

Aitkin County Board of Commissioners
Request for County Board Action/Agenda Item Cover Sheet



To: Chairperson, Aitkin County Board of Commissioners Date: 12-31-12

Via: Patrick Wussow, County Administrator

From: John Welle

Title of Item:

Equipment Purchase – Motor Graders

Requested Meeting Date: 1-08-13 Estimated Presentation Time: 15 minutes

Presenter: John Welle

Type of Action Requested (check all that apply)

- For info only, no action requested Approve under Routine Business
- For discussion only with possible future action Adopt Ordinance Revision
- Let/Award Bid or Quote (attach copy of basic bid/quote specs or summary of complex specs, each bid/quote received & bid/quote comparison)
- Approve/adopt proposal by motion Approve/adopt proposal by resolution (attach draft resolution)
- Authorize filling vacant staff position
- Request to schedule public hearing or sale Other (please list) _____
- Request by member of the public to be heard
- Item should be addressed in closed session under MN Statute _____

Fiscal Impact (check all that apply)

- Is this item in the current approved budget? Yes No (attach explanation)
- What type of expenditure is this? Operating Capital Other (attach explanation)
- Revenue line account # that funds this item is: 5001
- Expenditure line account # for this item is: 6600

Staffing Impact (Any yes answer requires a review by Human Resources Manager before going to the board)

- Duties of a department employee(s) may be materially affected. Yes No
- Applicable job description(s) may require revision. Yes No
- Item may impact a bargaining unit agreement or county work policy. Yes No
- Item may change the department's authorized staffing level. Yes No



Supporting Attachment(s)

- Memorandum Summary of Item
- Copy of applicable county policy and/or ordinance (excerpts acceptable)
- Copy of applicable state/federal statute/regulation (excerpts acceptable)
- Copy of applicable contract and/or agreement
- Original bid spec or quote request (excluding complex construction projects)
- Bids/quotes received (excluding complex construction projects, provide comparison worksheet)
- Bid/quote comparison worksheet
- Draft County Board resolution
- Plat approval check-list and supporting documents
- Copy of previous minutes related to this issue
- Other supporting document(s) (please list) _____

AITKIN COUNTY COMMISSIONER'S MEMO

TO: Aitkin County Commissioners
Patrick Wussow, County Administrator

FROM: John Welle

DATE: January 2, 2013

Regular Agenda Item:

Equipment Purchase – Motor Graders

Summary:

Two of our fleet of eight motor graders are scheduled to be replaced in our 2013 Capital Equipment Replacement Program. These motor graders were acquired in 1987 and 1989 and have nearly 23,000 hours on each machine.

Utilizing Contract Release M-439(5) of the Cooperative Purchasing Venture program offered through the State of Minnesota Department of Administration, options and pricing were researched for Caterpillar machines offered by Zeigler, Inc. and John Deere machines offered by RDO Equipment. Note that options and pricing were also available for Volvo and Case machines, however, these machines were not considered for this purchase.

Enclosed is a worksheet that shows the cost comparison for the Caterpillar 120M2, Caterpillar 120M AWD, John Deere 670G, and John Deere 672G. Note that the Caterpillar 120M AWD and John Deere 672G are the same machine as the other corresponding model with the addition of all-wheel drive instead of four-wheel drive.

Line 3 of the worksheet shows the comparative cost per machine after trade-in allowance for the four models listed. This comparative cost was based on the listed required specifications that were developed for this purchase and the sealed bid for trade-in values submitted by the two vendors. From this line, note that the Caterpillar 120M AWD is the lowest cost, largely due to the fact that Caterpillar has a surplus of this package machine and is offering trade-in allowance incentives. The total cost per machine for the Caterpillar 120M AWD is \$150,910 compared to a cost of \$155,442 for the John Deere 670G, which is the next lowest in cost.

Based on this comparison, the purchase of two Caterpillar 120M2 AWD motor graders is recommended at the total cost of \$301,820 as shown on line 4. Not only is the Caterpillar the lowest cost machine, it is also the best value, as it has additional options that include all-wheel drive, autoshift transmission, enhanced lighting package, and a larger and thicker moldboard. Note that the comparative cost of the all-wheel drive John Deere 672G is \$339,638 for two machines. This cost for the John Deere machines does not include the autoshift transmission, enhanced

lighting, upgraded moldboard, and other minor options that the Caterpillar machine has.

