

Pittsburg County, Oklahoma
COUNTY PURCHASING OFFICE
 Pittsburg County Court House
 McAlester, Oklahoma
 Phone: (918) 423-4934

INVITATION TO BID

PLEASE REVIEW TERMS AND CONDITIONS ON REVERSE
 SIDE RELATING TO SUBMISSION OF THIS BID.

Notarized Affidavit completions and signature required on reverse side.

DATE ISSUED	22-Jan-13
PAGE 1 OF	

BID NUMBER Bid # 12	BID CLOSING DATE AND HOUR February 4, 2013 @ 10:00AM	REQUIRED DELIVERY DATE Days after award of Purchase Order
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TERMS:	DATE OF DELIVERY:
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Item	Quantity	Unit of issue	DESCRIPTION	Unit Price	Total
			<p>Pittsburg County wishes to advertise for the following:</p> <p>One (1) or more new Motor Graders Lease with option to purchase with financing included</p> <p>SEE SPECIFICATIONS ATTACHED.</p>		

RESOLUTION
To
Advertise

The Board of County Commissioners, Pittsburg County, met in regular session on Tuesday, January 22, 2013.

WHEREAS, Pittsburg County wishes to advertise for the following:

One (1) or more new Motor Graders, Lease with option to purchase with financing included

A bid package containing complete specifications and an "Invitation to Bid" are available at the Pittsburg County Clerk's Office, 115 East Carl Albert Parkway, Room 103, McAlester, Oklahoma 74501 or online at pittsburg.okcounties.org.

WHEREAS, each competitive bid submitted to the County must be accompanied with an affidavit for filing with the competitive bid form as required by 61 O.S. § 138.

THEREFORE, sealed bids will be received and filed with the County Clerk and opened by the Board of County Commissioners on Monday, February 4, 2013 at 10:00 a.m. in the County Commissioners Conference Room, Pittsburg County Courthouse, 115 East Carl Albert Parkway, McAlester, Oklahoma. Contract will be awarded to the lowest or best bidder. The Board of County Commissioners reserves the right to reject any and all bids and re-advertise.

BOARD OF COUNTY COMMISSIONERS
PITTSBURG COUNTY, OKLAHOMA

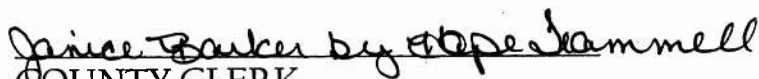

CHAIRMAN


VICE-CHAIRMAN


MEMBER



ATTEST:


COUNTY CLERK

		Bid specifications for Motor Grader
Compliance		
		Engine
yes	no	Engine meets EPA Interim Tier 4 and European Union Stage III B standards
yes	no	The engine shall have Dual safety air cleaner elements, radial seal, dry type
yes	no	Altitude deration will not occur at altitudes less than 10,000 ft (3048 m). The deration rate above 3048 m (10,000 ft) shall be 1.5% per 305 m (1000 ft).
yes	no	Engine shall have a wet-sleeve cylinder liner design for improved cylinder cooling over dry sleeve and cast-in-bore design and for improved cylinder and piston ring durability.
yes	no	Fuel system shall be high-pressure, common rail
yes	no	Engine bore and stroke shall be 4.66 X 5.35 in. (118 X 136 mm)
yes	no	Engine shall be a turbo-charged, direct injection, four stroke, 6-cylinder diesel engine with 4 valves per cylinder.
yes	no	Engine shall be electronically controlled for more efficient fuel injection and fuel burn.
yes	no	Engine displacement for standard engine shall be no less than 9.0 liters (548 cu. in.)
yes	no	Engine shall reach no less than SAE net horsepower in the gears 1-8: 1st 170hp, 2nd 173hp, 3rd 189hp, 4th 204hp, 5th 219hp, 6th 235hp, 7th 241hp, 8th 245hp
yes	no	Standard and Optional peak engine power shall not be achieved at an engine speed greater than 2100 rpm.
yes	no	Standard engine will have a minimum torque rise of 57% in all gears
yes	no	Unit shall have a self-draining muffler with curved stack
yes	no	Unit shall be equipped with Engine Power Management System for variable horsepower for up to 245 SAE net and shall meet IT4 standards
		Ether starting aid shall be available and must automatically meter ether injection to prevent engine damage.
yes	no	A jacket water heater shall be available to assist in cold weather starting.
yes	no	Machine shall be equipped with electronic over-speed protection to prevent the engine and transmission from over speeding, as a standard feature.
yes	no	Electronic Throttle Control (cruise control) shall be available, and shall be controlled by a switch, located on the right-hand console for resuming and decreasing throttle set.
yes	no	The Electronic Throttle Control modes, set and accelerate functions, shall be located on the right console for easy access.
yes	no	The engine shall have an altitude compensating turbocharger
yes	no	Six Cylinder, turbocharged with air-to-air after cooler diesel engine and shall be designed and built by the manufacturer
		Unit shall be equipped with engine stall prevention (ESP) as standard equipment
		Cooling
yes	no	A guard shall be available to protect the machine's transmission from debris.
yes	no	Coolant levels should be easily checked by sight gauges or overflow tank
yes	no	Engine coolant shall be Cool Guard™ II Extended Life or equivalent for temperatures to -34 F
yes	no	Air intake shall be pre-screened (3 mm perforations) standard
yes	no	The charged air cooler shall be heavy duty aluminum 10 fin per inch
yes	no	The engine shall have an air-to-air after cooling for low engine speed lugging
yes	no	Unit shall have charged air cooler with restriction sensor and in-cab restriction warning light
yes	no	Engine fan shall automatically adjust fan speed via a variable displacement hydraulic fan pump to meet engine cooling requirements to minimize power demand from the engine, reduce vehicle noise levels, improve fuel economy, and improve vehicle performance.
yes	no	Engine power shall automatically compensate for power draw of the fan system to maintain a constant horsepower available to maintain vehicle performance independent of cooling system power draw.
yes	no	Engine fan shall be able to automatically reverse and allow the operator to choose the time interval for the reversal to occur through the vehicle monitor.

		Bid specifications for Motor Grader
Compliance		
yes	no	The hydraulic oil cooler shall be 10 fin per inch with vertical, spin-on filter
yes	no	The radiator shall constructed of aluminum and have 10 fins per inch spacing
yes	no	Unit shall have a coolant recovery tank provided
yes	no	Cooling system shall be isolated from the engine compartment
yes	no	Pivot and / or slide out coolers provide access for quick air cleanout of dust and debris
yes	no	A rear access door shall be provided to provide quick air cleanout of dust and debris for the engine radiator, charge air cooler, transmission cooler, axle cooler, and the hydraulic oil cooler.
yes	no	Access to engine will be open from both sides with hinged engine side shields and full access service doors
		Engine enclosure and daily service points shall be accessible from ground level, and grouped on the left side of the machine.
yes	no	Engine compartment doors shall be lockable without the use of external locks.
yes	no	A guard shall be available to suppress sound from the engine.
yes	no	The unit shall have a 6000 hour coolant interval from factory
yes	no	Vandal protection package shall include locking for cab doors, engine side shields (4), top tank radiator access door, engine coolant surge tank, hydraulic reservoir cap, fuel tank cap and tool box.
Power Train		
yes	no	Optional auto-shift shall be available
yes	no	Cruise control shall be standard.
yes	no	Machine shall have no drive shafts that cross over the articulation hitch.
yes	no	The transmission shall have eight forward and eight reverse speeds with built-in diagnostics
yes	no	Transmission shall have 5 working gears between 0-10.2 mph (0-16.4 km/h), for dirt applications.
yes	no	Machine shall be equipped with an electronic inching pedal for improved modulation and machine control.
yes	no	The transmission system shall have an independent oil reservoir, filtration and cooling system with 31 GPM hydraulic gear pump
yes	no	The shift pattern will be the industry standard U-shape
yes	no	The transmission shift handle shall have a neutral park brake locking position. It shall include a park start safety switch
yes	no	Transmission shall be event based shifting (EBS) or use load sensing electronic shift modulation with over speed protection
yes	no	Transmission shall have clutch overheating protection to prevent clutch failures due to excessive and overuse of the inching pedal.
yes	no	The transmission shall have rubber isolation mounting to reduce noise and vibration
yes	no	Diameter at the output end of the transmission shaft shall be no less than 2.34 in (59.5 mm)
yes	no	Transmission shall be equipped with built-in self-diagnostic capability.
yes	no	Transmission shall be isolated/resilient mounted to reduce sound and vibration.
yes	no	Transmission shall be a direct drive, power shift, countershaft type.
Axles/Brakes/Tandems		
yes	no	The brakes shall be continuously pressurized, filtered, oil cooled
yes	no	The brakes shall be internal self-adjusting maintenance free, wet multi-disk, inboard of tandem pivot
yes	no	The park brake shall have an independent oil reservoir, filtration and cooling system with 8 GPM axle hydraulic gear pump and 10 fins per inch oil cooler
yes	no	The parking brake shall be automatic, spring-applied, hydraulic released
yes	no	The unit shall have primary and secondary service brakes
yes	no	Service brakes shall be multi-disc, oil-cooled and completely sealed.
yes	no	Service brakes shall be hydraulically actuated, utilizing dual independent brake circuits.

