

**CITY of NOVI CITY COUNCIL**

**Agenda Item 3  
August 25, 2008**

**SUBJECT: Approval to purchase one Front End Loader from JDE Equipment in the amount of \$139,400.**

**SUBMITTING DEPARTMENT: DPW**

**CITY MANAGER APPROVAL**

<b>EXPENDITURE REQUIRED</b>	<b>\$139,400</b>
<b>AMOUNT BUDGETED</b>	<b>\$145,000</b>
<b>APPROPRIATION REQUIRED</b>	<b>N/A</b>
<b>LINE ITEM NUMBER</b>	<b>101-442.00-984.000</b>

**BACKGROUND INFORMATION:**

A front end loader is utilized daily for loading dirt, debris, road salt, to unload gravel trains, and snow removal operations.

We evaluated the 7 bids we received in response to our RFP and recommend purchasing the loader from JDE Equipment, the low qualified bidder.

<b>Company</b>	<b>Trade-In Value of Existing DPW Loader</b>	<b>Total Cost</b>
A.I.S.	\$ 6,000	\$ 141,200
Bobcat of Motor City	2,700	192,621
Michigan CAT	8,000	142,650
JDE Equipment	9,500	139,400 ←
*JDE Equipment	9,500	173,300
*Southeastern Equipment Co. (copy of specifications attached)	12,000	124,350
*Southeastern Equipment Co.	12,000	141,640

\* Did not meet bid specifications

**RECOMMENDED ACTION: Approval to purchase one Front End Loader from JDE Equipment in the amount of \$139,400.**

	<b>1</b>	<b>2</b>	<b>Y</b>	<b>N</b>
<b>Mayor Landry</b>				
<b>Mayor Pro Tem Capello</b>				
<b>Council Member Crawford</b>				
<b>Council Member Gatt</b>				

	<b>1</b>	<b>2</b>	<b>Y</b>	<b>N</b>
<b>Council Member Margolis</b>				
<b>Council Member Mutch</b>				
<b>Council Member Staudt</b>				

128-198 NET HORSEPOWER



J

LOADERS



COPY

PRIMARY BID



cityofnovi.org

CITY OF NOVI, MICHIGAN  
PURCHASING DEPARTMENT

45175 W. TEN MILE RD.  
NOVI, MI 48375  
(248) 347-0446

4-WHEEL DRIVE LOADER - DEERE 624J OR SIMILAR  
SIGNATURE FORM

Bid submitted by:

Name (printed) CHRIS ROBINSON Title: GOVERNMENTAL SALES MANAGER

Company (Legal Registration) JDE EQUIPMENT COMPANY

Address 56555 PONTIAC TRAIL

City NEW HUDSON State MI Zip 48165

Telephone 248 437-8121 Fax 248 437-9750

E-mail crobison@jdeequip.com

Signature [Handwritten Signature] Date 7/29/08

For information on responding to this bid, contact Sue Morianti – Purchasing Manager, at [smorianti@cityofnovi.org](mailto:smorianti@cityofnovi.org)

Submittal of Bids: Bids must be delivered prior to the due date and time specified above to the City of Novi, Office of the City Clerk, 45175 W. Ten Mile Rd., Novi, Michigan 48375. Bids must be submitted by person or mail. Faxed bids will not be accepted.

THE BID ENVELOPE MUST BE IDENTIFIED WITH THE FULL BID NAME AND DUE DATE.

THIS PAGE IS PAGE ONE OF THE PROPOSAL FORM. FAILURE TO SUBMIT PRICING ON THE PROPOSAL FORM PROVIDED BY THE CITY OF NOVI MAY CAUSE THE BID TO BE CONSIDERED NON-RESPONSIVE AND INELIGIBLE FOR AWARD.

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If you obtained this document from a source other than the source indicated, it is recommended that you register on the MITN site, [www.govbids.com](http://www.govbids.com), and obtain an official copy.



CITY OF NOVI  
PROPOSAL FORM

4-WHEEL DRIVE LOADER --  
DEERE 624J OR SIMILAR

We the undersigned as bidder, propose to furnish to the City of Novi, according to the conditions and instructions attached hereto and made a part thereof according to the attached terms and conditions.

