Agenda Item No. 6

To: Building and Operating Committee/Committee of the Whole
Meeting of May 22, 2008

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Subject: **STATUS REPORT ON ENGINEERING PROJECTS**

Recommendation

The following report is provided for informational purposes and no action is required.

Summary

Golden Gate Bridge Seismic Retrofit Phase IIIA, North Anchorage Housing/North Pylon, Contract No. 2006-B-1. On January 26, 2007, the District received FHWA/Caltrans Authorization to proceed with advertising Contract No. 2006-B-1 for construction bids. The contract was advertised January 31, 2007, and on May 31, 2007, two bids were received and opened. On June 22, 2007, both bids were rejected by the Board. The contract was re-advertised for bids on October 2, 2007, and three bids were received and opened on February 19, 2008. On March 28, 2008, the Board awarded the contract to Shimmick Construction Company, Inc./Obayashi Corporation, a Joint Venture, in the amount of $83,320,672.

Golden Gate Bridge Seismic Retrofit Phase III, Construction Management and Inspection Support Services, Contract No. 2006-B-2. On March 10, 2008, the District issued a Request for Statements of Qualifications and Proposals, Request for Proposals (RFP) No. 2006-B-2, *Golden Gate Bridge Seismic Retrofit Phase III Construction Management and Inspection Support Services*, to engineering consultants. The scope of the services consists, in general, of supplementing District's staff to perform administration and inspection of construction activities on the Phase III Project for compliance with the construction contract documents of the Phase III Project, including providing Deputy Resident Engineers and inspection personnel, performing construction field inspections, cost estimating, schedule review, hazardous materials monitoring, surveying, traffic control oversight, and construction claim mitigation and defense. By the due date of April 10, 2008, the Office of the District Secretary received proposals from two engineering teams. See staff recommendations regarding the contract award under separate agenda item.

Golden Gate Bridge Seismic Retrofit Phase IIIA, Engineering Support Services, Contract No. 2006-B-3. The District commissioned HDR Engineering, Inc., to prepare the structural analyses, design plans and technical specifications for the Golden Gate Bridge Seismic Retrofit Phase IIIA Project in

June 2004 after an extensive competitive consultant selection process. On April 18, 2008, the District issued a Request for Proposal No. 2006-B-3, *Golden Gate Bridge Seismic Retrofit Phase IIIA Engineering Support Services,* to HDR Engineering, Inc. The scope of the services consists, in general, of reviewing, checking, and indicating approval status for Contractor's technical submittals, working drawings, structural steel shop drawings, and requests for substitution and alternative construction schemes; providing written responses to Contractor Requests for Information regarding the design; providing recommendations for the resolution of structural detail issues during construction and, if required, preparing plans and specifications for construction Contract Change Orders covering changes to the structural details. The District received HDR's scope of work and cost proposal on April 29, 2008. See staff recommendations regarding the contract award under separate agenda item.

Phase II: Golden Gate Bridge Seismic Retrofit of South Approach Structures, Contract No. 99-B-5. This contract includes structural retrofit of the South Approach Viaduct (SAV), the South Anchorage Housing, Pylons S1 and S2, and the Fort Point Arch (FPA); relocation of various utilities, and retrofit of utility conduits along the south approach structures.

On May 11, 2001, the Board awarded the contract to the low bidder, Shimmick Construction Company, Inc./Obayashi Corporation, a Joint Venture, in the amount of $122,292,503. The Notice to Proceed was issued to the Contractor on June 4, 2001.

The seismic retrofit the South Approach Structures is complete.

Minor punch list and site restoration items required in the NPS Special Use Permit remain.

Golden Gate Bridge Physical Suicide Deterrent System. By Resolution Nos. 2005-015 and 2005-031, the Board of Directors approved seeking funding to underwrite the development of environmental studies and preliminary design work for a Physical Suicide Deterrent System on the Golden Gate Bridge (Studies). On March 26, 2006, the Board of Directors approved Resolution No. 2006-027, which approved proceeding with environmental studies and preliminary design work. On June 28, 2006, Metropolitan Transportation Commission (MTC) passed a resolution providing $1.6 Million for this effort. A Request for Proposal (RFP) to engage consultants to perform this work was advertised on June 29, 2006, and the Board at its September 22, 2006, meeting authorized execution of a Professional Services Agreement with DMJM Harris, Inc. The Notice to Proceed was issued effective October 16, 2006.

The first phase, which is wind tunnel testing, was completed in May 2007 and the results of the wind studies were presented at the May 24, 2007, Building and Operating Committee Meeting. The second phase is preliminary engineering and environmental studies. As required by the California Environmental Quality Act (CEQA), the Notice of Preparation was sent to interested agencies on June 14, 2007. An agency scoping was held on July 17, 2007. FHWA has delegated to Caltrans the lead responsibility for ensuring compliance with National Environmental Policy Act (NEPA). Progress meetings are being held regularly with Caltrans staff to facilitate efficient exchange of information. The draft environmental document is being prepared and is scheduled to be released for public comment June 2008.

The District created a project website to inform the public regarding the project and to provide an opportunity for the public to submit comments. The project website is: www.ggbsuicidebarrier.org. The Wind Report, Notice of Preparation and other project documents are available at the website.

Golden Gate Bridge South Approach and Pier Physical Security Improvements. Staff is preparing the design plans and bid documents to improve the physical security at the south approach and pier and vicinity. This project is scheduled to be advertised in fall 2008.

Golden Gate Bridge North Approach Viaduct Suspended Scaffolding System, Contract No. 2007-B-4. Staff prepared the design plans and bid documents to purchase suspended scaffolding materials for installation by Bridge forces to be used for maintenance and painting of North Approach Viaduct superstructure. The contract was advertised for bids on October 10, 2006, and one bid was received and opened November 7, 2006. On November 17, 2006, the Board awarded the contract to the sole bidder, Safway Services, Inc., in the amount of $1,459,609.50. The Notice to Proceed was issued to the Contractor effective December 11, 2006. The Contractor has trained District personnel on use and erection of the platform. District personnel have completed the erection of the lower and upper platforms. On January 25, 2007, the Board authorized a contract change order in the amount of $11,235, for additional lift platform rental charges. Staff is finalizing this contract.

Golden Gate Bridge South Tower Maintenance Scaffolding System. Staff is preparing the design plans and bid documents to provide maintenance scaffolding at the South Tower. This project is scheduled to be advertised in late 2008.

Biennial Bridge Inspection Program. In order to ascertain the structural condition of the Bridge and to comply with FHWA regulations, the District conducts a Biennial Bridge Inspection. This inspection data is analyzed and organized to facilitate Bridge maintenance operations and to assist the capital budget development process. Staff has prepared the work plan for the Biennial Bridge Inspection, including underwater inspection of the North Pier, South Pier, and Fender. The inspection of the Suspension Bridge started on March 19, 2007, and has been completed. The inspection data is being compiled. Staff is preparing an RFP to select a consultant for the underwater inspection of the piers and fender.

Golden Gate Bridge Main Cable Renovation. On April 13, 2001, the Board accepted staff's recommendation to revise the contract documents and to re-advertise the project for construction bids. The revisions will include adding provisions for alternate work access systems to be proposed by contractors. Plans are being revised and specifications are being finalized.

Seismic Instrumentation. The State of California, Division of Mines and Geology – Strong Motion Instrumentation Program (SMIP) has completed installing and testing the Phase I seismic instrumentation system. Seventy-six seismic sensors and two recording stations were installed as part of this phase.

On April 10, 2001, and September 21, 2004, the Seismic Instrumentation Advisory Panel (Panel) approved the Phase II sensor locations for the South Approach Structures. Twenty-five additional sensors were proposed for the South Approach and were included as part of the Phase II Seismic Retrofit project. On September 24, 2002, the Panel approved the design plans of Phase II Seismic Instrumentation, North Approach Structures. Twenty-four additional sensors for the North Approach

were added to the Seismic Instrumentation System. Subsequent panel meetings were held on September 30, 2003, September 21, 2004, and October 25, 2006, to review the progress of construction of the Phase II Seismic Instrumentation and the MEMS system being developed by the U.C. Berkeley Citris program. The MEMS has been tested with satisfactory results and was removed by U.C. Berkeley in March 2007.

On October 25, 2006, the Panel recommended installing a wind monitoring system on the Golden Gate Bridge. On April 27, 2007, the Board authorized SMIP to install the wind monitoring system, including an anemometer and a seismic recorder connected to selected, existing and new seismic sensors on the Suspension Bridge.

On August 29, 2007, the Panel approved the design of the wind monitoring system, and recommended measuring ambient vibration and analyzing the Bridge computer model with data recorded from the 1999 Bolinas and 2000 Napa earthquakes. The next Panel meeting is scheduled for August 20, 2008.

Earthquake Response Plan. Staff has developed and finalized an Earthquake Response Plan. The Plan recommends establishment of an on-call Bridge emergency repair service and computer analytical capability and a list of on-call contractors for emergency repairs was established. Staff is developing an in-house computer analytical system with assistance from International Civil Engineering Consultants, Inc., (ICEC) for earthquake input data analyses. To date, ICEC has performed conversion of the Suspension Bridge, the South Approach Structures, and the North Approach Viaduct computer models to the ADINA program. In 2002, SMIP installed an independent seismic sensor with a warning light and buzzer in the Sergeant's control room. On March 1, 2007, the Bridge Earthquake Response Pager System successfully recorded and transmitted the Lafayette Earthquake with a 1%g ground acceleration at the Bridge. On October 30, 2007, the Bridge Earthquake Response Pager System successfully recorded and transmitted the Alum Rock Earthquake with a 1%g grounded acceleration of the Bridge. On April 1, 2008, the Pager System was tested with satisfactory results.

In 2002, the Ironworkers, the Sergeants, the Engineers and the Inspectors were given training in performing post-earthquake Bridge inspection in accordance with the Earthquake Response Plan. An updated training was provided on April 12, 2006. An earthquake response drill was carried out on April 19, 2006, to ensure that staff will be familiar with the Earthquake Response Plan. Staff has provided good comments to improve the procedures and inspection forms for the earthquake response inspection.

BUS TRANSIT FACILITIES

Santa Rosa Bus Facility Diesel Tanks Replacement, Contract No. 2007-BT-4. Staff prepared the preliminary design plans for replacing the underground diesel tanks with aboveground diesel tanks. The preliminary design was submitted to the Santa Rosa Fire Department for review, and the Fire Marshal has approved the design scheme for the above-ground fuel tanks. Staff has prepared the final plans and bid documents. The contract was advertised for bids on April 17, 2007, and three bids were received and opened on May 15, 2007. On May 25, 2007, the Board authorized awarding

the contract to the low bidder, American Construction & Environmental Services, Inc. The Notice to Proceed was issued on June 21, 2007. The new tanks and associated facilities have been installed and all field work completed. District staff is working on finalizing the project.

San Rafael District Administration Building HVAC Improvements, Contract No. 2008-BT-2. Staff, with the assistance of mechanical and electrical design consultants prepared design plans and specifications for the improvements to the existing HVAC system. The contract was advertised for bids on April 18, 2008, and five bids were received and opened on May 6, 2008. See staff contract award recommendation under separate agenda item.

San Rafael Bus Facility Perimeter Security Improvements, Contract No. 2009-BT-2. Staff is preparing design plans and specifications for improvements to the perimeter security at the San Rafael Bus facility. The project is scheduled to be advertised on May 20, 2008.

San Rafael District Data Center Project. Staff is preparing the design plans and bid documents to construct a District Data Center within the San Rafael Bus Facilities to house computer and radio servers including an uninterrupted power supply system. This project is scheduled to be advertised in August/September 2008.

Santa Rosa Bus Facility – Site Remediation. The District removed leaking underground tanks at the site in 1990. As part of the ensuing site investigation of diesel contamination, a soil vapor extraction system was installed and operated over a three-year period. In response to a 1997 request for site closure, the North Coast Regional Water Quality Control Board (NCRQWCB) requested additional groundwater monitoring. In October 1999, staff received a letter from NCRWQCB that contained additional requirements for site closure. Based on the presence of Volatile Organic Compounds (VOCs) in the groundwater, in particular the solvents TCE and TCA, the NCRWQCB, in December 2000, requested additional investigation regarding the presence of VOC pollutants on the site. The District responded that the VOC pollutants did not originate from the District property but migrated onto the site from the neighboring Hewlett-Packard (HP) property, which has had known releases of VOCs on their site.

