

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. 266 through 269**

Ladies and Gentlemen:

The following are the responses to questions submitted by prospective bidders and designated as Bid Question No. 266 through 269:

BID QUESTION No. 266:

In reference to the District's response to Bid Question No. 75, and the revisions/additions to Section 7-1.04 Public Safety included in Addendum No. 3 referring to Type K temporary railing, we offer the following questions:

1. The last paragraph of Section 7-1.04, added in Addendum No. 3, requires the installation of Type K temporary railing to separate any open traffic lane and any closed traffic lane where workers or equipment are present on the roadway of the Bridge. This added requirement significantly reduces the available timeframe to perform work within the closed lanes of the Bridge.

Based on lane closure table included in Section 12-4.05B for Tues-Thurs operations, conversations with traffic control subcontractors, and the Authority's answer to LOGGED BID QUESTION No. 75 we offer the following estimate of the effort involved to implement the configuration shown on Contract Drawing C008 and labeled "Lane Closure 3 NB Lanes Work in GGB Lanes 4, 5 and 6", including the installation of Type K temporary railing added by Addendum No 3:

20:00 – 20:30

Authority personnel shifts moveable barrier from 3N/3S to 4N/2S. Lane 3 remains closed with traffic cones. Movable barrier is between GGB lanes 2 and 3.

23:00 – 00:00	Contractor reduces traffic to one lane NB by shifting GGB lanes 5 and 6 to GGB lane 3. GGB lanes 4,5 and 6 are closed with traffic cones.
00:00 – 01:00	Contractor removes traffic cones and installs Type K temporary railing between open traffic lane GGB 3 and work area in GGB lanes 4, 5 and 6.
01:00 – 02:00	Contractor performs work behind Type K temporary rail in GGB lanes 4,5 and 6.
02:00 – 03:00	Contractor removes Type K temporary railing between lanes 3 and 4.
03:00 – 04:00	Contractor shifts northbound traffic from GGB lane 3 to GGB lanes 4, 5 and 6.
04:00 – 05:00	Authority personnel shifts moveable barrier from 4N/2S to 2N/4S by moving movable barrier from between lanes 2 & 3 to between lanes 4 & 5.
05:00	Traffic returns to 4N/2S configuration.

This scenario allows the Contractor a maximum of **one (1) hour** to perform work between 02:00 and 03:00. The estimated timeframe to perform work is similar for the configuration shown for the closure of GGB lanes 1,2 and 3.

Additionally, the nature of the operation to install and remove the Type K temporary railing in such a confined and narrow section of bridge roadway introduces and additionally inherently dangerous operation for both the Contractor's workers and the traveling public.

In view of the complicated and time consuming nature of the work that will be performed during the nighttime lane closures, has the Authority fully considered the cost and schedule impacts of the revised language for Section 7-1.04 included in Addendum No. 3?

RESPONSE:

See Addendum 11 for revised Sections 8-1.08 and 12-4 and revised Contract Drawings including Contract Drawing No. C008. See Addendum 12 for revised Section 12-4.02A.

See the Revised Response to Bid Question No. 75 and the response to Bid Question No. 268.

The requirement to install Type K temporary railing between an open traffic lane and a closed traffic lane where the contractor's personnel, equipment and materials are present in a traffic lane will remain. This requirement has been included in the plans and specifications for the Golden Gate Bridge Seismic Retrofit Phases 1, 2 and 3a and the Moveable Median Barrier construction projects without incident. The contractors for those projects were able to finish the projects within the allotted time. The use of Type K temporary railing is necessary to protect workers on the narrow bridge roadway.

See Addendum 12 for revisions to Section 12-4.02A, General. This section has been revised as follows:

“The District will be responsible for moving the moveable median barrier and setting traffic pylons for the District's lane arrangements. You must perform all other lane closures. After completion of each shift of work, and prior to the lane opening deadline shown on the Lane Closure Charts, remove the lane. The District will move the moveable median barrier to the bridge lane arrangement required for the lane closure prior to the time such lane closure is allowed to start as specified in Section 12-4.05B. The District will move the moveable median barrier to the bridge lane arrangement shown in the table below after the time the lane closure is specified in Section 12-4.05B to end removed.”

