1.0 Purpose:

The asphalt crack router shall be self-contained and capable of easily, accurately and rapidly following random cracks in asphalt surfaces and cutting sealant reservoir slot to a width of no less than $2^{\prime\prime}$ and a depth of no less than $1-1/2^{\prime\prime}$. The unit must include a gas powered engine with a minimum 30 horsepower and air filtration system necessary to provide long life. A dual safety stopping anti-kickback system must be included to stop the travel of the machine in emergency situations.

1.1 Bidder qualifications:

The equipment being bid must be new, current year production and meet the needs of this specification without modification. The model must be currently advertised, have been in production for a min. of two years and have a working volume of not less than called for in this specification. Hybrid, one-off or prototype equipment is unacceptable.

1.2 Approved Equal:

These specifications are not intended to be restrictive, but are meant to describe the kind and size of unit desired to be purchased in detail. If bidder is basing the proposal on equipment other than what is specified in these bid documents and wishes the equipment to be considered as an "approved equal" they shall submit on a separate sheet, an item by item description of that which is proposed. The bidder's specifications must be complete and of sufficient detail to cover all items included in this bid specification and in a manner that allows a direct comparison. Any item not covered will be deemed as not meeting specifications. Such bidder shall also include, but not as a substitute for the above, any manufacturer's literature. In addition, if the bidder takes exception to any item they shall note this and describe in detail the exception and how the proposal is an "approved equal". Failure to carry out the provisions noted herein may be deemed sufficient reason to reject the bidder's proposal. Check yes if demonstration has been performed prior to bid letting.

YES	NO

2.0	Basic Machine Requirements:	YES	S NO
	2.1 Percussion Drum style router	with 6 carbide cutting wheels.	
	2.2 Minimum 30HP gas engine.		
	2.3 Pneumatic wheels.		
	2.4 Electric Actuator to raise and lower unit.		
	2.5 Cut-Control automatic depth	system.	
	2.6 Adjustable height handles.		
	2.7 Anti-Kickback stopping syster	n and hands-free engine kill.	
	EXCEPT	IONS :	

3.0 Frame and axle:

The unit must have a rigid, jig-welded tubular and plate steel frame including lifting bale. It will employ a pivoting motor mount that adds to structural integrity by becoming a rigid structural component when secured yet allow easy belt adjustment. Two (2) belt adjustment bolts will be used to prevent engine platform twisting. For safety the tires will be equipped with safety hubs that will prevent any backward travel when quick stop system engages.

YES	NO

3.1 Frame and axle minimum requirements:	YES	NO
3.1.1 Construction: Tube Steel frame construction:		
3.1.2 Motor mount: Pivoting mount to allow belt tensioning.		
3.1.3 Drum Access: For better drum access, a swing up access		
door must be provided. Latches will be included to secure and		
no tools must be required for opening.		
3.1.4 Wheels: Wheels will be 4:80 x 8 highway rated with		
automotive type tapered roller bearings mounted on a		
machined axle.		
3.1.5 Safety Hubs: Safety hubs that prevent any rearward		
movement when anti-kickback system engages.		
3.1.6 Forward travel: Forward travel must not be impeded		
when safety hubs are locked.		
EXCEPTIONS:		

4.0	Operator Handle and control station:	
	sphalt router will be equipped with an adjustable bandle and operator station	All con-

The Asphalt router will be equipped with an adjustable handle and operator station. All control functions for engine and depth adjustment must be included and centrally located. A hands-free engine kill system must also be located at control station.

YES	NO

4.1 Handle and control station minimum requirements:	YES	NO
4.1. Operator handle: Handle will be adjustable for operator		
height. Minimum 12 inch height adjustment required.		
4.1.2 Raise/lower switch: Will be mounted within easy reach of		
handle grip.		
4.1.3 Cut Control: The Router will be equipped with an		
Electronic Cut Control system. A depth adjustment knob will be		
located on the control panel to set cut depth. Once depth is set,		
by setting the raise/ lower switch back to "Auto", the cut depth		
will return to previous depth automatically.		

