

## COUNCIL WORKSHOP ITEM

**ITEM:** Equipment Purchase – Skid-Steer Loader  
**DATE:** January 10, 2002  
**PREPARED BY:** John J. Bajor, Jr., Public Works Director  
Stan Balicki, Support Services Manager  
**PURPOSE:** Authorize Purchase  
**BID AMOUNT:** **\$30,794.31** **ACCOUNT:** 530.960.0000.5836  
**BUDGET AMOUNT:** **\$45,000**

### DISCUSSION:

The skid-steer loader is a piece of equipment used daily, primarily by the Public Works Department's Pavement Division, but also by others, in the completion of their essential functions. For instance, it is used for concrete and asphalt removal, guardrail and sign placement, brick street maintenance, grading stone shoulders, loading trucks with materials and mixed concrete, as well as snow removal. The current skid-steer loader, purchased in 1988, is showing signs of wear in its hydraulic system in particular. For example, a hydraulic piston cracked this summer. It has also developed a propensity for hydraulic fluid leaks.

Two sealed bids for the proposed skid-steer loader were opened on January 3, 2002. As with the backhoe-end loader, three sealed bid invitations went out, and the invitation to bid was advertised in accordance with accepted procedures. The low bid response was again due to the fact that the machines are sold and serviced through territorial regions. The recommended piece of equipment is a 2001 Bobcat 873. Based on a review of the bids submitted, a recommendation for purchase is made as follows:

Atlas Bobcat Inc. \$28,373.31 (Net price after trade-in.)  
5050 North River Rd.  
Schiller Park, IL 60176

Other pricing was received from:

Rob Roy Equipment & Supply Inc. \$30,650.00 (Net price after trade-in.)  
555 S. River St.  
Batavia, IL 60510

In light of the favorable bid results, the Public Works staff is interested in outfitting the recommend item with two additional options related to its use in pavement milling operations. These options are air conditioning (\$704), and a water and nozzle kit (\$1,717). Airborne particulate matter is generated during pavement milling operations, and air conditioning would improve employee comfort and safety. The water and nozzle kit also helps minimize dust during pavement milling activities, as well as extending the life of the teeth on the milling drum by reducing friction. These options bring the total price of the unit to \$30,794.31.

**ATTACHMENT:**

Specifications and bid results are attached.

**RECOMMENDATION:**

Staff recommends that the Village Council consider awarding the purchase of this piece of equipment to Atlas Bobcat Inc. in the amount of \$30,794.31.



**DETAILED SPECIFICATIONS  
SKIDSTEER LOADER**

**GENERAL:** This unit shall be a fully hydrostatic, 4-Wheel Drive Skidsteer Loader. It shall be complete with all standard equipment as described in the manufacturer's published literature and manuals as well as with special accessories described herein. The unit shall be completely serviced and ready for use prior to inspection and delivery. Design shall be current or within the last 24 months. Please list and explain any non-comply items in Section 21. The unit shall be compatible with village owned skid steer attachments

		<b>COMPLY</b>	
		<b>YES</b>	<b>NO</b>
<b>WORKING RANGE</b>			
Dump angel at Maximum height	37 degrees (min)	✓	—
Dump height w/Standard Bucket	98.4"	✓	—
Dump Reach at Maximum height	33" (min)	✓	—
Ground Clearance	8.5" (min)	✓	—
Height to bucket hinge pin	122" (min)	✓	—
Height w/Operator Cab	79.0" (min)	✓	—
Length w/out Attachment	107" (min)	✓	—
Length w/Standard Bucket	140.7" (min)	✓	—
Operating Height	159.1" (min)	✓	—
Rollback @ Carry Position	30 degrees (min)	✓	—
Rollback fully raised @ max. height	101 degrees (min)	✓	—
Turning radius w/Standard Bucket	84.2" (min)	✓	—
Wheelbase	48.8" (min)	✓	—
Wheel Tread	59.2" (min)	✓	—
Width (over standard tires)	72.0" (min)	✓	—
Width (over bucket)	74.0" (min)	✓	—