With regard to the estimated timeline presented within the above question for performing work within a 3 northbound lane closure, the District has the following comments:

- 1. The description given for timeframe of 20:00 to 20:30 is incorrect. After the move of the moveable median barrier, bridge traffic lane #3 will not remain closed with traffic cones as given the description. All 4 northbound lanes will be open until the Contractor sets up the traffic control for the 3 northbound lane closure, which may begin at 11 PM on Mondays through Thursdays, and at Midnight on Fridays, excluding holidays, as shown on the charts in Section 12-4.05B, Freeway and Expressway Lane Requirements.*
- 2. The description given for timeframe of 23:00 to 00:00 is incorrect. Traffic in bridge traffic lane #'s 4, 5 and 6 will be shifted to lane #3.*
- 3. The description given for timeframe of 00:00 to 01:00 is incorrect. The traffic cones are not removed at the Type K temporary railing. The traffic cones remain in place. See revised Contract Drawing No. C008 for details.*
- 4. The Contractor's timeline may show the removal of the Type K temporary railing at a later timeframe than the 02:00 to 03:00 shown. In accordance with revised Section 12-4.02A, the Contractor must remove the Type K temporary railing and the lane closure prior to the lane opening deadlines shown on the Lane Closure Charts in Section 12-4.05B, which is 5 AM Tuesday through Friday, and 7 AM on Saturday.*

5. *The description given for timeframe of 03:00 to 04:00 is incorrect. Traffic is not shifted from bridge traffic lane #3 to lane #'s 4, 5 and 6. The traffic control is removed and northbound bridge traffic lane #'s 3, 4, 5 and 6 become open to northbound traffic. The Contractor's timeline may show the removal of the lane closure and the shifting of the traffic from lane #3 to lanes #3, 4, 5 and 6 at a later timeframe than the 03:00 to 04:00 shown as long as the removal of the lane closure is complete by 5 AM.*
6. *The description given for timeframe of 04:00 to 05:00 is incorrect. The District will move the moveable median barrier after the contractor removes the lane closure. The Contractor's timeline may show the District's shift of the moveable median barrier starting at 05:00 instead of 04:00 shown.*
7. *The description given for timeframe of 05:00 is incorrect. Traffic returns to 2N/4S lane arrangement after the District moves the moveable median barrier to the 2N/4S lane arrangement after 5:00.*

The Contractor must be efficient in the set-up of the traffic control and Type K temporary railing. The Contractor must perform all of the required preliminary work and have its traffic control crews and equipment staged and ready prior to the specified time when northbound traffic can be reduced to one lane so the Contractor can start installing the traffic control at the specified time in accordance with the charts in Section 12-4.05B and not wait for the preliminary work to finish or the crew or equipment to be staged. In addition, the Contractor must have the temporary railing crews and equipment staged and ready when the traffic control is in place, so the placement of the railing can start soon after the traffic control is in place. During past projects, the District has observed that contractors have been able to have the traffic control for a 3 northbound lane closure and Type K temporary railing in place within about 1 hour after the specified time when northbound traffic may be reduced down to one lane but the actual time depends on the efficiency and timeliness of the contractor's operations.

In addition, the Contractor must be efficient in the removal of the traffic control and Type K temporary railing. The Contractor must have its crews and equipment staged and ready to start the temporary railing removal so there is no delay in removing the temporary railing or the traffic control. During past projects, the District has observed that contractors have been able to remove the temporary railing and the traffic control for a 3 northbound lane closure in about 1 hour but the actual time depends on the efficiency and timeliness of the contractor's operations.

Based on observations from previous construction projects, the District expects the Contractor to have about 4 to 5 hours of actual work time when a 3 northbound lane closure is in place on a Monday through Thursday night and between about 5 to 6 hours of actual work time when a 3 southbound lane closure is in place on a Monday through Thursday night. The actual work time is dependent on the efficiency and the timeliness of the Contractor's operations.

As stated in Section 8-1.08A, in order to complete all the Contract work within the specified Contract time, the Contractor must work on all Bridge structures simultaneously. This will require the Contractor to establish more than one work area in a lane closure across the Bridge and will require the placement of Type K temporary railing within the lane closure at more than one work area location. The Contractor must schedule its work and have the resources necessary to efficiently place and remove the temporary railing at the different work areas within the lane closure.

BID QUESTION No. 267:

Traffic Control

Bid Question No. 75 - Questions & Responses 1-4.

As a general follow-up to the District responses to Bid Question No. 75, please confirm the reconfiguration of the moveable median barrier by the District will occur **within the allowable lane closure periods** defined in Section 12-4.05B and thereby **shorten** the allowable closure periods for the Contractor.

Response 1 & 2. - Please confirm the District will require **30 minutes** to reconfigure the moveable median barrier from the 3N/3S arrangement to either the 4S/2N or 4N/2S configuration at the start of the allowable closure period, thereby **shortening the allowable closure period for the Contractor by 30 minutes at the beginning of the allowable closure period.**

Response 3 & 4. - Please confirm the District will require **60 minutes** to reconfigure the moveable median barrier and set traffic pylongs from a 4N/2S lane arrangement to a 2N/4S arrangement at the end of the allowable closure period, thereby **shortening the allowable closure period for the Contractor by 60 minutes at the end of the allowable closure period.**

For a Friday night closure, please clarify how much time the District will require to reconfigure the moveable median barrier from a 4N/2S lane arrangement to a 3N/3S arrangement. Will the reconfiguration occur at the end and within the allowable closure period, thereby shortening the allowable closure period for the Contractor?

