CITY OF WEST DES MOINES
CITY COUNCIL MEETING COMMUNICATION

4(j)

DATE: January 21, 2020

ITEM: Motion – Approval to Purchase Ice Resurfacer

FINANCIAL IMPACT: $177,986.60, delivered. Budget code: 692.400.700.5400.750 – Equipment Miscellaneous

BACKGROUND: In order to operate the full service two sheet ice facility at the MidAmerican Energy Company RecPlex, two electric ice resurfacers are needed. The Council approved the purchase of a reconditioned 2004 Zamboni Electric 552 ice resurfacer on October 7, 2019. That machine has been purchased and is in the process of being refurbished for delivery in fall of 2020.

Attached is a proposal from the Frank J. Zamboni Company for the purchase of a second ice resurfacer. This machine is included under the Sourcewell National Purchasing Alliance at a price of $177,986.60. The City's purchasing policy allows for purchases to be awarded for good cause to a vendor that provides pricing through Sourcewell.

The proposed machine will be newly built and features the latest advancements in ice resurfacing technology to maximize efficiency and reduce operating expenses.The typical lead time for a new machine is 10-12 months and a price increase will occur in early February 2020. This price includes all options requested as well as delivery and training. This ice resurfacer is scheduled to arrive in time for the opening of the RecPlex in late 2020.

OUTSTANDING ISSUES: None

RECOMMENDATION: That the City Council approve the purchase of a new Ice Resurfacer for the MidAmerican Energy Company RecPlex.

LEAD STAFF MEMBER: Ryan Penning, Superintendent of Recreation

STAFF REVIEWS

Department Director	Sally Ortgies, Director of Parks & Recreation
Appropriations/Finance	Tim Stiles, Finance Director
Legal	Richard Scieszinski, City Attorney
Agenda Acceptance	

PUBLICATION(S) (if applicable)

Published In	
Dates(s) Published	

SUBCOMMITTEE REVIEW (if applicable)

Committee	
Date Reviewed	

FRANK J. ZAMBONI & CO., INC.
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Phone (562) 633-0751
Fax (562) 633-9365
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January 2, 2020

Shayne Ratcliff
City of West Des Moines Parks & Recreation
4200 Mills Civic Pkwy #1B
West Des Moines, IA 50265

PROPOSAL

MODEL: **Zamboni 552AC**

QUANTITY: **One (1)**

CAPACITY: **Full Size**

- Snow Tank
  100 cubic feet (actual volume)
  120 cubic feet (compacted)
- Ice Making Water Tank
  Constructed of High Density Polyethylene
  200 U.S. gallons
  Wash Water Tank (optional)
  Constructed of High Density Polyethylene
  82 U.S. gallons
  Total Water Capacity
  282 U.S. gallons

ELECTRONIC CONTROLS: **Sevcon® Gen4 AC Motor Controllers**

- Sevcon solid state controls provide for infinitely Variable traction speeds, as well as optimum control of the accessory pump operations.
- Sevcon controls offer the latest in electronic technology and provide exact optimized control to achieve outstanding operability. These controls have been proven throughout the world in demanding applications such as forklifts and airport equipment.

ZAMBONI®

ELECTRONIC CONTROLS: (Cont'd)

"On-Board" Diagnostic Features

- Operator faults, eg. starting in gear or parking brake on
- Faults due to Component failure
- Motor temperature warning

Sevcon Display

- Sevcon dash display relays information about the motor controllers
- Full diagnostics with alphanumeric display including fault codes
- Battery Discharge Indicator (BDI) and motor controller hour meters.

ELECTRIC MOTORS:

- 24 HP (18kW) brushless AC traction motor w/ temperature sensor
- 11 HP (8kW) brushless AC pump motor w/ temperature sensor

BATTERY & CHARGER:

- 510 Amp Hour heavy-duty industrial type lead acid batteries. Heavy-duty features include a tabular solid plate design and heat bonded jar.
- "Intelligent" charger is microprocessor controlled to provide the best charging sequence in all conditions.

DRIVETRAIN:

Dana/Spicer Axles

- Front - Model 60, rated 6,400 lb. capacity.
- Rear - Model 60, rated 6,200 lb. capacity and is a rigid, full-float design.
- Because the 552 uses Spicer/Dana axles that are optimized for our chassis, we offer the industry's highest manufacturer approved axle capacities.

DRIVETRAIN:

- Our chassis/axle combination is the key to the Zamboni 552 having a turning radius of 16 feet, a full 3 feet tighter than most other machines.

