

SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION

50 California Street • Suite 2600 • San Francisco, California 94111 • (415) 352-3600 • Fax: (415) 352-3606 • www.bcdc.ca.gov

June 7, 2013

Application Summary

(For Commission consideration on June 20, 2013)

Number: BCDC Permit Application No. 2011.004.00
Date Filed: April 25, 2013
90th Day: July 24, 2013
Staff Assigned: Michelle Burt Levenson (415/352-3618,
michellel@bcdc.ca.gov)

Summary

- Applicants:** County of Marin and the Sonoma Marin Area Rail Transit (SMART)
- Location:** Approximately one quarter-mile west of the Larkspur Ferry Terminal, spanning and adjacent to Sir Francis Drake Boulevard and Corte Madera Creek, in the City of Larkspur, Marin County (Exhibit A).
- Project:** The proposed project involves connecting the Cal Park Hill Tunnel multi-use pathway to a new pedestrian bridge spanning Sir Francis Drake Boulevard and linking with the Bay Trail along the south edge of Sir Francis Drake Boulevard. The pathway will also provide pedestrian and bicycle access between the future Sonoma Marin Area Rail Transit (SMART) Larkspur station (to be located east of Highway 101 and north of East Sir Francis Drake Boulevard) and the Larkspur ferry terminal. The proposed project would consist of: (1) an at-grade pathway and ramp from the existing Cal Park Tunnel Pathway to East Sir Francis Drake Boulevard; (2) an approximately 15.5-foot-wide Warren Truss Pedestrian bridge over East Sir Francis Drake Boulevard; and (3) an approximately 273-foot-long, U-shaped, elevated access ramp connecting the bridge to the south side of East Sir Francis Drake Boulevard. The ramp would wrap around and through the existing wood trestle and connect with the existing Bay Trail. A 1,100-square-foot viewing platform would be constructed on the ramp to provide views of Corte Madera Creek and San Francisco Bay (Exhibits B through E). To facilitate



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construction of the bridge and ramp structure, a section of the existing wooden railroad trestle would be permanently removed and a temporary pile-supported construction trestle or platform would be installed in the marsh.

The elements of the project that would be in the Commission's jurisdiction consist of a portion of the pedestrian bridge that would be constructed within the shoreline band and the Bay, and the elevated ramp structure, viewing platform and construction staging area that would be located in the Bay. To mitigate for the fill impacts of the project, the applicants propose to enhance and restore 1.42 acres of degraded tidal salt marsh at Creekside Marsh, approximately 1.4-miles upstream from the project site and north of the main channel of Corte Madera Creek in the City of Kentfield Marin County (Exhibit F).

The proposed project would improve public safety, access and connectivity for non-motorized travel across and along East Sir Francis Drake Boulevard.

**Issues
Raised:**

The staff believes that the application raises three primary issues: (1) whether the project is consistent with the Commission's fill policies, including safety of fills, climate change and sea level rise; (2) whether the project is consistent with the Commission's public access policies; and (3) whether the project is consistent with the Bay Plan policies on natural resources, including fish, other aquatic organisms and wildlife, tidal marshes and tidal flats, and water quality.

Background

The County of Marin identified the need to improve non-motorized access along the U.S. Highway 101 corridor from the Tamalpais Drive interchange in the Town of Corte Madera to the East Sir Francis Drake Boulevard interchange in the City of Larkspur in 1999. In 2004, Regional Measure 2 was passed and funds were allocated to develop trail improvements within the Greenbrae Corridor. Several public workshops were held to identify public concerns and develop alternatives. The proposed project, the Central Marin Ferry Connection Multi-Use Pathway, is one of the improvements given high priority in this public process.

The Central Marin Ferry Connection Multi-use Pathway Project consists of two phases. Phase I, the subject of this application, consists of a multi-use pathway extending the Cal Park Hill Tunnel Pathway to the existing multi-use pathway located south of East Sir Francis Drake Boulevard along the north bank of Corte Madera Creek. This pathway would also provide bicycle/pedestrian access between the future Larkspur station of the Sonoma Marin Rail Transit

and the Larkspur Ferry Terminal. If future funding is found, Phase II would improve pedestrian and bicycle access from Sir Francis Drake Boulevard to the south to Wornum Drive. This project would include a bridge across Corte Madera Creek.

