

VILLAGE OF DOWNERS GROVE
REPORT FOR THE VILLAGE COUNCIL MEETING
APRIL 19, 2011 AGENDA

SUBJECT:	TYPE:	SUBMITTED BY:
Purchase of a New Fire Department Ladder Truck	✓ Resolution Ordinance Motion Discussion Only	Jim Jackson Fire Chief

SYNOPSIS

Resolutions have been prepared for the following items:

- Authorize the purchase of a 2011 Smeal 100' Rear Mount Platform Ladder Truck in an amount not to exceed \$804,990.00 from Smeal Fire Apparatus Corporation of Snyder, Nebraska
- Authorize the Village Manager to dispose of the Village's current Pierce 100' Platform Ladder Truck as surplus equipment.

STRATEGIC PLAN ALIGNMENT

The goals for 2011 to 2018 include *Exceptional Municipal Services*.

FISCAL IMPACT

The vehicle will be purchased from the Vehicle Replacement Fund, which had a cash balance of \$2.2 million at the end of FY10. The vehicle was scheduled for replacement in 2012; however, the current cash balance, along with the 2011 pre-funding payments made to the Equipment Replacement Fund will be enough to purchase a new ladder truck in 2011 without negatively affecting the fund in 2011 and beyond. A budget amendment for the amount of the purchase will be presented to the Council at a later date as this purchase will result in actual expenses exceeding the budgeted expenses in the Equipment Replacement Fund.

BACKGROUND

The Village has owned and operated a ladder truck since 1959. The Village's current ladder truck, a 1998 Pierce 100' Platform Ladder Truck with approximately 98,000 miles, is currently out of service due to significant structural damage. The ladder truck responds to all calls for fires, rescues and hazardous material incidents throughout the Village. In addition, the ladder truck responds to calls for emergency medical services within the Fire Station #2 response area. In 2010, the ladder truck responded to 670 calls for service. The Village's ladder truck, which has a 100-foot extending ladder and basket, carries rescue and ventilation tools as well as ground ladders and is equipped with hoses.

At the March 7, 2011 Public Safety Committee meeting, staff presented a recommendation to replace the Village's existing ladder truck, which has been out of service since mid-January due to structural damage and significant corrosion to the vehicle frame. The staff presentation to the Public Safety Committee can be found at <http://www.downers.us/top-stories/2011/03/21/village-considers-repairreplacement-of-ladder-truck>. The written report to the Public Safety Committee is attached. Staff recommended purchasing a new manufacturer-specified Ladder Truck, which will be available for delivery to the Village within three to six months, and trading in the current ladder truck toward to the purchase of the new vehicle. The Public Safety Committee approved a motion concurring with the staff recommendation to purchase the manufacturer-specified truck with an option to repair the current truck to use as a reserve vehicle.

At the Public Safety Committee meeting, the Council asked staff to explore repairing the existing ladder truck and keep it in reserve status. While a portion of the repairs necessary to safely operate the truck (repairs to the cracks in the torque box, which supports the aerial ladder) are covered by warranty, the cost to repair the corrosion on the frame of the vehicle would be borne by the Village. At the time of the Public Safety Committee meeting, staff estimated the cost of repairing the existing ladder truck to be \$80,000. A full inspection of the structure of the vehicle at the Pierce plant revealed more significant corrosion on the vehicle's frame than originally thought; therefore, staff does not believe that the vehicle can be repaired to an acceptable condition. Staff recommends declaring the vehicle as surplus available for trade-in or sale.

Subsequent to the Public Safety Committee meeting, the Village issued an RFP for the purchase of a manufacturer specified ladder truck. The Village received two proposals that met the requirements of the RFP.

A committee consisting of staff from the Fire Department, Fleet and Finance reviewed each of the proposals. Based on technical specifications, staff recommends purchasing the manufacturer-specified truck from Smeal Fire Apparatus Co, of Snyder, Nebraska. Staff anticipates delivery in late August to early September. The final pricing for each vendor's vehicle is below.

