San Francisco Bay Conservation and Development Commission
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Agenda Item #9

February 21, 2020

Staff Recommendation

Terminal One Development

(For Commission consideration on March 5, 2020)

Permit Application Number:	2018.006.00
Applicants:	Terminal One Development, LLC, and City of Richmond
Project Description:	Develop a 13.12-acre residential neighborhood, including a waterfront park.
Location:	In the Bay and within the 100-foot shoreline band, at 1500 Dornan Drive, in the City of Richmond, Contra Costa County.
Application Filed Complete:	October 21, 2019
Deadline for Commission Action:	March 19, 2020
Staff Contact:	Rebecca Coates-Maldoon (415/352-3634; rebecca.coates-maldoon@bcdc.ca.gov)
Staff Recommendation:	**APPROVAL WITH CONDITIONS**

Basis for Recommendation

The staff recommends approval of the application as conditioned in the recommended resolution, below. The project would consist of an approximately 13.12-acre residential development at 1500 Dornan Drive, in the City of Richmond, Contra Costa County. The proposed use is not in conflict with any Priority Use Areas established by the Bay Plan. Among other things, the recommended resolution includes special conditions to:

- Guarantee 5.33 acres of public access areas and 0.68 acres of the Bay as open space (the "Bay Tidelands Area").
- Require a minimum 10-foot-wide Bay Trail with 2-foot-wide shoulders (14-foot total width).
- Require that a Sea Level Rise Adaptation Plan be developed and submitted for review and approval by or on behalf of the Commission by 2035 and updated every 10 years thereafter.

Recommended Resolution and Findings

The staff recommends that the Commission adopt the following resolution:

I. Authorization

A. **Authorized Project.** Subject to the conditions stated below, the permittees, Terminal One Development, LLC and the City of Richmond, are granted permission to do the following in the Bay and within the 100-foot shoreline band, at 1500 Dornan Drive, in the City of Richmond, Contra Costa County:

1. **In the Bay**

   a. **Demolition.** Demolish approximately 29,120 square feet of an approximately 95,000-square-foot warehouse, the remainder of which is located within the Commission's 100-foot shoreline band jurisdiction and outside the Commission's jurisdiction;

   b. **Wharf Retrofit.** Retrofit an approximately 41,040-square-foot portion of an existing 49,950-square-foot concrete wharf (the remainder of which is within the 100-foot shoreline band), by constructing a new 9-inch-thick reinforced concrete deck overlay on top of the existing deck; and

   c. **Terminal One Wharf Park.** Construct, use and maintain in-kind approximately 41,040 square feet (0.94 acres) of an approximately 49,950-square-foot (1.15-acre) park on the retrofitted wharf (the remainder of which is within the 100-foot shoreline band), including portions of an elevated wooden picnic deck with picnic tables and a trellis shade and wind structure, a 30-foot-wide paved pedestrian promenade with seating, a "play theater" with concrete seat-steps, a lawn area, coastal plantings with 4-foot-wide pathways, an elevated wooden observation deck, and an 18-inch-high stem wall.

2. **Within the 100-foot shoreline band**

   a. **Demolition.** Demolish approximately 49,360 square feet of an approximately 95,000-square-foot warehouse (the remainder of which is in the Bay or outside the Commission's jurisdiction), and conduct site clearance and grading;

   b. **Site Stabilization.** Construct a Deep Soil Mix (DSM) buttress and a slurry wall;

   c. **Wharf Retrofit.** Retrofit an approximately 8,880-square-foot portion of an existing 49,950-square-foot wharf (the remainder of which is in the Bay) by constructing a new 9-inch-thick reinforced concrete deck over the existing deck, installing approximately 55 steel piles, and repairing 21 16-inch-square concrete piles;

   d. **Terminal One Wharf Park.** Construct, use, and maintain in-kind approximately 8,880 square feet (0.20 acres) of an approximately 49,950-square-foot (1.15-acre) park on the retrofitted wharf (the remainder of which is in the Bay), including portions of an elevated wooden picnic deck with picnic tables and a

trellis shade and wind structure, a 30-foot-wide paved pedestrian promenade with seating, a "play theater" with concrete seat steps, a lawn area, coastal plantings with 4-foot-wide pathways, an elevated wooden observation deck, an 18-inch-high stem wall, a 5- to 10-foot-wide paved pedestrian walkway, and railings, lighting, seating, and signage;

