

July 6, 2016



GOLDEN GATE BRIDGE
PHYSICAL SUICIDE DETERRENT SYSTEM
FEDERAL-AID PROJECT: BHLS-6003(051)
and
WIND RETROFIT
FEDERAL-AID PROJECT: BHLS-6003(052)

Contract No. 2016-B-1

To: Prospective Bidders

RE: **Response to Bidders' Question No. 270 through 274**

Ladies and Gentlemen:

The following are the responses to questions submitted by prospective bidders and designated as Bid Question No. 270 through 274:

BID QUESTION No. 270:

Field Verifications - 8-1.08D, 8-1.08E, 8-1.08F

These specification sections require the Contractor to, "Complete field verifications and measurements..." prior to start of fabrication for Structural Steel, Suicide Deterrent Net System, and Traveler System, respectively.

The Contractor assumes it will perform the field verification process, fabricate and install based on the information gathered and not be required to perform any follow-up field verification measurements after each phase of the project (e.g. before structural steel is fabricated, after structural steel is installed, but prior to net system is fabricate, etc.). Please, confirm this approach is acceptable.

RESPONSE:

See Addendum 11 for revised Section 8-1.08.

See Addenda for revised Section 60-1 and Section 60-2.

The Contractor's proposed approach to perform all the field measurements and verifications at one time and not perform any follow-up field verification is not acceptable. In accordance with Section 5-1.26A, Field Measurements, exact field measurements are the Contractor's responsibility and the Contractor is solely responsible for the correct fit of all new construction.

It is not clear from the bidder's question how they will verify the controlling dimensions necessary for the proper installation of elements in a subsequent phase when the initial phase has not yet been installed. Revised section 60-1.03C(3), Coordination, requires the Contractor to coordinate the SDNS Fabrication Working Drawings with the Net Support Fabrication Working Drawings which may require additional field measurements and verification after the Net Supports are fabricated and/or installed. Revised Section 60-2.04B, Field Measurements, provides a list of field measurements the Contractor is required to perform for the maintenance traveler system. The list includes measurements required prior to installation of the crane rails and trolley beams and their connections, and measurements required after the rails and beams and their connections are installed, so for the maintenance traveler system, the Contractor cannot perform all of the required field measurements at one time.

Section 5-1.23A, General, provides requirements for taking field measurements, performing field verification and resolving field conflicts prior to the submittal of any Working Drawings and for including copies of the field measurements including the resolution of field conflicts in the submittal of Working Drawings. Working Drawings submitted without complete documentation of all field measurements and resolution of field conflicts will be considered as an incomplete submittal and will be returned to the Contractor without review by the Engineer.

Whether or not the Contractor will need to perform field measurements and verifications after each phase of the project depends on the methods and types of field measurements and verifications performed by the Contractor and when these field measurements and verifications are performed. Working drawings are required whenever work, either temporary or permanent attaches to the Bridge structure. The Contractor must schedule and perform field measurements and resolve field conflicts as needed to fulfill the Contract requirements and not submit working drawings for a particular item of work until all field measurements have been performed and field conflicts have been resolved for that item of work. Also, as stated above, the Contractor is solely responsible for the correct fit of all new construction.

BID QUESTION No. 271:

The Contractor assumes it will perform the field verification process, fabricate and install based on the information gathered and not be required to perform any follow-up field verification measurements after each phase of the project (e.g. before structural steel is fabricated, after structural steel is installed, but prior to net system is fabricate, etc.). Please, confirm this approach is acceptable.

If not, does this subsequent field verification require a separate Work Plan approval prior to commencing the subsequent field verification?

RESPONSE:

See the District's response to Bid Question No. 270. The Contractor's proposed method as stated in Bid Question No. 270 are not acceptable.

A separate work plan may or may not be required for subsequent field measurements and verifications depending on if the Contractor's previously approved Field Measurement Access Plan may be used for the subsequent work. In accordance with Section 8-1.08, Conditions for Beginning Field Measurements and Verifications, prior to starting field measurements and verifications at a particular structure of the Bridge, the Contractor must submit and obtain approval of a Field Measurement Access Plan for that structure. Once the access plan for a structure is approved, the Contractor may use the approved access plan for performing field measurements and verifications at that structure of the Bridge at any time as long as the Contractor complies with the provisions and details of the approved access plan. If the Contractor elects not to comply with the approved access plan, the Contractor must submit and obtain approval of a revised or new plan which will be used for future field measurements and verifications.

BID QUESTION No. 272:

The Contractor assumes it will perform the field verification process, fabricate and install based on the information gathered and not be required to perform any follow-up field verification measurements after each phase of the project (e.g. before structural steel is fabricated, after structural steel is installed, but prior to net system is fabricate, etc.). Please, confirm this approach is acceptable. If not, do the results of the subsequent field verification need to be submitted and approved by the District prior to start of fabrication of the subsequent component? If so, this will extend the Contract duration, due to the timing of installation of components on the bridge, and the lead time of subsequent components (net system and traveler system).