	Smeal	Pierce
Vehicle Price	\$804,990	\$902,640
Trade-in Value	No trade-in option	\$120,000
NET PRICE	\$804,990	\$782,640

Staff's recommendation to purchase the Smeal vehicle is based on the following:

- The vehicle meets all Village specifications.
- The warranty offered by Smeal is preferable to the warranty offered by Pierce.
- The price of the Smeal is less than the price of the Pierce.
- Disposal of the existing ladder truck is expected to cover the \$22,350 price difference between Smeal and Pierce.
- Staff is not satisfied with the customer service provided by Pierce.

ATTACHMENTS

Staff Report to the Public Safety Committee
Resolutions
Smeal Ladder Truck Letter

RESOLUTION NO. ____

**A RESOLUTION AUTHORIZING EXECUTION OF A SALES CONTRACT
BETWEEN THE VILLAGE OF DOWNERS GROVE
AND SMEAL FIRE APPARATUS CO.**

BE IT RESOLVED by the Village Council of the Village of Downers Grove, DuPage County, Illinois, as follows:

1. That the form and substance of a certain Sales Contract (the “Contract”), between the Village of Downers Grove (the “Buyer”) and Smeal Fire Apparatus Co. (the “Seller”), for a 2011 Smeal 100' Rear Mount Platform Ladder Truck, as set forth in the form of the Contract submitted to this meeting with the recommendation of the Village Manager, is hereby approved.

2. That the Village Manager and Village Clerk are hereby respectively authorized and directed for and on behalf of the Village to execute, attest, seal and deliver the Contract, substantially in the form approved in the foregoing paragraph of this Resolution, together with such changes as the Manager shall deem necessary.

3. That the proper officials, agents and employees of the Village are hereby authorized and directed to take such further action as they may deem necessary or appropriate to perform all obligations and commitments of the Village in accordance with the provisions of the Contract.

4. That all resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.

5. That this Resolution shall be in full force and effect from and after its passage as provided by law.

Mayor

Passed:

Attest: _____
Village Clerk



610 WEST 4TH ST. - P.O. BOX 8
SNYDER, NEBRASKA 68664

smeal.com
(402) 568-2224

WE BUILD RESPECT.

SALES CONTRACT

(Standard)

This Sales Contract is made and entered into by and between Smeal Fire Apparatus Co. of Snyder, Nebraska, Seller and

Village of Downers Grove, 801 Burlington Ave.

Downers Grove, IL 60515

Buyer.

PRODUCT DESCRIPTION:

100' Rear Mount Platform Stock unit #3931

(Enter a brief product description and quantity of the items purchased on this contract)

PURCHASE. Buyer does hereby agree to purchase and accept delivery of the apparatus described in the Smeal Fire Apparatus Co. Proposal attached hereto, which is made a part hereof by this reference, upon the following terms and conditions:

1. **ACCEPTANCE.** This Sales Contract shall become a contract and a binding obligation only when accepted by the Seller as provided in paragraph 9 hereof.

2. **COMPLETION.** The Smeal Fire Apparatus Co. supplied apparatus and equipment, excluding dealership supplied equipment, covered by this contract will be completed in Snyder, Nebraska by no later than July 31, 2011, or as soon thereafter as is consistent with good workmanship and subject to any and all delays resulting from causes beyond the control of Seller, and contingencies set out in paragraph 11 hereof. It is understood by both the Seller and the Buyer that *Change Orders* executed after contract acceptance will delay delivery.

3. **SPECIFICATIONS.** The attached Smeal Fire Apparatus Co. Proposal dated March 23, 2011 and amended by letter dated April 14, 2011 attached here to and incorporated herein by reference as Exhibit 1-A3, shall control the construction of the apparatus and be binding upon both Buyer and Seller, notwithstanding any other specifications or proposals whether written or oral heretofore supplied, considered or discussed. If there is any conflict between Buyer's specifications and the attached Proposal, the attached Proposal and specifications will control and prevail.

4. **WARRANTY.** The attached warranty or warranties shall apply to this agreement:

As attached in Proposal package

_____. (Copies may be attached.)

5. **PERFORMANCE BOND.** The following bonding provisions are applicable:

 X Performance Bond NOT required.