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Compliance		
yes	no	Service brake disc surfaces shall be grooved and carry oil between discs and plates with brakes fully applied.
yes	no	Entire braking system shall meet all requirements of ISO 3450.
yes	no	Service brakes shall provide a minimum of 3,565 in ² (23,000 cm ²) of total friction material surface area used at each of the four tandem wheels to eliminate braking loads on the power train.
yes	no	Differential Lock/Unlock shall be electro-hydraulically controlled, as a standard feature.
yes	no	Differential Lock/Unlock shall be capable of being engaged or disengaged at any time during vehicle operation without incurring damage to the differential and differential lock system. Engagement shall not be restricted or determined by vehicle speed, vehicle shifts, or tandem tractive conditions (tandems slipping).
yes	no	Differential Lock/Unlock shall be a multi-disc design.
yes	no	Differential Lock/Unlock can be selected by operator to be automatic for gears 1-4.
yes	no	Differential Lock/Unlock shall be operator controlled, via toggle switch near the right hand blade controls
		Unit shall be equipped with system capable of automatically engaging and disengaging diffloc to optimize tractive capability, while at the same time providing the operator with the ability to manually engage diffloc during any vehicle operation
yes	no	Parking brake shall be multi-disc, oil-cooled, spring-applied, hydraulically released, sealed, adjustment-free, and integrated into the transmission.
yes	no	Parking brake shall be serviceable without removing the transmission.
yes	no	Engaged parking brake shall neutralize the transmission.
yes	no	Differential housing oil filter shall have 2000 hour service replacement interval.
yes	no	The axles shall be planetary single reduction final drive
yes	no	The rear axle shall have clutch style hydraulic differential lock that can be engaged on the go to achieve maximum traction instantly when required
yes	no	The rear-axle shall be a bolt-on modular design offering easy access to differential components, improving serviceability and contamination control.
yes	no	Final drive shall be a planetary design.
yes	no	Front axle shall be an arched design for maximum ground clearance.
yes	no	Front axle oscillation shall be no less than 32 degrees total, per side 16 degrees up, 16 degrees down.
yes	no	Front wheel steering angle shall be no less than 48.5 degrees left or right.
yes	no	Front wheel spindle maintenance intervals shall be no less than 2000 hrs.
yes	no	Steering tie rod ends shall be heat induction hardened.
yes	no	Front wheel spindle bearings shall be a large diameter taper roller bearing for radial and axial load
yes	no	Tandems shall be capable of oscillating 15 degrees front tandem up and 15 degrees front tandem down, with full machine articulation and having no interference between tandem wheel and machine structure.
yes	no	Tandem chain pitch shall not be less than 2.0 in (50.8 mm).
		Distance between center of tandem wheels shall be no less than 60.8 in (1540 mm).
yes	no	Maximum front wheel lean shall be no less than 20 degrees left or right.
Hydraulic System - GP Controls		
yes	no	Motor grader shall have an option of up to six auxiliary control valves and control levers integrated into the main control rack and valve stack, 14 possible control levers on main control rack.
yes	no	Hydraulic pump shall be a variable-displacement, axial-piston, load sense control, pump.
yes	no	Left and right blade lifts shall have hydraulic float control.
		The hydraulic system shall have a 56.0 gpm (212 L/m) main hydraulic axial piston pump and 10 fin per inch oil cooler
yes	no	Implement pump shall not be mounted under cab floor, minimizing sound and vibration.