**PERFORMANCE**

Rated Operating Capacity-SAE	2,350-2,650 (min)	✓	—
Rated Operating Capacity w/counterweight (Opt)	2,500 lbs. (min)	✓	—
Tipping Load-SAE rated	4,800 lbs. (min)	✓	—
Operating Weight-SAE rated	6,100 lbs. (min)	✓	—
Travel speed-single speed loader	7.4 mph (min)	✓	—
Travel speed-two speed loader (Opt.) Low/High	7.2 mph (min)-12.5 mph	✓	—
Lift Breakout Force (SAE)	4,800 lbs. (min)	✓	—
Tilt Breakout Force (SAE)	4,700 lbs. (min)	✓	—
Axle Torque-Single Speed Loader	5,300 ft-lbs	✓	—

Axle Torque-Two Speed Loader

**ENGINE/ELECTRICAL**

- 4 cylinder, diesel, minimum 73 hp (SAE J11349 Net) at minimum 2,350 governed RPM
- Turbo-charger is approved as Spark Arrestor, dual element air cleaner and glow plug cold weather assist must be provided as standard equipment
- Cooling air shall be drawn from above the loader uprights to provide clean, cool air
- Air cleaner, dry replaceable cartridge with safety element
- Battery shall be 12 volt with a minimum of 1000 cold-cranking amps
- Alternator shall be a minimum 90 amp
- Starter shall be 12 volt; direct drive
- Starting aid should be automatically activated glow plugs

**DRIVE SYSTEM**

- Fully hydrostatic 4-wheel drive
- Transmission shall be infinitely variable tandem hydrostatic piston pumps, driving 2 fully reversing hydrostatic motors
- Final drive chains shall be pre-stressed #100 HSOC endless roller chain (no master link). Two (2) chains per each side of the loader with no idler sprocket
- Sprockets in sealed chain case with oil lubrication. Chains do not require periodic adjustments.
- Final drive axles shall be a minimum 2.76" diameter
- Wheels shall be fixed to the axle hubs with eight (8) 9/16" wheel bolts
- Tires: 12.00-16.5, Foam filled

**HYDRAULIC SYSTEM**

- Pump type-gear type capable of providing minimum 20.6 gpm standard for bucket, lift arm and attachment operation
- System pressure at the quick couplers shall be 3000 psi (206 Bar)
- High Flow Hydraulics-hydraulic system capable of providing 30 gpm and 3000 psi (206 Bar) system relief pressure through auxiliary circuit for high flow hydraulic attachment operation
- Optional "variable flow" and "maximum flow" auxiliary hydraulics shall be standard
- Control Valve-three spool, open center, series type. Includes lift (w/float detent), tilt and front auxiliary hydraulic spools.
- Cylinders shall be double-acting type. Tilt cylinders shall have cushioning feature on dump.

III.

COMPLY  
YES NO

- A hydraulic oil cooler shall be standard equipment.
- Engine/Hydraulic System Shutdown will provide automatic engine shutdown to prevent loader damage
- Standard auxiliary hydraulics shall include flush face style quick couplers
- Cylinders shall meet the following minimum specifications:

Function	#of Cylinders	Bore Diameter	Rod Diameter	Stroke
Lift	2	2.75"(69.6mm)	1.500"(38.1mm)	28.5"(787.0mm)
Tilt	2	2.75"(69.6mm)	1.500"(41.3mm)	14.5"(452.0mm)

**OPERATOR COMFORT/CONTROLS**

- Vehicle Steering-forward, reverse, travel speed and steering controlled by two independent hand levers.
- Standard front auxiliary hydraulics controlled by electrical switches located on the right steering lever handle.
- Hydraulic functions-hand controlled lift and tilt functions available for complete hand control
- Optional rear auxiliary hydraulics controlled by left hand switches
- Engine Speed-controlled by hand lever
- Engine starting and shutdown functions shall be controlled electrically with the key switch.
- A feature for draining pressure from the auxiliary hydraulics circuit shall be provided in the left instrument panel
- Keyless start system shall be available as part of the deluxe instrument panel option
- Option cab with heater and/or air conditioning shall be available without changing the loader profile
- Parking Brake-Both mechanical disk and spring applied pressure release (2 speed)

**CAPACITIES**

- Fuel Tank Capacity 25 gal (94.6L)min
- Engine/Cooling Oil with Filter 16 qts (15.1L)min
- Hydraulic Reservoir 21 qts(19.9L)min
- Hydraulic/Hydrostatic System 13 gal(49.2L)min
- Chaincase Reservoir 10 gal(37.9L)min

**LOADER INSTRUMENTATION**

The loader conditions shall be monitored by a combination of gauges and warning lights in the operator's line of sight that monitor the following functions. The system should alert the operator of monitored loader malfunctions by way of an audible alarm and visual warning lights.

