



Agenda Item No. (3)

To: Building and Operating Committee/Committee of the Whole  
Meeting of August 24, 2023

From: John R. Eberle, Deputy District Engineer  
Ewa Z. Bauer-Furbush, District Engineer  
Denis J. Mulligan, General Manager

Subject: **APPROVE ACTIONS RELATIVE TO PROCUREMENT AND  
IMPLEMENTATION OF e-BUILDER CONSTRUCTION PROJECT  
MANAGEMENT SOFTWARE FOR THE GOLDEN GATE SUSPENSION  
BRIDGE SEISMIC RETROFIT PROJECT**

### **Recommendation**

The Building and Operating Committee recommends that the Board of Directors approve the following actions relative to procurement and implementation of a construction project management software for the *Golden Gate Suspension Bridge Seismic Retrofit Project* (Project #1923):

1. Authorize award of Contract No. 2023-B-054, *Construction Project Management Software*, to e-Builder, Inc., in a total not-to-exceed amount of \$375,323 to implement construction management software and provide licenses for 50 users for a term of one year, with options for an additional four years, with the understanding that sufficient funds are available in the FY 23/24 Bridge Division Capital Budget for Project #1923 to finance the \$49,129 software implementation fee and the first year \$59,033 licensing fee for the total of \$108,162; and that the licensing fees for the second through fifth year will be budgeted in the future year Project budgets; and,
2. Authorize execution of the Twelfth Amendment to Professional Services Agreement No. 2010-B-1 with HRD Engineering Inc., in an amount not-to-exceed \$399,637 to assist Engineering staff with custom configuration of the software modules and to provide staff training relative to the specific project application of the software, and to approve a contingency for this amendment in an amount of \$40,000, for the total of \$439,637, with the understanding that sufficient funds are available in the FY 23/24 Bridge Division Capital Budget for Project #1923 to finance the Twelfth Amendment and its contingency.

This matter will be presented to the Board of Directors at its August 25, 2023, meeting for appropriate action.

### **Summary**

Pursuant to Public Contract Code Section 6971, the California Legislature has authorized the Golden Gate Bridge, Highway and Transportation District (District) to utilize a Construction Manager/General Contractor project delivery method for construction, alteration, repair, rehabilitation or improvement projects on the Golden Gate Bridge.

Construction Manager/General Contractor project construction delivery method allows the District to engage a construction contractor, herein referred to as Construction Manager/General Contractor (CMGC), during the Project design stage to provide consulting services related to various aspects of the Project construction (Preconstruction Services), including developing construction means and methods, construction work access plan, construction schedule and establishing a construction contract price. After construction plans and specifications for the Project are finalized, the District plans to request that the CMGC prepare and submit a price for the Project construction. If the proposed price is accepted by the District, a Construction Contract will be issued to the CMGC so that the construction of the Project can begin. If the proposed price is not accepted by the District, the District, in its sole discretion, reserves the right to end the CMGC's participation in the Project and advertise the Project for construction bids.

By Resolution No. 2018-049, the Board of Directors approved the use of the Construction Manager/General Contractor procurement method for the construction of the Golden Gate Suspension Bridge Seismic Retrofit Project (also referred hereto as Project or Golden Gate Suspension Bridge Seismic Retrofit Project).

Implementation of the Project will require collaborative participation of the following parties as members of the Project Team:

- District's Project Management staff
- FHWA and Caltrans oversight staff
- CMGC staff
- Design Consultant staff
- Independent Construction Estimator and Scheduler
- Project Technical Review Panel
- Other District's Project Consultants

### **e-Builder Software**

During Preconstruction and Construction Phases of the Project, a large volume of documents will be prepared and exchanged to support effective flow of information among all involved parties and to record all aspects of the Project implementation. It is anticipated that the Project will generate thousands of documents that must not only be filed and tracked but also shared among the members of the Project Team.

The Engineering Department currently files project documents on District's servers and uses electronic spreadsheets developed by staff to keep track of documents. Staff also develops tracking logs to monitor and manage the status of submittals and the reviews of documents. The current document control system is very burdensome to manage and does not allow the sharing of documents among parties. The District's Engineering Department determined that, to efficiently

manage the Project, a construction project management and document control software is needed. The software must have the ability to digitally store all documents in a safe environment; allow designated personnel to access the documents; facilitate efficient exchange of documents to support collaboration; be able to track historical changes to documents, including ensuring that the most recent versions of drawings and documents are readily available; and, be able to track work progress and schedule. The software implementation must include training of staff and have vendor support resources available.

