



Agenda Item No. (4)

To: Building and Operating Committee/Committee of the Whole  
Meeting of May 28, 2020

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

Subject: **APPROVE ACTIONS RELATIVE TO PROFESSIONAL SERVICES AGREEMENT NO. 2010-B-1, GOLDEN GATE BRIDGE SEISMIC RETROFIT PHASE IIIB DESIGN SERVICES, WITH HDR ENGINEERING, INC.**

### **Recommendation**

The Building and Operating Committee recommends that the Board of Directors approve the following actions relative to Professional Services Agreement (PSA) No. 2010-B-1, *Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services*:

1. Authorize execution of the Second Addendum to the Seventh Amendment to Professional Services Agreement (PSA) No. 2010-B-1, *Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services*, with HDR Engineering, Inc., Walnut Creek, CA, in an amount not to exceed \$106,752, for continuation of engineering support services during construction of the Golden Gate Bridge Wind Retrofit Project (Project #1528), for the total Seventh Amendment amount of \$436,752; and,
2. Establish a 10% contingency for the addendum in the amount of \$10,600,

with the understanding that sufficient funds to finance the Second Addendum to the Seventh Amendment to the PSA and its contingency are available in the budget for construction of the Golden Gate Bridge Wind Retrofit Project (Project #1528).

This matter will be presented to the Board of Directors at its May 29, 2020, meeting for appropriate action.

### **Summary**

On August 14, 2009, by Resolution No. 2009-070, the Board of Directors authorized execution of a Professional Services Agreement, PSA No. 2010-B-1, with HDR Engineering, Inc., to prepare the final design and plans and technical specifications for the Golden Gate Bridge Seismic and Wind Retrofit of the Suspension Bridge, Phase IIIB, Project. By Resolution No. 2014-107, the construction of the Wind Retrofit was separated from the Phase IIIB construction project and

included in construction Contract 2016-B-1 that also involves construction of the Golden Gate Bridge Physical Suicide Deterrent System. The inclusion of the Wind Retrofit in Contract 2016-B-01 was necessary to mitigate any effect the Physical Suicide Deterrent System could have on the Suspension Bridge.

At its December 16, 2016, meeting, the Board of Directors, by Resolution No. 2016-087, authorized the award of construction Contract No. 2016-B-01, *Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Projects*, to Shimmick Construction Company, Inc./Danny's Construction Company LLC, a Joint Venture. The Suspension Bridge Wind Retrofit portion of the construction involves removal and replacement of the west sidewalk handrail and installation of a wind fairing along the west side of the Suspension Bridge main span. The construction time of Contract 2016-B-01 is 47 months.

Consistent with established engineering practice, and as referenced in the PSA with HDR Engineering, Inc., the administration and management of the Wind Retrofit construction requires that the Project design consultant provide engineering support services during construction of the Wind Retrofit. HDR Engineering, Inc., as the consultant responsible for the design, is uniquely qualified and capable to perform the design engineering support services during construction.

At its December 16, 2016, meeting, the Board of Directors, by Resolution No. 2016-088, authorized the General Manager to execute Amendment No. 7 to PSA No. 2010-B-1, *Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services*, to HDR in the amount of \$300,000, to perform the above noted services, and approved a contingency for Amendment No. 7 to the PSA in the amount of \$30,000. The Notice to Proceed was issued February 13, 2017. The services consist of: (1) reviewing and recommending approval of Contractor's technical submittals, working drawings, and requests for substitutions; (2) preparing written responses to Contractor's requests for information regarding the design; (3) providing recommendations for the resolution of different site condition issues during construction; and, if necessary, (4) preparing plans and specifications for construction contract change orders covering changes to the structural and other construction details.

The wind retrofit fabrication and installation was assumed to take place within the first 24 months of the project. The actual fabrication and installation has not progressed as planned and has exceeded the originally planned duration. The number of requests for information, work plans and shop drawings submitted by the construction contractor and the number of coordination meetings and interactions between the consultant and Golden Gate Bridge, Highway and Transportation District (District) have exceeded the amounts originally planned and required more effort than had been originally anticipated. In May 2019, staff reviewed the remaining Amendment No. 7 budget and determined that an increase to the Amendment No. 7 amount was required in order to pay for the additional effort and costs associated with the delay in completing the Wind Retrofit construction oversight. On December 18, 2019, Addendum No. 1 to Amendment No. 7 in the amount of \$30,000 was issued using the authorized PSA contingency.

In March 2020, the construction contractor informed the District that the west sidewalk handrail replacement and wind fairing installation would not be completed until January 2022. Staff has performed a review of the remaining Wind Retrofit work and the remaining Amendment No. 7 budget and determined that to carry on the wind retrofit construction engineering design services through January 2022, the Amendment No. 7 amount has to be increased. The extended construction engineering support services will involve reviews of the construction contractor's

request for information related to the design details and installation aspects of the wind retrofit, review of the construction contractor's work plans associated with the installation of the wind retrofit, assisting the District with review and resolution of any wind retrofit field issues that may arise, preparing Contract Change Orders as necessary, and provide engineering consultation regarding disputes that may arise between the contractor and the District during construction.

