



MONROE COUNTY
R O A D
COMMISSION

840 S. Telegraph Road • Monroe, Michigan 48161 • Phone: (734) 240-5102 • Fax: (734) 240-5101

PROPOSAL

FOR

2017 TANDEM TRUCK WITH ASPHALT DISTRIBUTOR

BID OPENING:

Wednesday, January 4, 2016 at 10:00 a.m.

BOARD OF COUNTY ROAD
COMMISSIONERS OF THE COUNTY OF
MONROE

Paul Iacoangeli, Chairman
Dan Minton, Vice Chairman
Bruce R. Stammer, Jr., Member
Stephen J. Pace, Member
Charles A. Londo, Member

**MONROE COUNTY ROAD COMMISSION
INVITATION TO BID**

Sealed bids will be received by the Board of County Road Commissioners of the County of Monroe until **10:00 a.m.** local time on **Wednesday, January 4, 2017** at their office located at 840 South Telegraph Road, Monroe, Michigan, 48161 for the following:

- LaPlaisance Road Drainage Improvements
- Tandem Truck Chassis with 3,000 Gallon Asphalt Distributor

Bids will be publicly opened and read aloud by the Bid Committee at 10:00 a.m. Proposals may be downloaded from the Road Commission's website at www.mcrc-mi.org/bids.html.

**BOARD OF COUNTY ROAD COMMISSIONERS
OF THE COUNTY OF MONROE, MICHIGAN**

**MONROE COUNTY ROAD COMMISSION
PROPOSAL
2017 TANDEM AXLE CHASSIS WITH 3,000 GALLON ASPHALT DISTRIBUTOR**

TO: The Board of County Road Commissioners of the County of Monroe, Michigan

FOR: 2017 Tandem Axle Chassis with 3000 Gallon Asphalt Distributor

Ladies and Gentlemen:

The undersigned bidder hereby affirms that:

1. The proposal is in all respects fair and without any collusion or fraud.
2. The undersigned agrees to furnish materials at the unit prices stated on the attached bid forms.

Company: _____

Address: _____

City, State, ZIP: _____

Telephone: _____

By: _____

Title: _____

Date: _____

INSTRUCTIONS TO BIDDERS
and
GENERAL CONDITIONS

It is the intent of the Monroe County Road Commission to acquire a Tandem Axle Chassis with 3000 Gallon Asphalt Distributor, model year 2017. By signing each bid, the bidder will deliver all bid equipment to the Monroe County Road Commission complete and ready to operate. This will be a two part bid document. Part A for the truck and chassis and Part B for the asphalt distributor equipment. Bidder may bid on either part A or B or both.

OWNER

The owner of the project is the Board of County Road Commissioners of the County of Monroe, also referred to as the "Board."

BIDDER

The Bidder is one who submits a signed bid with the required documentation directly to the Board at the time and place specified.

BID FORMS

Sealed proposals must be submitted on the bid forms furnished by the Board. The proposal shall be submitted in its entirety with no modifications or changes except as authorized by an addendum and with no pages removed. All proposals must be filled out in ink or typewritten and shall be legibly signed, giving the complete name and address of the Bidder.

All bids must be in a sealed envelope and clearly marked "**Bid for 2017 Tandem Axle Chassis with 3000 Gallon Asphalt Distributor.**"

OPENING OF BIDS

Bids will be received by the Board at 840 S. Telegraph Road, Monroe, Michigan, 48161 until **10:00 a.m.** local time on **Wednesday, January 4, 2017** at which time they will be publicly opened and read aloud.

ACCEPTANCE AND/OR REJECTION OF BIDS

The Board reserves the right to accept, reject and/or modify any or all bids, to waive irregularities therein, and to make the award in any manner deemed to be in the best interest of the Monroe County Road Commission. The Board reserves the right to award Part A and Part B together or separately.

TITLE VI NON-DISCRIMINATION PLAN

The Monroe County Road Commission, in accordance with Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC 2000d-4) and as amended, and the Civil Rights Restoration Act of 1987 (P.L. 100.259) and Title 49, Code of Federal Regulations, Department of federally-assisted programs of the Department of Transportation issues pursuant to such Act, hereby notifies all bidders that it assures that in any contract entered into pursuant to this advertisement, no person shall on the grounds of race, color, religion, national origin, gender, disability, or age be excluded from participation in, be denied benefits of, or otherwise be subjected to discrimination under any program receiving Federal Financial assistance. Additionally, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on grounds of race, color, religion, national origin, gender, disability, or age in consideration for an award.

TAXES

The Monroe County Road Commission is not subject to the Federal Excise Tax or the Michigan State Sales Tax. The Bidder shall not include these taxes in the unit prices quoted.