A. 4-Wheel Drive Loader, Deere 624J or Similar

Make/Model JOHN DEERE 624J \$ 145,600.<sup>00</sup>

ALTERNATE #1

Optional bucket mounted fork set including cost  
to weld mounting hooks on back of bucket \$ 3,300.<sup>00</sup>

ALTERNATE #2

Trade In:

1982 Ford Loader A64

Hours: 4966

( \$ 9,500.<sup>00</sup> )

TOTAL (A. + ALTERNATE 1 + ALTERNATE 2)

\$ 139,400.<sup>00</sup>

Delivery 30 TO 45 DAYS A.R.O.

We acknowledge receipt of the following Addendums:  
(please indicate numbers below)

\_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## 4 WHEEL DRIVE LOADER SPECIFICATIONS – DEERE 624J OR SIMILAR

### Compliance

- |   |  |
|---|--|
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Six Cylinder, turbocharged, charge air cooled diesel engine and shall be designed and built by the manufacturer  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Engine shall be certified to Tier 3 non-road emission standards  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | 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 <input checked="" type="checkbox"/> no <input type="checkbox"/> | Engine displacement shall be no less than 6.8 liters (414 cu. in.)   |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Engine rated net peak power shall be no less than 198 hp (147 kW) @ 1800 rpm   |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Engine rated peak net power shall be no less than 180 hp @ 1,800 rpm, gross horsepower shall not be considered.  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Engine shall develop at least a 55% torque rise and should have at least 617 lb-ft (836 Nm) @1600 rpm net peak torque  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Fuel system shall be high-pressure, common rail  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Daily check points shall be accessible from one side of the engine and shall be done from ground level   |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Under-hood engine air cleaner shall be dry type, dual element with an restriction sensor and in-cab restriction warning light  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Under hood pre-screened air intake to minimize plugging  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Access to engine will be open from both sides with side opening, full access service doors   |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Engine shall have no less than 10-micron rated primary fuel filter with water separator  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Loader shall be equipped with a heavy-duty steel fuel tank guard   |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Service interval for the engine oil and filter shall be 500 hours  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | The electrical system shall be 24 volt with 80 amp alternator  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Unit shall have glow plugs or equivalent for cold start aid.   |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Unit shall be equipped with centrifugal engine air precleaner  |

### Cooling

- |   |  |
|---|--|
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Unit shall have a proportionally controlled, hydraulically driven, 90 degree-swing-out fan, standard equipment |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | The unit will have two-side access to all coolers  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Air intake shall be pre-screened (3 mm perforations) for each cooling component                                |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Cooling system shall be isolated from the engine compartment   |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Unit shall have a coolant recovery tank provided   |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Unit shall have a fan-guard  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Fluid levels should be easily checked by sight gauges or overflow tank   |

### Power Train

- |   |   |
|---|---|
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Unit shall have a torque-converter, power shift transmission 4 forward, 3 reverse gears   |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | The transmission shall be electronically controlled, adaptive, with load and speed dependent shift modulation   |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Shift modes shall be auto or manual, auto to 1st or 2nd, kick down or kick up/down  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | The transmission clutch calibration shall be engage able from the cab monitor and shall have three clutch cutoff settings adjustable on the switch pad  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Service interval for the transmission oil filter shall be 1000 hours  |
| yes <input checked="" type="checkbox"/> no <input type="checkbox"/> | Unit shall have joystick mounted F-N-R and gear-select lever, kick-down button on hydraulic lever. Will also have quick shift feature that allows pushbutton gear changes, one gear at a time |

- yes  no  Sight gauge showing transmission fluid shall be at ground-level
- yes  no  Transmission filter restriction shall be displayed in the cab
- yes  no  The transmission shall be able to reach 24.6 mph in 4th gear and 16 mph in third gear.