		Bid specifications for Motor Grader
Compliance		
yes	no	A sight gauge will be provided for checking hydraulic reservoir fluid
		The hydraulic tank shall have a baffling system to improve reservoir effectiveness to prevent aeration, contaminant settling, and heat dispersion and dissipation.
yes	no	Hydraulic system shall be fully sealed, using O-ring seals to prevent contamination and spillage.
yes	no	The hydraulic stand-by pressure shall be no less than 1600 psi (11031 kPa).
yes	no	Hydraulics system shall be a closed center, load sensing type, with a variable displacement, axial piston-type pump.
yes	no	The maximum hydraulic system pressure shall be no less than 2,750 psi (18.961 kPa).
yes	no	Implement valves shall be proportional priority pressure compensating for consistent response, when multi-functioning any combination of implement controls and independent of engine speed.
yes	no	Lock valves shall be integrated into the main implement valve to prevent cylinder drift.
		Hydraulic valves shall not be mounted to the cab floor, to minimize sound and vibration.
yes	no	All implement hydraulic connections shall have O-ring face seals for leak prevention.
yes	no	The hydraulic system shall be pressure-compensated and load-sensing for reduced fuel consumption.
yes	no	Steering capabilities shall be ISO 5010
yes	no	Secondary steering is available
		Electrical
yes	no	The electrical system shall be 24 volt with 150 amp alternator.
yes	no	Machine shall have 1400 CCA extra heavy-duty batteries with 440 minute reserve capacity
yes	no	The cab shall have a 10 amp continuous / 15 amp peak capacity (24V to 12 V) converter
yes	no	A 24V to 12V converter with 25-amp continuous, 30-amp peak capacity shall be available.
yes	no	Optional electrical corrosion-prevention protection for protection in corrosive environments such as salt handling
yes	no	All core machine systems shall be electronically connected optimizing performance and preventing machine damage
yes	no	LED turn signal, marker and brake lights shall be provided.
yes	no	Unit shall be equipped with driving lights, two high and two low beam halogen headlights with front and rear turn signals, front and rear marker lights, brake lights and hazard warning lights.
yes	no	Unit shall have indicator or warning for: high beams, seat belt, turn signals, cruise control, low alternator voltage, engine air filter restriction, engine oil pressure, engine coolant temperature, wait to start (glow plugs), hydraulic filter restriction
yes	no	Machine shall have back-up lights and sounding alarm as standard when reverse gears are selected.
		The monitor shall have multi-language options provided (English, Spanish, French, & Russian)
yes	no	Unit shall be equipped with a single LCD monitor displaying gauges for: DPF cleanliness level, engine coolant temperature, transmission oil temperature, hydraulic oil temperature, rear steer articulation angle and fuel level with low level visual warning. The LCD monitor should also be capable of displaying vehicle performance data, diagnostic information, and diagnostic trouble codes.
yes	no	Unit shall have digital readout displayed on a single LCD monitor for: engine rpm, odometer, transmission gear indicator, speedometer, hour meter
yes	no	Starting system shall be a 24V direct electric type.
yes	no	All light and wiper switches will be solid-state distribution
yes	no	The in-cab switch module shall be sealed to keep out dirt, dust and airborne debris
yes	no	The unit shall be provided with ground level master electrical disconnect switch