RESPONSE:

See the revised response to Bid Question No. 75.

See Addendum 11 for revised Section 12-4 and revised and new Contract Drawings.

See Addendum 12 for revisions to Section 12-4.02A, General. This section has been revised as follows:

“The District will be responsible for moving the moveable median barrier and setting traffic pylons for the District's lane arrangements. You must perform all other lane closures. After completion of each shift of work, and prior to the lane opening deadline shown on the Lane Closure Charts, remove the lane. The District will move the moveable median barrier to the bridge lane arrangement required for the lane closure prior to the time such lane closure is allowed to start as specified in Section 12-4.05B. The District will move the moveable median barrier to the bridge lane arrangement shown in the table below after the time the lane closure is specified in Section 12-4.05B to end removed.”

BID QUESTION No. 268:

Traffic Control

Bid Question No. 75 - Questions & Responses 1-4.

As a follow-up to the District's response to Bidder's Question #75, the fourth answer states that the District will require the Contractor to completely demobilize all construction operations at least 60 minutes earlier than the allowable traffic work window shown in Chart 1 (Section 12-4.05B). This barely leaves a three-hour work window increment to build half of this project. The following is a quick recap to demonstrate the minimal work window for work on the west side.

1. In Section 12-4.02A General (page 12-21), the “general schedule of District's daily lane arrangements” will have the lanes arranged in the 3S / 3N after 6PM
2. Chart 1 (Section 12-4.05B) (page 12-25) allows the contractor to start taking lanes at 8PM
 - a. The Contractor will be allowed to take the second lane starting at 11PM
 - b. The Contractor MUST have it restored by 5AM
 - c. The allowable TOTAL work window to perform work in the 4N/2S configuration is 6 hours
3. To get the movable barrier into the 4N/2S configuration
 - a. 30 minutes is required by the District to reconfigure the moveable barrier
4. The Contractor will need to setup traffic control
 - a. Assume approximately 45 minutes to setup
5. AFTER proper traffic control is established, the Contractor will need to setup the protective barrier to separate work zone from traffic
 - a. 15 minutes MINIMUM is required to perform this properly
6. The Contractor will need to remove all protective barrier and traffic control
 - a. Assume 30 minutes is required
7. The District will need to configure the moveable barrier in the 4S/2N configuration by 5AM
 - a. The District requires 60 minutes

8. The difference between the TOTAL allowable work in the 4N/2S configuration and restoring the moveable barrier by 5AM
 - a. The delta is 3 TOTAL hours of potential work in the 4N/2S configuration
 - b. This assumes ideal setup and take down by both the Contractor and the District
 - c. This does NOT account for inclement weather or other factors which are NOT in the control of the Contractor or District
9. This is not a large enough work window to construct this technically challenging work. Half of the entire Contract work quantities are going to be built in the 4N/2S configuration.

In order to mitigate this situation, will the District consider leaving the moveable barrier in the 3N/3S configuration, and place both directions of traffic on the 3S side. The contractor will still need to setup traffic control to divide traffic and the District will still need 30 minutes to move the barrier into the 4S/2N configuration by 5AM. This traffic setup will save approximately 75 minutes of setup time. This will provide for nearly a 4 hour and 15 minute work window.

RESPONSE:

See the Revised response to Bid Question No. 75.

See Addendum 11 for revised Section 12-4 and revised Contract Drawings.

See Addendum 12 for revisions to Section 12-4.02A, General. This section has been revised as follows:

“The District will be responsible for moving the moveable median barrier and setting traffic pylons for the District's lane arrangements. You must perform all other lane closures. After completion of each shift of work, and prior to the lane opening deadline shown on the Lane Closure Charts, remove the lane closure. The District will move the moveable median barrier to the bridge lane arrangement required for the lane closure prior to the time such lane closure is allowed to start as specified in Section 12-4.05B. The District will move the moveable median barrier to the bridge lane arrangement shown in the table below after the time the lane closure is specified in Section 12-4.05B to end removed.”

The District will not consider leaving the moveable median barrier in the 3N/3S lane arrangement and placing both the northbound and southbound traffic on the south side of the barrier.

According to revised Section 12-4.02A, the Contractor does not have to account in its schedule for the District moving the moveable median barrier to its specified arrangement and will have the full amount of time specified in the lane closure charts in Section 12-4.05B to work on the Bridge roadway.

As stated in Section 8-1.08A, in order to complete all the Contract work within the specified Contract time, the Contractor must work on all Bridge structures simultaneously. This will require the Contractor to establish more than one work area in a lane closure across the Bridge and will require the placement of Type K temporary railing within the lane closure at more than one work area location. The Contractor must schedule its work and have the resources necessary to efficiently place and remove the temporary railing at the different work areas within the lane closure.

