



City of Rochester Hills  
AGENDA SUMMARY  
FINANCIAL ITEMS

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Legislative File No: 2021-0226

**TO:** Mayor and City Council Members  
**FROM:** Sean Canto, Fire Chief Emergency Services  
**DATE:** June 21, 2021  
**SUBJECT:** Protective Ensemble for Structural Firefighting

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**REQUEST:**

City Council is requested to authorize a blanket purchase order for the purchase of Protective Ensemble for Structural Firefighting to include the purchase of the Turnout Coat, Pant and Structural Firefighting Boots to Apollo Fire Equipment Company, Romeo, Michigan in the amount not-to-exceed \$525,000.00 and the purchase of Structural Firefighting Protective Gloves to Phoenix Safety Company, Springfield, Ohio in the amount not-to-exceed \$10,000.00 for a total not-to-exceed purchase amount of \$535,00.00 for a one-year period.

**REASON FOR PURCHASE:**

NFPA 1851: Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting states that gear is to be retired 10 years after the date of manufacture. The City's gear is at its 10 year date and in need of replacement as most of the gear has reached a point of where it is no longer repairable. In preparation for replacement of the gear, the City's Fire Department worked in coordination with the Purchasing Division for over nine (9) months to prepare a Request for Proposal that would provide the most thorough process to evaluate and select a Protective Ensemble for Structural Firefighting that provides the best value to the City.

The Purchasing Division issued a Request for Proposals (RFP) in October for Protective Ensemble for Structural Firefighting utilizing the MITN system and received three (3) proposal responses. A committee representing a diverse set of demographics, interests and physical characteristics was formed to be part of the evaluation process with the intent of ensuring that the department as a whole would be best represented based on the diversity of the group.

The Proposal evaluation process consisted of three (3) phases: Technical Evaluation, Wear Test Evaluation, and Cost. During the technical evaluation, proposal responses were reviewed in accordance with the criteria the City outlined in the RFP pertaining to providing information relative to delivery terms, references, adherence to specifications, gear specifications, innovations related to the gear, and compliance with required certifications. It was determined that two (2) of the proposers could provide the requested items and met the City's requirements, while the 3<sup>rd</sup> response was not able to provide the turnout gear and was removed from further consideration.

The City shortlisted the remaining two proposers and subsequently requested interviews/presentations to explain the benefits of the gear they were proposing. At the conclusion of the interviews/presentations the committee determined that both proposers met the criteria and the City requested that each proposer participate in the wear test evaluation phase. Each vendor as part of the process was required to provide to the City, at no cost, a set of gear for each evaluator to wear during the test period. Each evaluator was

measured by the proposer to ensure the gear provided to the individual fit them appropriately, and was suitable to be used in the course of their daily job duties during the wear test period.

The RFP outlined the process that would be utilized to evaluate the gear during the wear test, including the activities to be performed and criteria the gear would be evaluated on. The wear test evaluation period took several months to complete and included scoring criteria for daily shift wear (conducted throughout 3 full shift cycles), one full day of designated fire exercises performed in live and non-live fire scenarios, and overall wearer acceptability/rating of the gear's performance during the evaluation period. Each evaluator was required to complete forms at the conclusion of each of these activities that provided scoring based on specified categories as to the gear's performance during use.

The City's purchasing division gathered forms as they were submitted, and tabulated all information gathered. At the conclusion of the wear test period, the committee met to discuss performance of each set of gear during the wear tests and it was decided that both sets of gear performed well and that each proposer should move into the final phase and cost proposals should be requested.

Cost proposals were submitted directly to purchasing. Evaluators were not, and have not been provided pricing. This was done to allow evaluators to strictly evaluate the gear based on its performance, versus that of allowing costs to influence any decisions related to performance of the gear. The Purchasing Division utilized a mathematical formula to assign each vendor the points earned related to costs. Each vendor was assigned costs relative to their cost proposal. As you will see on the sheet provided, the lowest cost proposal price received all points available in the cost category for providing the lowest overall cost, while the higher cost received less points.