 Performance Bond Required - Performance Bond (Surety Bond) will cover standard one year warranty period only and will not cover extended warranties offered by seller or other component manufacturer.

EXCEPT AS SPECIFICALLY PROVIDED ABOVE, SELLER DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ALL WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND WARRANTIES THAT ARISE BY OPERATION OF LAW, COURSE OF TRADE, COURSE OF PERFORMANCE, OR USAGE OF TRADE.

6. LIMITATION OF REMEDIES. In no event shall Seller be liable for special, incidental, or consequential damages nor for any damages which exceed the purchase price of the apparatus.

7. PRICE. Buyer agrees to pay for the apparatus described herein the total sum of:

Eight Hundred Four Thousand Nine Hundred Ninety Dollars and no cents.
(Enter written dollar amount)

Dollars (\$ 804,990).

State and local sales taxes, if any, are not included in the purchase price. It is understood by both the buyer and the seller that *Change Orders* executed after contract acceptance may increase or decrease the price. The purchase price herein is based upon all applicable state and federal manufacturing law, regulations, orders, mandates and standards in effect as of the date of this Agreement (hereinafter "Standards") such as, for example, the Standards mandated by the National Fire Protection Association, tentative interim amendments to the National Fire Protection Association Standard, Underwriters Laboratories of Canada, and the Environmental Protection Agency. The purchase price shall be subject to increase due to any state or federal Standards that are adopted, issued or mandated following the date of this Agreement that require the apparatus(es) described above to be manufactured and/or delivered in compliance with such Standard(s)

8. PAYMENT. The purchase price shall be paid in the following manner:

Payment to be made after Final Inspection upon delivery to the Village of Downers Grove.

All checks must be made payable to Smeal Fire Apparatus Co. only and delivered to Seller at its offices in Snyder, Nebraska. Under no circumstances shall payment be made to a dealer or any one else as Seller's agent. Smeal Fire Apparatus Co. is the only authorized payee. Any representation that payment is to be made to any other party is absolutely unauthorized.

9. SELLER'S REPRESENTATIONS. All representations made and/or actions taken by a dealer or agent either before or after execution of this Sales Contract are not binding on the Seller. This Sales Contract in order to be effective and binding upon Seller must be signed and accepted by an authorized officer of Seller. The effective date of this Sales Contract will be the date it is signed and accepted by the Seller.

10. BUYER'S REPRESENTATIONS. Buyer is The Village of Downers Grove,
(Fire Department, Fire District, Municipality, Borough, Etc.)

and has the power and authority to enter into this Sales Contract and perform its obligations hereunder; this Agreement has been duly authorized, executed and delivered by Buyer and is the valid, enforceable and binding obligation of Buyer; and Buyer represents that there are no warranties, agreements or understandings, written or oral, which in any manner alter, abridge or conflict with the terms of this Sales Contract. Buyer represents that the individuals listed below have authority to sign all documents including but not limited to, all change orders on behalf of Buyer.

Downers Grove Village Council

801 Burlington Avenue

Downers Grove, IL 60515

11. DELAY ON PERFORMANCE. Seller's Performance under this Sales Contract is subject to delays resulting from strike, insurrection, war, accidents, fires, floods, commandeering of plant or other demands of governmental authority, delays in transportation, or materials, delays in receipt of information when clarifications are requested, and all other causes beyond the control of Seller.

12. TESTING. In the event Buyer wishes to test the apparatus, such test shall be made within ten (10) days after arrival of the apparatus at its destination. A written report of any and all tests shall be promptly forwarded to Seller. If Buyer fails to test within this time limit and/or fails to forward test results to Seller, the apparatus shall be considered as fully complying with contract specifications as described in paragraph 3.

13. TITLE. All apparatus shall remain the property of Seller until the purchase price is paid in full. In the event of default in payment, Seller may take full possession of all apparatus sold hereunder and any payments that have been made shall be forfeited and/or considered as rental for the use of the apparatus up to date of taking possession.

