



# City of Grand Island

Tuesday, December 18, 2018

Council Session

## Item G-7

**#2018-380 - Approving Purchase of a New Street Sweeper for the Streets Division of the Public Works Department**

Staff Contact: John Collins, P.E. - Public Works Director

# **Council Agenda Memo**

**From:** Shannon Callahan, Street Superintendent

**Meeting:** December 18, 2018

**Subject:** Approving Purchase of a New Street Sweeper for the Streets Division of the Public Works Department

**Presenter(s):** John Collins PE, Public Works Director

## **Background**

The Streets Division's Street Sweeping program consists of four (4) Street Sweepers that sweep the entire City (curb and gutter streets) once in the spring and once in the fall. During summer months a single Street Sweeper is used to sweep routes and other locations as needed. The Street Sweepers are also used to sweep specific areas including downtown before special events and the State Marathon Route.

Unit 243 is a 2000 Elgin Pelican Street Sweeper with over 13,500 hours and a repair cost to purchase price ratio of 1.60. This unit is due for replacement and the new street sweeper will be moved to the front-line position, logging the most hours each year, and the current front-line machine will be used as a seasonal unit. The Streets Division has funds approved in the 2018-2019 FY budget to purchase a Street Sweeper.

## **Discussion**

The City of Grand Island City Council approved the use of the National Joint Powers Alliance Buying Group (NJPA), now known as Sourcewell, with Resolution 2014-326.

To meet competitive bidding requirements, the Streets Division obtained pricing from the (NJPA) Sourcewell Contract No. 122017-FSC awarded to Federal Signal Corporation; with Nebraska Environmental Products of Lincoln, NE assigned as our authorized dealer. Per the Sourcewell Contract No. 122017-FSC the price for a new 2019 Elgin Pelican Street Sweeper, that meets the City's requirements, will be \$220,862.35.

Nebraska Environmental is offering \$7,500 for trade-in of the 2000 Elgin Pelican but Public Works is of the opinion that the City would receive more money for the used equipment by selling as surplus.

## **Alternatives**

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

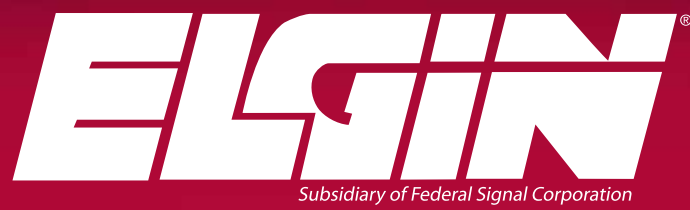
1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

## **Recommendation**

City Administration recommends that the Council approve the purchase of an Elgin Pelican Street Sweeper from Nebraska Environmental Products of Lincoln, NE for a purchase price of \$220,862.35.

## **Sample Motion**

Motion to approve the purchase of an Elgin Pelican Street Sweeper from Nebraska Environmental Products of Lincoln, NE for a purchase price of \$220,862.35.



Pelican<sup>®</sup>



# PELICAN® - LEGENDARY, DEPENDABLE PERFORMANCE.

To assure that the legendary Elgin Pelican continues to meet the needs of its customers and the industry, Elgin Sweeper raised the bar again and set a new benchmark for the industry standard. Based on a design that has been continually improved since 1914, the newest Pelican model combines maneuverability, economy, serviceability, and single-lane dumping with a sweep system that easily handles heavy, compacted dirt and bulky debris, as well as smaller particles found in the street. If you need an all-around sweeper with incredible digging power the Pelican is the perfect solution.

- Isolation-mounted cab for cleaner, quieter, more comfortable operation
- Improved 360° visibility
- Incredible ease of operation
- Superior durability, stability, and maneuverability
- Easy access for service and maintenance

Customized with your choice of options, the Pelican is a durable, reliable answer to your sweeper needs.