SPECIFICATIONS

Where specified, the truck, chassis and asphalt distributor equipment shall meet the Monroe County Road Commission's Specifications as described in the bid document.

WARRANTIES, GUARANTEES, SERVICE CONTRACT (S)

Please provide full description of manufacturer and/or dealer warranties and guarantees.

SERVICE MANUALS

Upon delivery of bid equipment, all service and parts manuals must be provided. This includes printed manuals and CD ROM manuals.

SPECIAL EQUIPMENT

The bidder will also include, with the total cost of this bid, all diagnostic software that is available.

ORIENTATION AND TRAINING

Provide complete description for orientation and training to MCRC employees for the operation of the bid equipment. This orientation and training should be complete enough to enable the purchaser to immediately and productively utilize and care for the equipment. Also, please provide an hourly quote for additional post-sale training.

MEETINGS

The Road Commission reserves the right to include pre-build, mid-build and pre-paint inspection meetings at the installers' location. The Road Commission reserves the right to make minor changes for the build/installation of truck equipment.

REFERENCES

Please attach a separate sheet showing the names of at least three companies and/or agencies, which have purchased the bid/specified equipment from your company, along with the address and phone number, and a contact person who utilizes or is knowledgeable about the equipment.

COMMUNICATIONS

Any questions regarding this bid shall be directed to the Monroe County Road Commission's purchasing agent listed below:

Name: Christine Herron
Phone: 734-240-5109
Email: Cherron@mcrc-mi.org

Technical: Matt Purcell
Phone: 734-625-8659

**MONROE COUNTY ROAD COMMISSION
UNIT PRICE CONTRACT
2017 TANDEM AXLE CHASSIS WITH 3,000 GALLON ASPHALT DISTRIBUTOR
PART A and PART B Specifications**

TO: Board of County Road Commissioners of Monroe County, Michigan

The undersigned, having full knowledge of the proposal (Part A and Part B) and specifications for a **2017 Tandem Axle Chassis with 3000 Gallon Asphalt Distributor Equipment** including Bidders' Addenda _____ and the conditions of these Contract Documents, hereby agrees to furnish materials at the unit prices named below:

Company: _____

Address: _____

Phone #: _____

Email: _____

PART A: TRUCK AND CHASSIS SPECIFICATIONS

Bid specifications are based on an International Truck chassis spec. All other competing companies shall be equivalent.

Model Profile 7400 SBA 6X4 (SF625)

APPLICATION: Tar Spreader
MISSION: Requested GVWR: 56000. Cale. GVWR: 56000
DIMENSION: Wheelbase: 205.00, CA: 137.90, Axle to Frame: 100.00
ENGINE, DIESEL: Navistar N9)EPA2010, SCR, 300 HP @ 2000 RPM, 860 lb-ft Torque @ 1200 RPM, 2200 RPM Governed Speed, 300 Peak HP (Max)
TRANSMISSION, AUXILIARY: Fuller AT-1202, 2-Speed with Air Shift Controls
TRANSMISSION, AUTOMATIC: {Allison 3500_RDS_P} 5th Generation Controls; Wide Ratio, 6-Speed, With Double Overdrive; On/Off Hwy; Includes Oil Level Sensor, With PTO Provision, Less Retarder, With 80,000-lb GVW & GCWMax.
CLUTCH: Omit Item (Clutch & Contrl)
AXLE, FRONT NON-DRIVING: {Meritor MFS-16-143A} Wide Track, 1-Beam Type, 16,000-lb Capacity
AXLE, REAR, TANDEM: {Meritor MT-40-14X-4DFR} Single Reduction, 0.433"(11mm) Wall Housing Thickness, 40,000-lb Capacity, R Wheel Ends Gear Ratio: 5.29
CAB: Conventional
TIRE, FRONT: (2) 315/80R22.5 Load Range L HSC1 (CONTINENTAL), 484 rev/mile, 68 MPH, All-Position
TIRE, REAR: (8) 11R22.5 Load Range G HSR2 (CONTINENTAL), 498 rev/mile, 75 MPH, All-Position
SUSPENSION, REAR, AIR, TANDEM: {International} Ride Optimized Suspension (IROS) Heavy Duty; 52" Axle Spacing; 40,000-lb Capacity, 9.25" Ride Height, Includes Heavy Duty Spring Hangers, Crossmembers and Fasteners, With Shock Absorbers
PAINT: Location PEPSI BLUE; HSB907167
CHASSIS SCHEMATIC: N/A

Description

- Base Chassis, Model 7400 SBA 6x4 with 205.00 Wheelbase, 137.90 CA, and 100.00 Axle to Frame
- Tow Hook, Front (2) Frame Mounted
- Frame Rails Heat Treated Alloy Steel (120,000 PSI Yield); 10.250"x3.610"x0.375" (260.4mmx91.7mmx9.5mm); 456.0" (11582mm) Maximum OAL
- Bumper, Front Steel, Swept Back