Engineering staff has investigated several software programs, such as e-Builder, Quickbase, Project Wise and Procore, to determine which would be the most appropriate for this Project by meeting the above requirements. Staff determined that e-Builder was the only software program that possessed the features necessary for this Project. e-Builder is a fully integrated cloud-based construction program management software for owners managing capital projects. The software is designed to address the specific needs of owners from planning stages through construction and operation. e-Builder connects all internal and external stakeholders to efficiently manage exchange of documents and communications among all of the project participants. e-Builder provides one integrated system to manage the cost, schedule and scope of a project as it moves from planning to construction and operation. The system is modular, and entirely accessible and configurable via the Internet making it a fast system to deploy. e-Builder has been used by many public agencies across the country to manage implementation of their capital projects, and by consultants and contractors involved in those projects.

e-Builder is available through the General Services Administration (GSA) Cooperative Purchasing Program that allows state and local governments to purchase IT equipment, software and services through the multiple award schedule. Staff determined that the e-Builder's cost proposal is consistent with the established GSA pricing which has been determined to be fair and reasonable. The software implementation fee and license fees for 50 users for the first year, with options to renew the licenses for years two through five, are presented in the table below:

<b>CONTRACT ITEM</b>	<b>FEE</b>
e-Builder Software Implementation Cost (First Year)	\$49,129
Annual Licensing Fees (First Year)	\$59,033
Option 1 - Annual Licensing Fees (Second Year)	\$61,984
Option 2 - Annual Licensing Fees (Third Year)	\$65,084
Option 3 - Annual Licensing Fees (Fourth Year)	\$68,338
Option 4- Annual Licensing Fees (Fifth Year)	\$71,755
<b>TOTAL</b>	<b>\$375,323</b>

The scope of the e-Builder, implementation services include:

- Deployment of the e-Builder Enterprise Essential Package software consisting of the following ten modules:  
  
Core; Cost & Funding (Budget); Project Contracts Management; Process (15 preconfigured processes); Forms Module (60 preconfigured forms); Schedule; Document Templates; Dashboards; Reports (50 preconfigured reports); Submittal Template; and of EZ File Transfer Tool and Import/Export Toolkit.
- Staff training consisting of initial walk-through training, administrator training, and end user training.

Staff recommends that the Building and Operating Committee recommend that the Board of Directors authorize the execution of Contract No. 2023-B-054, *Construction Project Management Software*, with e-Builder, Inc., in a total not-to-exceed amount of \$375,323, to implement construction management software and provide licenses for up to 5 years and 50 users, according to the fee schedule presented in this staff report.

#### **Twelfth Amendment to PSA No. 2010-B-1 with HDR Engineering**

It will be necessary after the initial deployment of the software and training by e-Builder, Inc., to customize the software modules to streamline the project management processes and procedures that will be utilized by the Engineering Department during the Project implementation. It will also be required to establish administrative and access protocols to protect the electronic project management system from unauthorized access and use, and to provide the up-to-date training of staff to assure proper utilization of the customized software modules as the Project progresses.

Staff has determined that engagement of the Project design consultant, HDR Engineering, would provide for the most efficient and effective customization of the software to adjust it to the specific needs of the Project management and for the staff training. Under Professional Services Agreement No. 2010-B-1, the District has contracted with HDR Engineering, Inc., to provide design services for the Project. HDR is thoroughly familiar with the Project and the project management processes and procedures used by the Engineering Department. HDR staff is also experienced in customization and use of the e-Builder software on other major transportation projects that HDR was retained for as a consultant by public agencies.

Staff has negotiated a cost proposal with HDR for such services in an amount not-to-exceed \$399,637. Staff has found this cost proposal to be reasonable in terms of the consultant's budgeted labor hours to perform the requested scope of services and consistent with HDR's audited labor and overhead billing rates.

Staff recommends that the Building and Operating Committee recommend that the Board of Directors authorize the execution of the Twelfth Amendment to PSA No. 2010-B-1 with HDR, in the not-to-exceed amount of \$399,637 for assistance with customization of the e-Builder software and staff training.

HDR will be compensated for actual time expended and expenses incurred up to the not-to-exceed amount. Staff also recommends that a contingency for this Amendment in the amount of \$40,000 be established for any additional scope of services that may develop as work progresses.

The District's Disadvantaged Business Enterprise (DBE) Program Administrator has determined no DBE or Small Business Enterprise participation is anticipated during the performance of the contract neither on the Twelfth Amendment.

### **Fiscal Impact**

The Seismic Retrofit Phase IIIB CMGC Project (Project #1923) is included in the FY 2023/24 Bridge Division Capital Budget with a total project budget of \$9,861,845.

Sufficient funds are available in the Project budget to finance the procurement in the amount of \$108,162 of the e-Builder Enterprise software implementation and one year license for 50 users, and to finance the Twelfth Amendment to PSA No. 2010-B-1 with HDR Engineering in the not-to-exceed amount of \$399,637 for the assistance with the e-Builder software module customization and staff training, and a contingency in the amount of \$40,000 for this amendment.

