



Staff Summary Report

Council Meeting Date: 06-05-2008

Agenda Item Number: _____

SUBJECT: Request to award a one-year contract to EZ-Liner Industries for a Roadway Striper to be operated by the Traffic Operations Department of Public Works to install and maintain traffic control pavement markings on Tempe City streets.

DOCUMENT NAME: 20080605fstal7 **PURCHASES (1004-01)**

SUPPORTING DOCS: Yes

COMMENTS: (RFP #08-134) Total cost for this contract shall not exceed \$340,000.

PREPARED BY: Tony Allen, Procurement Officer, 480-350-8548

REVIEWED BY: Michael Greene, CPM, Central Services Administrator, 480-350-8516
Glenn Kephart, Public Works Manager, 480-350-8205
John Osgood, Field Operations Manager, 480-350-8949
Isaac Chivara, Traffic Operations Supervisor, 480-350-8349

**LEGAL REVIEW AS
TO CONTRACT FORM
ONLY:** N/A

FISCAL NOTE: Sufficient funds have been appropriated in 3823-7509.

RECOMMENDATION: Award the contract.

ADDITIONAL INFO: Request for Proposal 08-134 was issued to establish a contract to purchase a roadway striping. Four responses were received. An evaluation committee comprised of Fleet, Traffic Operations and Procurement Staff reviewed the proposals. It is the recommendation of the committee to award a contract to EZ-Liner Industries the high scorer. A trade-in option was requested as part of the proposal, however, due to the lower than expected values received, the City will send the current vehicle to auction when the new unit arrives. The unit will be operated by the Traffic Operations Department of Public Works to install and maintain traffic control pavement markings on Tempe City streets.

Vendor's Proposal Offer

It is REQUIRED that Proposal Offeror COMPLETE, SIGN and SUBMIT the original of this form to the City Procurement Office with the proposal response offer. An unsigned "Vendor's Proposal Offer", late proposal response and/or a materially incomplete response will be considered non-responsive and rejected.

Proposal offeror is to type or legibly write in ink all information required below.

Proposal Offeror's Company Name	<u>Vogel Traffic Services Inc. dba EZ-Liner Industries</u>		
Company Mailing Address	<u>PO Box 140</u>		
Company Street Address	<u>1920 Albany Place SE</u>		
Proposal Offeror Contact	<u>Steve Smith</u>	Title	<u>Regional Truck Sales</u>
Contact's Phone No.	<u>775-265-2279</u>	E-mail Address	<u>steve.smit@ezliner.com</u>
Proposal Offeror's Company Tax Information:			
Arizona Transaction Privilege (Sales) Tax No.	<u>N/A</u>	or	
Arizona Use Tax No.	<u>N/A</u>		
Federal I.D. No.	<u>42-1447623</u>		
City & State Where Sales Tax is Paid	<u>N/A</u>		

EZ-Liner is currently not licensed to collect sales tax in AZ.

THIS PROPOSAL IS OFFERED BY

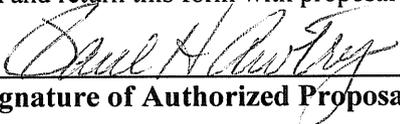
Authorized Proposal Offeror (Type or Print in ink) Paul H. Awtry

Proposal Offeror's Title (Type of Print in ink) Vice President

Date 3/18/08

REQUIRED SIGNATURE OF AUTHORIZED PROPOSAL OFFEROR (Must Sign in Ink)

By signing this Proposal Offer, Offeror acknowledges acceptance of all terms and conditions contained herein and that prices offered were independently developed without consultation with any other offeror or potential offeror. Failure to sign and return this form with proposal offer will result in a non-responsive proposal.


Signature of Authorized Proposal Offeror

3/18/08
Date

Form 201-B (RFP)
(H./RFP 3-2002)

Specifications

Item 1 – Cab and Chassis

Desired minimum specification for chassis. Each specification will receive a maximum evaluation score of three (3) points. Any exceptions to the desired specifications must be explained.

				Vendor Response
	Item Description	Yes	No	Exception
Cab and Chassis				
1.	Truck shall be of a COE (Cab Over Engine) design with total accessibility to engine and all components. Painted fleet white. Steel cab preferred	x		
2.	Wheel-base, cab to axle and overhang shall all meet respective body manufacturer's requirements. It is the vendor's responsibility to design the unit and guarantee legal load limits and weight distribution using average weights under normal conditions. Preferred wheelbase will be 171" or less.	x		
	Wheelbase 170"			
3.	Minimum equipment gauges: Tachometer, engine temperature, oil pressure, air pressure, voltage/amperage, transmission temperature, hour meter (truck engine). If smart gauges are to be utilized, the vendor will supply the City with equipment, software and training to be able to troubleshoot and reset the gauges	x		
4.	Truck seats to be Bostrom, National or Cush-n-air low profile low back deluxe with lumbar support	x		
5.	Truck cab shall be heated and air conditioned. Air Conditioning to be of sufficient size and rating for use in ambient temperatures of up to 120 degrees Fahrenheit. All repair components to be available locally. It is preferred that the condenser be factory installed dual fan, roof mount.	x		
6.	Equipped with low speed cruise control	x		
7.	Passenger door, driver door, wing vents and rear cab window to be covered with high performance metalized film (compliant with local legal requirements).	x		
8.	Interior and exterior grab handles for both driver and passenger	x		
9.	Noise suppressed cab with hot and cold weather insulation package.	x		
10.	Dual sun visors	x		
11.	AM/FM radio with CD player	x		
12.	Windshield wipers - heavy duty commercial type.	x		