e. **Bay Trail Loop.** Construct, use, and maintain in-kind a portion of a shoreline extension of the San Francisco Bay Trail ("Bay Trail Loop"), consisting of a 10-foot-wide paved pedestrian and bicycle path with 2-foot-wide shoulders and a minimum 3-foot-wide landscape buffer between the trail and roadway edge, and install signage and bicycle parking;

f. **Shoreline Drive.** Construct, use, and maintain in-kind a portion of a vehicular shoreline ring-road (Shoreline Drive), with pedestrian sidewalks, crosswalks, and 13 on-street public parking spaces, including two ADA spaces and one ADA drop-off/loading zone;

g. **Shoreline Trails.** Construct, use, and maintain in-kind a shoreline trail system, including a paved/boardwalk pathway approximately 15 feet in width that will connect the Terminal One Wharf Park to the Shoreline Drive frontage and a Rails-to-Trails Pathway involving reuse of existing railroad tracks;

h. **Shoreline Protection.** Construct, use, and maintain in-kind an approximately 1,000-square-foot light rock splash apron to extend existing rock riprap inland;

i. **Residential Buildings and Areas.** Construct, use, and maintain in-kind an approximately 98-square-foot portion of a condominium building (Building Number 1) extending into the Shoreline Band, as well as walkways and landscaping associated with the residential development; and

j. **Utilities.** Install, use, and maintain in-kind associated utilities, including water and wastewater lines.

B. **Authorization Basis.** This authority is generally pursuant to and limited by the application dated October 16, 2018, including all accompanying and subsequently submitted correspondence and exhibits, subject to the modifications required by conditions hereto.

C. **Deadlines for Commencing and Completing Authorized Work.** Work authorized herein must commence prior to December 31, 2021, or this permit will lapse and become null and void. Such work must also be diligently pursued to completion and must be completed within five years of commencement, or by December 31, 2026, whichever is earlier, unless an extension of time is granted by amendment of the permit.

D. **Project Summary.** The Terminal One Development Project will develop a mixed-use neighborhood and waterfront park on a 13.12-acre formerly industrial site. The project will include construction of 316 residential units, two podium parking garages, private common area amenities (e.g., clubhouse and fitness center facilities, pool, outdoor

dining, a children's play area, walkways, and landscaping), approximately 2,500 square feet of commercial and retail uses, and associated utilities and infrastructure. At build-out, approximately 590-920 residents and employees would use the site daily, in addition to members of the public. The majority of the residential and retail uses will be developed outside of the Commission's permitting jurisdiction, other than residential areas (including portions of a condominium building, walkways, and landscaping) constructed within the 100-foot shoreline band.

The project also involves the retrofit of an existing concrete wharf structure and the construction of an approximately 1.15-acre waterfront park on top of the wharf. A vehicular shoreline ring-road would be constructed Bayward of the residential development along with an approximately 1,908-foot-long shoreline extension of the San Francisco Bay Trail adjacent to the road. An approximately 440-foot-long commuter extension of the San Francisco Bay Trail would also be constructed along the northern side of Brickyard Cove Road, inland of the residential development. A shoreline trail system would be constructed along portions of the shoreline in addition to the Bay Trail, including a Rails-to-Trails Pathway involving reuse of existing railroad tracks. The project also involves the construction of an approximately 7,300-square-foot plaza at the northwest corner of the site, and a minimum 21,780-square-foot north-south pedestrian and bicycle paseo through the residential development. Public parking and bicycle parking would be provided in several locations.

Site preparation work would also be conducted, including contamination containment for both the residential and public access areas and seismic stability for both the site and the wharf through the construction of a Deep Soil Mix buttress and slurry wall, the removal of an existing warehouse, and construction of a concrete deck overlay and pile installation and repair as part of the wharf retrofit.

