
City of Forest



BIDDER SHALL COMPLETE BY CHECKING THE FOLLOWING. IF NOT COMPLIANT, STATE SPECIFICALLY ITEM BEING OFFERED.

SPECIFICATIONS FOR NEW 2026 EXCAVATOR

The following are the suggested minimum specifications for one (1)

Excavator

All bids must be equal in performance and quality pursuant to the bid specifications below, which are not intended to exclude any manufacturer's standard deviation. Any reference to manufacturer's make or series of equipment stated in the following specifications is intended only to establish an acceptable standard and is not intended to limit the bidding. The City of Forest is acting under the authority of Section 31-7-13, Miss. Code of 1972 Amended, and reserves the right to reject any and all bids.

LEGEND / KEY	YES <input type="checkbox"/> = Compliant	NO <input type="checkbox"/> = Exception / Non-Compliant
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SECTION 1: ENGINE SPECIFICATIONS			
SPECIFICATION REQUIREMENT	REQUIRED VALUE	YES	NO
Engine Manufacturer	OEM Diesel Engine Required	<input type="checkbox"/>	<input type="checkbox"/>
Engine Displacement (maximum)	4.5L (274.6 cu. in.)	<input type="checkbox"/>	<input type="checkbox"/>
Net Power Output (ISO 9249) – minimum	117 kW (157 hp)	<input type="checkbox"/>	<input type="checkbox"/>
Number of Cylinders (maximum)	4 cylinders	<input type="checkbox"/>	<input type="checkbox"/>
Engine Speed at Rated Power	1,800	<input type="checkbox"/>	<input type="checkbox"/>
Aspiration	Turbocharged with Air-to-Air Charge-Air Cooler	<input type="checkbox"/>	<input type="checkbox"/>
Emission Compliance	EPA Final Tier 4 / EU Stage IV or equivalent	<input type="checkbox"/>	<input type="checkbox"/>
Off-Level Capability (minimum)	70% (35 degrees)	<input type="checkbox"/>	<input type="checkbox"/>
Auto-Idle System	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Engine Oil Change Interval (minimum)	500-hour interval	<input type="checkbox"/>	<input type="checkbox"/>
Fuel Tank Capacity (minimum)	390 L (103.0 gal.)	<input type="checkbox"/>	<input type="checkbox"/>
DEF Tank (if applicable)	DEF Tank Required (EPA Tier 4 Final)	<input type="checkbox"/>	<input type="checkbox"/>
Cooling Fan Type	Hydraulic on-demand reversing Fan	<input type="checkbox"/>	<input type="checkbox"/>
Air Filter Type	Dual-Element Dry-Type with Pre-Cleaner	<input type="checkbox"/>	<input type="checkbox"/>
Engine Coolant Protection (minimum)	-34°F (-37°C)	<input type="checkbox"/>	<input type="checkbox"/>

SECTION 2: HYDRAULIC SYSTEM SPECIFICATIONS			
SPECIFICATION REQUIREMENT	REQUIRED VALUE	YES	NO
Main Hydraulic Pump Type	2 Tandem Variable-Displacement, EH-controlled Axial-Piston Pumps	<input type="checkbox"/>	<input type="checkbox"/>
Maximum Hydraulic Pump Flow – (combined, minimum)	448 L/min (118 gpm)	<input type="checkbox"/>	<input type="checkbox"/>
System Operating Pressure – Implement (minimum)	34,300 kPa (4,975 psi)	<input type="checkbox"/>	<input type="checkbox"/>
System Operating Pressure – Travel (minimum)	34,300 kPa (4,974 psi)	<input type="checkbox"/>	<input type="checkbox"/>
System Operating Pressure – Swing (minimum)	30,000 kPa (4,351 psi)	<input type="checkbox"/>	<input type="checkbox"/>
Pressure Boost (minimum)	37,300 kPa (5,410 psi)	<input type="checkbox"/>	<input type="checkbox"/>
Hydraulic Oil Change Interval (minimum with sampling)	6,000-hour interval	<input type="checkbox"/>	<input type="checkbox"/>
Hydraulic System Total Capacity (minimum)	280.0 L (74.0 gal.)	<input type="checkbox"/>	<input type="checkbox"/>
Hydraulic Tank Capacity (minimum)	127.0 L (33.5 gal.)	<input type="checkbox"/>	<input type="checkbox"/>
Boom Cylinder Bore (minimum)	120 mm (4.7 in.)	<input type="checkbox"/>	<input type="checkbox"/>