		Bid specifications for Motor Grader
Compliance		
yes	no	The unit shall have an electric key fuel shut-off switch
yes	no	Electrical system shall have a master disconnect switch with a padlock provision (in addition to the ignition switch), accessible from the ground level.
yes	no	Cab will be wired for beacon, radio and auxiliary circuit
yes	no	The unit shall have a bypass start safety cover on the starter
		Operator Station
yes	no	Integrated blade control system ready is standard from the factory. This option shall include integrated mounting brackets, hydraulic valves, electrical harnesses, circle rotate and slope sensors for quick, easy installation of BOTH Trimble AND TopCon systems.
yes	no	Steering wheel and control console shall be tiltable
yes	no	The ergonomically designed steering wheel will take 5 1/4 turns (lock to lock) if the machine is equipped with manual controls. If the machine is equipped with EH controls, the steering wheel shall take 6 1/4 turns (lock to lock).
yes	no	Steering wheel shall be required to operate machine.
yes	no	Left and right side cab doors are standard
		Cab doors shall have a hold-open clasp with a ground-level release and in addition to, a release in the cab.
yes	no	Machine shall provide dual exits allowing for emergency egress should one side become obstructed
yes	no	Cab shall have cup holder, personal cooler holder/storage compartment for operator's manual, with a molded floor mat
yes	no	Air vents shall be provided for all front and side tinted windows
yes	no	Cab air pre-cleaner shall be an option to extend filter life by pre-cleaning outside air
yes	no	Three rearview mirrors shall be provided, one interior and two breakaway exterior mounted
yes	no	AM/FM/WB Radio including 24V to 12V converter, two speakers, antenna and wiring shall be available.
yes	no	AM/FM/WB Radio with CD including 24V to 12V converter, two speakers, antenna and wiring shall be available.
yes	no	A rear sun shade shall be available.
yes	no	The motor grader shall be equipped with low ROPS/FOPS air conditioned cab, isolation frame mounted for noise and vibration reduction
yes	no	An enclosed cab with ROPS (Rollover Protective Structure) shall be provided.
yes	no	FOPS (Falling Object Protective Structure) shall be provided.
yes	no	Seat shall be a cloth-covered air suspension seat with, 3-inch (76 mm) retractable seat belts, with adjustments for fore-aft position, seat height, seat back angle, thigh support, and lumbar support.
yes	no	A machine security system shall be available to electronically code keys selected by the user to limit usage by individuals or by time parameters.
yes	no	Access to the cab shall be three anti-skid steps
yes	no	Machine shall provide 3 points of contact on all areas of the machine, for mounting and dismounting.
yes	no	Left and right side tandem case assemblies shall be covered with punched steel plate to provide an adequate platform for standing and walking.
yes	no	Cab shall have angled floor design allowing direct visibility to moldboard.
yes	no	The front glass shall be continuous and unobstructed glass from roofline to floor for visibility of the blade, heel and toe, back of the cutting edge and front tires. If choosing lower opening windows, the configuration changes slightly.
yes	no	The Laminated upper front tinted window shall come with a sun shade band
yes	no	The unit will come with a rear window electric defroster
yes	no	Machine shall have laminated glass for the front upper window to protect the operator from shattered glass.
yes	no	Optional decelerator pedal shall be available
yes	no	The upper front and rear windshield washers with intermittent wipers shall be standard

