190521-352, 17D 200117-216, 17D 201118-113

Contract Period: Through September 8, 2021. The State of Maine with vendor approval can opt to issue up to one (1) two (2) year and one (1) year extensions.

First extension through September 30, 2023

Vendor Contact Person: The vendor contact person will help consumers place orders, inquire about orders that have not been delivered, all shipping issues, quality issues and any issues pertaining to the Master Agreement (MA) contract. All orders not submitted through a Delivery Order will be sent through the vendor contact person. The vendor contact person for this MA is:

Name: Dan Matchett Tel: 207-399-0565 Email: <u>DanMatchett@hpfairfield.com</u>

Prices: Prices are with shipping terms of "Free on Board (FOB) – Destination". The State intends for this to mean that all goods shall be priced to include shipping charges, if any, to the State's desired location. The "FOB – Destination" shipping term is also intended to mean that the State shall not bear any responsibility for the goods in question until the State takes possession of them at the destination point of delivery.

All contracted prices and rates must be guaranteed for and must remain firm for minimally one year. Any approved price or rate adjustments after this period must be held firm for minimally one year or the remainder of the contract period. Price adjustment requests must be made by the vendor at least sixty (60) days prior to the effective date. Requests for price adjustments must include sufficient documentation from the manufacture supporting the request. The price adjustment will not go into effect until the contract amendment has been fully approved by the State of Maine.

Quantities: It is understood and agreed that the MA will cover the actual quantities required by the State over the length of the contract.

Ordering Procedures: Delivery Orders (DO) will be created in AdvantageME for all orders over \$5000.00. If a DO is used, the DO will be emailed to the email address referenced on the MA as a .pdf file. Orders less than \$5000.00 can be placed using a State of Maine issued P-Card (credit card).

Delivery: The vendor is responsible for the delivery of material in first class condition at the point of delivery, and in accordance with good commercial practice.



meets or most closely meets the specifications, while taking price and delivery into consideration.

The following abbreviations must be used:	X	Standard or as specified
	N/A	Not Available
	DI	Dealer Installed
	AE	Approved Equal

Section A BASE UNIT SNOW PLOW GEAR SYSTEM

The purpose and intent of this specification are to describe a Base Unit snow plow gear system. Detailed specifications in Sections 2-15.

	2.0 FRONT HITCH ASSEMBLY	Abbreviation	Actual Dimension	Notes
2.1	Custom side plate model designed, constructed and installed for extreme service.	X		
2.2	Quick detachable and pivoting for access to engine compartment, utilizing plow ram and 1½" pins. There shall be three (3) plow pinning heights located at 15.5", 18" and 20.5" heights on 31" centers. It shall be readily removable for summer storage leaving the hydraulic pump mounted to the chassis.	X		
2.3	Shall be minimum 5/8" steel construction.	X		
2.4	Integral heavy duty upper and lower horizontals for right and/or left wing tower of HSS 6" x 4" x 3/8" minimum steel tube.	X		
2.5	Shall be designed, constructed to accommodate interchangeability of various plows and plow frames in use by MaineDOT Fleet Services.	X		
2.6	Shall accommodate installation of engine crankshaft driven pump or PTO assembly.	X		
2.7	Shall be designed, constructed and installed to keep the effects of weight and leverage of	X		

	plow and plow frame to an absolute minimum and transmit plow forces directly to the truck frame side rails.		
2.8	Plow ram must be 4" diameter x 14" stroke with a 13/4" diameter double chrome piston, rod providing 20.75" lift minimum.	AE	NITRIDED ROD
2.9	The support frame shall be adjustable in height during installation to accommodate varying frame heights and chassis frames.	X	
2.10	The front mast shall be constructed of two 4" x 4" x ½" angle vertical members reinforced with a 4" x 4" x ½" horizontal top angle, a 4" x 4" x ½" cylinder base angle and a 3" x 2" x ¼" base tube.	X	
2.11	There shall be a ½" thick upper cheek/push plate bolted to the front frame ends to carry the vertical loading. There will also be a ½" x 24" frame rail reinforcement bolted to the frame above the front axle.	X	
2.12	The lift arm shall be fabricated from 1" flame cut plate, braced with two (2) ½" x 2" steel flat bar plates. The lift arm shall have a triple point chain hook allowing either single or double chaining	X	
2.13	The hitch shall be mounted at not more than 18" measured from truck grill to plow attach hole center.	X	
2.14	The base bracket and hitch frame mounting pin holes must be reinforced internally and externally by a HSS steel washer 3/8" thick welded as a boss to prevent elongation of the pin mounting holes due to vibration.	X	
2.15	A suitable rubber block must be installed between the base bracket and hitch frame to provide tension on the mounting pins which is intended to reduce or stop vibration.	X	
2.16	One (1) adjustable turn buckles must be provided to secure detached hitch portion to	X	

	the front plow, which will allow for standalone storage.			
2.17	Two (2) side winding screw adjustable parking legs (jacks) mounted on each end of hitch cross tube to allow for hitch assembly removal (minimum 1,000 lb. capacity).	X		
	3.0 FRONT TOWER ASSEMBLY RIGHT, LEFT AND DOUBLE	Abbreviation	Actual Dimension	Notes
3.1	The front tower shall be of open section design.	X		
3.2	It shall be constructed of 8" @ 18.4 lbs./ft. structural I-beam slide tray. The lift cylinder shall be located behind the tower, rod end down. Shelving shall be achieved by a single wire rope sheave on the cylinder rod end and a single sheave on the tower top.	X		
3.3	The slide travel shall be twice the cylinder stroke. The slider shall be retained by two (2) ³ / ₄ " structural square bars. At no point, shall any part of the tower structure extend above the tower at any point of slider travel.	X		
3.4	The front tower shall have a lower skid shoe. It also shall have bolted connections to the support tubes.	X		
3.5	Wing shall have a lift capacity of 72" minimum. It will be achieved by a 3" bore by 36" stroke double chrome cylinder with a 1½" diameter double acting piston rod, minimum.	AE		NITRITED ROD
3.6	Front tower cylinders shall be equipped with quick detachable hydraulic disconnecting fittings. (Fittings to be ½" diameter, Parker).	X		
3.7	Trip mechanism and wing to be approved by MaineDOT Fleet Services. The trip spring shall be a torsion type spring with a 1" diameter wire, minimum. Trip device shall be plumb.	X		

3.8	The front tower height shall be same as rear tower height.	X		
	4.0 TOWER WIRE CABLE	Abbreviation	Actual Dimension	Notes
4.1	All wire cable shall be ½" diameter 8 by 25 improved plow steel with triple clamps, loop thimbles and anchor shackles at each end.	X		
4.2	Three (3) ½' cable clamps must be used and spaced evenly (3) three inches apart from each other as required by OSHA standards. Any frayed cable ends need to be covered.	X		
	5.0 HYDRAULIC OIL TANK	Abbreviation	Actual Dimension	Notes
5.1	It shall have a "shed roof" design of approximately 35° (and a floor of ¼" plate steel).	X		
5.2	Tank shall have sight gauge and electrical float switch to indicate proper oil level. (Float part #OMEGA LVK-171 or approved equal).	X		
5.3	The tank shall have a capacity of 40 US gallons with baffle, breather, Hycon sight gauge, magnetic drain plug and internal feed line screen with a bypass.	X		
5.4	Hydraulic tank shall be fabricated utilizing minimum 7-gauge steel.	X		
5.5	The Hycon sight gauge must be reversible from the left to right side of the tank.	X		
5.6	Fill port cap will have an integral screen pressurized with a three PSI vent. Unit will be installed in such a manner to prevent entry of contaminants including snow and rain while either open or closed.	X		
5.7	Suction outlet on the tank shall be protected by an internal screen of approximately 35 microns with an integral bypass in the tank.	X		

5.8	Suction strainer must be externally removable for ease of replacement and servicing. (Buyers #SW3002003) or approved equal.	X	
5.9	A full flow/2" shut off ball valve shall be mounted in the suction line. The return line will incorporate a full flow check valve mounted between the return line filter and Parker tank inlet or approved equal.	X	
5.10	The tank shall be bolted to the rear saddle for ease of cleaning.	X	
5.11	The tank must have a 2" threaded pipe opening located in such a position to easily install an electric oil heater. The internal oil baffle must not interfere with the heating element.	X	
5.12	A suitable step of steel grating, approximately 14" x 16" must be attached to the hydraulic tank shed roof.	X	
5.13	Step shall be designed with grating, in an area of the hydraulic tank to make easy access for driver to step up to grating on top of the hydraulic tank. An additional step may be required for safety.	X	

	6.0 HYDRAULICS	Abbreviation	Actual Dimension	Notes
6.1	Load sense pump- 80 CID, front mount and cast-iron construction. The pump case drain must be plumbed directly to tank not through return filter. The load sense stand-by pressure should be set at 325 PSI and be internally drained to allow a dynamic flow for the sense signal. Eaton 420 Pump Code 421AK00891B or approved equal.			DOT PROVIDED
6.2	Additional hydraulically powered equipment may require more that the Eaton 420 mobile piston pump and can be substituted for hook lift system.			DOT PROVIDED
6.3	Spicer end yokes 2-4-533 and engine flange 2-2-479 series 1310.	X		
6.4	Spicer series 1310 PTO shaft slip joint non- grease-able tubular driveline with non- greaseable u-joints # C9533-SF-NG with proper angle of installation.	X		
6.5	Low oil safety circuit, consists of direct mount block valve, tank mounted float switch and system override. System shall automatically shut down at low oil level and be capable of also being manually shut off or locked out.			DOT PROVIDED
6.6	Directional Control Valve: Sauer Danfoss PVG32 with bleed off compensator or approved equal. The valve must be compensated, proportional and load independent.			DOT PROVIDED
6.7	Pressure and Flow: each valve must be settable with pressures up to 5,000 psi and the flow rating up to 35 gpm. Valve must be of laminar flow design for minimum pressure drop. Valve must have adjustable flow control on both sides of the spool.			DOT PROVIDED
6.8	Relief valves must include settable reliefs.			DOT PROVIDED

6.9	Electrically Activated Coils: all coils shall have actuation valve and must be able to be manually or electrically controlled. Electrical actuation must be controllable with a PWM signal for fully proportional or on/off operation from one coil. Separate coils not acceptable. Coil shall have Deutush female plugs located on the end of coil. Spools must have a heavier centering springs. Valve assembly must accommodate up to 13 work sections, valve must be available in either open or close center configurations.		DOT PROVIDED
6.10	System will also utilize a full flow return line filter. This filter will have ten-micron filtration and a 23 PSI bypass. Installation will allow for ease of servicing. Hycon model #MFBN160G10M1.0/12.2B3.1 filter or approved equal.	X	
6.11	All hydraulic valving for body, plows and spreader shall be in one central assembly. Multiple valve assemblies are unacceptable. All plow sections shall have field adjustable low (speed) controls. Installation will be done to state requirements and approved at prototype inspection.		DOT PROVIDED
6.12	Valves are to be mounted in a vertical position in an eleven-gauge stainless steel weatherproof enclosure outside the frame rails. Enclosure will be designed and constructed by MaineDOT Fleet Services and installed by vendor for easy, quick, complete accessibility and repair.	X	
6.13	An in-line high pressure filter will be mounted between the pump and main valve. A Hycon model #DFBN3HC160G10B1.1/12-B6YP shall be supplied.	X	
6.14	Spreader control system must be electrical and be easily and readily convertible to closed loop ground speed orientation by changing control head only.		DOT PROVIDED

Electrically controlled in cab with desired control system.			DOT PROVIDED
Parker ½" disconnect couplers shall be used on hydraulic lines to all quick detachable parts, including front hitch and wing posts. Parker hoses and fittings preferred.	X		
PTO shaft and universals must be guarded and must be able to be easily serviced.	X		
The application control system will be supplied by MaineDOT Fleet Services.	X		
7.0 REAR TOWER AND SADDLE RIGHT, LEFT AND DOUBLE	Abbreviation	Actual Dimension	Notes
The rear towers shall be of open section design.	X		
The slide tray shall be fabricated from a 12" structural channel @ 25lbs./ft.	X		
Tower shall have a top mounted self- aligning wire cable exit pulley with rope guide and top mounted lift lug included.	X		
Shall be 12"-inch minimum channel is supported by 2 vertical angles of 4" x 3" x ½".	X		
The tower structure includes intercostal braces at strategic locations.	X		
The slide retainer tracks of 3/4" square bar and extend the full length of travel.	X		
The wing lift cylinders shall be located on the rear of the tower and shall incorporate a guide on the rod end of the cylinder.	X		
The rear tower shall have bolted connections to the rear saddle to allow for various frame heights and off-season removal without disturbing the hydraulic system.	X		
	Parker ½" disconnect couplers shall be used on hydraulic lines to all quick detachable parts, including front hitch and wing posts. Parker hoses and fittings preferred. PTO shaft and universals must be guarded and must be able to be easily serviced. The application control system will be supplied by MaineDOT Fleet Services. 7.0 REAR TOWER AND SADDLE RIGHT, LEFT AND DOUBLE The rear towers shall be of open section design. The slide tray shall be fabricated from a 12" structural channel @ 25lbs./ft. Tower shall have a top mounted selfaligning wire cable exit pulley with rope guide and top mounted lift lug included. Shall be 12"-inch minimum channel is supported by 2 vertical angles of 4" x 3" x ½". The tower structure includes intercostal braces at strategic locations. The slide retainer tracks of ¾" square bar and extend the full length of travel. The wing lift cylinders shall be located on the rear of the tower and shall incorporate a guide on the rod end of the cylinder. The rear tower shall have bolted connections to the rear saddle to allow for various frame heights and off-season removal without	Parker ½" disconnect couplers shall be used on hydraulic lines to all quick detachable parts, including front hitch and wing posts. Parker hoses and fittings preferred. PTO shaft and universals must be guarded and must be able to be easily serviced. The application control system will be supplied by MaineDOT Fleet Services. 7.0 REAR TOWER AND SADDLE RIGHT, LEFT AND DOUBLE The rear towers shall be of open section design. The slide tray shall be fabricated from a 12" structural channel @ 25lbs./ft. Tower shall have a top mounted selfaligning wire cable exit pulley with rope guide and top mounted lift lug included. Shall be 12"-inch minimum channel is supported by 2 vertical angles of 4" x 3" x ½". The tower structure includes intercostal braces at strategic locations. The slide retainer tracks of ¾" square bar and extend the full length of travel. The wing lift cylinders shall be located on the rear of the tower and shall incorporate a guide on the rod end of the cylinder. X to the rear saddle to allow for various frame heights and off-season removal without	Parker ½" disconnect couplers shall be used on hydraulic lines to all quick detachable parts, including front hitch and wing posts. Parker hoses and fittings preferred. PTO shaft and universals must be guarded and must be able to be easily serviced. The application control system will be supplied by MaineDOT Fleet Services. 7.0 REAR TOWER AND SADDLE RIGHT, LEFT AND DOUBLE The rear towers shall be of open section design. The slide tray shall be fabricated from a 12" structural channel @ 25lbs./ft. Tower shall have a top mounted selfaligning wire cable exit pulley with rope guide and top mounted lift lug included. Shall be 12"-inch minimum channel is supported by 2 vertical angles of 4" x 3" x ½". The tower structure includes intercostal braces at strategic locations. The slide retainer tracks of ¾" square bar and extend the full length of travel. The wing lift cylinders shall be located on the rear of the tower and shall incorporate a guide on the rod end of the cylinder. X to the rear saddle to allow for various frame heights and off-season removal without

7.9	Wing arm brackets shall be angled at 15 degrees towards the front of the chassis to align push arms to the wing.	X		
7.10	All fasteners must have a minimum of grade (5) five rating.	X		
	8.0 REAR SHELFING SLIDE CONTROL CYLINDER	Abbreviation	Actual Dimension	Notes
8.1	The arm slide control cylinder shall be a minimum 3½" diameter bore x 54" stroke designed as a double acting unit.	X		
8.2	This shall be located on the exterior of the tower slide tray.	X		
	9.0 REAR SHELFING SLIDER	Abbreviation	Actual Dimension	Notes
9.1	The slider base plate shall be fabricated from a ³ / ₄ " thick plate with tapped edges to prevent the slider plate from binding in the tower.	X		
9.2	Slider plate shall provide 54" of vertical travel.	X		
	10.0 WING CONTROL CYLINDER	Abbreviation	Actual Dimension	Notes
10.1	The wing control cylinder shall be a minimum 3" diameter bore x 36" stroke double acting "RAM" type double chrome treated cylinder rods.	AE		NITRIDED ROD
10.2	There shall be a triple sheave box bolted to base and rod end of the cylinder.	X		
10.3	The wire cable travel is three times the cylinder stroke.	X		
	11.0 WING ARMS	Abbreviation	Actual Dimension	Notes
11.1	Two (2) arms shall run parallel to each other on 17" centers.	X		
11.2	They shall be non-telescopic and designed for proper length wing.	X		