Project Description

Project

Details: The applicants, the County of Marin and the Sonoma Marin Area Rail Transit (SMART), describe the project as follows:

In the Bay (a tidal marsh):

- a. Construct, use and maintain, an 800-square-foot section of a 4,516-square-foot cantilevered pedestrian bridge, across Sir Francis Drake Boulevard, a 3,040-square-foot ramp leading to the bridge supported by eight (8) columns displacing 130 cubic yards of the Bay and covering 195 square feet of Bay surface area, and a 1,100-square-foot overlook integrated into the ramp (a total of 4,940 square feet of pile-supported and cantilevered fill); and
- b. Construct, use and remove at project completion, an approximately 6,800-square-foot, pile-supported construction staging area (e.g., trestle, platform, etc.).

Within the 100-foot Shoreline Band:

- a. Construct, use and maintain, an approximately 1,750-square-foot section of a 4,516-square-foot pedestrian bridge.

Bay (Tidal Marsh) Fill:

Work proposed in the Bay consists of an 800-square-foot portion of the 4,516-square-foot pedestrian bridge, a 3,040-square-foot elevated ramp structure and associated support columns (130 cubic yards occupying 195 square feet) and a 1,100-square-foot overlook integrated into the southern ramp. To facilitate construction, an approximately 6,800-square-foot temporary pile-supported construction area (e.g., platform, trestle, etc.) would be erected in the marsh and removed upon project completion (Exhibit F).

To mitigate for the impacts of the fill, the applicants propose to enhance and restore 61,855 square feet (1.42 acres) of degraded tidal marsh at Creekside Marsh, located 1.4 miles upstream of the project site, north of the main channel of Corte Madera Creek, in the City of Kentfield, Marin County. In addition, the applicant proposes to salvage all tidal marsh plants removed during construction and return the plants to their original locations upon project completion. A mitigation and monitoring reporting plan has been prepared for the project and would be implemented to ensure that specific measures are employed during and following construction, and during restoration activities at the mitigation site.

Type of Fill (sf)	Cantilevered (sf)	Solid (sf)
Columns		195
Pedestrian Bridge	800	
Ramp Structure	3,040	
Boardwalk	1,100	
Total	4,940	195

Public Access:

All of the proposed improvements are intended to improve public access. These improvements include a 795-foot-long segment of pathway connecting the Cal Park Tunnel pathway to the north side of Sir Francis Drake Boulevard (located outside of the Commission's jurisdiction), a pedestrian bridge across Sir Francis Drake Boulevard, and a ramp connecting the bridge to existing access on the south side of Sir Francis Drake Boulevard. Approximately 6,690 square feet of multi-use pathway would be within the Commission's jurisdiction(s), and 20,323 square feet (0.47 acre) of the pathway would be located outside of the Commission's jurisdiction. The pathway would range in width from 12 feet to 22.75 feet. In addition, new signage, striping, lighting, handrails, fencing landscaping and bollards are proposed (Exhibits D and E).

Schedule and Cost:

Construction is anticipated to commence September 16, 2013 and be completed by November 10, 2014. The total project cost is estimated at \$14.8 million.