		Bid specifications for Motor Grader
Compliance		
		General Specifications
yes	no	Machine Wheel Base (distance from front axle to mid tandem) shall not be less than 242.6 in (6,160 mm).
yes	no	Machine shall be designed and built by the manufacturer.
yes	no	Transmission shall be designed and built by the machine manufacturer.
yes	no	The fuel tank capacity shall be no less than 110 gallons (416 L)
yes	no	Machine height to top of the cab shall not exceed 125 in (3,180 mm).
yes	no	Turning radius will be no greater than 284 in (7,214 mm)
yes	no	Max saleable weight of the machine shall not be more than 46,800 lbs (21 228 kg). Weight shall be the heaviest possible combination of compatible attachments, also including lubricants, full fuel tank and operator of 200 lbs (91 kg).
yes	no	Base Machine Weight shall not be less than 35,220 lbs (15,976 kg). Weight shall include: standard machine configuration, lubricants, coolants, full fuel tank and operator of 175 lbs (80 kg).
yes	no	Six Cylinder, turbocharged with air-to-air after cooler diesel engine and shall be designed and built by the manufacturer
		Frames and Structures
yes	no	The angle of articulation shall be no less than 22 degrees.
yes	no	The articulation joint shall have mechanical locking device to prevent frame articulation while servicing or transporting machine.
yes	no	The rear frame shall have two box section channels with an integrated bumper.
yes	no	The frame shall be ready for snow wing attachment
yes	no	The motor grader main frame shall be designed with .89" (23mm) top and bottom plates and .63" (16mm) side plates
yes	no	Unit will be provided with seven-position pin-locking saddle
		Circle and Mold Board
yes	no	Circle outside diameter shall be no less than 60 in (1524 mm).
yes	no	Circle shall be a fabricated rolled-ring, with machined wear surfaces on the top and bottom.
yes	no	Circle teeth contact surfaces shall be induction-hardened on the front 120 degrees of the circle.
yes	no	There will be no less than 6 replaceable wear inserts between the circle and drawbar providing at least 163 in ² (1051 cm ²) of wear surface area.
yes	no	The unit shall have a circle drive slip clutch to protect the drive pinion from shock loads
yes	no	Circle shall be rotated by a hydraulically driven motor with a minimum circle pinion torque capability of 49416 ft-lb (67,000 N-m) for nylon inserts or 31715 ft-lb (43,000 N-m)
yes	no	The standard mounting hardware for cutting edges and end bits shall be 3/4 in (19 mm)
yes	no	The draft frame pivot connection shall have a double Ball-in-Socket design with a minimum ball diameter of 6.0 in (152.4 mm) and minimum stem diameter of 2.88 in (73 mm)
yes	no	Link bar shall have 7 positions for increased versatility.
yes	no	Shall have 12' long, 24" high by 7/8" thick moldboard with 5/8" hardware
yes	no	Shall have 14' long, 27" high by 1" thick moldboard with 5/8" hardware
yes	no	Shall have 12' long, 27" high by 1" thick moldboard available with 5/8" hardware available
yes	no	Shall have 13' long, 27" high by 1" thick moldboard available with 5/8" hardware available
yes	no	Shall have 14' long, 24" high by 7/8" thick moldboard available with 5/8" hardware available
yes	no	Shall have 14' long, 24" high by 7/8" thick moldboard available with 5/8" hardware available