14. MISCELLANEOUS. The following miscellaneous provisions shall apply to this Sales Contract:

14.1 Entire Agreement. This Sales Contract, and the specifications and warranty attached hereto sets forth the entire agreement between the parties and there are no promises, agreements, conditions or understandings, either oral or written between them that are other than as herein set forth. Except as herein otherwise provided, no subject alteration, amendment, change or addition to this Sales Contract shall be binding upon either Seller or Buyer unless reduced to writing and signed by them.

14.2 Severability. If any term, covenant or condition of this Sales Contract, or any application thereof to any person or circumstance, shall, to any extent, be invalid or unenforceable, the remainder of this Sales Contract or application of such term, covenant or condition to persons or circumstances other than those as to which it is held as invalid or unenforceable, shall not be affected thereby and each term, covenant or condition of this Sales Contract shall be valid and enforceable to the fullest extent permitted by law.

14.4 Binding Effect. This Sales Contract shall be binding upon and inure to the benefit of the parties and their respective successors and assigns. Except with the written consent of the other party hereto, no person shall take any action which will allow any right hereunder to be assigned or held by any other person.

IN WITNESS WHEREOF, this Sales Contract has been duly executed by the parties hereto on the date set forth opposite their name.

To be completed by the Authorized Smeal Distributor

By: _____ Date: ____/____/____

Smeal Fire Apparatus Co.
Dealer Representative

Mailing Address of Customer: _____ 801 Burlington Avenue

_____ Downers Grove, IL 60515

Printed Name of Fire Chief or Primary Contact:

_____ Rich Mikel _____ Title: _____ Deputy Chief

Business Telephone Number: (____ 630 ____) ____ 434 ____ - ____ 5989

To be completed by the Purchasing Entity

Printed Name: _____ Title: _____

Signature: _____ Date: ____/____/____

Printed Name: _____ Title: _____

Signature: _____ Date: ____/____/____

Printed Name: _____ Title: _____

Signature: _____ Date: ____/____/____

Printed Name: _____ Title: _____

Signature: _____ Date: ____/____/____

Attests: _____ *Date:* ____/____/____

To be completed by Smeal Fire Apparatus Co.

By: _____ Date of Acceptance: ____/____/____

Smeal Fire Apparatus Co.
Delwin Smeal, President

Attests: _____ *Date:* ____/____/____

VILLAGE OF DOWNERS GROVE
REPORT FOR THE PUBLIC SAFETY COMMITTEE
MARCH 7, 2011

SUBJECT:	SUBMITTED BY:
Ladder Truck Replacement	David Fieldman Village Manager

SYNOPSIS

The Village's Ladder Truck is currently out of service due to significant structural damage. This report:

- o Provides an overview of the Village's level of service and response strategy
- o Explains How the Ladder Truck is used to achieve the desired level of service
- o Outlines the current condition of the ladder truck
- o Presents options for the repair and replacement of the ladder truck to continue to provide the desired service level
- o Identifies the funds that are currently available for the repair or replacement of the ladder truck
- o Includes a staff recommend for the replacement of the ladder truck
- o Discusses an additional option that the Village could consider if there is a desire for a change in service level

STRATEGIC PLAN ALIGNMENT

The Strategic Goals for 2011 – 2018 identified *Exceptional Municipal Services*.

BACKGROUND

Level of Service and Response Strategy

The Village's current level of service includes a response time of 4 to 6 minutes. For responses to fires, the level of service also includes performing three key activities - ventilation, search and rescue and suppression - immediately upon arriving at the scene. The Village has developed an emergency response strategy designed to perform these key actions as soon as possible using the appropriate apparatus. This response strategy designed to achieve the desired level of service can be expressed as providing the right tool at the right time. The ladder truck is used to perform all three key activities and is housed at Fire Station #2 in the center portion of the Village to achieve the most rapid response to all areas of the Village.

Three key actions are performed immediately and simultaneously when staff arrives at the scene of fire. Each is defined briefly below.