#### Axles/Brakes

- yes  no  The final drives shall be heavy-duty inboard planetary
- yes  no  The driveline shall not need lubrication, supplied with lube-for-life
- yes  no  The loader shall have two brake pedals with an activation switch to allow left brake pedal to switch between brake neutralizer or brake only function.
- yes  no  The service brake shall be hydraulically actuated, inboard, sun shaft mounted, pressure oil cooled, self-adjusting, single disc sealed from water, mud and dust contamination
- yes  no  The parking brake shall be automatic, spring applied, hydraulically released, oil cooled, multi-disc and sealed from water, mud and dust contamination
- yes  no  Rear axle shall not have less than 24 degree total oscillation, stop to stop
- yes  no  The dipstick port and housing fill shall be at the top of the axle
- yes  no  The front and rear axles shall have hydraulically actuated, disc clutch style, locking differentials for maximum traction when required but with less tire wear than limited slip or no-spin differentials

#### Hydraulic System

- yes  no  Hydraulic filter shall be spin-on, vertical mounting with service interval of 500 hours  
The hydraulic fluid shall have a rated life of 4000 hours
- yes  no  The hydraulic system shall be pressure-compensating load-sensing for reduced fuel consumption and better fluid heating compared to open center hydraulic systems
- yes  no  Hydraulic tank capacity should be no less than 32 gallons for extended hydraulic fluid intervals and cooler system temperature
- yes  no  Unit will be provided with automatic bucket return-to-dig control
- yes  no  Automatic boom height kick out control will be in cab adjustable
- yes  no  Unit shall be equipped with either single-lever joystick or two-lever fingertip pilot-operated controls
- yes  no  Automatic boom return to carry control will be in cab adjustable
- yes  no  A sight gauge will be provided for checking hydraulic reservoir fluid
- yes  no  The unit shall be provided with hydraulic system oil cooler for continuous running attachments and extreme temperatures.
- yes  no  Hydraulic pump shall be variable-displacement, axial-piston pump: closed-center, pressure-compensating system
- yes  no  Loader steering articulation angle shall be no less than 80 degrees, 40 degrees in each direction
- yes  no  Unit shall be equipped with Ride Control, automatic with monitor-adjustable speed settings.

#### Electrical

- yes  no  Two batteries shall be included, 12 volt, 950 CCA, 200-min. rated reserve
- yes  no  The unit shall have a solid-state electrical power distribution system using circuit board technology and solid-state switches
- yes  no  The unit shall be provided with a master electrical disconnect switch
- yes  no  Cab will be wired for rotating beacon
- yes  no  The in-cab switch module shall be sealed to keep out dirt, dust and airborne debris
- yes  no  Unit shall be equipped with driving lights with guards, turn signals and flashers, stop and tail lights. The tail lights shall be LED type mounted high up in the rear grille for protection from damage and better sight visibility and shall have a normal service life equal to the machine.

- yes  no  Unit shall be equipped with analog gauges for: engine coolant temperature, transmission oil temperature, fuel level hydraulic oil temperature, engine oil pressure
- yes  no  Unit shall have digital readout for: engine rpm, odometer, transmission gear indicator, speedometer, hour meter
- yes  no  Unit shall have operator warning lights for: check engine, engine oil pressure, engine air restriction, battery voltage, transmission filter restriction, brake pressure, hydraulic oil filter, fasten seat belt, transmission fault, hydraulic oil temperature

#### Operator Station

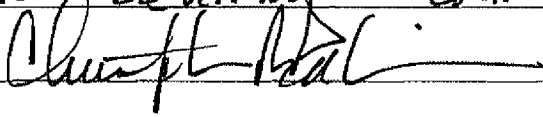
- yes  no  Unit shall be equipped with canopy with ROPS/FOPS protection, and be multi-plane isolation mounted for noise/vibration reduction. Cab shall include air conditioner, heater, defroster and pressurizer, Air Suspension Fabric Seat with Joystick Wrist Rest, front and rear intermittent windshield wipers and washers and (1) inside and (2) outside rear view mirrors, Front Sun Visor, Left and right rear side windows open 2.5" for ventilation.
- yes  no  3" retractable seat belt shall be provided
- yes  no  Steering wheel shall be tiltable
- yes  no  3-point contact at all times at the front and rear of the loader and around the roof-line
- yes  no  The cab shall have continuous and unobstructed glass from roofline to floor for visibility in tight quarters.
- yes  no  Cab shall be equipped with AM/FM/WB Radio and Headliner
- yes  no  A seat backrest extension will be standard
- yes  no  Cab shall have cup holder, personal cooler holder/storage compartment for operator's manual, rubber floor mat
- yes  no  Cab shall be equipped with 10 amp Converter with (2) 12V Power Ports