				Vendor Response
	Item Description	Yes	No	Exception
13.	Fuel tank(s) shall have a minimum capacity of 100 gallons. Tank(s) shall feed vehicle and accessory engine.	x		
14.	Dual outside mirrors with spot mirror.	x		
15.	Mud flaps mounted front and rear	x		
16.	A transistorized backup alarm, Preco LDA50 or equal, shall be installed.	x		
17.	Engine – 275 H.P. 2008 compliant electronically controlled diesel engine. Cummins preferred.	x		
18.	All engine manufacturer's specifications and/or requirements must be met. Spin on oil filter(s) must be of sufficient capacity and micron rating for operation in dusty conditions and meet engine manufacturer's specifications	x		
19.	Air filter – certified to meet requirements of applicable engine. Intake system to have restriction gauge mounted on the air cleaner housing.	x		
20.	Cooling system must have the largest heavy-duty components available with coolant recovery system. Cooling system filter equipped. Manufacturer must state that cooling system will keep engine at normal operating temperature in temperatures that can reach 120 degree Fahrenheit. The preferred cooling system will have no more than one radiator, frontally mounted and provide cooling in compliance with the specification of 2008 engine requirements. Metal surge tank required (plastic tanks not acceptable).		x	no cooling system filter
21.	All coolant hoses to be silicone or approved equal.	x		
22.	Engine equipped with alarm system, indicating high engine temperature and/or low oil pressure.	x		
23.	Engine supplied with high quality fuel filtering system to remove all impurities, including water, from the fuel.	x		
24.	Transmission - Allison 3500RDS series 6 speed transmission with appropriate cooler (must not cause main engine to overheat). Transmission must be supplied from the factory with Allison approved synthetic transmission fluid. Unit to be supplied with Allison ETC 5 year extended warranty policy.		x	Allison 3000 RDS-P

				Vendor Response
	Item Description	Yes	No	Exception
25.	Brakes - Complete brake system must be air. "S" cam actuators only will be accepted. Engine driven air compressor with a minimum of 17 CFM capacity. Air intake for compressor must come from a clean source preferably the main engine air intake system. All federal safety requirements regarding gauges, low pressure buzzer, pop-off valves and bleeder valves to be met. Air dryer supplied between air compressor and first air tank. Dryer shall be a Bendix ADIP. All chassis air lines are to be wire braid. Air system to have air coupling or stem valve to allow for pressurizing air system from outside source.	x		
26.	Gross Front axle capacity - 20,000# estimated.	x		
	Rating of axle 20,000 lbs			
27.	Gross Rear axle minimum capacity 30,000# required. Suspension will be air ride	x		
	Manufacturer, model and rating of rear suspension Peterbilt 23K Air Trac			
28.	Axles to have outboard drums and hub seals	x		
29.	Gear ratio shall be optimized and be able to obtain a minimum Sixty miles per hour (60 mph) road speed and allow for application speeds of ten to fifteen miles per hour (10-15 mph) without over-speeding the engine or causing continual transmission gear changes during application.	x		
	Gear ratio offered 6.14			
	Manufacturer and model of differential Dana Spicer S23-190 23K			
30.	Springs - Springs and spring hangers for front axle to exceed the rating of the axle.	x		
31.	Frame rails shall have RBM rating at least 2,080,000 in the main section, primarily of bolted construction with as few rivets as possible.		x	1,969,000 RBM per rail
32.	Tires Front and Rear: 315/80R22.5 Load range L. All tires to be mixed service rubber compound. Goodyear G291 preferred.	x		
	State Manufacturer and model of tires Bridgestone M360, 20 ply			
33.	Hub pilot, Budd style wheels, 10 hole, 22.5 X 9.0 front and rear.	x		
34.	Power steering – integral unit (add-on power assist not acceptable).	x		
35.	Drive line must meet GVWR requirements. U-joints to have glide coated splines.	x		

	Item Description	Vendor Response		
		Yes	No	Exception
36.	Batteries – Minimum of three (3) high cycle, group 31, 2250 CC to start engine and maintain complete electrical system. Cables professionally formed and routed with the shortest cable possible to reduce voltage drop and amp loss. Batteries mounted as close to starter and as near to the frame as possible. Batteries housed in covered container that is resistant to corrosion and yet must be easily accessible for servicing. Unit must be supplied with a battery cut off switch with lockout. The switch is to be mounted as close to the batteries as possible and wired to interrupt the positive battery feed.		x	2100 CCA
37.	Alternator-Delco Remy, Series 33SI, 135 AMP minimum is preferred.		x	Paccar 130 amp brushless 3 year, 350K warranty
38.	All wiring must be neatly loomed and routed so as not to come in contact with anything that could cause damage to wiring	x		
39.	A means for towing vehicle with wrecker must be provided. Pick up loops or eyes on front of vehicle strong enough to tow the vehicle with the front wheels off the ground. Must have a front bumper.	x		
40.	MCO provided at time of delivery.	x		
41.	MVD level one vehicle inspection provided	x		
	Manufacture and model of vehicle Peterbilt 320			
	State chassis warranty period Base 1 year 100K (see attached)			
	State any additional warranties available and cost			
	Cummins Engine 3 yrs 100,000 miles \$1,150.00			
	Heater/air conditioner 2 yrs 200,000 miles \$300.00			
	Basic vehicle warranty 2 yrs 200,000 miles \$ 1,150.00			

Item 2 – Equipment Platform

Desired minimum specification for platform. Each specification will receive a maximum evaluation score of three (3) points. Any exceptions to the desired specifications must be explained.

