



**DATE:** May 5, 2015

**CATEGORY:** Consent

**DEPT.:** Public Works

**TITLE:** **Shoreline Boulevard Adaptive Signal System, Project 13-30 – Approve Plans/Specifications and Authorize Bidding**

### **RECOMMENDATION**

1. Approve plans and specifications for the Shoreline Boulevard Adaptive Signal System, Project 13-30, and authorize staff to advertise the project for bids.
2. Authorize the City Manager to award the construction contract to the lowest responsible bidder if the low bid is within the project budget.
3. Transfer and appropriate \$248,000 from the Shoreline Regional Park Community Fund to the Shoreline Boulevard Adaptive Signal System, Project 13-30. (Five votes required)

### **BACKGROUND**

The Shoreline Boulevard Adaptive Signal System will interconnect traffic signals and provide adaptive signal technology at 15 intersections along Shoreline Boulevard between Church Street and Crittenden Lane. These traffic signals are currently interconnected in some areas, but gaps exist in the interconnect system. The signals are currently coordinated based on time of day plans that use preprogrammed, daily signal timing schedules and are unable to detect or adapt to varying traffic conditions.

### **ANALYSIS**

The proposed project will reduce delays on Shoreline Boulevard by modifying existing signal controllers to include adaptive system equipment and installing new detection cameras at 15 intersections from Church Street to Crittenden Lane.

With an adaptive system, the signals respond to varying traffic conditions, resulting in more efficient traffic flow on the main arterial. The adaptive system will improve traffic flow along Shoreline Boulevard, though vehicles on the side streets and those making

left turns may experience additional delays as compared to the current system. The adaptive system also allows staff to monitor and observe live traffic conditions and collect traffic data.

Two of the 15 intersections (U.S. 101 northbound on-/off-ramps and U.S. 101 southbound on-/off-ramps) are under the jurisdiction of State of California Department of Transportation (Caltrans). Staff has coordinated on the design with Caltrans and has obtained the necessary approvals to include Caltrans' intersections in the adaptive system.

The estimated cost of the project is as follows:

Construction	\$1,158,000
Construction Contingency	115,800
Design	90,000
City Inspection	65,000
Project Management	<u>65,000</u>
Subtotal	1,493,800
City Administration @ 6.5%	<u>97,100</u>
TOTAL PROJECT COST	<u>\$1,591,000</u> (rounded)

The current project budget is \$1,343,000 and the estimated cost of the project is \$1,591,000, leaving a funding gap of \$248,000. The estimated cost increase is due primarily to added scope, including: (1) installation of additional interconnect conduit than originally estimated; (2) addition of the new signalized intersection of Shoreline Boulevard at Shorebird Way; (3) upgrading outdated controllers; (4) additional side-mounted cabinets to house the new system equipment; and (5) one set of spare equipment to fulfill Caltrans permit requirements. All items are essential to the overall project.

Plans and specifications for the project are complete and available for viewing in the Public Works Department.

In accordance with the California Environmental Quality Act, this project has been found to be categorically exempt under Section 15301 as the project involves minor alterations to existing facilities to improve public safety.

If Council approves the recommended actions, construction is expected to begin in July 2015 and be completed by November 2015. Configuring, testing, and validating the adaptive system will take another two to three months to fully optimize.

### **FISCAL IMPACT**

Shoreline Boulevard Adaptive Signal System, Project 13-30, is funded with \$130,000 from the Construction/Conveyance Tax Fund, \$413,000 from the Shoreline Regional Park Community Fund, and \$800,000 from Transportation for Clean Air (TFCA) grant funds managed by VTA, for a total budget of \$1,343,000. The estimated project cost is \$1,591,000, leaving a funding shortfall of approximately \$248,000. The recommended actions would transfer \$248,000 from the Shoreline Regional Park Community Fund to fully fund the project. Staff will award a construction contract if the bids come in within the total project budget.

### **ALTERNATIVES**

1. Do not proceed with the project at this time.
2. Provide other direction.

### **PUBLIC NOTICING**

Agenda posting and noticing for this meeting included an announcement on the City's website.

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SF/MAF/3/CAM  
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cc: CTE, PCE – Macaraeg, STE – Lopez, STE – Aggarwal, F(13-30)