

Town of Summerville

25-30 ton Long Reach Excavator

Specifications



Summerville Stormwater Department
Final Bid Copy - A

Revised by Ryan Dews

REQUEST FOR PROPOSAL

Sealed bid proposals will be received by the Town of Summerville until 2:00 p.m. on Friday, November 6, 2020. Opening will be held in the 2nd floor training room at the Summerville Town Hall Annex, 200 S. Main Street, Summerville, SC 29483

Proposals will be for the purpose of furnishing the Town of Summerville with one (1) 25-30 ton long reach excavator and applicable attachments. A copy of the instructions to bidders and specifications can be down-loaded from the Town website at <http://www.summerville.sc.gov/302/Bids-RFPS>.

The Town of Summerville reserves the right to reject any and all bid proposals, to waive all formalities and to award the contract, as it appears to be in the best interest of the Town of Summerville. The right is also reserved to hold any and all bid proposals for a period not exceeding sixty days (60) days from the opening thereof.

Questions concerning the equipment specifications must be submitted in writing to:

Krista Collins, Purchasing Agent, Town of Summerville
kcollins@summerville.sc.gov

All bid proposals must be sealed and submitted to:

The Town of Summerville
Attn: Krista Collins
200 S. Main Street
Summerville, SC 29483

With the package marked as “Long Reach Excavator”

Intent

The intent of these specifications is to cover the requirements of a **25-30 Ton Long Reach Excavator**.

The design of the unit shall incorporate the latest available technology and engineering capacities.

The unit will be capable of powering high flow hydraulic lines to the end of the boom to operate a Bradco MM 60 mulching cutter at 45 GPM flow. The machine will need to be able to operate the cutter and the other hydraulics simultaneously.

The unit will need to be equipped with a JRB SmarLoc Coupler that is controlled from the cab for changing of attachments.

The unit shall be new of current manufacture. No prototype, demo, used, or mechanical type excavator will be accepted.

All parts not specifically mentioned which are necessary to provide a complete excavator shall be included in the bid and shall conform in strength, quality of materials, and workmanship to what is normally provided to the trade in general.

The proposed unit bid must be a regularly manufactured unit with at least ten (10) references available (please provide references with bid).

The Excavator shall meet or exceed all OSHA, federal and state regulations and requirements.

Each bidder must check either “Yes” or “No” column for each section. If “Yes” is checked, bidder will be expected to supply exactly what is described. If “No” is checked, please provide a **detailed explanation of the deviation**, no matter how minor it may be. If the bidder fails to respond either “Yes” or “No”, the bid will be rejected for non-compliance.

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25-30 ton Long Reach Excavator

SPECIFICATION SHEET

Vehicle Summary:

Excavator shall be diesel powered.

State year, _____

Vehicle shall comply with all applicable federal laws.

Vehicle shall comply with all applicable state laws.

Basic Specations:

Engine net power shall be at minimum 170 hp.

Machine operating weight shall be no less than 50,000 lbs.

Machine operating weight shall be no more than 60,000 lbs.

Machine will have a minimum working reach of 43 feet.

Machine shall couple with existing buckets and attachments owned by The Town of Summerville with a hydraulic quick coupler. (Komatsu PC160 attachments)

Machine will couple with Bradco MM 60 mulching head with auxiliary hydraulic lines installed and included in bid.

Automatic engine warm-up system.

Steel deck guards will be mounted around the machine for protection.

Counterweight shall have built-in lifting eyes.

Transport height shall not exceed 10' 10"

All intended walking surfaces shall have punched steel "anti-skid" traction plates; sandpaper type "anti-skid" material is not acceptable.

Buckets and Attachments

(One) 48” ditch cleaning bucket with pins (matching currently owned buckets)

Hydraulic quick coupler. JRB SmartLoc from Paladin Attachments w/ in cab controls.

Engine:

Engine shall be minimum EPA Tier II compliant.

State if engine is Tier 3: _____

Machine shall be 6 cylinder turbo charged / water cooled engine.