	<b>COMPLY</b>	
	<b>YES</b>	<b>NO</b>
• Hourmeter (gauge)	✓	—
• Fuel Level (gauge, light & alarm)	✓	—
• Engine Coolant Temp (gauge, light & alarm)	✓	—
• Attachment Control Device (light)	✓	—
• Two-speed High Range (light)	✓	—
• BICS Functions (light)	✓	—
• Glow Plugs (light)	✓	—
• Engine Oil Pressure (light & alarm)	✓	—
• Seat Belt (light)	✓	—
• Engine Air Filter (light & alarm)	✓	—
• Hydraulic Oil Temp (light & alarm)	✓	—
• Hydraulic Filter Condition (light & alarm)	✓	—
• System Voltage (light & alarm)	✓	—
• Hydrostatic Charge Pressure (light & alarm)	✓	—
• An air filter restriction indicator shall be provided as standard equipment	✓	—

**SERVICEABILITY**

Access to the following service items shall be gained by opening the rear door/tailgate and rear screen:

• Air Cleaner	✓	—
• Alternator	✓	—
• Battery	✓	—
• Cooling System (engine oil and hydraulic oil coolers)for cleaning	✓	—
• Engine oil and fuel filters	✓	—
• Engine oil drain and dipstick	✓	—
• Starter	✓	—
• Tailgate shall have optional lock for vandal proofing	✓	—
• Tailgate shall be equipped with a doorstop to hold the door open while servicing	✓	—
• Easy access to all lift arm grease points. Rod end of the tilt cylinder shall have a replaceable bushing.	✓	—

**SERVICEABILITY (Continued)**

- The axle hubs shall be removable without breaking chains for servicing the axle seals. Axle hubs will provide protection for the axle seals.
- Access to certain hydraulic system components shall be gained by a tip up operator cab

\_\_\_\_\_

\_\_\_\_\_

**SAFETY EQUIPMENT**

- An enclosable operator cab with side screens will be provided as standard equipment. Cab shall meet SAE standards J1040 and J1043 for Rollover Protective Structure and Falling Object Protective Structure. Minimum inside cab width of 33"(838mm).
- A seat belt and an electric switch operated parking brake must be furnished as standard equipment.
- Front and rear work lights are standard
- Additional operator protection shall be provided by a seat bar or similar device which restricts lift arm operation when not in use
- A lift arm support device to assist in servicing the loader will be provided as standard equipment.
- Grab handles to assist the operator in mounting and dismounting the loader will be provided as standard equipment
- Instructions-operational instructions and warnings by decals with pictorials and international symbols plus some messages in four basic languages: English, French, German and Spanish. Additionally, a weather resistant operator handbook written in English will be attached to the loader.
- Loader shall be equipped with an interlock control system which requires that the operator be seated in the loader with the seat bar down in place and the engine running before the hydraulic lift, tilt and the traction drive system can be operated. The auxiliary hydraulics shall deactivate when the operator raises the seat bar. Should the engine not start or a system problem occur with the lift arms raised, the lift arms can be lowered by turning the lift arm by-pass control knob clockwise 1/4 turn. Then, pull up and hold until the lift arms slowly lower.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**TRAINING RESOURCES**

- A comprehensive Skid-Steer Loader Operator Training Kit shall be available.
- A comprehensive Service Safety Training Kit shall be available.

\_\_\_\_\_

\_\_\_\_\_

III.

**OPTIONS**

**COMPLY**  
**YES NO**

- Counterweights to increase Rated Operating Capacity to 2500 lbs. (1134 kg) shall be available.

