TOWN OF MUNSTER

NOTICE TO BIDDERS

Notice is hereby given that the Town Council of the Town of Munster, Lake County, Indiana, will receive sealed bids up to 2:00 pm on Tuesday, October 20, 2009 in the Office of the Clerk-Treasurer Office, Munster Town Hall, 1005 Ridge Road, Indiana, at which time the bids will be publicly opened and read aloud, for the following equipment:

ONE (1) THREE WHEEL MECHANICAL STREET SWEEPER

Bid specifications can be picked up at the Town of Munster, Public Works Department, 1005 Ridge Road, Munster, Indiana, Monday through Friday, 8:00 am to 4:30 pm or you may print the bid from the Town of Munster website, www.munster.org.

Bidders shall execute their bids on forms prescribed by the State Board of Accounts of the State of Indiana, together with a Non-Collusion Affidavit and a bond or certified check in the amount of ten percent (10%) of the bid, payable to the Town of Munster, Indiana.

All bids shall be sealed in an envelope, addressed to the Clerk-Treasurer's Office, Town of Munster, 1005 Ridge Road, Munster, Indiana 46321. The name of the bidder and the name of the project "STREET SWEEPER" shall be clearly marked on the outside of the envelope.

The Town Council reserves the right to reject any and all bids, and to waive any informality.

Dated this 22th day of September, 2009.

TOWN COUNCIL OF
THE TOWN OF MUNSTER,
LAKE COUNTY, INDIANA

By:_____
Michael Mellon, President

ATTEST:

_____
David F. Shafer, Clerk-Treasurer

SPECIFICATIONS: Three Wheel Mechanical Street Sweeper.

The sweeper to be furnished under this proposal shall be a three wheel mechanical type, front wheel steer, single engine, high dump hopper, full hydrostatic drive, 5.6 cubic yard hopper capacity with dual gutter broom system. It shall be the manufacturer's latest model and design. Current model demonstrators, that meet specifications, will be considered. Demonstrators being bid must have less than 100 hours of operation. These specifications shall be regarded as MINIMUM. Bidders must furnish all descriptive literature, manufacturer's compliance certificates and all other necessary data on the equipment proposed as required in the specification. Bidder must answer **YES** or **NO** to each specification line item except where asked to state specific data. Failure to answer correctly, or failure to respond will deem your bid as non-responsive. All line items with a **"NO"** response, shall be explained in detail on the "Exceptions to Bid Specification" pages provided at the end of this document.
(This specification contains fourteen pages and twenty-seven clauses.)

1. HOPPER	**YES / NO**
1.1 Hopper capacity shall be 5.6 cubic yards.	_____
1.2 Hopper shall have a lifting capacity of 12,000 lbs.	_____
1.3 Hopper rear and side panels shall be constructed of 12 GA. ribbed steel for strength and the floor and front aperture to elevator panels shall be constructed of grade **304 stainless steel**.	_____
1.4 Hopper dump system shall have a safety lockout system to prevent any forward or reverse movement of the sweeper with hopper in the raised position.	_____
1.5 Hopper shall be raised and lowered by means of two 4" diameter hydraulic cylinders.	_____
1.6 Hopper shall have a load discharge door which will open automatically when hopper is being raised and close automatically when hopper is being lowered.	_____
1.7 Hopper dump control shall be by means of a single cab dash mounted rocker switch.	_____
1.8 A seal shall be provided between the hopper and the elevator to prevent dirt and dust emission.	_____
1.9 Hopper shall be a high dumping type, 114" minimum.	_____

2. CAB

2.1 Cab shall be fully enclosed and of all steel construction. _____

2.2 Cab shall be mounted front and center of sweeper for safety and unobstructed, panoramic, operator vision. _____

2.3 Cab shall be attached to chassis frame by means of rubber mounts. _____

2.4 Cab shall be dust and weather sealed and be equipped with factory installed air conditioning, heater and defroster. _____

2.5 Grab handles shall be supplied on the front of the cab. _____

2.6 Cab interior shall be sound suppressed and insulated with an in cab noise level not exceeding 83 dBA. _____

2.7 Cab shall be furnished with two seats, one being the primary operator's station and the other for the purpose of operator training. _____