Specifications are for a hydraulic power system. A system utilizing an alternate system will be considered without incurring a penalty in the scoring system should the City of Tempe feel the requirements of the City will be met. If an alternate system is proposed complete information on the alternate system must be included for evaluation.

	Item Description	Vendor Response		
		Yes	No	Exception
Equipment Platform				
1.	Platform shall be constructed of steel tubing covered by minimum 8-gauge steel non-skid diamond plate in all walk areas	x		
2.	There shall be a space measuring a minimum of four inches (4") between the chassis and the platform to accommodate all electrical and plumbing without interference with the truck frame.	x		

				Vendor Response
	Item Description	Yes	No	Exception
3.	Risers shall be attached to the longitudinal stringers of the deck to space the deck from chassis frame rails.	x		
4.	Risers shall be welded to the platform and bolted to the chassis rails.	x		
5.	There shall be access ladders on each side of platform permanently affixed to the equipment platform. It is preferable that ladders be fold up design and cover entry points on landings.	x		
6.	A steel railing will be installed around the entire platform except at the ladder entrance areas. Railing to be a minimum of 36" high.	x		
7.	The railing and support riser must be located so as not to inhibit visibility to spray carriages from workstations in the operators cab.	x		
8.	All top corners where the railing makes a turn shall be rounded	x		
Auxiliary Engine				
9.	A liquid-cooled diesel engine (Cummins preferred) of at least 85 horse power to drive a hydraulic pump used to power the striping equipment shall be provided.	x		
10.	Engine shall be equipped with a critically silenced muffler	x		
11.	The engine shall have an electrical system separate from the truck and include three (3) 1150 CCA batteries and a minimum 105 amp 12 volt alternator.	x		
12.	Engine is to be equipped with a governor for speed control, automatic shut down system controlled by engine oil pressure and engine temperature.	x		
13.	An hour meter, controlled by engine oil pressure, shall be installed in the operator cab	x		
14.	Access to the auxiliary engine for maintenance shall be maintained.	x		
15.	The auxiliary engine cooling system will have a heavy-duty Cooling system with coolant recovery system. Cooling system filter equipped. Manufacturer must state that cooling system will keep engine at normal operating temperature in temperatures that can reach 120 degree Fahrenheit. Metal surge tank required (plastic tanks not acceptable).	x		
16.	All coolant hoses to be silicone or approved equal.	x		
17.	Gauges and controls for the auxiliary engine will be mounted on the rear operator control panel located in the operators cab.	x		

				Vendor Response
	Item Description	Yes	No	Exception
18.	At a minimum, the following instruments shall be provided: engine hour meter, oil pressure gauge, tachometer, coolant temperature, and voltage.	X		
Hydraulic Reservoir				
19.	A hydraulic reservoir of adequate size and cooling capacity to maintain the required operating temperature shall be supplied. 100 gallon minimum preferred	X		
Size of Hydraulic reservoir 100 gallon				
20.	Reservoir will be equipped with baffles, breather cap, sight level gauge, clean out cover and drain valve	X		
21.	Ten (10) micron replaceable spin on filter shall be placed in the return line with shut off valves on both sides of the filter to reduce fluid loss during changing	X		
Compressor				
22.	Belt driven hydraulic motor driven from the auxiliary engine shall power the air compressor	X		
23.	Compressor shall be of sufficient capacity to simultaneously operate all the air driven components of the striping machine during normal striping operations	X		
24.	Compressor shall be air-cooled with a displacement of not less than 85 Cubic feet per minute at an air pressure of 100 pounds per square inch	X		
CFM Rating 85 cfm @ 100 psig				
25.	Compressor shall be equipped with a safety valve, air release valve and drain valve	X		
26.	Compressor will be equipped with an unloader that will allow the compressor to run in an unloaded condition once full working pressure is obtained	X		
27.	A minimum 10 gallon ASME rated air receiver tank will be plumbed into the air system with auxiliary couplings on both sides of the truck	X		
28.	Tank will be mounted between the frame rails and below the equipment deck of the striper	X		
29.	Air receiver tank will be equipped with a drain valve and safety pop-off valve	X		

