

**CITY OF HAYWARD**  
**AGENDA REPORT**

AGENDA DATE 03/09/04

AGENDA ITEM 8

WORK SESSION ITEM \_\_\_\_\_

**TO:** Mayor and City Council

**FROM:** Director of Public Works

**SUBJECT:** Optical Traffic Signal Preemption System: Approval of Plans and Specifications and Call for Bids

**RECOMMENDATION:**

It is recommended that the City Council adopt the attached resolution that approves the plans and specifications for installing a signal preemption system at various locations throughout the City and calls for bids to be received on April 6, 2004.

**BACKGROUND:**

The City has been installing traffic signal preemption devices on all new traffic signals and some of the existing traffic signals to allow movement of emergency vehicles in a timely, collision-free manner and foster safer general traffic movement. Additionally, the Fire Department has installed optical signal transmitters on all fire apparatus and has undertaken an extensive driver's training program.

This project continues the installation of optical traffic signal preemption systems based on an established priority list of intersections. It consists of installing optical preemption detectors on traffic signal poles/mast arms, detector cables in existing or new conduits, and preemption phase selectors in traffic controller cabinets. The intersections are shown in the location map (see Exhibit A) and listed in the summary table (see Exhibit B), which is divided into two parts, Schedule A and Schedule B.

Schedule A includes locations that were approved for federal funding under the Hazard Elimination Safety (HES) Program. Schedule B includes additional high-priority locations that are being funded by a combination of developer mitigation funds and City funding. This contract includes a base bid for each schedule with 1 and 3 additive alternative bid items for Schedule A and Schedule B, respectively. This bid structure was established to maximize system installation within the available funding for each schedule.

Both Schedules A and B have State highway locations and, therefore, require Caltrans encroachment permits for construction. The Caltrans District Local Assistant Engineer (DLAE) has approved the City's request for combining Schedule A and Schedule B into one project using one contract document and one Caltrans encroachment permit. The DLAE has also concluded that this project qualifies for a categorical exclusion under the National Environment Policy Act and has authorized the City to proceed with design and construction.

The project is also categorically exempt under guidelines of the California Environmental Quality Act for the addition of safety devices in conjunction with existing facilities.

Staff has established a single Disadvantaged Business Enterprise (DBE) goal of 3 percent for this project, per federal requirements. The appropriateness of the goal was established through an evaluation of available subcontracting opportunities for the project and analysis as to what portion of that subtracting would be reasonable to set aside for DBE participation.

**PROJECT COSTS:**

The estimated project costs are as follows:

Optical Traffic Preemption System - Contract Construction	240,000
Outside Services (Install a Salvaged Preemption Relay System)	8,000
Design and Administration	28,000
Inspection and Testing	<u>24,000</u>
TOTAL	300,000

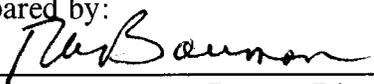
**FUNDING:**

The 2003-04 Capital Improvement Program includes a total of \$230,000 in the Transportation System Improvement Fund for these two projects. The City will be reimbursed \$100,000 in Federal HES funds for the locations in Schedule A. A total of \$100,000 in developer contributions is presently allocated to the locations in Schedule B. After bids are received, an additional appropriation will be requested, if necessary.

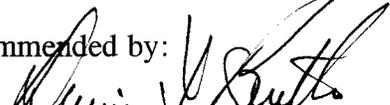
**SCHEDULE:**

Receive Bids	April 6, 2004
Award Contract	April 27, 2004
Begin Work	May 24, 2004
Complete Work	August 4, 2004

Prepared by:

  
\_\_\_\_\_  
Robert A. Bauman, Deputy Director of Public Works

Recommended by:

  
\_\_\_\_\_  
Dennis L. Butler, Director of Public Works

Approved by:

  
\_\_\_\_\_  
Jesús Armas, City Manager

Attachments: Exhibit A: Project Location Map  
Exhibit B: Intersection Summary Table