Includes

- Bumper, Front Powder Coated Gray (Argent) Color
- Wheelbase Range 169" (430cm) through and including 219" (555cm)
- Axle, Front Non-Driving {Meritor MFS-16-143A} Wide Track, I-Beam Type, 16,000 lb capacity

Notes

The following features should be considered when calculating Front GAWR; Front Axle; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires

- Suspension, Front, Spring Parabolic, Taper Leaf; 16,000 lb Capacity; with Shock Absorbers

Includes

- Spring Pins Rubber Bushings, Maintenance Free

Notes

The following features should be considered when calculating Front GAWR; Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.

- Brake System, Air Dual System for Straight Truck Applications

Includes

- Brake Lines Color and Size Coded Nylon
- Drain Valve Twist-Type
- Gauge, Air Pressure (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster
- Parking Brake Control Yellow Knob, Located on Instrument Panel
- Parking Brake Valve for Truck
- Quick Release Valve on Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4
- Slack Adjusters, Front Automatic
- Slack Adjusters, Rear Automatic
- Spring Brake Modulator Valve R-7 for 4x2, SR-7 with relay valve for 6x4

Notes

Rear Axle is limited to 46,000 lb GAWR with Code 04091 Brake System, Air and Standard Rear Air Cam Brakes regardless of Axle/Suspension Ordered.

- Brakes, Front, Air Cam 16.5"x6", includes 24 Sqin Long Stroke Brake Chambers

Notes

The following features should be considered when calculating Front GAWR; Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.

- Drain Valve {Bendix DV-2} Automatic; with Heater; for Air Tank

Includes

- Drain Valve Mounted in Wet Tank
- Air Brake ABS {Bendix AntiLock Brake System} Full Vehicle Control System (4-Channel)
- Air Dryer {Bendix AD-9} with Heater

Includes

Air Dryer Location inside Left Rail, Back of Cab

Brake Chambers, Rear Axle {Bendix EverSure} 30/30 Spring Brake

Description

- BRAKE CHAMBERS, FRONT AXLE (Bendix) 24 SqIn
- BRAKES, REAR, AIR CAMS-Cam; 16.5" x 7.0"; Includes 30/30 Sq.In. Long Stroke Brake Chamber and Spring Actuated Parking Brake

Notes

The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear Special Rating, GAWR; Wheels; Tires.

- AIR COMPRESSOR (Bendix Tu-Flo 550) 13.2 CFM Capacity
- STEERING COLUMN Stationary
- STEERING WHEEL 2-Spoke, 18" Dia., Black
- STEERING GEAR {Sheppard M110} Power
- EXHAUST SYSTEM Switchback Horizontal Aftertreatment Device, Frame Mounted Right Side Under Cab; Includes Single Vertical Tail Pipe, Frame Mounted Right Side Back of Cab
- TAIL PIPE (1) Turnback Type, Non-Bright, for Single Exhaust
- ELECTRICAL SYSTEM 12-Volt, Standard Equipment

Includes

- DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab
- FUSES, ELECTRICAL SAE Blade-Type
- HAZARD SWITCH Push On/Push Off, Located on Top of Steering Column Cover
- HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever
- HEADLIGHTS (2) Sealed Beam, Round, with Chrome Plated Bezels
- JUMP START STUD Located on Positive Terminal of Outermost Battery
- PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light
- STARTER SWITCH Electric, Key Operated
- STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector
- TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature
- WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever
- WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted
- WIRING, CHASSIS Color Coded and Continuously Numbered
- CIGAR LIGHTER Includes Ash Cup
- ALTERNATOR {Leece-Neville AVI160P2013} Brush Type; 12 Volt 160 Amp. Capacity, Pad Mount, With Remote Sense
- BODY BUILDER WIRING Back of Standard Cab at Left Frame or Under Extended or Crew Cab at Left Frame; Includes Sealed Connectors for Tail/Amber Turn/Marker/Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn
- BATTERY SYSTEM {International} Maintenance-Free (2) 12-Volt 1300CCA Total
- RADIO AM/FM/WB/Clock/3MM Auxiliary Input, with Multiple Speakers
- BATTERY DISCONNECT SWITCH {Cole-Hersee 75920-06} 300 Amp; Battery Box Mounted, Disconnects Charging Circuits, Locks with Padlock
- HORN, ELECTRIC Disc Style
- BATTERY BOX Steel With Plastic Cover, 18" Wide, 2, 3, or 4 Battery Capacity, Mounted Left Side Back of Cab