II. Special Conditions. The authorization made in Section I herein regarding the project authorized in the Commission's Bay and shoreline band jurisdiction, and the "Public Access Area," as further defined in Special Condition II.B below, including but not limited to the use of, and the construction, use, and maintenance of improvements, shall be subject to the following special conditions, in addition to the standard conditions in Part IV:

A. **Specific Plans and Plan Review**

1. **Construction Documents.** The development authorized herein shall be built generally in conformance with the following documents submitted as part of the application:

   a. The plan set titled "Terminal One Waterfront Park," prepared by Laconia and CMG, dated March 22, 2018 (the "Terminal One Waterfront Park Plan Set") (see the Terminal One/Latitude Major Permit Application, referenced in these Special Conditions as the "BCDC Application," Appendix B-1).

b. The "BCDC Plan Revisions" described in the "Addendum to Illustrative Project Description," prepared by Laconia and CMG, dated March 22, 2018 (see BCDC Application, Appendix B-2); and

c. Those provisions of the following plan sets that address the design of the Public Access Area (collectively referenced in these Special Conditions as the "Design Review Plan Sets"):

   i. The plan set titled "Terminal One, Design Review," dated October 20, 2017 (see BCDC Application, Appendix Y-2);

   ii. The plan set titled "Terminal One Design Review Supplemental Addendum," dated December 5, 2017 (see BCDC Application, Appendix Y-3); and

   iii. The plan set titled "Terminal One Design Review Supplemental Addendum Revision 1," dated February 14, 2018 (see BCDC Application, Appendix Y-4).

The permittees are responsible for assuring that all construction documents accurately and fully reflect the terms and conditions of this permit and any legal instruments submitted pursuant to this authorization. No substantial changes shall be made to the documents referenced in this Special Condition II.A.1a, II.A.1.b, and II.A.1.c without prior review and written approval by or on behalf of the Commission through plan review or a permit amendment. The Executive Director may direct the Commission's Design Review Board to review and comment upon any substantial changes to the plans referred to herein.

2. **Construction Documents Review and Approval.** No work whatsoever shall commence pursuant to this permit until final construction documents regarding authorized activities are approved in writing by or on behalf of the Commission. All documents are reviewed within 60 days of receipt. To save time, preliminary documents may be submitted prior to the submittal of final documents. If final construction document review is not completed by or on behalf of the Commission within the 60-day period, the permittees may carry out the project authorized herein in a manner substantially consistent with the plans referred to in Special Condition II.A.1 of this permit.

   a. **Construction Document Details.** Construction documents shall be labeled, as appropriate, with: the Mean High Water line or the upland extent of marsh vegetation no higher than +5 feet above Mean Sea Level and the tidal datum reference (NAVD88 or, if appropriate, Mean Lower Low Water (MLLW)); the corresponding 100-foot shoreline band; property lines; the location, types, and dimensions of materials, structures, and project phases authorized herein; grading limits; and the boundaries of Public Access Areas and view corridor(s) required herein. Construction documents for shoreline protection projects must be dated and include the preparer's certification of project safety and contact

information. Once the construction documents have been reviewed and approved in writing by or on behalf of the Commission in accordance with this Special Condition II.A.2, no substantial changes shall be made to these documents without prior review and written approval by or on behalf of the Commission through plan review or a permit amendment.

b. **Conformity with Final Approved Construction Documents.** All authorized development and uses shall substantially conform to the final approved construction documents. Prior to use of the facilities authorized herein, the appropriate professional(s) of record shall certify in writing that the work covered by the authorization has been implemented in accordance with the approved criteria and in substantial conformance with the approved construction documents. No substantial changes shall be made to these documents without prior review and written approval by or on behalf of the Commission through plan review or a permit amendment.

c. **Discrepancies between Approved Plans and Special Conditions.** In case of a discrepancy between final approved construction documents and the special conditions of either this permit or the legal instruments submitted pursuant to this permit, the special conditions shall prevail. The permittees are responsible for assuring that all plans accurately and fully reflect the special conditions of this authorization and of any legal instruments submitted pursuant to this authorization.

d. **Reconsideration of Plan Review.** The permittees may request reconsideration of a plan review action taken pursuant to this Special Condition II.A within 30 days of a plan review action by submitting a written request for reconsideration to the Commission's Executive Director. Following the Executive Director's receipt of such a request, the Executive Director shall respond to the permittees with a determination as to whether the plan review action in question shall remain unchanged, or in the alternative, whether an additional plan review shall be performed and plan review action taken by or on behalf of the Commission, including, but not limited to, an amendment to the permit and/or consultation with the Commission's Design Review Board.