OPTICAL TRAFFIC SIGNAL PRE-EMPTION  
CITY WIDE

LOCATION MAP

Exhibit A

**INTERSECTION SUMMARY TABLE**

**CITY OF HAYWARD**

**PROJECT TITLE:** OPTICAL TRAFFIC SIGNAL PRE-EMPTION SYSTEM

**PROJECT NO:** City Project No. 5750 And 5751, Federal Program No. STPLHG-5050 (028)

<b>SCHEDULE A -- Project No. 5750, Federal Program No. STPLHG 5050 (028)</b>		
<b>LOCATION NO.</b>	<b>LOCATION DESCRIPTION</b>	<b>REMARKS</b>
1	Pre-emption at Mission Blvd/Carlos Bee Blvd	On State Highway requires Encroachment Permit
2	Pre-emption at Second St/C St	City Intersection
3	Pre-emption at Jackson St/Amador St	On State Highway requires Encroachment Permit
4	Pre-emption at Jackson St/Winton Ave/Grand St	On State Highway requires Encroachment Permit
5	Pre-emption at Jackson St/Meek Ave/Silva Ave	On State Highway requires Encroachment Permit
6	Pre-emption at Jackson St/Watkins St	On State Highway requires Encroachment Permit
7	Pre-emption at Second St/A St	City Intersection, Additive Alternative Bid Item

<b>SCHEDULE B -- Project No. 5751</b>		
<b>LOCATION NO.</b>	<b>LOCATION DESCRIPTION</b>	<b>REMARKS</b>
8	Pre-emption at Industrial Blvd/I-880	On State Highway requires Encroachment Permit
9	Pre-emption at Second St/B St	City Intersection
10	Pre-emption at Mission Blvd/Sorenson Rd	On State Highway requires Encroachment Permit
11	Pre-emption at Mission Blvd/Jefferson St/Calhoun St	On State Highway requires Encroachment Permit
12	Pre-emption at Mission Blvd/Hancock St	On State Highway requires Encroachment Permit, Additive Alternative bid item.
13	Pre-emption at Hesperian Blvd/Sleepy Hollow Ave	City Intersection, Additive Alternative Bid Item
14	Pre-emption at Hesperian Blvd/Panama St	City Intersection, Additive Alternative Bid Item

**DRAFT**

NH  
2/23/04

HAYWARD CITY COUNCIL

RESOLUTION NO. \_\_\_\_\_

Introduced by Council Member \_\_\_\_\_

RESOLUTION APPROVING PLANS AND SPECIFICATIONS FOR INSTALLATION OF THE OPTICAL TRAFFIC SIGNAL PREEMPTION SYSTEM AT VARIOUS LOCATIONS THROUGHOUT THE CITY, PROJECT NOS. 5750 AND 5751, AND CALL FOR BIDS

BE IT RESOLVED by the City Council of the City of Hayward as follows:

1. That those certain plans and specifications for installation of the Optical Traffic Signal Preemption System at various locations throughout the City, Project Nos. 5750 and 5751, on file in the office of the City Clerk, are hereby adopted as the plans and specifications for the project; and
2. That the City Clerk is hereby directed to cause a notice calling for bids for the required work and material to be made in the form and manner provided by law; and
3. That sealed bids therefor will be received by the City Clerk's office at City Hall, 777 B Street, Hayward, California 94541-5007, up to the hour of 2:00 p.m. on Tuesday, March 9, 2004, and immediately thereafter publicly opened and declared by the City Clerk in Conference Room 4D, City Hall, Hayward, California; and
4. That the City Council will consider a report on the bids at a regular meeting following the aforesaid opening and declaration of same.
5. That this project is categorically exempt under the guidelines of the California Environmental Quality Act for the addition of safety devices in conjunction with existing facilities.

IN COUNCIL, HAYWARD, CALIFORNIA \_\_\_\_\_, 2004

ADOPTED BY THE FOLLOWING VOTE:

AYES: COUNCIL MEMBERS:

MAYOR:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ATTEST: \_\_\_\_\_  
City Clerk of the City of Hayward

APPROVED AS TO FORM:

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City Attorney of the City of Hayward