Arm/Stick Cylinder Bore (minimum)	140 mm (5.5 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Bucket Cylinder Bore (minimum)	120 mm (4.7 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Auxiliary Hydraulic Circuit	Standard – Pre-plumbed to arm	<input type="checkbox"/>	<input type="checkbox"/>
Auxiliary Flow Range – Single Pump	30-224 L/m (7.9-59 gpm)	<input type="checkbox"/>	<input type="checkbox"/>
Auxiliary Flow Range – Merge Flow	30-224 L/m (7.9-118 gpm)	<input type="checkbox"/>	<input type="checkbox"/>
Auxiliary Flow Range – Low Flow	31 L/m (8.2 gpm)	<input type="checkbox"/>	<input type="checkbox"/>
Hydraulic Control Type	EH Controls	<input type="checkbox"/>	<input type="checkbox"/>
Boom/Stick Drift Reduction Valve	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Auto Hydraulic Warm-Up Feature	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Automated Power Boost	Standard	<input type="checkbox"/>	<input type="checkbox"/>

SECTION 3: OPERATING WEIGHT & DIMENSIONS

SPECIFICATION REQUIREMENT	REQUIRED VALUE	YES	NO
Operating Weight (maximum config.)	Not to exceed 25,159 kg (55,470 lb.)	<input type="checkbox"/>	<input type="checkbox"/>
Operating Weight (minimum config.)	22,232 kg (49,010 lb.)	<input type="checkbox"/>	<input type="checkbox"/>
Overall Machine Length (maximum)	9,600 mm (31 ft. 6 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Overall Machine Height (to top of cab)	2980 mm (9 ft. 6 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Overall Width of Upper structure (maximum)	2,780 mm (9 ft. 1 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Tail Swing Radius (maximum)	2,880 mm (9 ft. 5 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Counterweight Clearance (minimum)	1,050 mm (3 ft. 5 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Ground Clearance (minimum)	470 mm (19 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Undercarriage Track Length	4,440 mm (14 ft. 7 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Track Gauge (centerline to centerline)	2,380 mm (7 ft. 10 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Boom Length	5.68 m (18 ft. 8 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Arm/Stick Length	2.9 m (9 ft. 6 in.)	<input type="checkbox"/>	<input type="checkbox"/>

SECTION 4: UNDERCARRIAGE SPECIFICATIONS

SPECIFICATION REQUIREMENT	REQUIRED VALUE	YES	NO
Track Shoe Width Options	Offer 700 mm (28 in.), and 800 mm (32 in.) triple grouser shoes	<input type="checkbox"/>	<input type="checkbox"/>
Number of Track Shoes per Side (minimum)	49 shoes per side	<input type="checkbox"/>	<input type="checkbox"/>
Number of Lower Track Rollers per Side (minimum)	8 rollers per side	<input type="checkbox"/>	<input type="checkbox"/>
Number of Carrier Rollers per Side (minimum)	2 carrier rollers per side	<input type="checkbox"/>	<input type="checkbox"/>
Track Chain Type	Greased and Sealed	<input type="checkbox"/>	<input type="checkbox"/>