**ATTACHMENTS**

- All attachments must be mounted on a quick-change mechanism. No attachments will be considered unless it can be removed or mounted by an experienced operator in two (2) minutes or less.
- The quick change mechanism will incorporate two handles that drive spring loaded, wear compensating wedges into the attachment ensuring a tight attachment fit-up (Optional Power Quick Change)
- A single control unit must be provided which will control all available attachments.

**LOADER INSTRUMENTATION**

An operating sensing system monitors the following loader conditions and functions:

<u>Gauges</u>	<u>Warning Lights*** &amp; Alarm</u>	<u>Other Functions</u>
Engine Coolant Temp	Advanced Hand Controls	Bucket Positioning (Opt.)
Fuel Gauge	Engine Oil Pressure	High Flow Auxiliary Hydraulics
Engine Oil Pressure	Hydrostatic Charge Pressure	Keyless Start
Hydraulic Oil Temp	Engine Coolant Temp	Clock
Battery Condition	Hydraulic Oil Temp	Job Clock
Tachometer		Help Functions
Hydrostatic Charge Pressure		Automatic Shutdown
		Diagnostic Capability**

- \* Display informs operator of attachment function and usage.
- \*\* To simplify trouble shooting procedures for active warnings.
- \*\*\* The 14 warning lights that are included with the loader instrumentation are also included with the Optional Deluxe Instrument Panel.

- A liquid-crystal display in the operator's line of sight will provide the visual warnings as well as constantly displaying fuel level, battery condition, engine oil pressure, engine coolant temperature, hourmeter, hydrostatic charge pressure and hydraulic oil temperature.
- The system will also be capable of storing service history of malfunctions of the loader for later retrieval by use of a diagnostic instrument. Basic items such as loader serial number and hours as well as instantaneous readouts on current loader conditions will be other functions of the diagnostic instrument.

**LOADER INSTRUMENTATION (Continued)**

**COMPLY  
YES NO**

- Ability to monitor real time readouts of these six items: engine oil pressure, engine coolant temperature, hydraulic charge pressure, hydraulic oil temperature, system voltage, engine speed in English or Metric units.

**COLOR**

- Manufacturer's standard color

**MANUAL PARTS BOOKS**

- Two (2) complete and accurate operator's manuals, and two (2) part manuals, and two (2) service manuals for the skid steer being purchased.

**OPTIONS BID SEPARATELY**

- Specifications for a 24-inch cold planer with a 24-inch drum
- The cold planer is to be compatible with the skid steer loader and quick attach system
- Minimum cutting with 24-inches

III.

COMPLY  
YES NO

- Minimum 68 cutting teeth
- Shall have a 0 to 6-inch cutting depth
- Minimum side shift of 22-inches
- Minimum tilt of 15 degrees
- Top access service panel
- Hydraulic depth control
- Drive System shall be direct drive
- Set up and ready for use at time of delivery
- Operator training kits
- Parts & Repair manuals
- Complete Water system
- One extra set of cutting teeth

**Non-Comply Items:**

1-3-2002

**Village of Downers Grove**

Options List or Optional Bid pricing - Addition to net price.

6905809 24" Planer	
6716197 24" Fastcut Drum	9,896.00
24" - 84 - Replacement Teeth	574.50
Air Conditioning Optional	704.00
6718826 Deluxe Instrumentation (keyless)	316.80
6719889 2 Speed Option	1,088.00
6717230 Counterweight Option	192.00
6719786 Rear Auxiliary Hyd.	432.00
6808292 Water Kit	
6658140 Nozzle Kit	1,717.00

**IV. BID CONTRACT FORM  
CONTRACT 2002**

The undersigned proposes to furnish at the prices indicated and conforming to the attached Village of Downers Grove specifications, the following: **2001 Skid-Steer Loader**, F.O.B. 5101 Walnut Avenue, Downers Grove, IL 60515, within 30 days of award of contract

<u>Description</u>	<u>Price</u>
2001 Skid-Steer Loader	\$ <u>22,977.31</u>
Make: <u>IR Bobcat</u>	
Model No.: <u># 873</u>	
Year of Manufacture: <u>2001</u>	
<b>TRADE-IN</b> 1988 Model #843 Bobcat Skid-Steer Loader, Serial #503728853	\$ <u>4,500</u>
<b>Net price after trade-in</b>	\$ <u>18,477.31</u>