	12.0 REAR SHEAVES	Abbreviation	Actual Dimension	Notes
12.1	The sheaves shall be 6" nominal size with an extra deep rope groove.	X		
12.2	The sheaves shall have 11/4" diameter axles with greaseable bronze bushings.	X		
12.3	The axle shall incorporate a positive location head to ensure non-rotation of axle.	X		
12.4	The sheaves shall be machined from solid steel.	X		
	13.0 REAR WING CABLE	Abbreviation	Actual Dimension	Notes
13.1	The wire cable shall be 1/2" diameter 8 by 25 improved plow steel with triple clamps, loop thimbles and anchor shackles at each end.	X		
13.2	There shall be 36" of ½" chain on free end to attach to wing lifting lug. (Wing Safety chain).	X		
13.3	Three (3) ½' cable clamps must be used and spaced three inches evenly apart from each other as required by OSHA stands. Any frayed cable ends need to be covered.	X		
	14.0 REAR SADDLE	Abbreviation	Actual Dimension	Notes
14.1	The rear saddle shall be laterally mounted section of minimum 6" x 4" x ½" wall thickness. There shall be ½" "L" shaped cheek plates with the tower end gusseted to form a box with the tower attach bracket. There shall be a minimum of two (2) 3" x 3" x 3/8" angle braces to stabilize the tower base. (Must be detachable if located below frame rail).	AE		REAR SADDLE 6" CHANNEL AT 8.2#/FT
14.2	Designed to be quick detachable including wing posts (and hydraulics) by the use of quick disconnecting fittings. (Fittings to be ½" diameter, Parker).	X		

14.3	Trip mechanism and wing plow to be approved by MaineDOT Fleet Services. The trip spring shall be a torsion type spring with a 1" diameter wire, minimum. Trip device shall be plumb.	X		
14.4	The rear tower height shall be same as front tower height.	X		
14.5	Cables that operate over sheaves must be adjusted so that at maximum stroke, cable clamps, etc., will not be pulled into the sheaves.	X		
14.6	Push arms for 10' wing plows must be 5' minimum.	X		
14.7	All cables must be minimum ½" diameter 8 by 25 construction, improved plow steel.	X		
14.8	When possible, the rear tower must be angled to provide a straighter alignment for push arms and push arm joints.	X		
14.9	There shall be pipe struts supplied to diffuse impact loads through wider frame area.	X		
	15.0 TOOL BOX	Abbreviation	Actual Dimension	Notes
15.1	The box shall be a minimum of 10-gauge mild steel all welded construction.	X		
15.2	The box must be minimum 18" high x 7-3/8" wide x 72" long (interior dimensions) with a hinged door located on the driver's side.	AE		60" ILO 72
15.3	This box must be installed next to the hydraulic oil tank and extend lengthwise across the truck chassis. The tool box must be securely mounting but must also be designed for easy removal. Must be securely fastened to truck chassis.	X		

15.4	The design, construction and installation of this box may act as a catwalk with a nonskid top surface but must not interfere with the proper operations and/or necessary front dump angle of the front dump body.	X	
15.5	Box must meet MaineDOT paint requirements (See Paint Section) with a 3.5 Imron High Gloss Plow Yellow top coat.	AE	PREVIOUSLY APPROVED PAINT PROCESS

ATTACHMENTS SECTION

Section B ONE-WAY RIGHT OR LEFT PLOW WITH PLOW FRAME

The purpose and intent of this specification are to describe a One-Way Right or Left Plow with Plow Frame installed with necessary hydraulics and controls to make it fully functional on tandem axle trucks. Detailed specifications listed in Section 16.

Бресни	cations fisted in Section 10.			
	16.0 GENERAL	Abbreviation	Actual Dimension	Notes
16.1	Plow intake height 26" minimum; discharge height 54" minimum measured at top of curvature. Minimum circumference excluding moldboard backer angle must be 541/4" on the intake end and 891/2" on the discharge end.	X		
16.2	Length of cutting edge shall be 11', cleared path 9' minimum at a 65° plowing angle. The overall length shall be 164".	X		
16.3	Designed and constructed for extreme plowing service.	X		
16.4	The moldboard shall be a one-piece tengauge construction, brake formed for additional rigidity. It shall be high speed curvature to eliminate blow-back.	X		
16.5	There shall be 29" of overhang, at a 65° attack angle, measured at the discharge end of the curvature plow.	X		
16.6	The top edge of the moldboard shall be reinforced with a HSS section of 3"x 2½"x ½" angle iron. The moldboard backer angle shall be 6"x4"x¾" angle. The moldboard shall have eight (8) ½" flame cut vertical support ribs.	X		
16.7	AASHTO standard punching with carbide cutting edges.	X		
16.8	Intake shall have an end plate of 3/8" minimum.	X		

16.9	Attack angle of cutting edge must be easily adjustable from 45° through and including 70° by means of a tubular telescoping bar.	X	UTILIZE BAR AND (2) MOLDBOARD TO PUSHFRAME PIN LOCATIONS
16.10	There shall be two moldboard shoes and one nose shoe.	X	
16.11	Trip mechanism shall be of the trip moldboard buffer style.	X	
16.12	The trip mechanism shall be a buffer type incorporating two radially mounted compression springs. The springs shall be wound from .703" wire to a 4.07 ID" diameter with a spring rating of 422 and shall have a minimum of nine (9) active coils. These springs shall be retained by adjustable Nylok nut and plate washer. The retaining rod shall be C-1045 steel rod of 1½" diameter. The rod shall have a safety retainer pin located at the end of the thread which prohibits the nut from backing off from the rod.	X	
16.13	The main drive tubes of the push frame shall be a minimum of 5" 5"x½" tubing. The lateral drive angle must be a minimum of 6"x6"x¾" angle which is boxed with ½" steel plate.	AE	6x6x1/2" BOXED WITH 1/2" PLATE
16.14	The drive angle shall have two connecting places to attach moldboard assembly with a center roller included.	X	
16.15	The oscillating push bar shall be flame cut from 1" steel and have a pivot bolt of 11/4" diameter grade five bolt with self-locking nut.	X	
16.16	Due to the buffer trip design, the push frame shall be supplied with adjustable frame shoes with 96" of bearing surface and a minimum Brinnell hardness of 37 each.	X	
16.17	Side winding screw adjustable leg (jack) positioned to support and balance plow	X	

16.18	when removed (minimum 1,000 lb. capacity). All metal shall be free of rust and mill scale and prepared (blasted) for primer and finish coat.	X	
	Code		
16.19	A two (2) part epoxy primer shall be applied to prepared metal surfaces to the minimum thickness of 3-5 mils dry.	X	
16.20	Paint shall be applied to a thickness of 5-7 mils dry and shall be Imron 3.5 HG Cat Highway Yellow color (paint code #42-3133). Axalta shall be the preferred brand of paint.	AE	PREVIOUSLY APPROVED PAINT
16.21	Plow shall come with carbide plow cutting blades.	X	

Section C REVERSIBLE PLOW WITH CONTOUR CHANGE

The purpose and intent of this specification are to describe a Reversible Plow with Contour Change installed with necessary hydraulics and controls to make it fully functional on tandem axle trucks. Detailed specifications in Section 17.

cations in Section 17.			
17.0 GENERAL	Abbreviation	Actual Dimension	Notes
Hydraulically reversible. Reverse action provided by two (2) 3½" diameter nitrate treated cylinders designed with 2,000 PSI pressure relief.	X		
Designed and constructed for extreme service.	X		
Length of cutting edge shall be 11', cleared path 9' at 35° of swing.	X		
Adjustable height of 33" minimum and 51" maximum with sufficient overhang and curvature for high speed plowing.	X		
Cutting edge, with trip edge mechanism fully exposed for convenient servicing.	X		
Lower moldboard reinforcement shall be 4"x4"x½" steel angle minimum.	X		
Minimum of six (6) torsion-type springs not less than 7/8" wire x 3"x ³ /4" O.D. with not less than sixteen (16) active coils each. Springs to be mounted horizontally and must be preloaded to require an initial tripping force of approximately 1,900 foot-pounds at full compression.	X		
Trip edge attachment supports shall be ½" plate steel minimum on both the trip edge backer angle and moldboard rib structure.	X		
AASHTO standard punching with carbide steel cutting edge.	X		
Retainer plate secured below center pin to prevent pin from falling out.	X		
	Hydraulically reversible. Reverse action provided by two (2) 3½" diameter nitrate treated cylinders designed with 2,000 PSI pressure relief. Designed and constructed for extreme service. Length of cutting edge shall be 11', cleared path 9' at 35° of swing. Adjustable height of 33" minimum and 51" maximum with sufficient overhang and curvature for high speed plowing. Cutting edge, with trip edge mechanism fully exposed for convenient servicing. Lower moldboard reinforcement shall be 4"x4"x½" steel angle minimum. Minimum of six (6) torsion-type springs not less than 7/8" wire x 3"x½" O.D. with not less than sixteen (16) active coils each. Springs to be mounted horizontally and must be preloaded to require an initial tripping force of approximately 1,900 foot-pounds at full compression. Trip edge attachment supports shall be ½" plate steel minimum on both the trip edge backer angle and moldboard rib structure. AASHTO standard punching with carbide steel cutting edge.	Hydraulically reversible. Reverse action provided by two (2) 3½" diameter nitrate treated cylinders designed with 2,000 PSI pressure relief. Designed and constructed for extreme service. Length of cutting edge shall be 11', cleared path 9' at 35° of swing. Adjustable height of 33" minimum and 51" maximum with sufficient overhang and curvature for high speed plowing. Cutting edge, with trip edge mechanism fully exposed for convenient servicing. Lower moldboard reinforcement shall be 4"x4"x½" steel angle minimum. Minimum of six (6) torsion-type springs not less than 7/8" wire x 3"x¾" O.D. with not less than sixteen (16) active coils each. Springs to be mounted horizontally and must be preloaded to require an initial tripping force of approximately 1,900 foot-pounds at full compression. Trip edge attachment supports shall be ½" x plate steel minimum on both the trip edge backer angle and moldboard rib structure. AASHTO standard punching with carbide steel cutting edge. Retainer plate secured below center pin to	Hydraulically reversible. Reverse action provided by two (2) 3½" diameter nitrate treated cylinders designed with 2,000 PSI pressure relief. Designed and constructed for extreme service. Length of cutting edge shall be 11', cleared path 9' at 35° of swing. Adjustable height of 33" minimum and 51" maximum with sufficient overhang and curvature for high speed plowing. Cutting edge, with trip edge mechanism fully exposed for convenient servicing. Lower moldboard reinforcement shall be 4"x4"x½" steel angle minimum. Minimum of six (6) torsion-type springs not less than 7/8" wire x 3"x¾" O.D. with not less than sixteen (16) active coils each. Springs to be mounted horizontally and must be preloaded to require an initial tripping force of approximately 1,900 foot-pounds at full compression. Trip edge attachment supports shall be ½" plate steel minimum on both the trip edge backer angle and moldboard rib structure. AASHTO standard punching with carbide steel cutting edge. Retainer plate secured below center pin to X

17.11	Attack angle of cutting edge must be easily adjustable from 60° through 85°.	X	
17.12	Control switch or lever for hydraulically reversing must be attached with other plow functions.	X	
17.13	Plow must be capable of automatically changing contour through the uses of hydraulics to act as a left or right hand oneway tapered plow and as a straight, nontapered reversible plow.	X	
17.14	The flared or discharge end of the plow shall coincide with the direction to which the moldboard has been angled.	X	
17.15	The tapered moldboard shall assume an inside height of 33" at the low side and 51" at the discharge side whenever angled to the extreme right or left positions from center.	X	
17.16	Hydraulic contour changing must be activated by and in conjunction with plow reversing.	X	
17.17	Moldboard material shall be one piece non-spliced 3/8" thick ultra-high molecular weight yellow polyethylene with a minimum tensile strength of 7000 PSI (in accordance with ASTMD638).	X	
17.18	The polyethylene materials shall be made from new resin (recycled material not acceptable), and shall be color impregnated and ultra violet stabilized safety yellow pigmentation.	X	
17.19	Plow weight approximately 2400 lbs. minimum.	X	
17.20	Side winding screw adjustable leg (jack) positioned to support and balance plow when removed (minimum 1,000 lb. capacity).	X	

17.21	All metal shall be free of rust and mill scale and prepared (blasted) for primer and finish coat.	X	
17.22	A two (2) part epoxy primer shall be applied to prepared metal surfaces to the minimum thickness of 3-5 mils dry.	X	
17.23	Paint shall be applied to a thickness of 5-7 mils dry and shall be Imron 17.5 HG Cat Highway Yellow color (paint code #42-3133). Axalta shall be the preferred brand of paint.	AE	PREVIOUSLY APPROVED PAINT
17.24	Plow shall come with carbide plow cutting blades.	X	

Section D LEFT & RIGHT WING PLOWS

The purpose and intent of this specification are to describe Left & Right Wing Plows installed with necessary hydraulics and controls to make it fully functional on tandem axle trucks. Detailed specifications in Sections 18-19.

III SCC	uons 16-19.			
	18.0 WING PLOWS (LEFT & RIGHT)	Abbreviation	Actual Dimension	Notes
18.1	Appropriate model for either 54,000 GVW or 32,000 GVW vehicle, whichever is required	X		
			1	
18.2	Heavy-duty model	X		
18.3	 Overall blade length 10' overall wing length shall be 11'to fit 32,000 GVW vehicle Overall blade length 11' overall wing length shall be 12' to fit 54,000 GVW vehicle Overall blade length 12' overall wing length shall be 13' to fit 54,000 GVW vehicle 	X		
18.4	Minimum ten-gauge moldboard. The moldboard shall be fabricated with a 1" nose plate. The moldboard shall be supported by four 1/2" flame cut ribs. The top of the moldboard shall be supported by a 3" x 3"x 1/4" HSS tube with intermediate support moldboard shall be supported by a 3" x 3"x 1/4" HSS tube with intermediate support	X		
18.5	The backer angle will be 6" x 4"x ¾" angle minimum gusseted with 3/8" triangular plate, AASHTO standard punching	X		
18.6	The wing shall include two mounting positions for a 1½" pivot bolt. The pivot bolts shall be reinforced with a ½" plate washer welded to the skin plate	X		
18.7	The wing arm attachment bracket shall be bolted in place and adjustable in position. The arms shall be pinned with a 1" diameter grade eight plated hex cap screw secured with a Nylok hex nut.	AE		GRADE 5 CROWN NUT WITH COTTER PINKEEPER TO PREVENT EROSION OF

10.0				NYLON LOCKING RING IN NYLOCK NUT
18.8	The blade shall be ½" x 8" C-1085 steel reversible cutting edge with coped corners on the intake end. There shall be two cast iron wear shoes bolted behind and through the base angle. The blade and shoes shall be secured with 5/8" grade five plated carriage bolts.	X		
18.9	Attack angle of 85°	AE		80°
18.10	A removable safety chain attached to the nose of the plow must be provided	X		
	19.0 GENERAL	Abbreviation	Actual Dimension	Notes
19.1	All parts and components must be compatible with equipment currently in use by MaineDOT Fleet Services.	X		
19.2	Ten (10) parts and repair manuals as necessary.	X		
19.3	A two (2) part epoxy primer shall be applied to prepared metal surfaces to the minimum thickness of 3-5 mils dry.	X		
19.4	Paint shall be applied to a thickness of 5-7 mils dry and shall be Imron 3.5 HG Cat Highway Yellow color (paint code #42-3133). Axalta shall be the preferred brand of paint.	AE		PREVIOUSLY APPROVED PLATE
19.5	All equipment must be thoroughly inspected, serviced and be ready for use upon delivery.	X		
19.6	Plow lights must be of halogen type, low profile, professionally mounted and wired with a weather pack type plug-in device for quick disconnect mounted in the engine compartment using OEM plow light socket.	X		

19.7	All wiring must be protected by wire loom and be weatherproof, soldered connections and heat shrink wrap must be used on all wiring.	X	
19.8	All wiring and hoses shall be mounted, routed and fastened in a professional manner to prevent chafing, rubbing, etc.	X	
19.9	All hardware installed shall not obstruct any vehicle or equipment lubrication points.	X	
19.10	All hardware installed shall not obstruct or interfere with any vehicle component or system.	X	
19.11	Vehicle bumper must be quick attachable for summer use and attached to plow hitch with pins.	X	
19.12	Main plow and plow wings must be capable of installation and/or removal easily by one person.	X	
19.13	All plow hydraulic cylinders must be easily rebuildable.	X	
19.14	Electrically controlled solenoids shall be equipped with manual overrides.	X	
19.15	All hydraulic fittings to be NPT thread with Teflon tape, JIC not acceptable.	X	
19.16	All cylinders must be double Chrome plated.	AE	NITRIDED ROD
19.17	Solenoid operated plow valves must be capable of conversion to cable operation if necessary.	X	
19.18	All feed and return lines must have shut off valves to isolate the hydraulic tank.	X	
19.19	An emergency light mast of heavy wall steel pipe must be provided and securely fastened to the hydraulic tank. The mast must extend past the cab roof.	X	

19.20	Stainless Steel ½" tubing and ¾" tubing under the cab and toward the rear if required. Minimizing the rubber hydraulic hoses lengths. Tubing shall be a minimum 304 SS welded seam tubing with the ½" tubing size has a side wall minimum of .049", the ¾" tubing has a side wall minimum of .065". Tubing flares shall be matched up with a JIC to hose end and shall have a Stainless Steel sleeves behind the flare as well as and	X	
	All Stainless tubing shall be run such manner that will not interfere with the accessibility of any filters or starter. Tubing holders shall be professionally designed and shall not allow the tubing to contact with each other. (No wrapping of tubing will be accepted) All brackets holding the tubing shall be easily removed to allow easy excess to components like transmission and engine.		