In addition to the base machine, additional machine options are recommended as shown on the bottom portion of the worksheet. These additional options, which primarily includes a rear compaction attachment, adds \$30,370 per machine for the Caterpillar M2 AWD as shown on line 5, for a total of \$60,740 for the two machines as shown on line 6.

Therefore, the total recommended purchase from Zeigler, Inc. under Contract No. 46477 for two Cat 120M AWD machines is \$362,560 as shown on line 7. \$310,000 is budgeted in the 2013 Capital Equipment budget for this purchase, with an additional \$70,000 programmed in the 2014 Capital Equipment Program.

Motor Grader Comparison

Zeigler, Inc.
901 West 94th Street
Bloomington, MN 55420

RDO Equipment Company
12500 Dupont Avenue South
Burnsville, MN 55337

	Caterpillar 120M2 \$ 188,290	Caterpillar 120M AWD \$ 188,290	John Deere 670G Base Price \$ 171,512	John Deere 672G Base Price \$ 180,653
Machine Specifications:				
Net Horsepower	145-189 (1st gear to 8th gear)	145-189 (1st gear to 8th gear)	160-195 (1st gear to 8th gear)	160-195 (1st gear to 8th gear)
Operating Weight	36,073 pounds	37,573 pounds (approx.)	35,220 pounds	37,470 pounds
Number of Drive Tires	4	6	4	6
Alternator Size	150 amp	150 amp	100 amp	100 amp
Battery CCA	Two 1125 CCA	Two 1125 CCA	Two 1400 CCA	Two 1400 CCA
Differential Type	Lock-unlock, automatic	Lock-unlock, automatic	lock-unlock, automatic	lock-unlock, automatic
Fuel Tank Size	100 gallons	100 gallons	111 gallon	111 gallon
Transmission	8 forward, 6 reverse	8 forward, 6 reverse	8 forward, 8 reverse	8 forward, 8 reverse
Powershift Transmission	Powershift	Autoshift	Powershift	Powershift
Deduct for Tier III emissions compliance	NA	yes \$ (14,840)	NA	NA
Required Specifications: (Highlighted items denotes exceeded specification)				
Tandem Rear Drive	yes \$ -	all-wheel drive \$ 22,390	yes \$ -	all-wheel drive \$ -
Snow Fighter Package	NA	yes \$ 14,000	NA	NA
Air Conditioning	yes \$ -	yes \$ -	yes \$ -	yes \$ -
Electronic Steering and Hydraulic Controls	yes \$ -	yes \$ -	yes \$ 18,700	yes \$ 18,982
Air Suspension Seat	yes	Included in snow-fighter package option \$ -	yes \$ -	yes \$ -
Rear Window Wiper/Washer	yes	included in snow-fighter package option \$ -	yes \$ -	yes \$ -
Rear Window Defrost	yes \$ 980	included in snow-fighter package option \$ -	yes \$ -	yes \$ -
Cab Air Pre-cleaner	yes \$ -	yes \$ -	yes \$ 421	yes \$ 427
Rear Vision Camera	yes \$ 1,150	included in snow-fighter package option \$ -	yes \$ 1,375	yes \$ 1,396
Exterior Mounted Rear View Mirror	yes \$ -	included in snow-fighter package option \$ -	yes \$ -	yes \$ -
Front Window Wiper/Washer	yes \$ -	yes \$ -	yes \$ -	yes \$ -
Rear Defroster Fan	yes \$ -	yes \$ -	yes \$ -	yes \$ -
RH Cab Door	yes \$ -	yes \$ -	yes \$ -	yes \$ -
Intermittent Wiper for RH Cab Door	yes \$ -	yes \$ -	yes \$ 304	yes \$ 309
RH Ladder	yes \$ -	yes \$ -	yes \$ -	yes \$ -
Speedometer/Tachometer	yes \$ -	yes \$ -	yes \$ -	yes \$ -
