

**VILLAGE OF ALLEGANY
SPECIFICATIONS FOR A MUNICIPAL LEAF MULCHER / VACUUM**

It is the intent of these specifications to describe a tow behind leaf mulcher / vacuum to be used by the Department of Public Works Crews that is capable of picking up and mulching leaves and discharging them into a leaf collection box.

The leaf mulcher / vacuum is to be used for removing leaves that fall from trees throughout the village and put out to streets by village residents. All parts and attachments not specifically mentioned but necessary to furnish complete equipment shall be included.

The exact machine design and/or model quoted on shall have been in successful use for five or more years. Proto-type or unproven units may not be acceptable. Bids that do not fully comply with these minimum specification requirements may not be considered.

Bidders must respond to each section of the specification with a "yes" or "no" for each section. If the "yes" box is checked, the bidder is expected to supply exactly what is described. If the "no" box is checked, a detailed explanation of the deviation must be provided, on this form or on a separate sheet of paper, no matter how minor it may be. Failure to respond to either "yes" or "no", the bid may be rejected for non-compliance.

YES	NO
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ENGINE:

99 hp, 4-cylinder, 276 cubic inch, water-cooled John Deere Tier III turbo diesel engine or similar shall be supplied.	<input style="width: 100%; height: 100%;" type="checkbox"/>	<input style="width: 100%; height: 100%;" type="checkbox"/>
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Engine shall be equipped with safety cut-off switches for over-heating, as well as, low oil pressure.	<input style="width: 100%; height: 100%;" type="checkbox"/>	<input style="width: 100%; height: 100%;" type="checkbox"/>
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Radiator shall be pressurized type and have a 6-blade cooling fan.	<input style="width: 100%; height: 100%;" type="checkbox"/>	<input style="width: 100%; height: 100%;" type="checkbox"/>
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65 AMP alternator, 12 volt mechanical starter, manually controlled variable speed governor, dry-type air cleaner, mechanical-type fuel transfer pump with hand primer, spin-on type fuel and oil filters.	<input style="width: 100%; height: 100%;" type="checkbox"/>	<input style="width: 100%; height: 100%;" type="checkbox"/>
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Closed type power unit with side panels and removable radiator screen.	<input style="width: 100%; height: 100%;" type="checkbox"/>	<input style="width: 100%; height: 100%;" type="checkbox"/>
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**VILLAGE OF ALLEGANY
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YES	NO
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Engine shall also be equipped with an internal balancer to eliminate engine vibration.

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ENGINE INSTRUMENT PANEL:

Instruments panel shall be mounted in their own remote panel directly attached to the main frame; and shall include key type ignition switch, ammeter, water temperature and oil pressure gauges and locking T-type or similar throttle handle.

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An hour meter and tachometer shall also be included.

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ENGINE P.T.O. CLUTCH:

Engine torque shall be transferred through a quick acting, over center 1 1/2" clutch.

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The power take off shaft shall be not less than 2 1/4" in diameter and shall be supported by two 2 1/4" tapered roller bearings.

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ENGINE BASE:

Base of engine shall be box type (unitized design) 9-gauge steel specifically designed to engine noted above.

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FUEL TANK:

The fuel tank shall be located under the main engine base and be protected on all four sides for safety and shall have a 30 gallon capacity. It shall be all steel (12 gauge) construction and have two internal baffles.

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YES	NO
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BLOWER IMPELLER HOUSING:

Engine base is bolted to the blower housing. Provisions shall be made so the blower housing can be bolted with exhaust in several positions as follows: In a vertical position for trailer mounted operations; at a 30-degree angle when front mounted.

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The blower housing shall be a minimum 35" high - 33" across and 12" wide, made of at least ¼" steel plate and equipped with a two-piece replaceable liner of at least ¼" thick steel.