Section E POWER REVERSING UNDERFRAME ROAD SCRAPER FOR WHEELER/TANDEM AXLE PLOW TRUCKS

The purpose and intent of this specification are to describe an Underframe Road Scraper for tandem axle trucks. The road scraper shall be hydraulically operated and have a blade width of ten (10) feet. Detailed specifications in Sections 20-22.

Бресп	20.0 SCRAPER	Abbreviation	Actual	Notes
			Dimension	Notes
20.1	Road Scraper shall be of heavy-duty construction and design for extreme use.	X		
20.2	Hydraulically operated. Wausau or approved equal.	X		
20.3	10' moldboard length approximately.	X		
20.4	20" overall height moldboard with blade.	X		
20.5	Nine (9') cleared swath at approximately 35°.	X		
20.6	Moldboard approximately 20" high x 1" corten steel.	X		
20.7	Moldboard shall be tiltable for road travel with a minimum travel distance of nine (9") inches above the ground.	X		
20.8	Integral shock absorbing safety trip device.	X		
20.9	Hydraulically operated raising and lowering.	X		
20.10	Moldboard will be HYDRAULICALLY operated reversing for left and right swing to an angle of 45°.	X		
20.11	Hydraulic relief valve set at 500 PSI. (Preferably in main valve section)	X		
20.12	Operated from cab either electrically or manually in commonality with the other plow, wing or sander controls.	X		
20.13	Scraper valves shall be stacked with plow valves.	X		
20.14	³ / ₄ "x6" carbide cutting edge with standard AASHTO punching.	X		

20.15	Punching shall be 11/16" square holes with countersink 1 1/16" diameter 45° to receive 5/8" diameter plow bolts.	X		
20.16	Cutting edges/moldboard shall be AASHTO punched for two (2) 3' and one (1) 4' sections as requested.	X		
20.17	Quick detachable for summer operation to include the hydraulics.	X		
20.18	One (1) parts and repair manuals per unit.	X		
20.19	One (1) operator's manual per unit.	X		
20.20	All components and controls must be compatible with equipment currently in use by Fleet Services/MaineDOT.	X		
20.21	All metal shall be free of rust and mill scale and prepared (blasted) for primer and finish coat.	X		
20.22	A two (2) part epoxy primer shall be applied to prepared metal surfaces to the minimum thickness of 3-5 mils dry.	X		
20.23	Paint shall be applied to a thickness of 5-7 mils dry and shall be Imron 3.5 HG Cat Highway Yellow color (paint code #42-3133). Axalta shall be the preferred brand of paint.	X		
20.24	All paint and primers shall be lead free.	X		
	21.0 GENERAL	Abbreviation	Actual Dimension	Notes
21.1	Must be installed in accordance with manufacturer's specifications.	X		
21.2	If modifications to vehicle need to be made to meet scraper manufacturer's specifications and to permit proper operation of scraper, the modifications must be approved by both the vehicle manufacturer and Fleet Services,	X		

Section G 10-12 YARD HEAVY-DUTY CONSTRUCTION DUMP BODY

The purpose and intent of this specification are to describe a 10-12 Yard Heavy-Duty Construction Dump Body with a length of 13' and CA of 132". Detailed specifications in Sections 26-31.

	26.0 BODY	Abbreviation	Actual Dimension	Notes
26.1	Designed and constructed for extreme service.	X		
26.2	Unibody construction with no exposed or structural or longitudinal cross members.	X		
26.3	Length 13' with 12" overhang past body pivot.	X		
26.4	Body pivot point should align with the most rearward vertical point of rear tandem tires.	X		
26.5	Approximately 42" tailgate.	X		
26.6	Approximately 36" sides.	X		
26.7	10-yard water level capacity without side boards.	X		
26.8	Longitudinal shall be 3/16" AR400 steel minimum.	AE		AR450
26.9	Body bracing shall be fabricated of 3/16" AR400 steel minimum.	AE		AR450
26.10	Sides to be braced with 4 -7" (minimum) vertical box braces in addition to a boxed frame for tailgate.	X		
26.11	3/16" AR400 boxed top rail.	AE		AR450
26.12	Tailgate and tailgate frame box braced.	X		
26.13	Sloping tailgate braces and body sills.	X		
26.14	Full width rear apron under tailgate 6" wide bolted on and easily removable.	X		

26.15	When tailgate is closed, tailgate must be even with body floor with no gap between tailgate and body floor.	X	
26.16	One piece floor of 1/4" AR400 steel.	AE	AR450
26.17	Hardware shall be extra heavy duty with 11/4" minimum upper and lower tailgate hinge pins.	X	
26.18	Two (2) 3/8 grade 70 rated tailgate chains with upper and lower eyes.	X	
26.19	Body hinge pins shall be designed for positive lubrication, grease fittings shall be located on the inner side of the body hinge pin with grease fitting and grease groove.	X	
26.20	Continuous welding inside and out. No stitch welding	X	
26.21	Driver controlled dual air operated tailgate cylinders.	AE	SINGLE AIR TAILGATE CYLINDER
26,22	Body must be equipped with adequately braced ladder mounted on the right side, whose first step is 21" above the ground and extends to the top of the sideboards. The right side of the ladder must terminate in a grab handle 8" above the side board.	X	
26.23	Mud flaps positioned fore and aft of rear wheels and/or tandem.	X	
26.24	Headwall will be 54" high fabricated from 3/16" AR400 steel. All full weld, no stitch welding acceptable.	AE	AR450
26.25	One gusseted non-slip step must be provided on the inside of the body adjacent to ladder on the ditch side of the vehicle.	X	
26.26	Permanently attached body support capable of holding body in raised position for servicing.	X	

26.27	Cab protector not required.	X		
26.28	Driver controlled air operated tailgate.	X		
	27.0 LOAD COVER FABRIC	Abbreviation	Actual Dimension	Notes
27.1	Load cover shall be designed and treated for hot asphalt temperatures.	X		
27.2	Cover material shall be constructed of RFL (Resorcinol Formaldehyde Latex) and be capable of withstanding temperatures of 350 degrees.	X		
27.3	Load cover material shall be latex-coated woven Polyester Yarn fabric.	X		
27.4	Load covers must be compatible with all existing MaineDOT load cover systems.	X		
27.5	Load cover shall have no tail or additional fabric beyond the tailgate.	X		
	28.0 LOAD COVER ROLL-UP SYSTEM	Abbreviation	Actual Dimension	Notes
28.1	Shall have roll-up type mechanism.	X		
28.2	Aluminum windscreen provided.	X		
28.3	Must be capable of mounting to body headboard.	X		
28.4	Electric motor shall be covered.	X		
28.5	Donovan Bullet Model #2858 electric drive motor or approved equal.	X		
28.6	Minimum three-year warranty on electric motor.	X		

	29.0 LOAD COVER GENERAL REQUIREMENTS	Abbreviation	Actual Dimension	Notes
29.1	Control switch must be integrated into truck dash and professionally labeled.	X		
29.2	The cover shall accommodate a 10-13 yard body or larger and must accommodate not only the body and load, but in winter must accommodate a hopper sander and load.	X		
29.3	Cover arms must be anodized aluminum and the length adjustable.	X		
29.4	Cover arms will be bent such that arms are not above sides of body when cover is retracted.	X		
29.5	Extra spring tension must be provided for cover arms to prevent the cover from "sailing" while the truck is in motion.	X		
29.6	Load cover arms shall not, in any way, hinder a person form climbing the ladder safely.	X		
29.7	If load cover sailing occurs after installation and delivery to Fleet Services, it will be required to be corrected by the cover manufacturer at no cost to MaineDOT.	X		
29.8	Load cover arms pivot point shall be positioned in such manner that would not allow equipment loading material to damage that area.	X		
	30.0 HOIST AND SUBFRAME	Abbreviation	Actual Dimension	Notes
30.1	Single piston front telescopic hoist incorporated into the body which shall be designed and will not extend beyond the face of the body.	X		
30.2	Class 80 hoist NTEA rated.	X		
30.3	Dump angle approximately 50° minimum to rear.	X		

30.4	Body hydraulics to be compatible with systems currently in use by Fleet Services/MaineDOT.	X		
30.5	All hoist wear points capable of being lubricated with grease fitting placed in a safe, convenient location for servicing and the ability to except auto grease system fitting.	X		
30.6	All fastening hardware to be of highest quality material available.	X		
30.7	There shall be minimum of 21/4" diameter grease-able rear hinge pins. (Grease fitting must be located at the end of the pin, facing inward)	AE		2" PIN DIAMETER
	31.0 GENERAL REQUIREMENTS	Abbreviation	Actual Dimension	Notes
31.1	Steel surface preparation shall be a minimum SSPC #6, Commercial Blast.	X		
31.2	Epoxy primer, two-part system. The dry film thickness shall be between 6-8 mils.	AE		PREVIOUSLY APPROVED PAINT PROCESS
31.3	Finish coat will be 3.5 Imron Aluminum.	X		TAINTIROCESS
31.4	Any controls to be compatible with those currently in use by MaineDOT Fleet Services.	X		
31.5	Parts and repair manuals as needed.	X		
31.6	Body up light to be installed in cab.	X		
31.7	NOTE: CA dimension will accommodate not only body but wing tower and hydraulic assembly for plows approximately 20".	X		
31.8	All wiring must be protected by wire loom or conduit.	X		
31.9	Soldered connections and heat shrink wrap must be used on all wire connections.	X		

	I		
31.10	Hardwood sideboards 10" x 2" minimum, wood, painted black must be supplied and installed by vendor.	X	
31.11	Marker, I.D., clearance lights must be LED	X	
31.12	Two stainless steel aerodynamic triple light box housing will be supplied by MaineDOT to be recessed in both the right and left rear post and fully welded around housing. The box will be mounted in the center of each post. Adequate holes must be provided through the frame and box to facilitate the installation of wires and connectors for the lights. The box will contain a rectangular Whelen strobe/halogen flashed which Fleet Services will install in the top position. The remaining two lights, which will be supplied by Fleet Services, will consist of a Whelen back-up lamp for the bottom position and a Whelen stop/tail/turn LED for the center position that will be installed by the body supplier. Dentsch waterproof connectors must be used on all Whelen lamps.	X	
31.13	Method or means to secure auto-greaser lines to the body that will be adjacent to the long sill.	X	

Section H 13' MULTIPURPOSE DUMP BODY

The purpose and intent of this specification are to describe a 13' Multipurpose Center Conveyor Belt Over Chain Rear Spread Dump Body. Detailed specifications in Sections 32-42.

Rear Spread Dump Body. Detailed specification	is in sections 32		
32.0 BODY	Abbreviation	Actual Dimension	Notes
Length 13' with 12" overhang past body pivot.	X		
10-yard water level capacity without side boards.	X		
Approximately 42" tailgate.	X		
Approximately 36" sides.	X		
Ten (10)" pockets for side boards, accepts two (2)" boards.	X		
Headwall to be 54" high fabricated from 3/16" Hardox 450 steel. All full weld, no stitch welding acceptable.	X		
Side material 3/16" Hardox 450 steel	X		
Front corner post 10-gauge core-ten 80 carbon steel, 7" wide by 3.38" deep.	X		
Formed box top section, dirt shedding lower rub rail, with side board support midway.	X		
Rear corner post 10-gauge core-ten 80 carbon steel, 15" wide by 5" deep.	X		
Rear corner post full bolster. Lower sill to be cut through post and welded forming an integral sill.	X		
Rear posts butt welded to lower sill not acceptable.	X		
Vertical extrusions supports on sides 10-gauge core-ten carbon steel. Supports fully welded, stitch welding of supports not acceptable.	X		
	Length 13' with 12" overhang past body pivot. 10-yard water level capacity without side boards. Approximately 42" tailgate. Approximately 36" sides. Ten (10)" pockets for side boards, accepts two (2)" boards. Headwall to be 54" high fabricated from 3/16" Hardox 450 steel. All full weld, no stitch welding acceptable. Side material 3/16" Hardox 450 steel Front corner post 10-gauge core-ten 80 carbon steel, 7" wide by 3.38" deep. Formed box top section, dirt shedding lower rub rail, with side board support midway. Rear corner post 10-gauge core-ten 80 carbon steel, 15" wide by 5" deep. Rear corner post full bolster. Lower sill to be cut through post and welded forming an integral sill. Rear posts butt welded to lower sill not acceptable. Vertical extrusions supports on sides 10-gauge core-ten carbon steel. Supports fully welded, stitch welding of supports not	Length 13' with 12" overhang past body pivot. 10-yard water level capacity without side boards. Approximately 42" tailgate. Approximately 36" sides. X Ten (10)" pockets for side boards, accepts two (2)" boards. Headwall to be 54" high fabricated from 3/16" Hardox 450 steel. All full weld, no stitch welding acceptable. Side material 3/16" Hardox 450 steel Side material 3/16" Hardox 450 steel X Front corner post 10-gauge core-ten 80 carbon steel, 7" wide by 3.38" deep. Formed box top section, dirt shedding lower rub rail, with side board support midway. Rear corner post 10-gauge core-ten 80 carbon steel, 15" wide by 5" deep. Rear corner post full bolster. Lower sill to be cut through post and welded forming an integral sill. Rear posts butt welded to lower sill not acceptable. Vertical extrusions supports on sides 10-gauge core-ten carbon steel. Supports fully welded, stitch welding of supports not	Length 13' with 12" overhang past body pivot. 10-yard water level capacity without side boards. Approximately 42" tailgate. X Approximately 36" sides. X Ten (10)" pockets for side boards, accepts two (2)" boards. Headwall to be 54" high fabricated from 3/16" Hardox 450 steel. All full weld, no stitch welding acceptable. Side material 3/16" Hardox 450 steel Side material 3/16" Hardox 450 steel X Front corner post 10-gauge core-ten 80 carbon steel, 7" wide by 3.38" deep. Formed box top section, dirt shedding lower rub rail, with side board support midway. Rear corner post 10-gauge core-ten 80 carbon steel, 15" wide by 5" deep. Rear corner post full bolster. Lower sill to be cut through post and welded forming an integral sill. Rear posts butt welded to lower sill not acceptable. Vertical extrusions supports on sides 10-gauge core-ten carbon steel. Supports fully welded, stitch welding of supports not

32.14	Three vertical side extrusions 7" wide by 3.38" deep.	X		
32.15	Grab handle shall be provided on the driver side of the body's headboard.	X		
32.16	Body must be equipped with adequately braced ladder mounted on the right side, whose first step is 21" above the ground and extends to the top of the sideboards. The right side of the ladder must terminate in a grab handle 8" above the side board.	X		
32.17	Mud flaps positioned fore and aft of rear wheels and/or tandem.	X		
32.18	One gusseted non-slip step must be provided on the inside of the body adjacent to ladder on the ditch side of the vehicle.	X		
32.19	Approximately exterior width of 99" and inside width of 88".	X		
32.20	Two (2) Lift lugs per side.	X		
32.20	Two (2) Lift lugs per side. 33.0 FLOOR	X Abbreviation	Actual Dimension	Notes
32.20				Notes
	33.0 FLOOR	Abbreviation		Notes
33.1	33.0 FLOOR Floor material Hardox 450 steel.	Abbreviation X		Notes
33.1	33.0 FLOOR Floor material Hardox 450 steel. Interior width 88" Angle floor with ramp at outer edges to sidewalls. Tub shape or radius body designs	Abbreviation X		Notes
33.1 33.2 33.3	33.0 FLOOR Floor material Hardox 450 steel. Interior width 88" Angle floor with ramp at outer edges to sidewalls. Tub shape or radius body designs are not preferred. Long sills formed monocoque design incorporating the center conveyor, 11" deep	Abbreviation X X		Notes

