FRANK J. ZAMBONI & CO., INC.

15714 Colorado Avenue Paramount, CA 90723-0770 Phone (562) 633-0751 Fax (562) 633-9365 www.zamboni.com

December 10, 2019

Preston Stensrud City of Marshall 344 West Main Street Marshall, MN 56258

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.



ELECTRONIC CONTROLS:

"On-Board" Diagnostic Features

(Cont'd)

- 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 doubleflighted 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. 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 solidstate 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	Zamboni 552AC	.\$1	24,995.00
PRICING:	 Lithium Ion Battery & Charger Board Brush Aluminum Wheels Wash Water System w/ Poly Tank Guide Wheel Black Powder Coated Conditioner Parking Brake Electronic Water Level Sight Gauge Conditioner Poly Side Plate Snow Tank Light Advanced Water System Auto Snow Breaker Stainless Steel Water Distribution Pipe Integrated Auger Wash Out System 	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	5,850.00 Standard 4,900.00 Standard Standard Standard
SUB-TOTAL:		\$1	57,840.00
	Less Sourcewell Discount	(\$	\$4,735.20)
	Transportation	\$	3,600.00
TOTAL:		\$1	156,704.80
F.O.B.:	Paramount, CA		

TERMS: Net 30 days on approved credit.

Shipment 150 days or sooner from receipt of order.

Pricing firm for 30 days.

Pricing does not include any applicable sales tax.

THANK YOU:

Regional Sales Manager

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