**Note:** Prices shall remain firm for 60 days from the date of proposal.

**IV. OPTIONAL BID CONTRACT FORM  
CONTRACT 2002**

24-Inch Cold Planer with a 24-inch Drum

\$ 9,896.00

Compatible with Skid-Steer Loader &  
Quick Attach System



**DETAILED SPECIFICATIONS  
SKIDSTEER LOADER**

**GENERAL:** This unit shall be a fully hydrostatic, 4-Wheel Drive Skidsteer Loader. It shall be complete with all standard equipment as described in the manufacturer's published literature and manuals as well as with special accessories described herein. The unit shall be completely serviced and ready for use prior to inspection and delivery. Design shall be current or within the last 24 months. Please list and explain any non-comply items in Section 21. The unit shall be compatible with village owned skid steer attachments

**WORKING RANGE**

**COMPLY  
YES NO**

Dump angel at Maximum height	37 degrees (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dump height w/Standard Bucket	98.4"	<input type="checkbox"/>	<input checked="" type="checkbox"/> 93.75"
Dump Reach at Maximum height	33" (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ground Clearance	8.5" (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Height to bucket hinge pin	122" (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Height w/Operator Cab	79.0" (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Length w/out Attachment	107" (min)	<input type="checkbox"/>	<input checked="" type="checkbox"/> 106.75"
Length w/Standard Bucket	140.7" (min)	<input type="checkbox"/>	<input checked="" type="checkbox"/> 139.00"
Operating Height	159.1" (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rollback @ Carry Position	30 degrees (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rollback fully raised @ max. height	101 degrees (min)	<input type="checkbox"/>	<input checked="" type="checkbox"/> 97°
Turning radius w/Standard Bucket	84.2" (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wheelbase	48.8" (min)	<input type="checkbox"/>	<input checked="" type="checkbox"/> 48.00"
Wheel Tread	59.2" (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Width (over standard tires)	72.0" (min)	<input type="checkbox"/>	<input checked="" type="checkbox"/> 66.25"
Width (over bucket)	74.0" (min)	<input type="checkbox"/>	<input checked="" type="checkbox"/> 73.00"

**PERFORMANCE**

Rated Operating Capacity- <b>SAE</b>	2,350-2,650 (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rated Operating Capacity w/counterweight (Opt)	2,500 lbs. (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tipping Load- <b>SAE</b> rated	4,800 lbs. (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operating Weight- <b>SAE</b> rated	6,100 lbs. (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Travel speed-single speed loader	7.4 mph (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Travel speed-two speed loader (Opt.)	7.2 mph (min)-12.5 mph	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lift Breakout Force (SAE)	4,800 lbs. (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tilt Breakout Force (SAE)	4,700 lbs. (min)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Axle Torque-Single Speed Loader	5,300 ft-lbs	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**COMPLY**

**YES NO**

- A hydraulic oil cooler shall be standard equipment.
- Engine/Hydraulic System Shutdown will provide automatic engine shutdown to prevent loader damage.
- Standard auxiliary hydraulics shall include flush face style quick couplers.
- Cylinders shall meet the following minimum specifications:

Function	#of Cylinders	Bore Diameter	Rod Diameter	Stroke
Lift	2	2.75"(69.6mm)	1.500"(38.1mm)	28.5"(787.0mm)
Tilt	2	2.75"(69.6mm)	1.500"(41.3mm)	14.5"(452.0mm)

**OPERATOR COMFORT/CONTROLS**

- Vehicle Steering-forward, reverse, travel speed and steering controlled by two independent hand levers.
- Standard front auxiliary hydraulics controlled by electrical switches located on the right steering lever handle.
- Hydraulic functions-hand controlled lift and tilt functions available for complete hand control.
- Optional rear auxiliary hydraulics controlled by left hand switches.
- Engine Speed-controlled by hand lever.
- Engine starting and shutdown functions shall be controlled electrically with the key switch.
- A feature for draining pressure from the auxiliary hydraulics circuit shall be provided in the left instrument panel.
- Keyless start system shall be available as part of the deluxe instrument panel option.
- Option cab with heater and/or air conditioning shall be available without changing the loader profile.
- Parking Brake-Both mechanical disk and spring applied pressure release (2 speed).