Individual wires in the engine wiring harness shall be color-coded and numbered every 2’ for easier diagnosis and servicing.

Engine shall be direct injection with electronically controlled common rail injection system.

All excavator fluids shall have a replaceable spin-on type service filter.

Fuel priming pump and fuel/water separator shall be standard.

Machine shall have a dry type air cleaner, double element.

Machine shall have an engine overheat prevention system.

State if machine is equipped with a radiator and oil cooler dust net.

Machine shall have remote mounted engine oil filter and fuel drain valve for easy access.

An engine cooling fan guard must be installed.

The engine fan guard shall fully enclose (360°) the engine fan.

Electrical System:

Machine shall have a 24-volt negative ground wiring system.

Machine shall have a 24-volt Alternator @ 90-amp minimum.

Machine shall have a 24-volt starting system.

Machine shall have a minimum of two, 12-volt maintenance free batteries total min CCA 1700.

Machine shall have a Positive post for jump-starting.

Machine shall have a Solid-state circuit protection and fuses.

Machine shall have an electric travel alarm 87-112 DB self-adjusting.

Machine shall have battery shut-off switch.

Deutsch (DT) connectors shall be used to improve wire harness reliability by locking out dust and moisture.

Wiring harnesses shall be securely fastened throughout the machine.

Wiring harnesses shall be color-coded and numbered every 2' for easier diagnosis and servicing, wrapped with abrasive resistant braided nylon material to prevent accidental damage and short circuits within the system.

Hydraulic System

State if machine shall have an open / closed centered hydraulic system with low effort pilot operated controls. _____

State if machine uses a variable displacement pump (axial piston type) or gear.

Fixed displacement implement pump shall be directly connected to engine output.

State hydraulic pump oil flow. _____

State hydraulic system operating pressure. _____

State if machine uses separate hydraulic pump for hydraulics and drive motors. _____

Hydraulic filtration to be on (1) suction filter and (1) 10-micron full flow return filter with bypass.

All hydraulic functions to be actuated by means of direct acting controls.

Boom and bucket cylinders to have built in cushions on the extension side.

Arm cylinders to have cushions on both sides.

Engine and hydraulic pumps shall be completely separated by a steel wall to reduce the possibility of oil contacting hot engine parts in the event of a hydraulic line rupture.

Hydraulic system shall have a separate hydraulic circuit at arm capable of operating the Town

of Summerville’s currently owned cutting attachment or a new “D&E” 5’ cutter.

Machine must have hydraulic quick couplers for attachments.

Hydraulic tank shall have a drain plug at bottom of reservoir.

Hydraulic tank shall have a shut-off valve at outlet supply for servicing system.

The hydraulic tank shall have an oil level sight gauge that allows checking the fluid level without removing the filler cap.

Excavator shall have a swing cushion valve.

Excavators to be able to travel, operate the booms, and swing at the same time.

Machine shall have a pilot safety valve to disable implement functions and standard hydraulic oil cooler that tilts out for easy cleaning of heat exchangers and full flow filtering.

All hydraulic fittings and connections must be JIC. ** No Metric **

Swing speed shall be a minimum of 10 RPM.

An accumulator shall be provided to allow the boom and stick to be lowered to the ground in the event of an engine failure.

Cab

All doors and service compartments must be lockable (with key), all windows must be lockable from the interior of cab.

Machine interior floor mat shall be black rubber.

State if machine has a washable cab flanged floor mat with drainage holes to facilitate runoff.

Machine shall have heavy-duty cab insulation (silencer package)

Machine shall have an Integral heater, defroster, and air conditioning.

Machine HVAC system shall have electronic controls.

Machine shall have automatic climate control that maintains a constant temperature setting.

Machine HVAC filter unit shall be located inside cab and serviceable.(removed and installed without the use of tools facilitating filter maintenance.)

Excavators shall have cup holders.

Cab shall have entry grab handles.

Machine cab interior shall contain tachometer, coolant temp, voltmeter, engine oil pressure, hour meter, and fuel gauges.

Machine shall have a two-speed electric windshield wiper motor with washer.