- o Ventilation: The process of process of opening holes in the roof and windows of the building to allow heat and smoke to escape in specified locations
- o Search and Rescue: The process of looking for and removing victims from the building through forcible entry and room-to-room search
- o Suppression: Extinguishing the fire using the water supply from hydrants

These services must and will be performed at each fire response in an effort to save lives, reduce damage to property and to minimize risk to Fire Department staff.

The Village's level of service and fire response strategy as described above is meant to ensure that the Fire Department will have the *right tools at the right time* to mitigate the risk to life and property in the event of a fire by having the right equipment available at any time.

Use of the Ladder Truck as the Right Tool at the Right Time

The key actions are performed by staff members using apparatus to perform the actions in a safe and efficient manner. Each piece of apparatus acts as a tool used by staff to perform one or more of the specific functions. The ladder truck is the most versatile apparatus in the fleet and is used to perform all three of the key actions during a fire response as well as key actions during other emergency calls. The ladder truck responds to all calls for fires, rescues and hazardous material incidents throughout the Village. In addition, the ladder truck responds to calls for emergency medical services within the Fire Station #2 response area. In 2010, the ladder truck responded to 670 calls for service.

A ladder truck is designed to provide access to buildings between one and seven stories tall; therefore, this piece of equipment would be used on any residential structure fire within the Village of Downers Grove. The Village's ladder truck, which has a 100-foot extending ladder and basket, carries rescue and ventilation tools as well as ground ladders and is equipped with hoses. The ladder truck is used to:

- o Access the roof of buildings between 1 and 7 stories. Using the 100 foot extending ladder and basket allows staff to position themselves just above the roof of a building to perform ventilation and suppression activities. Firefighters stand in the basket to perform these activities. This avoids situations where firefighters stand on the roof of buildings which may be structurally compromised due to fire damage.
- o Rescue people from buildings between 1 and 7 stories. Using the 100 foot extending ladder and basket, firefighters remove people from buildings.
- o Access multiple points of buildings above the first floor. Using the compliment of ground ladders, firefighters are able to access various portions of buildings above the first floor.
- o Pump water directly onto rooftops and other portions of buildings between 1 and 7 stories. Using the hose that is mounted at the end of the 100 foot extending ladder, firefighters are able to apply water to the roof and other portions of buildings.

The average ladder truck response time in 2010 was 4 minutes 56 seconds. To achieve the most rapid response to all areas of the Village the ladder truck should be centrally located within the Village. The Village's response strategy calls for the ladder truck to be operated from Fire Station #2 located at the northwest corner of Main Street and 55th Street. Prior to 2008, the ladder truck was operated from Fire Station #1 located at the northeast corner of Wisconsin and Katrine. One of the primary objectives of the reconstruction of Fire Station #2 was to allow for the relocation of the ladder truck to a central location within the Village to reduce the average response time of the ladder truck.

Current Condition of the Ladder Truck

The Village has owned and operated a ladder truck since 1959. The Village's current ladder truck, a 1998 model with approximately 98,000 miles, is currently out of service due to significant structural damage. The ladder truck has been out of service since mid-January, when a routine inspection by staff led to the discovery of two large cracks in the vehicle's torque box, which is the component of the vehicle that

supports and maneuvers the 100-foot aerial ladder. Pierce, the original manufacturer of the truck, also identified significant corrosion on the vehicle frame that poses an immediate hazard to safe operations of the vehicle. The full cost of the repairs to the torque box, which would take four to five months, will be covered by the Pierce warranty; however, the cost of repairs to the corroded vehicle frame will be borne by the village. The initial estimate for the corrosion repairs, contingent on the x-ray of the vehicle frame, is \$80,000. The vehicle is currently at the Pierce facility in Appleton, Wisconsin, for torque box repairs.