#### General Specifications

- yes  no  Unit shall be equipped with 23.5 R 25, L-3T tires with multi-piece rims
- yes  no  Front tires shall be covered with fenders
- yes  no  The counterweight shall be built-in
- yes  no  Unit will be provided with a rear cast bumper/counterweight with integral drawbar with locking pin
- yes  no  Unit shall have an articulation locking bar (conforms to SAE J276)
- yes  no  Unit shall have a vandal protection package that includes a lockable engine enclosure, fuel fill
- yes  no  The unit shall be provided with a loader boom service locking bar (conforms to SAE J38)
- yes  no  Loader shall have reinforced articulation joints with double tapered roller bearings
- yes  no  Fuel tank capacity shall be no less than 93 gallons (352L)
- yes  no  Operating weight with standard equipment, 20.5R25 tires, ROPS cab, 3.5 cu yd general purpose bucket with bolt on edge, 175 lb operator and full fuel tank shall be no less than 32,290 lbs (15 100 kg)
- yes  no  Bucket breakout force shall be no less than 28,483 lbs (12 920 kg) with manufacturers standard Z-Bar with pin-on 3.5 cu yd pin on bucket and standard configuration
- yes  no  Ground clearance under the loader shall be no less than 17.1 in (434 mm)
- yes  no  Unit shall have height to hinge pin no less than 13 ft (3.96 m)
- yes  no  Machine Full turn tipping load shall be at least 27,070 lbs with standard Z bar and GP 3.5 pin-on cu yd bucket.
- yes  no  Dump clearance at 45 degrees at full height shall be no less than 9 ft 5 in (2.87 m)
- yes  no  Reach at 45 degree dump, 7 ft clearance shall be no less than 5 ft 2 in (1.58 m)
- yes  no  Machine will have a strobe light mounted on top of Cab.

**Frames and Structures**

- yes  no  Unit shall have 3.5 Cu Yd GP Pin-on Bucket with Bolt-on Cutting Edge and (2) Hooks mounted on top of bucket.
- yes  no  Machine front frame shall be of a 4-plate design of four vertical plates extending from boom pivot pins reaching to the front axle to distribute boom loads on the axle. The design is superior to the two-plate frames
- yes  no  Loader bucket bell crank linkage shall be fabricated of high strength steel for increased durability and strength over castings.
- yes  no  Machine shall be equipped with an exterior mounted, ground level storage compartment

Company name JDE EQUIPMENT COMPANY  
Authorized signature   
Date 7/24/08





cityofnovi.org

**CITY OF NOVI, MICHIGAN  
PURCHASING DEPARTMENT**

45175 W. TEN MILE RD.  
NOVI, MI 48375  
(248) 347-0446

**4-WHEEL DRIVE LOADER - DEERE 624J OR SIMILAR  
SIGNATURE FORM**

Bid submitted by:

Name (printed) DENNIS A. KEMENY Title: SALES REPRESENTATIVE

Company (Legal Registration) SOUTHEASTERN EQUIPMENT COMPANY, INC.

Address 48545 GRAND RIVER AVE.

City NOVI State MI. Zip 48374

Telephone 248-349-9922 Fax 248-349-9191

E-mail dkemeny@southeasternequip.com

Signature Dennis A. Kemeny Date 7-26-08

For information on responding to this bid, contact Sue Morianti – Purchasing Manager, at [smorianti@cityofnovi.org](mailto:smorianti@cityofnovi.org)

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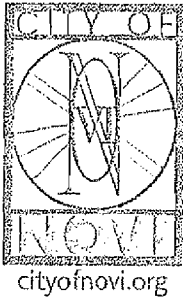
**THE BID ENVELOPE MUST BE IDENTIFIED WITH THE FULL BID NAME AND DUE DATE.**

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CITY OF NOVI  
PROPOSAL FORM

4-WHEEL DRIVE LOADER -  
DEERE 624J OR SIMILAR

We the undersigned as bidder, propose to furnish to the City of Novi, according to the conditions and instructions attached hereto and made a part thereof according to the attached terms and conditions.