4. The Contractor assumes it will be permitted to proceed (if the initial installation was within the specified tolerances) at its own risk . Please, confirm this approach is acceptable.

RESPONSE:

See the District's response to Bid Question Nos. 270 and 271. The Contractor's proposed approach to perform all field measurements and verifications at one time and not perform any follow up field verification is not acceptable. In accordance with Section 5-1.26A, Field Measurements, exact field measurements are the Contactor's responsibility and the Contractor is solely responsible for the correct fit of all new construction.

The results of the subsequent field verifications must be submitted to the District prior to the start of fabrication of the subsequent component. In accordance with Section 5-1.23A, General, Working Drawings must be submitted and approved prior to the start of fabrication of the work involved on those Working Drawings. Section 5-1.23A provides requirements for taking field measurements, performing field verification and resolving field conflicts prior to the submittal of any Working Drawings and for including copies of the field measurements including the resolution of field conflicts in the submittal of Working Drawings. Working Drawings submitted without complete documentation of all field measurements and resolution of field conflicts will be considered as an incomplete submittal and will be returned to the Contractor without review by the Engineer.

The Contractor is responsible to schedule and execute the work including field measurements and verifications in accordance with the Contract requirements to fully and finally complete the entire work called for under the Contract within the time set forth in Section 8-1.05, Time.

BID QUESTION No. 273:

44 14-11.01B(4)

The second paragraph begins, "At all locations where abrasive blasting or mechanical methods are used to remove lead-based paint from steel and other structures, a closed containment system with a negative air ventilation system must be utilized."

Please confirm localized abatement performed for the purpose of flame cutting for steel removal, attachment of welds, field drilling, or spot painting on faying surfaces, that vacuum systems without closed containment can be used.

RESPONSE:

The information provided in this question is insufficient to determine whether an alternative to a closed containment system with a negative air ventilation system may or may not be allowed for field drilling or spot painting on faying surfaces. The Contractor must comply with the Contract requirements.

See Addendum 12 for revised Section 15-4.01A(1).

In accordance with revised Section 15-4.01A(1), Summary, when cutting existing steel for removal, the Contractor is responsible for the safety of their workers and the public, and must comply the requirements by Cal-OHSA, including Title 8 Section 1532.1. In addition, when cutting existing steel, the Contractor must comply with their approved Lead Compliance Plan, their approved Health and Safety Plan and their approved Site Operations and Materials Handling Plan. The abatement and containment required for the purpose of flame cutting will need to comply with the requirements in revised Section 15-4.01A(1).

Note that, as specified in Section 48-3.03, field welding of new steel to existing steel or of temporary structures to existing steel is not allowed.

For locations where new steel is to be attached to existing steel, including faying surfaces and areas where field drilling for installing new fasteners is to be performed, the existing steel must be blast cleaned in accordance with Section 59-2.03B(2)(b), Blast Cleaning, prior to painting. In accordance with Section 14-11.01B(4), Collection System and Containment Plan, blast cleaning must consist of abrasive blasting and requires a closed containment system with a negative air ventilation system, conforming to Class 1A as specified in Section 4.2.2.1 Guide of the Steel Structures Painting Council (SSPC) Steel Structures Painting Manual.

BID QUESTION No. 274

Drawing No. S180/Bid Question #208

Bid Question #208 is assuming a constant movement of the bridge which might have an influence on the final configuration and installation.

Drawing S180 shows tension forces and mesh geometry, assuming that the construction is in a "neutral" position. In the response of bid question #208 it is stated, that the SDNS work plan must include provisions for installing the SDNS, such as the installation complies with the geometry and tension requirements, and tolerances shown on the Contract Drawings.

Can the Designer of the SDNS confirm, that the continually moving of the bridge is considered in the values shown on the Drawing No. S180, Table 1?

RESPONSE:

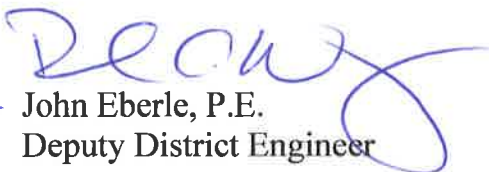
See Addenda for revised Section 60-1 and Contract Drawings.

The values shown in Contract Drawing S180, Table 1, assume that the Bridge is in a "neutral" position.

The largest movements of steel trusses, such as vertical and horizontal deflections due to live load, temperature and wind, occur at the Main Span of the Suspension Bridge. These movements have been assessed as having insignificant effect on the values shown in Table 1. Note that the effects of these movements are only a fraction of the geometry and tensile force tolerances specified in the Notes on Contract Drawing S180.

The relative movements that occur at the interfaces of bridge structures have been accounted for by un-tensioned net panels and the border cables with extra lengths. Please see Contract Drawing Nos. S115, S121 and S230.

Sincerely,


for John Eberle, P.E.
Deputy District Engineer