

Street / Sanitation / Recycling
705 South River Road
West Lafayette, IN 47906
Phone: (765) 775-5242
Fax: (765) 746-1302

September 14, 2016

Dear Sir:

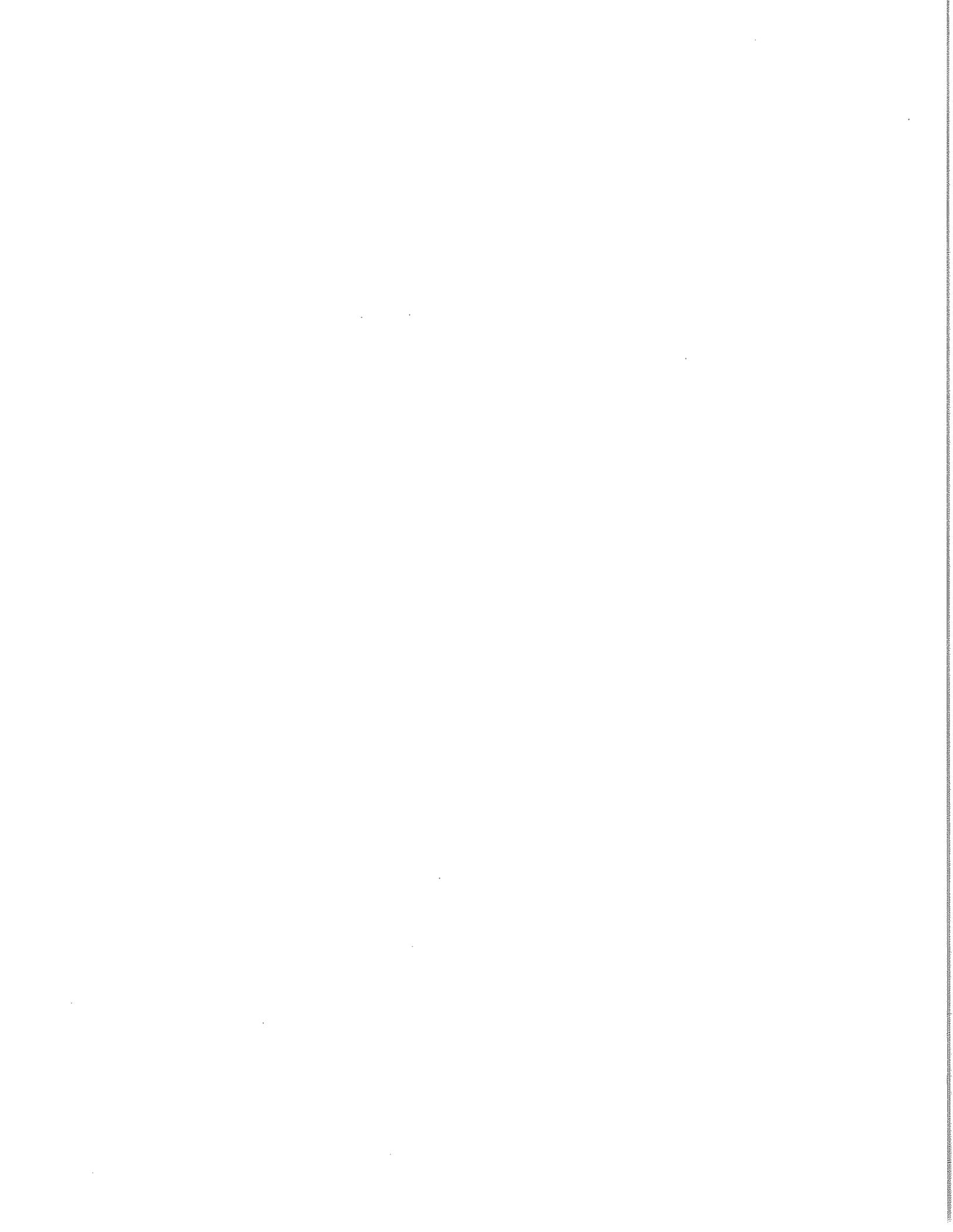
The West Lafayette Street Department is requesting sealed bids for one self-propelled truck mounted hydraulically driven boom-type mower meeting the enclosed specifications.

SEALED BIDS will be received until 8:30 a.m. (local time) on October 11, 2016 at the Office of the Clerk, 222 N. Chauncey Ave., West Lafayette, Indiana 47906. Each dealer will submit his bid upon forms provided in the bid packet and enclosed in a sealed envelope marked, "Boom Mower". At 8:30 a.m., all bids will be taken to the Board of Works meeting at the Morton Community Center, Multi-Purpose Room, 222 N. Chauncey Ave., West Lafayette, and there be publicly opened and read aloud.