- HORN, AIR Black, Single Trumpet, Air Solenoid Operated
- CLEARANCE/MARKER LIGHTS (5) {Truck Lite) Amber LED Lights, Flush Mounted on Cab or Sunshade
- STARTING MOTOR {Delco Remy 38MT Type 300) 12 Volt; less Thermal Over-Crank Protection INDICATOR, LOW COOLANT LEVEL With Audible Alarm
- CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III With Trip Indicators, Replaces All Fuses Except For 5-Amp Fuses

Description

- TURN SIGNALS, FRONT Includes LED Side Turn Lights Mounted on Fender
- INSULATION, UNDER HOOD for Sound Abatement
- GRILLE Stationary, Chrome
- INSULATION, SPLASH PANELS for Sound Abatement
- FRONT END Tilting, Fiberglass, With Three Piece Construction; for WorkStar
- PAINT SCHEMATIC, PT-1 Single Color, Design 100

Includes

- PAINT SCHEMATIC ID LETTERS "GN"
- PAINT TYPE Base Coat/Clear Coat, 1-2 Tone
- VEHICLE REGISTRATION IDENTITY ID for 49 States, Excluding California
- CLUTCH Omit Item (Clutch & Control)
- ANTI-FREEZE Red, Extended Life Coolant; To -40 Degrees F/-40 Degrees C, Freeze Protection
- ENGINE, DIESEL {Navistar N9} EPA 2010, SCR, 300 HP @2000 RPM, 860 lb-ft Torque@ 1200 RPM, 2200 RPM Governed Speed, 300 Peak HP (MAX)

Includes

- AIR COMPRESSOR AIR SUPPLY LINE Naturally-Aspirated (Air Brake Chassis Only)
- COLD STARTING EQUIPMENT Intake Manifold Electric Grid Heater with Engine ECM Control
- CRUISE CONTROL Electronic; Controls Integral to Steering Wheel
- ENGINE OIL DRAIN PLUG Magnetic
- ENGINE SHUTDOWN Electric, Key Operated
- FUEL FILTER Included with Fuel/Water Separator
- FUEUWATER SEPARATOR Fuel/Water Separator and Fuel Filter in a Single Assembly; With Water-in-Fuel Sensor; Engine Mounted
- GOVERNOR Electronic
- OIL FILTER, ENGINE Spin-On Type
- WET TYPE CYLINDER SLEEVES
- FAN DRIVE {Horton Drivemaster Polar Extreme} Direct Drive Type, Two Speed, With Residual Torque Device for Disengaged Fan Speed

Includes

- FAN Nylon
- RADIATOR Aluminum, Cross Flow, Series System; 1228 Sqn Core and 648 Sqn Charge Air Cooler FEDERAL EMISSIONS {Navistar N9 & N10} EPA, OBD and GHG Certified for Calendar Year 2016
- AIR CLEANER Single Element

Includes

- GAUGE,AIRCLEANERRESTRICTIONAirCleanerMounted
- THROTTLE, HAND CONTROL Engine Speed Control for PTO; Electronic, Mobile, Variable Speed; {Range 2 to 20 MPH) Mounted on Steering Wheel
- ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO Controls; With Ignition Switch Control for MaxxFace and Navistar post 2007 Emissions Electronic Engines
- EMISSION COMPLIANCE Federal, Does Not Comply With California Clean Air Idle Regulations
- TRANSMISSION, AUXILIARY {Fuller AT-1202) 2-Speed With Air Shift Controls

- TRANSMISSION, AUTOMATIC {Allison 3500_RDS_P} 5th Generation Controls; Wide Ratio, 6-Speed, With Double Overdrive; On/Off Hwy; Includes Oil Level Sensor, With PTO Provision, Less Retarder, With 80,000-lb GVW & GCW Max.
- OIL COOLER, AUTO TRANSMISSION {Modine} Water to Oil Type

Description

- TRANSMISSION SHIFT CONTROL {Allison} Push-Button Type; for Allison 3000 & 4000 Series Transmission
- TRANSMISSION OIL Synthetic; 29 thru 42 Pints
- ALLISON SPARE INPUT/OUTPUT for Rugged Duty Series (RDS); General Purpose Trucks, Construction
- SHIFT CONTROL PARAMETERS Allison 3000 or 4000 Series Transmissions, 5th Generation Controls, Performance Programming
- PTO LOCATION Dual, Left and Right Side of Transmission
- AXLE, REAR, TANDEM {Meritor MT-40-14X-4DFR} Single Reduction, 0.433"(11mm) Wall Housing Thickness, 40,000-lb Capacity, R Wheel Ends. Gear Ratio: 5.29

Includes

- POWER DIVIDER LOCK Electric over Air Operated, Cab Control with Indicator Light
- REAR AXLE DRAIN PLUG (2) Magnetic, For Tandem Rear Axle

Notes

The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires.