33.7	Floor includes bent plate stiffeners of 3/16" steel.	X		
33.8	Underbody pan required	X		
	34.0 TAILGATE	Abbreviation	Actual Dimension	Notes
34.1	Tailgate 3/16" Hardox 450 steel	X		
34.2	Bracing shall be 10-gauge core-ten steel	X		
34.3	Horizontal stiffeners and lower rub rail shall be dirt-shedding type.	X		
34.4	Driver controlled dual air operated tailgate cylinders.	X		
34.5	Double ½" flame cut plate with 5%" latch fingers and 1¼" diameter lower latch rods.	X		
34.6	Upper hinge pins 1¼" with ¾" outside ears and ¾" tailgate ears.	X		
34.7	Two (2) 3/8" grade 70 rated tailgate chains with upper and lower eyes.	X		
34.8	No stitch welding, all seams fully welded.	X		
34.9	Discharge door adjustable for multiple positions to allow for material metering when using spinner assembly for spreading material in snow and ice operations.	X		
34.10	Discharge door shall be design such that when completely shut it has no material leakage.	X		
34.11	Overhang of body with apron to be suitable for paver operation.	X		
34.12	Maximum 6" wide spreader apron.	X		
34.13	When tailgate is closed, tailgate must be even with body floor with no gap between tailgate and body floor.	X		

	35.0 CONVEYOR	Abbreviation	Actual Dimension	Notes
35.1	Center mounted conveyor set up for rear discharge, 24" preferred.	X		
35.2	Discharge door to include screw-jack for infinite metering of material and shall not interfere with tailgate safety chains and be easy access from ground level.	X		
35.3	Conveyor floor 3/16" Hardox 450 steel.	X		
35.4	Poly conveyor return tray (easily removed) under body to prevent material spillage on chassis and components.	X		
35.5	Hydraulic motor drive, one (1) planetary 25:1 gear box at rear of conveyor assembly with removeable covers to protect motors from asphalt. Hydraulic fitting and sensor on motor shall also be positioned in such a manner that they are protected during paving application.	X		
35.6	Conveyor shall be chain type with a cross bar welded to every chain link	X		
35.7	Shall have 667-X drive chain	X		
35.8	Mechanical belt/chain take up	X		
35.9	Removable center conveyor cover plate 3/16" Hardox 450 steel.	X		
35.10	Sprockets to be cast steel only.	X		
35.11	Shaft and sprocket assembly to be designed and placed in conveyor to eliminate undue wear on conveyor floor assembly at either end.	X		
35.12	Body floor to overlap edge of conveyor chain to prevent chain "ride-up".	X		
35.13	Conveyor to end beyond tailgate such that tailgate and any center discharge or coal	X		

	doors close positively on conveyor tray to prevent leakage of material. Units with conveyor designs that end before the tailgate are neither desired nor acceptable.			
	36.0 SPINNER	Abbreviation	Actual Dimension	Notes
36.1	Spinner diameter 20" Poly	X		
36.2	Hydraulic spinner motor 3.0 CID	X		
36.3	Quick disconnects on hydraulic lines for ease of removal.	X		
36.4	Spinner assembly mounted beneath rear discharge door opening.	X		
36.5	Mount to be manual swing-away style such that complete assembly can be manually swung in towards chassis so that body can be raised to complete height in dump position without removal of spinner assembly.	X		
36.6	Spinner adjustable fore-aft, left-right and updown.	X		
36.7	Spinner shall be braced and/or supported to prevent vibration and cracking.	X		
	37.0 LIQUID SYSTEM	Abbreviation	Actual Dimension	Notes
37.1	Liquid system designed to supply liquid to rear spinner assembly.	X		
37.2	Liquid capacity minimum of 200 gallons.	X		
37.3	Tanks shall have 2" fill ports.	X		
37.4	Tanks shall be mounted to the dump body, and designed for easy full excess as well as easily replaced and not be directly in contact of the against the side of the body.	X		

	38.0 LOAD COVER FABRIC	Abbreviation	Actual Dimension	Notes
38.1	Load cover shall be designed and treated for hot asphalt temperatures.	X		
38.2	Cover material shall be constructed of RFL (Resorcinol Formaldehyde Latex) and be capable of withstanding temperatures of 350 degrees.	X		
38.3	Load cover material shall be latex-coated woven Polyester Yarn fabric.	X		
38.4	Load covers must be compatible with all existing MaineDOT load cover systems.	X		
38.5	Load cover shall have no tail or additional fabric beyond the tailgate.	X		
	39.0 LOAD COVER ROLL-UP SYSTEM	Abbreviation	Actual Dimension	Notes
39.1	Shall have roll-up type mechanism.	X		
39.2	Aluminum windscreen provided.	X		
39.3	Must be capable of mounting to body headboard.	X		
39.4	Electric motor shall be covered.	X		
39.5	Donovan Bullet Model #2858 electric drive motor or approved equal.	X		

	40.0 LOAD COVER GENERAL REQUIREMENTS	Abbreviation	Actual Dimension	Notes
40.1	Control switch must be integrated into truck dash and professionally labeled.	X		
40.2	The cover shall accommodate a 10-13 yard body or larger and must accommodate not only the body and load, but in winter must accommodate a hopper sander and load.	X		
40.3	Cover arms must be anodized aluminum and the length adjustable.	X		
40.4	Cover arms will be bent such that arms are not above sides of body when cover is retracted.	X		
40.5	Extra spring tension must be provided for cover arms to prevent the cover from "sailing" while the truck is in motion.	X		
40.6	Load cover arms shall not, in any way, hinder a person form climbing the ladder safely.	X		
40.7	If load cover sailing occurs after installation and delivery to Fleet Services, it will be required to be corrected by the cover manufacturer at no cost to MaineDOT.	X		
40.8	Load cover arms pivot point shall be positioned in such manner that would not allow equipment loading material to damage that area.	X		
	41.0 HOIST AND SUBFRAME	Abbreviation	Actual Dimension	Notes
41.1	Single piston front telescopic hoist incorporated into the body which shall be designed and will not extend beyond the face of the body.	X		
41.2	Class 80 hoist NTEA rated.	X		

41.3	Dump angle approximately 50° minimum to rear.	X		
41.4	Body hydraulics to be compatible with systems currently in use by Fleet Services/MaineDOT.	X		
41.5	All hoist wear points capable of being lubricated with grease fitting placed in a safe, convenient location for servicing and the ability to except auto grease system fitting.	X		
41.6	All fastening hardware to be of highest quality material available.	X		
41.7	There shall be minimum of 21/4" diameter grease-able rear hinge pins. (Grease fitting must be located at the end of the pin, facing inward)	AE		2" PIN DIAMETER
	42.0 GENERAL REQUIREMENTS	Abbreviation	Actual Dimension	Notes
42.1	Steel surface preparation shall be a minimum SSPC #6, Commercial Blast.	X		
42.2	Epoxy primer, two-part system. The dry film thickness shall be between 6-8 mils.	AE		PREVIOUSLY APPROVED PAINT PROCESS
42.2		AE X		APPROVED
	thickness shall be between 6-8 mils.			APPROVED
42.3	thickness shall be between 6-8 mils. Finish coat will be 3.5 Imron Aluminum. Any controls to be compatible with those currently in use by MaineDOT Fleet	X		APPROVED
42.3	thickness shall be between 6-8 mils. Finish coat will be 3.5 Imron Aluminum. Any controls to be compatible with those currently in use by MaineDOT Fleet Services.	X		APPROVED
42.3 42.4 42.5	thickness shall be between 6-8 mils. Finish coat will be 3.5 Imron Aluminum. Any controls to be compatible with those currently in use by MaineDOT Fleet Services. Parts and repair manuals as needed.	X		APPROVED

42.9	Soldered connections and heat shrink wrap must be used on all wire connections.	X
42.10	Hardwood sideboards 10" x 2" minimum, wood, painted black must be supplied and installed by vendor.	X
42.11	Marker, I.D., clearance lights must be LED	X
42.12	Two stainless steel aerodynamic quad light housings will be supplied by MDOT to be fully welded to the exterior of both the right and left rear post. The box will be mounted in the center of the frame. Adequate holes must be provided through the frame and box to facilitate the installation of wires and connectors for the lights. The box will contain a rectangular Whelen strobe/halogen flasher which Fleet Services will install in the top position. The remaining two lights, which will be supplied by Fleet Services, will consist of a Whelen back up lamp for the lower position and a Whelen stop/tail/turn LED for the center position that will be installed by the body supplier. Dentsch waterproof connectors must be used on all Whelen lamps.	X
42.13	Method or means to secure auto-greaser	X
42.13	lines to the body that will be adjacent to the long sill.	A

Section I 10' SIDE DUMP BODY

The purpose and intent of this specification are to describe a 10' side dump left front discharge dump body spreader which can be used as a conventional dump body. All construction to utilize continuous welding. Detailed specifications in **Sections 43-54**.

	43.0 BODY	Abbreviation	Actual Dimension	Notes
43.1	Length: 10' (6.8/8.8 yds)	X		
43.2	Interior width: 86"	X		
43.3	Exterior width: 102"	X		
43.4	Side height: 30"	X		
43.5	Tailgate Height: 39"	X		
	44.0 HEADBOARD AND CAB SHIELD	Abbreviation	Actual Dimension	Notes
44.1	Flat one piece 3/16" Hardox AR450	X		
44.2	Two (2) external vertical braces of 3/8" x 4" section	X		
44.3	10 Ga Corten break formed "C" section brace full width	X		
44.4	24" cab shield shall be 10 Ga 44W steel, continuously welded to headboard	X		
44.5	Cab shield side bracing shall be integral with front side board pockets	X		
	45.0 HOIST BASKET	Abbreviation	Actual Dimension	Notes
45.1	Floating trunnion cylinder pivot with removable greaseable bearing blocks, sized to match selected cylinder	X		
45.2	Basket back plate shall be 3/8" steel plate	X		
45.3	Basket side plates shall be 3/4" steel plate	X		
45.4	Two (2) 1/4" gussets welded between each side plate and the back plate	X		

45.5	Bearing blocks shall include zerk grease fittings	X		
	46.0 LIVE FLOOR AND WALL	Abbreviation	Actual Dimension	Notes
46.1	One-piece live action type 3/16" Hardox AR450 steel floor	X		
46.2	Live floor vertical wall section shall be 3/16" Hardox AR450	X		
46.3	Live wall section shall break to 90 degrees over the top of the full outer wall to prevent material from flowing between the live wall and outer wall	X		
46.4	Top section shall include 6" high board pockets at front and rear to accept 13/4" thick side board planks and shall include a third pocket midway on the body	X		
46.5	Floor and wall sections shall be longitudinally break formed at their intersection and continuously welded together to form a full length 30 degree gusset	X		
46.6	Head sheet of tilt section shall be 3/16" Hardox material	X		
46.7	Shall have an adjustable polymer wiper of 3/8" material at the body headboard	X		
46.8	Floor and right inner side wall shall move as one unit and shall be hinged to left side conveyor tray at the long sill and shall be capable of 36 degrees of floor lift by two (2) 4" minimum diameter by 20" stroke cylinders	X		
46.9	Cylinder rods shall be nitrided	X		
46.10	Cylinders in retracted position shall be at 22 degree angle	X		

46.11	Rod end bosses shall be designed and	X	
10.11	mounted for maximum serviceability		
46.12	Cylinder rod end bosses shall include	X	
	greaseable bushed pinning, with pin		
	designed with grease grooves		
	designed with groupe grooves		
46.13	Base trunnion mount shall be 1" steel plate	X	
40.13	base trumnon mount shan be 1 steel plate	Α	
46.14	C 1' 1 ' 1 111 C11/2' 4 C	W.	
46.14	Cylinder pins shall be of 11/4" stress-proof	X	
	steel and greaseable		
46.15	There shall be six (6) channel cross members	X	
	of 3" steel, 4.1lbs/ft and shall be spaced with		
	two (2) at each of the live floor hinge		
	assemblies and two (2) intermediate spacing		
		,	
46.16	The two (2) outer sets of horizontal cross	X	
	members shall be joined to vertical live wall		
	supports with 14" x 9" x ½" plate sections to		
	form lifting cylinder end bosses and shall		
	include additional ½" plate steel shims for		
	the rod ends		
46.17	There shall be three (3) independent hinges	X	
	of 11/4" diameter 304 stainless steel rods with		
	grease groove and zerk fitting		
46.18	Hinge sections shall be bolted to both the	X	
	left hand body long sill and floor section for		
	maximum serviceability		
46.19	Hinge tube shall be of 2" OD mechanical	X	
10.17	tubing with 3/8" thickness		
	thomg with 5/0 thronicss		
46.20	Hinge plates shall be of 3/8" steel with	X	
40.20		_ ^	
	vertical gussets of ½" plate		
46.21	Dight side of header shall have a feet 1 and	v	
46.21	Right side of body shall have a fixed outer	X	
	wall of 3/16" Hardox AR450 to provide		
	required rigidity for dump body use mode		
	and restriction of personnel entry under		
	tilting floor body		

46.22	There shall be safety props supplied to support the tilt floor during maintenance operations	X		
	47.0 SUB-FRAME	Abbreviation	Actual Dimension	Notes
47.1	Body long sills shall be 10" structural channel at 15.3lbs/ft	X		
47.2	Channel shall be tied together with four (4) 1/4" steel plate supports, placed two (2) each at the base of the live floor lifting cylinders	X		
47.3	Shall include full-width, 14" height rear bumper of 1/4" steel plate continuously welded to the long sills and vertical rear corner posts at either end to offer a fully integral bumper and increase the integrity of the body	X		
47.4	To maintain integrity of the body bumper shall be of solid design with no cut-out access doors	X		
47.5	Live floor, floor hinges, conveyor tray, chain return tray and life cylinders shall be removable for maintenance	X		
	48.0 SIDE	Abbreviation	Actual Dimension	Notes
48.1	Left hand body wall shall be one-piece Hardox AR450 3/16" with formed box section, top and bottom	X		
48.2	Vertical rear post shall have 11" x 4" base section	X		
48.3	Rear post shall be of full bolster design for additional rigidity with formed box section bottom rail extending through rear post and welded in place with rear post extending below bottom rail. Designs with rear post butt welded to bottom rail not acceptable.	X		
48.4	6" high front and rear board pockets to accept 13/4" planks	X		

48.5	Inner front board pocket shall be at top of headboard	X		
48.6	Shall have material shedding 45 degree lower rub rail standard	X		
48.7	Body shall be smooth side with no intermediate posts	X		
	49.0 TAILGATE AND LOCKING MECHANISM	Abbreviation	Actual Dimension	Notes
49.1	One-piece skin plate of 3/16" Hardox AR450	X		
49.2	Perimeter box reinforcement plus lower rub rail material shedding design	X		
49.3	Tailgate shall have two-way action standard	X		
49.4	Tailgate shall have 3/8" adjustment chains standard	X		
49.5	Tailgate shall have 3/4" flame cut hinge ears with 11/4" diameter galvanized handle pins	X		
49.6	Tailgate shall have 11/4" diameter lower latch rod	X		
49.7	Two (2) chain hooks per side standard (attached to rear post)	X		
49.8	Air tailgate locking mechanism attached to a 1" diameter full-width traverse rod with four bearing points	X		
49.9	Positive lock cam action latches to give a "double" lock action	X		
49.10	Rear latches shall be independently adjustable	X		
49.11	½" plate latch ears with ½" flame cut lock finger	X		
49.12	Shall have air gate kit included as standard	X		