Dealer will attach any explanations and/or detail of specifications provided on a separate page(s).

Respectfully,
Tonya Vanaman

Tonya Vanaman
Receptionist/Office Assistant



FORM 1 OF 3
CITY OF WEST LAFAYETTE

General: Specifications for the City of West Lafayette Street Department for a truck mounted hydraulically driven boom-type mower, which shall mow forward and right of the right rear tire and extend by means of a two-section boom. (Reference within the specs to a brand name or manufacturer's name or specs is for reference only). Equipment that is bid pursuant to these specifications shall be of equal quality and size, or greater, to those referenced, and are subject to approval by the purchaser. These are minimum specifications. Bidder must address compliance section. If any part of an item that is not in compliance, that item must be marked "no"; an explanation can be provided on a separate sheet with the benefits of that item to the city. A no response will not automatically exclude a bid. It will be up to the purchasers discretion on what items will be termed equal. Original copies of equipment literature must be provided with the bid. Mower shall meet SAE J232, J284, J990, J1065. ANSI/SAE - 201.4, S203.13, S205.2, S279.12, S350, EP363.1, S283, S493, ASTM: A370. Submit Compliance report signed by a Registered Professional Engineer

Minimum Specifications for Equipment	Compliance
Auxiliary Engine:	
85 HP turbo diesel, 4 cylinders, Tier III /Stage IIIA emissions rated	<input type="checkbox"/> Yes <input type="checkbox"/> No
Shall have spin on full flow oil filter and dry type air cleaner	<input type="checkbox"/> Yes <input type="checkbox"/> No
Engine mounted front and left side of bed	<input type="checkbox"/> Yes <input type="checkbox"/> No
Cab mounted, center control console	<input type="checkbox"/> Yes <input type="checkbox"/> No
Electronic adjustable throttle	<input type="checkbox"/> Yes <input type="checkbox"/> No
Cab mounted hour meter, hydraulic oil temp, trans temp, tachometer, water temp, oil pressure gauges, with high pressure filter light	<input type="checkbox"/> Yes <input type="checkbox"/> No
Warning lights and auto shut-down for, low coolant, low oil, high coolant temp	<input type="checkbox"/> Yes <input type="checkbox"/> No
For any offer to be considered, all items/features must be of a standard production model, not modified for bid purposes.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Operator Safety Features:	
Right hand door and boom shut-off switch	<input type="checkbox"/> Yes <input type="checkbox"/> No
Mower shall have 7 second shut down, switch activated	<input type="checkbox"/> Yes <input type="checkbox"/> No
Brush guard over cab extending over windshield	<input type="checkbox"/> Yes <input type="checkbox"/> No
Protective screen shall be attached to the right hand operator door and shall be constructed of 3/8" polycarbonate upper and 110,000 yield steel lower	<input type="checkbox"/> Yes <input type="checkbox"/> No
Cab controlled air suspension to facilitate stability while in operation and cushion air ride when traveling on highway	<input type="checkbox"/> Yes <input type="checkbox"/> No
Joystick Hydraulic Control System:	
Hydraulic mower control system shall use fused circuits and sealed control panel	<input type="checkbox"/> Yes <input type="checkbox"/> No
Cutter head mower on/off switch with safety start device and indicator light	<input type="checkbox"/> Yes <input type="checkbox"/> No
Master on/off switch shall disable joystick and mower drive	<input type="checkbox"/> Yes <input type="checkbox"/> No
Travel lock shall use hydraulic pressure to hold boom to bed in transport position with 800 PSI of force	<input type="checkbox"/> Yes <input type="checkbox"/> No
Lift control valve shall be five spool, electro-hydraulic proportional, port pressure relieved (9), single lever, four-axis, joystick with two proportional thumb rollers	<input type="checkbox"/> Yes <input type="checkbox"/> No
Manual over-rides for joystick functions shall be built into lift valve	<input type="checkbox"/> Yes <input type="checkbox"/> No
Pressure filter shall be installed before inlet of lift valve, indicator light shall be at operator's position.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Boom Lift:	
Shall have, two (2) double acting hydraulic cylinders, one single acting cylinder and nitrogen accumulator. Hydraulically operated horizontal maneuvering	<input type="checkbox"/> Yes <input type="checkbox"/> No