- SUSPENSION, REAR, AIR, TANDEM {International} Ride Optimized Suspension (IROS) Heavy Duty; 52" Axle Spacing; 40,000-lb Capacity, 9.25" Ride Height, Includes Heavy Duty Spring Hangers, Crossmembers and Fasteners, With Shock Absorbers

Includes

- CROSSMEMBER, SUSPENSION 3-Piece with Steel C-Channel and Cast Iron Ends

Notes

The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires.

- FUELUWATER SEPARATOR with Thermostatic Fuel Temperature Controlled Electric Heater, and Filter Restriction/Change Indicator, includes Standard Equipment Water-in-Fuel Sensor
- FUEL TANK Top Draw; D-Style, Non-Polished Aluminum, 16" Tank Depth, 50 U.S. Gal., 189 L Capacity, with Quick Connect Outlet, Mounted Left Side, Under Cab
- DEF TANK 7 U.S. Gal. 26.5L Capacity, Frame Mounted Outside Left Rail, Under Cab
- CAB Conventional

Includes

- ARM REST (2) Molded Plastic; One Each Door
- COAT HOOK, CAB Located on Rear Wall, Centered Above Rear Window
- CUP HOLDERS Two Cup Holders, Located in Lower Center of Instrument Panel
- DOME LIGHT, CAB Rectangular, Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Console, Center

Mounted

- GLASS, ALL WINDOWS Tinted
- GRAB HANDLE, CAB INTERIOR (1) "A" Pillar Mounted, Passenger Side
- GRAB HANDLE, CAB INTERIOR (2) Front of "B" Pillar Mounted, One Each Side
- INTERIOR SHEET METAL Upper Door (Above Window Ledge) Painted Exterior Color

- STEP (4) Two Steps Per Door
- GAUGE CLUSTER English With English Electronic Speedometer

Includes

- GAUGE CLUSTER (6) Engine Oil Pressure (Electronic). Water Temperature (Electronic). Fuel (Electronic), Tachometer (Electronic).
- Voltmeter, Washer Fluid Level
- ODOMETER DISPLAY, Miles, Trip Miles, Engine Hours, Trip Hours, Fault Code Readout
- WARNING SYSTEM Low Fuel, Low Oil Pressure, High Engine Coolant Temp, and Low Battery Voltage (Visual and Audible)
- IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes In Gauge Cluster
- GAUGE, DEF FLUID LEVEL

Description

SEAT, DRIVER {National 2000} Air Suspension, High Back With Integral Headrest, Vinyl, Isolator, 1 Chamber Lumbar, With 2 Position Front Cushion Adjust, -3 to +14 Degree Angle Back Adjust

Includes

- SEAT BELT 3-Point, Lap and Shoulder Belt Type
- MIRRORS (2) {Lang Mekra} Styled; Rectangular, Power Both Sides, Thermostatically Controlled Heated Heads, Clearance Lights LED, Bright Finish Heads & Brackets, Breakaway Type, 7.09" x 15.75" & Integral Convex Both Sides, 102" Inside Spacing
- SEAT, PASSENGER {National} Non Suspension, High Back, Fixed Back, Integral Headrest, Vinyl
- AIR CONDITIONER {Blend-Air} With Integral Heater & Defroster

Includes

- HEATER HOSES Premium
- HOSE CLAMPS, HEATER HOSE Mubea GonstantTension Clamps
- REFRIGERANT Hydrofluorocarbon HFG-134A
- INSTRUMENT PANEL Genter 8section, Flat Panel
- HVAC FRESH AIR FILTER
- STORAGE POCKET, DOOR Molded Plastic, Full Width; Mounted on Passenger Door
- FRESH AIR FILTER Attached to Air Intake Gover on Cowl Tray in Front of Windshield Under Hood
- GAB INTERIOR TRIM Deluxe

Includes

- "A" PILLAR GOVER Molded Plastic
- CAB INTERIOR TRIM PANELS Cloth Covered Molded Plastic, Full Height; All Exposed Interior Sheet Metal is Covered Except for the following with Two Man Passenger Seat or with a Full Bench Seat the Back Panel is Completely Void of Covering
- CONSOLE, OVERHEAD Molded Plastic; With Dual Storage Pockets with Retainer Nets and GB Radio Pocket
- DOOR TRIM PANELS Molded Plastic; Driver and Passenger Doors
- FLOOR COVERING Rubber, Black
- HEADLINER Soft Padded Cloth
- INSTRUMENT PANEL TRIM Molded Plastic with Black Center Section
- STORAGE POCKET, DOOR (1) Molded Plastic, Full-Length; Driver Door
- SUN VISOR (2) Padded Vinyl with Driver Side Toll Ticket Strap, Integral to Console
- GAB REAR SUSPENSION Air Bag Type
- WHEELS, FRONT {Accuride 29300} DISC; 22.5x9.00 Rims, Powder Goat Steel, 5-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs
- WHEELS, REAR {Accuride 50408} DUAL DISC; 22.5x8.25 Rims, Powder Goat Steel, 2-Hand Hole, 10-Stud, 285.75mm BG, Hub-Piloted, Flanged Nut, with Steel Hubs