At the conclusion of the evaluation process, and as you will see from the overall scoring summary that has been provided with the agenda request, the proposers ended up tied in overall score. The evaluation committee met to discuss the results, as well as the pros and cons of both sets of gear. The gear proposed by Apollo Fire Equipment Company and manufactured by MSA Fire/Globe is what they identify as their Athletix line of gear. The Athletix line of gear has been designed to protect, but also reduce heat stress that a firefighter encounters when performing their job duties. The Bureau of Labor Statistics (BLS) surveyed a sample of U.S. employers in their Survey of Occupational Injuries and Illnesses (SOII), SOII reported over half (52 %) of injuries and illnesses resulting in lost workdays occurred due to overexertion and body 'reaction.' With MSA's Globe ATHLETIX Turnout Gear, firefighters can be protected from heat and other dangers, while working in less bulky, body-contoured gear. When combined with the Globe Guard™ System, it helps reduce exposure to airborne particulates that can include toxic substances—without significant added heat stress.

Some ways in which Globe has redesigned their gear to allow for less stress to a firefighters includes:

- Less bulky fit accomplished by streamlining the jacket design to reduce bulk and stiffness, softer material, more adjustable collar interfaces which hood and helmet which reduces head restriction, elasticized side panels on jacket to allow for more flexibility, elasticized sides on pants and adjustable belt closure to provide more flexible athletic fit at the waist and allow for ease of motion.
- More range of motion accomplished by utilizing a stretch fabric to gain a closer, less bulky fit that provides easier range of motion and more flexibility in areas where bending occurs most, banded inseams to reduce bunching and binding, articulated elbows for a more contoured fit and articulated knees with cathedral knee patches and pads built in for unrestricted and protected crawling.
- Less weight and more breathable, which was the most prevalent benefit of this gear that was noted by evaluators and provides this through providing a thermal liner that is thinner, lighter, more flexible, more breathable, and quicker drying,

The committee deemed that the gear proposed by Apollo fire equipment provided the best value to the City, based on fit, comfort, lighter weight, good protection, and breathability. The Globe gear received the highest score during the wear test as well. It is the recommendation of the evaluation committee to award the

turnout gear and boots to Apollo Fire Equipment Company as the best value purchase based on all the factors identified above. Additionally, the committee recognizes the fire industry is moving forward with a focus and emphasis that manufacturers needs to start focusing on creating gear that still protects from all the normal hazards encountered, but also reduces heat stress in firefighters. It is anticipated that the NFPA will start focusing on this in the next few years making changes to requirements that will put requirements in place to meet this. With the purchase of the Athletix gear the Rochester Hills Fire Department will continue to stay at the forefront of the fire industry, and will be able to stay current with requirements as changes are made.

As part of this purchase, and to complete the ensemble to provide protection to our firefighters, the purchase of gloves is also needed. During the evaluation process, Phoenix Fire Company scored the highest and the gloves they provided the best protection and fit. This is demonstrated in the scoring process as you will note on the attached sheet during the wear test evaluation.

The blanket amounts requested for each vendor allow for additional gear, boots, gloves to be purchased through the year should additional sets be needed for new hires, etc.

**PROCESS:**

**Vendor Name and Address:**

Apollo Fire Equipment Company  
12584 Lakeshore Drive  
Romeo, MI 48065

Phoenix Safety Outfitters  
1619 Commerce Road  
Springfield, OH 45504

**Reason for Selection:**

Best Value

**Method of Purchase:**

Blanket Purchase Order

**BUDGET:**

Funding is included in the 2021 Adopted Budget

Fund Name	Department Account No	Account No. Description	Budget Amount	Cost	Remaining Budget
Fire Capital Fund	402.748000	Operating Equipment	\$720,000	\$535,000	\$185,000

**RECOMMENDATION:**

It is recommended that City Council authorize a blanket purchase order for the purchase of Protective Ensemble for Structural Firefighting to include the purchase of the Turnout Coat, Pant and Structural Firefighting Boots to Apollo Fire Equipment Company, Romeo, Michigan in the amount not-to-exceed \$525,000.00 and the purchase of Structural Firefighting Protective Gloves to Phoenix Safety Company, Springfield, Ohio in the amount not-to-exceed \$10,000.00 for a total not-to-exceed purchase amount of \$535,00.00 for a one-year period.

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APPROVALS:	SIGNATURE	DATE
Department Review		
Department Director		
Budget Content: Chief Financial Officer		
Purchasing Process: Supervisor of Procurement		
Mayor		
Deputy Clerk		

Contract Reviewed by City Attorney       Yes       N/A