4.1.4 Engine Throttle and Choke: Both throttle and choke	
control levers will be remote mounted in control panel.	
4.1.5 Hands-free engine kill: An engine kill system will be	
included and be activated with a bar that runs the whole length	
of the control station. In an emergency, the operator can kill	
engine by simply bumping the bar.	

EXCEPTIONS:

5.0 Cutter Head and bearings:

The Cutter head (drum) must be a split two piece design with 1-3/16" x 12" solid steel, surface ground drums allowing replacement of either side individually. Additional access to drum will be provided with an access panel that allows more than 60% access to drum without rotating.

	YES	NO
5.1 Cutter Drum and bearings minimum requirements:	YES	NO
5.1.1 Drum design: Solid steel 2 piece drum design allowing just one side to be replaced.		
5.1.2 Dimensions: minimum 1 3/16 inch x 12 inch		
5.1.3: The composite drum shall be mounted to a 1-11/16"		
shaft by standard tapered bushings to eliminate scoring of		
shaft.		
5.1.4: Swing away pin retainers must allow pin removal from		
either side of drum.		
5.1.5: Drum shall accommodate six standard cutter bits.		
5.1.6: (6) Carbide tipped steel cutting star bits must be included and installed on drum.		
5.1.7: Heavy duty roller bearing pillow blocks. Split pillow block		
housing is required to allow removal of drum assembly by		
removing only the bearing caps and belt.		
5.1.8: The drum must include six (6) hardened pins upon which		
the cutters will rotate and sixty-six (66) hardened spacers to be		
installed on the drum assembly for adjustment of width of		
routed slot.		
EXCEPTIONS		

EXCEPTIONS:

6.0 Engine and drive belt:

The unit must be equipped with a min. 30 HP, twin cylinder overhead valve gasoline engine with hydraulic valve lifters, Fixed-jet Smart-Choke equipped side-draft carburetor, integrated oil cooler, spin-on oil filter, electronic ignition and spark advance.

YE	S	NO

6.1 Engine and drive belt minimum requirements:	YES	NO
6.1.1 Gas engine: Twin cylinder overhead valve gasoline engine with hydraulic valve lifters.		
6.1.2 Engine HP: Minimum 30 HP for best cutting.		
6.1.3 Engine Protection: Engine will be protected by an Oil		
sentry system to shut engine down during low oil conditions.		
6.1.4 Air Filtration: Dual dry-element inner and outer air		
cleaners.		
6.1.5: Electric start must also be included		
6.1.6: Spin on oil filter will mounted on engine.		
6.1.7: Power shall be transmitted by four groove 3V section		
sheaves on the engine and drum shaft with a single banded (4)		
groove belt.		
6.1.8: Belt protection will be afforded by a bolt-on vented belt		
guard. The guard must also fully cover the Muffler to protect		
the operator from hot surfaces.		

EXCEPTIONS:

7.0 Included Options: If box is checked yes then item must be included.

	YES	NO
7.1 Optional Gauge Kit includes: Amp meter and Oil pressure		
gauge.		
7.2 Extra Carbide tipped Router bit set of six cutters.		
7.3 Digital Tach/ Hour meter.		
7.4 Replacement set of pins (6)		
7.5 Replacement set of Washers (66)		
8.6 TRAVEL ASSIST OPTION: Travel assist option allows self-		
propelled motion for transport to next crack and		
loading/unloading of Router. When unit Raise/ lower switch is		
held in raise position, friction wheels will engage router wheels.		
When switch is released, travel will automatically stop.		

10.0 Paint and safety decals:

The unit shall be painted using Dupont acrylic paint in black with red accent colors. It will be equipped with required safety decals and signage.

YES	NO

11.0 Warranty:

The manufacturer shall warranty the equipment for a period of one year. Bidder warranty policy must be included with bid submittal.

YES	NO