## APPLICATION SOLUTIONS

*Elgin Sweeper doesn't offer just one sweeping technology – we take an application-based approach to solving our customers sweeping needs. Our team works with each customer to ensure that you get a machine that fits your specifications, with the right chassis, engine configuration, fuel requirements and options.*

## POWERFUL SUPPORT

*Elgin Sweepers are built for clean, backed for life. Throughout the life of the sweeper, we offer training to your team on proper use and maintenance. We have a world-wide network of experienced dealers with factory trained technicians and a local stock of OEM parts and accessories, to ensure total customer peace of mind.*

## UNMATCHED QUALITY

*The Pelican has roots dating back to 1914 and has been continuously improved in design and production. Elgin sweepers are manufactured in an ISO:9001 certified manufacturing plant. Products are painted prior to assembly and quality tested. Elgin Pelicans are proudly assembled in the U.S.A. using only the finest materials.*



### UNIQUE SINGLE-ENGINE THREE-WHEEL DESIGN

The durable purpose-built chassis features a compact frame to maximize maneuverability and position the load low and between front wheels for stability. The high steering angle and tight turning radius allow sweeping extremely close to obstacles and following curb lines.

### POWERFUL BROOM SYSTEM

Hydraulically-driven free-floating side and main brooms work as a system to sweep material from the curb and street into the debris hopper. Side brooms protrude up to 13 in (330 mm) beyond the tire to capture more curb debris. The large main broom features variable-speed and down-pressure to adapt to changing conditions and follow road contours.

### NO-JAM CONVEYOR

No-Jam Conveyor: The Pelican's standard No-Jam chevron belt conveyor features angled molded-in full width cleats that carry more large debris as well as small fines efficiently into the hopper. The chevron belt provides improved hopper loading, better belt tracking, superior debris pick-up, reduced sticking and quieter operation than other belts. Material loads to the front and center first to allow maximum use of the hopper capacity.

### 360° VISIBILITY AND OPERATOR ERGONOMICS

The Pelican's isolation-mounted cab provides a clean, quiet, and comfortable environment for the operator. Filtered fresh air conditioning and heater/defroster come standard. Large windows, see-through doors, and full-width windshield allow for 360° degree visibility.

### EASY MAINTENANCE

Access to service points is simple with most accessible from ground-level. O-ring face seal hydraulic fittings are used and the electrical system features snap-together connections and color-coded wires for quick identification. The unit is equipped with a combination of in-cab and site gauges to monitor fluid levels.

### ECOINFUSED® TECHNOLOGY

Elgin Sweeper has made advancing the use of cleaner, safer, and more efficient technologies for sweeping roads and streets a priority, with innovations that provide the powerful performance, fuel economy and overall value our municipal and contractor customers demand. Today's environmentally efficient Pelican is designed with exclusive EcoInfused Technology, representing years of unmatched innovation and success combining the science of horsepower management with the ability to do more with less.



## DURABLE, RELIABLE, AND EASY TO USE



### DURABLE, PURPOSE-BUILT CHASSIS

The Pelican's heavy-duty construction and compact frame ensures a tight turning radius and years of reliable, low-maintenance operation. A balanced design provides stable sweeping and dumping. The hopper load is positioned low between the two front wheels for stability and safety. The axle support and hopper lift system are integral parts of the chassis.

### OUTSTANDING MANEUVERABILITY

The Pelican's high steering angle and tight turning radius allows for quick turns, sweeping extremely close to obstacles and following curbs without climbing or scuffing tires. The dual-tire guide wheel increases stability and steering traction.

### EFFICIENT, COMFORTABLE CAB

The clean, quiet and spacious isolation-mounted cab features large windows, wide see-through doors and a full-width windshield for 360° visibility. The center console is easily accessed from both left and right driving positions. Fingertip controls include illuminated and graphically identified gauges and rocker switches.

### REAR SUSPENSION

Swing-arm suspension with twin parallel heavy-duty shock absorbing spring coils and an integrated single coil rubber spring assist provide effective suspension dampening through the entire range of travel. The design enhances ride quality and comfort in the cab while reducing stress on the sweeper frame – especially when operating in pothole conditions or on rough, uneven roads.

### SINGLE ENGINE POWERED

The Pelican is powered by the John Deere 4045T 4.5L, 4-cylinder turbocharged diesel engine. The engine is capable of operating on bio-diesel up to B20.

