



Agenda Item No. (5)

To: Building and Operating Committee/Committee of the Whole  
Meeting of September 21, 2023

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

Subject: **STATUS REPORT ON ENGINEERING PROJECTS**

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The following report is provided for informational purposes and no action is required. *Items that have changed since the last report are in this typeface.*

## Summary

### **BRIDGE FACILITIES**

Design Services for the Golden Gate Bridge Physical Suicide Deterrent System, RFP No. 2011-B-2. On January 22, 2010, the District issued the Final Environmental Impact Report and Environmental Assessment and Section 4(f) Evaluation with Finding of No Significant Impact for the Golden Gate Bridge Physical Suicide Deterrent System Project (Project) with the horizontal Net System as the environmentally superior alternative. On February 12, 2010, the Board of Directors approved a resolution that certified the Final Environmental Impact Report, adopted the Project, and adopted Findings of Fact, which includes a Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Plan.

The District has a Project website to inform the public regarding the Project. All Project documents, such as the Wind Report and the environmental studies, are available at the website: [www.ggbsuicidebarrier.org](http://www.ggbsuicidebarrier.org).

On July 28, 2010, the Metropolitan Transportation Commission (MTC) voted to provide \$5 million for the design of the Physical Suicide Deterrent System. On August 13, 2010, the Board of Directors, by Resolution No. 2010-068, authorized acceptance of \$5 million from MTC for design and added the design Project to the Fiscal Year 10/11 Bridge Division Capital Budget.

On August 13, 2010, the District posted on its website a Request for Proposals (RFP) to engage consultants to design and prepare construction bid documents for the Suicide Deterrent Net System. On June 24, 2011, the Board authorized the General Manager to award a Professional Services Agreement (PSA) for Design Services for the Golden Gate Bridge Physical Suicide Deterrent System, Contract No. 2011-B-2, to HNTB Corporation in an amount not to exceed \$3,990,000 upon receiving FHWA/Caltrans approvals of the Agreement. The Contract was awarded to HNTB Corporation on July 28, 2011. On October 11, 2013, the Board authorized execution of the Second Amendment to the Professional Services Agreement in the not-to-exceed amount of \$130,000 for the design of power supply lines to electric battery charging stations. On May 23, 2014, the Board authorized execution of a Fourth Amendment to the Professional Services Agreement with HNTB Corporation, in an amount not to exceed \$72,743, for review and coordination of the construction contract documents. On September 26, 2014, the Board authorized execution of a Fifth Amendment to the Professional Services Agreement with HNTB Corporation, in an amount not to exceed \$75,227 for a Value Engineering Study and a Sixth Amendment in an amount not to exceed \$65,492 for the design of a training rescue net.

On July 30, 2015, the final Value Engineering Study Report was sent to Caltrans.

On December 18, 2014, the Board, by Resolution No. 2014-107: 1) approved the final design of the Project; 2) approved the installation of the Physical Suicide Deterrent System as defined in the final design plans and technical specifications; 3) approved construction of the Physical Suicide Deterrent System in conjunction with the Suspension Bridge Wind Retrofit as part of the same construction contract; 4) approved the sequence of construction requiring installation of the Wind Retrofit prior to installation of the net fabric on the west side of the Suspension Bridge main span;

5) approved the conclusion of SDS Project's environmental revalidation that, based on the Project's final design review and an examination of the current conditions and supporting information, the original environmental document remains valid and there is no need for subsequent environmental review under state or federal law; and, 6) confirmed that the interpretation of the policy-level project criterion, listed in the Board of Directors Resolution No. 2005-033 as the tenth criterion, which states that the physical suicide deterrent system: "Must not in and of itself create undue risk of injury to anyone who comes in contact with the suicide deterrent system" is not applicable to nor intended to ensure that individuals who jump into the net, or otherwise end up in the net, would be free from injury.

On July 31, 2015, consultant submitted the draft 100% design plans.

On August 21, 2015, the National Park Service (NPS) provided a draft Special Use Permit (SUP) associated with the use of staging areas and access roads required for construction of the Project. On October 7, 2015, staff & NPS negotiated the final terms of the SUP. On October 9, 2015, the Board, by Resolution No. 2015-089, approved the permit and authorized the General Manager to execute the NPS SUP. The permit was executed on October 9, 2015.

On December 20, 2019, the Board, by Resolution No. 2019-086, authorized Amendment No. 1 to the National Park Service's Special Use Permit for construction of Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit, to extend the permit term to December 31, 2023, to pay an annual permit fee in an amount of \$48,717, and to increase the Project #1526 budget by \$194,868.

On August 21, 2015, the Board, by Resolution No. 2015-070, authorized the Ninth Amendment with HNTB Corp. for construction support services during advertisement and transferred \$355,182 from the construction project budget (1526) to the design project budget (1118) to finance this amendment.

On December 16, 2016, the Board, by Resolution No. 2016-089, authorized the Twelfth Amendment to PSA No. 2011-B-2, in the not to exceed amount of \$6,000,000 with HNTB Corporation for providing engineering support services during construction of the Physical Suicide Deterrent System Project as part of construction Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent and Wind Retrofit, and also authorized a contingency amount of \$600,000. On January 30, 2023, using the authorized contingency budget, the First Addendum to the Twelfth Amendment to PSA No. 2011-B-2 with HNTB Corporation in the amount not-to-exceed \$600,000 was executed for continuation of engineering support services during construction of the Physical Suicide Deterrent System Project.

On February 24, 2023, the Board, by Resolution No. 2023-015, authorized award of the First Addendum to the Sixth Amendment to PSA No. 2011-B-2 with HNTB Corporation in the amount not-to-exceed \$66,000 for engineering support services during construction of the rescue net.

Golden Gate Bridge Physical Suicide Deterrent System Environmental Revalidation, PSA No. 2015-B-10. On September 26, 2014, the Board of Directors, by Resolution No. 2014-081, authorized execution of Professional Services Agreement No. 2015-B-10, with AECOM in the not-to-exceed amount of \$30,000 and authorized an increase in FY14/15 Bridge Division Capital Budget in the amount of \$33,000. The Notice to Proceed was issued effective October 28, 2014. The consultant completed the Revalidation Report. The report was submitted to Caltrans on September 15, 2015.

Golden Gate Bridge Physical Suicide Deterrent and Wind Retrofit, Contract No. 2016-B-1. On June 27, 2014, the Board of Directors, by Resolution No. 2014-066, amended the FY 14/15 Bridge Division Capital Budget to include the construction of the Golden Gate Bridge Physical Suicide Deterrent System Project (Project) in the amount of \$76 million, with the understanding that the Project will be funded with \$22 million of federal Local Highway Bridge Program funds programmed by Caltrans, \$27 million of federal Surface Transportation Program funds programmed by the Metropolitan Transportation Commission, \$7 million of California Mental Health Service Act Funds, and \$20 million from District Reserves.

On December 19, 2014, the Board, by Resolution No. 2014-107, approved inclusion of the Golden Gate Bridge Wind Retrofit Construction Project, as a separate project in the fiscal year 2014-2015 Bridge Division Capital Budget, with the budget of \$8 million to be 100% federally funded.

On March 26, 2015, the Board, by Resolution No. 2015-026, adopted a finding that the Golden Gate Bridge Physical Suicide Deterrent and Wind Retrofit is unique and substantially complex, and therefore approved that up to a 10% retention may be withheld from progress payments due to the construction contractor until satisfactory completion of the work.

On September 16, 2015, staff submitted a request for authorization to proceed with construction of the project to Caltrans. On September 28, 2015, Caltrans and Federal Highway Administration authorized the project construction.

On October 13, 2015, the District advertised the construction contract, Contract No. 2016-B-1, for the Physical Suicide Deterrent System and Wind Retrofit. The pre-bid conference was held on December 9, 2015. On July 12, 2016, two bids were received and opened. The Board, by Resolution No. 2016-062, authorized staff to seek a 90 day extension of the bid validity period for all bids received for Contract No. 2016-B-1, in order to allow the development of a revised funding plan. Both bidders agreed to the 90 day extension of the bid validity.

On December 16, 2016, the Board, by Resolution No. 2016-087, approved actions relative to a revised funding plan for the construction of the Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit. The Board also authorized award of a contract to construct the Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit, Contract No. 2016-B-1, to Shimmick Construction Company, Inc./Danny's Construction Company LLC, JV, in the amount of \$142,051,868, and a contingency of \$27,578,969. The Notice to Proceed was issued effective February 13, 2017.

On April 13, 2017, a ceremony commemorating the beginning of construction was held.

On January 27, 2017, the Board of Directors, by Resolution No. 2017-003 authorized the execution of an on-call service agreement with the California Highway Patrol in an amount not to exceed \$2,000,000, for enforcement services during construction of Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Project. On March 1, 2017, the agreement was executed. On December 14, 2021, the First Amendment extending the agreement time from December 31, 2021, to December 31, 2022 was executed. On December 12, 2022, the Second Amendment extending the agreement time from December 31, 2022, to December 31, 2023 was executed.

On March 24, 2023, the Board, by Resolution No. 2023-024 authorized the Third Amendment to Agreement No. 16R350000, Construction Zone Enhanced Enforcement Program (COZEEP)

Services, with the Department of California Highway Patrol, increasing the budget by \$1,280,000 and extending the time through December 31, 2025.

On February 24, 2017, the Board, by Resolution No. 2017-018, approved revised General Manager's Authorization Limits for change orders to Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Project, and for Amendments to the related Professional Services Agreements.

On August 7, 2017, the Contractor began installing the temporary security fencing on the west sidewalk.

On August 14, 2017, the Contractor began installing the temporary security fencing on the east sidewalk. On September 7, 2017, the Contractor completed installation of the temporary security fencing.

On March 7, 2018, the Contractor began fabricating the SDS net supports, the new traveler rails, and the new west sidewalk bridge railing at their fabricator's facility in Oregon. The fabrication by this fabricator is complete. On August 3, 2022, the Contractor's new steel fabricator began fabrication of the remaining structural steel elements and the remaining net support and North Anchorage Housing vertical barrier structural steel elements. Fabrication of the remaining items was completed the last week of March 2023.

On March 14, 2018, Engineering staff met with the Contractor and its net system supplier to discuss fabrication and installation of a net mock-up to be used to verify full scale installation procedures. On August 30, 2018, the Contractor began construction of the mock-up in their yard in Richmond, CA, and on January 28, 2019, the Contractor completed the construction of the mock-up and submitted the installation report. On January 30, 2019, the District brought representatives from suicide prevention advocacy groups to view the mock-up.

On April 15, 2019, the Contractor's net manufacturer began fabrication of the net to be installed on the Bridge. The fabricator has completed fabrication of all the major portions of the net and has delivered them to the Contractor's yard. Corner sections, miscellaneous hardware, net panels for the travelers and extra material remain to be fabricated.

On July 11, 2018, the Contractor began nighttime bridge lane closures to facilitate preparatory work for the installation of the work platforms to be installed below the stiffening trusses of the Suspension Bridge. Nighttime lane closures are ongoing.

On June 14, 2018, the Contractor began paint abatement and primer coat painting at the new SDS bracket locations on the Suspension Bridge. Paint work is ongoing.

On August 14, 2018, the Contractor began installing the first of five work access platform in the Suspension Bridge to be used for the installation of the net supports, the interior traveler rails and the bottom traveler trolley beams. On September 24, 2018, the Contractor began installing the second and third work access platforms in the Suspension Bridge. The first platform was completed and ready for use on October 16, 2018. The second platform was completed and ready for use on December 14, 2018. The third platform was completed and ready for use on January 22, 2019. The fourth platform was completed and ready for use on February 25, 2019. On September 16, 2019, the Contractor began installing the fifth work access platform on Span 1 of the Suspension Bridge. The fifth platform was completed and ready for use on November 12, 2019.

On September 3, 2020, the Contractor began installation of the first of 60 fixed access platforms located in the Suspension Spans. The Contractor is continuing with the ten electric charging station platform installations. Electrical equipment placement is continuing at all ten locations.

On December 4, 2019, the Contractor began installing containment, abrasive blasting and painting the west sidewalk stringer and new side traveler rail support locations in Span 3 of the Suspension Bridge. On December 12, 2019, the Contractor began installing the new side traveler rail supports and trolley beams in Span 3 on the west side of the Suspension Bridge. The removal and replacement of the west side crane rails, trolley beams and rail chairs in Span 2 and Span 3, is complete.

On October 31, 2018, the Contractor began removal of the existing inner traveler crane rails and the bottom traveler trolley beams in Span 3 of the Suspension Bridge using work access platform no. 1. On November 2, 2018, the Contractor began removal of the existing crane rail and trolley beam support brackets. On November 15, 2018, the Contractor began paint abatement operations for the new crane rails and trolley beams. On November 30, 2018, the Contractor began installing the new crane rail and trolley beam brackets. On December 7, 2018, the Contractor began installation of the new crane rails and trolley beams. On April 28, 2023, the Contractor finished the inner and bottom traveler rail and beam replacement in Span 3.

On December 14, 2018, the Contractor began removal of the existing inner traveler crane rails and the bottom traveler trolley beams in Span 2 of the Suspension Bridge using work access platform no. 3. Inner and bottom traveler rail removal and replacement is complete in Span 2 of the Suspension Bridge except adjacent to the South Tower where the existing travelers are located. The replacement work adjacent to the South Tower is progressing.

Inner and bottom traveler rail removal and replacement in Span 1 began on November 18, 2019. Installation of inner and bottom traveler rails and trolley beams and net supports in Span 1 of the Suspension Bridge is complete except at the north location near the South Tower where the existing travelers are still located.

On April 14, 2020, the Contractor began removal of the west side traveler crane rails, rail chairs and trolley beams and installation of new crane rail chairs in Span 1 of the Suspension Bridge. On October 30, 2020, the Contractor began installing side access platforms on the west side of Span 1 of the Suspension Bridge. All of the Span 1 west side traveler crane rails, rail chairs and trolley beams have been removed and replaced. Final relative alignment of the trolley beams and crane rails is complete and final painting was completed on June 15, 2022.

On June 9, 2021, the Contractor began removal of the existing east side traveler crane rails, rail chairs and trolley beams in Span 1 of the Suspension Bridge. On June 17, 2021, the Contractor began installing access platforms to be used for removing and replacing east side existing traveler rail chairs. All of the Span 1 east side traveler rail, trolley beam and rail chair removal is complete and the installation of the new rail chairs, crane rail and trolley beams is complete. Final relative alignment of the crane rail and trolley beams is complete and final painting was completed on June 13, 2023.

On November 29, 2018, the Contractor began installing the first net supports on the Suspension Bridge. On November 19, 2019, the Contractor began installing the net supports in Span 1. On December 3, 2019, the Contractor began installing net supports in Span 4 of the Suspension Bridge.

Installation of the Suspension Bridge net supports, except the end panel net supports in Spans 1, 2 and 4 near the South Tower and the north pylon is complete.

On December 5, 2022, the Contractor began installation of North Main Tower lower access platforms to be used for installing the Tower truss net supports. On December 23, 2022, the west side scaffolding was completed and on January 25, 2023, the east side scaffolding was completed. On February 6, 2023, paint abatement began on the west side and on February 10, 2023, installation of the new net support truss frame steel began. On April 14, 2023, installation of the new net support truss frame and new net support arms onto the truss frame on the west side was completed. On March 9, 2023, installation of the new net support truss frame on the east side began. On April 21, 2023, installation of the new support truss frame and new net support arms onto the truss frame at the east side was completed. *On August 23, 2023, the installation of the interior and exterior cables at the east side was completed.* On August 10, 2023, the Contractor began installation of the interior and exterior border cables at the west side. *On August 16, 2023, installation of the interior and exterior border cable at the west side was completed.* *On August 22, 2023, the Contractor began installation of the SDNS net on the west side. The work is progressing.*

On December 21, 2022, the Contractor began installation of South Main Tower lower access platforms to be used for installing the Tower truss net supports. On March 20, 2023, installation of the east lower access platform was completed and on March 30, 2023, installation of the west lower access platform was completed. On May 1, 2023, the Contractor began installing the South Main Tower east side net support truss frames. On June 9, 2023, installation of the east side truss frames was complete. On May 16, the Contractor began installation of the west side net support truss frame. On June 26, 2023, installation of the west side truss frame was completed. On July 28, 2023, the Contractor began installation of the west side net supports. On August 4, 2023, the installation of the west side net supports was completed. On July 18, 2023, the Contractor began installation of the east side net supports. On July 21, 2023, installation of the east side net supports was completed.

On April 1, 2020, the Contractor began removal of the existing west side traveler crane rails, trolley beams and rail chairs in Span 4 of the Suspension Bridge and on November 19, 2020, began installing the new rail chairs. On October 5, 2020, the Contractor began installing side access platforms on the west side of Span 4 of the Suspension Bridge. On January 6, 2021, the Contractor began installation of new revised access platforms to perform side traveler crane rail removal and replacement. On January 11, 2021, the Contractor began installation of new side traveler crane rails in Span 4. All of the Span 4 west side traveler crane rails, rail chairs and trolley beams have been removed and replaced. Final relative alignment of the crane rail and trolley beams are complete. Final painting was completed on March 16, 2022.

On April 27, 2021, the Contractor began removing existing east side traveler rails and trolley beams in Span 4 of the Suspension Bridge. On May 11, 2021, the Contractor began installing access platforms to be used for removing and replacing east side existing traveler rail chairs. On May 21, 2021, the Contractor began removal of the east side existing traveler rail chairs. All of the Span 4 east side traveler rail, trolley beam and rail chair removal has been completed, all of the new chairs have been installed and all of the new rails and trolley beams have been installed. Final relative alignment of trolley beams and crane rails are complete. Final painting was completed on September 13, 2022.



On April 22, 2020, the Contractor removed the existing Span 4 bottom maintenance traveler. On March 12, 2021, work to remove the existing Span 4 west side maintenance traveler from the bridge was completed. On March 23, 2021, the Contractor completed removal of the existing Span 4 east side maintenance traveler. On April 5, 2021, work began removing the existing Span 1 east and west side travelers. On April 27, 2021, the Contractor completed removal of the Span 1 east and west side travelers. On May 4, 2021, work began removing the existing Span 2 east and west side travelers. By May 21, 2021, removal of the Span 2 east and west side travelers was completed. On May 26, 2021, work began removing the existing Span 3 east and west side travelers. By June 18, 2021, removal of the Span 3 east and west side travelers was completed.

On March 12, 2021, the Contractor began installing in Span 3 on the east side of the Suspension Bridge work access platforms to be used for removal of the existing side traveler rails, trolley beams and rail chairs, and the installation of the new side traveler rails, trolley beams and rail chairs. On April 14, 2021, the Contractor began installation of new side traveler rail chairs on the east side of Span 3. The Span 3 east side traveler rail and rail chair removal is complete and installation of the new rail chairs, crane rails and trolley beams is complete. Final relative alignment of trolley beams and crane rails is complete. Final painting was completed on June 13, 2022.

On May 10, 2021, the Contractor began removal of the Span 2 east side existing side traveler rails and trolley beams. On August 9, 2021, the Contractor began installation of new side traveler rail chairs. The Span 2 east side traveler rail and rail chair removal is complete and installation of the new rail chairs, crane rails and trolley beams is complete. Final relative alignment of trolley beams and crane rails and painting are complete.

On April 6, 2022, the Contractor began in Span 3 installation of the temporary side platforms to be used to install the net system. Installation of the temporary platforms was completed on April 21, 2022. The Contractor began the interior and exterior border cable installation on April 22, 2022. On August 15, 2022, the Contractor completed installation of the border cables in Span 3, except at the North Main Tower interface and the mid-span weather station interface. On August 15, 2022, the Contractor began installing the temporary auxiliary cables between the interior and exterior border cables in preparation of the net installation. On August 17, 2022, the Contractor began installing the net between the Span 3 interior and exterior border cables. Installation of the net with temporary ties to the border cables has been completed on both the east and west sides. Final sewing of the net onto the border cables has begun and is continuing. The temporary side platforms on both the east and west sides are being removed and sent to the Richmond yard. On February 7, 2023, the Contractor began installing the border cables and net at the end panel near the North Main Tower. The net installation is continuing. On February 24, 2023, the Contractor began installing the border cables and net at mid-span around the weather stations. The net installation is continuing.

On April 27, 2022, the Contractor began in Span 2 installation of the temporary side platforms to be used to install the net system. Installation of the temporary platforms is complete. The Contractor began the interior and exterior border cable installation on May 31, 2022. On August 29, 2022, the Contractor completed installation of the border cables in Span 2, except at the South Main Tower interface and the mid-span weather station interface. On August 30, 2022, the Contractor began installing the temporary auxiliary cables between the interior and exterior border cables in preparation of the net installation. On September 1, 2022, the Contractor began installing the net between the Span 2 interior and exterior border cables. Installation is complete from Panel

Point 51 to Panel Point 128 on the east side and from Panel Point 52 to Panel Point 128 on the west side. The temporary side platforms on both the east and west sides have been removed and re-located to Span 1.

On December 8, 2022, the Contractor began in Span 1 the interior and exterior border cable installation. On January 18, 2023, the Contractor completed installation of the border cables in Span 1, except at the South Tower interface and the Pylon S1 interface. On January 23, 2023, the Contractor began installing the temporary auxiliary cables between the interior and exterior border cables in preparation of the net installation. On January 23, 2023, the Contractor began installing the net between the Span 1 interior and exterior border cables. On February 24, 2023, the Contractor began installing the end panel net support and net between Panel Points 0 and 2 near Pylon S1. On April 5, 2023, installation and final sewing at the end panel near Pylon S1 was completed. On April 5, 2023, the Contractor began final sewing of SDNS nets in Span 1 at Panel Point 2, working north. The work is progressing.

On March 17, 2023, the Contractor completed installation of the end panel net support at Panel Point 39' on the west side of Span 4. On March 16, 2023, the Contractor installed the temporary side traveler for use in installing the border cables and net. On April 5, 2023, the Contractor completed installing the interior and exterior border cables, and on April 6, 2023, began installing the net. On April 20, 2023, the Contractor began final sewing of SDNS nets in Span 4. On May 17, 2023, the Contractor has completed sewing the SDNS net on the west side of Span 4 between Panel Points 0' to 39'.

On February 19, 2019, the Contractor began removal and replacement activities for the Suspension Bridge west sidewalk railing. Removal of the west sidewalk railing is complete. Final painting is on-going.

On March 11, 2020, the Contractor began installation of the wind fairing in Span 3 of the Suspension Bridge. On March 30, 2020, the Contractor began installation of the wind fairing in Span 2 of the Suspension Bridge. Installation of the wind fairings was completed on July 23, 2021. Final painting is on-going.

On August 12, 2019, the Contractor began installing in the North Approach Viaduct the temporary access system to be used to perform the floorbeam strengthening activities. The access installation was completed on June 26, 2020. On March 12, 2020, the Contractor began layout work for the floorbeam strengthening. On June 10, 2020, the Contractor began tensioning the floorbeam high strength rods. On June 17, 2020, the work stopped. On May 13, 2021, the Contractor resumed work on the floorbeam strengthening. The strengthening of the last of the 42 floorbeams has been completed. On January 31, 2021, the Contractor began removing the floorbeam strengthening access system. Removal of the access system is complete.

On January 15, 2020, the Contractor began installing on the west side of the North Approach Viaduct the temporary access system to be used to perform the net support and net installation activities. In September 2021, the temporary access system installation was completed. On January 8, 2021, the Contractor completed the installation of the first net support on the west side of the North Approach Viaduct. In October 2021, the Contractor completed installing the 9 total Type 1 net supports and the 15 total Type 2 net supports. On November 15, 2021, the Contractor began installation of the North Approach Viaduct net border cables. On February 3, 2022, the Contractor began installation of the first of four net mesh panels at west side of the North Approach Viaduct. All four panels were installed by February 8, 2022. The Contractor has completed

sewing the mesh panels to the border cables. On October 25, 2022, the Contractor completed installation of the untensioned net sections along the west side. The Contractor has completed removing all of the temporary access system from the west side of the North Approach Viaduct.

On April 7, 2022, the Contractor began installing on the east side of the North Approach Viaduct the temporary access system to be used to perform the net support and net installation activities. Temporary access system installation was on hold due to Contractor lack of personnel. On October 05, 2022, the Contractor re-started work along the NAV east side, installing access to the lower level scaffolding. The Contractor has installed 23 out of the 23 east side net support arms. On June 21, 2023, the Contractor began installation of the border cables and on June 23, 2023, the Contractor completed installing the interior and exterior border cables. On June 26, 2023, the Contractor began installing the net. On July 5, 2023, the Contractor completed installing the net. On July 6, 2023, the Contractor began final sewing of nets. On August 8, 2023, final sewing of nets was completed. *On August 10, 2023, the Contractor began removing temporary access scaffolds. The work is progressing.*

On January 18, 2023, the Contractor began installing the temporary access platform (E-Plat) on the west side of Suspension Bridge Span 4 in preparation for the net support installation. This work is complete. On September 24, 2020, the Contractor began removal of the existing inner traveler crane rails and bottom traveler trolley beams in Span 4 using man lifts from the ground. On March 1, 2023, the Contractor began installing the temporary access platform (SafeSpan) on the east and West track girder of Suspension Bridge Span 4 in preparation for the removal and replacement of the remaining inner and bottom traveler crane rails and trolley beams. Temporary access installation at the East track girder is complete and temporary access installation at the West track girder is complete. Removal and replacement of existing inner and bottom traveler rails and beams resumed on March 15, 2023 and is continuing.

The suicide deterrent barrier on and immediately adjacent to the North Anchorage Housing consists of a tall vertical steel railing. On March 2, 2022, the Contractor began installation of a portion of the vertical steel railing on the west side of Span 4 Suspension Bridge near Pylon N1. On March 8, 2022, the Contractor began installation of a portion of the vertical steel railing on the east side of the Span 4 Suspension Bridge near Pylon N1. The work was on hold pending fabrication of miss-fabricated components. The west side gate was installed on April 25, 2023 and the east side gate on April 26, 2023. On March 8, 2023, the Contractor began installation of the vertical steel posts on the west and east sides of the North Anchorage Housing. Installation of posts is complete except grouting behind and below 51 new posts were found defected. Contractor submitted a non-conformance report with proposed repair scheme. Contractor is performing corrective grouting work. Preparation for installation of the barrier panels between the posts is continuing.

On February 28, 2022, the Contractor began installing on the South Approach Viaduct east side the upper level temporary access system to be used to install the east side sidewalk stringer net support brackets. On March 3, 2022, the Contractor began installing the east side sidewalk stringer net support brackets. This work is complete. On March 17, 2022, the Contractor began installing the east side lower level temporary access system to be used for installing the east side net supports. On August 15, 2022, the Contractor began installing on the South Approach Viaduct girder spans the ground supported scaffolding to be used to install the girder span net supports. Installation of the ground supported scaffolding is complete and the net supports have been installed. On November 21, 2022, the Contractor resumed east side net support installation. On July 20, 2023,

installation of the 13 east side net support arms was completed. On July 26, 2023, the Contractor completed the installation of the border cables. On August 1, 2023, the Contractor completed the installation of the SDNS net. On August 3, 2023, the Contractor began final sewing of the SDNS nets. *On August 22, 2023, final sewing of the SDNS nets was completed.*

On April 18, 2022, the Contractor began installing on the South Approach Viaduct west side the upper level temporary access system for the installation of the west side sidewalk stringer net support brackets. The west side work was on hold due to Contractor lack of personnel. The west side work resumed on October 26, 2022. This work is continuing. A total of 15 west side sidewalk stringer net support brackets have been installed. The Contractor has installed 3 of the 13 west side net support arms.

On August 31, 2022, the Contractor began installing the Fort Point Arch east side lower level access system to be used for installing the east side net supports. Work on installing the access system is progressing. To date, the Contractor has installed 9 of 10 east side net supports.

On April 17, 2023, the Contractor began installing access system at both Pylon S1 and S2 to be used for installing the net around the Pylon S1 and S2. On August 4, 2023, installation of the access system at Pylon S1 was completed. *On August 22, 2023, installation of the access system at Pylon S2 was completed.*

On September 20, 2022, the Contractor began removing the existing bottom maintenance traveler from Span 3 of the Suspension Bridge. On October 13, 2022, the Contractor removed the last portion of the existing bottom maintenance traveler.

On September 21, 2022, the Contractor began removing the existing interior maintenance traveler from Span 4 of the Suspension Bridge. On October 27, 2022, the Contractor removed the last portion of the existing interior maintenance traveler.

On December 5, 2022, the Contractor began removing the existing bottom maintenance traveler from Span 2 of the Suspension Bridge. On December 20, 2022, the Contractor removed the last portion of the existing bottom maintenance traveler.

On August 23, 2019, the Board, by Resolution No. 2019-060, authorized Contract Change Order No. 62 to Contract No. 2016-B-1, Golden Gate Bridge Suicide Deterrent System and Wind Retrofit Project, in the amount of \$420,685 for modifications to the suicide deterrent system wire mesh splice details.

On April 24, 2020, the Board, by Resolution No. 2020-021, approved Contract Change Order No. 20 to Contract No. 2016-B-1, Golden Gate Bridge Suicide Deterrent System and Wind Retrofit Project, in the amount of \$428,332, for modifications to the North Approach Viaduct floorbeam strengthening details.

On August 28, 2020, the Board, by Resolution No. 2020-054, approved a \$2,000,000 budget increase in the FY 2020/21 Bridge Division Capital Budget to the Golden Gate Bridge Physical Suicide Deterrent System Project (Project #1526), to finance additional administration and construction engineering staff costs relative to construction Contract No. 2016-B-01.

On February 25, 2021, the Board of Directors, by Resolution No. 2021-012, approved Contract Change Order No. 31 to Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent

System and Wind Retrofit Project, in the amount of \$1,132,331, for modifications to the Suspension Bridge Suicide Deterrent System end net panel configuration.

On June 25, 2021, the Board of Directors, by Resolution No. 2021-044, approved a \$5,270,000 budget increase in the FY 2020/21 Bridge Division Capital Budget to the Golden Gate Bridge Physical Suicide Deterrent System Project (Project #1526), to finance through approximately November 2022, the District staff contract administration and construction engineering costs.

On September 22, 2022, the Board of Directors, by Resolution No. 2022-078, authorized a budget increase in the amount of \$4,637,000 to finance through approximately December 2023, the District staff contract administration and construction engineering costs.

Physical Suicide Deterrent System and Wind Retrofit Environmental Compliance Monitoring Services, RFQ/RFP No. 2017-B-09. On November 21, 2016, the District issued a Request for Statement of Qualifications and Proposals (RFQ/RFP) to engage consultants to provide environmental compliance monitoring services during construction of Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent and Wind Retrofit. On December 20, 2016, the Office of the District Secretary received proposals from two teams. On January 27, 2017, the Board of Directors, by Resolution No. 2017-002, approved the award of a Professional Service Agreement to Environmental Science Associates, of San Francisco, CA, in an amount not to exceed \$882,831. The Notice to Proceed was issued effective February 16, 2017. The consultant is performing site surveys and employee training and assisting the District with review of the construction Contractor's environmental submittals.

Physical Suicide Deterrent System and Wind Retrofit Construction Scheduling and Claim Review Services, RFQ/RFP No. 2018-B-07. On August 8, 2017, the District issued a Request for Statement of Qualifications and Proposals (RFQ/RFP) to engage consultants to provide cost estimating and construction scheduling and claim review services during construction of Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent and Wind Retrofit. On September 12, 2017, the Office of the District Secretary received eight proposals. The selection committee reviewed the proposals and on September 29, 2017, interviewed the three top-ranked proposers.

On November 17, 2017, the Board, by Resolution No. 2017-105, authorized the award of Contract No. 2018-B-07, Construction Scheduling and Claim Review Services, to Secretariat International in an amount not to exceed \$2,264,332.41 subject to the District receiving the California Department of Transportation's (Caltrans) approval of the PSA prior to its execution. The proposed contract and supporting documentation were submitted to Caltrans for review and approval and on May 22, 2018, Caltrans approved the PSA and supporting documentation. The Notice to Proceed was issued effective July 9, 2018. The consultant is assisting the District with reviews of the Contractor's schedule and schedule updates.

On June 25, 2021, the Board of Directors, by Resolution No. 2021-044, authorized execution of the Second Amendment to Professional Services Agreement No. 2018-B-07, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Construction Scheduling and Claim Review Services, to Secretariat International for continued scheduling and claim review services in an amount not to exceed \$925,000.

On September 22, 2022, the Board of Directors, by Resolution No. 2022-078, authorized execution of the Third Amendment to Professional Services Agreement No. 2018-B-07, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Construction Scheduling and Claim Review

Services, with Secretariat International, Manhattan Beach, CA, for continued scheduling, estimating and claim evaluation services in an amount not to exceed \$1,542,000.

Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Steel Fabrication Shop Inspection Services, RFQ/RFP No. 2018-B-06. On August 29, 2017, the District issued a Request for Qualifications/Request for Proposals (RFQ/RFP) to engage fabrication inspection firms to provide structural steel fabrication shop inspection services during construction of Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent and Wind Retrofit. On October 3, 2017, the Office of the District Secretary received six proposals.

On December 15, 2017, the Board, by Resolution 2017-115, approved execution of Professional Services Agreement (PSA) No. 2018-B-06, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit, Steel Fabrication Shop Inspection Services, to Materials Testing & Inspection, Boise, ID, in an amount not to exceed \$1,500,000. The Notice to Proceed was issued effective February 28, 2018

On May 29, 2020, the Board, by Resolution No. 2020-027, approved the Second Amendment to Professional Services Agreement (PSA) No. 2018-B-06, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Steel Fabrication Shop Inspection Services with Material Testing & Inspection in an amount not to exceed \$180,000, to provide additional shop inspection services. The structural steel fabrication is complete, and this contract has been closed.

Physical Suicide Deterrent System and Wind Retrofit, Suicide Deterrent Net System Fabrication Shop Inspection Services, RFQ/RFP No. 2018-B-075. On March 29, 2018, the District issued a Request for Statement of Qualifications and Proposals (RFQ/RFP), RFQ/RFP No. 2018-B-044, to engage fabrication inspection firms to provide fabrication shop inspection services of the suicide deterrent net system at the Contractor's fabrication facility located near Burr Ridge, Illinois. By the proposal due date of May 1, 2018, no proposals were received. On May 9, 2018, the District re-advertised the Contract under RFQ/RFP No. 2018-B-075. On June 6, 2018, the Office of the District Secretary received three proposals.

On August 24, 2018, the Board, by Resolution No. 2018-059, approved the award of Professional Services Agreement (PSA) No. 2018-B-075, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit, Suicide Deterrent Net System Fabrication Shop Inspection Services, to David Engineering, LLC., Chicago, IL, in an amount not to exceed \$400,000. The Notice to Proceed was issued effective October 8, 2018.

On February 25, 2021, the Board, by Resolution No. 2021-013, approved the Third Amendment to PSA No. 2018-B-075, Golden Gate Bridge Physical Suicide Deterrent Net System Fabrication Shop Inspection Services with David Engineering, LLC., in an amount not to exceed \$163,000, for continuation of the suicide deterrent net system fabrication inspection services through December 2021.

On March 25, 2022, the Board, by Resolution No. 2022-016, approved the Sixth Amendment to PSA No. 2018-B-075, Golden Gate Bridge Physical Suicide Deterrent Net System Fabrication Shop Inspection Services with David Engineering, LLC, in an amount not to exceed \$134,000, for continuation of the suicide deterrent net system fabrication inspection services through March 2023.

On February 23, 2023, the Board, by Resolution No. 2023-017, approved the Seventh Amendment to PSA No. 2018-B-075 with David Engineering, LLC., in the amount not to exceed \$94,000 for continuation of the suicide deterrent net system fabrication inspection services through December 2023.

Temporary Structures Engineering Advisor Support Services for the Construction of the Golden Gate Bridge Physical Suicide Deterrent System and Traveler System, RFQ/RFP No. 2018-B-082.

On August 3, 2018, the District issued a Request for Statement of Qualifications and Proposals (RFQ/RFP) No. 2018-B-082, to engage engineering firms to provide Temporary Structure Engineering Advisor Support Services related to the reviews of construction Contractor's temporary structures and construction Contractor's engineering evaluations of the sufficiency of bridge members' structural capacity under service loads and construction loads. On September 4, 2018, the Office of the District Secretary received one proposal.

On October 26, 2018, the Board, by Resolution No. 2018-066, approved the award of Professional Services Agreement (PSA) No. 2018-B-082, Temporary Structures Engineering Advisor Support Services for the Construction of the Golden Gate Bridge Physical Suicide Deterrent and Traveler Systems to TJA Engineering, Inc., Livermore, CA, in an amount not to exceed \$870,500. The Notice to Proceed was issued effective November 8, 2018.

On October 23, 2020, the Board, by Resolution No. 2020-082, authorized execution of the Second Amendment to PSA No. 2018-B-082, Temporary Structures Engineering Advisor Support Services for the construction of the Golden Gate Bridge Physical Suicide Deterrent and Traveler Systems, with TJA Engineering, Inc., in an amount not to exceed \$1,340,000, for continuation of engineering support services during construction of the Golden Gate Bridge Physical Suicide Deterrent System Project.

On March 24, 2023, the Board, by Resolution No. 2023-024, authorized execution of the Fifth Amendment to PSA No. 2018-B-082 with TJA Engineering, Inc. in an amount not-to-exceed \$1,200,000, for continuation of engineering support services.

Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Field Inspection Support Services, RFQ/RFP No. 2018-B-084. On August 24, 2018, the District issued a Request for Statement of Qualifications and Proposals (RFQ/RFP) No. 2018-B-084, to civil engineering construction management consultants to provide field inspection support services during the construction of Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit.

On September 21, 2018, the Office of the District Secretary received one proposal.

On December 20, 2018, the Board, by Resolution No. 2018-080 approved the award of Professional Services Agreement (PSA) No. 2018-B-084, Golden Gate Bridge Physical Suicide Deterrent Field Inspection Support Services, to Summit Associates, in an amount not to exceed \$3,700,000. The Notice to Proceed was issued effective January 28, 2019.

On June 25, 2021, the Board of Directors, by Resolution No. 2021-044, authorized the execution of the Second Amendment to Professional Services Agreement No. 2018-B-84, Golden Gate Bridge Physical Suicide Deterrent Field Inspection Support Services, with Summit Associates for continuation of field inspection services in an amount not to exceed \$1,715,000.

On September 22, 2022, the Board of Directors, by Resolution No. 2022-078, authorized execution of the Third Amendment to Professional Services Agreement No. 2018-B-084, Golden Gate Bridge Physical Suicide Deterrent Field Inspection Support Services, with Summit Associates, Concord, CA, for continuation of field inspection services through approximately December 2023 in an amount not to exceed \$2,127,000.

Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Maintenance Traveler System Fabrication Shop Inspection Services RFQ/RFP No. 2019-B-007. On April 24, 2019, the District issued a Request for Statement of Qualifications and Proposal (RFQ/RFP) No. 2019-B-007 to structural steel fabrication inspection firms to provide steel fabrication shop inspection services during the construction of the Project at the fabrication shops located in Alabama and Georgia. On May 21, 2019, the Office of the District Secretary received one proposal.

On July 26, 2019, the Board, by Resolution No. 2019-048, approved the award of Professional Services Agreement (PSA) No. 2019-B-007, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Maintenance Traveler System Fabrication Shop Inspection Services, to Bureau Veritas North America, Inc.(BV), Lisle, IL, in an amount not to exceed \$640,000. The Notice to Proceed was issued effective September 23, 2019.

The construction contractor informed the District that they will no longer fabricate the travelers in Alabama and Georgia and have contracted with a fabricator in Oregon and Washington. The consultant did not have available resources to perform the shop inspections at the new fabrication facility and agreed that the PSA be rescinded.

Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit, Maintenance Traveler System Fabrication Shop Inspection Services RFQ/RFP No. 2021-B-073. To replace the rescinded PSA No. 2019-B-007, on December 17, 2021, the District issued a Request for Statement of Qualifications and Proposal (RFQ/RFP) No. 2021-B-073 to structural steel fabrication inspection firms to provide steel fabrication shop inspection services at the fabrication shops located in Oregon and Washington. On January 21, 2022, the Office of the District Secretary received five proposals.

On March 25, 2022, the Board, by Resolution No. 2022-016, authorized execution of Professional Services Agreement No. 2021-B-073, Golden Gate Bridge Physical Suicide Deterrent System, Maintenance Traveler Fabrication Shop Inspection Services, with Smith Emery Laboratories, in an amount not to exceed \$2,600,000. The Notice to Proceed was issued effective July 13, 2022. On August 5, 2022, a fabrication site kick-off meeting was held with representatives from the District, Smith Emery and the contractor's fabricator. Quality assurance inspections began on August 5, 2022 and are on-going.

Suicide Deterrent System Rescue Training Net, Contract No. 2022-B-084. On August 26, 2022, the Board of Directors, by Resolution No. 2022-071, approved the establishment of a new capital project, Project #2321, Suicide Deterrent System Rescue Training Net Project, in the Fiscal Year 2022/2023 Bridge Division Capital Budget, for the construction of a rescue training net at the Southern Marin Fire Department facility in Mill Valley, California. The contract was advertised for bids on October 25, 2022. A pre-bid meeting was held on November 16, 2022. On the bid opening date of December 6, 2022, no proposals were received by the District. The project was re-advertised on December 20, 2022. A pre-bid meeting was held on January 11, 2023. On January 24, 2023, two bids were received.



On February 23, 2023, the Board, by Resolution No. 2023-014, approved award of Contract No. 2022-B-084, Suicide Deterrent System Rescue Training Net to Valentine Corporation in the amount of \$487,505. The Notice to Proceed was issued with an effective date of March 20, 2023.

The Contractor has completed fabrication shop drawings and is currently working on other submittals and work plans necessary to begin field work. *On September 5, 2023 the Contractor started fabrication of the net supports. The fabrication is progressing.*

Golden Gate Bridge Seismic Retrofit Phase IIIB, Design Services PSA No. 2010-B-1. On June 2, 2009, the District issued a Request for Statement of Qualifications and Proposals, Golden Gate Bridge Design Services, to engineering firms and on June 30, 2009, the Office of the District Secretary received proposals from four engineering teams. Based on the proposals and consultant interviews, HDR Engineering, Inc., was determined to be the top-ranked consultant. On August 14, 2009, the Board authorized the General Manager to execute the Contract with HDR Engineering, Inc., upon receiving FHWA/Caltrans approval. The Notice to Proceed was issued effective November 17, 2010.

The consultant has completed preparation of the base plan sheets, review of record documents, and computer modeling of the Suspension Bridge and is progressing with structural analyses. On March 20, 2012, and on June 5, 2012, staff met with the consultant to review progress and results of the structural analyses and development of preliminary retrofit strategies.

Geotechnical investigations involving test borings for the Toll Plaza Undercrossing and Lincoln Boulevard Overcrossing occurred on June 13-15, 2012. The geotechnical report, including foundation recommendations, has been completed and submitted by the consultant.

On October 8, 2012, staff met with the Suicide Deterrent consultant, HNTB Corporation, and the Seismic Retrofit consultant, HDR Engineering, Inc., to coordinate the design work between the two projects.

On November 16, 2012, the Board, by Resolution No. 2012-086, authorized District's participation in the FHWA Pooled Fund Study relative to the Phase IIIB Project structural analysis. On January 8, 2013, staff and the design consultant met with U.S. Army Corps of Engineers (USACE) and FHWA to discuss the Pooled Fund Study relative to the Phase IIIB Project. USACE submitted to the District a report summarizing the results of analyses.

On January 24, 2014, the Board authorized the establishment of the Design Technical Review Panel (TRP). The first meeting of the TRP was held on February 20 and 21, 2014. At the December 11, 2014 meeting, the TRP concurred with the retrofit strategy as described in the Draft Strategy Report dated September 23, 2014.

On February 19, 2015, the Board of Directors, by Resolution No. 2015-008, authorized the Fourth Amendment to Professional Services Agreement No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services, with HDR Engineering, Inc., to Perform Energy Dissipation Device Testing. The Notice to Proceed for the Fourth Amendment was issued to the consultant effective March 9, 2015. The testing was performed in two phases. Phase one was the fabrication and testing of a 0.4 scale model of the EDD and phase two was the fabrication and testing of a full scale specimen. The consultant completed the design of the phase one and phase two prototype Energy Dissipation Devices (EDDs) and entered into an agreement with a fabricator to fabricate the prototype EDD test specimens. The phase one fabrication began on April 13, 2015. On May

18, 2015, fabrication of the 0.4 Scale model of the EDD was completed and shipped to the University of New York at Buffalo, NY. On June 1, 2015, testing of the 0.4 Scale model began. The 0.4 Scale model testing was completed in November 2015. The consultant analyzed the test results and on November 18, 2015, a teleconference was held with the consultant, TRP, FHWA, and Caltrans to discuss the 0.4 Scale model testing results. The group concurred that the phase one testing objectives were met and that work could proceed on the next phase of EDD testing.

On November 30, 2015, the consultant was authorized to begin fabrication of the phase two test specimen. Fabrication was completed on June 27, 2016. The test specimen was shipped to U.C. San Diego testing facility on June 29, 2016, and the testing facility began installing the specimen into the testing equipment on August 15, 2016. The full scale test specimen testing began on September 9, 2016 and was successfully completed on September 28, 2016. On October 7, 2016, the specimen was delivered to the Bridge. The consultant and U.C. San Diego completed the test report and documentation, and consultant used the test results to update the bridge model and finalize the retrofit design. On November 4, 2016, December 1, 2016, and December 2, 2016, staff met with the consultant to review the progress on the design. On December 6, 2016, staff met with the consultant, the TRP members and representatives from FHWA and Caltrans to discuss the results of the phase two full scale specimen testing performed at U.C. San Diego. On February 1, 2017, and February 2, 2017, staff met with the consultant, the TRP members, FHWA representatives and Caltrans representatives to review the progress of the seismic design, strategize on procurement process for the construction contract, clarify FHWA and Caltrans' project requirements, and confirm next steps in project design.

On October 9, 2015, the Board, by Resolution No. 2015-090, authorized the Fifth Amendment to Professional Services Agreement (PSA) No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services, in the not to exceed amount of \$70,500, with HDR Engineering, Inc., for providing bid support services during the advertising period for construction contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit and authorized a contingency of \$7,000.

On December 16, 2016, the Board, by Resolution No. 2016-088, authorized the Seventh Amendment to Professional Services Agreement (PSA) No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services, in the not to exceed amount of \$300,000, with HDR Engineering, Inc., for providing engineering support services during construction of the Suspension Bridge Wind Retrofit as part of construction Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit, and authorized a contingency of \$30,000.

On May 29, 2020, the Board, by Resolution No. 2020-028, approved 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. in the not to exceed amount of \$106,752 to provide additional engineering support services during construction.

On October 28, 2022, the Board, by Resolution No. 2022-085, approved the Fourth Addendum to the Seventh Amendment to PSA No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services, with HDR Engineering, Inc., in the not to exceed amount of \$40,000, for continuation of engineering support services during construction.

On February 24, 2017, the Board, by Resolution No. 2017-017, approved actions relative to the Eighth Amendment to Professional Services Agreement No. 2010-B-1, Golden Gate Seismic

Retrofit Phase IIIB Design Services with HDR Engineering, Inc., for additional design services to develop temporary supports and bracing, EDD access platforms, repairs to the main towers, replacement of the Fort Point Arch EDD friction elements and replacement of the roadside seismic isolation joint at the Marin Abutment in an amount not to exceed \$2,200,000, subject to the Golden Gate Bridge, Highway and Transportation District receiving approval from the California Department of Transportation, and to establish a contingency in an amount of \$220,000 for this amendment. The Notice to Proceed with the services under the Eighth Amendment was issued on March 6, 2017.

On April 4 and 5, 2017, staff met with the consultant, the TRP members, FHWA representatives and Caltrans representatives to review the 65% design plan submittal, discuss project timeline to complete bid documents, and next steps in project design.

On May 26, 2017, the Board, by Resolution No. 2017-047, authorized the Ninth Amendment to Professional Services Agreement No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Project Phase IIIB Design Services, with HDR Engineering, Inc., in an amount not to exceed \$191,000, to perform a wind study of the Suspension Bridge to take into account the addition of temporary bracing supports and construction work platforms, and established a contingency in an amount of \$19,100 for this amendment. The Notice to Proceed with the services under the Ninth Amendment was issued on May 30, 2017. The wind tunnel tests of the bridge model were performed during the week of October 2, 2017. Additional tests were performed the week of October 30, 2017. On May 11, 2018, the consultant submitted the wind tunnel test results.

On November 8 and 9, 2017, staff met with the consultant, the TRP members, FHWA representatives and Caltrans representatives to review the 85% design plan submittal, discuss project timeline to complete bid documents, and next steps in preparing the project for construction. On April 17, 2018, staff met with the consultants, the TRP members, FHWA representatives and Caltrans representatives to review the status of the project.

On November 17, 2017, the Board, by Resolution No. 2017-106, authorized the First Addendum to the Ninth Amendment of Contract No. 2017-B-1, Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services, with HDR Engineering, Inc. in an amount not to exceed \$216,500 to perform additional wind tunnel testing of the Suspension bridge to optimize the wind retrofit required to satisfy the wind retrofit criteria and to optimize the configuration of the temporary construction supports and work platforms. The additional tests were performed the week of January 15, 2018.

On July 24, 2020, the Board, by Resolution No. 2020-044, authorized the Second Addendum to the Ninth Amendment, in an amount not to exceed \$260,218, of Contract No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services, with HDR Engineering, Inc. to perform wind tunnel testing and acoustic studies on full-scale specimens of the new bridge railing and fairing in order to replicate, in the laboratory, the wind-induced sounds caused by wind passing through the new Suspension Bridge railing, and to determine what modifications, if any, could be made to reduce or eliminate the sound without impairing the effectiveness of the wind retrofit. The fabrication of the full-scale specimens was completed and on October 23, 2020, wind tunnel testing began. The initial testing was completed on November 5, 2020. The District and consultant evaluated the test results and developed details of measures that could potentially mitigate the wind induced sound.

On June 25, 2021, the Board of Directors, by Resolution No. 2021-043, authorized execution of the Fourth Addendum to the Ninth Amendment to Professional Services Agreement No. 2010-B-

1, Golden Gate Suspension Bridge Seismic and Wind Retrofit Project Phase IIIB Design Services, with HDR Engineering, Inc. in an amount not to exceed \$130,420 to conduct additional wind tunnel tests of potential sound mitigation measures. The additional testing of potential mitigation measures was completed, and the consultant submitted a final report of the findings.

On December 18, 2021, the Board of Directors, by Resolution No. 2021-093, authorized actions relative to reducing wind induced sound emanated by the Golden Gate Suspension Bridge West Railing.

On July 28, 2017, the Board, by Resolution No. 2017-068, authorized the Tenth Amendment to Professional Services Agreement No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Project Phase IIIB Design Services, with HDR Engineering, Inc., in an amount not to exceed \$399,000, for assistance with preparation of a Risk Assessment Plan and a Major Project Management Plan (MPMP), and established a contingency in an amount of \$39,900 for this amendment. The Notice to Proceed with the services under the Tenth Amendment was issued on August 14, 2017. On September 12, 2017, staff met with the consultant to discuss the content of the MPMP. On January 2, 3 and 4, 2018, staff met with the consultant, TRP representatives, FHWA representatives and Caltrans representatives to develop a Project Risk Register as required by FHWA.

On June 21, 2019, the Board, by Resolution No. 2019-037, approved the Eleventh Amendment to Professional Services Agreement with HDR Engineering, Inc., for testing of stainless steel welding procedures for fabrication of the energy dissipation devices. The Notice to Proceed with the services under the Eleventh Amendment to the PSA was issued with an effective date of July 1, 2019. On September 25, 2019, welding began on a stainless steel specimen at a fabrication facility in Oregon. On October 14, 2019, welding began as a test specimen at a fabrication facility in Alabama. The welding of the stainless steel plates and testing of the welded plates was completed, including the finalization of non-destructive testing protocols for the stainless steel welds. On March 3, 2022, the final report by Vigor Industrial documenting the acceptable welding techniques and testing procedures was finalized.

On July 27, 2018, the Board, by Resolution No. 2018-049, approved the use of the Construction Manager/General Contractor (CMGC) procurement method, authorized by and in conformance with Section 6970 et seq. of the Public Contract Code, for procuring construction of the Golden Gate Bridge Seismic Retrofit Phase IIIB project.

On September 12, 2018, staff met with FHWA and Caltrans representatives to develop a Project Oversight Agreement, as required by FHWA. FHWA, Caltrans and District are developing the Project Oversight Agreement, which assigns each party responsibilities for preparation, review and approval of project actions and documents during construction.

On September 13, 2018, staff attended a CMGC training workshop presented in Sacramento by Caltrans and FHWA. Staff is drafting various documents required for the solicitation of statement of qualifications from construction companies for the Phase IIIB CMGC Preconstruction Services.

On December 11, 2020, staff met with the design consultant, the TRP members, FHWA representatives and Caltrans representatives to discuss project timeline to complete CMGC bid documents, and to present a summary of the Energy Dissipation Device Testing report and the information contained in the Addendum A to the Seismic Retrofit Strategy Report. The TRP members reviewed the information and requested additional information prior to preparing their

report documenting the results of their reviews of the retrofit strategies and design details and specifications. On July 15, 2021, staff provided the requested additional information. The TRP members reviewed the additional information and recommended minor edits to the Seismic Retrofit Strategy Report. The TRP members have finalized their report.

On January 22, 2021, the Board, by Resolution No. 2021-007, authorized the following amendments to Professional Services Agreements Nos. 2014-B-7, 2014-B-8 and 2014-B-9, Golden Gate Bridge Seismic Retrofit Phase IIIB Technical Review Panel Member Services:

1. Sixth Amendment to PSA No. 2014-B-7 with Mr. Michel Bruneau, in an amount not to exceed \$100,000;
2. Sixth Amendment to PSA No. 2014-B-8 with Mr. Karl H. Frank, in an amount not to exceed \$100,000; and,
3. Sixth Amendment to PSA No. 2014-B-9 with Mr. David J. Nash, in an amount not to exceed \$100,000;

for continuation of technical review services of the Golden Gate Bridge Seismic Retrofit Phase IIIB Project design through the Construction Manager/General Contractor (CMGC) preconstruction phase of the Project.

*On August 25, 2023, the Board, by Resolution No. 2023-054, approved the Twelfth Amendment to Professional Service Agreement No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Project Phase IIIB Design Services, with HDR Engineering, Inc., in an amount not to exceed \$399,637, for assistance with customization of a construction project management system, e-Builder software, for the Golden Gate Suspension Bridge Seismic Retrofit Project and staff training.*

Golden Gate Suspension Bridge Seismic Retrofit, CMGC Preconstruction Services, RFQ 2023-B-015. The RFQ was advertised on May 31, 2023. By the Statement of Qualification (SOQ) submission due date of August 4, 2023, the District received three SOQs. Staff is reviewing the SOQs.

Aluminum Clip Fabrication for Suspension Bridge Sound Reduction Project, Contract No. 2022-B-036. On March 15, 2022, the District advertised for the procurement of aluminum u-shaped clips that will be installed on the Suspension Bridge west sidewalk railing to reduce wind induced sounds. By the bid opening date of April 6, 2022, no bids were received. On April 7, 2022, the procurement was re-advertised with a bid opening date of April 26, 2022. On April 26, 2022, staff received one bid.

On May 20, 2022, the Board, by Resolution 2022-036, authorized the award of Contract No. 2022-B-036, Aluminum Clip Fabrication for Suspension Bridge Sound Reduction Project to RushCo Energy Specialist, Fort Worth, TX. The Notice to Proceed was issued with an effective date of June 6, 2022. The fabricator prepared shop drawings and other submittals in preparation of the work. The fabricator provided sample clips and paint samples for review and approval. After review of the samples, staff requested modifications to better match field conditions. On December 16, 2022, the revised clip was received and found to be acceptable. On March 7, 2023, the revised paint sample was received and found to be acceptable. The fabricator completed the fabrication and painting of 25 samples for review and approval. The samples were determined to be acceptable, and authorization was given to proceed with production. On August 7, 2023, the

first shipment of clips was received. The fabricator is continuing with production of the remaining clips.

Golden Gate Toll Plaza Pavement Overlay Project, Contract No. 2022-B-114. On April 27, 2017, the Board of Directors, by Resolution No. 2017-039, approved the addition of the Toll Plaza Pavement Overlay project to the FY 16/17 Bridge Division Capital Budget in the amount of \$3,500,000 to be funded by District Reserves. Staff prepared design plans and bid documents to repair the pavement at the Toll Plaza. On January 31, 2023, the District advertised Construction Contract No. 2022-B-114 for bids.

On April 28, 2023, the Board of Directors, by Resolution No. 2023-029, approved award of Contract No. 2022-B-114, Golden Gate Bridge Toll Plaza Pavement Overlay Project to Argonaut Constructors in the amount of \$3,024,389. On June 1, 2023, the preconstruction meeting was held between the District and Argonaut Constructors. The Notice to Proceed was issued with an effective date of June 5, 2023. Contractor is preparing submittals and work plans. On July 31, 2023, the Contractor started installation of construction area signs. On August 15, 2023, the Contractor began concrete repairs in the Toll Plaza roadway. Concrete repair work is progressing.

Toll Plaza Paving QA Services, Contract No. 2023-B-025. On March 30, 2023, the District sent a letter to three (3) firms requesting proposals for performing QA testing for the Toll Plaza Pavement Overlay Project. Two firms responded and on May 12, 2023, the Service Agreement was executed between the District and Smith-Emery of San Francisco for the material quality assurance services in support of the Toll Plaza Pavement Overlay Project, Contract No. 2022-B-114. The Notice to Proceed was issued with an effective date of June 5, 2023.

Lead Cleanup Phase II Feasibility Study, Remedial Action Plan and Construction Drawings for Golden Gate Bridge North and South Approaches, RFP No. 2010-B-2. A Request for Proposal (RFP) to engage consultants to prepare a feasibility study, remedial action plan, construction drawings, and a revegetation plan(s) for cleanup of lead paint contaminated soils and sandblast residue at the North and South land approaches to the Golden Gate Bridge was posted on the District's website on October 20, 2009, and on December 1, 2009, seven proposals were received by the District. Staff evaluated the proposals and interviewed the top four ranked firms on February 3, 2010. On June 25, 2010, the Board authorized execution of a Professional Services Agreement (PSA) with Erler & Kalinowski, Inc., in an amount not to exceed \$980,057, with a contingency amount of \$98,000. The Notice to Proceed was issued with an effective date of September 1, 2010. The State Department of Toxic Substances Control (DTSC) has regulatory oversight of the project. The consultant completed two rounds of soil sampling verification studies and submitted the reports to the DTSC for review. Staff and consultant met with the National Park Service (NPS) for a project briefing. Consultant prepared draft reports for various field investigations, including a topographical survey of the site, a landslide-potential survey, and inventories of the biological, wetland, archaeological, and cultural resources that exist on the site; and developed draft cleanup alternatives and prepared a draft Feasibility Study (FS). Staff and consultant met with the DTSC and with the NPS at separate meetings in January 2012 and discussed the draft remedial alternatives. On December 21, 2012, the Draft Golden Gate Bridge Lead Cleanup Phase II Feasibility Study was sent to DTSC and NPS for review. In February 2013, NPS and DTSC representatives participated in a site walk-through of the proposed cleanup areas as part of their review of the cleanup alternatives in the Feasibility Study. On June 19, 2015, NPS sent a general reply letter on the Draft Feasibility Study (FS). NPS stated they are supportive of the project and

generally agreed with the proposed alternatives listed in the draft FS. On October 16, 2015, staff met with DTSC representatives to discuss comments on the FS and the required clean up levels. On October 23, 2015, DTSC sent a letter with its comments on the FS. On August 1, 2016, the second amendment was executed extending the time of completion to September 1, 2017. On September 11, 2017, staff met with DTSC to further review the DTSC comments on the Feasibility Study and the cleanup level being proposed by DTSC. DTSC agreed to consider different cleanup levels and requested the District submit its proposal for consideration. On April 10, 2020, staff and its consultant had a teleconference with DTSC to discuss status of project, allowable cleanup level, and cleanup strategies. DTSC requested District to review current and future land use of areas and develop cleanup plan based on land use. On December 17, 2020, the District sent a letter to DTSC responding to DTSC's letter regarding the cleanup level and a site-specific site management plan.

On June 3, 2021, the District received a letter from DTSC in response to the District's December 17, 2020, letter on lead cleanup goals. On June 10, 2021, the District sent a letter to DTSC expressing the District's interest in pursuing a land-use based cleanup program referred to as a Soil Management Plan (SMP) strategy. On July 20, 2021, DTSC responded to the District's June 10, 2021, letter. On August 13, 2021, a virtual conference meeting with the District, its consultant and DTSC was held to discuss the recent correspondence. Subsequent to the call, staff and DTSC compiled a list of items to be addressed in order to move the project forward. Staff and its consultant are working with DTSC staff on addressing each of the items.

On November 19, 2021, the District sent a letter to the National Park Service (NPS) informing NPS of the District's recent discussions with DTSC and the District's plan for moving this cleanup project forward. Staff and its consultant are continuing to work with DTSC and NPS on the cleanup goal for the Phase II areas.

On March 28, 2022, staff and its consultant met with representatives from DTSC and NPS to perform a field review of the Phase I areas to assess whether the measures implemented during Phase I to protect workers and the public were still functioning as intended. DTSC found that the measures, including fencing and signage, were functioning as planned. DTSC requested that a report of the site review be prepared and submitted to DTSC and uploaded to the DTSC website. Staff and its consultant prepared the field review report and, on May 25, 2022, transmitted the report to DTSC and NPS for their review and comments. DTSC requested additional information on the report and on August 4, 2022, the District's consultant transmitted the revised final report and additional information to DTSC. Staff are awaiting DTSC's comments before finalizing the Five-Year Review Report. On November 7, 2022, DTSC provided comments on the Five-Year Review Report. Staff and the District's consultant modified the report to incorporate responses to DTSC's comments and on January 17, 2023, submitted to DTSC for review and approval.

Staff and consultant have prepared a draft work plan for additional soil sampling to assist in determining a cleanup goal for areas to be eventually opened to the public at the north and south approaches. The Workplan has been distributed to DTSC and the NPS for review and approval.

On January 10, 2023, DTSC informed the District that new project managers had been assigned for oversight of the lead cleanup project. District staff and consultant held a virtual meeting with the new DTSC staff on Feb 7, 2023 to discuss the status of the project and next steps. Staff and consultant collated a number of recent background documents and sent those to DTSC for their review and to assist the new managers with coming up to speed with the project. On April 24,

2023, DTSC provided comments on the Phase I Five Year Review Report. On May 4, 2023, consultant provided response to DTSC's comments and questions. On May 16, 2023, the Phase I Five Year Review Final Report was submitted to DTSC. On August 9, 2023, DTSC approved the Five-Year Review Final Report. On July 10, 2023, District sent to DTSC for their review and comments a draft lead cleanup level for the Phase II work and an outline for the revised Phase II Draft FS/RAP. *On August 9, 2023, DTSC requested additional information associated with the Phase II Draft FS/RAP be submitted for their review. The District is preparing the additional information.*

Mandatory Bridge Inspection Program. In order to ascertain the structural condition of the bridge and to comply with FHWA (Federal Highway Administration) regulations, the District conducts a Biennial Bridge Inspection. Staff prepared and submitted to Caltrans the inspection work plans for the Biennial Bridge Inspection, including Underwater Inspection Plan of the North Pier, South Pier, and South Pier Fender, the Fracture Critical Elements Inspection, the Complex Bridge Element Inspection and the Routine Bridge Inspection Plans.

From Tuesday, August 23, to Thursday, August 25, 2022, FHWA and Caltrans performed a review of the Golden Gate Bridge Inspection Program via the 23 Metrics set by the National Bridge Inspection Standards and MAP-21. FHWA confirmed that the District meets the requirements of the 23 Metrics, and that the Engineering Department is compliant with all requirements of the Federally mandated inspection regulations and standards.

In November 2022, Engineering staff completed the 2021-2022 Biennial Bridge Inspection. On December 30, 2022, the District submitted the final biennial bridge inspection report to Caltrans.

In January 2023, the District commenced the 2023-24 biennial bridge inspection.

Golden Gate Bridge Inspection Services, RFQ/RFP 2020-B-053. The Engineering Department prepared and on November 4, 2020, advertised a Request for Qualifications/Request for Proposals (RFQ/RFP) for the Golden Gate Bridge Inspection Services. The request sought proposals from qualified professional engineering firms to provide bridge inspection services, including (1) designing, furnishing, installing on the entire length of the Golden Gate Bridge (Bridge) and, when no longer required, removing from the Bridge rope climbing access systems to be used for bridge inspections; (2) using the rope climbing access systems to perform (a) Fracture Critical Member Inspections of select floor beams, girders, main cable and truss members, (b) Routine or Special Close Up Bridge Inspection of select non fracture critical members at the Bridge; and (3) preparing inspection reports. By the due date of December 8, 2020, the Office of the District Secretary received one proposal. Staff reviewed the proposal, found that it complied with the requirements of the RFQ, and negotiated scope and pricing of the services with the consultant.

On February 25, 2021, the Board, by Resolution 2021-014, approved the award of Professional Services Agreement No. 2020-B-053, Bridge Inspection Services, to HDR Engineering, Inc., Walnut Creek, CA, in an amount not to exceed \$9,063,000, to perform two cycles of the 23 CFR 650 mandated bridge inspections at the Golden Gate Bridge. The consultant prepared their work plans and on April 26, 2021, began rope inspections. During the months of February and March of 2022, the consultant submitted final inspection reports for the 2021/2022 rope inspections.

During the months of November and December 2022, the consultant submitted final load rating reports for the Lincoln Blvd Undercrossing and Toll Plaza Undercrossing. The consultant is



continuing with the load rating analysis for the Golden Gate Bridge.

During the week of April 24, 2023, the Consultant began rope inspections of fracture critical members and inaccessible members in the Suspension Bridge Span 1. The Week 2 inspections were performed during the week of May 22, 2023, during which the Suspension Bridge Span 1 inspection was completed, and the Suspension Bridge Span 2 began. The Week 3 inspections were performed for the Suspension Bridge Span 2 during the week of June 26, 2023. *The Weeks 4 and 5 inspections were performed during the weeks of July 24 and August 21, 2023, respectively, during which the North Approach Viaduct was completed, and inspection of the Suspension Spans continued.*

Seismic Instrumentation. In 1995, the State of California, Division of Mines and Geology – Strong Motion Instrumentation Program (SMIP) installed and tested the Phase I seismic instrumentation system. Seventy-six seismic sensors and two recording stations were installed on the Golden Gate Bridge as part of this phase.

On April 10, 2001, and September 21, 2004, the Seismic Instrumentation Advisory Panel (Panel) approved the Phase II sensor locations for the South Approach Structures. Twenty-five additional sensors were proposed for the South Approach and were included as part of the Phase II Seismic Retrofit project. On September 24, 2002, the Panel approved the design plans for the Phase II Seismic Instrumentation, North Approach Structures. Twenty-four additional sensors for the North Approach were added to the Seismic Instrumentation System. Subsequent panel meetings were held on September 30, 2003, September 21, 2004, and October 25, 2006, to review the progress on construction of the Phase II Seismic Instrumentation and the MEMS system (Micro-Electro-Mechanical System) developed by the U.C. Berkeley Citris program. The MEMS has been tested with satisfactory results and was removed by U.C. Berkeley in March 2007.

On October 25, 2006, the Panel recommended installing a wind monitoring system on the Golden Gate Bridge. On April 27, 2007, the Board authorized SMIP to install the wind monitoring system, including an anemometer and a seismic recorder connected to selected, existing and new seismic sensors on the Suspension Bridge.

On August 29, 2007, the Panel approved the design of the wind monitoring system, and recommended measuring ambient vibration and analyzing the bridge computer model with data recorded from the 1999 Bolinas and 2000 Napa earthquakes. The wind monitoring system was completed in October 2008.

On July 24, 2019, the seismic alarm panel and seismic sensor located inside the Sergeant's Office were upgraded to streamline and improve earthquake notifications and post-earthquake responses. The new system has two alarms: 1) light shaking; and 2) moderate and more serious seismic shaking.

On October 25, 2019, the Board, by Resolution No. 2019-074, authorized execution of Professional Services Agreement No. 2019-B-056, Golden Gate Bridge Strong Motion Instrumentation Program, with the State of California, Division of Mines and Geology, for a total not to exceed amount of \$357,421 for the purchase of the new recorders, labor, travel and supplies necessary for the installation of the new equipment, and for three years of maintenance costs associated with monitoring, testing and minor repairs to the system, and authorized a contingency in the amount of \$35,742,00 be established for any additional or changed scope of services that may develop while work progresses.

Subsequent to the October 2019 Board authorization, SMIP informed staff about an error in the cost proposal. The cost proposal did not include the State of California Department of Conservation overhead and administrative costs associated with the specified services. The SMIP representatives explained reasons for the overhead and administrative charges and their corresponding rates that were established under the State of California accounting rules, and the allocation of these rates to the cost of the services under PSA No. 2019-B-056. The inclusion of the SMIP overhead and administrative costs result in a \$34,451 increase to the cost of replacement of the instrumentation system. SMIP agreed that the cost of the instrumentation system maintenance would remain unchanged.

On February 28, 2020, the Board, by Resolution No. 2020-005, authorized execution of Professional Services Agreement (PSA) No. 2019-B-056, Golden Gate Bridge Strong Motion Instrumentation Program, with the State of California, Division of Mines and Geology, for a revised total not-to-exceed amount of \$391,872, and with the unchanged PSA contingency of \$35,742 be established for any additional or changed scope of services that may develop while work progresses.

On August 25, 2022, the Board, by Resolution No. 2022-068, authorized execution of Professional Services Agreement No. 2022-B-061, Golden Gate Bridge Strong Motion Instrumentation Program, with the State of California, Division of Mines and Geology, in the not to exceed amount of \$125,248 for three years of maintenance costs associated with monitoring, testing and minor repairs to the system and authorized a contract contingency in an amount of \$12,525 be established for any additional or changed scope of services that may develop while work progresses.

On January 31, 2022, staff met with representatives from the California Department of Conservation at the Bridge to discuss operations and maintenance of seismic sensors and equipment, and access of seismic data. On February 2, 2022, SMIP remotely performed an annual test for the alarm panel located inside the Sergeant's office and confirmed that the alarm functioned as intended.

Earthquake Response Plan. Engineering staff developed a revised Earthquake Response Plan that accounts for the to-date constructed seismic retrofit measures on the bridge approach structures and further defines detailed procedures for response actions to be taken by the District's forces depending on severity of an earthquake.

In 2002, SMIP installed an independent seismic sensor with a warning light and buzzer in the Sergeant's control room. On March 1, 2007, the Bridge Earthquake Response Pager System successfully recorded and transmitted the Lafayette Earthquake with 1% g ground acceleration at the bridge. On October 30, 2007, the Bridge Earthquake Response Pager System successfully recorded and transmitted the Alum Rock Earthquake with a 1% g ground acceleration of the bridge.

On June 28, 2010, a small nearby earthquake triggered the sensors and recorded the earthquake.

On March 5, 2012, a 4.0 magnitude earthquake occurred on the Hayward fault near El Cerrito. The ground acceleration registered at the Bridge was insignificant to trigger the Bridge Earthquake Response Pager System. In accordance with the triggering criteria described in the "Bridge Earthquake Response Plan," a Level 1 inspection was performed by Sergeant's Office personnel

with video cameras and a driving inspection of the roadway. It was determined that there was no damage to the bridge caused by the earthquake.

On August 24, 2014, a 6.0 magnitude earthquake occurred at 3:20 a.m. on the West Napa Fault, located west of the city of Napa, along the edge of the foothills. The ground acceleration registered at the Bridge was insignificant to trigger the Bridge Earthquake Response Pager System. In accordance with the triggering criteria described in the “Bridge Earthquake Response Plan,” a Level 1 inspection was performed by Sergeant’s Office personnel with video cameras and a driving inspection of the roadway. It was determined that there was no damage to the bridge caused by the earthquake.

On August 25, 2014, engineering staff performed a complete Level 1 inspection of all of the bridges under the District’s jurisdiction. No damage was found at any of the structures.

On January 4, 2018, a 4.5 magnitude earthquake occurred on the Hayward fault near Berkeley. In accordance with the triggering criteria described in the “Bridge Earthquake Response Plan,” a Level 1 inspection was performed by Sergeant’s Office personnel with video cameras and a driving inspection of the roadway. In addition, Engineering performed a field inspection at the Bridge. It was determined that there was no damage to the bridge caused by the earthquake.

During the month of December 2020 and early January 2021, there were a number of small earthquakes in the larger Bay Area. None of these earthquakes were felt at the Bridge and none triggered an alarm at the Bridge.

On June 28, 2021, a 3.9 magnitude earthquake occurred on the Hayward fault near San Leandro. The earthquake was felt throughout the Bay Area. The earthquake did not trigger an alarm at the Bridge.

On Tuesday October 25, 2022, a 5.1 magnitude earthquake occurred near San Jose. The shaking was widely felt throughout the Bay Area. There was no perceptible seismic movement either detected or reported at the Bridge. The earthquake did not trigger an alarm at the Bridge.

On **September 5, 2023**, the Pager System was tested with satisfactory results.

Golden Gate Bridge Toll Gantry Design Services, RFQ/RFP 2017-B-15. The Engineering Department prepared and advertised on May 2, 2017, a Request for Statement of Qualifications and Proposals, Golden Gate Bridge Toll Gantry Design Services. On May 30, 2017, two proposals were received by the District. Consultant interviews were held on June 16, 2017.

On July 28, 2017, the Board, by Resolution No. 2017-067, authorized award of Professional Services Agreement, PSA No. 2017-B-15, Golden Gate Bridge Toll Gantry Design Services, to AECOM, in an amount not to exceed \$1,039,086, and established a contingency in an amount of \$155,863 for this PSA. The Notice to Proceed was issued effective August 21, 2017. A project kick-off meeting was held on August 25, 2017. On August 30 and September 22, 2017, the consultant’s drilling sub-consultant drilled soil borings for the design of gantry foundations and cut core samples of the existing roadway structural section for the design of the roadway section near the gantry. The consultant prepared the Geotechnical Report. The consultant surveyed the general area of the proposed gantry location on September 25, 2017, and September 26, 2017. The consultant prepared different gantry concepts for District review.

On January 30, 2018, staff and the consultant met with representatives of the American Institute

of Architects (AIA) of San Francisco and a member of San Francisco Beautiful to discuss preliminary concepts and receive general feedback on the concepts. On February 16, 2018, staff and the consultant met with representatives from SF Heritage to discuss preliminary concepts. Staff and the Consultant modified the concepts based on the received feedback. On March 23, 2018, staff and the consultant presented three architectural toll gantry concepts during the Board of Directors' meeting for the Board's consideration and comments. On April 27, 2018, the Board approved Scheme C, Bridge Light Style, of the gantry architectural design for the project.

On June 1, 2018, the consultant submitted the 35% design review plans. On November 1, 2018, the District and consultant participated in a coordination teleconference with Kapsch, the new all electric toll equipment consultant.

On December 27, 2018, the consultant submitted the 65% design review plans. On February 7, 2019, the District and consultant participated in a coordination meeting with Kapsch to review the 65% submittal. The District provided the consultant with comments on the 65% submittal.

On March 22, 2019, the consultant submitted 75% design review plans with updated structural details. The District and Kapsch reviewed the 75% design review plans. District staff sent structural review comments on the 75% design review plan to AECOM on April 26, 2019, and stage construction and traffic handling review comments to AECOM on July 15, 2019.

On August 7, 2019, the District and consultant participated in a coordination meeting with Kapsch to resolve outstanding items prior to the 95% design submittal, including a revised Installation Plan to be submitted by Kapsch.

On November 6, 2019, staff presented the 75% design to the National Park Service (NPS) for the NPS review.

On November 27, 2019, the consultant submitted the 95% design plans and specifications. On December 6, 2019, the consultant submitted the 95% cost estimate. District staff reviewed the 95% submittal and on February 11, 2020, submitted comments on the design plans to the consultant. On March 6, 2020, the consultant provided responses to the District's comments on the 95% design plans and determined some items required further discussion. On March 30, 2020, and on April 8, 2020, the District and the consultant discussed the District's outstanding comments on the 95% design plans. On October 29, 2020, the District submitted comments on the 95% specifications to the consultant.

On December 5, 2019, Kapsch submitted their revised Installation Plan and Installation Drawings. On March 26, 2020, the District and consultant participated in a coordination meeting with Kapsch to resolve the District's comments on Kapsch's revised Installation Plan and Installation Drawings.

On December 21, 2020, the consultant submitted the draft 100% design plans and specifications. The District staff reviewed these documents and submitted to the consultant comments for incorporation into the final design package.

On May 29, 2020, the Board, by Resolution No. 2020-029 approved the Third Amendment to Professional Services Agreement (PSA) No. 2017-B-15, Golden Gate Bridge Toll Gantry Design Services, with AECOM, Oakland, CA, in the not to exceed amount of \$149,793.11, to perform

additional design services.

On February 10, 2021, Kapsch submitted revised Installation Drawings and on August 10, 2021, Kapsch submitted the revised Installation Plan. The Installation Drawings include changes to the toll equipment that will require revisions to the 100% draft toll gantry design plans from the consultant. District staff reviewed these revisions from Kapsch and on October 12, 2021, provided comments on the plan. Kapsch is no longer the District's all-electric toll equipment consultant and will not be providing the final Installation Plan.

On April 25, 2023, the District issued a Notice to Proceed to HDR Engineering, Inc for Task Order No. 4 to Contract No. 2018-B-05 for the evaluation of the current Toll Gantry design drawings. HDR will provide design change recommendations to make the gantry neutral for any toll system provider to install toll equipment on the gantry. On May 5, 2023, HDR and the District held the kick off meeting. On June 14, 2023, District staff met with HDR to discuss the Toll Gantry design requirements and constraints and to conduct a site visit to verify field conditions. *On July 25, 2023, HDR submitted a draft Basis of Design Memo summarizing HDR's understanding of the project and proposed next steps. The District is reviewing the information.*

On April 28, 2023, the Board of Directors, by resolution No. 2023-030, authorized execution of the Seventh Amendment to Professional Services Agreement (PSA) No. 2017-B-15, Golden Gate Bridge Toll Gantry Design Services, with AECOM, Oakland, CA in the amount not-to-exceed \$291,662.17 to revise the design details to make the gantry structure suitable for installation of currently available All Electronic Toll Collection systems.

Truss Span Staging for South Viaduct Restoration Project. On April 15, 2019, Bridge staff began installation of scaffolding in a portion of Span 4 of the South Approach Viaduct. Installation of the Span 4 scaffolding and installation of scaffolding in the upper half of the truss in Spans 5 and 6 of the South Approach Viaduct were completed and approved for use.

On January 6, 2020, Bridge Paint department began clean and paint operations in containment area #5 which is located at the southern end of the Span 4 just north of tower 1. On March 6, 2020, blasting and primer application in containment area #5 was completed and minor steel repairs commenced. On April 17, 2020, intermediate coat and final coat operations began. On August 13, 2020, final paint operations in area #5 were completed.

On April 10, 2020, blasting and primer applications began in containment area #4 located at tower 1 and the south end of Span 4. On May 22, 2020, blasting and primer application in containment area #4 was completed. On August 26, 2020, rivet and bolt replacements were completed. On September 23, 2020, intermediate and top coat applications in area #4 were completed.

On August 10, 2020, blasting and prime coat applications began in containment area #6 located in the upper half of the truss at Tower Span 2 and south end of Span 5. On December 22, 2020, rivet and bolt replacements and miscellaneous steel repairs commenced in containment area #6. Intermediate coat and final coat operations were performed from March 18, 2021 through May 6, 2021.

On January 11, 2021, blasting and primer application began in containment area #8, which is located at the north end of Span 6. On April 3, 2021, rivet and bolt replacements and miscellaneous

steel repairs commenced. On August 9, 2021, fastener replacements and miscellaneous steel repairs were completed. On October 26, 2021, intermediate coat and final coat operations were completed.

On July 12, 2021, blasting and primer application began in containment area #9, which is located at the north end of Span 4, and were completed on September 7, 2021. On February 10, 2022, Quality Assurance tests for newly installed bolts were performed with satisfactory results. Fastener replacement and miscellaneous steel repairs in this area are complete. Intermediate and top coat application inside containment area #9 are complete.

Blasting and prime coat applications were performed in containment area #7, which is the last containment at the SAV Truss Spans, from November 10, 2021, to January 7, 2022. On June 14, 2022, fastener replacements and miscellaneous steel repairs commenced. On October 25, 2022, Quality Assurance tests for newly installed bolts were performed with satisfactory results. Fastener replacement and miscellaneous steel repairs in this area are complete. During the month of February 2023, paint operations inside Containment #7 were completed. Blasting and painting of the remaining areas in the SAV Truss Spans will resume after the SDS contractor completes their work in the SAV Truss Spans.

Toll Plaza Administration Building Elevator Repairs and Improvements, Construction Contract No. 2021-B-052. Staff prepared design plans and bid documents to repair the existing elevator at the Toll Plaza Administration Building. On March 22, 2022, the District advertised Construction Contract No. 2021-B-052. On April 7, 2022, a pre-bid meeting was held at the Toll Plaza. On April 26, three bids were received.

On May 20, 2022, the Board, by Resolution 2022-037, authorized the award of award of Contract No. 2021-B-052 to Trico Construction, San Francisco, and authorized a capital budget increase in the amount of \$944,000 in the FY 21/22 Bridge Division Capital Budget for Project #2121, Toll Plaza Administration Building Elevator Replacement. The Notice to Proceed was issued effective June 13, 2022.

On August 1, 2022, the contractor began work on the new elevator machine room. The Contractor's Certified Industrial Hygienist took soil samples from the existing elevator pit and confirmed there are no PCB contaminants and no asbestos. On October 20, 2022, the Contractor began drilling the hole to fit the new cylinder. On December 1, 2022, the new hydraulic jack installation was completed. On January 12, 2023, painting of the machine room, 1st and 2nd floor lobby was completed. On March 8, the fire detection and fire alarm system, and the machine room ventilation system were completed. On April 14, 2023, installation of all elevator equipment was completed and the initial inspection by the State of California elevator inspector was conducted. Due to the heavy winter rains, the water table in the area has risen and has infiltrated the elevator pit. The inspector stated that the elevator pit water intrusion and sump discharge must be addressed prior to final inspection. Staff developed construction drawing details for waterproofing and coating the elevator pit and for furnishing and installing a new sump system and water oil-separator. The Contractor received price proposals for the work that were acceptable to the District. The elevator pit waterproofing and coating work was completed on June 29, 2023. *The installation of the new sump and oil-water separator system was completed on August 22, 2023. The elevator contractor has requested the final inspection from the State of California elevator inspectors.*

Toll Plaza Administration Building Door and Window Rehabilitation, Construction Contract No. 2022-B-104. Staff prepared design plans and bid documents to retrofit select fixed paned windows and to remove and replace the existing automatic sliding glass front doors at the Toll Plaza Administration Building. On December 6, 2022, the District advertised Construction Contract No. 2022-B-104. On December 20, 2022, a pre-bid meeting was held at the Toll Plaza. On January 10, 2023, two bids were received and publicly opened.

On February 23, 2023, the Board, by Resolution No. 2023-016, approved award of Contract No. 2022-B-104 to Pinguelo Construction in the amount of \$220,000. The Notice to Proceed was issued with an effective date of March 13, 2023. Contractor has completed field measurements and has ordered the windows and new front door. On May 6, 2023, the contractor removed and replaced the Sergeant's office window glass. On August 4, 2023, the Contractor removed and replaced the Administration Building main entrance sliding doors. *Fabrication of the windows was completed in the middle of August 2023. The Contractor commenced the window installation on August 28, 2023, and completed installation on September 8, 2023. Punch list work remains.*

## **BUS TRANSIT FACILITIES**

Novato Bus Facility – Site Remediation. A site remedial investigation report regarding previous fuel leaks at the site was submitted to the San Francisco Regional Water Quality Control Board (SFRWQCB) in May of 1997. The SFRWQCB reviewed and approved the recommended corrective actions identified in the report, which included replacing the existing diesel Underground Storage Tanks (USTs). Two existing 12,000-gallon single-walled underground storage diesel tanks were removed in 1998 and replaced with two new double-walled 15,000-gallon USTs nearby.

In June 1999, the District submitted a report for implementation of the remaining corrective actions, which included quarterly groundwater monitoring, closure of a deep well, installation of additional monitoring wells and a sensitive receptor survey. The groundwater monitoring results indicated that the fuel from the leak was confined to the site; however, it was not diminishing at a rate that would allow site closure.

The fourth quarter 2003 round of monitoring discovered a spike in contaminant levels in the monitoring wells. The District reported the findings to the SFRWQCB in its April 2004 progress report and included recommendations that would lead to site closure. The SFRWQCB approved the recommendations, added a few of its own, and required that the District implement those recommendations. The District implemented two rounds of quarterly groundwater monitoring that were concluded in March 2005. On November 8, 2005, the District advertised an RFP for a new contract to perform additional testing and monitoring as required by the SFRWQCB. On February 24, 2006, the Board authorized execution of a Professional Services Agreement with PES Environmental, Inc. The Notice to Proceed was issued to the consultant on March 6, 2006. The consultant prepared a work plan and submitted the plan to the SFRWQCB for approval. The District received a conditional approval of the work plan from the SFRWQCB. The consultant performed extensive soil and groundwater sampling throughout the site. Consultant developed a plan to determine the extent of residual diesel fuel that has been discovered in the subsoil and groundwater. The plan was approved by the SFRWQCB.

Consultant completed the fieldwork delineating the extent and zones of residual diesel fuel and free-phase diesel fuel in the soil and groundwater and submitted the reports to the SFRWQCB for review and comment. On August 14, 2013, staff met with representatives of the SFRWQCB to

discuss site closure requirements based on the new guidelines of the Water Board's recent "Low-Threat Underground Storage Tank Case Closure Policy." On April 7, 2015, the consultant completed the work tasks listed in the Professional Services Agreement.

The Water Board's representatives indicated that the free-phase product in soil and groundwater must be cleaned up before closure is granted.

Novato Bus Facility Underground Storage Tank Site Cleanup and Closure Design Services, Contract No. 2015-BT-02. A Request for Statement of Qualifications and Proposals (RFQ/RFP) to engage consultants to finalize environmental clearance, design and construction documents in order to complete site cleanup and obtain environmental closure of the site was advertised on September 2, 2014. On October 7, 2014, three proposals were received and on October 22, 2014, staff interviewed all three firms. On February 20, 2015, the Board of Directors authorized the award of Professional Services Agreement No. 2015-BT-02 with Brunsing Associates, Inc., in the amount not to exceed \$400,500, and established a contingency in the amount of \$40,500. The Notice to Proceed was issued effective March 16, 2015. The project kick-off meeting was held on March 18, 2015. The consultant reviewed historical documents, performed groundwater sampling on March 25, 2015, and performed a preliminary survey of the site. On May 22, 2015, the District sent a letter to the Water Board outlining the proposed tasks the District intended to perform in support of completing the Feasibility Study and Corrective Action Plan (FS/CAP) required by the Water Board. On June 30, 2015, the District received a letter from the Water Board granting approval to submit the FS/CAP. On October 30, 2015, the FS/CAP report was submitted to the Water Board. On December 18, 2015, the Water Board notified the District that a public notification and comment period on the proposed site cleanup is required. The Water Board requested a mailing list of property owners within a 500-foot radius of the site, a list of other interested parties and relevant public agencies, and a draft notification invitation to comment on the proposed cleanup at the site. The District provided the information to the Water Board and on January 6, 2016, the Water Board issued to the District the final Notice of Invitation to Comment. The District's consultant sent the Notice to all property owners and entities on the Interested Party list on January 7, 2016. The comment period ended on February 9, 2016. Staff sent responses to the public comments to the Water Board on March 7, 2016. On April 22, 2016, the Water Board requested that the scope of work presented in the FS/CAP be revised. Staff and consultant met with the Water Board on May 18, 2016 to discuss the Water Board's request, and explained the rationale for the preferred option in the FS/CAP. The Water Board requested the District prepare a document that further explains the cleanup goal described in the FS/CAP. The document was submitted to the Water Board on June 16, 2016. The Water Board issued a conditional approval of the FS/CAP on October 26, 2016, and requested the preparation of a Remedial Action Plan (RAP) for implementing the proposed cleanup work. The District submitted a focused RAP to the Water Board on January 13, 2017. The Water Board issued a conditional approval of the RAP on February 3, 2017. Staff requested a time extension for completion of the cleanup from the Water Board in order to incorporate the RAP conditions into the design and complete the construction documents. On April 21, 2017, the Water Board approved a time extension for completion of the cleanup to the end of 2018 and approved reducing the frequency of testing of groundwater to twice a year.

On October 31 and November 30, 2017, staff submitted a Remedial Action Plan Implementation Progress Report to the Water Board. On December 28, 2017, staff submitted a progress report to the Water Board and requested a time extension for completion of the Project as described in the RAP. On February 28, 2018, staff submitted another progress report to the Water Board. In



November 2019, staff met with the Water Board and presented the current schedule for completing design and commencing construction. Staff informed the Water Board that the design is being modified and the project will advertise for construction in 2020. The Water Board stated the cleanup must take place as soon as possible and requested monthly updates on progress.

On September 25, 2020, the Board, by Resolution No. 2020-076, authorized execution of the Fourth Amendment to Professional Services Agreement No. 2015-BT-02, Novato Bus Facility Underground Storage Tank Site Cleanup and Closure Design Services, with Brunsing Associates, Inc., Santa Rosa, CA, in an amount not to exceed \$112,500.00, for engineering support services and post construction monitoring. On September 1, 2021, the consultant submitted to the Water Board the Remedial Action Plan Implementation Report. On September 30, 2021, the consultant performed groundwater sampling at the site. On October 28, 2021, the consultant submitted to the Water Board the ground water monitoring report and recommended that, based upon the monitoring results, the Water Board approve moving forward with site closure.

On June 13, 2022, the Water Board approved the August 31, 2021, RAP Implementation Report, the June 30, 2021, Semi-Annual Post-Construction Groundwater Monitoring Report, the October 28, 2021, Semi-Annual Post-Construction Groundwater Monitoring Report, and the February 24, 2022, Request for Site Closure report for the site. The Water Board also requested that the District prepare and submit additional closure documents including a Soil and Groundwater Management Plan, an interested party mailing list and a Case Closure Summary Form, which are required in order to receive site closure. On September 1, 2022, the consultant submitted the Soil and Groundwater Management Plan to the Water Board for review and approval. The consultant prepared a mailing list of adjacent property owners and interested local agencies for eventual distribution of the Soils Management Plan once approved by the RWQCB and on October 25, 2022, the District submitted the list to the Water Board. On February 24, 2023, the District submitted the draft Case Closure Form to the Water Board. On April 28, 2023, the Water Board provided conditional approval of the Soil and Groundwater Management Plan and requested additional information in order to proceed with case closure. On June 28, 2023, the District submitted the additional information to the Water Board. Staff is waiting for the Water Board's response.

San Rafael Parking Lot Improvements and Solar Panel Installation Project, Construction Contract No. 2021-BT-031. Staff is preparing design plans and bid documents to perform improvements to the employee and visitor parking lots and install a solar panel carport at the San Rafael Bus Facility.

## **FERRY FACILITIES**

Damage Assessment and Structural Analysis of the San Francisco Ferry Terminal Inner and Outer Berths, PSA 2021-F-049. On June 30, 2021, during a facility inspection at the San Francisco Ferry Terminal, District staff discovered a crack in one of the outer berth steel framing elements. Subsequent inspections on July 6<sup>th</sup> and 7<sup>th</sup>, 2021, revealed additional cracks at both the outer and inner berths.

In accordance with Public Contract Code Section 22050 and the District's Procurement Policy, on July 14, 2021, the General Manager authorized an emergency procurement to hire Moffatt & Nichol to perform a thorough damage assessment and structural analysis in order to determine the cause of the cracks and the structural condition of the berths. The consultant completed the

assessment and analysis and developed a repair for the inner berth. On March 11, 2022, staff submitted a construction permit application to the Port of San Francisco for the repairs. The Port issued the permit on April 18, 2022 and the consultant provided engineering support during construction. The inner berth structural repairs have been completed.

In addition to the structural repairs, the damage assessment included recommendations for repairs and rehabilitation to the existing hydraulic lift system. Deficiencies in the hydraulic lift system were determined to be a contributing factor in causing the damage. Ferry Operating staff has determined that recommended repairs are beyond the capabilities of staff. Engineering consulted with Moffatt & Nichol and requested that they develop a scope of work and cost proposal for designing and preparing plans and specifications for a rehabilitation of the hydraulic system. An amendment to PSA 2021-F-049, in the amount of \$269,873 was executed for the hydraulic system rehabilitation design. The design work is progressing. During field investigations of the berth hydraulic lift systems, it was determined that the hydraulic system for the gangplanks that extend from the berth to the vessels was also in poor condition. The investigation determined that the condition of the inner berth hydraulic gangplank system was similar to that of the hydraulic lift system and requires replacement. Engineering staff requested and Moffatt & Nichol prepared a scope of work and cost proposal for the design of the repairs. A fourth contract amendment, which includes a task in the amount of \$19,766, was executed with Moffatt & Nichol, for the replacement of the inner berth hydraulic gangplank design plans and specifications. The design work for the gangplank hydraulic repairs is progressing. Upon completion of the design, a construction contract will be issued for bids to implement the repairs.

Engineering staff and Moffatt & Nichol developed options for the outer berth repairs and Moffatt & Nichol prepared a scope of work and cost proposal for the design of the outer berth repairs. The fourth contract amendment, which includes a task in the amount of \$336,374, was executed with Moffatt & Nichol for the outer berth structural and hydraulic systems repair final design and construction documents. The design work for the outer berth is progressing. Upon completion of the design, a construction contract will be issued for bids to implement the outer berth repairs.

San Francisco Ferry Terminal (SFFT) Security Improvement Project, Contract No. 2022-F-111. Staff is preparing design plans and bid documents to construct security improvements at the San Francisco Ferry Terminal. On May 4, 2023, Staff submitted conceptual designs of the improvements to the Port of San Francisco for review and approval. On May 11, Port of San Francisco approved the conceptual design. Staff is preparing design plan and specification for the building permit application of the Port of San Francisco. On July 10, 2023, staff met with Port of San Francisco representatives to discuss the Port building permit application and the Bay Conservation and Development Commission (BCDC) permit. The Port requested a project narrative for review to determine permit requirements. On July 28, 2023, a project narrative was submitted to Port for review. *On August 24, 2023, the Port provided comments supportive of the security improvement project but included conditions. Staff is reviewing Port comments and conditions.*

Larkspur Ferry Terminal Fuel Tank Cleaning, Inspection, and Rehabilitation, Contract No. 2022-F-014. District staff prepared a request for proposals for services to clean, inspect and perform minor repairs to the District's four (4) 75,000 gallon above ground diesel fuel storage tanks located at the District's Larkspur Ferry Terminal. The project was advertised for bids on April 12, 2023. A pre-bid meeting was held on May 2, 2023.

On June 23, 2023, the Board, by Resolution 2023-043, approved actions regarding award of Contract No. 2022-F-014 to Euro Style Management. The Notice to Proceed was issued effective August 7, 2023. *The Contractor completed necessary submittals and work plans to start work. On August 21, 2023, the Contractor began cleaning the existing fuel in three of the four tanks and completed the work on August 25, 2023. The Contractor began sand blasting the interior of existing fuel tank No. 04 on September 5, 2023. This work is currently in progress.*

Conceptual Designs, Environmental Studies and Engineering Services for Modifications and Improvements to the Larkspur, San Francisco, and Sausalito Ferry Terminal Facilities, PSA No. 2010-FT-3. A Request for Proposal (RFP) to engage consultants to perform this work was advertised on May 19, 2009, and on July 7, 2009, six proposals were received. On September 25, 2009, the Board authorized execution of a Professional Services Agreement with Moffatt & Nichol. The Notice to Proceed was issued effective November 2, 2009. Soil borings for evaluating geotechnical conditions at the San Francisco site and Sausalito site were performed between November 5 and November 12, 2010. The consultant completed the site surveys and alternative designs for each terminal. Staff completed evaluation of the alternative designs. Staff presented the design concepts to the Building and Operating Committee at its January 27, 2011, meeting.

The District's environmental consultant prepared draft environmental documents for the Sausalito and San Francisco Ferry Terminals. The draft documents were reviewed by District staff and on April 3, 2012, transmitted to the Federal Transit Administration (FTA) for review. FTA requested that the documents be modified prior to publishing them for public comments. The San Francisco Terminal and the Sausalito Terminal documents have been revised and presented to FTA and FTA has determined they are acceptable.

San Francisco Ferry Terminal. On February 14, 2011, the design consultant presented the conceptual designs at the Ferry Passenger Advisory Committee meeting. On April 11, 2011, the design consultant presented the conceptual designs of the San Francisco Ferry Terminal to the Port of San Francisco and the Water Emergency Transit Authority (WETA). The Port and its design consultants then presented their conceptual design for the landside improvements behind the Ferry Building and the addition of new WETA ferry berths. It was agreed that these meetings will continue periodically as working sessions to ensure that both projects interface smoothly.

In October 2011, staff met with BART and business representatives of the San Francisco Ferry Building to brief them on the status of the project. Staff also met with BART and WETA to discuss schedule and potential construction impacts of projects. On February 18, 2014, staff and the consultant met with Port of San Francisco representatives to discuss the permitting requirements associated with the San Francisco Ferry Terminal project. On March 20, 2014, staff met with representatives from the Port of San Francisco, Bay Conservation and Development Commission (BCDC), San Francisco Bicycle Coalition, WETA, and the Ferry Building property management and Ferry Plaza tenants to discuss this project and other upcoming projects, the impacts the project will have on the area and how public access may be improved in the Ferry Plaza.

The consultant completed revisions to the San Francisco Ferry Terminal environmental technical documents and prepared the draft regulatory agency consultation letters for the FTA. The District submitted the revised letters and documents to the FTA for review and approval. The FTA requested additional edits to the consultation letters and environmental technical documents. The revised letters and environmental documents were submitted to the FTA on October 3, 2014.

On June 19, 2014, the FTA submitted to the State Historic Preservation Officer (SHPO) a request for concurrence that the proposed San Francisco Ferry Terminal Vessel Boarding Rehabilitation Project will have no adverse effect on historic properties, in accordance with Section 106 of the National Historic Preservation Act. On July 23, 2014, the SHPO concurred that the project will have no adverse effect on historic properties.

On November 6, 2014, the FTA submitted to the National Marine Fisheries Service a request for concurrence under Section 7 of the Endangered Species Act and the Magnuson-Stevens Fishery Conservation and Management Act, that the San Francisco Ferry Terminal Vessel Boarding Rehabilitation Project will have no effects or will not likely adversely affect federally listed species. On November 6, 2014, the FTA submitted to the U.S. Fish and Wildlife Service a request for concurrence that this project will have no effect or will not likely adversely affect certain listed species. The National Marine Fisheries Service (NMFS) requested additional information on the project. The District submitted the information to the FTA and on April 3, 2015, FTA submitted the information to NMFS. On April 13, 2015, NMFS concurred that the proposed project is not likely to adversely affect certain subject listed species and designated critical habitats.

Sausalito Ferry Terminal. The District presented the conceptual design for the Sausalito Ferry Terminal at the Sausalito City Council meeting on May 3, 2011, and also to the Director of Public Works on May 4, 2011. The City Council was amenable to the design with only minor comments and suggestions.