	50.0 CONVEYOR, DISCHARGE BOX & SPINNER	Abbreviation	Actual Dimension	Notes
50.1	Left side longitudinal conveyor shall empty to the front.	X		
50.2	The conveyor floor (upper tray) shall be bolted in for maximum serviceability	X		
50.3	Full-length conveyor cover (two-section) of 3/16" Hardox AR450 shall be steel hinged to fold and latch to the side	X		
50.4	Hinges on conveyor cover shall include zerk grease fittings	X		
50.5	Conveyor floor (upper tray) shall be formed from 1/4" Hardox AR450 plate and shall be bolted in. Conveyor floor and return trays that are welded in are neither desired nor acceptable	X		
50.6	Conveyor chain shall be 667x pintle type chain 16" wide on center with 3/8" x 1½" flights every second link (double bar type) providing no more than 4½" between flights	X		
50.7	Each end of flights bars shall be welded to chain link, both top and bottom of flight	X		
50.8	Flight bars shall be ramped up to chain link to reduce abrasive wear by weld point on conveyer floor	X		
50.9	Conveyor chains links shall be covered to prevent ride-up	X		
50.10	Conveyor chain shall be driven by a 5.9 cubic inch hydraulic motor through a 25:1 worm gear reducer	X		
50.11	Gear box assembly shall include cast iron drive box with bronze gear assemblies	X		
50.12	There shall be a 13/4" diameter front drive axle shaft carrying eight tooth steel	X		

steel sprockets. Units utilizing return roller assemblies in lieu of shaft and sprocket assemblies are neither desired nor acceptable.		
Motor and gear box assembly shall be mounted to drive shaft at side of discharge box with a coupler assembly such that this assembly can be removed for service without removal of shaft and sprocket assembly. Units that require removal of shaft and sprocket assembly with gear box are neither desired nor acceptable.	X	
Discharge box shall form front of conveyor frame and shall be an integral part of conveyor frame	X	
Mount shall be slotted to allow gear box/motor/drive shaft to be removed as a unit also if desired	X	
Clean-out cover on discharge box shall include positive tab and pin locking system and shall be removable without the use of tools by opening the cover and sliding to the free side of the pin and tube steel hinge assembly	X	
Discharge box cover shall include slots cut for visibility into the box with cover in place to observe material flow	X	
Conveyor chain adjustment shall be through the use of dual grease tensioners at the return end of the body	X	
There shall be a guillotine-type flow control door, minimum of 18" wide	X	
Door in full open position shall be 12" high, offering a 216 square inch total opening	X	
Floor control door shall include screw-style jack mounted to headboard above door for infinite material flow control	X	
	assemblies in lieu of shaft and sprocket assemblies are neither desired nor acceptable. Motor and gear box assembly shall be mounted to drive shaft at side of discharge box with a coupler assembly such that this assembly can be removed for service without removal of shaft and sprocket assembly. Units that require removal of shaft and sprocket assembly with gear box are neither desired nor acceptable. Discharge box shall form front of conveyor frame and shall be an integral part of conveyor frame Mount shall be slotted to allow gear box/motor/drive shaft to be removed as a unit also if desired Clean-out cover on discharge box shall include positive tab and pin locking system and shall be removable without the use of tools by opening the cover and sliding to the free side of the pin and tube steel hinge assembly Discharge box cover shall include slots cut for visibility into the box with cover in place to observe material flow Conveyor chain adjustment shall be through the use of dual grease tensioners at the return end of the body There shall be a guillotine-type flow control door, minimum of 18" wide Door in full open position shall be 12" high, offering a 216 square inch total opening	steel sprockets. Units utilizing return roller assemblies in lieu of shaft and sprocket assemblies are neither desired nor acceptable. Motor and gear box assembly shall be mounted to drive shaft at side of discharge box with a coupler assembly such that this assembly can be removed for service without removal of shaft and sprocket assembly. Units that require removal of shaft and sprocket assembly with gear box are neither desired nor acceptable. Discharge box shall form front of conveyor frame and shall be an integral part of conveyor frame Mount shall be slotted to allow gear box/motor/drive shaft to be removed as a unit also if desired Clean-out cover on discharge box shall include positive tab and pin locking system and shall be removable without the use of tools by opening the cover and sliding to the free side of the pin and tube steel hinge assembly Discharge box cover shall include slots cut for visibility into the box with cover in place to observe material flow Conveyor chain adjustment shall be through the use of dual grease tensioners at the return end of the body There shall be a guillotine-type flow control door, minimum of 18" wide Door in full open position shall be 12" high, offering a 216 square inch total opening Floor control door shall include screw-style jack mounted to headboard above door for

50.22	Control rod and handle of flow control door shall be accessible from ground level	X		
50.23	There shall be a chassis mounted polymer chute feeding to a 6-flight 18" diameter poly spinner driven by an independent 3.0 cubic inch sealed hydraulic motor	X		
50.24	Polymer chute shall be capable of windrowing spread material to the road center by rotating 90 degrees.	X		
50.25	Spinner drive shall be chassis mounted and adjustable through three (3) axes: lateral, longitudinal and vertical	X		
			A	
	51.0 HYDRAULICS	Abbreviation	Actual Dimension	Notes
51.1	Body will be fully plumbed for both conveyor drive and side lift cylinders	X		
51.2	Stainless steel hydraulic feed	X		
51.3	Return lines mounted on body shall be stainless steel for durability on longitudinal lines	X		
	52.0 HOIST AND REAR HINGE	Abbreviation	Actual Dimension	Notes
52.1	Main dump body telescopic cylinder shall have nitride wear surfaces, multiple stages, self-bleeding and sized appropriately for the length of box desired	X		
52.2	Standard cylinder shall be single acting on all stages.	X		
52.3	Hoist shall be of "CS" design for use in high salt environments	X		
52.4	Cylinder rods to be nitrided	X		
52.5	Cylinder trunnion to include zerk grease fittings	X		

52.6	Rear hinge shall be fabricated with a base angle of 4" x 4" x 3/8" structural angle	X		
52.7	Two (2) 3" thick hinge ears pivoting on 2" diameter pins shall in turn be welded to the body.	X		
52.8	Safety prop included	X		
	J 1 1			
	53.0 CENTRAL GREASE LINE KIT	Abbreviation	Actual Dimension	Notes
53.1	Central grease block system for wear points on body as standard equipment	X		
53.2	Central greasing to include: a. Bearing blocks at base basket for main lift cylinder b. Main lift cylinder trunnion c. Front drive shaft bearings at conveyor d. Drive shaft bearings at gear box e. Rear idler return shaft bearings at conveyor f. Rod end side lift cylinders g. Base end side lift cylinders h. Front live floor hinge i. Mid live floor hinge j. Rear live floor hinge k. Conveyor cover hinges	X		
	54.0 OPTIONS	Abbreviation	Actual Dimension	Notes
54.1	Additional summer chute to move material 90 degrees to truck			NOT REQUESTED
54.2	Hydraulically actuated door with in-cab control			NOT REQUESTED
54.3	Folding ladder with three (3) rungs above, handhold	X		
54.4	Double acting main hoist cylinder			NOT REQUESTED
54.5	Tailgate coal door			NOT REQUESTED
54.6	Spreader apron	X		

54.7	SDS two (2) section hinged screen package	NOT REQUESTED
54.8	Poly discharge chute body mounted	NOT REQUESTED
54.9	Summer discharge chute (windrow)	NOT REQUESTED
54.10	Ladder, fold up style	NOT REQUESTED
54.11	Tarp rods at body sides	NOT REQUESTED
54.12	Shovel holder	NOT REQUESTED
54.13	High temp tilt floor wiper at headboard	NOT REQUESTED
54.14	Conveyor automatic spring roller chain tensioner in lieu of grease tensioners	NOT REQUESTED

Section J 13' SIDE DUMP BODY

The purpose and intent of this specification are to describe a 13' Side Dump Left Front Discharge Dump Body Spreader which can be used as a conventional dump body. All construction to utilize continuous welding. Detailed specifications in **Sections 55-66**.

	55.0 BODY	Abbreviation	Actual Dimension	Notes
55.1	Length: 10' (10/13 yds)			13' PER SPECS
55.2	Interior width: 86"	X		
55.3	Exterior width: 102"	X		
55.4	Side height: 38"	X		
55.5	Tailgate Height: 42"	X		
	56.0 HEADBOARD AND CAB SHIELD	Abbreviation	Actual Dimension	Notes
56.1	Flat one piece 3/16" Hardox steel	X		
56.2	Two (2) external vertical braces of 3/8" x 4" section	X		
56.3	10 Ga Corten break formed "C" section brace full width	X		
56.4	24" cab shield shall be 10 Ga 44W steel, continuously welded to headboard	X		
56.5	Cab shield side bracing shall be integral with front side board pockets	X		
	57.0 HOIST BASKET	Abbreviation	Actual Dimension	Notes
57.1	Floating trunnion cylinder pivot with removable greaseable bearing blocks, sized to match selected cylinder	X		
57.2	Basket back plate shall be 3/8" steel plate	X		
57.3	Basket side plates shall be 3/4" steel plate	X		

57.4	Two (2) 1/4" gussets welded between each side plate and the back plate	X		
57.5	Bearing blocks shall include zerk grease fittings	X		
	58.0 LIVE FLOOR AND WALL	Abbreviation	Actual Dimension	Notes
58.1	One-piece live action type ½" Hardox 205,000 psi steel floor	X		
58.2	Live floor vertical wall section shall be 3/16" Hardox	X		
58.3	Live wall section shall break to 90 degrees over the top of the full outer wall to prevent material from flowing between the live wall and outer wall	X		
58.4	Top section shall include 6" high board pockets at front and rear to accept 134" thick side board planks and shall include a third pocket midway on the body	X		
58.5	Floor and wall sections shall be longitudinally break formed at their intersection and continuously welded together to form a full length 30 degree gusset	X		
58.6	Head sheet of tilt section shall be 3/16" Hardox material	X		
58.7	Shall have an adjustable polymer wiper of 3/8" material at the body headboard	X		
58.8	Floor and right inner side wall shall move as one unit and shall be hinged to left side conveyor tray at the long sill and shall be capable of 36 degrees of floor lift by three (3) 4" minimum diameter by 20" stroke cylinders	AE		(2) SIDE TIP CYLINDERS
58.9	Cylinders in retracted position shall be at 22 degree angle	X		

58.10	Live cylinder rod ends shall mount to heavy- duty gusset between live floor and live wall c-channel and shall include heavy-duty bosses	X
58.11	Rod end bosses shall be designed and mounted for maximum serviceability	X
58.12	Cylinder rod end bosses shall include greaseable bushed pinning, with pin designed with grease grooves	X
58.13	Base trunnion mount shall be 1" steel plate	X
58.14	Cylinder pins shall be of 1¼" stress-proof steel and greaseable	X
58.15	There shall be eight (8) channel cross members of 3" steel, 4.1lbs/ft and shall be spaced with two (2) at each of the live floor hinge assemblies and two (2) intermediate spacing	X
58.16	The two (2) outer sets of horizontal cross members shall be joined to vertical live wall supports with 14" x 9" x ½" plate sections to form lifting cylinder end bosses and shall include additional ½" plate steel shims for the rod ends	X
58.17	There shall be three (3) independent hinges of 1½" diameter 304 stainless steel rods with grease groove and zerk fitting	X
58.18	Hinge sections shall be bolted to both the left hand body long sill and floor section for maximum serviceability	X
58.19	Hinge tube shall be of 2" OD mechanical tubing with 3/8" thickness	X
58.20	Right side of body shall have a fixed outer wall of 3/16" Hardox steel to provide required rigidity for dump body use mode and restriction of personnel entry under tilting floor body	X

58.21	There shall be safety props supplied to support the tilt floor during maintenance operations	X		
	59.0 SUBFRAME	Abbreviation	Actual Dimension	Notes
59.1	Body long sills shall be 10" structural channel at 15.3lbs/ft	X		
59.2	Channel shall be tied together with four (4) 1/4" steel plate supports, placed two (2) each at the base of the live floor lifting cylinders	X		
59.3	Shall include full-width, 14" height rear bumper of 1/4" steel plate continuously welded to the long sills and vertical rear corner posts at either end to offer a fully integral bumper and increase the integrity of the body	X		
59.4	To maintain integrity of the body bumper shall be of solid design with no cut-out access doors	X		
59.5	Live floor, floor hinges, conveyor tray, chain return tray and life cylinders shall be removable for maintenance	X		
	60.0 SIDE	Abbreviation	Actual Dimension	Notes
60.1	Left hand body wall shall be one-piece Hardox 3/16" with formed box section, top and bottom	X		
60.2	Vertical rear post shall have 11" x 4" base section	X		
60.3	Rear post shall be of full bolster design for additional rigidity with formed box section bottom rail extending through rear post and welded in place with rear post extending below bottom rail. Designs with rear post butt welded to bottom rail not acceptable.	X		

60.4	6" high front and rear board pockets to accept 13/4" planks	X		
60.5	Inner front board pocket shall be at top of headboard	X		
60.6	Shall have material shedding 45 degree lower rub rail standard	X		
	61.0 TAILGATE AND LOCKING MECHANISM	Abbreviation	Actual Dimension	Notes
61.1	One-piece skin plate of 3/16" Hardox	X		
61.2	Perimeter box reinforcement plus lower rub rail material shedding design	X		
61.3	Tailgate shall have two-way action standard	X		
61.4	Tailgate shall have 3/8" adjustment chains standard	X		
61.5	Tailgate shall have 3/4" flame cut hinge ears with 11/4" diameter galvanized handle pins	X		
61.6	Tailgate shall have 11/4" diameter lower latch rod	X		
61.7	Two (2) chain hooks per side standard (attached to rear post)	X		
61.8	Air tailgate locking mechanism attached to a 1" diameter full-width traverse rod with four bearing points	X		
61.9	Positive lock cam action latches to give a "double" lock action	X		
61.10	Rear latches shall be independently adjustable	X		
61.11	½" plate latch ears with ½" flame cut lock finger	X		
61.12	Shall have air gate kit included as standard	X		

	62.0 CONVEYOR, DISCHARGE BOX & SPINNER	Abbreviation	Actual Dimension	Notes
62.1	Left side longitudinal conveyor shall empty to the front.	X		
62.2	The conveyor floor (upper tray) shall be bolted in for maximum serviceability	X		
62.3	Full-length conveyor cover (three-section) of 3/16" Hardox steel shall be steel hinged to fold and latch to the side	X		
62.4	Hinges on conveyor cover shall include zerk grease fittings	X		
62.5	Conveyor floor (upper tray) shall be formed from ¼" Hardox plate and shall be bolted in. Conveyor floor and return trays that are welded in are neither desired nor acceptable	X		
62.6	Conveyor chain shall be 667x pintle type chain 16" wide on center with 3/8" x 1½" flights every second link (double bar type) providing no more than 4½" between flights	X		
62.7	Each end of flights bars shall be welded to chain link, both top and bottom of flight	X		
62.8	Flight bars shall be ramped up to chain link to reduce abrasive wear by weld point on conveyer floor	X		
62.9	Conveyor chains links shall be covered to prevent ride-up	X		
62.10	Conveyor chain shall be driven by a 10 cubic inch hydraulic motor through a 25:1 worm gear reducer	X		
62.11	Gear box assembly shall include cast iron drive box with bronze gear assemblies	X		
62.12	There shall be a 1¾" diameter front drive axle shaft carrying eight tooth steel sprockets and a 1¼" rear idler shaft with cut steel sprockets. Units utilizing return roller	X		

	assemblies in lieu of shaft and sprocket		
	assemblies are neither desired nor		
	acceptable.		
	1		
62.13	Motor and gear box assembly shall be mounted to drive shaft at side of discharge box with a coupler assembly such that this assembly can be removed for service without removal of shaft and sprocket	X	
	assembly. Units that require removal of shaft and sprocket assembly with gear box are neither desired nor acceptable.		
62.14	Discharge box shall form front of conveyor frame and shall be an integral part of conveyor frame	X	
62.15	Mount shall be slotted to allow gear box/motor/drive shaft to be removed as a unit also if desired	X	
62.16	Clean-out cover on discharge box shall include positive tab and pin locking system and shall be removable without the use of tools by opening the cover and sliding to the free side of the pin and tube steel hinge assembly	X	
62.17	Discharge box cover shall include slots cut for visibility into the box with cover in place to observe material flow	X	
62.18	Conveyor chain adjustment shall be through the use of dual grease tensioners at the return end of the body	X	
62.19	There shall be a guillotine-type flow control door, minimum of 18" wide	X	
62.20	Door in full open position shall be 12" high, offering a 216 square inch total opening	X	
62.21	Floor control door shall include screw-style jack mounted to headboard above door for infinite material flow control	X	

62.22	Control rod and handle of flow control door shall be accessible from ground level	X		
62.23	There shall be a chassis mounted polymer chute feeding to a 6-flight 18" diameter poly spinner driven by an independent 3.0 cubic inch sealed hydraulic motor	X		
62.24	Polymer chute shall be capable of windrowing spread material to the road center by rotating 90 degrees.	X		
62.25	Spinner drive shall be chassis mounted and adjustable through three (3) axes: lateral, longitudinal and vertical	X		
	63.0 HYDRAULICS	Abbreviation	Actual	Notes
			Dimension	Notes
63.1	Body will be fully plumbed for both conveyor drive and side lift cylinders	X		
63.2	Return lines mounted on body shall be stainless steel for durability on longitudinal lines	X		
	64.0 HOIST AND REAR HINGE	Abbreviation	Actual Dimension	Notes
64.1	Main dump body telescopic cylinder shall have nitride wear surfaces, multiple stages, self-bleeding and sized appropriately for the length of box desired	X		
64.2	Standard cylinder shall be single acting on all stages.	X		
64.3	Hoist shall be of "CS" design for use in high salt environments	X		
64.4	Cylinder trunnion to include zerk grease fittings	X		
64.5	Rear hinge shall be fabricated with a base angle of 4" x 4" x 3/8" structural angle	X		

64.6	Two (2) 3" thick hinge ears pivoting on 2" diameter pins shall in turn be welded to the body.	X		
64.7	Safety prop included	X		
	65.0 CENTRAL GREASE LINE KIT	Abbreviation	Actual Dimension	Notes
65.1	Central grease block system for wear points on body as standard equipment	X		
65.2	Central greasing to include: a. Bearing blocks at base basket for main lift cylinder b. Main lift cylinder trunnion c. Front drive shaft bearings at conveyor d. Drive shaft bearings at gear box e. Rear idler return shaft bearings at conveyor f. Rod end side lift cylinders g. Base end side lift cylinders h. Front live floor hinge i. Mid live floor hinge j. Rear live floor hinge k. Conveyor cover hinges	X		
	66.0 OPTIONS	Abbreviation	Actual Dimension	Notes
66.1	Additional summer chute to move material 90 degrees to truck			NOT REQUESTED
66.2	Hydraulically actuated door with in-cab control			NOT REQUESTED
66.3	Folding ladder with three (3) rungs above, handhold	X		
66.4	Double acting main hoist cylinder			NOT REQUESTED
66.5	Tailgate coal door			NOT REQUESTED
66.6	Spreader apron	X		
66.7	SDS two (2) section hinged screen package			NOT REQUESTED