				Vendor Response
	Item Description	Yes	No	Exception
Paint Transfer Pump				
30.	Two 2" stainless steel double diaphragm loading pumps shall be installed. ARO or approved equal	x		
Manufacture and Model of Pump <u>ARO PD20A-FSP-STT</u>				
31.	Pumps shall be equipped with Teflon diaphragms	x		
32.	Pumps shall be mounted on top of deck for ease of access	x		
33.	All hardware necessary for the transferring of paint from drums or totes into the truck tanks shall be included.	x		
34.	Valves will be provided to allow each pump to be isolated from the paint system for the purpose of cycling solvent through the pump for cleaning.	x		
35.	Loading pumps will double as priming pumps for the heat exchangers	x		
Paint Vat				
36.	Two (2) vats of not less than 250 gallons each shall be provided	x		
Size of vats <u>200 gallons each with 4" splash area (per addendum 1, item VI)</u>				
37.	Vat shall have no square corners	x		
38.	Bottom of vat shall be contoured to avoid accumulation of wet paint	x		
39.	Bottom of vat will be sloped for drainage to the outside of the platform	x		
40.	A 4" splash area will remain at the top of each tank when loaded to stated capacity	x		
41.	Inspection access will be provided in each section of the vat	x		
42.	Each section will be fitted with a drain valve located near the outside edge of the platform	x		
43.	All low-pressure valves will be Teflon seated ball type valves	x		
44.	All paint and air valves will be color coded for identification	x		
45.	There will be ample unions and cleanouts in the low-pressure plumbing to aid in clean out	x		
46.	A hydraulically driven, mechanical paint agitator shall be mounted on each section of the paint vat	x		

				Vendor Response
	Item Description	Yes	No	Exception
47.	Agitators shall agitate the paint completely top to bottom	X		
48.	Controls for agitators will be located on the control panel in the rear operators cab	X		
49.	All components in the paint holding and delivery system (including, but not necessarily limited to the paint vat, agitator, paddles, loading pumps, airless paint pumps, valves, strainers and spray guns) that contact paint shall be Stainless Steel	X		
50.	Paint loading shall be on right side of truck adjacent to tanks. Piping runs shall not exceed five feet (5')	X		
Paint Heating System				
51.	A diesel fired, thermostatically controlled heater for warming the paint shall be installed	X		
52.	Fuel supply will be from the truck's fuel tank	X		
53.	Heater shall have an adjustable combustion heat assembly and operate with no smoke production	X		
54.	Heater must be ASME approved 250,000 BTU minimum capacity powered by the 12 VDC system. Fully automatic and adjustable heat range from 50 to 250 degrees Fahrenheit with a digital display	X		
55.	Either truck or auxiliary engine electrical system may be used depending on each system's load	X		
56.	Temperature controls, including displays and gauges, shall be installed on the rear operator's panel	X		
57.	Heating medium shall be circulated by a 1" double diaphragm pump from heater through two automatically controlled heat exchangers at a minimum of 25 GPM.	X		
58.	Pump must be able to operate efficiently up to 250 degrees Fahrenheit	X		
59.	Audible over temperature warning device shall be installed in the rear operator's cab.	X		
60.	Heat exchangers are to be a minimum four-pass stainless steel shell and tube type with a minimum heat transfer area of 64 square feet and equipped with automatic diverter valve.	X		
61.	Overflow reservoir will be mounted at one heat exchanger being the highest point in the heat system with overflow tube plumbed below deck into a storage container.	X		

				Vendor Response
	Item Description	Yes	No	Exception
Paint Filters – Low Pressure				
62.	There shall be a low pressure paint screen plumbed after each tank	☒		
63.	Paint screens shall be a stainless steel basket strainer with a minimum of 100 square inches of surface area	☒		
64.	Strainer cap will be removable allowing access to the basket	☒		
65.	Drain port will be included in each filter	☒		
66.	The drain port will have an stainless steel ball valve plumbed in it to allow for draining of the filter into a pail	☒		
67.	Modified Y strainers will not be acceptable for this application	☒		
Paint Filters – High Pressure				
68.	Plumbed between each airless paint pump and the spray guns there shall be a high pressure stainless steel filter assembly with a 30 to 40 micron rating	☒		
69.	Each filter shall be capable of handling fluid pressure of 5,000 psi and shall have 1/2" inlet and outlet ports	☒		
Flush System				
70.	An air operated flushing system shall be installed consisting of a minimum 20 gallon stainless steel pressure tank with safety valve, plus ball valves and piping necessary to introduce the flushing medium into each paint line.	☒		
71.	The flush shall also be piped into each main line, adjacent to shut off valve at the tank in order that each line can be thoroughly flushed when required.	☒		
Airless Paint Application Pumps				
72.	Two (2) airless paint pumps with a capacity of 12.9 GPM at 1600 PSI. Graco preferred	☒		
73.	All wetted parts including the piston, check balls, seats, housing and packing retaining rings shall be stainless steel	☒		
74.	Airless paint pumps shall be mounted on the top of the deck	☒		
75.	A ground strap will be installed on the vehicle to discharge any static electrical buildup from the pumps.	☒		