Staff Analysis

- A. **Issues Raised:** The staff believes that the application raises three primary issues: (1) whether the project is consistent with the Commission's fill policies, including safety of fills, climate change and sea level rise; (2) whether the project is consistent with the Commission's public access policies; and (3) whether the project is consistent with the Bay Plan policies on natural resources, including fish, other aquatic organisms and wildlife, and water quality.
1. **Fill.** The Commission may allow fill only when it meets the requirements identified in Section 66605 of the McAteer-Petris Act, which states, in part, that: (a) fill "should be limited to water-oriented uses" or "minor fill for improving shoreline appearance and public access"; (b) fill in the Bay should be approved only when "no alternative upland location" is available; (c) fill should be "the minimum amount necessary to achieve the purpose of the fill"; (d) "the nature, location, and extent of any fill should be such that it will minimize harmful effects to the Bay area, such as, the reduction or impairment of the volume, surface area or circulation of water, water quality, fertility of marshes or fish or wildlife resources, or other conditions impacting the environment..."; and (e) "fill should be authorized when the applicant has such valid title to the properties in question that he or she may fill them in the manner and for the uses to be approved."
 - a. **Public Access.** The project proposes to provide a multi-use pathway for pedestrians, bicyclists, and other non-motorized users, linking the Cal Park Tunnel with the existing Bay Trail and sidewalks along East Sir Francis Drake Boulevard. This multi-use pathway was identified as a critical component of the Greenbrae Corridor improvements because it will provide a safe alternative to at-grade crossings by pedestrians and cyclists across a heavily traveled thoroughfare, and will connect a future commuter rail station (SMART) with the existing Larkspur Ferry Terminal.
 - b. **Alternative Upland Location.** Due to the locations of existing access (the Cal Park Tunnel and access along Sir Francis Drake Boulevard), and the fact that the access along San Francis Drake Boulevard is immediately adjacent to a tidal marsh, the applicants state that it is not feasible to connect existing access without placing fill in the marsh. In addition, siting the pathway over East Sir Francis Drake and over the marsh reduces potential at-grade crossings on a heavily traveled thoroughfare, preventing additional congestion to an already significantly congested roadway and exposing pedestrians and bicyclists to potentially unsafe roadway conditions.

- c. **Minimum Amount Necessary.** The project would result in the placement of 4,940 square feet of permanent, cantilevered fill for portions of the pedestrian bridge, access ramp and overlook, and 195 square feet of solid fill for pilings. In addition, 6,800 square feet of temporary fill for a pile-supported construction trestle or platform would be in place for approximately 1.5 years and would be used to facilitate construction of the project. In an effort to reduce the amount of fill that would be placed with the project, the applicants revised the original design of the project, resulting in a reduction of 7,150 square feet of temporary fill placed for construction access and a reduction of 195 square feet of permanent fill. The applicants state that the amount of fill placed with the project is the minimum amount necessary to construct a multi-use pathway that would accommodate a variety of non-motorized uses safely and effectively while providing adequate connections to existing public access pathways.
- d. **Effects on Bay Resources** As discussed more fully in the “**Natural Resources Policies**” section below, best management practices have been incorporated into the project to minimize the impacts of the proposed new fill in the Bay. On December 30, 2011, the U.S. Fish and Wildlife Service (USFWS) issued its Biological Opinion on the effects of the project on the endangered salt marsh harvest mouse and the endangered California clapper rail. The USFWS concluded that the project was not likely to “jeopardize the continued existence of these species” with the successful implementation of conservation measures and best management practices, the relatively small acreage and marginal quality of the habitat affected by the project and the benefits related to the enhancement of 1.42 acres of suitable high tidal marsh/upland refugia habitat that would be provided with the off-site mitigation at Creekside Park. Additionally, on April 25, 2013, the Regional Water Quality Control Board (RWQCB) issued a water quality certification for the project.
- e. **Valid Title.** The project site is currently owned by the Sonoma-Marin Area Transit District (SMART). The County of Marin would be responsible for constructing and maintaining the project.
- f. **Safety of Fills / Climate Change / Sea Level Rise.** Policy 4 of the Bay Plan policies on Safety of Fills states, in part, that “adequate measures should be provided to prevent damage from sea level rise and storm activity that may occur on fill or near the shoreline over the expected life of a project,” that “new projects on fill or near the shoreline should either be set back from the edge of the shore so that the project will not be subject to dynamic wave energy, be built so the bottom floor level of structures will be above a 100-year flood elevation that takes future sea level rise into account for the expected life of the project, be specifically designed to tolerate periodic flooding, or employ other effective means of addressing the impacts of future sea level rise and storm activity.”

Policy 2 of the Bay Plan policies on Climate Change states in part, “when planning shoreline areas or designing larger shoreline projects, a risk assessment should be prepared by a qualified engineer and should be based on the estimated 100-year flood elevation that takes into account the best estimates of future sea level rise”, that “a range of sea level rise projections for mid-century and end of century based on the best scientific data available should be used in the risk assessment” and that “the risk assessment should identify all types of potential flooding, degrees of uncertainty, consequences of defense failure, and risks to existing habitat from proposed flood protection devices.” Policy 3 requires all projects “other than repairs of existing facilities, small projects that do not increase risks to public safety, interim projects and infill projects within existing urbanized areas” to be “designed to be resilient to a mid-century sea level rise projection”.

On April 12, 2013, the applicant's consultants provided a memorandum dated March 2013 (and revised on May 2013), prepared by David J. Powers & Associates, that analyzed design water levels and projected sea level rise and its impacts on the proposed CMFC ramp structure.

According to the applicants, the project structure has a design life of approximately 75 years or until 2090. The project includes a 15.5-foot-wide path on a bridge over Sir Francis Drake Boulevard and an approximately 400-foot-long pathway supported over the marsh adjacent to Corte Madera Creek connecting the new pathway with the existing sidewalk on Sir Francis Drake Boulevard.

The following table includes the tidal elevations provided by the applicants for the site, including the 100-year extreme high water levels for the project vicinity (also known as FEMA's Base Flood Elevation (BFE)) or "100-year flood elevation", based on data from the Federal Emergency Management Agency (FEMA) Flood Insurance Study for Corte Madera Creek and work completed by the U.S. Army Corps of Engineers (1984). The 100-year flood elevation is defined by FEMA as the "flood elevation having a 1% chance of being exceeded in a given year."

Tidal Height	Elevation Based on NAVD 88 (feet) datum
Mean High Water (MHW)	5.3
Mean Higher High Water (MHHW)	5.9
100-Year Flood Elevation*	9.2
*Adjusted for 0.1 feet for sea level rise between Corps 1984 Report and 2000.	

Current estimates of the future rate of sea level rise vary widely, from the historic trend measured over the last century of about 8 inches per century to as much as 55 inches per century put forth by Stefan Rahmstorf based on his empirical studies of sea level rise and global temperature rise. The following table includes sea level rise projections (in feet) for the coast of California provided in the October 2010 *State of California Sea-Level Rise Interim Guidance Document*, and the 2012 National Research Council (NRC) report titled *Sea-Level Rise for the Coasts of California, Oregon and Washington: Past, Present and Future*.

Year	CA Interim Strategy (2010)		National Research Council NRC (2012)
	Average	Range	
2030	0.6	0.4 – 0.7	0.1 – 1.0
2050	1.2	0.9 – 1.4	0.4 – 2.0
2070	2.0	1.4 – 2.7	N/A
2100	4.0	2.6 – 5.8	1.4 – 5.5

The applicants reviewed a range of modeled conditions and selected an average in calculating projected sea level rise. For 2030, the average modeled rise is 7 inches (0.6 feet); for 2050, the average modeled rise is 14 inches (1.2 feet). For 2100, using the “high” emissions scenario developed by the Intergovernmental Panel on Climate Change (IPCC), the average modeled sea level rise is 55 inches (4.6 feet).

Using these projected sea level rise numbers with BCDC recommendations for 2050 and 2100, the applicants calculate the 100-year flood elevation at the project site to be:

Year	Projected BFE Elevation NAVD 88 (feet)
2030	9.8
2050	10.5
2090*	13.2
2100	13.8
*Based on 75-year design life of the structure	

Exhibit G shows the predicted flooding levels within the project area and along adjacent properties based on these projected sea level rise numbers. According to the applicants, a good portion of the site and low-lying portions of Sir Francis Drake Boulevard would be flooded by 2030. By 2050, much of the project area is projected to be inaccessible during significant flooding events and by 2090 (the end of the projected life of the project) and 2100, the entire area including the Larkspur Ferry Terminal, Sir Francis Drake Boulevard, and inland areas are projected to be inundated under several feet of water during major flood events. As a result, independent of the project structure itself, sea level rise will need to be addressed for the entire project site and adjacent areas, including the Larkspur Ferry Terminal.

Exhibit H shows the predicted flooding levels on the portion of the Central Marin Ferry Connection ramp located within BCDC’s jurisdiction. According to the applicants, much of the CMFC structure within BCDC’s jurisdiction has been constructed above an elevation subject to flooding due to sea level rise. However, the southern ramp structure that slopes down to connect with the existing grade at Sir Francis Drake will be flooded increasingly over the years. As shown on Exhibit I in elevation, by 2030, approximately 7.5 feet of the ramp structure would be flooded; by 2050, approximately 16.2 feet would be flooded; by 2090, 53.7 feet would be flooded; and by 2100, approximately 65 feet of the ramp would be flooded.

To address future coastal flooding related to sea level rise in San Francisco Bay, recent development projects have used a combination of raising development grades, setting the development footprint back from the shoreline, and improving shoreline protection systems, among other approaches.

According to the applicants, the entire ramp structure cannot be elevated above the projected inundation levels since the ramp must connect to existing access points and grades such as the path south of East Sir Francis Drake Boulevard that are already subject to inundation under existing conditions. Moving between the proposed ramp and the existing path requires an ADA-compliant sloped ramp for a connection, a portion of which would be required to be within the area subject to inundation. Therefore, in the long-term, planners and decision-makers will need to consider how best to protect the entire project area from sea level rise. The plan

could include reconstruction of infrastructure and private development at elevations above the projected sea level, removal of development from the zone of inundation, construction of levees, or some combination thereof.

In the event the decision is to reconstruct existing facilities at higher elevations, the applicants state that the connections to the CMFC ramp structure could be easily modified to accommodate such reconstruction. For instance, if East Sir Francis Drake Boulevard is elevated, the connecting ramp to the path could be modified as needed to provide a connection to and from the path. According to the applicant, 65 feet of the proposed ramp structure (the area predicted to be flooded by 2100) could be replaced with an elevated pathway at elevation 13.8 feet to provide continued access by 2100. The new pathway structure could be supported on three columns, similar to the proposed ramp, within the current alignment of the project. The rest of the ramp structure bridge, and bridge foundation would not require modification.

In addition, the applicants have designed the project to address future sea level rise by: (1) using materials for the ramp structure that are able to withstand elevated flood levels; and (2) increasing the depth of rebar cover as compared to a regular structure designed in a dry environment, to account for prolonged exposure to a wet marine environment.

Although it is clear that a portion of the proposed ramp structure (approximately 16.2 feet) will likely be flooded by 2050 based on sea level rise projections, Policy 3 of the Bay Plan policies on Climate Change, exempt certain projects from being designed to be resilient to a mid-century sea level rise projection, including "small projects that do not increase risks to public safety, interim projects and infill projects within existing urbanized areas." The CMFC project is a relatively small project and according to the applicants, would pose no risk to the public since the public would not use the path during events when the entire area, including the ferry terminal, is inundated with water. The project's sole purpose is to provide public access and the public will likely be moving in and out of the area on a regular basis. In addition, the project would be constructed within an existing urbanized area – adjacent to the Larkspur Ferry Terminal, near the U.S. 101 Freeway, Sir Francis Drake Boulevard Interchange and adjacent to retail, housing and office complexes. As stated above, the adjacent areas are also vulnerable to flooding from sea level rise and a comprehensive long-term strategy will be needed to address the area as a whole.

The Commission should determine whether the project is consistent with its law and policies regarding Bay fill, safety of fills, climate change and sea level rise.

2. **Public Access.** Section 66602 of the McAteer-Petris Act states that "...maximum feasible public access, consistent with a proposed project, should be provided." Policy 1 and Policy 6 of the Bay Plan policies on Public Access state that "a proposed fill project should increase public access to the Bay to the maximum extent feasible" and that the public access improvements "...should be designed and built to encourage diverse Bay-related activities and movement to and along the shoreline, should permit barrier free access for the physically handicapped to the maximum extent feasible, should include an ongoing maintenance program, and should be identified with appropriate signs." Policy 8 states "access to and along the waterfront should be provided by walkways, trails, or other appropriate means to connect the nearest public thoroughfare where convenient parking or public transportation may be available". In addition, Policy 5 states, "public access should be sited, designed, managed and maintained to avoid significant adverse impacts from sea level rise and flooding...."

The purpose of the project is to provide a pedestrian and non-motorized, multi-use pathway to promote non-motorized commute alternatives and enhance recreational travel within the City of Larkspur, Marin County. Its sole purpose is to enhance public access. The 1,977 feet of pathway would range in width from 12 feet to 22.75 feet and would extend existing trails, provide an important connection between trails, and provide a safe means for pedestrians and bicyclists to cross a busy roadway. When the Larkspur station for SMART is constructed, the pathway would provide a connection between the new station and the Larkspur Ferry Terminal. The pathway would provide elevated views of Corte Madera Creek, adjoining marshlands, and the Bay. The pedestrian bridge would be enclosed with a fine wire mesh to provide required safety and a transparency for bridge users as well as travelers on Sir Francis Drake and Highway 101. Lighting along the pathway would be directed downward to minimize glare and interpretive and directional signs would be placed along its length. The new pathway bridge is designed to provide universal access.

The Commission should determine whether the applicants' proposed public access improvements are consistent with its policies on Public Access.

3. **Natural Resources Policies.** Policy 1 of the Bay Plan policies on Water Surface Area and Volume state, in part: "the surface area of the Bay and the total volume of water should be kept as large as possible in order to maximize active oxygen interchange, vigorous circulation, and effective tidal action." Policy 2 of the Bay Plan policies on Fish, Other Aquatic Organisms, and Wildlife state, in part: "specific habitats that are needed to conserve, increase, or prevent the extinction of any native species, species threatened or endangered...should be protected...." Policy 4 states that the Commission should "...consult with the California Department of Fish and Wildlife [CDFW] and the U.S. Fish and Wildlife Service or [NMFS] whenever a proposed project may adversely affect an endangered or threatened...species" and "...give appropriate consideration to the recommendations of the [state and federal resource agencies] in order to avoid possible adverse effects of a proposed project on fish, other aquatic organisms and wildlife habitat." Policy 1 of the Bay Plan policies on Water Quality states, "bay water pollution should be prevented to the greatest extent feasible..." and policy 2 states that, "...the policies, recommendations, decisions, advice and authority of the State Water Resources Control Board and the Regional Board, should be the basis for carrying out the Commission's water quality responsibilities." Policy 2 of the Bay Plan Policies on Tidal Marsh and Tidal flats states, "any proposed filling...should be thoroughly evaluated to determine the effect of the project on tidal marshes and tidal flats, and designed to minimize, and if feasible, avoid any harmful effects...."

Corte Madera Creek is designated as "critical habitat" for the green sturgeon, the central California coast steelhead, the central California coast coho salmon, and the Sacramento River winter-run Chinook salmon. In addition, the project site provides potential habitat for the endangered salt marsh harvest mouse and the endangered California clapper rail.

On March 2, 2011, the proponents initiated consultation with the USFWS regarding potential project impacts to the clapper rail and salt marsh harvest mouse. On December 30, 2011, the USFWS issued its Biological Opinion for the project. The BO requires the implementation of several measures to ensure that the project does not adversely affect endangered species including implementation of a Stormwater Pollution and Prevention Plan (SWPP) and erosion control best management practices (BMPs) to minimize wind and water-related erosion. In addition, dust control measures would be implemented and bio-filtration strips and swales would be installed to receive stormwater discharge prior to entering the Bay. All areas of the marsh disturbed during construction would be revegetated with appropriate tidal marsh plant species. All construction activities would occur between September 1 and January 31, to avoid the clapper rail breeding season. If

construction must occur within the breeding season, clapper rail surveys must be conducted by a USFWS approved biologist. To protect the salt marsh harvest mouse, temporary exclusion fencing would be placed around a defined work area prior to the commencement of construction. A biologist would be on-site during vegetation removal activities, installation of the exclusion fencing and all construction activities. Construction activities would be avoided during high tides to ensure that adequate cover vegetation is available in the project site for clapper rail and the mouse during high tide events. The BO concluded that the project "is not likely to jeopardize the continued existence of these species with the "successful implementation" of the measures described above. The Opinion goes on to state that USFWS's determination is based on, "...the relatively small acreage of marginal quality habitat that will be disturbed during construction..." and "the enhancement of about 1.42 acres of suitable tidal/marsh upland refugia habitat for these species within the same recovery unit..."