66.8	Poly discharge chute body mounted	NOT REQUESTED
66.9	Summer discharge chute (windrow)	NOT REQUESTED
66.10	Ladder, fold up style	NOT REQUESTED
66.11	Tarp rods at body sides	NOT REQUESTED
66.12	Shovel holder	NOT REQUESTED
66.13	High temp tilt floor wiper at headboard	NOT REQUESTED
66.14	Conveyor automatic spring roller chain	NOT REQUESTED
	tensioner in lieu of grease tensioners	

	Section K REQUIREMEN	NTS SECTIONS		
	67.0 WARRANTY	Abbreviation	Actual Dimension	Notes
67.1	Manufacturer's standard warranty will apply.	X		
67.2	Terms and conditions of warranty to be provided with bid proposal (Warranty must be clearly defined and all components covered must be clearly listed and identified).	X		
67.3	Manufacturer's warranty will start with MaineDOT in-service date.	X		
67.4	Vendor shall be 100% responsible for all repair costs to include parts, labor during the warranty period.	X		
	68.0 MANUALS AND SOFTWARE REQUIREMENT	Abbreviation	Actual Dimension	Notes
68.1	There shall be two (2) operator's manuals per unit.	X		
68.2	There shall be two (2) shop repair manuals or CDs per unit.	X		
68.3	There shall be two (2) parts manuals or CDs per unit.	X		
	69.0 GENERAL REQUIREMENTS	Abbreviation	Actual Dimension	Notes
69.1	All pinch points shall be clearly marked.	X		
69.2	Equipment must be fully inspected, serviced, fully assembled, and ready to work upon delivery.	X		
69.3	All hardware installed shall not obstruct any lubrication points, or interfere with proper operation.	X		
69.4	All safety, warning and instructional decals must be properly displayed and appropriate for application.	X		

69.5	MaineDOT Fleet Services reserves the right to pre-inspect before delivery.	X
69.6	Upon delivery of unit or units all necessary paper work such as Certificate of Origin, dealer's certificate and invoices shall accompany unit(s).	X
69.7	All awarded proposals will include shipping and delivery to: MaineDOT Fleet Services, 66 Industrial Drive, Augusta, ME 04330.	X

	70.0 BID SUBMISSION REQUIREMENT	Abbreviation	Actual Dimension	Notes
70.1	In addition to required information as exhibited in the specifications, the Bidder shall also provide: • Warranty and extended warranty data and all sub-components. • Detailed Specifications required on the proposed. Failure to supply the required documentation may render the bid non-responsive.	X		

	MaineDOT and is required of the vendor/installer.			
21.3	All hydraulic cylinder rams must be nitrate coated and easily rebuildable.	X		
21.4	Mounting side plate must allow for multiple height variation from side to side.	X		
21.5	Multiple holes will allow for truck lean or severely crowned roads, thus allowing height adjustment to scraper.	X		
	22.0 WARRANTY	Abbreviation	Actual Dimension	Notes
22.1	Manufacturer's standard warranty will apply.	X		
22.2	Terms and conditions of warranty must be provided with bid proposal.	X		
22.3	Manufacturer's warranty will start with MaineDOT in-service date.	X		
22.4	Terms and conditions of warranty must be provided with bid proposal (Warranty must be clearly defined and all components covered must be clearly listed and identified).	X		
22.5	In-Service Date: Warranty on under frame road scraper (not placed in service immediately because of time lag due to installation of components, special equipment, seasonal usage or other delays) shall be warranted from the date the equipment is actually placed in service. MaineDOT Fleet Services Augusta shall notify the vendor in writing of "in service" date.	X		
22.6	Vendor shall be 100% responsible for all repair costs to include parts, labor during the warranty period.	X		

Section F MANUALLY REVERSING UNDERFRAME ROAD SCRAPER FOR PATROL/SINGLE AXLE PLOW TRUCKS

The purpose and intent of this specification are to describe an Underframe Road Scraper for single axle trucks. The road scraper shall be manually operated and have a blade width of ten (10) feet. Detailed specifications in Sections 23-25.

specifi	cations in Sections 23-25.			
	23.0 SCRAPER	Abbreviation	Actual Dimension	Notes
23.1	Road Scraper shall be of heavy-duty construction and design for extreme use.	X		
23.2	Manually operated. Wausau or approved equal.	X		
23.3	10' moldboard length approximately.	X		
23.4	20" overall height moldboard with blade.	X		
23.5	Nine (9') cleared swath at approximately 35°.	X		
23.6	Moldboard approximately 20" high x 1" corten steel.	X		
23.7	Moldboard shall be tiltable for road travel with a minimum travel distance of nine (9") inches above the ground.	X		
23.8	Integral shock absorbing safety trip device.	X		
23.9	Hydraulically operated raising and lowering.	X		
23.10	Moldboard will be MANUALLY operated reversing for left and right swing to an angle of 45°.	X		
23.11	Hydraulic relief valve set at 500 PSI. (Preferably in main valve section)	X		
23.12	Operated from cab either electrically or manually in commonality with the other plow, wing or sander controls.	X		
23.13	Scraper valves shall be stacked with plow valves.	X		
23.14	³ / ₄ "x6" carbide cutting edge with standard AASHTO punching.	X		

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23.15	Punching shall be 11/16" square holes with countersink 1 1/16" diameter 45° to receive 5/8" diameter plow bolts.	X		
23.16	Cutting edges/moldboard shall be AASHTO punched for two (2) 3' and one (1) 4' sections as requested.	X		
23.17	Quick detachable for summer operation to include the hydraulics.	X		
23.18	One (1) parts and repair manuals per unit.	X		
23.19	One (1) operator's manual per unit.	X		
23.20	All components and controls must be compatible with equipment currently in use by Fleet Services/MaineDOT.	X		
23.21	All metal shall be free of rust and mill scale and prepared (blasted) for primer and finish coat.	X		
23.22	A two (2) part epoxy primer shall be applied to prepared metal surfaces to the minimum thickness of 3-5 mils dry.	X		
23.23	Paint shall be applied to a thickness of 5-7 mils dry and shall be Imron 3.5 HG Cat Highway Yellow color (paint code #42-3133). Axalta shall be the preferred brand of paint.	X		
23.24	All paint and primers shall be lead free.	X		
	24.0 GENERAL	Abbreviation	Actual Dimension	Notes
24.1	Must be installed in accordance with manufacturer's specifications.	X		
24.2	If modifications to vehicle need to be made to meet scraper manufacturer's specifications and to permit proper operation of scraper, the modifications must be approved by both the vehicle manufacturer and Fleet Services,	X		

	MaineDOT and is required of the vendor/installer.			
24.3	All hydraulic cylinder rams must be nitrate coated and easily rebuildable.	X		
24.4	Mounting side plate must allow for multiple height variation from side to side.	X		
24.5	Multiple holes will allow for truck lean or severely crowned roads, thus allowing height adjustment to scraper.	X		
	25.0 WARRANTY	Abbreviation	Actual Dimension	Notes
25.1	Manufacturer's standard warranty will apply.	X		
25.2	Terms and conditions of warranty must be provided with bid proposal.	X		
25.3	Manufacturer's warranty will start with MaineDOT in-service date.	X		
25.4	Terms and conditions of warranty must be provided with bid proposal (Warranty must be clearly defined and all components covered must be clearly listed and identified).	X		
25.5	In-Service Date: Warranty on under frame road scraper (not placed in service immediately because of time lag due to installation of components, special equipment, seasonal usage or other delays) shall be warranted from the date the equipment is actually placed in service. MaineDOT Fleet Services Augusta shall notify the vendor in writing of "in service" date.	X		
25.6	Vendor shall be 100% responsible for all repair costs to include parts, labor during the warranty period.	X		

INSTRUCTIONS FOR COMPLETING TECHNICAL SPECIFICATION SHEET

Please complete the checklist for technical specifications set forth below. Electronically enter responses directly into the text-enabled fields next to each specification, including actual dimensions when applicable. Each Bidder must indicate whether it can meet the technical specifications by inserting an "X" next to each specification. The "X" will demonstrate that the Bidder's offering meets the technical specification. If a Bidder cannot meet a technical specification, then the Bidder must give an explanation for each exception and for equipment that is not available or that will be dealer installed. All explanations must be provided in detail on separate pages along with the justification as to why the alternative equipment or deliverables will be as good as the equipment or deliverables described in the detailed specifications for desired items. A copy of the vendor specification proposal must be provided. Following these instructions is essential for proper bid evaluation.

If a Bidder fails to provide requested information or if information on a quote is found to be false or misleading, the quote will be rejected as unresponsive.

The award will be made on a best value basis to the vendor that either
meets or most closely meets the specifications, while taking price and delivery into consideration.

The following abbreviations must	: be	used:
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X	Standard or as specified	
N/A	Not Available	
DI	Dealer Installed	
AE	Approved Equal	

	1.0 WHEELER RIGHT, LEFT & DOUBLE DOWN PULL SYSTEM (HIGH TOWER)	Abbreviation	Actual Dimension	Notes
1.1	Cable hydraulic operated heavy duty high towers.	X		
1.2	The front towers shall be of open section design 8" @ 18.4 lbs. structural I-beam offering a R.B.M. of not less than 518,000 inch pounds.	X		
1.3	Shall attach to the front snow plow hitch with not less than 6" x 4" x 3/8" tubing and extra heavy pipe bracing.	X		
1.4	Mounted directly to the 8" I-beam shall be the front control cylinders.	X		

1.5	The front control cylinders shall be not less than a 3½" x 43" stroke D/A cylinder.	X		
1.6	Shall be reeved so to provide not less than 86" of front slide travel.	X		
1.7	Cylinders shall have double chrome treated cylinder rods.	AE		NITRIDED
1.8	In an attempt to better clean the road surface, there shall be a down pull rod assembly that when used in conjunction with the front post cylinder and slider assembly, will add pressure on the front of the wing.	X		
1.9	Rod assembly shall consist of a minimum ³ / ₄ " threaded rod with a 5/8" rod eye welded to the lower end of the assembly.	X		
1.10	A 15/32" x 2-15/32" x 13" compression spring shall go over the rod.	X		
1.11	At the top and bottom of the rod assembly there shall be spring retainers that the spring shall go between and be held in place by a ³ / ₄ " Nylock nut.	X		
1.12	The ½" wire cable shall be connected to the rod eye and be reeved through a 5" pulley located at the bottom of the front post.	X		
1.13	The wire cable shall then go to the top of the tower and be held in place by a ½" shackle.	X		
	2.0 FRONT SHEAVES	Abbreviation	Actual Dimension	Notes
2.1	The sheaves shall be 6" nominal size with extra deep rope groove.	X		
2.2	The sheaves have 1½"diameter axles with greaseable bronze bushings.	X		
2.3	Sheaves shall be machined from solid steel.	X		

	3.0 FRONT WIRE CABLE	Abbreviation	Actual Dimension	Notes
3.1	All wire cable shall be ½" diameter 8 by 25 improved plow steel with triple clamps, loop thimbles and anchor shackles at each end.	X		
3.2	Three (3) ½" cable clamps must be used and spaced evenly 3" apart from each other as required by OSHA standards. Any frayed cable ends must be covered.	X		
	4.0 FRONT PIVOT	Abbreviation	Actual Dimension	Notes
4.1	The front pivot shall have a 24" long slider base plate of 3/4" plate reinforced for durability by a 3/4" reinforcing bar.	X		27.50"
4.2	Shall have a 1¼" stress proof pivot pins pinning through 1" plate ears spaced to accept either a "NT" Non-Trip style wing trip blocking.	X		
4.3	Front pivot shall have a 1½" diameter Grade Five wing-mounting bolt with slotted hex nut and cotter pin standard.	X		
	5.0 REAR TOWER	Abbreviation	Actual Dimension	Notes
5.1	The rear towers shall be of open section design.	X		
5.2	The slide tray shall be fabricated from a 12" structural channel @ 25 lbs/ft.	X		
5.3	Towers shall have a top mounted self- aligning wire cable exit pulley with rope guide and top mounted lift lug included.	X		
5.4	Shall be 12" channel supported by 2 vertical angles of 4" x 3" x ½" material.	X		
5.5	The tower structure includes intercostal braces at strategic locations.	X		

The slide retainer tracks of 3/4" square bar and extend the full length of travel.	X		
The wing lift cylinders shall be located on the rear of the tower and shall incorporate a guide on the rod end of the cylinders.	X		
The rear towers shall have bolted connections to the rear saddle to allow for various frame heights and off-season removal without disturbing the hydraulic system.	X		
Wing arm brackets shall be angled at 15 degrees towards the front of the chassis to align push arms to the wing.	AE		10 DEGREE
All fasteners must have a minimum of Grade Five rating.	X		
6.0 REAR SHELFING SLIDE CONTROL CYLINDER	Abbreviation	Actual Dimension	Notes
The arm slide control cylinders shall be a 3½" diameter bore x 54" stroke designed as a double acting unit.	X		
This shall be located on the exterior of the tower slide tray.	X		
7.0 REAR SHELFING SLIDER	Abbreviation	Actual Dimension	Notes
The slider base plate shall be fabricated from a ³ / ₄ " thick plate with tapped edges to prevent the slider plate from binding in tower.	X		
Slider plate shall provide 54" of vertical travel.	X		
8.0 WING CONTROL CYLINDER	Abbreviation	Actual Dimension	Notes
The wing control cylinders shall be a 3"	AE		SA/NITRIDED
	and extend the full length of travel. The wing lift cylinders shall be located on the rear of the tower and shall incorporate a guide on the rod end of the cylinders. The rear towers shall have bolted connections to the rear saddle to allow for various frame heights and off-season removal without disturbing the hydraulic system. Wing arm brackets shall be angled at 15 degrees towards the front of the chassis to align push arms to the wing. All fasteners must have a minimum of Grade Five rating. 6.0 REAR SHELFING SLIDE CONTROL CYLINDER The arm slide control cylinders shall be a 3½" diameter bore x 54" stroke designed as a double acting unit. This shall be located on the exterior of the tower slide tray. 7.0 REAR SHELFING SLIDER The slider base plate shall be fabricated from a ¾" thick plate with tapped edges to prevent the slider plate from binding in tower. Slider plate shall provide 54" of vertical travel.	The wing lift cylinders shall be located on the rear of the tower and shall incorporate a guide on the rod end of the cylinders. The rear towers shall have bolted connections to the rear saddle to allow for various frame heights and off-season removal without disturbing the hydraulic system. Wing arm brackets shall be angled at 15 degrees towards the front of the chassis to align push arms to the wing. All fasteners must have a minimum of Grade Five rating. 6.0 REAR SHELFING SLIDE CONTROL CYLINDER The arm slide control cylinders shall be a 3½" diameter bore x 54" stroke designed as a double acting unit. This shall be located on the exterior of the tower slide tray. 7.0 REAR SHELFING SLIDER The slider base plate shall be fabricated from a ¾" thick plate with tapped edges to prevent the slider plate from binding in tower. Slider plate shall provide 54" of vertical travel. 8.0 WING CONTROL CYLINDER The wing control cylinders shall be a 3" AE	The wing lift cylinders shall be located on the rear of the tower and shall incorporate a guide on the rod end of the cylinders. The rear towers shall have bolted connections to the rear saddle to allow for various frame heights and off-season removal without disturbing the hydraulic system. Wing arm brackets shall be angled at 15 degrees towards the front of the chassis to align push arms to the wing. All fasteners must have a minimum of Grade Five rating. 6.0 REAR SHELFING SLIDE CONTROL CYLINDER The arm slide control cylinders shall be a 3½" diameter bore x 54" stroke designed as a double acting unit. This shall be located on the exterior of the tower slide tray. 7.0 REAR SHELFING SLIDER The slider base plate shall be fabricated from a ¾" thick plate with tapped edges to prevent the slider plate from binding in tower. Slider plate shall provide 54" of vertical travel. 8.0 WING CONTROL CYLINDER The wing control cylinders shall be a 3" AE Abbreviation Actual Dimension Actual Dimension Actual Dimension Actual Dimension Actual Dimension