### **History of PSA No. 2010-B-1:**

	<b>DATE APPROVED</b>	<b>DESCRIPTION</b>	<b>AMOUNT</b>	<b>SOURCE OF FUNDS</b>
PSA No. 2010-B-1	11/17/2010	Original Contract PSA No. 2010-B-1, Phase IIIB Design Services; Resolution No. 2009-070	\$18,258,232	100% Federal (part of the Phase IIIB Design budget)
1 <sup>st</sup> Amendment	10/3/2012	Wind-Lock Repair Design; (under the GM authority)	\$24,576	100% District (not part of the Phase IIIB Design budget)
2 <sup>nd</sup> Amendment	7/3/2013	Additional Wind-Lock Repair Design; (under the GM authority)	\$11,449	100% District (not part of the Phase IIIB Design budget)
3 <sup>rd</sup> Amendment	9/26/2013	No cost time extension	\$0	
4 <sup>th</sup> Amendment	3/4/2015	EDD Testing, Resolution No. 2015-008	\$1,521,789	100% Federal (part of the Phase IIIB Design budget)
1 <sup>st</sup> Addendum to 4 <sup>th</sup> Amendment	1/25/2016	Additional EDD Testing; (under the GM authority)	\$152,034	

	DATE APPROVED	DESCRIPTION	AMOUNT	SOURCE OF FUNDS
		Total 4 <sup>th</sup> Amendment	\$1,673,823	
5 <sup>th</sup> Amendment	10/9/2015	Bid support during advertising period of the Wind Retrofit, Contract No. 2016-B-1, Resolution No. 2015-090 ----- Actual Spent  Remaining Balance reallocated to 2 <sup>nd</sup> Addendum to 7 <sup>th</sup> Amendment, Resolution No. 2020-028	\$70,469  ----- \$45,160  (\$25,309)	100% Federal  (part of the Wind Retrofit Construction budget)
6 <sup>th</sup> Amendment	12/31/2016	No cost time extension	\$0	
7 <sup>th</sup> Amendment	1/16/2017	Engineering support services during the Wind Retrofit Project construction, Resolution No. 2016-088	\$300,000	100% Federal  (part of the Wind Retrofit Construction budget)
1 <sup>st</sup> Addendum	12/18/2019	Additional engineering support services during the Wind Retrofit construction	\$30,000	
2 <sup>nd</sup> Addendum	5/29/2020	Additional engineering support services during the Wind Retrofit construction	\$106,752	
3rd Addendum	01/25/2021	No cost time extension	\$0	
<i>Proposed 4<sup>th</sup> Addendum, this report</i>		<i>Additional engineering support services during the Wind Retrofit construction</i>  ----- <i>Proposed Total 7<sup>th</sup> Amendment</i>	<i><u>\$40,000</u></i>  ----- <i><u>\$476,752</u></i>	

	<b>DATE APPROVED</b>	<b>DESCRIPTION</b>	<b>AMOUNT</b>	<b>SOURCE OF FUNDS</b>
8 <sup>th</sup> Amendment	3/6/2017	Additional design services, Resolution No. 2017-017	\$2,200,000	100% Federal (part of the Phase IIIB Design budget)
9 <sup>th</sup> Amendment	May 26, 2017	Wind tunnel testing, Resolution No. 2017-047	\$191,000	100% Federal (part of the Phase IIIB Design budget)
1 <sup>st</sup> Addendum to 9 <sup>th</sup> Amendment	11/20/2017	Additional wind tunnel testing, Resolution No. 2017-106	\$216,500	
2 <sup>nd</sup> Addendum to 9 <sup>th</sup> Amendment	07/27/2020	Additional wind tunnel testing, Resolution No. 2020-044	\$260,218	
3 <sup>rd</sup> Addendum to 9 <sup>th</sup> Amendment	06/01/2021	Additional wind tunnel testing, Resolution No. 2020-044 contingency	\$39,033	
4 <sup>th</sup> Addendum to 9 <sup>th</sup> Amendment	06/25/2021	Additional wind tunnel testing and acoustic analysis of the new bridge railing, Resolution No, 2021-043	\$130,420	
		Total 9th Amendment	\$837,171	
10 <sup>th</sup> Amendment	8/14/2017	Assistance with preparation of the Risk Assessment Plan and Major Project Management Plan, Resolution No. 2017-068	\$399,000	100% Federal (part of the Phase IIIB Design budget)
11 <sup>th</sup> Amendment	6/26/2019	Additional design services to develop stainless steel welding	\$235,500	100% Federal

	<b>DATE APPROVED</b>	<b>DESCRIPTION</b>	<b>AMOUNT</b>	<b>SOURCE OF FUNDS</b>
		procedures for the fabrication of the energy dissipation devices, Resolution No. 2019-037		(part of the Phase IIIB Design budget)
<i>12<sup>th</sup> Amendment (proposed)</i>	<i>This staff report</i>	<i>e-Builder software module customization and staff training</i>	<i>\$399,637</i>	<i>100% Federal (part of the CMGC Preconstruction Phase Project Budget)</i>
		<b>TOTAL PSA AMOUNT <i>Proposed</i></b>	<i>\$24,561,300</i>	