

# Agenda Report

TO: City Council DATE: March 12, 2001

THROUGH: Public Safety Committee

FROM: City Manager

SUBJECT: Amendment of the Capital Improvement Budget and Appropriation

of COPS Grant Funds for an Indoor/Outdoor Firing Range

at Eaton Canyon

### **RECOMMENDATION:**

It is recommended that the City Council:

- 1) Amend the Capital Improvement Budget to create a project account for the design and construction of an indoor/outdoor firing range at the current Eaton Canyon range site, and;
- 2) Appropriate the CY 2000 COPS grant funds to this account when received.

#### **EXECUTIVE SUMMARY:**

Although Pasadena has operated a firing range in Eaton Canyon for more the 75 years, recent issues have caused the City to seek alternatives that would provide improved safety, more functional training and less impact on surrounding residential neighborhoods. A recent grant from the COPS program provided the City with \$1.8 million to fund police technology projects, which could include the development of a new training facility. After evaluating several alternatives for bullet containment, fire prevention, noise mitigation and the ability to provide flexible, realistic training, staff concluded that the indoor/outdoor range provided the best alternative.

#### **BACKGROUND:**

The City has operated a shooting range in Eaton Canyon since about 1927. In the late 1940's the Pasadena Junior Rifle Club obtained an easement from the Southern California Edison Company and began shooting small caliber rifles. In the late 1950's the City built a public shooting facility, taking the total number of active ranges to three. The public range closed in the late 1980's.

In 1994, at the City's request, the Army Corps of Engineers designed and built a shooting booth structure and installed moveable targets on the police range. The overall design of

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this complex proved faulty when ricochet bullets struck neighbors homes and excessive sound wave pressure caused injury. As a result, the structure and target system were removed.

Following a fire caused by a bullet in July of 2000, staff began looking at alternatives to the outdoor range. In the meantime, mitigation measures were instituted including brush clearance, fire retardant plantings and upgrades to the irrigation system.

On October 16, 2000 City Council directed staff to complete a Feasibility Study/Business plan to determine if a new range/training facility could be supported through outside revenue sources. To conduct this study the INTERact group, of Newport Beach California, was retained. The INTERact study found that while some outside law enforcement agencies and civilians would utilize a new range, there would be insufficient revenue to offset operational expenses and personnel costs without the addition of a commercial enterprise. Most private ranges in the greater Los Angeles area have a secondary business attached that sells guns, ammunition and other shooting supplies. These business practices are inconsistent with current City philosophy with respect to making Pasadena a violence free city and reducing the availability of guns within the community.

#### **Design Alternatives**

Three different types of shooting facilities were evaluated. They are the indoor range, the baffled range and the indoor/outdoor range. All three would utilize the same total bullet containment and targeting systems, be approximately the same size and provide overhead bullet containment and fire safety.

Each model was evaluated on criteria including bullet containment, fire prevention, noise mitigation and the ability to provide the required flexible, realistic training. The attached matrix compares the three types of range facilities.

Indoor ranges are fully enclosed structures and would meet neighborhood and city goals of bullet containment, fire prevention and noise mitigation. Flexibility, for highly realistic training, is lacking due to potential Cal OSHA and Cal EPA air quality requirements. The need to utilize lead-free ammunition would require police officers to shoot outdoors for duty ammo qualification, shotguns and patrol rifles, for which there is no lead free ammunition. The indoor range is the most expensive of the three range types.

The baffled range resembles a carport and the roof serves as the supporting superstructure for overhead bullet containment baffling and will provide some noise mitigation. A baffled range meets the first two goals of containment and fire prevention as well as the fourth, training flexibility; however, noise remains a significant issue and one that may require substantial sound wall mitigation to the side-berms or property line which would increase the cost. The baffled range is the least expensive alternative.

The indoor/outdoor range, like the baffled range, also has a roof superstructure for overhead bullet containment baffling and noise mitigation. It may have partial or full sidewalls, either from the roofline downward (called sound curtains) or from the ground upward towards the roofline. It also has lighting, ventilation, and other sound mitigation. The indoor/outdoor range meets the stated goals for bullet containment, fire prevention and flexibility. The indoor/outdoor range is a mid-priced facility.

## **Noise Mitigation**

Staff believes that the indoor/outdoor range can be designed to meet the City's noise ordinance. This opinion is based upon the apparent success of the noise mitigation efforts done for the Los Angeles Police Department's (LAPD) new range in Granada Hills. Staff met with the sound engineering firm that was able to bring the Los Angeles Police Department's new range into noise compliance.

The Los Angeles Police Range in Granada Hills is a new indoor/outdoor shooting facility that had been years in planning and design. The original design included some sound mitigation. After the range opened noise complaints were received from residents who lived about 1500 yards westerly and across a flood control basin.

The LAPD hired Troy Sound Wall Systems of Van Nuys California to develop sound mitigation for the range. Troy designed and installed sound mitigation materials at the range and a secondary sound study demonstrated that the shooting range was in full compliance with the Los Angeles Municipal Code.

Troy visited the Eaton Canyon site and is confident that by utilizing new sound reduction technologies the noise of an Indoor/Outdoor facility could be reduced to be within the parameters of the Pasadena Noise Ordinance for Zone 1. Troy emphasized that this was a qualified opinion and a full sound study must be accomplished to identify all of the noise characteristics under a variety of conditions.

#### Costs

The costs associated with the project were divided into design, building, and range equipment. Staff has projected these costs as indicated below.

Design:

\$140,000

The design phase consists of a sound study, site survey, geological study, engineering, architectural plans and permits.

**Building:** 

\$200,000

The building costs were developed using a prefabricated structure that had been engineered for sound mitigation, bullet containment and fire prevention.

Range Equipment: \$450,000

Range equipment estimates were provided by a potential vendor and include many of the items contained in the costs for the design phase, thus reducing overall costs. Range equipment includes a total bullet containment system, overhead and sidewall baffling, a computerized target system, lighting and air quality management system.

The preliminary cost estimate for the indoor/outdoor range is approximately \$869,000 which includes a contingency factor of 10%.

Upon Council approval, staff will identify a sound engineering firm to complete a comprehensive sound study. The sound study will identify the noise levels associated with the range facility and determine any geographic sound corridors. From this data the location(s) for the installation of sound monitoring devices, to ensure noise ordinance compliance once the project is completed, can be determined.

#### **FISCAL IMPACT:**

In December, the City was awarded \$1,875,864 for police technology upgrades through the Community Orientated Policing Services (COPS) grant. Upon receipt, these funds will be appropriated for development of the new firing range. Any grant funds remaining after the completion of the range will be reappropriated to other police technology upgrade projects.

Respectfully submitted,

City Manager

Approved by:

BERNARD K. MELEKIAN
Chief of Police

Prepared by:

Bruce Linsenmayer, Commander