CITY OF ALBANY
CITY COUNCIL AGENDA
STAFF REPORT

Agenda Date: 5/2/05
Reviewed by_____

Subject: Installation of traffic light preemption system for traffic control in front of the Fire Station

Report By: Jeff Keary, Fire Lieutenant

STAFF RECOMMENDATION

Approve Resolution No. 05-08 authorizing the City Administration to negotiate and enter into a contract with Advanced Technical Consulting (ATC) to design and install Opticom and radio controlled systems for the purpose of traffic control in front of the fire station at a cost not to exceed $50,000.

BACKGROUND

During commute hours, eastbound Marin Ave. traffic is frequently at a standstill in front of the fire station due to a red light at San Pablo Avenue (SPA). Code 3 emergency responders exiting the fire station are forced to take the "long way" around the block to avoid this standstill traffic. Although the current Opticom system on San Pablo Avenue does work, due to the close proximity of the fire station to the SPA/Marin intersection, it does not work soon enough to give stopped traffic a green light and therefore an effective way to get out of emergency responders way. Furthermore, when emergency responders attempt to proceed westbound on Marin from the fire station, they are frequently forced to wait for westbound Marin traffic to yield the right of way. Westbound Marin drivers frequently carry excessive speed down Marin and do not yield the right of way to emergency vehicles exiting the fire station.

DISCUSSION/ANALYSIS

Currently there are no suitable means to supercede the control of traffic lights that affect traffic in front of or approaching the fire station. This is a deficiency that is not only a safety concern for emergency responders, but also results in slower response times when the aforementioned traffic conditions exist. The solution is to suspend approaching traffic at both the Jackson/Buchanan and SPA/Marin via red lights, and enable egress of stopped eastbound Marin traffic by a preempted green light at SPA. This preemptive signal control (both intersections, simultaneously) can be achieved via a manual push button, mounted in the fire station. The means to connect this button to these intersections are possible by an Opticom relay system, or by a less expensive wireless radio frequency (RF) device. The RF device essentially works just like a wireless garage

door opener and will change the signal on demand. The wireless system is meant only to control the signal lights for a very short (but critical) period of time.

The Opticom system at SPA/Marin was installed several years ago by the Alameda County Congestion Management Agency (CMA). The Jackson/Buchanan intersection is not currently Opticom equipped. In order to facilitate the intended purpose of this project, the Jackson/Buchanan intersection must be Opticom equipped to enable the uninterrupted transition from wireless preemption to Opticom preemption.

In researching this project it became evident that hiring a company who is experienced in designing and delivering a "turn key" system would be the most effective and cost efficient means to meet our needs. At the recommendation of the Principal Transportation Engineer at CMA, contact was made with Advanced Technical Consulting (ATC). ATC has designed and installed wireless systems in the cities of Lafayette and Hayward. The city engineer of Lafayette was contacted and praised ATC who did the design and installation of work.

Due to the cost savings of using a wireless system instead of the more complex and expensive Opticom relay system, it became possible to stay within the funded limitations and include an additional Opticom preemption system to the intersection of Buchanan @ I-80/580.

FINANCIAL IMPACT

There is no financial impact on the City. As a condition of approval, Target Stores, Inc. deposited $50,000 into a city trust account as consideration for traffic mitigation on SPA and Marin for emergency vehicles that will fund this equipment purchase and installation.