				Vendor Response
	Item Description	Yes	No	Exception
Surge Chambers				
76.	Surge chambers shall be installed to eliminate the "hour-glass" effect caused by the pump changing strokes	×		
Glass Supply				
77.	An ASME certified pressure vessel shall be installed having a minimum capacity of 4,000 lbs of glass spheres	×		
	Capacity of vessel 2,400 lbs minimum (per addendum 1, item X)			
78.	Vessel shall be equipped with a level gauge	×		
	Type of gauge to be utilized (3) sight glasses at 1/4, 1/2 & 3/4 levels (per addendum 1, item XI)			
79.	This vessel shall be of all steel construction and shall have a top opening not less than 24" in diameter	×		
80.	Vessel shall be equipped with an air release valve, a 160 lb pressure gauge, a 110 lb pressure relief valve	×		
81.	Spheres shall be conveyed under pressure to automatic glass sphere guns through reinforced poly plastic hose	×		
82.	Poly plastic hose shall also contain ball valves to both sides of the paint carriage for easy turn off	×		
83.	Finned tube type air cooler and moisture separator to remove moisture from air used to operate the glass system shall be installed	×		
84.	Moisture separator shall be the self-expelling type	×		
85.	A vacuum bead loading system with a minimum capacity for 200 lbs of glass beads per minute will be included in the glass supply system	×		
86.	Vacuum bead system shall operate by creating a vacuum in the bead tank	×		
87.	Glass filling system shall include a 12 foot long, 2" ID suction hose, 36" long 2" ID steel tube and all necessary fitting.	×		
88.	New 55 gallon metal drum with a combination bag splitter and strainer top	×		
89.	All plumbing for the bead loading system will be rigid pipe except for the flex suction tube that extends from the deck height inlet to the suction standpipe	×		

				Vendor Response
	Item Description	Yes	No	Exception
Spray Gun Carriages				
90.	Equipped with 2 spray gun carriages assemblies	x		
91.	Carriage assemblies shall be hydraulically retractable to within the overall vehicle width and pneumatically lifted off the roadway for high-speed transport	x		
92.	Road wheels on all carriages shall be fitted with ball bearing supported pneumatic tires	x		
93.	All wheels shall be caster mounts to allow them to pivot freely	x		
94.	All bearings or pivots on the carriage where relative motion occurs shall be fitted with replaceable bushings or anti-friction bearings and pressure lubrication fittings.	x		
95.	The telescoping area of the slide mechanism shall be square tubing inside tubing and be fitted with Ultra High Molecular Weight material to reduce friction and wear and shall require no lubrication.	x		
96.	Each carriage slide shall be equipped with a hydraulic cylinder for moving the carriage to any point within its operating range	x		
97.	The cylinder shall be double acting and controlled by a steering control unit and steering wheel located in the rear operator's cab.	x		
98.	The power steering mechanism must operate in a smooth manner	x		
99.	A mechanism that will cause over steering, creeping or jerking movements is not acceptable.	x		
100.	Each carriage will be equipped with a flashing yellow light facing forward and a red light facing to the rear – break away LED type is preferred.	x		
Left Street Carriage				
101.	This unit shall be located 12" in front of the left rear tire	x		
102.	Carriage shall support four spray guns and four sphere guns	x		
103.	Two road wheels shall be provided to maintain it at a given height from the road and the entire unit shall be mounted with linear bearings to allow vertical motion but keep the spray guns parallel to the road surface.	x		
104.	Carriage must be capable of being operated in any position from inside the outer edge of the platform to a point four feet or more from outboard of this location	x		

				Vendor Response
	Item Description	Yes	No	Exception
	Right Street Carriage			
105.	This unit shall be located 12" in front of the right rear tire	x		
106.	Carriage shall support two spray guns and two sphere guns	x		
107.	One road wheel shall be provided to maintain it at a given height from the road and the entire unit shall be mounted with linear bearings to allow vertical motion but keep the spray guns parallel to the road surface.	x		
108.	Carriage shall be capable of being operated in any position to give spacing from 8 feet to 16 feet between the outside gun on the left and right carriage.	x		
	Paint Glass Spray Equipment			
109.	Six (6) air/electric operated airless atomizing spray guns are to be supplied. Four on left carriage, two on right carriage. Graco preferred	x		
	Manufacturer and Model of spray gun to be supplied 238-377			
110.	Spray guns are to be specifically developed for highway striping and shall be capable of handling all types of highway marking materials – except pre-beaded type	x		
111.	All wetted parts (except spray tip) are to be constructed entirely of stainless steel	x		
112.	Spray tips shall be Carbide Steel	x		
113.	Guns are to be controlled with 1/4" solenoid valves to ensure quick gun reaction	x		
114.	Line widths for each spray gun are to be adjustable from 4" to 8"	x		
115.	Paint guns will be plumbed to allow paint to re-circulate within the heated paint system	x		deleted (per addendum 1, item XV)
	Glass Spray Equipment			
116.	Six automatic glass sphere dispensing guns shall be provided. Four on left carriage, 2 on right carriage.	x		
117.	Automatic sphere guns shall be capable of dispensing between 1 and 20 pounds of spheres per minute with 60 pounds of air pressure	x		
118.	All components of the glass sphere guns (except the shroud) shall be chrome plated and mounted behind each paint spray gun	x		