2.8 Operator's seat shall be single bucket suspension type with cloth upholstery, dual arm rests, and shock absorbers. _____

2.9 Both operator's seat and "buddy" seat shall have three point safety seat belts with shoulder and lap harnesses. _____

2.10 For operator safety and comfort, the front of seat to the front wall of cab shall be a minimum of 23", maximum 31". _____

2.11 For operator safety and comfort, the cab rear wall to cab front wall shall be a minimum of 56 ½". _____

2.12 For operator safety and comfort, the back seat to center line of steering column shall be a minimum of 17", maximum 31". _____

2.13 Cab shall have a single lever operated tilt and telescoping steering wheel. _____

2.14 Cab shall have sliding windows on both right and left sides. _____

2.15 Cab shall have adequate storage space for driver's tool kit, lunch box, hard hat, coffee cup, coat etc. _____

2.16 Cab shall have dual west coast mirrors with extended frames and 12" convex sweeping mirrors on both sides. Sweepers that require a seat change during operation, must have remote power adjustable mirrors. _____

2.17 Cab shall have tinted safety glass throughout and a single full width tinted sun visor. _____

2.18 Cab shall be furnished with a full width interior ceiling shelf to accommodate a radio, documents and other equipment. _____

3. ENGINE

3.1 Sweeper shall be powered by a single John Deere 4045T 4-cylinder, turbo charged four cycle diesel engine with a minimum horsepower rating of 115 HP @ 2500 engine RPM. Cubic inch displacement shall be 276 CID and net torque rating of 274 ft. lbs. at 1400 RPM or equal. All sweeper functions and drive systems shall be powered by this engine. _____

3.2 Engine shall have a two stage dry type air cleaner with safety element and restriction indicator. Plus TURBO II pre-cleaner or equal. _____

3.3 Engine shall be water cooled by aid of a radiator of swing-away design. _____

3.4 Antifreeze protection for engine shall be not less than minus 34 degrees Fahrenheit. _____

3.5 Engine shall automatically shut down and dispose itself from re-starting if any attempt is made to unlatch radiator away from its locked position. _____

3.6 Engine shall be protected against damage by means of an anti-crank device which will prevent re-engagement of starter while the engine is running. _____

3.7 Engine shall be fitted with a pusher fan with special "ejector" blades for centrifugal ejection of ambient dust particles from the engine compartment _____

4. TRACTION SYSTEM

4.1 Traction system shall be fully hydrostatic and capable of variable speeds up to 23 MPH. _____

4.2 Direction and speed selection shall be controlled by means of a dash mounted four position quadrant shifter and vernier throttle control with integral quick release feature . _____

4.3 Engine mounted traction pump shall be variable displacement axial piston type. _____

4.4 Broom and elevator speed shall be independent of vehicle speed _____

4.5 The traction drive system shall be capable of being shifted from “LOW” to “HIGH” while the sweeper is in motion. _____

4.6 The traction pump and motors shall be relief valve protected. _____

4.7 Operational road speed control shall be by means of a single automotive type foot pedal. _____

4.8 The traction system shall provide braking assistance when control pedal is released. _____

4.9 The rear wheel motor and torque hub drive system shall be a carrier beam type with rubber spring and torque rod suspension. _____

5. ELEVATOR

5.1 The elevator shall be 7 flight configuration with continuously molded rubber belts and replaceable corded rubber squeegee tips. _____

5.2 Elevator sprockets shall be of split flange type to enable replacement without having to remove belts and shafts. _____

5.3 Elevator sprockets shall have hardened teeth for longevity. _____

5.4 Elevator flight bars shall be constructed of 2” x ½” aluminum angle. _____

5.5 Elevator speed shall be variable and reversible. _____

5.6 Elevator belt shafts shall be of split design to facilitate easy belt replacement. _____

5.7 Elevator motor drive shall be direct hydraulic (no chain or sprockets) with relief cartridge protection. _____

5.8 Elevator shall have an adjustable floor and deflector system to ensure even hopper loading and prevent back spilling. _____

6. HYDRAULIC SYSTEM

6.1 Hydraulic oil reservoir system shall consist of two frame mounted tower tanks, each with an oil capacity of 18 gallons. The residual oil capacity shall be an additional 5 gallons for a total system capacity of 41 gallons. _____

6.2 To provide dependable performance and reduce maintenance costs, the hydraulic system MUST include the following filtration elements:

6.2.(1) A 40 micron tank fill neck strainer in each tank _____

6.2.(2) Each tank MUST have its own suction strainer rated at a minimum 100 mesh. _____

6.2.(3) A suction filter with restriction gauge MUST be supplied with a minimum rating of 10 microns. _____

6.2.(4) A high pressure filter complete with restriction status indicator shall be supplied. _____

6.2.(5) A water / hydraulic oil separator / filter shall be installed in the return circuit. _____

6.3 Each hydraulic tank shall be provided with a 5 psi. pressurized fill cap. _____

6.4 Each hydraulic tank shall have rear mounted, accessible drain plugs. _____

6.5 Hydraulic manifolds, valves and solenoids shall be mounted in a separate dedicated, enclosed compartment, for protection and ease of access. _____

7. PICKUP BROOM

7.1 Pickup broom shall be 32” diameter and 58” long minimum. _____

7.2 Pickup broom drive shall be direct hydraulic, variable speed with relief valve protection _____

7.3 Pickup broom shall be hydraulically raised and lowered by a single, in cab dash mounted rocker switch _____

7.4 Pickup broom shall be self adjusting for pressure and wear _____

7.5 Pickup broom motor shall have a shaft and seal protection device which will prevent the ingress of damaging wire, cassette tape, fishing line, etc. _____

8. GUTTER BROOMS

8.1 Gutter brooms (right & left sides) shall be a minimum of 47" in diameter and each shall contain twelve snap-in "Tuff Grip" disposable steel tine segments. _____

8.2 Gutter broom drive shall be completely hydraulic and relief valve protected. _____

8.3 Gutter brooms shall be hydraulically lowered and raised by means of an in-cab, dash mounted rocker switch _____

8.4 Provisions shall be made for gutter broom pressure adjustment by means of independent dash mounted switch gauges. _____

8.5 Gutter brooms shall be free floating both horizontally and vertically and shall be impact protected _____

8.6 Gutter broom curb angle adjustment shall be by simple multi hole and anchor pin arrangement. Adjustment shall be "wrench free". _____

8.7 Gutter broom support towers shall have adjustable travel "stop" mechanisms to limit inward travel of gutter brooms _____

8.8 Gutter broom motors shall have a shaft and seal protection device which will prevent the ingress of damaging wire, cassette tape, fishing line, etc. _____

9. WATER SYSTEM

9.1 Water tank capacity shall be 230 gallons minimum _____

9.2 Water tank shall be constructed of cross-linked corrosion proof material. _____

9.3 A low water indicator shall be dash mounted in cab _____

9.4 Individual, adjustable, variable flow, water delivery valves shall be installed in the sweeper cab to allow operator to control water sprays over main broom and both gutter brooms _____

9.5 Twin electric diaphragm pumps with total output rating of 4 gallons per minute @ 35 PSI shall be supplied. _____

9.6 An in line 20 mesh screen type filter shall be installed in an accessible area and shall be capable of being checked, cleaned or changed without the use of tools _____

9.7 A 15' hydrant hose, coupler and wrench shall be supplied. _____

9.8 A high/low water flow switch shall be installed in the cab for additional water flow control _____

10. FUEL SYSTEM

10.1 Vehicle fuel system must include a 35 gallon diesel fuel tank.(minimum) _____

10.2 Fuel system must incorporate a fuel and water separator with built in primary fuel filter _____

11. DIRT SHOES

11.1 Dirt shoes shall be of parallel arm design, polyethylene construction and be capable of floating over uneven surfaces, railroad tracks, raised manhole covers, etc. _____

12. BRAKES

12.1 Service brakes shall be internal expanding shoe and drum

type on rear wheels. _____

12.2 Parking brake shall be mechanically applied and hydraulically released internal expanding type _____

12.3 Parking brake shall be automatically applied when sweeper is placed in “PARK” position _____

12.4 Brake master cylinder shall have an auxiliary boost feature _____

12.5 Standard braking system shall be assisted by vehicle’s inherent dynamic braking when control pedal (“GO” Pedal) is released _____