- (8) TIRE, REAR 11R22.5 Load Range G HSR2 (CONTINENTAL), 498 rev/mile, 75 MPH, All-Position
- (2) TIRE, FRONT 315/80R22.5 Load Range L HSC1 (CONTINENTAL), 484 rev/mile, 68 MPH, All-Position
- Gab schematic 100GN
- Location 1: 9219, Winter White (Std)

Chassis Schematic N/A

Services Section:

WARRANTY Standard for WorkStar 7300/7400 (4x2, 4x4, 6x4, 6x6), Effective with Vehicles Built January 2, 2015 or Later, CTS-2002U

Miscellaneous

Please provide all specifications and literature regarding the bid equipment.

Delivery FOB: Monroe County Road Commission, 840 S. Telegraph Road, Monroe, MI 48161

All exceptions and deviations from listed above specifications must be clearly identified. Details regarding said exceptions or deviations can be spelled out below:

PART B: BITUMINOUS DISTRIBUTOR SPECIFICATIONS

Bid specifications are based on an Etnyre Distributor spec. All other competing companies shall be equivalent.

GENERAL

It is the intent of these specifications to describe a Bituminous Distributor in sufficient detail to secure bids on comparable equipment. All parts not specifically mentioned, which are necessary to provide a complete Distributor, shall be included in the bid and shall conform in strength and quality of material and workmanship to what is usually provided to the trade in general. The Distributor shall be a current model under standard production by the manufacturer.

Any units not conforming to these specifications will be rejected, and it will be the responsibility of the manufacturer to conform to the requirements unless deviations have been specifically cited by the bidder and acceptance made on the basis of the exception.

FUNCTION

The Distributor shall perform the following functions:

- a. Fill tank by Distributor pump from outside source.
- b. Circulate material in tank.
- c. Circulate material in spray bar.
- d. Spray at a constant desired application rate, regardless of variance in truck speed.
- e. Return material in spray bar to tank by pump suction.
- f. Handspray.
- g. Return material in hand spray to tank by pump suction.
- h. Transfer from an outside source to another outside source without having material enter Distributor tank.
- i. Pump material back to supply source.
- j. Automatically go from Circulate in Spray Bar to Spray mode and return to circulate without pushing material over relief valve.

It is important that the Distributor be capable of returning all material in the spray bar, handspray and distributing lines to the Distributor tank by means of pump suction. This function is to be accomplished without reversing the asphalt pump.

Unit shall use volumetric metering with no bypass when spraying to insure accuracy of application.

Provision shall be made for easily draining the circulating system independently of the tank and for flushing circulating system and pump with not more than three (3) quarts of fuel oil so as not to dilute tank contents.

TANK AND FITTINGS

- a. Capacity: **3000** U.S. Gallons minimum.
- b. Shape: Oval in cross section, with the long axis horizontal.
- c. Material: Shell to be 10 gauge steel. Tanks to have 10 gauge steel heads, deep dished and flanged, welded to tank shell both inside and outside for strength and durability.
- d. Surge Plate: Tank to be supported with full section surge plate, deep dished and flanged, constructed of 10 gauge steel. To be spaced to provide adequate tank strength and proper surge control. Openings shall be provided in the surge plates for the free flow of material to the pump and large enough for a man to crawl through.
- e. Manhole: 20" inside diameter manhole with quick-opening cover.
- f. Overflow: 3" diameter overflow, extending at least 6 inches above the liquid, and draining internally only through the bottom of the tank in such a location as to clear all chassis members. Tank overflow design that drains asphalt material into the spill collar around manhole is not acceptable.
- g. Insulation: 2" fiberglass 1 lb. Density with spacers to prevent compression, protected by aluminum jacket sheet (.040").
- h. Tank Mounting: Mounting saddles shall be full bolster style. Includes aluminum fenders.
- i. Tank Gauge: Float type, with dial calibrated in 50 gallon increments, both front and rear of tank.
- j. Measuring Stick: Aluminum, calibrated in 50 gallon increments. To be designed and calibrated to read tank contents without dipping stick into material.
- k. Spillage collar and overflow drain, including refiners platform and ladder.
- l. Tank design and construction to meet all applicable Federal Cargo Tank Regulations 49 CFR 173.247 and including DOT-406, HM-183, HM-198A, with consideration for hot asphalt products. Must have

ASME tank approval number to assure that federal cargo tank regulations can be met.