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The wear liners shall be secured by (12) heat treated alloy steel flat head socket cap screws and lock washers with nuts to provide wear resistance against abrasive materials and for safety reasons

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IMPELLER:

The impeller shall be 31½" in diameter and will have four blades, not less than ¾" thick steel. It shall be of welded construction with a back gusset plate not less than 3/16" thick steel and a hub of not less than 4" in diameter. The impeller shall be mounted to a 2¼" P.T.O. shaft. Suction capability shall be not less than 24,000 C.F.M.

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IMPELLER TO IMPELLER HOUSING EFFICIENCY:

The above highly efficient impeller housing shall be designed with no less than ½" clearance from the tip of the impeller to the inside of housing to prevent excessive material build-up in the impeller housing and help reduce impeller and impeller housing damage from foreign objects. IMPELLER AND IMPELLER HOUSING THAT DO NOT MEET THE ABOVE RATIO MAY NOT BE ACCEPTED.

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INTAKE HOSE AND BOOM SUPPORT:

The intake hose shall be 10 feet long and 18" in diameter. It shall be fabricated of thermoplastic urethane and reinforced with a heat-treated steel coil and outer polyethylene wear strip. (Hose weighing not more than 4.5 pounds per foot,)

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YES	NO
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The pick-up end of hose shall be fitted with an 18" round intake nozzle constructed of 16-gauge steel.

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The nozzle shall have a semi-circular 1" O.D. tube handle grip.

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The boom pivots on two 1½" diameter flanges bearing over a 10-foot wide path.

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The hose support boom is spring-loaded with its pivot position over the center of the intake hose for optimum ease in operation.

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Boom to be 1 1/4" tubular construction and 1/8" wall thickness and shall be not more than 6 feet in length capable of supporting a weight of 175 pounds.

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THE INTAKE SECTION:

The intake section shall be located in the rear to facilitate left or right hand side vacuuming.

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THE DISCHARGE SECTION:

The discharge section shall be 16" square.

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The discharge section shall be telescopic in design so that additional sections may be added.

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A straight section and curved right angle section shall be supplied. At the end of the curved section there shall be a square to round.

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A 5-foot length of 16" flexible metal hose shall be supplied to enter the truck box

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YES	NO
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Standard discharge height is 108" to the center of the discharge tube.

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TRAILER SECTION:

The box type engine base shall be designed to support the trailer axle.

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Axle to be no less than 6,000 pound Torflex Axle with steel rims and the tires shall be L.T. 700/15, 10 ply or equivalent.

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The A-frame type hitch shall be unitized design throughout with the outer frame channels formed 3" x 7½", 9-gauge steel.

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The center channel is formed 5" x 7½"

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The A-frame tongue apron shall be continuously welded and gusseted to the engine base.

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Towing bar shall be a 4" channel ¼" thick, adjustable from 25" to 34" in height with a 3" Lunette eye hitch.

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The A-frame hitch shall also have a front adjustable jack with a 5" caster wheel.

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The rear of the unit shall have a drop stand to support the unit when it is not coupled to the tow truck.

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Fenders, safety chains, stop & taillights and front nozzle holders shall be supplied.

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The unit shall also have electric brakes with safety breakaway kit.

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YES	NO
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PAINT:

The unit shall be thoroughly cleaned and given two coats of rust inhibitor primer and two coats of finish paint. The axle and rims shall be painted black and the engine (power unit) shall be painted engine manufacturer standard color.

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FUEL GAUGE:

A fuel gauge shall be attached to unit.

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HYDRAULIC BOOM (up/down)

The intake hose and boom shall be controlled hydraulically and have the capability to be locked in place.

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A hydraulic remote for operator walking with pickup hose.

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DELIVERY:

Equipment shall be furnished fully serviced and assembled.

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Operators and parts manual shall be supplied covering the entire leaf mulcher / vacuum.

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WARRANTY:

A one year warranty covering the leaf mulcher / vacuum for materials and workmanship is to be included in the bid price.

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Distributor or representative shall have a service and parts facility within 100 miles of the end user's garage.

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YES

NO

The distributor facility must have adequate stock of parts and mechanics trained to work on their leaf mulcher / vacuums.

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Please Indicate Location of Service / Parts Facility:
