Golden Gate Bridge Physical Suicide Deterrent System Project

City and County of San Francisco and County of Marin, California

Project 2006-B-17 04-MRN-101-GGHT Federal Project #: STPL-6003(030)

Prepared for:

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Prepared by:

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May 2008

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May 2008

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State of California Business, Transportation and Housing Agency

HISTORIC PROPERTY SURVEY REPORT

1. UNDERTAKING DESCRIPTION AND LOCATION								
District	County	Route (Local Agency)	Local Assistance Project Prefix	Post Miles (Project No.)	Charge Unit (Agreement)	Expenditure Authorization (Location)		
4	MRN	101	STPL	6003(030)		Project 2006-B-17		

(For Local Assistance projects off the highway system, use headers in italics)

Project Description:

(Insert project description here; refer reader to location and vicinity maps in HPSR)

The Golden Gate Bridge, Highway and Transportation District (District) is conducting a study of its proposed Golden Gate Bridge Suicide Deterrent System Project (Project) [04-MRN-101-GGHT, Project 2006-B-17; Federal Project #: STPL-6003(030)]. The Project will develop and evaluate alternatives for a potential physical suicide deterrent system for the Bridge. The Project Location and Vicinity (Figures 1 and 2), and the Area of Potential Effect (Figure 3), and Renderings 1A, 1B, 2A, 2B and 3 illustrating the Project alternatives, are provided in the attached HRER.

The Golden Gate Bridge (the Bridge) has a symmetrical design. Vertical bridge elements on the horizontal plane are generally based on increments of $12 \frac{1}{2}$ feet. For example, the outside handrail posts and the public safety rail posts are aligned at a spacing of $12 \frac{1}{2}$ feet. Additionally, light posts are 150 feet apart ($12 \times 12 \frac{1}{2}$ feet), and the suspender ropes are 50 feet apart ($4 \times 12 \frac{1}{2}$ feet). (Belvederes (24 widened areas located on both the east and west sidewalks) are $12 \frac{1}{2}$ feet long and centered between two suspender ropes. Maintenance gates on the public safety railing are spaced at 150 feet ($12 \times 12 \frac{1}{2}$ feet) and are aligned with the light posts. Vertical members of the stiffening truss are spaced at 25 feet and are aligned with the suspender ropes. Figure 2 shows a plan view of a section of the Bridge illustrating the relationship of these Bridge elements.

Several build alternatives have been developed from the three general physical concepts considered for this Project. The alternatives were developed after the first phase of the Project, wind tunnel testing, was completed. Wind tunnel testing on the generic concepts was performed first in order to determine the limiting characteristics of each concept with respect to wind. The wind tunnel testing and analysis determined that any physical addition to the Bridge would adversely affect the Bridge's aerodynamic stability. However, testing also determined that wind devices could be installed to mitigate the adverse effects associated with the additions.

All of the build alternatives developed and included in this document require the addition of one of two different types of wind devices. The first type of wind device is called a fairing and consists of a curved element placed at two locations below the sidewalk on the top chord of the west stiffening truss. The second type of wind device is called a winglet and consists of a curved element placed above the sidewalk at the top of the alternative posts.

The fairing wind device was previously evaluated as part of the District's seismic retrofit program and has been environmentally cleared. Therefore, this report will not discuss this device. The winglet is a new feature that has not been evaluated and as such, will be discussed in this report.

The following build alternatives would impede the ability of individuals to jump from the Bridge, as well as meet additional criteria established by the Golden Gate Bridge, Highway and Transportation District (District). During the screening process, these alternatives were evaluated for their ability to

meet the Project's purpose and need, which included the District's criteria. These alternatives include:

- Alternative 1A Add Vertical System to Outside Handrail
- Alternative 1B Add Horizontal System to Outside Handrail
- Alternative 2A Replace Outside Handrail with Vertical System
- Alternative 2B Replace Outside Handrail with Horizontal System
- Alternative 3 Add Net System that Extends Horizontally from Bridge (Add Net System)

Alternatives 1A, 2A and 3 were evaluated utilizing a fairing, while Alternatives 1B and 2B were evaluated utilizing a winglet. Each build alternative design has been developed to maintain the symmetry of the Bridge. The outside handrail posts, light posts, suspender ropes and belvederes would all remain at their current locations. There would be no changes to the stiffening truss.

Build Alternatives

Alternative 1A - Add Vertical System to Outside Handrail

Alternative 1A would construct a new barrier on top of the outside handrail (and concrete rail at north anchorage housing and north pylon). The barrier would extend 8 feet vertically from the top of the 4-foot high outside handrail for a total height of 12 feet. The barrier's vertical members would be comprised of ½-inch diameter vertical rods spaced at 6 ½ inches on center, leaving a 6-inch clear space between rods. The existing rail posts would be replaced with new 12-foot high outside rail posts at the same locations and of the same cross-section, size, material, and color of the original posts. The top horizontal header would consist of a chevron-shaped member matching the top element of the outside handrail. The vertical rods would be attached to the horizontal header and outside handrail. The entire system would be constructed of steel that would be painted International Orange, matching the material and color of the outside handrail. Transparent panels would be installed at the belvederes and towers on both sides of the Bridge. This alternative assumes that the modification to the outside handrail on the west side of the Bridge between the two main towers and the installation of the wind fairings have been completed as part of the previously approved seismic retrofit project.

Because maintenance workers would no longer be able to climb over the outside handrail to reach the below-deck maintenance traveler, gates would be located at a spacing of 150 feet on center to generally match the locations of the existing light posts and gates on the public safety railing. The gates would be 8 feet wide and 8 feet high (two 4 foot wide by 8 foot high panels), and match the appearance of the vertical system. The frame for each gate door would be constructed of 2-inch by 2-inch steel members. The gates would be located on top of the outside handrail. The outside handrail would remain in place.

Alternative 1B - Add Horizontal System to Outside Handrail

Alternative 1B would construct a new barrier on top of the outside handrail (and concrete rail at north anchorage housing and north pylon) consisting of $\frac{3}{8}$ -inch diameter horizontal steel cables at 6 inches on center leaving 5 $\frac{5}{8}$ inches clear space between cables. The cable diameter matches the cables on the public safety railing. The new barrier would extend 8 feet above the top of the 4-foot high outside handrail for a total height of 12 feet. The existing rail posts would be replaced with new 12-foot high

outside rail posts at the same locations and of the same cross-section, size, material, and color of the original posts. The entire system would be constructed of steel that would be painted International Orange, matching the material and color of the outside handrail. Transparent panels would be installed at the belvederes and towers on both sides of the Bridge.

A winglet would be placed on top of the outside rail posts to ensure aerodynamic stability and impede climbing over the barrier. The winglet would be a transparent 42-inch wide panel with a slight concave curvature extending approximately 2 feet over the sidewalk. The winglet would run the length of the suicide deterrent barrier, except at the north and south towers. The winglet would be notched at the suspender ropes and light posts.

Because maintenance workers would no longer be able to climb over the outside handrail to reach the below-deck maintenance traveler, gates would be located at a spacing of 150 feet on center to generally match the locations of the existing light posts and gates on the public safety railing. The gates would be 8 feet wide and 8 feet high (two 4 foot wide by 8 foot high panels), and match the appearance of the horizontal system. The frame for each gate door would be constructed of 2-inch by 2-inch steel members. The gates would be located on top of the outside handrail. The outside handrail would remain in place.

Alternative 2A – Replace Outside Handrail with Vertical System

Alternative 2A would construct a new vertical 12-foot high barrier consisting of ½-inch diameter vertical steel rods spaced at 4 ½ inches on center, leaving a 4-inch clear space between rods. A rub rail would be installed at the same height as the public safety railing (4 feet 6 inches). The existing rail posts would be replaced with new 12-foot high outside rail posts at the same locations and of the same cross-section, size, material, and color of the original posts. The top horizontal header would consist of a chevron-shaped member matching the top element of the outside handrail to be removed. The vertical rods would be attached to the header and bottom barrier element. The entire system would be constructed of steel that is painted International Orange, matching the upper 8 feet at the belvederes and towers on both sides of the Bridge. This alternative assumes that the modification to the outside handrail on the west side of the Bridge between the two main towers and the installation of the wind fairings have been completed as part of the previously approved seismic retrofit project.

Because maintenance workers would no longer be able to climb over the outside handrail to reach the below-deck maintenance traveler, gates would be located at a spacing of 150 feet on center to generally match the locations of the existing light posts and gates on the public safety railing. The gates would be 8 feet wide (two 4 foot wide panels) and 12 feet high, and match the appearance of the vertical system. The frame for each gate door would be constructed of 2-inch by 2-inch steel members. A rub rail would be located at a height of 4 feet 6 inches, matching the height of the public safety railing.

Alternative 2B – Replace Outside Handrail with Horizontal System

Alternative 2B would construct a new 10 foot high barrier consisting of $\frac{3}{8}$ -inch diameter steel horizontal cables. The cables in the lower 3 $\frac{1}{2}$ foot section would be spaced at 4.4 inches on center, while the cables in the upper 6 $\frac{1}{2}$ foot section would be spaced 6 inches on center. A rub rail would be installed at the same height as the public safety railing (4 feet 6 inches). The existing rail posts would be replaced with new 10-foot high outside rail posts at the same locations and of the same cross-

section, size, material, and color of the original posts. The entire system would be constructed of steel that would be painted International Orange, matching the material and color of the outside handrail. Transparent panels would be installed along the upper 6 $\frac{1}{2}$ foot portion at the belvederes and towers on both sides of the Bridge.

A winglet would be placed on top of the rail posts to ensure aerodynamic stability and impede climbing over the barrier. The winglet would be a 42-inch wide translucent panel with a slight concave curvature extending approximately 2 feet over the sidewalk. The winglet would run the length of the suicide deterrent barrier, except at the north and south towers. The winglet would be notched at the suspender ropes and light posts.

Because maintenance workers would no longer be able to climb over the outside handrail to reach the below-deck maintenance traveler, gates would be located at a spacing of 150 feet on center to generally match the locations of the existing light posts and gates on the public safety railing. The gates would be 8 feet wide (two 4 foot wide panels) and 12 feet high, and match the appearance of the horizontal system. The frame for each gate door would be constructed of 2-inch by 2-inch steel members. A rub rail would be located at a height of 4 feet 6 inches, matching the height of the public safety railing.

<u>Alternative 3 – Add Net System</u>

Alternative 3 would construct a horizontal net approximately 20 feet below the sidewalk and approximately 5 feet above the bottom chord of the exterior main truss. The net would extend horizontally approximately 20 feet from the Bridge and be covered with stainless steel cable netting incorporating a grid between 4 and 10 inches. The horizontal support system would connect directly to the exterior truss and be supported by cables back to the top chord of the truss. The support system for the netting would include cables that would pre-stress the netting to help keep it taut and not allow the wind to whip the netting.

The horizontal net would consist of independent 25-foot sections that can be rotated vertically against the truss to allow the maintenance travelers to be moved. The net and the steel horizontal support system would be painted to match the International Orange Bridge color. With this alternative there would be no modifications to the above deck Bridge features. This alternative assumes that the modification to the outside handrail on the west side of the Bridge between the two main towers and the installation of the wind fairings have been completed as part of the previously approved seismic retrofit project.

No-Build Alternative

The No-Build Alternative represents the future year conditions if no other actions are taken in the study area beyond what is already in place. The No-Build Alternative provides the baseline for existing environmental conditions and future conditions against which all other alternatives are compared. The No-Build Alternative would continue the existing non-physical suicide deterrent programs at the Bridge, as well as implement Bridge modifications approved as part of the seismic retrofit project.

Existing Suicide Deterrent Programs

Emergency Counseling Telephones

On November 5, 1993, by Board Resolution 93-264, the District upgraded the emergency motorist "call-box" telephone system on the Bridge sidewalks to also accommodate suicide prevention and crisis intervention calls. Additional phones were installed to expand the coverage area with a total of 11 phones located on both sidewalks. The system was modified to allow the Bridge security staff to instantly connect callers, at their request, to trained suicide prevention counselors at San Francisco Suicide Prevention's crisis line.

To comply with international convention regarding emergency telephones, the signs above the telephone call boxes were modified in color from black on yellow to white on blue. The wording was changed from "Emergency Telephone" to "Emergency Telephone and Crisis Counseling" and the international "telephone" icon was added. Further, in 2006, additional signs with blue with white lettering were added directly above the telephone call boxes that read: "Crisis Counseling, There is Hope, Make the Call. The Consequences of Jumping from this Bridge are Fatal and Tragic."

The phones are used both by potentially suicidal persons seeking assistance and by members of the public who wish to alert District authorities to persons that may be contemplating suicide. In recent years, the proliferation of cellular telephones has also increased the incidence of reporting by the general public of potential persons contemplating suicide.

Public Safety Patrols

On February 23, 1996, under Board Resolution 93-34, a Public Safety Patrol was initiated on the Bridge sidewalks with suicide prevention as one of its primary objectives. The patrols started on April 1, 1996. Under this program, the District's existing Bridge Patrol Program was re-oriented with an emphasis on patrolling the Bridge east sidewalk. The initial patrols were performed on foot and by scooter. In August, 1999, the Board authorized the formation of a bicycle unit within the Bridge Patrol ranks. Today the majority of sidewalk patrolling is done on bicycles. In December 2001, as a result of heightened security concerns, the Board authorized the hiring of additional Bridge patrol officers to expand the Bridge's security force. These new officers are trained in suicide prevention and intervention. In early 2003, the California Highway Patrol (CHP) deployed its own bicycle patrol officers on the Bridge, increasing law enforcement coverage even further. CHP officers are also trained in suicide intervention.

Employee Training

All Bridge security personnel, as well as several Bridge ironworkers who have volunteered to assist in suicide intervention and rescue activities, have received special training. In 2004, the District, CHP, and the U.S. Park Police jointly sponsored an intensive full-day training session on crisis intervention and suicide prevention. This course was attended by more than 120 law enforcement officers, District security and ironworker personnel. The course was conducted by a nationally renowned expert in the field of crisis intervention and by personnel from San Francisco Suicide Prevention, Inc.

Surveillance Cameras

In the 1960s, closed-circuit cameras were installed at the Bridge towers to remotely monitor traffic conditions. As a result of security system upgrades in the mid 1990s and again following September 11, 2001, additional cameras were installed at other locations on and around the Bridge. This network of cameras aids in directing intervention personnel.

Seismic Retrofit Project

Immediately following the 1989 Loma Prieta earthquake, a vulnerability study for the Bridge was conducted that concluded if a high magnitude earthquake centered near the Bridge occurred, there would be a substantial risk of impending collapse of the San Francisco and Marin Approach Viaducts and the Fort Point Arch, and extensive damage to the remaining Bridge structures. After determining that retrofitting the Bridge would be more cost-effective than replacement, a construction phasing plan was developed in 1996 to retrofit the Bridge. The seismic retrofit modifications were designed to maintain the historic and architectural appearance of the Bridge. The following phasing plan reflected the degrees of structural vulnerabilities:

- Phase I retrofit the Marin (north) Approach Viaduct
- Phase II retrofit the San Francisco (south) Approach Viaduct, San Francisco (south) Anchorage Housing, Fort Point Arch, and Pylons S1 and S2
- Phase III will retrofit the Main Suspension Bridge and Marin (north) Anchorage Housing and North Pylon

Phase I of the seismic retrofit project was completed in 2002. Phase II of the seismic retrofit project was completed in 2008. The third and final phase has been divided into two construction projects: Phase IIIA and Phase IIIB. Phase IIIA, which was awarded on March 28, 2008, will retrofit the north anchorage housing and north pylon. It is scheduled to be completed in 3 years. Phase IIIB, the seismic retrofit of the main span and towers, is planned to start in 20010. Phase IIIB includes a wind retrofit of the suspended span, including the replication of the west outside handrail between the Towers and the installation of wind fairings along the same length.

Wind Retrofit of West Handrail

In accordance with the findings of the wind study report conducted for the seismic retrofit project, the vertical members under the outside handrail on the west side of the Bridge between the two main towers will be modified to reduce the effects of the wind on the handrail. The retrofit modification will replace the existing vertical members and bottom rail with narrower members. The new vertical members will be spaced at 5 inches on center, which will help to increase the porosity of the handrail by allowing the wind to pass through the pickets more freely thus reducing the wind loads inducted upon these elements. The top rail and main support posts would remain unchanged.

Wind fairings will be installed at the west outer edge of the sidewalk and the top chord of the main stiffening truss. A quarter round fairing, with a radius of 19 inches, would be placed at the sidewalk's edge and a half round fairing, with a radius of 25 inches would be placed along the top chord of the stiffening truss. The fairings will be painted to match the existing Bridge color. The fairings radius and diameter will be equivalent to the width of the edge of sidewalk and top chord of the stiffening

truss of which they cover. This will retain the same scale and the same relationship of solids and voids of the main suspension truss's elevation. This modification was previously approved as part of the seismic retrofit project.

Construction Activities

Construction Staging Areas

Five potential staging areas have been identified. Four of the construction staging areas are located on the northern side of the Bridge in Marin County below the Marin Approach and Span 4 backspan. The four proposed construction staging areas on the north side of the Bridge would be located on existing parking lots and maintenance areas currently used for the Bridge operations. One staging area is located adjacent to the Bridge Toll Plaza within the City and County of San Francisco. This staging area would be located to the west of the Toll Plaza in an existing parking lot. Construction equipment and materials would be located within one or more of these construction staging areas. Storage of construction equipment and materials on-site would be limited to the staging areas.

Construction Activities

Construction of the new barrier would be done in sections, beginning on the west side of the Bridge and ending on the east side of the Bridge. Sidewalk and lane closures may be necessary during limited periods. Construction may take place during non-peak hours to minimize impacts to vehicles and other users of the Bridge. Lane closures would only be permitted during non-peak hours. It is anticipated that it would take 12 to 18 months per side to complete construction.

2. AREA OF POTENTIAL EFFECTS

The Area of Potential Effects (APE) for the Project was established by the District, the cultural resources consultant team, Alicia Otani, PQS Principal Architectural Historian, H.P. Tang, Local Assistance Engineer, and Moe Shakeria, Caltrans Project Manager. The APE was signed on November 2, 2007, and is provided in Figure 3, Appendix A of the attached HRER.

The APE for historic architectural resources includes two areas: General APE and Focused APE. The General APE was developed to encompass both the project area, and the contributing elements of the Golden Gate Bridge historic property that extend past the project area, namely the appurtenant approach viaducts (the Doyle Drive viaducts in San Francisco County). The Focused APE encompasses only those portions of the Golden Gate Bridge property that may be potentially affected by the Project: the main Bridge structures where the proposed Project would be constructed, and the construction staging areas in the Toll Plaza area and along Conzelman Road. The Project has no potential to effect historic properties outside of the Focused APE.

In consultation with Brett Rushing, PQS Archaeologist, it was determined that no archaeological study, and therefore, no archaeological APE are necessary because the construction of the Project will take place on the Golden Gate Bridge structure and the Project construction staging areas are located on previously established paved and graveled parking areas. No additional road rights-of-way, either permanent or temporary, will be required for this Project.

3. CONSULTING PARTIES / PUBLIC PARTICIPATION

- **X** Local Government (Head of local government, Preservation Office / Planning Department)
 - The District issued a Notice of Preparation (NOP) on June 14, 2007 and invited public agencies to participate in a meeting about the Project on July 17, 2007. Distribution list for the NOP is included in Appendix C of the HRER, along with meeting minutes and related correspondence from the participants. Attendees included: District staff; members of the consulting team; staff from the San Francisco Bay Conservation and Development Commission (BCDC); staff from California Department of Transportation (Caltrans); and staff from the Golden Gate National Recreation Area/National Park Service (GGNRA/NPS). The minutes of the meeting and correspondence related to the meeting are included in Appendix C.
 - The District, in conjunction with Caltrans, initiated consultation with SHPO following 36 CRF 800 and held a Project meeting on site at the Bridge to discuss Section 106 process on November 20, 2007. The meeting included Caltrans Local Assistance Staff and Architectural Historian Alicia Otania (Caltrans PQS), as well as OHP staff historians and Deputy SHPO in attendance.
- X Local Historical Society / Historic Preservation Group (also if applicable, city archives, etc.)
 - The District has prepared a letter to parties interested in historical resources. The letter was sent April 29, 2008 to seek comment and information pertaining to the historic significance of the Golden Gate Bridge and the potential effect the Project may have on the character-defining features of the property. Copies of the letter and the list of recipients are in Appendix C of the HRER. Responses to this letter will be appended to this document and will be included in the environmental document upon receipt.
 - Also see distribution of the NOP and public agency meeting participants described above.
- X Public Information Meetings (list locations, dates below and attach copies of notices)
 - The District directed the creation of a public information website for the Project at <u>www.ggbsuicidebarrier.org</u>. The website went "live," on May 11, 2007, and provides information about the Project, press releases, project document archives, links, and information about on-going technical and environmental studies. The site also provides a fully integrated public comment system, on-going opportunities for public input, contact information, and links to related projects.
 - Also see distribution of the NOP and public agency meeting participants described above.
 - On-going public participation includes District Board meetings, which are open to the public. Public comments received during formal public comment periods will be part of the public record and will be incorporated into the process and the environmental document. In addition, all comments received at District Board meetings will be reviewed by the Project team for consideration as they may relate to the Project.

4. SUMMARY OF IDENTIFICATION EFFORTS

- <u>X</u> National Register of Historic Places
- California Register of Historical Resources
- XXXXXX California Inventory of Historic Resources
- California Historical Landmarks
- California Points of Historical Interest
- State Historic Resources Commission

Month & Year: 1979-2002 & supplements Year: 1992 & supplemental information to date Year: 1976

Year: 1995 & supplemental information to date Year: 1992 & supplemental information to date Year: 1980-present, minutes from quarterly meetings

Year: 2006 & supplemental information to date

- Х Caltrans Historic Highway Bridge Inventory
- Archaeological Site Records [List names of Institutions & date below]
- Other sources consulted [e.g., historical societies, city archives, etc. List names and dates below] Х
 - Golden Gate Bridge Highway & Transportation District Files, January 2007-present.
 - Shields Library, University-Davis; January 2007-present.
 - California Room, Government Documents, California State Library; January 2007-present •
 - Northwest Information Center, historic resources records search request, March 2007.
 - California Department of Transportation, District 4, Maps Files, February 2008. •
 - Historic Photograph Collection, San Francisco Public Library, March-April 2007. •
 - Historic American Buildings Survey, Library of Congress, August 2007.
 - University of California-Berkeley, Bancroft Library, August 2007.
 - University of California-Berkeley, Environmental Design Archives, June 2007.
 - University of California-Berkeley, Water Resources Center Archives, June 2007.
- Results: (provide a brief summary of records search and research results, as well as inventory findings) Х
 - Several historic properties are located within the General APE, however none of these properties were subject to further study, because they were outside the Focused APE: individually listed historic highway bridges (Marina Viaduct 34 0014 and Presidio Viaducts 34 0019); Fort Point National Historic Site; Presidio of San Francisco National Historic Landmark District; and Forts Baker, Barry and Cronkhite Historic District. The United States Department of the Interior owns the land on which the Bridge is located and District has a permit from the department to use the land. Portions of the General APE are located within the boundaries of the Presidio of San Francisco National Historic Landmark District. The Fort Point National Historic Site is located under the Fort Point Arch between Pylon S1 and S2 of the Bridge. The Golden Gate Bridge is within the General APE and the Focused APE, see below.
 - The Focused APE for historic architectural resources encompasses the Golden Gate Bridge historic property. The contributing elements of this property located within the Focused APE include the Bridge (Bridge 27 0052), the Round House Gift Center building, and the Toll Plaza Undercrossing (Bridge 34 0069). The Golden Gate Bridge, Round House, and Toll Plaza Undercrossing, were subject to updated inventory and evaluation in the attached HRER.

5. PROPERTIES IDENTIFIED

X Properties previously listed or determined eligible (include date of listing or determination):

The Golden Gate Bridge and Round House, located within the Focused APE, have been previously determined eligible for listing in the National Register of Historical Places. The attached HRER presents updated inventory and evaluation data for these resources. Golden Gate Bridge. San Francisco and Marin counties, Route 101, Bridge 27 0052, OHP Status Code 2. Determined eligible for listing in the NRHP by the Keeper in 1977, and by consensus determination in 1980. The consensus determination found the Bridge significant, at the national level, under NRHP Criterion A, B, and C, with a period of significance of 1933-1938. Subsequent detailed analysis by the National Park Service in 1997, during preparation of a NHL nomination proposed significance under Criterion C only. The Criterion C significance appears to be accurate and is proposed as the correct designation in the updated evaluation of the property presented in the attached HRER. The National Landmark Nomination has not been accepted and the Bridge is not yet listed as an NHL. The Golden Gate Bridge is listed in the California Register of Historical Resources because it was designated California State Landmark No. 974 in 1987. The Bridge is also City of San Francisco Historic Landmark No. 222, designated in 1999. The Golden Gate Bridge was partly photographed for the Historic American Engineering Survey in 1985 (Survey number HAER CA-31). The Golden Gate Bridge property is a contributing element of the Presidio of San Francisco National Historic Landmark District, a district outside the Focused APE for this Project.

