



Agenda Item No. (3)

To: Building and Operating Committee/Committee of the Whole
Meeting of February 25, 2021

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

Subject: **AUTHORIZE APPROVAL OF CONTRACT CHANGE ORDER NO. 31 TO
CONTRACT NO. 2016-B-01, GOLDEN GATE BRIDGE PHYSICAL
SUICIDE DETERRENT SYSTEM AND WIND RETROFIT PROJECT**

Recommendation

The Building and Operating Committee recommends that the Board of Directors authorize approval of Contract Change Order (CCO) No. 31 to Contract No. 2016-B-01, *Golden Gate Bridge Suicide Deterrent System and Wind Retrofit Project*, in the amount of \$1,132,331, for modifications to the Suspension Bridge Suicide Deterrent System (SDS) end net panel configuration, with the understanding that sufficient funds are available in the Contract No. 2016-B-01 construction contingency to finance this CCO.

This matter will be presented to the Board of Directors at its February 26, 2021, meeting for appropriate action.

Summary

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 (Contractor).

The SDS portion (Project #1526) of Contract No. 2016-B-01 involves construction of a tensioned horizontal stainless steel wire mesh net suspended on stainless steel boarder cables that are connected to and supported by cantilevered steel brackets along the west and east sides of four Golden Gate Bridge structures: the South Approach Viaduct, the Fort Point Arch, the Suspension Bridge, and the North Approach Viaduct. The net and support brackets will be located approximately twenty feet below the sidewalk and will extend out about twenty feet.

On the Suspension Bridge, the typical net support brackets are attached to the stiffening truss vertical members and are spaced 50 feet on center. The net support brackets and the net panels they support that are adjacent to Pylons S1 and N1 and the south and north sides of the main towers are different from the typical brackets and are called end net panels. The end net panels are built

of heavier steel support brackets and are bolted to and braced against the stiffening truss bottom chord so they are strong enough to resist the loads imparted onto them from the tensioned net and border cables and to transfer these loads into the stiffening truss.

After the Contractor submitted the Suspension Bridge SDS end net panel support bracket shop drawings, engineering staff determined that the Suspension Bridge SDS end net panels would interfere with energy dissipation devices (EDDs) to be installed as part of the upcoming Golden Gate Bridge Phase IIIB Seismic Retrofit (Phase IIIB) project. The EDDs are approximately 26-foot long devices that will be installed onto the Suspension Bridge stiffening trusses at the interfaces with Pylons S1 and N1 and main towers. Engineering staff and the Phase IIIB design consultant determined that EDDs could not be installed with the SDS net in place and that an approximately 100-foot long portion of the net at the twelve interface locations would have to be removed to provide sufficient clearance for rigging of the EDDs. The original design of the SDS net system did not allow for such partial removal of the net at the end net panels because, if a portion of the net was removed, the remaining portion of the net would not maintain the required tension and geometry and would not properly function. Hence, the end net panels had to be reconfigured by installing an independent functioning net panel in each of the twelve 100-foot long interface areas and by moving the end net panels 100 feet away from their original location. The SDS design consultant developed revised Contract Drawings detailing the modifications.

Staff sent the revised drawings with a request for a cost and time proposal for the modifications to the Contractor. The Contractor has submitted a cost proposal of \$2,261,206.93 and has reserved its rights to an unspecified contract time extension and unspecified costs associated with the time extension. The Contractor's proposal is based on crediting the cost of work that was modified by CCO No. 31 using the bid prices and pricing the cost of the work covered by CCO No. 31 using much higher pricing. The proposal also includes costs for additional lane closures, additional access platforms, material storage and handling, engineering, management, consulting and overhead that were excessive and not proportionate to the change. The Contractor has not provided a justification for contract time extension and costs associated with the undefined time extension.

In parallel, Engineering staff and its cost consultant have developed a cost estimate for CCO No. 31 by pricing the actual changes to the net system at each location based on the bid prices, cost adjustments for labor, equipment, additional management and engineering equitable with the increased scope, and contract allowed overhead and profit rates and have determined that the revisions to the work resulted in a cost increase of \$1,132,331. Staff and its schedule consultant have analyzed whether CCO No. 31 will impact the final completion of the work under the Contract and have determined that the change does not warrant a Contract time extension.

Engineering staff and its cost consultant reviewed the Contractor's proposal and determined it to be unfair and not equitable with the CCO No. 31 scope of work and not compliant with the Contract requirements for development of cost proposals for changes to the work under the Contract (e.g., mark-up for indirect costs and profit). The Contract states that, in the event that the parties cannot reach agreement concerning the compensation terms for the changed work, the Golden Gate Bridge, Highway and Transportation District (District) will make payment in such amount as the Engineer may determine to be fair and equitable. In such event, an approved CCO will be issued to reflect the amount to be paid by the District.

Staff and the Contractor cannot reach an agreement concerning the compensation for the change, including the determination of no extension of Contract time. Therefore, as provided for in the

Contract, staff recommends that approved CCO No. 31 be issued in the amount of \$1,132,331 for the labor, equipment, and material costs associated with the change and with no time extension. Staff has discussed this change with the Federal Highway Administration (FHWA) and Caltrans and has received their concurrence with proposed CCO No. 31.

The District's Disadvantaged Business Enterprise (DBE) Program Administrator has determined no DBE participation is anticipated with the scope of work for CCO No. 31.

Staff recommends that the Building and Operating Committee recommends that the Board of Directors authorize the approval of CCO No. 31 to Contract 2016-B-01 as described in this staff report.

Fiscal Impact

The *Golden Gate Bridge Physical Suicide Deterrent System Project* (Project #1526) is included in the FY 2020/2021 Bridge Division Capital Budget at a total cost of \$196,235,868. The budget for Project #1526 includes a Contract 2016-B-01 contingency in the amount of \$22,405,213. The total estimated cost of the issued to-date and pending CCOs, including this CCO No. 31, is \$4,001,007.33. Sufficient funds are available in the Contract contingency to finance the \$1,132,331 price of CCO No. 31.

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