Transfer Case

- Rugged cast iron housing for rigid gear and bearing support. Heat-treated alloy steel gears are helical cut for greater strength and lower noise.
- Traction drive motor is directly-mounted to the housing for long shaft life.

Chassis

- 2" X 5" structural steel tubing for high strength and long service.

HYDRAULICS:

Pump and Motor

- Gear-type for high efficiency, flow and speed. This design has been proven in many rugged applications and helps to continue Zamboni's reputation for the best conveyor performance in the industry.

Steering Pump

- The use of a hydraulic steering system provides very smooth power steering with little effort.

Filtration and Tank

- Parker 10 micron hydraulic filter ensures a clean environment for all hydraulic components.
- Large 21 gallon tank enhances hydraulic fluid travel to rid the oil of entrapped air and increase heat dissipation.

SNOW TANK AND AUGERS:

- Large snow capacity and tank design provides all areas of the snow tank to be completely filled, even the top and rear corners.
- Both 10 inch large diameter augers are double-flighted to ensure good performance even during heavy shaving and the augers are powder coated for durability.

CONDITIONER:

- Zamboni Ice Resurfacers have a well-deserved reputation for producing the finest sheet of ice, even after many years of being in use.
- A unique design of spring and hydraulic down pressure is used for superior shaving results.
- Performance will continue for the life of the machine by using replaceable bushings and springs.

HUMAN ENGINEERING:

- The operation of the 552 is very simple. The operator selects the travel direction, then drives the machine with a foot control. Because the conveyors are independent of vehicle speed, the 552 provides full power and speed to the augers at all times, even when slowing for corners.
- Speed is controlled by a single foot pedal. A solid-state electronic actuator provides smooth and responsive acceleration.

ELECTRONIC CONTROLS:
(Cont'd)

- Operator compartment has an ergonomic layout and includes a modern steering wheel with spinner knob.
- The MOSFET electronic controls, while securely locked to inhibit unauthorized entry, are conveniently located should service be necessary. The battery is easily accessed through both side doors for routine maintenance checks, even with the snow tank down.
- Wiring and looms are well routed and protected.
- Vertical auger cover reduces noise and provides an aesthetically pleasing look to the rear platform of the machine.

FACILITY ENGINEERING:

- Zamboni Ice Resurfacers offer unparalleled shaving and snow conveyor performance. A quality sheet of ice is among an arena's primary selling features.
- Zamboni has the tightest turning radius in the industry, enabling operators to resurface deeper into their corners.
- The snow tank on the 552 is designed with a flat bottom and sides, allowing for the snow to slide out with the least amount of residue and at a much lower height. This is important for both dumping indoors as well as outdoors in adverse conditions.
- Polyethylene ice-making water tank is standard. This tank is completely rust free and has a 8" quick access cover for inspection and clean-out.

MANUFACTURER'S STATEMENT:

The Model 552 is proudly designed and manufactured in Paramount, California by Frank J. Zamboni & Co., Inc., a United States company.

WARRANTY:

Twenty Four (24) months or 2,000 hours, parts replacement only.

SAFETY STANDARDS:

The 552 is engineered to meet or exceed A.N.S.I. safety labelling requirements.

SOURCEWELL CONTRACT PRICING:	**Zamboni 552AC**	$124,995.00
	• Lithium Ion Battery & Charger	$ 12,500.00
	• Back Up Alarm	$ 710.00
	• Board Brush	$ 5,850.00
	• Aluminum Wheels	$ Standard
	• Wash Water System w/ Poly Tank	$ 4,900.00
	• Guide Wheel	$ Standard
	• Black Powder Coated Conditioner	$ Standard
	• Parking Brake	$ Standard
	• Conditioner Poly Side Plate	$ Standard
	• Advanced Water System	$ 5,250.00
	• Tire Wash System	$ 1,425.00
	• Stainless Steel Water Distribution Pipe	$ 400.00
	• Conti Blade Changer	$ 2,750.00
	• Level Ice System (Includes on site installation & training)	$ 21,000.00
SUB-TOTAL:		$179,780.00
	Less Sourcewell Discount	($5,393.40)
	Transportation	$ 3,600.00
TOTAL:		$177,986.60

F.O.B.: Paramount, CA

TERMS: Net 30 days on approved credit.
Shipment 150 days or sooner ARO.
Pricing firm for 30 days.
Pricing does not include any applicable sales tax.

THANK YOU:

Doug Peters
Regional Sales Manager

1/2/20
Date

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