### LOW-MAINTENANCE DRIVE SYSTEM

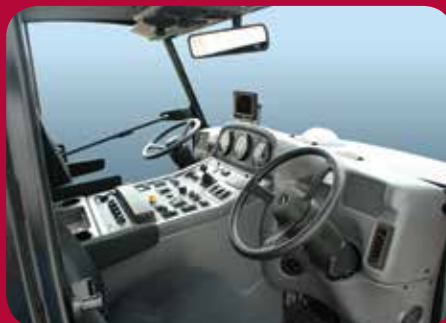
With a unique wheel motor design for outstanding power and minimal maintenance, steep grades are no problem. Integrated sensors precisely measure road speed and adjust power requirements according to the load.

### HEAVY-DUTY BRAKE SYSTEM

The Pelican features twin-caliper (ea), power disc brakes and a dynamic braking design that significantly reduces wear on service brakes. All brake components are easy to access and economical to maintain.

### HYDRAULIC SWEEP SYSTEM

Controlled by engine RPM and operated independently of direction and ground speed, the Pelican's broom speed provides digging power at slow or zero ground speeds. A foot pedal controls speed and sweeper direction through the hydrostatic transmission.



# SUPERIOR MECHANICAL SWEEPER DESIGN



## MAIN BROOM

The 35 in x 66 in (889 mm x 1676 mm) hydraulically driven polypropylene main broom features variable speed (variable with engine RPM) for optimal sweeping in changing conditions. To protect the broom mechanism, the broom raises automatically when the sweeper is reversed and is returned to its sweep position and previously set down pressure when a forward direction is resumed.

## SIDE BROOM

Hydraulically driven side brooms are rugged construction, 36 in (914 mm) in diameter and protrude up to 13 in (330 mm) beyond the outside of the tire while sweeping to capture more gutter debris.

## NO-JAM DEBRIS CONVEYOR

The standard conveyor system features a chevron belt with angled molded-in full width cleats that moves material to the center of the belt for less spill over, and throws it to the center of the hopper for improved hopper fill without jamming. New poly/nylon high-strength belt material on the conveyor delivers long wear for maximum uptime. An optional built-in washdown provides quick and easy clean-up.

## VARIABLE HEIGHT FRONT DUMP HOPPER

The Pelican's front dump hopper is ideal for single-lane dumping, which ensures minimal traffic interruption. The hopper can be dumped from ground level up to 9 ft 6 in (2895 mm) high. The load can be easily observed from the cab by lifting and rolling the hopper. The hopper's 3.5 cu yd (2.7 cu m), 9,000 lb (4082 kg) capacity provides maximum sweep time. For easy inspection, the hopper rolls out and rests on the ground.



## CORROSION-RESISTANT WATER SYSTEM

A corrosion-resistant polyethylene water tank supplies the dust suppression system with 220 gallons (833 L) of water. The exclusive Elgin water pump can run dry without damaging the machine's water system. For convenience and ease of maintenance, a water-level gauge is visible from the cab.

## EASE OF MAINTENANCE

Easy servicing lowers ownership costs and increases sweeper usage. O-ring face seal hydraulic fittings assure leak-free connections, while the electrical system's weatherproof snap-together connectors and stamped color-coded wires allow quick identification. To ensure easy monitoring of fluid levels, the hydraulic tank directly behind the cab features a sight glass inspection tube.

## MEMORY SWEEP®

Elgin's exclusive Memory Sweep feature allows the operator to resume all previous sweeper settings, even broom tilt if so equipped, with one touch control. This feature enhances operator productivity and reduces operator fatigue. Memory Sweep incorporates a multi-screen display that indicates engine hours and water tank level as well as system diagnostics. This screen also displays optional features such as broom tilt angle and broom hours.

**MEMORY  
SWEEP**



## WATERLESS PELICAN



The Pelican with optional dry dust control maintains all the popular features and sweeping performance that have made the Pelican the best selling three-wheel sweeper—without the use of water for dust suppression. This means increased pick-up of fine particles over traditional, wet dust control sweepers, proven reliable year-round sweeping and significant water conservation.