FOOT CONTROL

**CAPACITIES**

- Fuel Tank Capacity 25 gal (94.6L)min
- Engine/Cooling Oil with Filter 16 qts (15.1L)min
- Hydraulic Reservoir 21 qts(19.9L)min
- Hydraulic/Hydrostatic System 13 gal(49.2L)min
- Chaincase Reservoir 10 gal(37.9L)min

24 GPM

2 GPM RACTH SIDE

### LOADER INSTRUMENTATION

The loader conditions shall be monitored by a combination of gauges and warning lights in the operator's line of sight that monitor the following functions. The system should alert the operator of monitored loader malfunctions by way of an audible alarm and visual warning lights.

	COMPLY	
	YES	NO
• Hourmeter (gauge)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Fuel Level (gauge, light & alarm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Engine Coolant Temp (gauge, light & alarm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Attachment Control Device (light)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Two-speed High Range (light)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• BICS Functions (light)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Glow Plugs (light)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Engine Oil Pressure (light & alarm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Seat Belt (light)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Engine Air Filter (light & alarm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Hydraulic Oil Temp (light & alarm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Hydraulic Filter Condition (light & alarm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• System Voltage (light & alarm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Hydrostatic Charge Pressure (light & alarm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• An air filter restriction indicator shall be provided as standard equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### SERVICEABILITY

Access to the following service items shall be gained by opening the rear door/tailgate and rear screen:

• Air Cleaner	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Alternator	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Battery	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Cooling System (engine oil and hydraulic oil coolers) for cleaning	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Engine oil and fuel filters	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Engine oil drain and dipstick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Starter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Tailgate shall have optional lock for vandal proofing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Tailgate shall be equipped with a doorstop to hold the door open while servicing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Easy access to all lift arm grease points. Rod end of the tilt cylinder shall have a replaceable bushing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SERVICEABILITY (Continued)**

- The axle hubs shall be removable without breaking chains for servicing the axle seals. Axle hubs will provide protection for the axle seals.
- Access to certain hydraulic system components shall be gained by a tip up operator cab

✓                        
 ✓                      

**SAFETY EQUIPMENT**

- An enclosable operator cab with side screens will be provided as standard equipment. Cab shall meet SAE standards J1040 and J1043 for Rollover Protective Structure and Falling Object Protective Structure. Minimum inside cab width of 33"(838mm).
- A seat belt and an electric switch operated parking brake must be furnished as standard equipment.
- Front and rear work lights are standard
- Additional operator protection shall be provided by a seat bar or similar device which restricts lift arm operation when not in use
- A lift arm support device to assist in servicing the loader will be provided as standard equipment.
- Grab handles to assist the operator in mounting and dismounting the loader will be provided as standard equipment
- Instructions-operational instructions and warnings by decals with pictorials and international symbols plus some messages in four basic languages: English, French, German and Spanish. Additionally, a weather resistant operator handbook written in English will be attached to the loader.
- Loader shall be equipped with an interlock control system which requires that the operator be seated in the loader with the seat bar down in place and the engine running before the hydraulic lift, tilt and the traction drive system can be operated. The auxiliary hydraulics shall deactivate when the operator raises the seat bar. Should the engine not start or a system problem occur with the lift arms raised, the lift arms can be lowered by turning the lift arm by-pass control knob clockwise 1/4 turn. Then, pull up and hold until the lift arms slowly lower.

✓                        
 ✓                        
 ✓                        
 ✓                        
 ✓                        
 ✓                        
 ✓                      

METS ALL SPECS  
EXCEPT FOR  
BYPASS KNOB

**TRAINING RESOURCES**

- A comprehensive Skid-Steer Loader Operator Training Kit shall be available.
- A comprehensive Service Safety Training Kit shall be available.

✓                        
 ✓

III.

OPTIONS

COMPLY  
YES NO

- Counterweights to increase Rated Operating Capacity to 2500 lbs. (1134 kg) shall be available.

ATTACHMENTS

- All attachments must be mounted on a quick-change mechanism. No attachments will be considered unless it can be removed or mounted by an experienced operator in two (2) minutes or less.
- The quick change mechanism will incorporate two handles that drive spring loaded, wear compensating wedges into the attachment ensuring a tight attachment fit-up (Optional Power Quick Change)
- A single control unit must be provided which will control all available attachments.