On September 19, 2012, the District filed a Notice of Intent to Adopt a Mitigated Negative Declaration, in conformance with the requirements of the California Environmental Quality Act (CEQA), for the proposed improvements at the Sausalito facility. On October 2, 2012, a public meeting was held at the Sausalito City Hall Chambers. The public comment period concluded on October 19, 2012. On December 14, 2012, the Board, by Resolution No. 2012-100, adopted a Mitigated Negative Declaration and approved the project design for the Sausalito Ferry Terminal.

On April 11, 2013, staff and the consultant met with BCDC to review the project and requirements for the submittal of a draft BCDC permit application. The consultant prepared and the District submitted the additional information requested by BCDC on the Sausalito Project.

On July 24, 2013, staff and the consultant met with the City of Sausalito Public Works Department to review the status of the project and coordination issues for the project.

On August 9, 2013, staff and the consultant participated on a teleconference with the FTA and the National Marine Fisheries Service (NMFS) discussing the impacts associated with the Sausalito Ferry Terminal improvements. The NMFS was concerned with impacts to the fish habitat as a result of the additional shading associated with the improvements and stated that the District must propose mitigation for the loss of habitat due to the additional shading. The FTA concurred and on September 13, 2013, wrote to NMFS committing to mitigate for the habitat loss and requesting concurrence with the District's determination that the project may affect, but is not likely to adversely affect, protected fish species and marine mammals. Staff, the FTA and NMFS negotiated mitigation measures to address the NMFS' concerns. The District entered into an agreement with the State Coastal Conservancy to implement the mitigation measures. The District and FTA met on December 5, 2013, to review the status of the project. The District submitted to FTA on December 10, 2013, in conformance with the new FTA format, documentation requesting concurrence that the Sausalito Ferry Terminal Project is categorically excluded under the National

Environmental Policy Act (NEPA). On February 13, 2014, the FTA concurred with the District's determination that the project qualifies as a categorical exclusion under NEPA.

On December 20, 2013, the Board approved actions regarding an amendment to the consultant's contract for additional design services associated with a temporary terminal at Sausalito and vessel studies.

On January 29, 2014, staff submitted a permit application for the Sausalito Ferry terminal to BCDC. On February 27, 2014, BCDC requested additional information be prepared and submitted for their reviews. On April 29, 2014, District sent the additional information and responses to comments to BCDC. The District and the consultant presented the project to BCDC's Design Review Board (DRB) on October 6, 2014. BCDC staff requested additional information on the design of the facility. Staff submitted the information to BCDC on November 3, 2014. On December 4, 2014, staff presented the project to BCDC at a public hearing. BCDC requested further information from its staff regarding the specifics of the project. The District worked with BCDC on scheduling a date to bring the project back for consideration. On October 17, 2014, the City of Sausalito issued an encroachment permit for the temporary terminal and other work elements located outside the District's lease area. On December 2, 2014, staff made a presentation of the project to the City of Sausalito City Council. Staff worked with the City of Sausalito staff on establishing a project review process that would allow the City residents and officials to provide additional input on the project design. At its February 10, 2015 meeting, the City Council approved the process. On March 11, 2015, the District presented the project to the Sausalito Joint Planning Commission/Historic Landmark Board meeting. On March 21 and 22, 2015, the District provided a story pole equivalent demonstration between 8:00 AM and 10:00 AM at the project site. On March 24, 2015, the District submitted its final design drawings and additional information requested by the City of Sausalito, of the Sausalito Ferry Terminal Improvements. On April 1, 2015, the District presented the project to the Sausalito Joint Planning Commission/Historic Landmarks Board meeting. On April 15, 2015, the District participated in the second Sausalito Joint Planning Commission/Historic Landmarks Board public meeting. On May 5, 2015, the District participated in the City of Sausalito Council meeting during which the City Council voted to not provide consent on the project. On June 27, 2015, staff attended a workshop with representatives of the Sausalito City Council and Sausalito residents to further discuss the project. On October 10 and November 14, 2015, staff met with members of the Sausalito City Council and Sausalito residents. The District presented a proposed revised design to the Sausalito Planning Commission and Historic Landmarks Board on March 16, 2016 and on March 29, 2016. Sausalito City staff compiled design questions for the Project from both meetings. The City of Sausalito has also hired consultants to independently peer review the District's proposed float size and renderings showing the proposed ferry terminal from different views along the Sausalito shoreline. On April 8 and 19, 2016, the City of Sausalito requested information related to the renderings and the size of the float. The District provided this information on April 19 and 26, 2016. The City of Sausalito and its peer reviewer requested additional information on June 1, 6, 9 and 17, 2016 and the District responded to these requests by June 29, 2016. The City of Sausalito requested information on July 22, 2016, related to the ferry schedule, number of passengers and operations. The District provided the information on August 11, 2016. On August 18, 2016, the District submitted a revised design package to the City of Sausalito and requested the City to provide its consent to the project within 45 days. On August 22, 2016, the City of Sausalito requested an extension to the 45-day review period in order for them to investigate whether further environmental reviews of the project were warranted. On September 2, 2016, the District withdrew its submittal requesting the City of Sausalito's review. On September 13, 2016, the City of

Sausalito filed a lawsuit against the District. On October 25, 2016, the District attended a settlement meeting with the City of Sausalito to discuss the lawsuit and find resolution. On December 8, 2016, the District attended another settlement meeting with the City of Sausalito where the District's Consultant and the City's third party reviewer further discussed the size of the proposed facility. The City of Sausalito and its consultant requested more clarification and information on the design assumptions. On January 12, 2017, staff provided a response to the City's request.

On November 18, 2016, the Board approved actions relative to the Fifth Amendment to PSA No. 2010-FT-3 with Moffatt & Nichol for additional environmental and design services associated with the Sausalito and San Francisco ferry terminals.

On May 26, 2017, the Board, by Resolution No. 2017-045, approved the Sixth Amendment to PSA No. 2010-FT-3 with Moffatt & Nichol, in an amount not to exceed \$122,000, to perform an inspection and evaluation of the Sausalito Ferry Boarding facility, and established a contingency in an amount of \$12,200 for this amendment. Engineering is coordinating inspections of the float with the Ferry Division. Between December 4, 2017 and December 8, 2017, the Consultant performed in-water and above water inspections of the Sausalito float and the gangway.

On December 15, 2017, the Board, by Resolution No. 2017-116, authorized execution of the First Addendum to the Sixth Amendment to Professional Services Agreement, PSA No. 2010-FT-3, Conceptual Designs, Environmental Studies and Engineering Services for Modifications and Improvements to the Larkspur, San Francisco, and Sausalito Ferry Terminal Facilities, with Moffatt & Nichol, in an amount not to exceed \$19,200 to perform additional inspections and evaluation of the Sausalito Ferry boarding facility. The consultant submitted the final inspection report on March 26, 2018.

On May 26, 2017, the Board, by Resolution No. 2017-044, approved the First Addendum to the Sausalito Ferry Terminal Initial Study/Mitigated Negative Declaration, as amended to remove the selection of a specific construction staging area, authorized the filing of a Notice of Determination, and authorized proceeding with implementation of the modified Sausalito Ferry Terminal Vessel Boarding Rehabilitation Project.

On July 8, 2017, the District and the City executed a Memorandum of Understanding (MOU). The District submitted revised photo renderings of the project on August 17, 2017 and submitted revised plans on August 29, 2017. The District presented the revised plans and responded to questions from the City of Sausalito and the public at the September 12, 2017 and September 26, 2017 Sausalito City Council meetings. On October 10, 2017, the Sausalito City Council, at its Council Meeting, voted unanimously 4-0 to approve the project with conditions.

On October 27, 2017, the Board, by Resolution 2017-097, approved the First Amendment to the Lease of Public Tide and Submerged Land with the City of Sausalito, agreed to the Conditions of Approval set by the Sausalito City Council Resolution No. 5670, and authorized Staff to proceed with the implementation of the modified Project.

On June 25, 2018, the consultant submitted the 65% detailed design package. Staff has provided comments on the 65% design package to the consultant. On December 21, 2018, the consultant submitted the 95% detailed design package. Staff has provided comments on the 95% design package to the consultant.

On April 29, 2019, the consultant submitted the 100% detailed design package. Staff provided comments on the 100% design package to the consultant.

The consultant prepared the draft BCDC permit application for the construction. In November 2019, staff transmitted the BCDC permit application to the City for their signature. The City staff requested a meeting to discuss the permit application. Staff is working with the City to finalize the permit application.

Golden Gate Ferry Sausalito Landing Rehabilitation Environmental Mitigation Project, Contract No. 2015-FT-2. On June 27, 2014, the Board of Directors, by Resolution No. 2014-058, approved two (2) actions relative to the establishment of a new capital project, Golden Gate Ferry Sausalito Landing Rehabilitation Environmental Mitigation Project, in the amount of \$100,000 and authorized the General Manager to execute an agreement with the State Coastal Conservancy (SCC), in the same amount to implement the mitigation. The mitigation will be included in the State Coastal Conservancy's Living Shorelines Project that involves the planting and monitoring of eelgrass beds in the Central San Francisco Bay. The agreement was executed and the SCC performed the mitigation. On April 13, 2017, the SCC submitted the Eelgrass Habitat Creation and Monitoring at the San Rafael Living Shorelines Site Report as required by the 2014 Cooperation Agreement between the District and the SCC. On December 13, 2017, the State Coastal Conservancy submitted the Annual Summary Reports for 2015 and 2016 as required by the Cooperation Agreement. On July 24, 2018, the SCC submitted the final Annual Summary Report for 2017.

Wetland Restoration Design and Permitting Support Services at Corte Madera Ecological Reserve, RFP No. 2014-FT-13. As a condition of a 1988 USACE permit for maintenance dredging of the Larkspur Ferry Terminal, the District was required to perform a study to assess the potential impact of ferry operations on erosion of the shoreline at the CMER. The study also investigated creating replacement habitat for a native bird species, the Clapper Rail, due to erosion of their existing habitat. The study was inconclusive regarding the impact of ferry operations on erosion of the shoreline. In consultation with the USACE and USFWS (U.S. Fish & Wildlife Service), the District agreed to create two acres of tidal marsh habitat on the District's 72-acre parcel adjacent to CMER, as mitigation for the erosion impacts. In addition, in 1995 the District negotiated an agreement with local environmental groups to create two more acres of tidal marsh habitat as mitigation for the introduction of the first fast catamaran ferry vessel to the Larkspur fleet, for a total of 4 acres of habitat restoration.

The Engineering Department prepared and advertised on December 3, 2013, a Request for Statement of Qualifications and Proposals (RFQ/RFP) for Wetland Restoration Design and Permitting Support Services. On January 28, 2014, five proposals were received. On March 10, 2014, the District interviewed the top three ranked consultant firms. On April 25, 2014, the Board authorized the General Manager to award a Professional Services Agreement to WRA Inc.

Staff finalized the bid documents and on July 23, 2020, advertised the project for construction. The construction project was completed in 2021.

On September 25, 2020, the Board, by Resolution No. 2020-075, authorized execution of the Fourth Amendment to Professional Services Agreement No. 2014-FT-13, in an amount not to exceed \$550,000.00, for engineering support services and post construction monitoring.

The consultant is performing the required 5-year post-construction monitoring services of the new marsh, including performing irrigation, weeding and maintaining the new plants. On January 25, 2022, the consultant submitted the first year monitoring report to the US Army Corps of Engineers, BCDC, the Regional Water Board and to the California Department of Fish and Wildlife. On January 5, 2023, the consultant submitted a draft Year 2 monitoring report to the District for review, prior to submittal to the permit agencies. On January 23, 2023, the finalized Year 2 monitoring report was submitted to the USACE, BCDC, RWQCB and State Fish and Wildlife Service permit agencies. Year 3 monitoring is in progress.

*On August 25, 2023, the Board, by Resolution No. 2023-055, approved Amendment No. 6 to Professional Services Agreement (PSA) No. 2014-FT-13, Wetland Restoration Design and Permitting Support Services Project, with WRA, Inc. (WRA) in the not to exceed amount of \$576,561, to perform invasive vegetation removal in the areas adjacent to the restored marsh. The Notice to Proceed was issued effective September 5, 2023. On September 5, 2023, WRA commenced vegetation removal. The work is progressing.*

*The invasive vegetation removal plan developed by WRA calls for mechanical removal of pampas and Harding grasses. Because there is a possibility that pampas grass may resprout from its large root bases two years after the root bases were pulled from the ground, the plan considers a targeted use of herbicide to eradicate such root regrowth. Staff has requested that the consultant review the Marin County Integrated Pest Management (IPM) policy regarding herbicides approved for use by the Marin County Parks to eradicate pampas grass. If there is no herbicide approved for such purpose, staff will instruct the consultant to develop a mechanical method of stopping the pampas grass root regrowth should it occur. If mechanical clearing of the root regrowth is found to be required, an addendum to PSA Amendment No. 6 will be presented for the Board approval of such method and its cost. Staff will provide an update on the results of the consultant's review of the IPM approved list of herbicides in the next Engineer's Report.*



<b>Construction Contract Working Days Expended as of September 03, 2023</b>					
<b>Project</b>	<b>Contract</b>	<b>Contract Working/ Calendar Days</b>	<b>Elapsed Contract Days</b>	<b>Contract Extension Days</b>	<b>Contract Time Expended</b>
Physical Suicide Deterrent System and Wind Retrofit (Shimmick/Danny/s JV NTP 02/13/17 CCD 01/12/21	2016-B-1	1,430	2394**	0	167.41%
Golden Gate Bridge Toll Plaza Administration Building Elevator Repairs and Improvements (TRICO Construction Co.) NTP 06/15/22 CCD 04/14/2023*	2021-B-052	270	430**	160*	101%
Suicide Deterrent System Rescue Training Net (Valentine Corporation Co.) NTP 03/20/23 CCD 12/21/23	2022-B-084	190	113***		59.47%
Golden Gate Bridge Toll Plaza Administration Building Door and Window Rehabilitation (Pinguelo Construction, Inc.) NTP 03/13/23 CCD 11/05/23	2022-B-104	120	120***		100%
Golden Gate Bridge Toll Plaza Pavement Overlay (Argonaut Constructors) NTP 06/05/23 CCD 11/05/23	2022-B-114	150	88**		58.67%
Larkspur Ferry Terminal Fuel Tanks Rehabilitation (Euro Style Management) NTP 08/07/23 CCD 03/06/24	2022-B-104	140	19***		13.57%
*Change orders in process to extend time					
** Calendar Day Project					
*** Working Day Project					
NTP = Notice to Proceed					
NOC = Notice of Completion					
CCD = Contract Completion Date					

**Fiscal Impact**

There is no fiscal impact relative to this status report.

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