Wiper motor shall be intermittent (delay) type windshield wipers.

Machine shall have AM/FM stereo radio.

Machine shall have a high back rest seat and be fully adjustable for height, weight, fore/aft, seat back, and dual armrests.

Machine shall have storage compartment between seat* and back wall of cab.

Machine shall have two 12 volt outlets.

Excavator cab shall be of steel construction.

Cab to be isolation mounted.

Cab shall have standard tinted safety glass.

Cab shall have a ventilation fan independent of A/C

Excavator is to have a lockout system for the hydraulic controls during entrance and exit of the cab.

Cab shall have a 5 lb. fire extinguisher mounted inside.

Machine shall have rearview camera.

There shall be a removable protective screen mounted to the front of cab to protect from flying debris while using cutting attachment.

Machine shall have a skylight that can be opened and is rated to level 1 falling object protection w/ a sliding shade.

The front windshield shall be mounted on tracks and be able to be swung up into a secure position in the cab ceiling by the operator in order to provide improved visibility forward and down.

A security system shall be available to inhibit unauthorized machine use by immobilizing vital electrical circuits unless a valid key is used to start the machine.

Tracks and Undercarriage

Track shall be all welded stress released construction, side frames to be welded to frame.

Track shoes shall be no less than 24” wide. State shoe width_____.

Track rollers, sprockets and idlers to be permanently lubricated.

Track shall have hydraulic track adjusters with recoil springs.

Track shoe and carriage combination shall create a ground pressure less than 25 psi.

Each track shall be driven by one independent, axial-piston motor via integral planetary final drives.

Track length should be approx. 14.5’. State length_____.

Overall track width should not exceed 12’. State overall track width_____.

The transmission shall be fully hydrostatic with multi speed settings.

State machine ground pressure. _____

Operator’s Controls

Personal storage areas shall include places to store a lunch box, thermos, cup, coat rack and a lockable storage area.

Control pattern shall be SAE (international) design.

The standard control package shall include joystick type pilot controls.

Travel to be (2) pedal lever combinations, one for each track.

Engine throttle control shall be a rotary dial type.

A comfort seat shall be included with ergonomically shaped seat cushions to reduce pressure on the lower back and thighs and allow unrestricted arm and leg movement.

State if arm rest angle adjustment is available.

Seat shall include a retractable seat belt with an anti-cinch feature.

State if machine has bonded, tinted glass with silicon joints and few obstructions that eliminates pillar obstructions and allows expansive peripheral visibility.

Steps leading up to the cab shall be wide and angled out for secure footing.

A 12V converter for powering electronics, a radio installation package, sun-visor for windshield, roll-down sun screen for rear window, external mirror package and auxiliary lighting packages both front and rear shall be installed.

Travel

Travel to be by propel motors, one (1) each side.

Propel motors to be of axial piston design with planetary drives.

Each propel motor shall be independent of each other for counter rotation.

Propel motors and lines to have protective covers.

An idler guard shall be provided to maintain track alignment while traveling or working on slopes.

Each track frame supported by a minimum of 5 bottom rollers and 1 upper roller.

Boom

Boom and arm to be of low stress, welded full box section design.

Boom and arm pins and bushings to have a central lubrication system, state location of system.

All bucket pins to have dirt seals.

State bucket force_____.

Must have minimum 10,000 lb lifting capacity at 5' in front with blade down.

State capacity_____.

Boom & stick configuration shall allow for a minimum of 46' ground level reach.

State max. reach_____.

Serviceability

State if Machine has a one-piece engine enclosure hood with gas struts to access to filters and service points. _____

Radiator and oil coolers shall be easily accessible for cleaning.

Machine shall have a hydraulic oil sight gauge and vented hydraulic system.

The engine enclosure shall have a curved design to provide excellent visibility.

Engine enclosure shall be impact resistant, rustproof, and have a lockable latch.

Radiator coolant level shall have sight gauge.

A swing-out oil cooler shall allow quick, easy cleaning and service to the radiator.
Spin on filters for engine oil and hydraulic oil shall be vertically mounted for easier servicing.