LOADER INSTRUMENTATION

An operating sensing system monitors the following loader conditions and functions:

Gauges

- Engine Coolant Temp
- Fuel Gauge
- Engine Oil Pressure
- Hydraulic Oil Temp
- Battery Condition
- Tachometer
- Hydrostatic Charge Pressure

Warning Lights\*\*\* & Alarm

- Advanced Hand Controls
- Engine Oil Pressure
- Hydrostatic Charge Pressure
- Engine Coolant Temp
- Hydraulic Oil Temp

Other Functions

- Bucket Positioning (Opt.)
- High Flow Auxiliary Hydraulics
- Keyless Start
- Clock
- Job Clock
- Help Functions
- Automatic Shutdown
- Diagnostic Capability\*\*\*

- \* Display informs operator of attachment function and usage.
- \*\* To simplify trouble shooting procedures for active warnings.
- \*\*\* The 14 warning lights that are included with the loader instrumentation are also included with the Optional Deluxe Instrument Panel.

- A liquid-crystal display in the operator's line of sight will provide the visual warnings as well as constantly displaying fuel level, battery condition, engine oil pressure, engine coolant temperature, hourmeter, hydrostatic charge pressure and hydraulic oil temperature.
- The system will also be capable of storing service history of malfunctions of the loader for later retrieval by use of a diagnostic instrument. Basic items such as loader serial number and hours as well as instantaneous readouts on current loader conditions will be other functions of the diagnostic instrument.

**LOADER INSTRUMENTATION (Continued)**

**COMPLY  
YES NO**

- Ability to monitor real time readouts of these six items: engine oil pressure, engine coolant temperature, hydraulic charge pressure, hydraulic oil temperature, system voltage, engine speed in English or Metric units.

MEETS ALL SPECS  
EXCEPT  
CHANGE PRESSURE  
+  
ENGINE SPEED

**COLOR**

- Manufacturer's standard color

**MANUAL PARTS BOOKS**

- Two (2) complete and accurate operator's manuals, and two (2) part manuals, and two (2) service manuals for the skid steer being purchased.

**OPTIONS BID SEPARATELY**

- Specifications for a 24-inch cold planer with a 24-inch drum
- The cold planer is to be compatible with the skid steer loader and quick attach system
- Minimum cutting with 24-inches

✓

✓

✓

✓

✓

✓

III.

COMPLY

YES NO

- Minimum 68 cutting teeth
- Shall have a 0 to 6-inch cutting depth
- Minimum side shift of 22-inches
- Minimum tilt of 15 degrees
- Top access service panel
- Hydraulic depth control
- Drive System shall be direct drive
- Set up and ready for use at time of delivery
- Operator training kits
- Parts & Repair manuals
- Complete Water system
- One extra set of cutting teeth

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Non-Comply Items:

I/Word/Staff/Pavement/Skid Steer Loader Specifications 100301

62 PIC 5

IV. BID CONTRACT FORM  
CONTRACT 2002

The undersigned proposes to furnish at the prices indicated and conforming to the attached Village of Downers Grove specifications, the following: **2001 Skid-Steer Loader, F.O.B. 5101 Walnut Avenue, Downers Grove, IL 60515, within 30 days of award of contract**

<u>Description</u>	<u>Price</u>
2001 Skid-Steer Loader	\$ <u>23,650.00</u>

Make: GAHL  
 Model No.: 6635 DX 7 II  
 Year of Manufacture: 2002

<b>TRADE-IN</b> 1988 Model #843 Bobcat Skid-Steer Loader, Serial #503728853	\$ <u>4500.00</u>
<b>Net price after trade-in</b>	\$ <u>19,150.00</u>

**Note:** Prices shall remain firm for 60 days from the date of proposal.

*(Faint, mostly illegible text, likely a contract preamble or terms and conditions section.)*

### IV. OPTIONAL BID CONTRACT FORM CONTRACT 2002

24-Inch Cold Planer with a 24-inch Drum

\$ 11,500.00

Compatible with Skid-Steer Loader &  
Quick Attach System