		Bid specifications for Motor Grader
Compliance		
yes	no	The mold board shall be pre-stressed during manufacturing for superior strength and durability
yes	no	The mold board will have quick change circle wear and side shift wear inserts, capable of being replaced in approximately 2 hours using only a 9/16" wrench.
yes	no	Moldboard shall have a bank slope angle capability of at least 90 degrees to both sides.
yes	no	The standard moldboard shall be at least 12 ft (3657 mm) long, 24 in (610 mm) high and no less than 7/8 in (22 mm) thick.
yes	no	Slide rails shall be hardened, continuously welded, and have replaceable bronze-alloy wear inserts top and bottom.
yes	no	Moldboard slide rails shall be constructed of a heat-treated, high carbon steel.
yes	no	Moldboard shall have a hydraulic tip control through a range of 42 degrees fore and 5 degrees aft.
yes	no	Throat clearance with standard moldboard shall be at least 4.8 in (123 mm)
yes	no	The motor grader shall have five permanent and usable tie downs for transport
yes	no	Drawbar wear strips shall be replaceable drop-in inserts, made from nylon composite material.
yes	no	Circle and drawbar vertical adjustment points shall be accessible from the bottom of the drawbar, for ease of maintenance.
yes	no	Circle radial wear insert shall be replaced without removing the circle support castings for quick easy maintenance.
yes	no	Moldboard wear strips shall be adjusted with lock screws, providing shim-less adjustment capability both vertical & horizontal.
		Serviceability
yes	no	Daily check points shall be accessible from the left side of the engine and shall be done from ground level
yes	no	The dip stick for checking transmission fluid shall be at ground-level
yes	no	Engine shall have environmentally friendly fuel drain valves
yes	no	Environmental drain provisions will be provided for the hydraulic oil, engine oil, engine coolant, transmission, differential and fuel tank.
yes	no	High-speed oil drain system shall be available with ground level quick connect access.
yes	no	Fuel fast fill shall be ground level accessible, and capable of fill rates of up to 150 gallons/minute (xxx liters / min)
yes	no	Standard hydraulic tank capacity shall not be more than 16 gallons (60.6 L).
yes	no	Standard fuel tank capacity shall not be less than 110 gallons (416 L).
yes	no	Standard cooling system capacity shall not be less than 11.6 gallons (43.9 L).
yes	no	Standard engine oil capacity shall not be less than 6.3 gallons (23.8 L).
yes	no	Standard tandem housing capacity shall not be less than 19.5 gallons (73.8 L) each.
yes	no	Standard circle drive housing capacity shall not be less than 1.5 gallons (5.7 L)
yes	no	Standard front wheel AWD gear box shall not be less than 2 gallons (7.2 L).
yes	no	Engine oil filter shall be a 500-hour, vertical spin-on
yes	no	Engine primary and final fuel filters shall have 500-hour service replacement interval.
yes	no	Engine shall have primary fuel filter with fuel water separator and electronic sensor; quick release dual stage filter and primer pump
yes	no	Hydraulic, transmission, and differential filters shall be banked and easily assessable through the engine compartment doors.
yes	no	Hydraulic filter shall have a service interval of 2000 hours
yes	no	Hydraulic oil change service interval shall be no less than 4000 hours
yes	no	Transmission filter restriction indicator shall be displayed in the cab
yes	no	Transmission oil filter service replacement interval shall be 2000 hours
yes	no	The centralized lube bank shall be at the articulation joint to give access to difficult to reach zerks
yes	no	Sampling ports shall be accessible from the tandem level and provide access to the engine, hydraulic, coolant, and fuel ports.

		Bid specifications for Motor Grader
Compliance		
yes	no	A two-way communication tool shall give service technicians easy access to stored diagnostic data and allow configuration of machine parameters.
		Unit shall be equipped with OEM provided wireless communication system capable of monitoring and communicating machine location, fuel burn, as well as multiple other vehicle performance data. In addition, the system shall be capable of updating system control software wirelessly.
yes	no	Engine shall allow for at least 500 hours of operation between oil changes.
		Tires / Rims
yes	no	Tires mounted on a 9 in (22.86 cm) by 24 in (61 cm) single-piece tire rim to provide mounting for 14x24 pr 14R24 tires
yes	no	A 10 in (25.4 cm) by 24 in (60.96 cm) size multi-piece tire rim shall be available to provide mounting for 14.00-24 and 14.00R24 conventional tires.
yes	no	A 14 in (35.6 cm) by 25 in (63.5 cm) size multi-piece tire rim shall be available to provide mounting for 17.5R25 tires.
		Safety
yes	no	Standard grey glare-reducing paint shall be used on the front frame and engine enclosure to decrease glare from other equipment lights and reflection from the sun and snow.
yes	no	Engine shall be rubber isolation mounted to reduce noise and vibration
yes	no	The unit shall have a fan finger guard
yes	no	A toolbox shall be provided.
		Optional Equipment
yes	no	Blade lift accumulators shall be available, to reduce vertical impact damage.
yes	no	Rear vision camera with integrated display and wiring shall be available.
yes	no	A front lift group shall be available
yes	no	A front scarifier and mid-mount scarifier shall be available.
yes	no	Rear fenders shall meet ISO-3457 requirements and shall not interfere with the ability to fully open any cab or engine enclosure, or service access doors.
yes	no	A rear hitch 120 lb (54 kg) or rear counterweight 1,603 lb (727.1 kg) with integral hitch are available
yes	no	Rear ripper shall have five ripper shank holders and 9 scarifier shank holders.
yes	no	Rear ripper shall have a working penetration of maximum 16.8 in (426 mm) and a minimum penetration force of 20,910 lb (9484 kg) at typically equipped operating weight