

ADDENDUM

TWO 90" HEAVY DUTY REAR FLAIL MOWER BID

Please accept this Addendum to clarify, correct, and add equipment/implements to the specifications. The Highway Department is seeking **one** compact tractor with power and lift capacity necessary for general highway use and **one** rear flail mower equipment to attach to the tractor for mowing/maintenance of highway right of way/grass areas. The Highway Department seeks the option to purchase additional equipment/implement for use with the tractor, to wit: hydraulically driven post driver/pounder to use for installation of snow fencing. In addition to the above, the Highway Department seeks the option and reserves the right to purchase a second compact tractor with or without flail mower equipment and/or with or without hydraulically driven post driver/pounder.

Next, the original bid specifications (describing the functional and performance characteristics of the tractor and equipment) were not complete and thus are annexed hereto and made a part hereof (nine pages). It is important to note and it is stated throughout the specifications that, while the bid specifications describe a Massey Ferguson 1759 series tractor and Diamond Modal 3 Point 90" Rear Flail, the identification of the brand/model with detail such as 4 cylinder, 2 cylinder valves, power shuttle transmission gear speeds, etc are intended to describe general, physical, functional or performance characteristics and level of equality that will satisfy the needs of the Highway Department. The Highway Department is not requiring brand specific tractor or equipment and will consider all equals. All bidders seeking to submit a bid for an "equal" should submit specifications in the same detail as provided in these specifications.

Last, a revised bid sheet (in red type-2 pages) is annexed to this addendum. The revised bid sheet reflects the Highway Department's reservation and options regarding purchase and quantity of items.

SPECIFICATIONS

It is the intent of these specifications to describe & purchase one or more new 59 h.p. Compact tractor with 90" Heavy Duty Rear Flail Mower such as the Massey Ferguson Model 1759 Tier-4 Final, current production model or approved equal.

		<u>COMPLY?</u> <u>YES NO</u>
<u>ENGINE:</u>		
Make:	Mitsubishi Heavy Industries	_____
Model:	K39	_____
Cylinders:	4-Cylinders minimum	_____
Bore x Stroke:	3.39" x 3.74"	_____
Displacement:	2.2L	_____
Compression:	18:1	_____
Intake:	Dual Stage Dry, Paper Element	_____
Aspiration:	Turbocharged and Intercooled	_____
Injection:	Direct, High Pressure Common Rail	_____
Valves:	2/Cylinder	_____
Engine Control:	Electronic Engine Management	_____
Low/High Idle:	950 RPM/2625 RPM	_____
EPA Compliance:	Tier-4 Final, (No Tier-4 Interims will be accepted)	_____
Emissions Components:	Closed Crank Case Ventilation, Throttle Valve, DOC, DPF	_____
Diesel Particulate Filter:	Ceramic Wall Flow Type, Regenerating	_____
Regeneration Modes:	Active/Passive	_____
Regeneration Control:	Automatic and Manual	_____
Starting Aid:	Glow Plug	_____
Alternator:	50 Amp ROPS, 75 Amp Cab minimum	_____
Starter:	12V, 2.0 kW minimum	_____
Battery:	710 CCA minimum	_____
Exhaust:	Horizontal, Right Side Front	_____
Bio Diesel Content:	B5 (5%) Maximum	_____

TRANSMISSION:

Type:	Power-shuttle	_____
Gears:	4-Fully Synchronized	_____
Ranges:	3, Non-Synchronized	_____
Main Clutch Type:	Dry Single Disc	_____
Shuttle Clutch Type:	Wet Multi-disc	_____
Gear Shift Lever:	Left Side, "H" Pattern	_____
Range Lever:	Left Side, In-line	_____
Shuttle Lever:	Left Side Steering Wheel	_____
Shuttle Control:	Electro-hydraulic	_____
Forwards Speeds:	12 minimum	_____
Reverse Speeds:	12 minimum	_____
Foot Pedals:	Clutch, Brakes, Throttle	_____

Speed Chart w/Power Shuttle Transmission:

	<u>Forward:</u>	<u>Reverse:</u>	
Low Range:	<u>Gear 1</u>		_____
	0.27 mph	0.25 mph	_____
	<u>Gear 2</u>		_____
	0.38 mph	0.36 mph	_____
	<u>Gear 3</u>		_____
	0.54 mph	0.51 mph	_____
	<u>Gear 4</u>		_____
	0.76 mph	0.72 mph	_____
Medium Range:	<u>Gear 1</u>		_____
	1.19 mph	1.12 mph	_____
	<u>Gear 2</u>		_____
	1.72 mph	1.62 mph	_____
	<u>Gear 3</u>		_____
	2.42 mph	2.29 mph	_____
	<u>Gear 4</u>		_____
	3.41 mph	3.22 mph	_____