POWER UNIT

- a. Type: Hydrostatic transmission, consisting of:
 - 1. Pump: Infinitely variable displacement pump with a minimum displacement of 3.1 cubic inches per revolution, axial piston type. Electronic stroker control.
 - 2. Motor: Piston motor with gearbox. 1.53 cubic inch per revolution displacement, direct coupled to the asphalt pump. Entire transmission unit shall be capable of operating speeds up to 2800 RPM. Hydraulic oil may reach temperature up to 200 degrees without damage to the unit. Unit shall have internal valving, and shall be fitted with relief valve and high oil temperature signal in cab.
- b. Crankshaft Take-Off: Hydrostatic pump driven by crankshaft take off; chassis must be equipped to accept crankshaft drive.
- c. Hydraulic Lines:
 - 1. High pressure hose with swaged type split flange "O" ring fittings, per S.A.E. standards. (90 series pump only)
 - 2. Low pressure hose installation shall be made according to transmission manufacturer's recommendations. Only top quality fittings, tubing and hoses to be used.
- d. Controls: Electronic micro-control of hydrostatic transmission for setting asphalt pump discharge rate shall be located in truck cab. Control to permit stopping the variable pump discharge without disconnecting the drive and be equipped with an override of the micro-control which shall allow increases in asphalt pump output for filling, sucking back, etc., without affecting application rate setting. Override control shall be located at rear of unit.
- e. Reservoir. Minimum 20 gallon hydraulic reservoir with dial thermometer and level indicator.
- f. Filter: A 10 micron, replaceable cartridge type filter with vacuum gauge shall be located in the line between oil reservoir and hydrostatic pump.

BITUMEN PUMP

- a. Type: Positive displacement rotary gear type. 4 1/2" suction x 4" discharge.
- b. Location: To be located below the bottom level of the tank so that the material will flow vertically from the suction to the discharge insuring complete drainage when tank contents valve is closed.
- c. Capacity: Minimum of 400 gallons per minute.
- d. Self Flushing line from fuel tank or heating system to fill line. Includes minimum 20 gallon capacity fuel tank with float level gauge. Located away from burners for safe operation.

HEATING SYSTEM

- a. Flues: Two (2) with (LPG) liquid petroleum gas burner, with minimum of 1,000,000 BTU per hour per burner capacity. With pressure regulator, valves, piping, and 52 gallon frame mounted tank to be furnished.

SPRAY BAR

Full circulating 12 feet in length, hinged to permit folding for traveling. Length of bar in folded position not to exceed 8 feet. Positive circulation from one end of the bar to the other end, regardless of bar length or asphalt pump rate.

To consist of 8' center section with (2) folding wing sections.

Electric-air on-off in 1' increments, cab controlled.

Electric-hydraulic spray bar shifting, lifting and wing folding, cab controlled.

Nozzles to be spaced on 4" centers on spray bar and shall have an individual valve for each spray nozzle. Each nozzle valve to have flip lever control so spray width can be adjusted, and allows individual valves to be disconnected without the use of tools or pulling pins. Right and left side wings (bar extensions) to relieve fore and aft. Pin replacement required when bar relieves.

Bar to adjust for positive or negative crown and also adjustment for pitch of bar to aim nozzle valves rearward. Sections to be interchangeable, right or left side.

AIR CONTROLS

Driver Operated Cab Control:

Distributor shall be equipped with air controls. Air for the controls shall be obtained from the air system on the truck chassis. The Distributor air system shall include its own air reservoir (using of truck chassis reservoir not acceptable) with check valve set at 80 pounds to prevent loss of air on truck chassis brakes in case lines are ruptured. System shall have its own air line oiling device and controls shall be electric, located in cab convenient to operator.

Air Operated:

1. All air solenoid valves and hydraulic solenoid valves are to be mounted to be accessible and serviceable from the ground without climbing on the machine.

TOOL BOX, FENDERS, ETC.

- a. Tool Box: All steel box with aluminum door, of sufficient size to store all necessary tools shall be furnished at side of the tank. Must have hinged door at side with flush-type lock. Door at top not acceptable.
- e. Fenders: Full dual flanged fenders (.080" aluminum) with rubber flaps. Use of skirting and flaps as a substitute for fenders not acceptable.

CONTROLS / INSTRUMENTATION

- a. Computer with in-cab operator controls which include:
 - * Computer controlled switches for ten (minimum) preset application rates.
 - * Distance/volume reset switch.
 - * Application rate adjustment switch.
 - * Display select switch.