### DRY DUST CONTROL SYSTEM

The Pelican with dry dust control features a patented system that includes a dust skirting system, dust separator in the hopper, and a dust control fan with a maintenance-free filter, working together to control fugitive dust without the use of spray water. The Pelican's waterless dust control system means operators sweep more and spend less time filling tanks enhancing productivity. Without water, mud doesn't build up on components, reducing clean-up time at the end of the shift. Since there is no water, sweeping in freezing weather conditions is possible which helps meet the growing demand for quick pick-up of winter-time road sand, salt, and cinders. Perhaps the most important benefits are those for the environment including a smaller water footprint, as well as reduced road silt that can be left as a film from waterbased dust control sweepers.



### PATENTED FILTRATION SYSTEM

The powerful vacuum system on the sweeper creates an air stream through the debris hopper, conveyor, and skirted areas. The inward rushing air carries the airborne dust into the debris hopper where it's allowed to settle out with the rest of the swept debris. A majority of the fugitive dust falls into the hopper with only a fraction of the dust making it to the filter. When the filter becomes loaded, it can be mechanically cleaned with an on-board cleaning system so sweeping can continue. A long life, low maintenance, dry filter element is installed between the debris hopper and the fan.

\*Industrial Pelican Option Available - consult factory for details.

## OPTIONAL ENHANCEMENTS



### LIGHTING PACKAGES

A variety of lighting packages are available for the Pelican to enhance safety and visibility.



### LIFELINER® HOPPER SYSTEM

The LifeLiner system is a specially designed hopper liner and finish system that greatly improves the life, durability, and functionality of a sweeper hopper.



### LIMB GUARD

Heavy-duty guards surround cab and protect sweeper by guiding low-hanging tree limbs up and over the Pelican. Available in right hand, left hand, or dual configuration.

## ADDITIONAL OPTIONS

- Auto-Lube automatic lubrication system
- Conveyor, lower roller washout
- Various dirt shoe offerings
- Air suspension seat(s)
- Cold weather start aid
- Heated/remote mirrors
- Engine pre-cleaner
- In-cab side broom tilt
- Lower roller deflector

## SPECIFICATIONS:

### SWEEPING PATH

- One side broom 8 ft (2438 mm)
- Two side brooms 10 ft (3048 mm)

### HOPPER CAPACITY

Volumetric Capacity: 3.5 cu yds (2.7 cu m)

### HOPPER DUMPING

Maximum dump height: 9 ft 6 in (2895 mm)

### TRAVEL SPEED

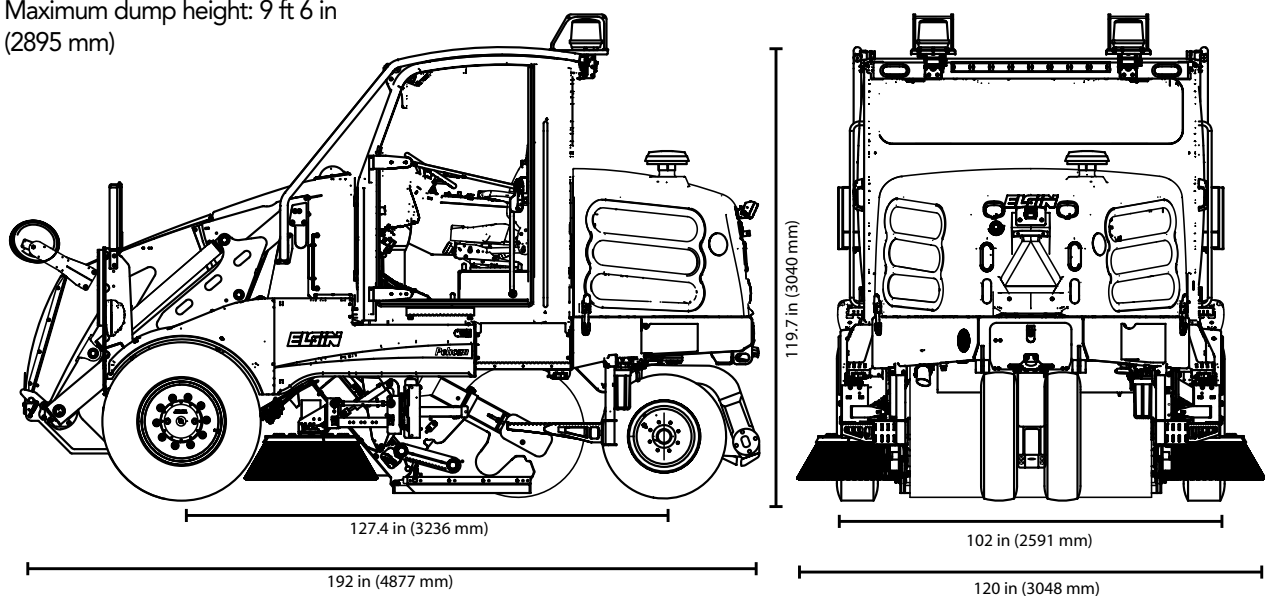
20 mph (32 Km/h)