A stationary radiator and coolant hoses shall be standard.

Hydraulic oil cooler shall be standard.

Machine shall have grouped grease fittings.

Machine shall have positive torque hose clamps.

Scheduled oil-sampling port for the main hydraulic system and pilot hydraulic system shall be provided for hydraulic oil to simplify sampling.

An engine coolant sampling port shall be provided to all engine coolant to be tested for antifreeze and additive strengths.

Radial seal air filter with double layered filter core shall be provided for better filtration.

Two track tension adjuster fittings shall be provided for each track so if one valve becomes plugged, the grease can still be drained by loosening the other valve.

Hydraulic system pressure taps shall be included for quick, easy, efficient system diagnostics.

Service Fill Capacities

Fuel tank shall have a minimum 100-gallon capacity.

Cooling system shall have hot weather cooling capacity.

State the hydraulic system capacity: _____

State capacity of hydraulic reservoir: _____

Operating Cost

Dealer shall state recommended oil change interval of machine.

Extended Life Coolant/Antifreeze shall allow for up to 6,000 hours between changes.

With required oil sampling, hydraulic oil shall have a minimum of a 4,000 hour change interval.

Dealer shall recommend hour hydraulic filter change. _____

Parts List Cost

Dealer will list the **description, part #, and cost** for all filters needed to perform a full service to machine being quoted for warranty. ***Dealer to add any other filters not listed***

DESCRIPTION:	PART#	COST \$
Oil Filter(s) _____		
Fuel Filter(s) _____		
Inner Air Filter _____		
Outer Air Filter _____		
Hydraulic Inlet Filter _____		
Hydraulic Outlet Filter _____		
Coolant Filter _____		
Fuel/Water Filter _____		
Air Cab Filter _____		

State if after market filters will void warranty (Wix, Fleetguard, Donaldson, etc) _____

Warranty

The Excavator warranty shall include the following: (beyond all factory warranties)

- Dealer’s mileage and travel time shall be included in the life of the warranty.
(No Cost \$ to the Town)
- Vendor or authorized representative of the vendor shall have a parts distribution and repair facility to supply after sales support within 30 miles of the Town Maintenance facility located at 1105 Yancey Street, Summerville, SC 29483.
- No Cost (\$) will be charged to the Town of Summerville if machine is transported to Dealership.
(During any warranty period)
- No cost (\$) will be charged to the Town of Summerville for freight of parts or any other cost incurred by the Dealer under warranty.

Options (show cost of warranty options)

- Full Machine warranty of five years or 7,500 hours Bumper to Bumper.
- Full Machine warranty of three years or 3,000 hours Bumper to Bumper.
- Power train warranty of five years or 7,500 hours.

A 30-day guarantee shall be submitted on the bidder’s letterhead stating, “If the machine fails to perform under its intended use and fails to operate because of extended downtime and repairs, the Town may reject the proposed equipment within 30 days after delivery, for a full refund including freight.” No exceptions to this requirement.
Delivery shall be included in the cost of the unit.

Tax will be included as a separate line item.

Training videotape shall be provided showing maintenance and operating procedures.

Complete Parts, Operating, and Service manuals for both the unit and the engine shall be supplied on 1 set(s) of CD-Rom(s) and 1 set(s) of books at delivery. **No Exceptions**

The unit shall be delivered completely assembled, serviced, and ready to operate.

Dealer to state delivery date: _____
No bid will be considered if left blank.

Total Bid Proposal Price: _____

Bid submitted by: _____
 Name of company

 Street address

 City, state, zip

 Telephone number

 Authorized signature of bidder

 Printed name of above individual

 Date

No bid will be considered if not signed and dated.

BID PROPOSAL EVALUATION

Bid proposals will be evaluated using the following criteria:

- * Cost of bid.
- * Compliance with our specifications.
- * Delivery Date.
- * Operation and maintenance cost of equipment.
- * Life cycle cost of equal equipment.
- * Performance of equipment in actual operating conditions.
- * Availability of parts and service.
- * Prior experience with vendor/s and their product.