Track Drive Type	2-speed Axial-Piston Motors	<input type="checkbox"/>	<input type="checkbox"/>
Travel Speed (minimum – high range)	5.8 km/h (3.6 mph)	<input type="checkbox"/>	<input type="checkbox"/>
Travel Speed (minimum – low range)	3.4 km/h (2.1 mph)	<input type="checkbox"/>	<input type="checkbox"/>
Maximum Drawbar Pull (minimum)	211 kN (47,435 lbf)	<input type="checkbox"/>	<input type="checkbox"/>
Propel Motor Shields / Travel Motor Guards	Required	<input type="checkbox"/>	<input type="checkbox"/>
Automatic Propel Brake (spring-applied, hydraulic release)	Required	<input type="checkbox"/>	<input type="checkbox"/>
Ground Pressure (32 in. shoes, bucket, maximum)	36.4 kPa (5.3 psi)	<input type="checkbox"/>	<input type="checkbox"/>

SECTION 5: DIGGING PERFORMANCE & REACH

SPECIFICATION REQUIREMENT	REQUIRED VALUE	YES	NO
Maximum Digging Depth (minimum)	6.65 m (21 ft. 10 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Maximum Depth Cut – 8 ft. Level Bottom (minimum)	6.46 m (21 ft. 2 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Maximum Reach at Ground Level (minimum)	9.68 m (31 ft. 9 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Maximum Cutting Height (minimum)	9,470 mm (31 ft. 1 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Maximum Loading Height (minimum)	6,890 mm (22 ft. 7 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Maximum Vertical Wall Digging Depth (minimum)	4,880 mm (16 ft. 0 in.)	<input type="checkbox"/>	<input type="checkbox"/>
Bucket Digging Force – ISO (minimum)	163 kN (36,644 lbf)	<input type="checkbox"/>	<input type="checkbox"/>
Arm Digging Force – ISO (minimum)	118 kN (26,528 lbf)	<input type="checkbox"/>	<input type="checkbox"/>
Minimum Swing Radius (maximum)	2.88 m (9 ft. 5 in.)	<input type="checkbox"/>	<input type="checkbox"/>

SECTION 6: SWING MECHANISM

SPECIFICATION REQUIREMENT	REQUIRED VALUE	YES	NO
Swing Speed (minimum)	11.7 rpm	<input type="checkbox"/>	<input type="checkbox"/>
Swing Torque (minimum)	75,100 Nm (55,391 lbf-ft.)	<input type="checkbox"/>	<input type="checkbox"/>
Swing Brake Type	Spring-Applied, Hydraulically Released	<input type="checkbox"/>	<input type="checkbox"/>
Swing Fences Alarm	Standard	<input type="checkbox"/>	<input type="checkbox"/>

SECTION 7: ELECTRICAL SYSTEM

SPECIFICATION REQUIREMENT	REQUIRED VALUE	YES	NO
Battery Configuration	Two (2) 12-Volt Maintenance-Free Batteries	<input type="checkbox"/>	<input type="checkbox"/>
Battery Cold Cranking Amps (minimum)	950 CCA	<input type="checkbox"/>	<input type="checkbox"/>
Alternator Output (minimum)	145 amps	<input type="checkbox"/>	<input type="checkbox"/>
Centralized Electrical Disconnect Switch	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Machine Telematics / GPS Fleet Management	Standard– OEM Telematics System (e.g., JDLINK, etc)	<input type="checkbox"/>	<input type="checkbox"/>
Remote Diagnostics / Remote Flash Capability	Required	<input type="checkbox"/>	<input type="checkbox"/>
Remote Display Access & Control	Standard	<input type="checkbox"/>	<input type="checkbox"/>