BID QUESTION No. 269:

This is in response to our team's evaluation of the contents of Addendum #12.

Notice to Contractors page 3 or 4, and revised **Section 3-1.05 Contract Bonds** state the Contractor needs to provide a warranty bond for \$30,000,000. In Section 3-1.05 the third paragraph, second sentence reads, "The Warranty Bond must guarantee your faithful performance of the Contract in compliance with all terms, conditions, and requirements specified in the Contract Documents, including but not limited to, the obligation to correct, repair or replace defects in the SDNS materials or workmanship and/or the SDNS materials or discovered before or after the date of acceptance of the completed work."

In conjunction with the provisions of **6-3.06 Guarantee**, please, confirm our understanding that this Warranty Bond is for a total of \$30,000,000 and a duration of 24 months after Contract acceptance. The Contractor will provide this Warranty Bond to cover ALL work associated with the Contract. The warranties for the paint, traveler, and SDNS (59-2.03D, 59-3.04, 60-2.02D(3)(d), and 60-1.04, respectfully) will be provided directly from the manufacturers of those systems.

Additionally, since a Warranty Bond is not commercially available beyond 5 years, it is not possible for this warranty bond to cover the full term of the requested manufacturer's warranty of 10 years.

Please, confirm the duration of the warranty bond. Also, please confirm, during the period the bond is in place, the manufacturer is expected to have a concurrent manufacturer's warranty to overlap this duration (for a total duration specified in the above mentioned specification sections).

RESPONSE:

Note that for the first 2 years after final acceptance of the Contract by the Engineer, all warranties under the Contract must be guaranteed by the Performance Bond.

The Warranty Bond is required to be for the term of three (3) years, beginning the 3rd year after the final acceptance of the Contract by the Engineer, or until the satisfactory resolution of all outstanding warranty claims. The Warranty Bond is required to be delivered to the District as a condition of the final Acceptance of the Contract by the Engineer. When the Warranty Bond is delivered to the District, specific dates defining its term of three years must be written in the spaces shown in parentheses on the bond form. The Warranty Bond states:

“WHEREAS, as a condition to the final acceptance of the Contract by the Engineer, Principal is required to furnish a warranty bond...”

“THE CONDITION OF THIS OBLIGATION IS SUCH that if the above-bound Principal, or its heirs, executors, administrators, successors, or assigns approved by the District, promptly and faithfully perform all obligations, covenants, and conditions set forth in the Contract, including without limitation the fulfillment of all warranties during the period of (two years after the date of final acceptance) to (five years after final acceptance) or (b) the satisfactory resolution of all outstanding warranty claims, and shall indemnify, defend, protect, and hold harmless the District as stipulated in the Contract, then this obligation shall be null and void; otherwise it shall be and remain in full force and effect.”

The Warranty Bond is for an amount of \$30,000,000. Because the only warranty specified to be longer than two years is the SDNS warranty, the Warranty Bond is to cover the defects in the SDNS only. Revised Section 3-1.05, CONTRACT BONDS (PUB CONT CODE §§ 10221 AND 10222), states:

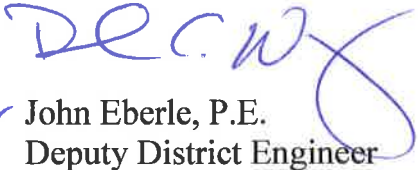
“If you are awarded the Contract, prior to and as a condition to the final Contract acceptance by the Engineer, provide a Warranty Bond in an amount of thirty million dollars (\$30,000,000). The Warranty Bond must guarantee your faithful performance of the Contract in compliance with all terms, conditions, and requirements specified in the Contract Documents, including, but not limited to, the obligation to correct, repair or replace defects in the SDNS materials or workmanship and/or the SDNS materials or workmanship that do not conform to the Specifications or other requirements of the Contract, whether discovered before or after the date of acceptance of the completed work.”

The SDNS Manufacturer's warranty is required to be in place for 10 years from the final acceptance of the Contract by the Engineer and, as a result, will overlap the Performance and Warranty Bond periods. A formal assignment of the Manufacture's warranty to the District for years 6 through 10 of the warranty period must be delivered to the District as a condition of the final acceptance of the Contract by the Engineer. Revised Section 60-1.04, Warranty, issued in Addendum 14 states:

“Provide a 10-year manufacturer's warranty conforming to the provisions in Section 6-3.06 for defects in the SDNS materials and workmanship.

You must execute a formal assignment to the District of said manufacturer 's warranty. The assignment is to be effective for years 6 through 10 of the warranty period and must be delivered to the District before the final acceptance of the Contract by the Engineer. "

Sincerely,



fw John Eberle, P.E.
Deputy District Engineer