Engineering staff requested, and HDR Engineering, Inc., has provided, a cost proposal in the amount of \$106,752, for the requested additional scope of Wind Retrofit construction engineering support services. Engineering staff has reviewed the proposal and found it to be reasonable in terms of the consultant's budgeted labor hours to perform the additional scope of services requested by the District and it was consistent with HDR Engineering, Inc.'s audited labor and overhead billing rates.

The District's Disadvantaged Business Enterprise (DBE) Program Administrator has determined HDR's DBE subconsultant will perform 24.3% of the additional scope of work included in this Second Addendum.

Staff recommends that the Building and Operating Committee recommend that the Board of Directors authorize the execution of the Second Addendum to Amendment No. 7 to PSA No. 2010-B-1, with HDR Engineering, Inc., in the not to exceed amount of \$106,752, to perform the additional services as presented in this report. The consultant will be compensated for actual time expended and expenses incurred. Staff also recommends that a contingency for this Second Addendum, in the amount of \$10,600, be established for any additional scope of services that may develop while work progresses.

### **Fiscal Impact**

The *Golden Gate Bridge Wind Retrofit Project* (Project #1528), is included in the FY 2019/2020 Bridge Division Capital Budget at a total cost of \$11,860,000 (100% Federal funding). The budget for Project #1528 includes a budget in the amount of \$1,423,206 for Construction Engineering Services, which includes the Wind Retrofit construction engineering support services.

It is proposed that the \$106,752 cost of the Second Addendum to Amendment No. 7 to PSA No. 2010-B-1 with HDR and its \$10,600 contingency, for the total amount of \$117,352, be financed with the \$32,340 remaining balance of the authorized \$77,500 Amendment No. 5 to the PSA No. 2010-B-1, Construction Engineering Bid Support Services, budget and its contingency, which is included in the Project #1528 Construction Engineering budget, and with a reallocation of \$85,012 from the Project #1528 District Staff and General Project Expenditures budget.

The following is the 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	100% Federal (part of the Phase IIIB Design budget)
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; <i>proposed to relocate to 2<sup>nd</sup> Addendum to 7<sup>th</sup> Amendment</i>	\$70,469 ----- \$45,160  <u>(\$25,309)</u>	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	\$300,000	100% Federal (part of the Wind Retrofit

1 <sup>st</sup> Addendum	12/18/2019	construction, Resolution No. 2016-088	\$30,000	Construction budget)
2 <sup>nd</sup> Addendum <i>proposed</i>		Additional engineering support services during the Wind Retrofit construction	<u>\$106,752</u>	
		Additional engineering support services during the Wind Retrofit construction	----- <u>\$436,752</u>	
		Proposed Total 7 <sup>th</sup> Amendment		
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	November 20, 2017	Additional wind tunnel testing, Resolution No. 2017-106	\$216,500	100% Federal (part of the Phase IIIB Design budget)
10 <sup>th</sup> Amendment	August 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	June 26, 2019	Additional design services to develop stainless steel welding procedures for the fabrication of the energy dissipation devices, Resolution No. 2019-037	\$235,500	100% Federal (part of the Phase IIIB Design budget)
		<b>TOTAL PSA AMOUNT <i>proposed</i></b>	\$23,690,758	

**TABLE 1b: PROJECT BUDGET - #1528, Wind Retrofit Construction**

BUDGET ELEMENT		BUDGET ELEMENT AMOUNT	PROPOSED ADJUSTME NT	ADJUSTED AMOUNT
Construction Contract		\$9,488,038	0	\$9,488,038
Construction Contingency		\$948,756	0	\$948,756
Construction Engineering:		\$1,423,206	0	\$1,423,206
	CONSTR. ENGINEERING SUB- ELEMENT	CONSTR. ENG SUB- ELEMENT BUDGET		
1	District Staff and General Project Expenditures	\$650,591		
	Proposed Revision	<u>(\$85,012)</u>		
	Proposed Revised Budget	<u>\$565,579</u>		
2	Construction Engineering Bid Support, 5 <sup>th</sup> Amendment and Contingency to PSA 2010-B-1 with HDR	\$77,500		
	Proposed Revision	<u>(\$32,340)</u>		
	Proposed Revised Budget	<u>\$45,160</u>		
3	Construction Engineering Support, 7 <sup>th</sup> Amendment, including 1 <sup>st</sup> Addendum to PSA 2010-B-1 with HDR	\$330,000		
	Proposed 2 <sup>nd</sup> Addendum, including contingency (Proposed in this report)	<u>\$117,352</u>		
	Proposed Revised Budget	<u>\$447,352</u>		
4	Environmental Compliance PSA 2017-B-09 Resolution No. 2017-002	\$67,979		

5	Interim Construction Scheduling and Claim Support PSA 2017-B-17 GM Report	\$7,000			
6	Construction Scheduling and Claim Support PSA 2018-B-07 Resolution No. 2017-105	\$174,636			
7	Steel Fabrication Shop Inspection PSA 2018-B-06 Resolution No. 2017-115	\$115,500			
<b>SUBTOTAL CONSTR. ENG., INCLUDING THE PROPOSED AMENDMENT</b>		<b>\$1,423,206</b>	<b>AVAIL BUDGET: \$1,423,206</b>		
<b>TOTAL PROJECT BUDGET</b>			<b>\$11,860,000</b>	<b>0</b>	<b>\$11,860,000</b>

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