8.2	There shall be a triple sheave box bolted to base and rod end of the cylinders.	X		
8.3	The wire cable travel is six (6) times the cylinder stroke.	X		
	9.0 WING ARMS	Abbreviation	Actual Dimension	Notes
9.1	Two (2) arms shall run parallel to each other on 17" centers.	X		
9.2	Wing arms shall be non-telescopic and designed for proper length wing.	X		
	10.0 REAR SHEAVES	Abbreviation	Actual Dimension	Notes
10.1	The sheaves shall be 6" nominal size with extra deep rope groove.	X		
10.2	The sheaves have 1¼" diameter axles with greaseable bronze bushings.	X		
10.3	The axle shall incorporate a positive location head to ensure non-rotation of axle.	X		
10.4	The sheaves shall be machined from solid steel.	X		
	11.0 REAR WIRE CABLE	Abbreviation	Actual Dimension	Notes
11.1	The wire cable shall be ½" diameter 8 by 25 improved plow steel with triple clamps, loop thimbles and anchor shackles at each end.	X		
11.2	There shall be 36" of ½" chain on free end to attach to wing lifting lug.	X		
11.3	Three (3) ½" cable clamps must be used and spaced evenly 3" apart from each other as required by OSHA standards. Any frayed cable ends must be covered.	X		
	12.0 REAR SADDLE	Abbreviation	Actual Dimension	Notes

12.1	The rear saddle shall be laterally mounted section of minimum 6" x 4"x ½" wall thickness. There shall be ½" "L" shaped cheek plates with the tower end gusseted to form a box with the tower attach bracket. There shall be a minimum of two (2) 3" x 3" x 3/8" angle braces to stabilize the tower base. (Must be detachable if located below frame rail).	X		
12.2	Designed to be quick detachable including wing posts (and hydraulics) by the use of quick disconnecting fittings. (Fittings to be ½" diameter, Parker).	X		
12.3	Trip mechanism and wing plow to be approved by Fleet Services/MaineDOT. The trip spring shall be a torsion type spring with a 1" diameter wire, minimum. Trip device shall be plumb.		N/A	
12.4	The rear tower height shall be same as front tower height.	X		
12.5	Cables that operate over sheaves must be adjusted so that at maximum stroke, cable clamps, etc., will not be pulled into the sheaves.	X		
12.6	Push arms for wing plows must be 5' minimum.	X		
12.7	All cables must be minimum ½" diameter 8 by 25 construction, improved plow steel.	X		
12.8	When possible, the rear tower must be angled to provide a straighter alignment for push arms and push arm joints.	X		
12.9	There shall be pipe struts supplied to diffuse impact loads through wider frame area.	X		

RIDER B TERMS AND CONDITIONS

- **1. DEFINITIONS**: The following definitions are applicable to these standard terms and conditions:
 - a. The term "Buyer" or "State" shall refer to the Government of the State of Maine or a person representing the Government of the State of Maine.
 - b. The term "Department" or "DAFS" shall refer to the State of Maine Department of Administrative and Financial Services.
 - c. The term "Bureau" or "BGS" shall refer to the State of Maine Bureau of General Services.
 - d. The term "Division" shall refer to the State of Maine Division of Purchases.
 - e. The term "Contractor", "Vendor", or "Provider" shall refer to the organization that is providing goods and/or services through the contract to which these standard terms and conditions have been attached and incorporated.
 - f. The term "Contract" or "Agreement" shall refer to the contract document to which these standard terms and conditions apply, taking the format of a Buyer Purchase Order (BPO) or Master Agreement (MA) or other contractual document that is mutually agreed upon between the State and the Contractor.
- **2. WARRANTY**: The Contractor warrants the following:
 - a. That all goods and services to be supplied by it under this Contract are fit and sufficient for the purpose intended, and
 - b. That all goods and services covered by this Contract will conform to the specifications, drawing samples, symbols or other description specified by the Division, and
 - c. That such articles are merchantable, good quality, and free from defects whether patent or latent in material and workmanship, and
 - d. That all workmanship, materials, and articles to be provided are of the best grade and quality, and
 - e. That it has good and clear title to all articles to be supplied by it and the same are free and clear from all liens, encumbrances and security interest.

Neither the final certificate of payment nor any provision herein, nor partial nor entire use of the articles provided shall constitute an acceptance of work not done in accordance with this agreement or relieve the Contractor liability in respect of any warranties or responsibility for faulty material or workmanship. The Contractor shall remedy any defects in the work and pay any damage to other work resulting therefrom, which shall appear within one year from the date of final acceptance of the work provided hereunder. The Division of Purchases shall give written notice of observed defects with reasonable promptness.

- **3. TAXES**: Contractor agrees that, unless otherwise indicated in the order, the prices herein do not include federal, state, or local sales or use tax from which an exemption is available for purposes of this order. Contractor agrees to accept and use tax exemption certificates when supplied by the Division as applicable. In case it shall ever be determined that any tax included in the prices herein was not required to be paid by Contractor, Contractor agrees to notify the Division and to make prompt application for the refund thereof, to take all proper steps to procure the same and when received to pay the same to the Division.
- **4. PACKING AND SHIPMENT**: Deliveries shall be made as specified without charge for boxing, carting, or storage, unless otherwise specified. Articles shall be suitably packed to secure lowest transportation cost and to conform to the requirements of common carriers and any

applicable specifications. Order numbers and symbols must be plainly marked on all invoices, packages, bills of lading, and shipping orders. Bill of lading should accompany each invoice. Count or weight shall be final and conclusive on shipments not accompanied by packing lists.

- **5. DELIVERY**: Delivery should be strictly in accordance with delivery schedule. If Contractor's deliveries fail to meet such schedule, the Division, without limiting its other remedies, may direct expedited routing and the difference between the expedited routing and the order routing costs shall be paid by the Contractor. Articles fabricated beyond the Division's releases are at Contractor's risk. Contractor shall not make material commitments or production arrangements in excess of the amount or in advance of the time necessary to meet delivery schedule, and, unless otherwise specified herein, no deliveries shall be made in advance of the Division's delivery schedule. Neither party shall be liable for excess costs of deliveries or defaults due to the causes beyond its control and without its fault or negligence, provided, however, that when the Contractor has reason to believe that the deliveries will not be made as scheduled, written notice setting forth the cause of the anticipated delay will be given immediately to the Division. If the Contractor's delay or default is caused by the delay or default of a subcontractor, such delay or default shall be excusable only if it arose out of causes beyond the control of both Contractor and subcontractor and without fault of negligence or either of them and the articles or services to be furnished were not obtainable from other sources in sufficient time to permit Contractor to meet the required delivery schedule.
- **6. FORCE MAJEURE**: The State may, at its discretion, excuse the performance of an obligation by a party under this Agreement in the event that performance of that obligation by that party is prevented by an act of God, act of war, riot, fire, explosion, flood or other catastrophe, sabotage, severe shortage of fuel, power or raw materials, change in law, court order, national defense requirement, or strike or labor dispute, provided that any such event and the delay caused thereby is beyond the control of, and could not reasonably be avoided by, that party. The State may, at its discretion, extend the time period for performance of the obligation excused under this section by the period of the excused delay together with a reasonable period to reinstate compliance with the terms of this Agreement.
- 7. INSPECTION: All articles and work will be subject to final inspection and approval after delivery, notwithstanding prior payment, it being expressly agreed that payment will not constitute final acceptance. The Division of Purchases, at its option, may either reject any article or work not in conformity with the requirements and terms of this order, or re-work the same at Contractor's expense. The Division may reject the entire shipment where it consists of a quantity of similar articles and sample inspection discloses that ten (10%) percent of the articles inspected are defective, unless Contractor agrees to reimburse the Division for the cost of a complete inspection of the articles included in such shipment. Rejected material may be returned at Contractor's risk and expense at the full invoice price plus applicable incoming transportation charges, if any. No replacement of defective articles of work shall be made unless specified by the Division.
- **8. INVOICE**: The original and duplicate invoices covering each and every shipment made against this order showing Contract number, Vendor number, and other essential particulars, must be forwarded promptly to the ordering agency concerned by the Vendor to whom the order is issued. Delays in receiving invoice and also errors and omissions on statements will be considered just cause for withholding settlement without losing discount privileges. All accounts are to be carried in the name of the agency or institution receiving the goods, and not in the name of the Division of Purchases.

- **9. ALTERATIONS**: The Division reserves the right to increase or decrease all or any portion of the work and the articles required by the bidding documents or this agreement, or to eliminate all or any portion of such work or articles or to change delivery date hereon without invalidating this Agreement. All such alterations shall be in writing. If any such alterations are made, the contract amount or amounts shall be adjusted accordingly. In no event shall Contractor fail or refuse to continue the performance of the work in providing of articles under this Agreement because of the inability of the parties to agree on an adjustment or adjustments.
- **10. TERMINATION**: The Division may terminate the whole or any part of this Agreement in any one of the following circumstances:
 - a. The Contractor fails to make delivery of articles, or to perform services within the time or times specified herein, or
 - b. If Contractor fails to deliver specified materials or services, or
 - c. If Contractor fails to perform any of the provisions of this Agreement, or
 - d. If Contractor so fails to make progress as to endanger the performance of this Agreement in accordance with its terms, or
 - e. If Contractor is adjudged bankrupt, or if it makes a general assignment for the benefit of its creditors or if a receiver is appointed because of its insolvency, or
 - f. Whenever for any reason the State shall determine that such termination is in the best interest of the State to do so.

In the event that the Division terminates this Agreement in whole or in part, pursuant to this paragraph with the exception of 8(f), the Division may procure (articles and services similar to those so terminated) upon such terms and in such manner as the Division deems appropriate, and Contractor shall be liable to the Division for any excess cost of such similar articles or services.

- 11. NON-APPROPRIATION: Notwithstanding any other provision of this Agreement, if the State does not receive sufficient funds to fund this Agreement and other obligations of the State, if funds are de-appropriated, or if the State does not receive legal authority to expend funds from the Maine State Legislature or Maine courts, then the State is not obligated to make payment under this Agreement.
- 12. COMPLIANCE WITH APPLICABLE LAWS: Contractor agrees that, in the performance hereof, it will comply with applicable laws, including, but not limited to statutes, rules, regulations or orders of the United States Government or of any state or political subdivision(s) thereof, and the same shall be deemed incorporated herein by reference. Awarding agency requirements and regulations pertaining to copyrights and rights in data. Access by the grantee, the subgrantee, the Federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers and records of the Contractor which are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts, and transcriptions. Retention of all required records for three years after grantees or subgrantees make final payments and all other pending matters are closed. Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h), section 508 of the Clean Water Act, (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15). (Contracts, subcontracts, and subgrants of amounts in excess of \$100,000). Mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

- **13. INTERPRETATION**: This Agreement shall be governed by the laws of the State of Maine as to interpretation and performance.
- **14. DISPUTES**: The Division will decide any and all questions which may arise as to the quality and acceptability of articles provided and installation of such articles, and as to the manner of performance and rate of progress under this Contract. The Division will decide all questions, which may arise as to the interpretation of the terms of this Agreement and the fulfillment of this Agreement on the part of the Contractor.
- **15. ASSIGNMENT**: None of the sums due or to become due nor any of the work to be performed under this order shall be assigned nor shall Contractor subcontract for completed or substantially completed articles called for by this order without the Division's prior written consent. No subcontract or transfer of agreement shall in any case release the Contractor of its obligations and liabilities under this Agreement.
- 16. STATE HELD HARMLESS: The Contractor agrees to indemnify, defend, and save harmless the State, its officers, agents, and employees from any and all claims and losses accruing or resulting to any and all contractors, subcontractors, material men, laborers and other persons, firm or corporation furnishing or supplying work, services, articles, or supplies in connection with the performance of this Agreement, and from any and all claims and losses accruing or resulting to any person, firm or corporation who may be injured or damaged by the Contractor in the performance of this Agreement.
- 17. SOLICITATION: The Contractor warrants that it has not employed or written any company or person, other than a bona fide employee working solely for the Contractor to solicit or secure this Agreement, and it has not paid, or agreed to pay any company, or person, other than a bona fide employee working solely for the Contractor any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon, or resulting from the award for making this Agreement. For breach or violation or this warranty, the Division shall have the absolute right to annul this agreement or, in its discretion, to deduct from the Agreement price or consideration, or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gifts, or contingent fee.
- **18. WAIVER**: The failure of the Division to insist, in any one or more instances, upon the performance of any of the terms, covenants, or conditions of this order or to exercise any right hereunder, shall not be construed as a waiver or relinquishment of the future performance of any such term, covenant, or condition or the future exercise of such right, but the obligation of Contractor with respect to such future performance shall continue in full force and effect.
- 19. MATERIAL SAFETY: All manufacturers, importers, suppliers, or distributors of hazardous chemicals doing business in this State must provide a copy of the current Material Safety Data Sheet (MSDS) for any hazardous chemical to their direct purchasers of that chemical.
- **20. COMPETITION**: By accepting this Contract, Contractor agrees that no collusion or other restraint of free competitive bidding, either directly or indirectly, has occurred in connection with this award by the Division of Purchases.

21. INTEGRATION: All terms of this Contract are to be interpreted in such a way as to be consistent at all times with this Standard Terms and Conditions document, and this document shall take precedence over any other terms, conditions, or provisions incorporated into the Contract.

Appendix A

STATE OF MAINE DEPARTMENT OF ADMINISTRATIVE AND FINANCIAL SERVICES DIVISION OF PROCUREMENT SERVICES

BID COVER PAGE and DEBARMENT FORM

Bidder's Organization Name: HP FAIRFIELD					
Chief Executive - Name/Title: Phil Nangle					
Tel: 6032236599	Fax: 2074746526	E-mail:			
		PHILNANGLE@HPFAIRFIEL			
		D.COM			
Headquarters Street Address: 554	4 Maple St				
Headquarters City/State/Zip: Hop	kinton NH 03229				
(provide information requested be	low if different from above)				
Lead Point of Contact for Bid - Name/Title: Dan Matchett Regional Sales Manager					
Tel: 2073990565	Fax: 2074746526	E-mail:			
		DanMatchett@hpfairfeld.com			
Street Address: 9 Green St					
City/State/Zip: Skowhegan ME 04976					

By signing below Bidder affirms:

- Their bid complies with all requirements of this RFQ;
- This bid and the pricing structure contained herein will remain firm for a period of 180 days from the date and time of the bid opening;
- That no personnel currently employed by the Department or any other State agency participated, either directly or indirectly, in any activities relating to the preparation of the Bidder's proposal;
- That no attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a proposal; and
- The undersigned is authorized to enter into contractual obligations on behalf of the above-named organization.

Name: Dan Matchett		Title: Regional Sales Manager				
To have your bid accepted, this Appendix MUST have an actual wet signature or utilize DocuSign						
or Adobe Sign forms of electronic signature.						
Authorized Signature:		Date: 1/30/2020				
At tot						

Debarment, Performance, and Non-Collusion Certification

By signing this document, I certify to the best of my knowledge and belief that the aforementioned organization, its principals, and any subcontractors named in this proposal:

- a. Are not presently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from bidding or working on contracts issued by any governmental agency.
- b. Have not within three years of submitting the proposal for this contract been convicted of or had a civil judgment rendered against them for:
 - i. fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government transaction or contract.
 - ii. violating Federal or State antitrust statutes or committing embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - iii. are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
 - iv. have not within a three (3) year period preceding this proposal had one or more federal, state or local government transactions terminated for cause or default.
- c. Have not entered into a prior understanding, agreement, or connection with any corporation, firm, or person submitting a response for the same materials, supplies, equipment, or services and this proposal is in all respects fair and without collusion or fraud. The abovementioned entities understand and agree that collusive bidding is a violation of state and federal law and can result in fines, prison sentences, and civil damage awards.
- Failure to provide this certification may result in the disqualification of the Bidder's proposal, at the discretion of the Department.

To the best of my knowledge all information provided in the enclosed proposal, both programmatic and financial, is complete and accurate at the time of submission.

	Title: Regional Sales Manager				
To have your bid accepted, this Appendix MUST have an actual wet signature or utilize DocuSign					
or Adobe Sign forms of electronic signature.					
	Date: 1/30/2020				
	ave				

Appendix D

STATE OF MAINE DEPARTMENT OF ADMINISTRATIVE AND FINANCIAL SERVICES DIVISION OF PROCUREMENT SERVICES

MUNICIPALITY POLITICAL SUBDIVISION and SCHOOL DISTRICT PARTICIPATION CERTIFICATION

RFQ # 17D 201118-113 Everest Base Unit Snowplow Gear System - Short Front Tower

The Division of Procurement Services is committed to providing purchasing opportunities for **municipalities**, **political subdivisions and school districts** in Maine by allowing them access, through our vendors, to our contract pricing. A bidder's willingness to extend contract pricing to these entities will be taken into consideration in making awards.

our vendors, to our contract pricing. A bidder's willingness to extend contract pricing to these entities will be taken into consideration in making awards.	
Will you accept orders from political subdivisions and school districts in Maine at the prices quoted?	
X Yes	
Yes, with conditions as follows:	
No	
Name of Company: HOWARD P. FAIRFIELD	
Address: 9 GREEN ST SKOWHEGAN ME 04976	
Signature:	
Date: 11/24/20	

Appendix E

RFQ # 17D 200117-216 Procurement and Installation of Right, Left & Double Down Pull Plow Gear System

CERTIFICATIONS

1.0 NONCOLLUSION BIDDING CERTIFICATION

By submission of this Bid, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid, each party certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief:

- 1. The prices in this Bid have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition as to any other matter relating to such prices with any other Bidder or with any other competitor;
- 2. Unless otherwise required by law, the prices which have been quoted in this Bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly, to any other Bidder or to any competitor; and,
- 3. No attempt has been made or will be made by the Bidder to induce any other person, partnership or corporation to submit or not to submit a Bid for the purpose of restricting competition.