### WATER SPRAY SYSTEM

Tank capacity: 220 gal. (833 L)

### ENGINE (make and type)

John Deere 4045T  
Horsepower 74 hp (55 kW) @ 2,400 RPM  
Tier 4F low emission diesel  
\*Tier 3 model dependant





## ELGIN SWEEPER IS YOUR PARTNER...

### IN THE PLANNING

Instead of one-size-fits-all solutions, we'll work with you to select the sweeping technology that fits your specific needs.



### IN THE STREETS

We're here to help you maintain your Elgin and train your operators to ensure the job is done right.



### INTO THE FUTURE

Our dealers don't just sell you an Elgin; they're available to answer your questions and provide service for the life of the machine.



## WARRANTY

Elgin Sweeper Company backs the Pelican sweeper with a one-year limited warranty. The Pelican is warranted against defects in material or workmanship for a period of 12 months from the date of delivery to the original purchaser. Optional extended warranty packages are available. Consult your Elgin dealer for complete warranty information. The ESCO/FSM warranty shall not apply to major components or trade accessories such as, but not limited to, trucks, engines, hydraulic pumps and motors, tires, and batteries that have a separate warranty by the original manufacturer.

Your Local Elgin Dealer Is:



[elginsweeper.com](http://elginsweeper.com)

1300 W. Bartlett Road • Elgin, IL 60120 U.S.A.

(847) 741-5370 Phone • (847) 742-3035 Fax

Specifications subject to change without notice.  
Some photos shown with optional equipment.  
Elgin® Pelican® Memory Sweep® and LifeLiner® are registered trademarks of Elgin Sweeper Company.  
Covered under US Patent #7,281, 296 B2 & 6,584,157 B2, and Canadian Patent #CA2475362  
Effective 3/18 P/N 0705031-H  
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RESOLUTION 2018-380

WHEREAS, Sourcewell, formerly known as the National Joint Powers Alliance, cooperative purchasing group was utilized to secure competitive bids for a New Street Sweeper by the Streets Division of the Public Works Department; and

WHEREAS, Sourcewell Contract No. 122017-FSC was awarded to Federal Signal Corporation and authorized Nebraska Environmental Products to offer said contract pricing to the City of Grand Island, Nebraska; and

WHEREAS, the Public Works Department has recommended the purchase of a 2019 Elgin Pelican Street Sweeper from Nebraska Environmental Products of Lincoln, NE for a purchase price of \$220,862.35; and

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that a purchase order and subsequent payment for the 2019 Elgin Pelican Street Sweeper from Nebraska Environmental Products of Lincoln, NE is hereby approved.

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Adopted by the City Council of the City of Grand Island, Nebraska, December 18, 2018.

\_\_\_\_\_  
Roger G. Steele, Mayor

Attest:

\_\_\_\_\_  
RaNae Edwards, City Clerk

Approved as to Form	▣ _____
December 14, 2018	▣ City Attorney