Wireless Data Transfer	Standard	<input type="checkbox"/>	<input type="checkbox"/>
OTA (Over-the-Air Software updates)	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Programmable Time-Delay LED Working Lights	Required	<input type="checkbox"/>	<input type="checkbox"/>
LED Boom Work Light (minimum 1 per side)	Required	<input type="checkbox"/>	<input type="checkbox"/>
Right & Rearview Camera System	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Surround View Camera	Required	<input type="checkbox"/>	<input type="checkbox"/>
Keyless Push-to-Start Engine Control	Standard	<input type="checkbox"/>	<input type="checkbox"/>
12V DC Power Outlet in Cab	Standard	<input type="checkbox"/>	<input type="checkbox"/>
USB Charging Port in Cab	Standard	<input type="checkbox"/>	<input type="checkbox"/>

SECTION 8: OPERATOR'S STATION & CAB

SPECIFICATION REQUIREMENT	REQUIRED VALUE	YES	NO
ROPS Certification	ISO 12117-2 ROPS Certification Required Weight Rating: 61,730 lb.	<input type="checkbox"/>	<input type="checkbox"/>
Cab Pressurization / Air Conditioning	Automatic Climate Control with Heat, A/C, and Pressurizer Required	<input type="checkbox"/>	<input type="checkbox"/>
Seat Type (minimum)	Air-Suspension Seat with active cooling and heating Required	<input type="checkbox"/>	<input type="checkbox"/>
Seat Belt	Minimum 3 in. Retractable Seat Belt Required (SAE J368)	<input type="checkbox"/>	<input type="checkbox"/>
Monitor / Display Type	High-Resolution Color Touchscreen Monitor (minimum 12.8 in.) w/ integrated 2d and capable of 3D grade control all in a single display	<input type="checkbox"/>	<input type="checkbox"/>
Monitor Language Capability	Multi-Language Capable	<input type="checkbox"/>	<input type="checkbox"/>
Radio	AM/FM Radio with Bluetooth. Full control in the display and command arm.	<input type="checkbox"/>	<input type="checkbox"/>
Joystick Control Pattern	Configurable EH controls for customizable joystick functionality.	<input type="checkbox"/>	<input type="checkbox"/>
Joystick / Armrest Adjustability	Joystick, armrest, seat are independently adjustable	<input type="checkbox"/>	<input type="checkbox"/>
Front Windshield Wiper with Washer	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Tinted Glass	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Skylight / Overhead Hatch (transparent)	Openable tinted polycarbonate sky-light with solid sliding sunshade - Standard	<input type="checkbox"/>	<input type="checkbox"/>
In-Cab Storage (document holder, cup holder, coat hook)	Storage shelf suitable for lunch box, cooler, and other smaller storage provisions Two Beverage / Cup Holder Coat hook - Standard	<input type="checkbox"/>	<input type="checkbox"/>
Interior Lighting	Dome Light - Standard	<input type="checkbox"/>	<input type="checkbox"/>

Machine Vibration Dampening / Viscous Cab Mounts	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Sound Level Inside Cab (maximum)	70 dB(A) per ISO 6396	<input type="checkbox"/>	<input type="checkbox"/>

SECTION 9: GRADE CONTROL & TECHNOLOGY

SPECIFICATION REQUIREMENT	REQUIRED VALUE	YES	NO
2D Grade Control System	2D Grade Control - Standard	<input type="checkbox"/>	<input type="checkbox"/>
3D Grade Control Upgrade Ready	Machine Must Be Pre-Wired/Ready for 3D Grade Control Upgrade	<input type="checkbox"/>	<input type="checkbox"/>
3D Grade Control Compatibility	Must Be Compatible with Topcon, and/or Leica	<input type="checkbox"/>	<input type="checkbox"/>
Bucket Angle Assist / Bucket Auto-Hold	Required	<input type="checkbox"/>	<input type="checkbox"/>
Machine Damage Avoidance (Front, Roof, & Boom)	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Virtual Fences (Swing L/R, Reach, Ceiling, Floor)	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Payload Weigh System (Dynamic Weighing)	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Object Detection	Standard or Optional – Required for Municipal Use	<input type="checkbox"/>	<input type="checkbox"/>
Remote Display Access / Control	Remote Display Access and Control enabling off board visibility and support through the display	<input type="checkbox"/>	<input type="checkbox"/>
Wireless Data Transfer	Wirelessly upload grade control files to machine - Standard	<input type="checkbox"/>	<input type="checkbox"/>
EZ Control	Standard	<input type="checkbox"/>	<input type="checkbox"/>