1/30/2020 Dated

Dan Matchett

Printed name of Person Bidding

Authorized Signature

Regional Sales Manager Title

2.0 EQUIPMENT PERFORMANCE AND WARRANTY DATA

The information provided on this form will be used in determining operating costs of the equipment. Bidder must complete this form and submitted with bid. Bids received without this information will be considered non-responsive to the bid.

- **1. EQUIPMENT**: EVEREST
- 2. DESCRIBE THE PROCESS FOR THE SUBMISSION OF WARRANTY CLAIMS FOR REIMBURSEMENT OUTLINED AND SUBMITTED WITH THE BID. (written process to follow for reimbursement of warranty claims)

Customer to contact Damian Belanger, Service Manager at 207 858 7606

3. EQUIPMENT INFORMATION:

YEAR: Current **EQUIPMENT MAKE:** Everest

EQUIPMENT MODEL: ACCOC54/E87H/DP/NT/68

4. MANUFACTURER'S RECOMMENDED PREVENTATIVE MAINTENANCE SCHEDULE MUST BE PROVIDED

5. BASIC EQUIPMENT WARRANTY DESCRIPTION

1 YEAR PARTS AND LABOR

6. NAME/LOCATION OF REPAIR FACILITY(S) (BOTH AUTHORIZED WARRANTY, PARTS & SERVICE PER REQUESTED LOCATION). It is desired that at least one facility is located within 75-mile radius each region headquarters: Scarborough, Augusta, Dixfield, Bangor and Presque Isle.

WARRANTY AND SERVICE FACILITIES

ADDRESS 1: HP FAIRFIELD, 9 GREEN ST, SKOWHEGAN ME ADDRESS 2: HP FAIRFIELD, 554 MAPLE ST, HOPKINTON NH

ADDRESS 3: **ADDRESS 4: ADDRESS 5:**

CONTACT NAME: Damian Belanger TELEPHONE: 207 858-7620

EQUIPMENT PARTS PROVIDER: HP FAIRFIELD

ADDRESS: 9 Green ST, Skowhegan, ME

CONTACT NAME: Keith Tracy TELEPHONE: 207 858-7618

Attach written explanation describing the locations of the facilities, the contact name and number at each

facility, the times the facilities will be available for use, the qualifications of the staff at the facilities and how the vendor will provide warranty and service at these service facilities.

Bidder certifies that they have service facilities in Maine, staffed with trained service technicians and stocked with repair parts for the equipment which is bid.

This form must be reproduced and completed for any additional equipment warranty/facility

information.

1/30/2020 Dated

Signature

Dan Matchett Print Name

HP Fairfield Company Name

3.0 SPECIFICATION COMPLIANCE

The bidder hereby certifies that the equipment(s) being bid in response to this invitation meet or exceed these specifications and that where a deviation from the specifications exists, the bidder has obtained written approval of those exceptions prior to submitting this bid.

If a conflict exists between these specifications and Federal and/or State laws, the Federal and/or State laws shall prevail and the bidder must alert the purchaser to any such conflicts.

1/30/2020 Dated

Dan Matchett

Printed name of Person Bidding

Authorized Signature

Regional Sales Manager

Title

Appendix F

RFQ # 17D 200117-216 Procurement and Installation of Right, Left & Double Down Pull Plow Gear System

MaineDOT TERMS AND CONDITIONS

A. <u>AGREEMENT</u>

The Vendor shall deliver the equipment ordered in accordance with this Agreement and governed by these Terms and Conditions.

B. INDEPENDENT CAPACITY

In providing the equipment under the Agreement, the Vendor shall act independently and not as an agent of the State of Maine.

C. STATUS REPORTS

Prior to the start of work, the Vendor shall furnish MaineDOT with a proposed progress schedule in MaineDOT's standard format. The Vendor will outline the various phases of work that will need to be completed in order to meet the schedule set forth by MaineDOT.

During equipment assembly, the successful bidder shall submit to MaineDOT's Fleet Representative, a Monthly Status Report of accomplishments from the preceding month. The progress report shall be used to keep team members and MaineDOT's Fleet Representative informed about project status and issues. Information will include:

- a. A written statement describing the work accomplished during the period and to date.
- b. An estimate of the percentage of work completed within the specified services.
- c. Any information needed from MaineDOT to complete the project and avoid delays.
- d. The successful bidder's action plan to remedy and address any non-conforming or unacceptable work submitted to Department.
- e. Document anticipated problems and possible solutions.

These progress reports shall be submitted to MaineDOT on a **monthly basis**. Failure to submit could result in non-payment of the invoice, or be considered as a default, and shall be recorded in the Vendor's Performance Evaluation. If work is temporarily delayed, the Vendor may suspend submittal of the monthly progress reports with written approval from MaineDOT. The Vendor shall be responsible for addressing any action that may be required to keep the project on schedule.

MaineDOT shall have a period of 15 business days after receipt of the submissions to complete the review and make any necessary comments. Following the review, the Vendor will make any revisions and corrections requested by MaineDOT.

D. PAYMENT AND OTHER PROVISIONS

MaineDOT anticipates paying the selected Vendor for goods and services received, on the basis of net 30 payment terms following acceptance of the equipment, the receipt of an acceptable title and required documents, and an accurate and acceptable invoice. An invoice will be considered accurate and acceptable if it contains the State of Maine Agreement number, correct pricing information relative to the Agreement, and provides any required supporting documents, as applicable, and any other specific and agreed-upon requirements listed within the Agreement.

MaineDOT reserves the right to pay for the equipment purchased by any of several available means, which include but may not be limited to check, EFT, and/or procurement card. Vendors are advised that state statute precludes sellers from imposing a surcharge on credit or debit card purchases (text follows):

"9-A MRSA §8-303 (2): A seller in a sales transaction may not impose a surcharge on a cardholder who elects to use a credit card or debit card in lieu of payment by cash, check or similar means."

E. WARRANTY

For a period of one (1) year following equipment delivery and acceptance (the "Warranty period"), Vendor unconditionally warrants and guarantees that the equipment shall be free from defects in parts and workmanship. If MaineDOT discovers any defects during the Warranty period, the Vendor's obligation will be to repair or replace the equipment or refund the purchase price, at MaineDOT's sole option subject to the following requirements as applicable:

- Replacement will be with new equipment matching the specifications within this Agreement.
- Reimbursement will be for the total purchase price of the equipment including the cost of returning the equipment.
- All Repairs including the cost of transporting the equipment will be borne by the Vendor. All repairs will be warranted free from defects in parts and workmanship for a one year period following the repair.

The Vendor hereby assigns to MaineDOT the right to enforce all manufacturer's warranties or guarantees on the equipment.

The Vendor agrees that the warranty obligations provided by this Agreement shall be reported as an outstanding obligation in the event of bankruptcy, dissolution, or the sale, merger, or cessations of operations of the Vendor.

In the event of a breach of Vendor's warranty obligations, MaineDOT shall notify Vendor in writing of the breach and grant Vendor 30 days to cure the breach. Should Vendor fail to cure the breach, MaineDOT may pursue whatever remedies may be available.

F. DAMAGES

Time is of the essence in the delivery of the equipment specified herein, and in event of delay(s) in the delivery of the equipment beyond the date set forth in the Agreement, or beyond authorized extensions thereof MaineDOT may impose liquidated damages. Because it is difficult to determine the actual amount of the damage by reason of such delay it is therefore agreed that the Vendor will pay the sum of five hundred twenty-five dollars (\$525.00) per unit for each calendar day(s) delay in delivery as liquidated damages and not as a penalty.

These damages shall be deducted from any monies due, or which may thereafter become due to the Vendor or may be recovered by through any lawful means.

G. <u>SET-OFF RIGHTS</u>

MaineDOT shall have all of its common law, equitable and statutory rights of set-off.

H. FORCE MAJEURE

Either party may be excused from performance under this Agreement to the extent the failure to perform is caused by acts of God or of the public enemy, fire, floods, epidemics, quarantine, restrictions, strikes, labor disputes, and freight embargos, or other causes beyond the party's reasonable control. In the event of such event of force majeure, the affected party shall provide the other party written notice of the cause of delay within fifteen (15) days from the beginning of any such delay. The time of performance shall be excused to extent of the duration of any such event of force majeure, or such period of time as may be mutually agreed upon by the parties.

I. <u>INDEMNIFICATION</u>

The Vendor shall indemnify and hold harmless MaineDOT and its officers, agents, and employees from and against any and all claims, liabilities, and costs, including reasonable attorney fees, for any or all injuries to persons or property or claims for money damages, including claims for violation of intellectual property rights, arising from the negligent acts or omissions of the Vendor, its employees or agents, officers or Subcontractors in the performance of work under this Agreement; provided, however, the Vendor shall not be liable for claims arising out of the negligent acts or omissions of MaineDOT, or for actions taken in reasonable reliance on written instructions of MaineDOT.

This indemnification provision shall survive any termination or expiration of the Agreement.

J. DEFAULT, TERMINATION

i. MaineDOT reserves the right to terminate this Agreement or any part hereof, for its sole convenience. Thirty (30) days advance written notice shall be provided in the case of a termination for convenience. In the event of such termination, Vendor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Vendor shall be paid for all work on a percentage completed basis, as mutually agreed upon by the parties, up to the date of termination under this Paragraph 14.A.

- ii. MaineDOT shall have the right to terminate this Agreement in the event of a material breach or default by Vendor of its obligations hereunder that is not cured within thirty (30) days from the date of receipt by Vendor of written notice of such breach from MaineDOT. If the breach or default, by its nature, cannot be cured within such thirty (30) day period, then Vendor shall have such additional time (not to exceed thirty (30) additional days) as may be necessary to cure the breach or default, provided Vendor has exercised reasonable commercial efforts and taken appropriate action to begin cure of the breach or default within the initial thirty (30) day cure period.
- iii. MaineDOT shall have the right to terminate this Agreement immediately upon written notice to Vendor in the event (i) Vendor, or any director, officer or employee of Vendor assigned to this Project is convicted of a criminal offense directly related to information technology services; or (ii) proceedings in bankruptcy are commenced against Vendor or if a receiver is appointed and such case or proceeding shall continue undismissed, or unstayed and in effect, for a period of one hundred twenty (120) days. Notwithstanding the foregoing, if a conviction of an employee assigned to this Project, officer or director, relates to individual and/or personal actions of such employee, officer or director and not the policy or directive of Vendor and, upon such conviction, Vendor shall terminate or otherwise remove such employee, officer or director and take such other steps to reasonably ensure the propriety of Vendor' delivery of information technology services, then MaineDOT shall not have a right to terminate this Agreement pursuant to the foregoing clause (i) of this Section 14 (C).
- iv. Vendor shall have the right to terminate this Agreement in the event of a material breach or default by MaineDOT of its obligations hereunder that is not cured within thirty (30) days from the date of receipt by MaineDOT of written notice of such breach from Vendor. If the breach or default, by its nature, cannot be cured within such thirty (30) day period, then MaineDOT shall have such additional time (not to exceed thirty (30) additional days) as may be necessary to cure the breach or default, provided MaineDOT has exercised reasonable commercial efforts and taken appropriate actions to begin cure of the breach or default within the initial thirty (30) day cure period.
- v. Vendor shall cause the foregoing provisions to be inserted in any subcontract for any work covered by this Agreement so that such provisions shall be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.

K. <u>DELIVERY AND ACCEPTANCE</u>

Time is of the essence in the delivery of the equipment. The Vendor shall execute the work continuously and diligently. Delivery of the units shall occur in accordance with the terms and conditions outlined in the resulting Agreement.

- i. Production of the units shall be conducted as a continuous production with no breaks or inserts of other orders or types of equipment.
- ii. Delivery shall be restricted to Monday through Friday, between the hours of 8 AM and 4 PM.
- iii. The Vendor will contact MaineDOT Fleet Services 24 hrs. prior to delivery with an estimated time of arrival.
- iv. Units furnished under this Agreement shall be delivered in first class condition, complete and ready for operation, and the Vendor shall assume all costs, responsibilities, and risk of loss related to damage that may have occurred in the delivery of the units.
- v. When units are delivered, certificates or releases signed by representatives of MaineDOT Fleet Services are understood to be a simple acknowledgment of receipt of the units only, and will <u>NOT</u> constitute an acceptance of the condition of the units or their conformance with the terms and conditions of the Agreement specifications.
- vi. Upon delivery, MaineDOT may conduct such tests as may be required to determine to its own satisfaction that the units appear to be in conformance with the terms, conditions, and requirements of the Agreement specifications.

Acceptance shall occur following final inspection by authorized employees of MaineDOT Fleet Service, receipt of the titles and all requested documentation. The Vendor will be notified, in writing, of acceptance/non-acceptance within fifteen calendar (15) days of delivery to the location specified in this Agreement.

L. RIGHT TO SUSPEND WORK

MaineDOT has the right to suspend any or all work at any time for any reason as it deems necessary. Consultant may receive payment for the portion of services completed through the date of suspension.

M. <u>COPYRIGHT AND LICENSES - PATENTS AND COPYRIGHTS</u>

Data and publication rights to any documents, produced under the terms of Agreement are the property of MaineDOT. The Vendor shall not copyright the material produced under the terms of the Agreement without written approval of MaineDOT, except to the extent necessary to protect its rights pursuant to the following paragraph.

The Parties to this Agreement mutually agree that, if patentable discoveries, intellectual property and software, or inventions should result from work described therein, all rights accruing from such discoveries or inventions shall be the sole property of MaineDOT.

N. CLAIMS AND DISPUTES

General

To preserve any claim arising out of the Agreement, the Parties shall comply with and exhaust all provisions of this Section. Unless otherwise agreed to in writing, the Vendor shall continue to perform its services during any dispute resolution process. If the Vendor continues to perform, MaineDOT shall continue to make payments in accordance with the Agreement of amounts not in dispute.

Negotiation with MaineDOT's Fleet Representative

The Vendor shall promptly notify MaineDOT's Fleet Representative, or their designee, in writing, of disputes that could significantly affect scope, schedule or compensation. After such notice, the Vendor and MaineDOT's Fleet Representative shall promptly negotiate in good faith to resolve the dispute. MaineDOT's Fleet Representative will promptly issue a decision.

Review by Director

If the Vendor desires a review of MaineDOT's Fleet Representative's decision, then the Vendor shall promptly request in writing that MaineDOT's Director of the applicable Bureau or Office review the Fleet Representative's decision. The Director or its designee(s) shall promptly notify the Vendor in writing of the result of the review.

Dispute Resolution

If the dispute remains unresolved after negotiation and review as set forth above, the Parties may proceed to mediation by selecting a mediator acceptable to both.

If the Parties are unable to resolve the dispute through mediation, either party may seek judicial review through a civil action commenced in the Superior Court of Maine, Kennebec County.

O. CONTROLLING LAWS

The Agreement referred to in these Terms and Conditions is governed by the applicable laws of the Federal Government and the State of Maine.

Laws to Be Observed

The Vendor shall comply with all applicable Federal. State and local laws, rules, regulations, orders, and ordinances affecting the work including, without limitation all environmental, wage, labor, equal opportunity, safety, patent, copyright, or trademark laws. The Vendor shall indemnify MaineDOT and hold MaineDOT harmless against any and all claims or liabilities arising from or based upon the violation or alleged violation of any such Law caused directly or indirectly by or through the Vendor.

P. ENTIRE AGREEMENT/BINDING EFFECT/MODIFICATION/ASSIGNMENT

This Agreement sets forth the entire agreement of the parties with regard to the subject herein. This Agreement may not be modified except by a written amendment executed by both parties.

Neither MaineDOT nor the Vendor may assign, sublet, or transfer any rights under or interest (including, but without limitation, monies that are due or may become due) in the Agreement without the written consent of the other, except to the extent that any assignment, subletting, or transfer is mandated or restricted by law. Unless specifically stated to the contrary in any written Consent To Assignment, no assignment shall release or discharge the assignor from any duty or responsibility under the Agreement.

Q. SEVERABILITY

The invalidity or unenforceability of any particular provision or part thereof of this Agreement shall not affect the remainder of said provision or any other provisions, and this Agreement shall be construed in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

R. NON-WAIVER

If MaineDOT fails or refuses to enforce any provision in the Agreement that shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of the Agreement.

Name of Company: HP Fairfield

Address: 9 Green ST, Skowhegan, ME/149/16

Signature:

Date: 1/30/2020