



Agenda Item No. 1

To: Building and Operating Committee/Committee of the whole  
Meeting of February 24, 2005

From: Denis J. Mulligan, District Engineer  
Celia G. Kupersmith, General Manager

Subject: **DISCUSSION RELATIVE TO PROCESS FOR DEVELOPMENT OF A  
PHYSICAL SUICIDE DETERRENT SYSTEM ON THE GOLDEN GATE  
BRIDGE**

### **Recommendation**

The following report outlines the procedures necessary to undertake development of a physical suicide deterrent system on the Golden Gate Bridge.

### **Summary**

Development of a physical suicide deterrent system on the Golden Gate Bridge will require extensive engineering analysis and environmental review. It is estimated that the process could take up to two years to complete and cost as much as \$2 million. Several state and federal agencies would be involved in the process due to the desire to have the project be eligible for federal funding at any level. Final design and construction would occur following this initial two-year time period.

### ***Overview of Process to Construct a Physical Suicide Deterrent System***

The development of a physical suicide deterrent system on the Bridge would require extensive environmental and engineering feasibility studies. It is estimated that a \$2 million budget would be needed to fund District efforts to develop an array of reasonable alternatives and to commence and complete the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) processes. This budget does not include the cost of developing final plans and specifications. The actual work would be done by a combination of District staff and consultants.

Once approved to proceed with the development of a project, the Board of Directors would adopt criteria for the evaluation of alternatives for a physical suicide deterrent system. Concurrently, staff will develop a "Purpose and Need" statement for the project pursuant to the CEQA/NEPA process and obtain Federal Highway Administration (FHWA) concurrence regarding this purpose and need statement.

Staff would review prior proposals for a suicide deterrent on the Golden Gate Bridge and review designs that have been implemented on other bridges. A Request for Proposals (RFP) would be issued to engage consultants to undertake the preliminary engineering and environmental work on the project. The focus would be on developing alternatives for a deterrent system that incorporates architectural details that compliment the Golden Gate Bridge design and does not diminish its beauty or structural effectiveness. This effort would build upon the review of prior proposals and designs implemented on other bridges.

Staff will solicit feedback from the Psychiatric Foundation of Northern California and suicide prevention organizations in San Francisco, Marin and Sonoma counties specifically regarding the adequacy of the alternatives as a suicide deterrent. Additionally, wind tunnel tests and analysis of the alternatives would be undertaken to ensure the basic “constructability” of the design. These tests would be done assuming both with and without a moveable median barrier on the bridge structure. Staff would then pursue and obtain FHWA concurrence regarding the alternatives for further study.

A Visual Analysis of the workable alternatives would be done, including preparation of several still photographic simulations (e.g. drivers’ perspective, sidewalk users’ perspective and perspectives from sensitive visual receptors) for each alternative. Concurrently, staff will prepare an historic “106 Evaluation” including a “Finding of Effect”; consult with the State Historic Preservation Office (SHPO) and, if necessary the federal Advisory Council on Historic Preservation (ACHP). Staff will also prepare a “Section 4(f)” Report. Staff will also use the photographic simulations to solicit feedback from the Bay Conservation and Development Commission’s (BCDC) Design Review Board and Engineering Criteria Review Board regarding the alternatives.

These analysis, evaluations and reports would be incorporated into a *Draft Environmental Assessment/Initial Study*. After FHWA approves the *Draft Environmental Assessment/Initial Studies* for public release, the District would publish the document for full public review and comment, and hold public workshops and a public hearing to provide for full public disclosure and public comment.

Following public review of the workable alternatives, staff would prepare responses to public comments, incorporating changes as appropriate. Simultaneously, staff would execute a Memorandum of Agreement with SHPO, FHWA, and GGNRA, and obtain FHWA Section 4(f) approval. Nearing the end of the process, staff would prepare a Finding of No Significant Impact (FONSI)/Negative Declaration (Neg. Dec.). The Board of Directors would then take up the Negative Declaration, and if approved, send it to the FHWA for approval of the FONSI. It is anticipated that this milestone will be achieved approximately two years after the Board action to fund this \$2 million effort.

The ultimate cost to construct the proposed physical deterrent on the Golden Gate Bridge will be a function of the alternative selected for implementation.

Once a physical suicide deterrent system alternative is selected for implementation and additional funding secured for the cost of final design, staff will prepare final plans, specifications and estimates (PS&E) and obtain necessary regulatory permits. If the Board chooses to commence final design prior to the FONSI/Neg. Dec. in order to move the project to construction sooner, the cost of that design work undertaken before the FONSI is adopted would not be eligible for federal funding. Nor could it qualify as matching funds for any federal funding of the construction phase.

The completion of the PS&E coupled with obtaining the regulatory permits results in the project being ready to advertise for construction, assuming funding has been secured for the construction phase.

It is anticipated that construction would last approximately two (2) years for alternatives that replace the exterior railing.

### **Fiscal Impact**

If the Board of Directors chooses to proceed with design and environmental analyses of a physical suicide deterrent system, the initial fiscal impact is estimated to be \$2 million for preparing environmental and engineering studies leading to completion of the CEQA/NEPA environmental process. This project is not currently included in the District's Capital Budget, and the District does not currently have available capital reserves. The Board may choose to reprioritize the Capital Budget and delete \$2 million worth of existing projects so that funds can be reassigned to this project or the Board would need to pursue funds from alternative, non-traditional sources.

The ultimate fiscal impact of proceeding with the project will be a function of the alternative selected.