The NCRWQCB responded that the two property owners needed to resolve this issue. The District and HP agreed to conduct joint groundwater sampling for presence of VOCs and provide recommendations for resolving the issue. Two rounds of joint sampling were performed in April and October, 2001.

The District completed the site closure actions requested by the NCRWQCB and submitted a final report in February 2002. The NCRWQCB responded in May 2002 with a request for additional monitoring for diesel hydrocarbons and VOC pollutants. The parties did not reach agreement on recommendations for resolving the VOC issue.

HP issued its own report on the joint monitoring in October 2002. The NCRWQCB requested a written response from the District to the HP report. The District responded with a comprehensive *Forensic Evaluation Report* that explained the occurrence of VOCs on GGB property and met with

the NCRWQCB to reach an agreement on remaining concerns. The final report addressed the Board's comments and was submitted in December 2003.

The NCRWQCB responded in March 2005, requesting that the District develop a plan for further mitigation of VOCs and diesel hydrocarbons. The District has met with the NCRWQCB to clarify its request. The NCRWQCB is reviewing information submitted by the District and will clarify its request regarding additional testing for VOC pollutants on the property. The NCRWQCB is concerned that historic use of the site as a small aviation airport could have contributed to VOCs found in groundwater on the District site. The District's position is that there is no evidence to support that concern. On November 8, 2005, the District advertised an RFP for a new contract to obtain additional test samples required by the water board. On February 24, 2006, the Board authorized execution of a Professional Services Agreement with PES Environmental, Inc. and the Notice to Proceed was issued to the consultant on March 6, 2006. The consultant obtained test samples from the existing wells and submitted a request for closure to the NCRWQCB. The District met with the NCRWQCB to discuss the closure request and the NCRWQCB declined to approve site closure. An annual sampling event was performed in March 2007; however, the test results were inconclusive. Additional quarterly sampling was performed in June, September, and December 2007 at the site. Another annual sampling event was performed in March 2008.

Novato Bus Facility – Site Remediation. The final site remedial investigation report regarding previous fuel leaks at the site was submitted to the San Francisco Regional Water Quality Control Board (SFRWQCB) in May of 1997. The SFRWQCB reviewed and approved the recommended corrective actions identified in the report, which included replacing the existing diesel Underground Storage Tanks (USTs). Two existing 12,000-gallon single-walled underground storage diesel tanks were removed in 1998 and replaced with two new double-walled 15,000 gallon USTs nearby.

In June 1999, the District submitted a report for implementation of the remaining corrective actions, which included quarterly groundwater monitoring, closure of a deep well, installation of additional monitoring wells and a sensitive receptor survey. The groundwater monitoring results indicated that the fuel from the leak was confined to the site; however, it is not diminishing at a rate that would allow site closure.

The fourth quarter 2003 round of monitoring discovered a spike in contaminant levels in the monitoring wells. The District reported the findings to the SFRWQCB in its April 2004 progress report and included recommendations that would lead to site closure. The SFRWQCB approved the recommendations, added a few of its own and required that the District implement those recommendations. The District implemented two rounds of quarterly groundwater monitoring that were concluded in March 2005. On November 8, 2005, the District advertised an RFP for a new contract to perform additional testing and monitoring as required by the SFRWQCB. On February 24, 2006, the Board authorized execution of a Professional Services Agreement with PES Environmental, Inc. The Notice to Proceed was issued to the consultant on March 6, 2006. The consultant prepared a work plan and submitted the plan to the SFRWQCB for approval. The District received a conditional approval of the work plan from the SFRWQCB and has commenced work at the site. The consultant has performed soil and water sampling throughout the site and is developing remediation plans for the site. Quarterly groundwater monitoring continues.