The cost of maintaining the ladder truck and the amount of time it has been out of service for repairs and maintenance has increased in recent years. The table below summarizes the annual ladder truck repair costs and out of service time from 2005 through 2010:

Year	Annual Repair Costs	Days Out of Service
2005	\$26,227.13	7
2006	\$38,649.93	24
2007	\$53,617.36	24
2008	\$37,235.08	28
2009	\$14,105.46	41
2010	\$52,967.81	68
Total	\$222,802.77	192

Options for Repair or Replacement

Staff has identified the following four options for the repair or replacement of the ladder truck that are consistent with Village's current level of service and response strategy. Additional options may be considered if the Village Council would like to explore changes in service level and response strategy.

Option #1: Repair the ladder truck and return it to service

This option consists of making warranty repairs at no cost to the Village and also repairing the corrosion on the vehicle at an estimated cost of \$80,000. Given recent maintenance needs that have kept the truck regularly out of service, staff anticipates that this is a short-term solution to delay the eventual replacement of the truck. This vehicle also has outdated technology that would not be addressed with this option.

Option #2: Refurbish the ladder truck and return it to service

This option consists of refurbishing the vehicle completely at a cost of \$350,000 to \$500,000. Refurbishing would result in cosmetic updates and some upgrades to existing systems. Refurbishment does not replace the vehicle's engine, transmission or axles, which would have a higher likelihood of failure as the vehicle ages. This option is costly when compared to the remaining life expectancy of the vehicle, which would be limited by the truck's age and mileage.

Option #3: Purchase a new custom specification ladder truck

This option consists of the Village purchasing a new ladder truck that is custom manufactured to meet Village specifications. The cost of a custom specification ladder truck is approximately \$950,000 to \$1,000,000. It would take approximately 12 months to design and manufacture a ladder truck pursuant to this option. Based on discussions with ladder truck manufacturers, the Village's ladder truck has a trade-in value of approximately \$100,000, which could be used toward the purchase of a new vehicle. The net cost of this option is approximately \$850,000 to \$900,000.

Option #4: Purchase a new manufacturer's specification ladder truck

This option consists of the Village purchasing a new ladder truck that is already being manufactured according to specifications determined by the manufacturer. Manufacturers produce vehicles with expert

specifications that can be prepared for delivery in three to six months. The cost of manufacturer specified ladder truck is approximately \$875,000. Based on discussions with ladder truck manufacturers, the Village's ladder truck has a trade-in value of approximately \$100,000, which could be used toward the purchase of a new vehicle. The net cost of this option is approximately \$775,000.

Funds Available

The Village maintains an Equipment Replacement Fund which is designed to maintain a cash balance necessary to make all vehicle and computer related purchases in timely manner without adverse impacts on the Village's annual operating budgets. The operating departments make annual contributions to the Equipment Replacement Fund in amounts that allow for the replacement of specific equipment at the end of their useful life.

There is approximately \$2.2 million in cash in the Equipment Replacement Fund as of December 31, 2010. The ending cash balance in the Fund, assuming a purchase price of \$850,000 for the ladder truck, would be approximately \$1.1 million at 12/31/11. While the plan was to purchase a ladder truck in 2012, the current cash balance, along with the 2011 pre-funding payments made to the Equipment Replacement Fund will be enough to purchase a new ladder truck in 2011 without negatively affecting the fund in 2011 and beyond. However, a budget amendment will be required in 2011 as the total expenses will exceed the budgeted expenses in the Equipment Replacement Fund.

Recommendation

Staff recommends Option #4: Purchase a new manufacturer's specification ladder truck. The Village could purchase the ladder truck using money available from the Equipment Replacement Fund and would be able to place a new ladder truck in service within six months.

Change in Level of Service Option – Mutual Aid

The Village partners with nearby Fire Departments using mutual aid agreements. Through mutual aid agreements ladder trucks from Lisle-Woodridge, Lombard, Darien-Woodridge and Westmont respond to calls in Downers Grove when requested by the Village. Staff has investigated the possibility of operating permanently without a ladder truck and relying on ladder truck responses from other Fire Departments. Relying on the use of other Fire Departments' ladder trucks through mutual aid agreements would have a significant negative impact on the level of service. There would be an increase in response times from an average of less than five minutes to a response of up to 12-15 minutes. This option can be considered further if the Village Council would like to explore changes in the Village's level of service.