B. **Public Access**

1. **Total Area Reserved for Public Access.** Except as otherwise provided in this Special Condition II.B.1, Special Condition II.B.4.g, and Special Condition II.B.13, the approximately 232,340-square-foot (5.33-acre) area, along approximately 978 linear feet of shoreline as generally shown on Exhibit "A" shall be made available to the public for unrestricted public access purposes, including for walking, bicycling, running, sitting, viewing, fishing, picnicking, and other related uses (the "Public Access Area"). The permittees shall retain the right to make reasonable supplemental use of the Public Access Area for the following purposes:

a. Utility improvements, including sanitary sewer, storm drain, water (domestic, irrigation, and fire), and dry utilities (joint trench) (see provisions of Design Review Plan Sets that address the design of the Public Access Area as referenced in Special Condition II.A.1 above);

b. Bioretention and other water quality and stormwater management features (see the provisions of the Design Review Plan Sets that address the design of the Public Access Area as referenced in Special Condition II.A.1 above);

c. Site remediation measures (see BCDC Application, Appendix H – Draft 2018 Remedial Action Plan Addendum, as approved by the San Francisco Bay Regional Water Quality Control Board in a Conditional Concurrence Letter issued March 21, 2019; and

d. Sea level rise mitigation measures (see BCDC Application, Appendix W – City of Richmond Entitlements, Resolution No. 63-16, Exhibit B, Final Mitigation and Features Monitoring and Reporting Program, "Project Design Feature HYD-2: Sea Level Rise Measures," at page 6-14, and "Project Design Feature HYD-3: Sea Level Rise Adaptation Strategies," at pages 6-15 through 6-17).

If the permittees wish to use the Public Access Area for other than public access purposes as described in this Special Condition II.B.1, they must obtain prior written approval by or on behalf of the Commission.

The overall proposal for public access for this project, as shown on the attached Exhibit A-2 and on the exhibit titled "Principal Features of Waterfront Park" at page 6 of the Terminal One Waterfront Park Plan Set (BCDC Application, Appendix B-1), includes:

New public access in the Bay: approximately 41,040 square feet (0.94 acres)

New public access in the shoreline band: approximately 112,070 square feet (2.57 acres)

New public access outside of the Commission's jurisdiction: approximately 79,200 square feet (1.82 acres)

2. **Permanent Guarantee**. Prior to the commencement of any grading or construction activity, the permittees shall, by instrument or instruments acceptable to counsel for the Commission, dedicate to a public agency or otherwise permanently guarantee such rights for the public to access the new 5.33-acre Public Access Area. The instrument(s) shall create rights in favor of the public which shall commence no later than after completion of construction of any public access improvements required by this authorization and prior to the use of any structures authorized herein. Such instrument shall be in a form that meets recordation requirements of Contra Costa County and shall include a legal description of the property being restricted and a map that clearly shows the shoreline (Mean High Water Line or 5 feet above Mean Sea Level if marsh is present), the property being restricted for

public access, the legal description of the property and of the area being restricted for public access, and other appropriate landmarks and topographic features of the site, such as the location and elevation of the top of bank of any levees, any significant elevation changes, and the location of the nearest public street and adjacent public access areas. Approval or disapproval of the instrument shall occur within 30 days after submittal for approval and shall be based on the following:

(a) Sufficiency of the instrument to create legally enforceable rights and duties to provide the Public Access Area required by this authorization;

(b) Inclusion of an exhibit to the instrument that clearly shows the area to be reserved for public access with a legally sufficient description of the boundaries of such area; and

(c) Sufficiency of the instrument to create legal rights in favor of the public for public access that will run with the land and be binding on any subsequent purchasers, licensees, and users.

3. **Recordation of the Instrument.** Within 30 days after approval of the instrument, the permittees shall record the instrument on all parcels affected by this instrument and shall provide evidence of recording to the Commission. No changes shall be made to the instrument after approval without the express written consent by or on behalf of the Commission.