In-cab instrumentation will include the following information on self-illuminated display(s):

- * Truck travel speed feet/minute or meters/minute.
 - * Application rate in gallons/square yard or liters/square yard.
 - * Pump rate in gallons/minute or liters/minute.
 - * Resettable distance sprayed in feet or meters.
 - * Resettable volume sprayed in gallons or liters.
 - * Low tank level warning.
 - * Warnings that travel speed and/or applications rate are beyond system capability.
- b. Radar type sensor to pickup ground speed.
 - c. System control of 4-way asphalt valve.

ACCESSORIES

1. Hose trough for fill hose in lieu of hooks.
2. Thermometer well on side of tank.
3. Pencil thermometer.
4. Liquid sampling valve to be state approved for taking samples of liquid asphalt. Located in the rear tank head.
5. Hand Spray Attachment: Hand spray gun with cold handle and not less than 3 nozzles, with 25' of 3/4" flexible rubber hand spray hose.
6. Strainers: Asphalt system to be designed so all liquid asphalt pumped to the tank, from the tank or to the spray bar must pass through a screen.
7. Turn Signals: At rear of Distributor with truck supplying chassis control of signals.
8. Light: Federal Standard 108 requirements, including reflectors, clearance and identifications lights. Wiring in loom.
9. All necessary special tools for operation and maintenance of the Distributor shall be provided.
10. Painting: Distributor steel parts shall be painted Black Enamel.

WARRANTY

Minimum 12 month warranty of Distributor components.

With the bid shall be included manufacturer's descriptive literature and specifications on unit being bid, and a list of any exceptions to these specifications. Bidder will supply parts manual and complete operating instruction manual with bid if requested.

Bid shall include mounting on customer's chassis at factory and instruction of operator on maintenance and operation at factory.

OPTIONAL ITEMS**a. Tank and Accessories:**

1. Manhole strainer, 20" only required when filling tank overhead storage.
2. Dial Thermometer, 2".

b. Circulating System:

- 1. Power wash down system including electric fuel pump, 15' hose with gun.

c. Spray Bar:

Standard Spray Bar

- 1. Standard bar extensions with 1' electric-air on-off, up to 24', per foot.
- 2. Powered bar latch with cab and rear controls.
- 3. Wet storage box with drain plug & hinged lid.

d. Power System:

- 1. PTO off transmission in lieu of crankshaft drive.

e. Controls/Instrumentation:

- 1. Additional display in rear control box.

f. Heating System:

Flues: Two (2) 8" x 6" U-type return flues running the full length of the tank. The inlet and exhaust opening of each individual set of flues shall be in the same horizontal plane, allowing heating with a minimum of material in the tank. (2)-flue is standard)

Flues shall have stainless steel external stack.

- 1. Two flues with LPG burners. Includes 52 gallon LP. tank, frame mounted.

g. Miscellaneous Accessories:

- 1. L.E.D. Lights, Sealed system.
- 2. Wet storage box with drain plug and hinged lid.
- 3. Strobe light mounted on top of front of tank.

All exceptions and deviations from listed above specifications must be clearly identified. Details regarding said exceptions or deviations can be spelled out below:

The truck and bituminous distributor package shall include all specifications listed above in Part A and Part B. All exceptions to the specifications must be noted in areas provided. Equipment prices must be written in the spaces provided. Descriptive literature, detailed quotation for all equipment including make and model numbers and comprehensive warranty statements shall be included and shall be considered part of the quotation. If vendor checks comply it is understood that the specification as written will be provided. These specifications are meant to provide a minimum performance and quality standard acceptable to the Road Commission.

Price for the above listed Part A Truck and Part B Bituminous Distributor. Please provide all specifications and literature regarding the bid equipment.

Part A & Part B Truck & Bituminous Distributor		Total Unit Price
Outright Purchase Price with automatic	Manufacturer Model No.	\$
Delivery in calendar days from date of purchase order:		

After the bids have been awarded and prior to order, the successful equipment bidder shall meet at the Road Commission with Monroe County Road Commission officials for a pre-build specifications review in order to verify the compatibility of the truck chassis and the equipment to be installed. This meeting shall take place within a week after bidder is awarded.

The successful equipment bidder will be required to perform training at the Monroe County Road Commission on both maintenance and operation of the truck equipment.

The Board of Monroe County Road Commissioners reserves the right to accept, reject and/or modify any or all bids received, to waive irregularities therein, and to make the award in any manner deemed to be in the best interest of the Monroe County Road Commission.

Delivery FOB: Monroe County Road Commission, 840 S. Telegraph Rd., Monroe, MI 48161

By signing the bid below the bidder agrees to the above conditions.

Communications concerning this Bid shall be addressed to the Bidder's representative.

Name of Representative: _____

Address: _____

City, State, ZIP: _____

Telephone Number: _____

Fax Number: _____

E-Mail Address: _____

Title: _____

Signature: _____