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DATE: December 8, 2010

TO: Honorable Mayor and City Councilmembers

FROM: Development Services Department

SUBJECT: **APPROVAL OF PLANS AND SPECIFICATIONS FOR IMPROVEMENTS TO THE CITY'S TRAFFIC SIGNAL COMMUNICATION SYSTEM**

**SYNOPSIS**

Staff recommends that the City Council approve the plans and specifications for improvements to the City's traffic signal communications system, and authorize the City Engineer to call for bids.

**BACKGROUND**

The City's existing computerized signal system was installed in 1998 and is currently monitoring and controlling approximately 142 of 150 City-operated signals. The proposed improvements to the communication system will upgrade the existing traffic signal communication infrastructure, install fiber-optic cable, install closed-circuit television cameras (CCTV) at major intersections in the City, install changeable message-signs (CMS) and bring the information into the City's Transportation Management Center (TMC) at City Hall.

The TMC provides an area for City staff to monitor and regulate traffic conditions throughout the City. Other cities throughout the region are installing or upgrading existing TMCs to provide real-time information to manage everyday traffic conditions on main arterials.

The traffic signal communication system will also enhance the City's network for communications and provide greater performance for public safety and other critical multi-facility applications and systems.

**ANALYSIS**

The installation of approximately 10 miles of fiber-optic cable will upgrade the existing traffic signal copper cable network and allow the City's communications network to be on a City-owned system rather than lease lines. With the interconnecting of facilities, the City will be able to scale back its dependence on leased lines which provides a significant savings (after the first year the savings could be upwards of \$50,000 annually).

The installation of approximately 20 CCTV cameras at the key signalized locations shown on Exhibit A will allow traffic staff to monitor traffic and make signal-timing changes from the TMC as needed to improve traffic flow.

Installation of two CMS will allow staff to inform motorist of traffic incidents, detours, or special events in the downtown area. (CMSs are proposed on the north end of Coast Highway and west of I-5 on Mission Avenue).

The Fire Department is also involved in the functions of a TMC to serve as a primary location for the Emergency Operation Center.

The City has also been approved for \$200,000 from the American Recovery and Reinvestment Act for the Department of Energy under the Energy Efficiency and Conservation Block Grant (EECBG) Program.

The Grant Program requires the use of prevailing wages under the Davis-Bacon Act and Buy American Provision and will be bid accordingly.

The anticipated schedule for the project is as follows:

Bid Opening	January 2011
Award of Contract	February 2011
Start Construction	March 2011
Construction Completion	July 2011

The plans and specifications are available for review in the City Engineer's Office.

### **FISCAL IMPACT**

The FY 2010-11 CIP budget for the Adaptive Signals/TMC (902111200212), funded with Transnet funds in the Streets Program has an approximate balance of \$440,000, Communication System (903526100508) funded with Signal funds has an approximate balance of \$86,000, College Boulevard Adaptive Signals (903521800508) funded with Signal funds has an approximate balance of \$176,000, Signals Unscheduled/Street Lights (903526300213) has an approximate balance of \$66,000; and \$200,000 is available from the Energy Efficiency and Conservation Block Grant (EECBG) Program (999115900274.5320). The total approximate funds available for the project are \$968,000.

The estimated total cost of this project, which includes administration, inspection, and project management and contingency, is approximately \$900,000; therefore sufficient funds are available.

### **INSURANCE REQUIREMENTS**

The City's standard insurance requirements will be provided.

**COMMISSION OR COMMITTEE REPORT**

The Transportation Commission reviewed the original TMC proposal at their June 16, 2009 meeting.

**CITY ATTORNEY'S ANALYSIS**

The referenced documents have been reviewed by the City Attorney and approved as to form.

**RECOMMENDATION**

Staff recommends that the City Council approve the plans and specifications for improvements to the City's traffic signal communications system, and authorize the City Engineer to call for bids.

PREPARED BY:

  
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David DiPierro  
City Traffic Engineer

SUBMITTED BY:

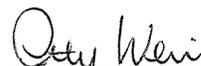
  
\_\_\_\_\_  
Peter A. Weiss  
City Manager

Exhibit A: Proposed CCTV locations

REVIEWED BY:

Michelle Skaggs Lawrence, Deputy City Manager

George Buell, Development Services Director

Scott O. Smith, City Engineer

Teri Ferro, Financial Services Director

  
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Ferro

Attachments:  
Exhibit A

Proposed Closed-Circuit Television Camera (CCTV) locations:

1. Coast Highway & Mission Avenue (2 CCTV)
2. Coast Highway & Oceanside Boulevard
3. Coast Highway & Vista Way
4. Oceanside Boulevard & State Tree Drive
5. Oceanside Boulevard & Crouch Street
6. Oceanside Boulevard & El Camino Real
7. Oceanside Boulevard & College Boulevard
8. Oceanside Boulevard & Peacock Boulevard
9. College Boulevard & Plaza Drive
10. College Boulevard & Vista Way
11. College Boulevard & Mesa Drive
12. College Boulevard & North River Road
13. El Camino Real & Vista Way
14. El Camino Real & Vista Oceana
15. El Camino Real & Mission Avenue
16. Mission Avenue & Foussat Road
17. North River Road & Douglas Drive
18. Jefferson Street & Vista Way
19. Lake Boulevard & College Boulevard