SECTION 10: SERVICE, MAINTENANCE & WARRANTY

SPECIFICATION REQUIREMENT	REQUIRED VALUE	YES	NO
Centralized Lubrication Bank for Arm and Boom	Remote Grease Bank - Required	<input type="checkbox"/>	<input type="checkbox"/>
Ground-Level Engine Oil and Fuel Filter Access	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Ground-Level Hydraulic Level Sight Gauge	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Oil Sampling Ports (engine, hydraulic)	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Hydraulic Filter Restriction Indicator	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Bottom Guard / Undercarriage Protection	Required	<input type="checkbox"/>	<input type="checkbox"/>
Service Handrails and Anti-Skid Platform	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Vandal Locks (cab door, service doors, toolbox)	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Perforated Side Panel to prevent debris into cooling pack	Standard	<input type="checkbox"/>	<input type="checkbox"/>
Integrated Vehicle Health Management System	Required – OEM Telematics Monitoring w/ integrated and advanced machine diagnostic capabilities	<input type="checkbox"/>	<input type="checkbox"/>
Scheduled Oil Sampling Ports (S.O.S. or equivalent)	Standard	<input type="checkbox"/>	<input type="checkbox"/>

Factory-Trained Technicians Available	Required – Certified OEM Service Technicians	<input type="checkbox"/>	<input type="checkbox"/>
Remote Software Updates / Over-the-Air Updates	Standard	<input type="checkbox"/>	<input type="checkbox"/>

SECTION 11: ATTACHMENT COMPATIBILITY & COMPLIANCE

SPECIFICATION REQUIREMENT	REQUIRED VALUE	YES	NO
Installed Hydraulic thumb	Required	<input type="checkbox"/>	<input type="checkbox"/>
ISO Standards Compliance (Lift Capacities)	All Lift Ratings per ISO 10567 Required	<input type="checkbox"/>	<input type="checkbox"/>

Additional Requirements: Delivery will be a consideration factor to establish the lowest and best bid pursuant to Mississippi Code 31-7-13 section d.

Any exceptions to the above specifications must be listed in the bidders bid, with justification. Failure to do so will disqualify the bid. All bidders must be able to deliver their equipment within 45 days (which will be a factor used in determining the lowest and best bid. Failure to do so may result in the termination of the award) and bid price must include delivery to the City of Forest.

Delivery Date:_____ The offer of a guaranteed buy back provision at the end of three (3) years or may be a factor used in determining the lowest and best bid. The guarantee buy back must be accompanied by a letter from the vendor. All bidders must list any conditions and or limitations to buy back, if any. Please enter your guaranteed buyback dollar amount

Guaranteed Buy Back Provision at the end three (3) years:_____

All bids must state warranty, which will be a factor used in determining the lowest and best bid. A minimum of (3) or 3,000 hours, whichever occurs first.

Towing shall be included in bid

There will be no mileage or deductible charges during the warranty period. Parts must be available within 36 hours. Service center must be located within 50 miles of The City of Forest.

The City of Forest will be responsible for repair costs resulting from damage due to operator errors.

BID FORM FOR THE SALE OF USED EQUIPMENT

NAME OF BIDDER:

ADDRESS OF BIDDER:

PHONE NUMBER:

MAKE OF UNIT BEING SOLD:

SERIAL NUMBER: 1FF200GAVPF000046

EXISTING BUYBACK GUARANTEE: \$160,000.00

EXISTING HOURS OF USED EQUIPMENT:

BID PRICE OF USED EQUIPMENT "AS IS"