13. STEERING

13.1 Steering shall be hydrostatic type, by means of an engine driven gear pump through a hydraulic cylinder and shall be capable of operation in the event of engine shutdown _____

14. FRONT (STEERING) AXLE / SPINDLE

14.1 Front axle assembly shall be spindle type, with dual wheels and tires. _____

14.2 Front axle configuration shall be such that the standard front steering road wheels shall be not be closer than 40 inches to the curb line when sweeping, to avoid tire damage from broken bottles and other sharp debris. _____

15. FRAME

15.1 Frame shall be constructed of 4 gauge, high strength low alloy steel (ASTM 607 or equivalent) with an RBM rating of 863,700 inch pounds and a minimum yield strength of not less than 50,000 psi _____

15.2 Frame shall be 13” x 3” ‘C’ section channel _____

15.3 Frame shall incorporate front tow points. _____

15.4 A tool/storage compartment shall be built into right rear fender _____

15.5 Frame attached gutter broom towers shall have reinforced cut outs to enable access to lower elevator bearings for ease of maintenance _____

16. ELECTRICAL SYSTEM 12 VOLT

16.1 Battery shall be maintenance free and rated at 900 CCA _____

16.2 A heavy duty 120 amp dust shielded alternator shall be supplied _____

16.3 All electrical connections shall be sealed and heat shrunk with epoxy resin connectors. No-splice wiring between connectors. _____

16.4 A sealed electrical systems locker shall be provided to house all controlling electrical components and protect them from exposure to dirt, moisture, and inclement weather _____

16.5 The system locker shall comprise of a sealed compartment to house both high amperage and low amperage components _____

16.6 All components within the locker shall be easily replaceable with minimum effort _____

16.7 All rocker switches in cab shall be sealed, back lit, and function identified _____

16.8 All electrical system diodes shall be located within the systems locker _____

16.9 A laminated electrical control unit diagram shall be attached to systems locker door for instant easy reference during troubleshooting or repair procedures _____

16.10 Two sealed beam headlights with in-dash high beam indicator shall be standard _____

16.11 Two speed windshield wiper shall be provided _____

16.12 Sweeper shall be supplied with dual LED stop and tail light combinations, dual gutter broom lights, rear license plate light and bracket, back up lights and reflectors, self canceling turn signals with hazard flashers, electrical back up alarm (107 dBA minimum) and hopper dump alarm (107 dBA minimum). _____

16.13 Solenoids for hydraulic manifolds shall be enclosed in rear fender compartment for protection and easy access. _____

16.14 All electrical wiring shall be solid colored, numbered and function coded every 12 “for quick, easy identification purposes _____

17 SWEEPER BODY

17.1 Sweeper body shall have hinged, swing out single latched side panels for simple, easy access to elevator, fuel tank fill and water manifold components _____

17.2 Rear radiator grille and engine cover shall have stainless steel hinges to enhance longevity and eliminate rust. _____

17.3 A heavy duty front bumper shall be supplied. _____

17.4 A rust and corrosion proof front grille shall be supplied. _____

17.5 A two step cab entry ladder with anti-slip, positive grip feature shall be supplied. _____

18. WHEELS AND TIRES

18.1 Front rims shall be 6.75 HC, 10 hole heavy duty steel disc type with 10R 17.5 G load range radial tires _____

18.2 Rear rims shall be disc type 8.25 X 22.5 with 11R 22.5 G load range radial tires. _____

19. SUSPENSION

19.1 A rear drive motor carrier with full rubber spring and torque rod suspension shall be supplied. _____

19.2 Front (steering) axle assembly shall incorporate a weight and load matched ‘Rubber Spring’ and torque rod suspension system. _____

Suspension must be a full suspension, incorporating the entire sweeper. Sweepers that suspend the cab only will be deem non-responsive.