FERRY FACILITIES

Larkspur Ferry Terminal Parking & Access Improvements, Contract No. 2008-FT-8. Staff prepared the design plans and bid documents to construct the parking lot improvements to increase the passenger parking spaces, to comply with ADA regulations and to improve pedestrian and vehicular traffic access safety. The construction schedule will be proposed after a BCDC permit has been issued. The contract was advertised for bids on May 13, 2008.

Larkspur Ferry Terminal Administration Building Improvements, Contract No. 2007-FT-3. Staff and a design consultant prepared design plans and bid documents to improve the HVAC, exit corridor and offices of the second floor of the Larkspur Ferry Terminal administration building. A BCDC permit is not required for this project. This project was advertised for bids on May 8, 2007, and two bids were received and opened on June 5, 2007. On July 13, 2007, the Board awarded the contract to KCK Builders, Inc. The Notice to Proceed was issued effective July 31, 2007. The Contractor has completed all phases of work. The District is finalizing the project.

Larkspur Ferry Terminal Storage and Inspection Station, Contract No. 2007-FT-13. Staff has prepared the design plans and bid documents to construct the storage and inspection building, equipment and utilities. The contract was advertised for bids on April 17, 2007, and three bids were received and opened on May 15, 2007. The BCDC permit has been issued and the District awarded the contract to Bay Area Structural, Inc. The Notice to Proceed was issued effective July 18, 2007. The site work is complete and the building is installed. The District is finalizing the project.

Larkspur Ferry Terminal, Consultant to Provide Berth and Channel Maintenance Dredging Design and Permitting Support Services, RFP No. 2008-FT-3. A Request for Proposal (RFP) to engage consultants to perform this work was advertised on July 27, 2007, and the Board at its September 28, 2007, meeting authorized execution of a Professional Services Agreement with Anchor Environmental CA, L.P. The Notice to Proceed was issued for the first phase of the project, Berth Maintenance Dredging, effective October 3, 2007. The consultant performed a bathymetric survey of the existing conditions and the District determined that the conditions did not warrant dredging the berths in 2008. The dredging work is now scheduled to be performed in 2009.

Corte Madera Ecological Reserve (CMER) Tidal Wetlands Restoration Project. As a condition of a 1988 COE (U.S. Army Corps of Engineers) permit for maintenance dredging of the Larkspur Ferry Terminal, the District was required to perform a study to assess the potential impact of ferry operations on erosion of the shoreline at the CMER. The study also investigated creating replacement habitat for a native bird species, the Clapper Rail, due to erosion of their existing habitat. The study was inconclusive regarding the impact of ferry operations on erosion of the shoreline. In consultation with the COE and USFWS (U.S. Fish & Wildlife Service), the District agreed to create four acres of tidal marsh habitat on the District's 72-acre parcel adjacent to CMER, as mitigation for the erosion impacts. A conceptual design report and a draft environmental IS (Initial Study) for the marsh restoration project, which proposed the restoration of three and a half acres of tidal wetlands, two acres of seasonal wetlands, and the relocation of a public access easement that exists on the levee surrounding the parcel, were prepared in 1999. Preparation of Final

Plans and Specifications and acquisition of permits from the Town of Corte Madera, the COE, USFWS and BCDC resumed in September 2003 with the award of a Professional Services Agreement to Philip Williams & Associates. The COE met with District staff in March 2004 and stated they wanted to re-evaluate the proposed mitigation plan as well as perform a new JD (Jurisdictional Determination) of the entire 72-acre parcel. The consultant has performed the new JD. The District and COE will meet to further discuss the project.

Contract Time Expended as of April 5, 2008

Project	Contract	Contract Working Days	Elapsed Contract Days	Authorized Contract Time Extension Days	Contract Time Expended
GGB Seismic Retrofit of South Approach (Phase II) (SOJV)	99-B-5	1,300 (calendar days)	2,493	790 (NOTE 1)	119.3%
Larkspur Ferry Terminal Administration Bldg. Improvements (KCK Builders, Inc.) *NOC 4/29/08*	2007-FT-3	180	272	0	151.1%

NOTE 1 – 787 days added to the contract time for the authorized extra work of repairing and painting at the South Approach Viaduct and the Fort Point Arch.

Fiscal Impact

There is no fiscal impact relative to this status report.

DJM/dh