Toll Plaza Undercrossing. San Francisco Counties, Route 101, Bridge 34 0069, OHP Status Code 1. Determined eligible as a contributing element of the Presidio of San Francisco National Historic Landmark, updated nomination prepared by National Park Service, 1993.

X As assigned by FHWA, Caltrans has determined the following properties are **eligible**:

The Toll Plaza Undercrossing (34 0069) is an original component of the Golden Gate Bridge that appears to be eligible as a contributing element of the Bridge history property.

6. LIST OF ATTACHED DOCUMENTATION

- X Project Vicinity, Location, and APE Maps (see HRER attachments)
- X California Historic Bridge Inventory sheet (see HRER attachments)
- X Historical Resources Evaluation Report (HRER)
 - JRP Historical Consulting, LLC, "Historical Resources Evaluation Report, Golden Gate Bridge Suicide Deterrent System Project, County of San Francisco and County of Marin, California, Project 2006-B-17, 04-MRN-101-GGHT, STPL-6003(030)." May 2008.

7. FINDINGS – HPSR to File

X Not applicable.

8. FINDINGS – HPSR to SHPO

X As assigned by FHWA pursuant to U.S.C.326, Caltrans has determined that there are properties evaluated as a result of the project that are **eligible** for inclusion in the National Register within the project's APE. Under Section 106 PA Stipulation VIII.C, Caltrans requests SHPO's concurrence in this determination.

9. Findings for State-Owned Properties

(Check all that apply. Copy to CCSO. Transmit to SHPO if State-owned buildings or structures were evaluated or there are previously identified State-owned historic properties within the APE. Findings that are not applicable may be deleted)

X Not applicable; project does not involve Caltrans right-of-way or Caltrans-owned property.

10. CEQA IMPACT FINDINGS

- X Caltrans has determined that a finding of substantial adverse change to historical resources is appropriate for this project, pursuant to CEQA Guidelines §15064.5(b) because the project will cause adverse change to the following historical resources within the Project Area limits. See attached documentation.
 - The Golden Gate Bridge historical resource for the purposes of CEQA. All build alternatives would materially impair the historic integrity of Bridge as a historical resource. [The other contributing elements of this property located within the Focused APE include the main Bridge (Bridge 27 0052), the Round House Gift Center building, and the Toll Plaza Undercrossing (Bridge 34 0069), which would not be impacted as historical resources].

State of California Business, Transportation and Housing Agency

HISTORIC PROPERTY SURVEY REPORT

11. HPSR PREPARATION AND DEPARTMENT APPROVAL

Prepared by <i>(sign on line)</i> : District Caltrans PQS/Generalist:	PQS level and discipline]	Date
Prepared by: (sign on line)		
Consultant / discipline: Affiliation	Rebecca Meta Bunse, Architectural Historian JRP Historical Consulting, LLC, Davis, CA	Date
Reviewed for approval by: (sign on line)		
District 4 Caltrans PQS discipline/level:	Andrew Hope Principal Architectural Historian	Date
Approved by: <i>(sign on line)</i> District 4 EBC:	Jennifer Darcangelo Chief, Office of Cultural Resource Studies	Date

11. HPSR PREPARATION AND DEPARTMENT APPROVAL

Prepared by *(sign on line):* District <u>Caltrans</u> PQS/Generalist:

PQS level and discipline]

Date

California Department of Transportation

Prepared by: *(sign on line)* Consultant / discipline: Affiliation Rebecca Meta Bunse, Architectural Historian JRP Historical Consulting, LLC, Davis, CA

Date

Reviewed for approval by: (sign on line)

State of California Business, Transportation and Housing Agency

District 4 Caltrans PQS discipline/level:

Andrew Hope Principal Architectural Historian

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Approved by: *(sign on line)* District 4 EBC:

Jephifer Darcangelo Chief, Office of Cultural Resource Studies

Date

[HPSR form: 09-10-07]