FORM 1 OF 3
CITY OF WEST LAFAYETTE

cylinder with limited reliefs, swings boom 105 degrees. All cylinders shall be of the welded type, and mounted on top of booms. Cutter head shall rotate 180 degrees around outer boom	
Outer boom cylinder shall have replaceable, spherical bearing on rod end	<input type="checkbox"/> Yes <input type="checkbox"/> No
Boom Swivel:	
Swivel base plate shall have integral swing cylinder attachment clevis, and constructed of not less than 1" 100,000 PSI yield steel. Vertical cylinder base mounting shall be constructed of 1" 100,000 PSI yield steel with greaseable spring steel bushing. Vertical king post shall be supported by a greaseless bushing with nitrided pin	<input type="checkbox"/> Yes <input type="checkbox"/> No
All cylinder mountings shall have replaceable, greaseable, hardened steel bushings	<input type="checkbox"/> Yes <input type="checkbox"/> No
Boom Arms:	
Cutting assembly shall have the following specifications: Reach Up of 19' 10" , Reach Down of 12' 5" Below Ground Level and Reach Out of 21' (Horizontal w/ 50" Rotary Cutter Head). Reach shall be measured from truck centerline and may vary depending upon truck and/or tire configuration.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Inner boom arm shall be horizontal line bored and supported by replaceable, Garlock bearings and hardened pin	<input type="checkbox"/> Yes <input type="checkbox"/> No
Inner boom arm shall be constructed of 70,000 PSI, 8" x 6" x 1/4" steel tube, reinforced w/100,000 PSI steel.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Sectional properties: Torsional 74.9" 4, Horizontal 60.1" 4, Vertical 38.6" 4	<input type="checkbox"/> Yes <input type="checkbox"/> No
Inner boom arm shall be supported by 37 sq.in. hardened plain bearing	<input type="checkbox"/> Yes <input type="checkbox"/> No
Outer boom arm shall be constructed of 70,000 PSI, 6" x 4" x 1/4" steel tube, reinforced w/50,000 PSI steel.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Sectional properties: Torsional 25.0" 4, Horizontal 23.8" 4, Vertical 23.8" 4	<input type="checkbox"/> Yes <input type="checkbox"/> No
Hydraulic Drive System:	
Reservoir shall be internally treated against corrosion with industry approved chemical agent at time of manufacture. Reservoir shall have a minimum capacity of 43 gallons. Equipped with in tank absolute filter rated at 75 GPM, 10 micron, 200 Beta element, with restriction gauge. Reservoir suction and return outlets shall be equipped with ball valves	<input type="checkbox"/> Yes <input type="checkbox"/> No
A hydraulic cooler shall be rated at 15,000 BTU's per hour @ 50 F ETD (entering temperature differential)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Hydraulic pressure connections shall meet SAE o-ring and JIC standards	<input type="checkbox"/> Yes <input type="checkbox"/> No
Suction line shall be an unrestricted 1-1/4" inside diameter.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Pressure and return hoses shall be 1" inside diameter. Hoses shall have a burst pressure 4 times working pressure	<input type="checkbox"/> Yes <input type="checkbox"/> No
Pressure, return and lift system steel hydraulic lines shall be mounted at rear of boom arms	<input type="checkbox"/> Yes <input type="checkbox"/> No
Pump drive shaft shall be direct connected to the auxiliary engine	<input type="checkbox"/> Yes <input type="checkbox"/> No
Pump shall be gear type with cast steel housing and steel gears.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Hydraulic drive system shall produce no less than 3,250 PSI, 45 GPM at 2,400 RPM	<input type="checkbox"/> Yes <input type="checkbox"/> No
Mower drive control valve shall not cause restriction while cutter head in operation. Valve to stop cutting assembly in maximum 7 seconds while operating from full rpm.	<input type="checkbox"/> Yes <input type="checkbox"/> No

FORM 1 OF 3
CITY OF WEST LAFAYETTE

Cutting Head:	
Shall be constructed of 110,000 PSI yield steel 1/8" deck and 1/4" thick side walls and four (4) trapezoidal formed 50,000 PSI steel reinforcements. Top to be continuously welded for strength and eliminate debris from collecting under reinforcements.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Shall have full length replaceable abrasion resistant skid shoes.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Rubber safety shield shall be bolted to back side of deck.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Safety shield will operate hydraulically from operator's position and shall extend below the cutting plane.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Safety door shall be constructed of Domex Steel and meets all ANSI / SAE tests for rotary mowers.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Head shall weigh no less than 785 lbs.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Head shall have combined rotation of 305 degrees and 50" of actual cut.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Cutter head pivot assembly shall be fully welded and integrated into the cutter head design.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Spindle:	
Spindle shall be one piece forged and heat treated. Minimum 131,000 PSI yield alloy steel with 7-1/4" O.D. and 10-7/8" overall length with a 2-5/8" I.D. lower bearing and 2" upper bearing.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Spindle shall be attached to hydraulic motor by a flexible coupler and dust cover.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Spindle assembly shall have minimum torsional shear capacity of 4174 ft-lb torque, 231,000 PSI yield rotational strength and distribute load over 169 sq. inch area.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Spindle shall have stationary wire wrap protection.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Spindle shall be mounted in sealed, double tapered roller bearing, grease reservoir with an o-ring plug and port to drain old grease. Assembly shall be filled with synthetic grease.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Spindle shall rotate 19,000 FPM blade tip speed at rated tractor RPM.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Spindle drive area shall be enclosed and fully protected from outside debris entering into the drive coupler.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Knife Carrier:	
Shall be one piece, laser cut dual spin formed, offset center disc, with a diameter of 31". Dynamically balanced (per ISO quality G2.5 spec), 50,000 PSI yield steel dish, 5/8" x 28-5/8" diameter with a 40 degree formed outer edge extending out 3-5/8" and attached to spindle with six (6) 5/8" x 1-3/4", grade 8 bolts.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Dish shall have no structural welds.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Shall accommodate two (2) three (3) four (4) or six (6) 5/8" x 5 x 18-3/4", 360 degree swinging, grass knives.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Knives shall be attached by a 1-1/8" x 3-1/4" shouldered and keyed bolts, backed by T-1 spacers and hex lock nuts.	<input type="checkbox"/> Yes <input type="checkbox"/> No
All knives to be shot peened with a chamfered bolt hole.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Removable Bed:	
Bed shall be constructed of 8" x 2" x 5/16" channel perimeter with 3" x 8" x 1/4" rectangular steel tubing for cross support, covered by 1/4" steel diamond plate.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Truck bed shall be removable to allow truck chassis to be utilized for various needs and seasons	<input type="checkbox"/> Yes <input type="checkbox"/> No

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CITY OF WEST LAFAYETTE

Bed shall be disconnected by removal of direct side fasteners into truck frame and lifted by means of hoist or jacks	<input type="checkbox"/> Yes <input type="checkbox"/> No
Removal shall be aided with weather proof twist type quick disconnects between cab and bed for electronics.	<input type="checkbox"/> Yes <input type="checkbox"/> No
The bed shall be integral with auxiliary engine, hydraulic reservoir, mower mount, and brush guard.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Bed shall have lift pockets for ease in removal	<input type="checkbox"/> Yes <input type="checkbox"/> No
Additional Bed:	
An additional standard platform bed shall be provided to replace the mower mount bed during non-use seasons.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Additional Items:	
Chassis (provided by City of West Lafayette) shall have complete right hand power steering system installed by Monroe Truck Equipment, Monroe, WI.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Paint:	
Color to be manufacturer's standard for mower	<input type="checkbox"/> Yes <input type="checkbox"/> No
Platform beds to be painted black	<input type="checkbox"/> Yes <input type="checkbox"/> No
Warranty:	
Basic: 12 months for complete mowing unit and bed	<input type="checkbox"/> Yes <input type="checkbox"/> No
Warranty period to begin on delivery date of complete unit to the City.	<input type="checkbox"/> Yes <input type="checkbox"/> No
All Equipment Listed:	
Manufacturer shall provide caution labels, decals and any warnings deemed necessary.	<input type="checkbox"/> Yes <input type="checkbox"/> No
One set of operator's manuals must be furnished for truck, engine, and transmission at time of delivery of unit.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Additional Attachments:	
Snow Panther snow blower attachment with all standard items	<input type="checkbox"/> Yes <input type="checkbox"/> No
Wester Wide Out snow plow installed on chassis	<input type="checkbox"/> Yes <input type="checkbox"/> No

Bidder: _____
 Company

Signature: _____

Title: _____

Date: _____

**City of West Lafayette
Truck Mounted Boom Mower**

**Bid FORM 2 of 3
Bid PRICE SHEET**

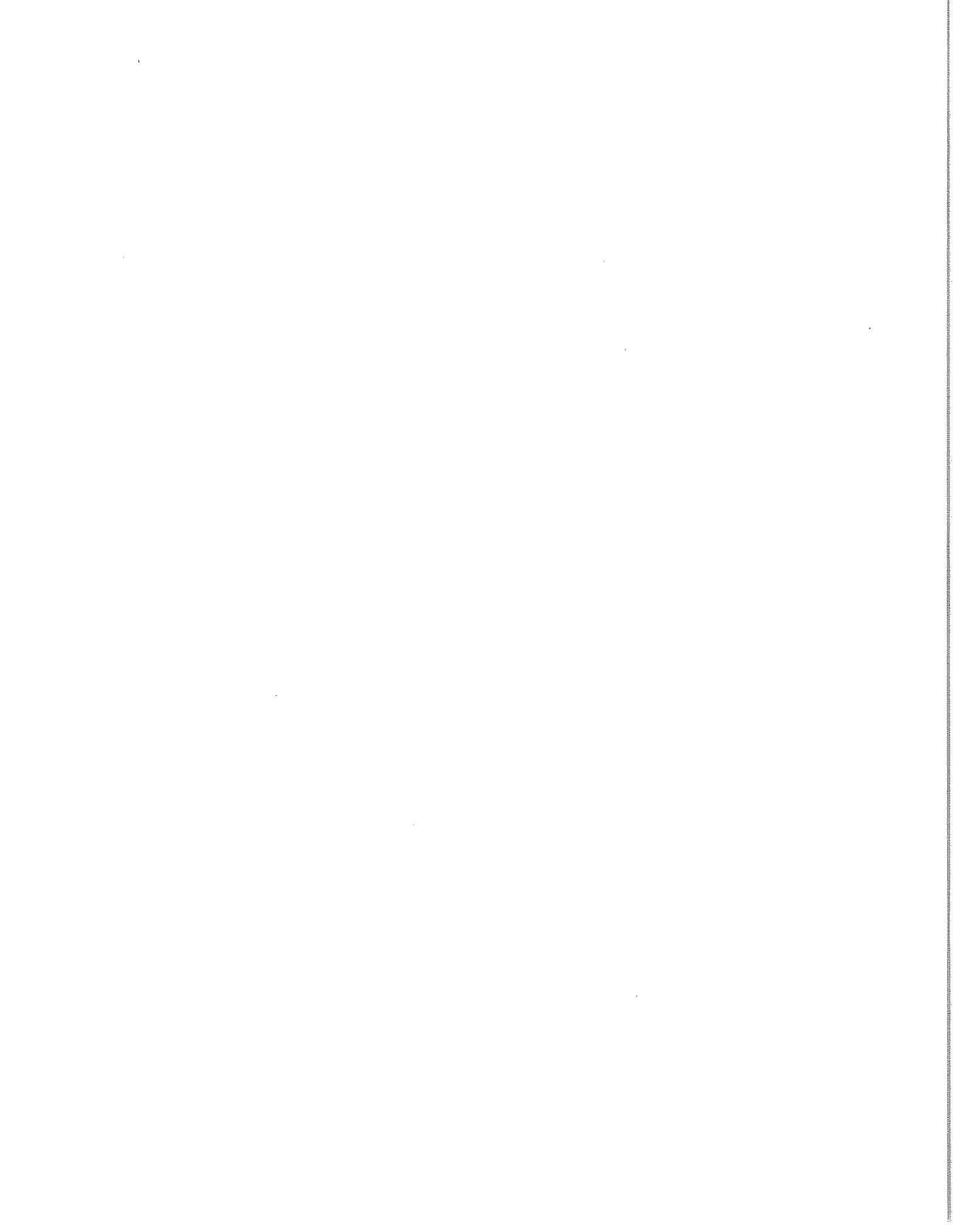
Make & Model _____

ITEM	UNIT PRICE	QUANTITY	TOTAL AMOUNT
Base Price			
Option (if applicable) Costs			
Discounts or Other Price Adjustments			
Destination Charges			
Dealer Preparation Charges			
Any Additional Charges			
Trade-In Allowance			
TOTAL BID			

Bidder: _____
 Company

Signature: _____ Title: _____
 Name

Date: _____



Form 3 of 3

CITY OF WEST LAFAYETTE
NON-COLLUSION AFFIRMATION

STATE OF INDIANA

COUNTY OF: _____ } SS:

The undersigned offeror or agent, duly swears, under penalties for perjury, that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be offered by any person nor to prevent any person from making an offer nor to induce anyone to refrain from making an offer and that this offer is made without reference to any other offer.

Offeror (Firm)

Signature of Offeror or Agent

Before me, a Notary Public in and for said County and State personally appeared, _____, who acknowledged the truth of the statements in the foregoing affirmation on this _____ day of _____, 20 ____.

My Commission Expires:

(written)

Notary Public

(printed)

County of Residence: _____

