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## *Memorandum*

TO: BATA Oversight Committee

DATE: January 7, 2009

FR: Deputy Executive Director

W. I.

RE: Contract – Dumbarton and Antioch Bridge Prototype Bearings: Earthquake Protection Systems, Inc (EPS)

Staff is proposing that the Committee authorize the Executive Director or his designated representative to negotiate and enter into a sole source contract with Earthquake Protection Systems, Inc. to design, fabricate and test 6 prototype Friction Pendulum Isolation Bearings (FPIB) in support the ongoing seismic design work by Caltrans at both the Antioch and Dumbarton Bridges.

### **Background**

At the Authority's meeting in December, Caltrans provided a briefing on the status of the seismic analysis and design for the Antioch and Dumbarton Bridge retrofit projects. The briefing discussed the basic retrofit strategies, cost estimates, and a schedule of milestones for the retrofit projects. The schedule is provided below for your reference:

<b>Milestone</b>	<b>Projected Completion Date</b>
100% Plans, Specifications and Estimate	August 2009
Obtain Final Regulatory Agency Permits	September 2009
Award Antioch Construction Contract	April 2010
Award Dumbarton Construction Contract	August 2010
Prototype Bearing Design, Manufacture & Testing	April 2010
Complete Antioch Construction Contract	2012
Complete Dumbarton Construction Contract	2013

As reported, a critical element of the retrofit strategy for each bridge is the placement of Friction Pendulum Isolation Bearings (FPIB). FPIB change the way the bridge structure moves during a large earthquake in a way that protects areas of potential damage; therefore, reducing the amount of post earthquake repair required.

Caltrans is proposing to procure and test six prototype FPIBs to be able to ensure that they can be effectively produced as designed and that they can meet the required displacement criteria for the bridges. Based on Caltrans review, EPS is the only manufacturer in the United States that has produced FPIB of the size required, within the United States, and is currently the only

pre-qualified manufacturer by Caltrans. The pre-qualification process for other manufacturers could take 6 months or longer to complete. In order for the Antioch and Dumbarton projects to remain on schedule, a contract must be issued within the next month to begin the design, fabrication, and testing of the FPIB. The remaining FPIBs for the project would be procured under a separate procurement.

**Recommendation**

Staff recommends that the Committee authorize the Executive Director or his designated representative to negotiate and enter into a sole source contract with Earthquake Protection Systems, Inc. in an amount not to exceed \$1,100,000, to design, fabricate and test 6 prototype Friction Pendulum Isolation Bearings (FPIB) as described herein.

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Andrew B. Fremier

ABF: jw

REQUEST FOR COMMITTEE APPROVAL  
Summary of Proposed Contract

Work Item No.: 1251

Vendor: Earthquake Protection Systems, Inc.  
Mare Island, Vallejo, California

Work Project Title: Prototype Friction Pendulum Isolation Bearings

Purpose of Project: Produce prototype Friction Pendulum Isolation Bearings. The specifications of these prototype bearings will be incorporated into the plans and specifications for the Antioch and Dumbarton Bridge retrofit projects.

Brief Scope of Work: To design, fabricate, and test 6 prototype Friction Pendulum Isolation Bearings

Project Cost: \$1,100,000

Funding Source: Toll Bridge Rehabilitation Program Funds

Fiscal Impact: Project costs will be consistent with funds programmed and budgeted.

Motion by Committee: That the Executive Director or his designee is authorized to negotiate and enter into a contract in the amount not to exceed \$1,100,000 with Earthquake Protection Systems, Inc. to design, fabricate, and test 6 prototype Friction Pendulum Isolation Bearings, and, as budgeted, the Chief Financial Officer is directed to set aside funds for such contract.

BATA Oversight Chair: \_\_\_\_\_  
Steve Kinsey, Chair

Approved: Date: January 14, 2009