				Vendor Response
	Item Description	Yes	No	Exception
119.	Adjustable setscrew for dispensing control shall be built into each bead gun	X		
Line Oiler and Moisture Trap				
120.	Two airline oilers will be included in the air system which feed the spray guns	X		
121.	One line oiler will be provided for the spray guns on each carriage to remove the moisture from the air	X		
Paint Meter (Electronic)				
122.	A metering system shall be installed to comply with various state DOT requirements in recording gallons dispensed	X		
123.	The systems design shall contain no wetted parts.	X		
124.	A display will include totalizers to show total gallons of yellow and white paint	X		
125.	The display (readout) shall be an integral part of the skip timer system.	X		
Striper Control Cab				
126.	A totally enclosed cab will be built on the back of the striper	X		
127.	Access from cab to platform shall be provided	X		
128.	Entry to the cab will be from the rear of the vehicle, slider door preferred	X		
129.	The door shall have a latch system that secures the door	X		
130.	Chassis frame rails shall be of sufficient length to allow bolting the cab to the frame rails	X		
131.	Sufficient windows shall be provided allowing good visibility for the operators. Bay windows will be provided at each operator station	X		
132.	Sliding windows are to open from front to rear.	X		
133.	Windows to be covered with high performance metalized film (complaint with local legal requirements).	X		
134.	Windows shall have rounded corners and be constructed of safety glass with proper identification marks.	X		
135.	Noise suppressed cab with hot and cold weather insulation package.	X		

				Vendor Response
	Item Description	Yes	No	Exception
136.	Floor shall be clad with thick rubber mat for sound suppression	✗		
137.	Operator cab shall be heated and air conditioned. Air Conditioning to be of sufficient size and rating for use in ambient temperatures of up to 120 degrees Fahrenheit. All repair components to be available locally.	✗		
138.	Heating/cooling system to be driven from the auxiliary engine	✗		
139.	Two operator captain style chairs shall be provided. To be air suspension high back deluxe with lumbar support	✗		
140.	Seats shall be located on the right hand and left hand sides of the cabin angled for best visibility of the carriages and have a locking swivel.	✗		
141.	Operator stations shall have adjustable steering wheels providing both tilt and height adjustments.	✗		
142.	All control center components shall be flush mount	✗		
143.	A metal control panel shall be mounted to allow access from either operator position and contain all the necessary regulators, gauges, valves, switches and indicator required for the operation of the striping equipment and auxiliary engine. Maintenance access to back of panel shall be provided.	✗		
144.	Face of control panel will be painted flat black	✗		
145.	Both the right side and left side gun carriages shall be electrically controlled by means of toggle switches and solenoid valves.	✗		
146.	Switches shall be located in separate movable control boxes mounted on right side of wheel and be within easy reach of the equipment operator	✗		
147.	Control box shall be equipped with one, three position toggle switch for each paint gun and a master on/off switch	✗		
148.	Three position toggle switch will be configured with forward for solid line, center for neutral and down for automatic.	✗		
149.	A "kill switch" shall be located in the truck cab. This switch will have the ability to shut down all paint and bead gun operations	✗		
Intercom System				
150.	An intercom system shall be furnished to provide communications between the driver of the vehicle and operators of the striping equipment	✗		

				Vendor Response
	Item Description	Yes	No	Exception
151.	System shall be a three headset system, David Clark Master station model U-3800 with U-3811 interface module or approved equal	✗		
152.	Two headsets with dual earphones shall be provided for the operators of the striping equipment	✗		
153.	One head set with single earphone shall be provided for the vehicle driver	✗		
154.	Communication to be provided to follow unit which utilizes intercom system on sprayer and City of Tempe radio system.	✗		
Skip Line Control				
155.	The skip setting mechanism shall be all electronic and utilize solid state components for all active internal functions.	✗		
156.	It must process electrical pulses received from the vehicle motion sensor and must drive solenoid valves.	✗		
157.	A means of inductive arc suppression shall be included. It shall require little or no maintenance	✗		
158.	Clutches, cams, gears or devices that require adjustment are not acceptable	✗		
159.	Skipsetting mechanism must generate the selected repetitive pattern without utilizing any internal or external moving parts (except operator adjusted toggle switches for establishing pattern size, placement and calibration)	✗		
160.	Switches shall be of the three-position (spring loaded - center off) type	✗		
161.	Switches provided for Cycle Length adjustment and Stripe Length adjustments.	✗		
162.	Switches with thumb wheels or that have engraved digits are not acceptable	✗		
163.	An alphanumeric display shall be provided to display advisory and warning messages as well as stripe and cycle settings	✗		
164.	Display must be capable of concurrently displaying at least two characters or text or digits	✗		
165.	The display must be liquid crystal type with industrial temperature range fluid and must be compatible with electro luminescent back lighting devices	✗		
166.	All indicator lamps must be solid state light emitting diode types	✗		