20. CAB DASH & INSTRUMENTS

20.1 An automotive style, anti glare, wrap-around dash with easily removable fascia and instrument panel shall be supplied _____

20.2 All dash mounted equipment including instruments, gauges, switches and display panels shall have extra length wires to permit lifting of dash for internal component access _____

20.3 Dash panel shall have a light emitting diode panel system which will monitor and provide an alert to the following systems: OIL PRESSURE, SWEEPER in PARK, RIGHT HYDRAULIC TANK LEVEL, LEFT HYDRAULIC TANK LEVEL, RIGHT AND LEFT TURN SIGNALS and HIGH BEAM INDICATOR. The panel shall also be capable of accommodating additional monitoring systems if required. _____

20.4 The dash board shall be of low cut design for completely unobstructed vision _____

20.5 The dash panel shall incorporate high flow adjustable side and windshield defrost vents _____

20.6 The side instrument panel shall accommodate all sweeping functions, heating and air conditioning controls _____

21. SWEEPER DIMENSIONS

21.1 Sweeper shall meet the following minimum requirements

21.2 Wheel Base.....…… 116 in. _____

21.3 Turning Radius (Not to exceed).....12.5 ft. _____

21.4 Overall Length (Not to exceed)..……..214 in. _____

21.5 Maximum Height (Not to exceed).....118 in. _____

21.6 Maximum Width (Not to exceed).....… 98 in. _____

21.7 Sweeping Swath.....……125 in. _____

21.8 Maximum Weight/Empty.....……..14,440 lbs _____

22 PAINT

22.1 All sweeper components, including but not limited to, CAB, HOPPER, FRAME, ELEVATOR, BODY PANELS, ENGINE COVER PANELS, BODY FLOOR PANELS, GENERAL BRACKETRY, shall be individually 100% powder coated BEFORE VEHICLE ASSEMBLY to protect the machine from the adversities of weather and the ravages of sweeping environments _____

22.2 Sweeper standard color shall be White _____

23. QUALITY

23.1 ALL fasteners above 1/4" in thread size shall be grade #8 or better. _____

23.2 ALL critical fasteners shall be torqued to manufacturer's quality requirements and a special torque striping paste shall be applied as witness to this procedure _____

23.3 ALL hydraulic hose pressure fittings shall be torqued to manufacturer's requirements and a special torque striping paste shall be applied as witness to this procedure _____

23.4 The sweeper shall be manufactured by a company with an internationally recognized and registered quality system which shall meet or exceed I.S.O. 9001 standards _____

24. WARRANTY

24.1 Sweeper shall carry a one year warranty covering 100% parts and labor with all repairs to be carried out at customer's location. _____

25 MANUALS

25.1 The following documentation shall be supplied upon delivery of unit: _____

a) **Sweeper:** 1-Parts Manuals, 1-Service/Operation Manuals, 1-Operator's Guide _____

b) **Engine**: 1-Engine Users Guide. _____

26. TRAINING

26.1 Operator/mechanic training shall be provided at no charge by dealer at customer's location. _____

27 ADDITIONAL EQUIPMENT TO BE SUPPLIED

26.1 Cab Strobe with Limb Guard _____
26.2 Rear LED Arrow-stik with Limb Guard _____
26.3 AM/FM/CD Stereo _____
26.4 Elevator Flush _____
26.5 Hopper Flush _____
26.6 Automatic Lube System shall lube all daily grease points as specified by the manufacturer's maintenance manual _____

TRADE-IN

Unit #365

One (1) 2003 Johnston Street Sweeper

Mileage – 17,122 Hours – 3,161

To view trade-in, contact Wayne Karrson to make an appointment to see trade-in at 219-836-6976.

EXCEPTIONS TO BID SPECIFICATIONS

Clause #	Explanation

FORM OF THE BID

Company Name _____

Address _____

_____

Phone Number _____

Representative Name _____

Title _____

Price for One (1) Three Wheel Street Sweeper

$_____

Trade-In for Unit #365 $_____

NET PRICE $_____

Number of days for completed unit to be delivered to the Town of Munster, after receiving acceptance from the Town Council: _____ days

Signature _____ Date _____

THE ABOVE AGREES TO HOLD THE ABOVE PRICING FOR NINETY (90) DAYS.

The Town Council reserves the right to reject any and all quotes.