A. 4-Wheel Drive Loader, Deere 624J or Similar

Make/Model CASE 721E \$ 133,500.00

ALTERNATE #1

Optional bucket mounted fork set including cost  
to weld mounting hooks on back of bucket \$ 2850.00

ALTERNATE #2

Trade In:  
1982 Ford Loader A64  
Hours: 4966 \$ 12,000.00

TOTAL (A. + ALTERNATE 1 + ALTERNATE 2) \$ 124,350.00

Delivery 60 TO 90 DAYS

We acknowledge receipt of the following Addendums:  
(please indicate numbers below)

\_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## 4 WHEEL DRIVE LOADER SPECIFICATIONS – DEERE 624J OR SIMILAR

### Compliance

### Engine

- yes  no  Six Cylinder, turbocharged, charge air cooled diesel engine and shall be designed and built by the manufacturer
- yes  no  Engine shall be certified to Tier 3 non-road emission standards
- 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.
- 6.7 yes  no  Engine displacement shall be no less than 6.8 liters (414 cu. In.)
- 183 HSP. yes  no  Engine rated net peak power shall be no less than 198 hp (147 kW) @ 1800 rpm
- 172 HSP. yes  no  Engine rated peak net power shall be no less than 180 hp @ 1,800 rpm, gross horsepower shall not be considered.
- 605/400C yes  no  Engine shall develop at least a 55% torque rise and should have at least 617 lb-ft (836 Nm) @1600 rpm net peak torque
- yes  no  Fuel system shall be high-pressure, common rail
- yes  no  Daily check points shall be accessible from one side of the engine and shall be done from ground level – *GROUND LEVEL – 2 SIDES*
- yes  no  Under-hood engine air cleaner shall be dry type, dual element with an restriction sensor and in-cab restriction warning light
- yes  no  Under hood pre-screened air intake to minimize plugging
- TAT NEED* yes  no  Access to engine will be open from both sides with side opening, full access service doors
- yes  no  Engine shall have no less than 10-micron rated primary fuel filter with water separator
- yes  no  Loader shall be equipped with a heavy-duty steel fuel tank guard
- yes  no  Service interval for the engine oil and filter shall be 500 hours
- 65AMP yes  no  The electrical system shall be 24 volt with 80 amp alternator
- yes  no  Unit shall have glow plugs or equivalent for cold start aid.
- yes  no  Unit shall be equipped with centrifugal engine air precleaner

### Cooling

- COOLING MODULE* yes  no  Unit shall have a proportionally controlled, hydraulically driven, 90 degree-swing-out fan, standard equipment – *WITH REVERSING FAN*
- yes  no  The unit will have two-side access to all coolers
- yes  no  Air intake shall be pre-screened (3 mm perforations) for each cooling component
- yes  no  Cooling system shall be isolated from the engine compartment
- yes  no  Unit shall have a coolant recovery tank provided
- yes  no  Unit shall have a fan-guard
- yes  no  Fluid levels should be easily checked by sight gauges or overflow tank

### Power Train

- yes  no  Unit shall have a torque-converter, power shift transmission 4 forward, 3 reverse gears
- yes  no  The transmission shall be electronically controlled, adaptive, with load and speed dependent shift modulation
- yes  no  Shift modes shall be auto or manual, auto to 1st or 2nd, kick down or kick up/down
- yes  no  The transmission clutch calibration shall be engage able from the cab monitor and shall have three clutch cutoff settings adjustable on the switch pad
- yes  no  Service interval for the transmission oil filter shall be 1000 hours
- yes  no  Unit shall have joystick mounted F-N-R and gear-select lever, kick-down button on hydraulic lever. Will also have quick shift feature that allows pushbutton gear changes, one gear at a time

- 23.6  
 yes  no \_\_\_ Sight gauge showing transmission fluid shall be at ground-level  
 yes  no \_\_\_ Transmission filter restriction shall be displayed in the cab  
 yes \_\_\_ no  The transmission shall be able to reach 24.6 mph in 4th gear and 16 mph in third gear.