				Vendor Response
	Item Description	Yes	No	Exception
167.	The skipsetting system shall not use or require the use of internal or external electromechanical relays	✗		
168.	For ease of operation, the skipsetter must have direct reading digital dials and must provide pattern capability from 1/10th to 99.9 feet, adjustable by 1/10th foot increments at any time whether at rest or in motion without generating spurious patterns.	✗		
169.	When changing patterns, simple dial changes must suffice without resorting to “data complete” or “enter data” type controls	✗		
170.	“Start” indexing (reset to zero) must be instantaneous	✗		
171.	To aid in registration of new paint with previously painted pattern, the “Advance” or “Retard” phase correction system must alter the pattern length no more than plus or minus twenty percent while activated (not more than every fifth motion sensor pulse shall be added or omitted.)	✗		
172.	The system must be provided with a means of Automatically adjusting the cycle length by 1/10 th foot increments if the Advance or Retard control is invoked three consecutive times.	✗		
173.	The skipsetter must provide a means to compensate for registration errors commonly found in the application of paint and beads.	✗		
174.	To reduce glare, skipsetter shall be finished in flat black with black front panel.	✗		
175.	Separate controls must be provided to individually register leading and trailing ends of the pattern.	✗		
176.	It shall be possible to store two skip line patterns in the control – one as primary and the other as secondary selectable by pressing a pattern selection button	✗		
177.	The left and right side carriages will have an individual master control panel with displays	✗		
178.	Panels will be mounted at the operator stations	✗		
179.	Panels will include individual gun switches and master on/off switch	✗		
180.	Each operator station will be complete with master skiptimer	✗		

		Vendor Response		
Item Description		Yes	No	Exception
Camera Guidance System				
181.	A 12 VDC closed circuit television camera guidance system shall be supplied including two - 10" flat screen color monitors, two color cameras and one wide angle color backup camera	×		
	Manufacturer and model of displays <u>Weidex WDL-1040M</u>			
	Manufacturer and Model of cameras <u>Panasonic WZ-CP-284</u>			
182.	Cameras must be based on the use of solid state components and be housed in durable metal casings with high resistance to shock/vibration	×		
183.	One monitor shall be installed in the truck cab in clear view of the driver	×		
184.	One monitor shall be installed in the rear operator's compartment in such a way that it can be used on the left or right side.	×		
185.	Driver shall have control switches for selecting the centerline, edge-line or backup camera for viewing. Rear operators monitor view will be the same as the front depending on the camera selection made by the driver	×		
186.	To provide the best possible color as lighting conditions change (shade to sunshine) the cameras must continuously adjust color balance with automatic light compensation	×		
187.	Two cameras shall be mounted at the front of the truck so that each camera shall have full range hydraulic power adjustment, shall retract to within the width of the truck and extend to be in-line with spray guns on the extended carriage	×		
188.	Controls shall be within easy reach of the driver	×		
Optical Pointer				
189.	The truck cab shall be equipped with two optical pointers that will project a virtual image on a distant target	×		
190.	Pointers shall be installed in such a way that the driver can use the line or other areas to be striped with a minimum obstruction of view	×		
191.	Pointers shall be fully operational independent of each other	×		
192.	A light source shall project an image through a lens with the following properties: All external parts will be black anodized, 17 foot virtual image focal point and horizontal line with vertical crosshairs	×		

				Vendor Response
	Item Description	Yes	No	Exception
193.	Optical pointers shall have a control box or boxes with potentiometers for varying the light intensity on each unit from 0 to 9	✗		
Message Board				
194.	Single faced message reader board which includes three line LED sign with eight 10" characters per line and display terminal	✗		
195.	Keypad controller will be supplied for message programming and accessed from rear operators station	✗		
196.	Power for the message board will be supplied by the truck electrical system	✗		
197.	Size to be approximately 75" by 40" on a fixed, low profile mount	✗		
Beacon Lights				
198.	Two LED multi flash strobes shall be installed on the front portion of vehicle – on each corner	✗		
199.	Two LED multi flash strobes shall be mid mounted on vehicle	✗		
200.	Two LED multi flash strobes shall be installed per City of Tempe instructions on the rear portion of vehicle – on each corner	✗		
201.	All lights shall be positioned to minimize interference with camera system	✗		
202.	Control switch shall be installed on the truck cab dash in a convenient area with easy driver access	✗		
Work Lights				
203.	A minimum of 7 lights will be supplied.	✗		
204.	All work lights are to be high intensity flood with adjustable swivels.	✗		
205.	One light on each carriage	✗		
206.	One light positioned on sprayer platform ahead of each carriage.	✗		
207.	Two lights will be positioned on the platform, mounted on risers on the rear of deck	✗		
208.	One light will be positioned forward on the guideline	✗		
209.	Additionally, all gauges and instruments on control panels will be lighted	✗		

				Vendor Response
	Item Description	Yes	No	Exception
210.	Two (2) – Twenty pound Ansul, or approved equal, dry powder fire extinguisher are to be supplied. One to be mounted inside rear control cab and one on platform.	X		
211.	Noise rating of operating unit will not exceed 90db within 5 feet of vehicle in all modes of operation (loading and painting) Extra consideration will be given to units operating at lower sound levels	X		
	db rating of operating unit 82 avg			
212.	Noise rating inside rear operators cab will not exceed 75db in all modes of operation (loading and painting) Extra consideration will be given to units operating at lower sound levels	X		
	db rating of operators cab 68 to 72.5			
Review Work in Progress				
213.	Vendor shall make necessary arrangements for three (3) City representatives to view the equipment on site when the work on the striping reaches approximately 90% of completion	X		
214.	The city representatives will inspect the equipment for compliance with specifications and recommend any changes that are necessary	X		
215.	The Vendor shall include in their bid the cost for the City representative's air and ground transportation and lodging costs	X		
Technical Service				
216.	The successful bidder shall provide a factory technician for at least three (3) days of instruction in the operation and maintenance of the striping machine when the unit is delivered.	X		
217.	Technical training for two (2) service technicians at vendor factory, or approved facility. Vendor shall include in their bid the cost for the all expenses associated with this training	X		
Manuals				
218.	Vehicle to be provided with two operator manuals, one Parts manual, one technical service manual, one complete engine technical manual, chassis manual and one complete technical service manual for the Allison transmission. Manuals may be provided in CD form that is Novell server compatible. The order will be considered incomplete until the manuals and or CDs are supplied.	X		

Proposal Questionnaire

Proposer must submit (with their Proposal response) answers to each question, plus additional supporting documentation to further explain their Proposal. A thorough answer is necessary to fully evaluate each Proposal response. This information will be used during the evaluation process.