On March 2, 2011, the proponents initiated consultation with NOAA Fisheries regarding potential project impacts on Essential Fish Habitat (EFH) (Corte Madera Creek) for the green sturgeon, the central California coast steelhead, the central California coast coho salmon, and the Sacramento River winter-run Chinook salmon. On October 7, 2011, NOAA Fisheries issued its opinion on the project stating that the project contains, "...adequate measures to avoid, minimize, mitigate or otherwise offset the adverse effects to EFH..."

On April 25, 2013, the RWQCB issued a water quality certification for the project.

The applicants incorporated all of these proposed construction mitigation measures into project plans. The project would result in a total of 4,940 square feet of permanent, cantilevered and pile-supported fill in a tidal marsh. To build the project, 6,800 square feet of temporary, pile-supported fill would be placed for approximately one and a half years. The fill would shadow the marsh creating sub-optimal growing conditions for tidal marsh plant species. In addition, the support structures for the ramp and overlook would displace 195 square feet of the marsh. The applicants propose to mitigate for the permanent tidal marsh impacts of the 4,940-square-foot (0.11-acre) structure by restoring and enhancing 1.42 acres (61,855 square feet) of degraded tidal marsh habitat at Creekside Marsh, located approximately 1.4 miles upstream of the project site and north of the main channel of Corte Madera Creek in the City of Kentfield (Exhibit J). This area would be improved to create high tidal marsh plain, transitional habitat, and a buffer to screen wetland habitat from adjacent recreational areas by regrading, lowering, and loosening existing soils and planting with appropriate vegetation (e.g., salt grass, gumplant and Coyote bush).

The Commission should determine if the proposed project, as mitigated, is consistent with the Bay Plan policies regarding fish, other aquatic organisms, and wildlife, and water quality.

B. Review Boards

1. **Design Review Board.** On October 8, 2012, the Commission's Design Review Board (DRB) reviewed the project. The DRB supported the project and commented on project details. The DRB stated that it preferred that the pedestrian bridge be painted white as this would off-set the "landmark quality" of the structure. The Board recommended that a handrail be installed along the bridge and that intermittent seating be incorporated along the bridge. The Board preferred that the mesh be placed on the interior side of the bridge and that the overlook be "squared off" to reduce the likelihood that bicyclists would use this area when making the ramp's U-turn in order to reduce the "race track" feeling of this turn in the pathway and to better balance the use of the bridge for both pedestrians and bicyclists.

C. **Environmental Review.** The Transportation Authority of Marin (TAM) has local discretionary approval over the project. On September 23, 2010, TAM approved the Initial Study/Mitigated Negative Declaration for the project.

D. **Relevant Portions of the McAteer-Petris Act**

1. Section 66605
2. Section 66602

E. **Relevant Portions of the San Francisco Bay Plan**

1. Bay Plan Policies on Fish, Other Aquatic Organisms, and Wildlife (page 16)
2. Bay Plan Policies on Water Quality (page 19)
3. Bay Plan Policies on Water Surface Area and Volume (page 20)
4. Bay Plan Policies on Tidal Marshes and Tidal Flats (pages 21-24)
5. Bay Plan Policies on Climate Change (pages 36-39)
6. Bay Plan Policies on Safety of Fills (pages 40-41)
7. Bay Plan Policies on Public Access (pages 67-69)

Exhibits

A. **Vicinity Map**

B. **Local Vicinity Map**

C. **Multi-Use Pathway-Public Access**

D. **Site Section and Elevation**

E. **General Plan**

F. **Impacts within Jurisdictional Waters**

G. **Predicted Flooding in Project Area and Adjacent Properties**

H. **Predicted Flooding to Central Marin Ferry Project within BCDC Limits**

I. **Sea Level Rise Flood Elevations at South Ramp**

J. **Creekside Park Restoration Site**

K. **Initial Study/Mitigated Negative Declaration – Executive Summary and Mitigation Monitoring and Reporting Program**