TRANSMISSION CONT'D:

Speed Chart w/Power Shuttle Transmission Cont'd:

<u>High Range:</u>	<u>Forward:</u>	<u>Reverse:</u>	
	<u>Gear 1</u>		
	5.17 mph	4.89 mph	_____
	<u>Gear 2</u>		
	7.47 mph	7.06mph	_____
	<u>Gear 3</u>		
	10.52 mph	9.95 mph	_____
	<u>Gear 4</u>		
	14.81 mph	14.00 mph	_____
Maximum Speed	15.55 mph minimum		_____

PERFORMANCE:

Rated Engine HP:	59.0 hp	_____
Rated PTO HP:	45.6 hp	_____
Rated Engine Torque ft/lbs.:	123.9 @ 2500 RPM	_____
Maximum Engine Torque ft/lbs.:	154.9 @ 1800 RPM	_____
Torque Rise:	25%	_____

AXLES:

Rear Axle:

Type:	Solid Heavy Duty Cast Steel Housing with Flange	_____
Reduction:	Bull Gear	_____
Differential Lock:	Rear Axle only, mechanical engaged using foot pedal	_____
Brakes:	Internal Wet Multi-disc; 15.662 in ² braking area	_____
Brakes Actuation:	Mechanical	_____
Individual LH and RH Brake Pedals, Left side of foot deck		
Parking Brake via brake pedal lock		
Right Heel Pedal Engagement		
Sight Glass Oil Level check		

COMPLY?
YES | NO

AXLES CONT'D:

Front Axle:

Type: Mechanical 4WD Only, Solid Heavy Duty Cast Steel _____

4WD Engagement: Bevel Gear _____

4WD Lead Ratio: 1.6837 _____

Steering: Hydrostatic _____

Steering Angle: 56° Degrees _____

Parking Brake: Uses Foot Brakes _____

Ring and pinion reduction _____

Hydrostatic power steering, double end hydraulic cylinder, debris guard over cylinder rods. _____

Center Driveline, open differential, 6-8 degrees of even oscillation minimum _____

Mechanical engagement via left hand lever _____

4-Wheel braking when engaged _____

AXLE WEIGHT CAPACITIES:

Front Axle Capacity: 4,631lbs. minimum _____

Rear Axle Capacity: 4631lbs. minimum _____

Total Machine Capacity: 8,379lbs. minimum _____

AXLE FLANGE-TO-FLANGE MEASUREMENTS:

Front Axle: 55.65mm minimum _____

Rear Axle: 50.08mm minimum _____

HYDRAULIC SYSTEM AND 3-POINT HITCH:

System Type: Open Center, Two Gear Type Pumps _____

Steering and Implement _____

System Pressure: 2,277 PSI _____

Implement Flow GPM: 12.8 GPM _____

Steering Flow: 6.8 GPM _____

Total Flow: 19.6 GPM _____

Rear Valves: 1 Standard on Cab models _____

3-Point Hitch Type: ASAE Category 1 _____

Ball Ends: Telescopic, Extendable _____

Adjustment: Single Lift Arm _____

OPERATORS AREA/STANDARD FEATURES CONT'D:

- HVAC Standard _____
- Suspended cloth seat with arm rests _____
- Recirculation filter _____
- Pre-wired for stereo and speakers _____
- One remote valve standard _____
- Opening side and rear windows _____
- 6-Post ROPS minimum _____
- 66ft³ internal volume minimum _____
- Right and left external mirrors _____
- (2) Front and rear roof-line work lights _____
- Amber marker lights at mid-level _____
- Front/rear wiper/washer _____
- Replaceable cab air filter _____
- Right and left entry doors _____

DIAMOND MODEL DRF090-CE 90" 3-POINT REAR FLAIL MOWER:

- Must be capable of cutting 1" to 2" brush _____
- Must come equipped with self-cleaning knives to provide a clean cut and must be reversible Y-blades. _____
- Mower housing shell must be made with 100,000 PSI Steel _____
- Must come with replaceable Skid Shoes _____
- Must come with discharge flap and protective bonnet _____
- Must incorporate "Grip-Tight" bearings on cutter shaft _____
- Cutter shaft must be 6" in diameter minimum _____
- Knife tip speed must be 9306 FPM minimum _____
- Bonnet thickness must be 3/16" minimum _____
- Side wall thickness must be 1/2" minimum _____
- Must be 540 PTO driven _____
- Must be equipped with Cat-II 3-Point hitch _____
- Unit must weigh 1440lbs. minimum _____
- Must have double V-belt power transfer belt with adjustable self-tensioner _____
- Must have a double V-belt power transfer belt with self-tensioner _____
- Must have the ability to flip between clockwise and counter-clockwise rotation for unique cutting conditions. _____

COMPLY?
YES | NO

DIAMOND MODEL DRF090-CE 90" 3-POINT REAR FLAIL MOWER CONT'D:

Must have adjustable cutting height of 1/2" to 6"

One year parts and labor warranty

Price shall include Factory installation onto rear of Tractor

WARRANTY:

2 Years/ 2,000 hours on tractor full parts and labor

1 Year parts and labor on Mower

VENDOR REQUIREMENTS:

Vendor must be the authorized Suffolk County dealer.

Vendor must be an authorized dealer for the Tractor a minimum of 5 years for product being bid.

Vendor shall maintain a fully equipped road service vehicle capable of performing road service.

One set of keys shall be delivered with vehicle at no charge.

Vendor must have Lowboy Trailer capable of picking up and delivering Tractor for warranty work at no charge to the Town.

Bid Price

\$

OPTIONAL POST POUNDER:

Hydraulically driven

Impact at full stroke 30,000lbs. minimum

Effective weight of spring powered hammer 360lbs. minimum

Operating distance above ground 53"-126" minimum

Maximum post width 7 1/8" minimum

Maximum post length 10' feet minimum

Number of block studs 4 minimum

Tilt- Front to Back and Side to Side

Tilt with Base Plate shall be 15° degrees minimum

CAT Assembly Cat I & II

COMPLY?
YES | NO

OPTIONAL POST POUNDER CONT'D:

Mounting 3 Pt. Hitch

Hydraulic requirements 3-4 g.p.m., 1,500 PSI minimum

Shipping weight with base plate 438lbs. minimum

Collapsed width shall be 66" minimum

Extended width shall be 90" maximum

Height shall be 37½" to 55½" minimum

Weight shall be 705lbs. minimum

Swivel shall be 0-155° degrees minimum

Must include T-Post Holder

Must include Manual Base

Must include return adapter

Hoses and Adapters to rear remote included

Bid Price

\$ _____

V. REVISED BID SHEET

(This revised bid sheet is required as set forth in the “Addendum”)

A. Compact Tractor (Massey Ferguson Model 1759 Or Equal)

1. BID PRICE: for One Compact Tractor (Massey Ferguson Model 1759 Or

Equal): \$_____ Delivery Date: _____

2. BID PRICE: for Two Compact Tractor (Massey Ferguson Model 1759 Or

Equal): \$_____ Delivery Date: : _____

B. 90” Heavy Duty Rear Flail Mower (Diamond Model DRF090-CE Or Equal)

1. BID PRICE: for One 90” Heavy Duty Rear Flail Mower (Diamond Model

DRF090-CE Or Equal) \$_____

Delivery Date: _____

2. BID PRICE: for Two 90” Heavy Duty Rear Flail Mower (Diamond Model

DRF090-CE Or Equal) \$_____

Delivery Date: _____

C. One Hydraulic Post Driver/Pounder

1. BID PRICE: for One Hydraulic Post Driver/Pounder

REVISED BID SHEET Page 2

\$ _____ Delivery Date: _____

2. BID PRICE: for Two Hydraulic Post Driver/Pounder

\$ _____ Delivery Date: _____

***THE SPECIFICATION SHEET (PAGES ONE THROUGH NINE) OR IF AN EQUAL, SPECIFICATIONS IN IDENTICAL DETAIL, MUST BE COMPLETED AND ANNEXED HERETO FOR ALL ANY OR ALL SUCH ITEMS (TRACTOR, 90" MOWER AND POST DRIVER OR ALL SUCH ITEMS) THAT BIDDER SEEKS TO BID**

Name of Bidder: _____

Address of Bidder: _____

Telephone Number: _____

Email: _____