I Conformity to Desired Specifications

1. Does your submittal conform to all requested specifications?

Yes No

2. Did you include an alternate power system?

Yes No

II Warranty and References

3. What warranty is offered for the **Cab and Chassis**

1 year 100K, see attached

4. What warranty is offered for the **striper unit**

2 year limited, see attached

5. Please state three reference to which you have supplied similar equipment

Company	Contact Name	Phone Number
AZ DOT (multiple units throughout state)	Michael O'Malley	602-712-6507
City of Yuma, AZ	Joel Olea	928-373-4633
City of N. Las Vegas, NV	Mike Edwards	702-633-1264

III Cost

6. Include detailed price information – attach to bid

IV Parts, Service and Training

7. Training to be provided for service technicians

All training specified on page 34, items 216 and 217 are included in our base bid

8. Training for operators

All training specified on page 34, items 216 & 217 are included in our base bid

9. A local parts and service center with a full line of replacement parts and qualified factory service personnel is required for the offered **cab and chassis**. City of Tempe staff may perform a site visit of the potential successful vendor's parts and service facility to determine adequate (based on City of Tempe evaluation) parts availability and stock on hand, prior to RFP award. Indicate address for chassis parts below.

Rush Truck Center

2600 W McDowell Road

Phoenix, AZ 85009

10. What is the inventory level for repair parts for the **cab and chassis** offered?

Phoenix Rush has 2.8 million \$ in parts, unable to determine the quantity specific to the Model 320

11. Where is the backup facility for **cab and chassis** parts?

Las Vegas, NV, Seattle, WA, Oklahoma City, OK, Rockford, IL, Atlanta, GA & Lancaster, PA

12. What is the inventory level of repair parts for the **cab and chassis** at the back up facility?

unable to determine, but quite extensive

13. What is delivery time for **cab and chassis** parts from the backup facility?

1-2 days

14. A local parts and service center with a full line of replacement parts and qualified factory service personnel is preferred for the offered **striper unit**. Do you have a local facility?

Yes ___ No x

If NO, explain in detail how replacement parts and service are to be obtained

see attached service document entitled "We are pleased..."

V Delivery & Demonstration Vehicle

15. Do you have a **cab and chassis** demonstration vehicle available locally for evaluation?

Yes No

16. Do you have a demonstration unit available locally for the **striper unit**?

Yes No

17. What is the delivery time ARO for complete vehicle 180 days
Requested delivery time is 120 day or less.

Cab and Chassis delivery time ARO 100 days (estimated)

Striper unit delivery time ARO +80 days from chassis delivery date

Company Name: _____

PRICE SHEET

ITEM NO.	DESCRIPTION OF REQUIRED MATERIAL, SERVICE OR CONSTRUCTION	QTY	UNIT	UNIT PRICE
1.	Cab and Chassis Peterbilt 320 Manufacturer and Model #	1	Ea	\$ 108,494.00
2.	Striper Unit EZ-Liner AL400-EZ Manufacturer and Model #	1	Ea	\$ 210,980.00
3.	Trade in of City of Tempe Unit	1	Ea	(\$ 7,500.00)
Total				\$ 311,974.00

* Applicable Tax N/A% EZ-Liner is not licensed to collect sales tax in AZ

* State correct jurisdiction to receive sales tax on the Vendor's Bid Offer, form CS-P201 (B) included in this Invitation for Bid document.

Less prompt payments discount terms of ___ % ___ days/ or Net 30 days. (To apply after receipt and acceptance of an itemized monthly statement.) For bid evaluation purposes, the City cannot utilize pricing discounts based upon payments being made in less than 30 days from receipt of statement.

Ordering and Invoice Instructions

In order to facilitate internal control and accounting, each City Department will order and must be invoiced separately. Monthly invoices must be segregated by City Department number and mailed or delivered directly to the City Customer Department. For most materials, there will be between three - (3) and six - (6) ordering departments. At the time an order is placed, the contractor must obtain the ordering department's cost center numbers for billing purposes. The use of the department's cost center numbers will be in addition to the purchase order number. Once a month, the contractor shall submit a consolidated statement which shall itemize the invoice numbers, invoice date, invoice amounts, and the total amount billed to Accounting. Discount offering will be based upon days from receipt of the consolidated monthly statement. Invoice(s) shall not show previous balances.

Invoices shall include:

1. Listing Of All Delivery/Pickup Receipt Numbers Being Invoiced.
2. Total Cost Per Item.
3. Applicable Tax.
4. Payment Terms.
5. Blanket Purchase Order Number.