#### Axles/Brakes

- OUTBOARD yes \_\_\_ no  The final drives shall be heavy-duty inboard planetary  
 yes  no \_\_\_ The driveline shall not need lubrication, supplied with lube-for-life  
 yes  no \_\_\_ The loader shall have two brake pedals with an activation switch to allow left brake pedal to switch between brake neutralizer or brake only function.  
 MULTIPLE DISC yes \_\_\_ no  The service brake shall be hydraulically actuated, inboard, sun shaft mounted, pressure oil cooled, self-adjusting, single disc sealed from water, mud and dust contamination - MULTI-DISC  
 yes  no \_\_\_ The parking brake shall be automatic, spring applied, hydraulically released, oil cooled, multi-disc and sealed from water, mud and dust contamination  
 yes  no \_\_\_ Rear axle shall not have less than 24 degree total oscillation, stop to stop  
 yes  no \_\_\_ The dipstick port and housing fill shall be at the top of the axle  
 yes \_\_\_ no  The front and rear axles shall have hydraulically actuated, disc clutch style, locking differentials for maximum traction when required but with less tire wear than limited slip or no-spin differentials

#### Hydraulic System

- yes  no \_\_\_ Hydraulic filter shall be spin-on, vertical mounting with service interval of 500 hours  
 The hydraulic fluid shall have a rated life of 4000 hours  
 yes  no \_\_\_ The hydraulic system shall be pressure-compensating load-sensing for reduced fuel consumption and better fluid heating compared to open center hydraulic systems  
 yes  no \_\_\_ Hydraulic tank capacity should be no less than 32 gallons for extended hydraulic fluid intervals and cooler system temperature  
 yes  no \_\_\_ Unit will be provided with automatic bucket return-to-dig control  
 yes \_\_\_ no  Automatic boom height kick out control will be in cab adjustable  
 yes  no \_\_\_ Unit shall be equipped with either single-lever joystick or two-lever fingertip pilot-operated controls  
 yes \_\_\_ no  Automatic boom return to carry control will be in cab adjustable  
 yes  no \_\_\_ A sight gauge will be provided for checking hydraulic reservoir fluid  
 yes  no \_\_\_ The unit shall be provided with hydraulic system oil cooler for continuous running attachments and extreme temperatures.  
 yes  no \_\_\_ Hydraulic pump shall be variable-displacement, axial-piston pump: closed-center, pressure-compensating system  
 yes  no \_\_\_ Loader steering articulation angle shall be no less than 80 degrees, 40 degrees in each direction  
 yes  no \_\_\_ Unit shall be equipped with Ride Control, automatic with monitor-adjustable speed settings.

#### Electrical

- 700 AMP yes  no \_\_\_ Two batteries shall be included, 12 volt, 950 CCA, 200-min. rated reserve  
 yes  no \_\_\_ The unit shall have a solid-state electrical power distribution system using circuit board technology and solid-state switches  
 yes  no \_\_\_ The unit shall be provided with a master electrical disconnect switch  
 yes  no \_\_\_ Cab will be wired for rotating beacon  
 yes  no \_\_\_ The in-cab switch module shall be sealed to keep out dirt, dust and airborne debris  
 yes  no \_\_\_ Unit shall be equipped with driving lights with guards, turn signals and flashers, stop and tail lights. The tail lights shall be LED type mounted high up in the rear grille for protection from damage and better sight visibility and shall have a normal service life equal to the machine.