AM/FM weatherband radio	yes	Included in snow-fighter package option \$ -	yes \$ 447	yes \$ 454
Rear Sunshade	yes	included in snow-fighter package option \$ -	yes \$ 103	yes \$ 105
24 Volt to 12 Volt converter	yes \$ 890	included in snow-fighter package option \$ -	yes \$ -	yes \$ -
Fluid Sample Ports	yes \$ -	yes \$ -	yes \$ -	yes \$ -
Black Exhaust Pipe	yes 0	yes \$ -	yes \$ -	yes \$ -
Transmission Solenoid Guard	yes 0	yes \$ -	yes \$ 97	yes \$ 98
Engine Coolant Heater	yes \$ -	yes \$ -	yes \$ -	yes \$ -
Basic Work Lights	yes \$ 350	included in snow-fighter package option \$ -	yes \$ 498	yes \$ 506
Rt Flip Down Bracket	yes \$ -	yes \$ -	yes \$ 72	yes \$ 73
Cab-Mounted Strobe Light	yes \$ 800	yes \$ 800	yes \$ 379	yes \$ 379
17.5 x 25" Rim/Tires	Bridgestone VKT, multi piece rim \$ 2,260	Bridgestone VKT, multi piece rim \$ 2,260	Michelin XTLA, single piece \$ 6,848	Michelin XTLA, single piece \$ 6,955
Base Hydraulics Plus Rear Function	yes \$ 970	Included in snow-fighter package (front, rear, and two side functions) \$ -	yes \$ 1,343	yes \$ 1,364
Base Hydraulics Plus Front Function	yes \$ 860	yes \$ -	yes \$ 756	yes \$ 768
14"x24"x7/8" Blade	yes \$ 540	Included in snow fighter package (14"x 27"x1" blade) \$ -	yes \$ 713	yes \$ 724
Left Blade Extension	yes \$ 1,570	yes \$ 1,570	yes \$ 1,008	yes \$ 1,024
Standard Pin-on Hitch	yes \$ 2,720	yes \$ 2,720	NA \$ -	NA \$ -
Dozer Blade	Falls 9-foot \$ 4,310	Falls 9-foot \$ 4,310	105" Dozer Blade \$ 4,575	105" Dozer Blade \$ 4,647
Front-Mount Hitch	yes \$ 200	included in snow fighter package \$ -	yes \$ 853	yes \$ 866
Front Steerable Fenders	yes \$ 1,270	yes \$ 1,270	yes \$ 467	yes \$ 467
Slopemeter	yes \$ 380	yes \$ 380	yes \$ 5,111	yes \$ 9,752
60 month/5,000 hour full machine warranty	yes \$ 6,760	yes \$ 8,760	yes \$ 360	yes \$ 360
Delivery	yes \$ -	yes \$ -	yes \$ 215,942	yes \$ 230,319
Line 1 Total with Options (each):	\$ 214,300	\$ 231,910	\$ 215,942	\$ 230,319
Line 2 Trade-in Allowance (each):	\$ 50,300	\$ 81,000	\$ 60,500	\$ 60,500
Line 3 Total per unit after trade-in allowance:	\$ 164,000	\$ 150,910	\$ 155,442	\$ 169,819
Line 4 Total for two Units:	\$ 328,000	\$ 301,820	\$ 310,884	\$ 339,638
Additional Desired Options:				
Rear Compaction Attachment	Walk N' Roll w/HD lift and accumulator \$ 30,370	Walk N' Roll w/HD lift and accumulator \$ 30,370	Handi Hitch 90-Inch \$ 24,614	Handi Hitch 90-Inch \$ 24,614
Side Window Wipers	yes \$ -	yes \$ -		
Inside Wide Angle Rear View Mirror	yes \$ -	yes \$ -		
Heated outside mirrors	yes \$ -	included in snow-fighter package option \$ -		
fire extinguisher			yes \$ 60	yes \$ 60
Font Sun Visor			yes \$ 69	yes \$ 70
Reversible Hydraulic Fan			yes \$ -	yes \$ -
Hydraulic Disconnect			yes \$ 85	yes \$ 87
Ether Starting Aid			yes \$ -	yes \$ -
Line 5 Total Additional Options Per Unit:	\$ 30,370	\$ 30,370	\$ 24,828	\$ 24,831
Line 6 Total Additional Options for Two Units:	\$ 60,740	\$ 60,740	\$ 49,656	\$ 49,662
Line 7 Grand Total with All Options for Two Units:	\$ 388,740	\$ 362,560	\$ 360,540	\$ 389,300