- yes  no \_\_\_ Unit shall be equipped with analog gauges for: engine coolant temperature, transmission oil temperature, fuel level hydraulic oil temperature, engine oil pressure
- yes  no \_\_\_ Unit shall have digital readout for: engine rpm, odometer, transmission gear indicator, speedometer, hour meter
- yes  no \_\_\_ Unit shall have operator warning lights for: check engine, engine oil pressure, engine air restriction, battery voltage, transmission filter restriction, brake pressure, hydraulic oil filter, fasten seat belt, transmission fault, hydraulic oil temperature

#### Operator Station

- yes  no \_\_\_ Unit shall be equipped with canopy with ROPS/FOPS protection, and be multi-plane isolation mounted for noise/vibration reduction. Cab shall include air conditioner, heater, defroster and pressurizer, Air Suspension Fabric Seat with Joystick Wrist Rest, front and rear intermittent windshield wipers and washers and (1) inside and (2) outside rear view mirrors, Front Sun Visor, Left and right rear side windows open 2.5" for ventilation.
- yes  no \_\_\_ 3" retractable seat belt shall be provided
- yes  no \_\_\_ Steering wheel shall be tiltable
- yes \_\_\_ no  3-point contact at all times at the front and rear of the loader and around the roof-line
- yes  no \_\_\_ The cab shall have continuous and unobstructed glass from roofline to floor for visibility in tight quarters.
- yes  no \_\_\_ Cab shall be equipped with AM/FM/WB Radio and Headliner
- yes  no \_\_\_ A seat backrest extension will be standard
- yes  no \_\_\_ Cab shall have cup holder. personal cooler holder/storage compartment for operator's manual, rubber floor mat
- yes  no \_\_\_ Cab shall be equipped with 10 amp Converter with (2) 12V Power Ports

#### General Specifications

- yes  no \_\_\_ Unit shall be equipped with 23.5 R 25, L-3T tires with multi-piece rims
- yes  no \_\_\_ Front tires shall be covered with fenders
- yes  no \_\_\_ The counterweight shall be built-in
- yes  no \_\_\_ Unit will be provided with a rear cast bumper/counterweight with integral drawbar with locking pin
- yes  no \_\_\_ Unit shall have an articulation locking bar (conforms to SAE J276)
- yes  no \_\_\_ Unit shall have a vandal protection package that includes a lockable engine enclosure, fuel fill
- yes  no \_\_\_ The unit shall be provided with a loader boom service locking bar (conforms to SAE J38)
- yes  no \_\_\_ Loader shall have reinforced articulation joints with double tapered roller bearings
- yes \_\_\_ no  Fuel tank capacity shall be no less than 93 gallons (352L)
- yes \_\_\_ no  Operating weight with standard equipment, 20.5R25 tires, ROPS cab, 3.5 cu yd general purpose bucket with bolt on edge, 175 lb operator and full fuel tank shall be no less than 32,290 lbs (15 100 kg)
- yes  no \_\_\_ Bucket breakout force shall be no less than 28,483 lbs (12 920 kg) with manufacturers standard Z-Bar with pin-on 3.5 cu yd pin on bucket and standard configuration
- yes  no \_\_\_ Ground clearance under the loader shall be no less than 17.1 in (434 mm)
- yes  no \_\_\_ Unit shall have height to hinge pin no less than 13 ft (3.96 m)
- yes \_\_\_ no  Machine Full turn tipping load shall be at least 27,070 lbs with standard Z bar and GP 3.5 pin-on cu yd bucket.
- yes \_\_\_ no  Dump clearance at 45 degrees at full height shall be no less than 9 ft 5 in (2.87 m)
- yes  no \_\_\_ Reach at 45 degree dump, 7 ft clearance shall be no less than 5 ft 2 in (1.58 m)
- yes  no \_\_\_ Machine will have a strobe light mounted on top of Cab.

**Frames and Structures**

yes  no  Unit shall have 3.5 Cu Yd GP Pin-on Bucket with Bolt-on Cutting Edge and (2) Hooks mounted on top of bucket.

yes  no  Machine front frame shall be of a 4-plate design of four vertical plates extending from boom pivot pins reaching to the front axle to distribute boom loads on the axle. The design is superior to the two-plate frames

*CAST* yes  no  Loader bucket bell crank linkage shall be fabricated of high strength steel for increased durability and strength over castings.

yes  no  Machine shall be equipped with an exterior mounted, ground level storage compartment

Company name SOUTHEASTERN EQUIPMENT Co. INC

Authorized signature *William G. Roman*

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