4. **Improvements Within the Total Public Access Area**. According to the schedule in Special Condition II.B.8 ("Public Access Construction Timing") below, the permittees shall construct and make available to the public for public access uses, including walking, bicycling, running, sitting, viewing, picnicking, fishing and related purposes, the following barrier-free Public Access Areas and attendant improvements, as generally shown on attached Exhibit A. (The publicly accessible improvements to be constructed in the Public Access Area, as further described in this Special Condition II.B.4, are also collectively referenced in this permit as the "Waterfront Park Improvements.")

   a. **Terminal One Wharf Park.** An approximately 49,950-square-foot (1.15-acre) waterfront park on the existing wharf, including the following improvements within the park, all as shown on the attached Exhibit A and on pages 15 and 16 of the Terminal One Waterfront Park Plan Set (with area calculations based on the assumption that the walkway along the northern edge of the wharf will be 5-10 feet in width):

      (1) An approximately 30-foot-wide paved pedestrian promenade;

      (2) A minimum of four picnic areas with appropriate picnic tables and seating;

      (3) An approximately 5,500-6,050-square-foot "play theater"/lawn area with stepped concrete seating and a walkway approximately 15 feet in width connecting the pedestrian promenade to the Bay Trail;

(4) Approximately 8,000-8,800 square feet of multi-use lawn area with natural grass or synthetic turf. Natural grasses are generally preferred within this area, however, synthetic turf may be installed if the Executive Director determines that the permittees have substantiated that use of natural grass is infeasible or on the balance the use of synthetic turf would provide for a better overall experience for the public;

(5) An approximately 6,000-6,600 square-foot coastal garden area with minimum 4-foot-wide, ADA-accessible crushed stone pathways;

(6) An approximately 750-825 square-foot raised viewing deck;

(7) An appropriate number of benches, lounge seats, and other types of seating;

(8) Appropriate shade and wind protection, including but not limited to trellis shade structures;

(9) An approximately 42-inch-high railing along the waterfront edge of the site, for public safety, which should maximize visual access to the Bay and have a top rail that is comfortable to lean on;

(10) A walkway approximately 5-10 feet in width along the inland edge of the wharf;

(11) Public artwork in accordance with the public art plan to be prepared pursuant to Special Condition II.B.6;

(12) Appropriate lighting; and

(13) Appropriate interpretive and way finding signage in accordance with the comprehensive public access sign program to be prepared pursuant to Special Condition II.B.5.

b. **Wharf Park Connections.** A minimum 15-foot-wide pathway to connect the Terminal One Wharf Park with the Bay Trail and crosswalks across Shoreline Drive, at both the eastern and western ends of the Terminal One Wharf Park.

c. **Bay Trail Loop.** A minimum 10-foot-wide trail with 2-foot-wide shoulders, approximately 1,908 linear feet in length, along the Bayward side of the vehicular ring-road (Shoreline Drive), to be designated as a segment of the San Francisco Bay Trail. The trail shall have a minimum 3-foot-wide landscape buffer between the outer edges of the roadway and the Bay Trail shoulder, and appropriate Bay Trail and wayfinding signage shall be provided.

d. **Bay Trail Commuter Extension.** A minimum 10-foot-wide trail with 2-foot-wide shoulders, along approximately 440 linear feet of Brickyard Cove Road, to be designated as a segment of the San Francisco Bay Trail. The trail shall have a minimum 3-foot-wide landscape buffer between the outer edges of the roadway and the Bay Trail shoulder, and appropriate Bay Trail and wayfinding signage shall be provided.

e. **Landscaping.** An approximately 16,400-square-foot (0.38 acres) Native Coastal Garden and other plantings and landscaping areas appropriate to support the public access uses required by Special Conditions II.B.1 and II.B.4.

f. **Entry Plaza.** An approximately 7,300-square-foot public plaza with appropriate bicycle racks, public artwork, signage, lighting, and plantings. The entry plaza will provide a strategically located public gathering space with café seating that is activated by a small visitor-serving retail node. The entry plaza may also include a defined area of up to 500 square feet that will be located adjacent to the project's retail space and will be designed to accommodate the patrons of and address the commercial requirements of the plaza's retail tenant(s). In addition, the flexible use character of the entry plaza will enable it to serve as an occasional venue for public and private events.

g. **Central Promenade.** A minimum 21,780-square-foot north-south pedestrian and bicycle paseo that connects the Brickyard Cove Road access corridor to the Shoreline Drive access corridor through the residential development, which shall be available as public access daily from dawn to dusk. The Central Promenade will also provide a view corridor with a width of approximately 50 feet at its northern end and approximately 80 feet at its southern end. Appropriate pathways, signage, lighting, and plantings should be provided. No gates, fences, or similar physical obstructions shall be installed within the Central Promenade.

h. **Public Parking.** A minimum of 49 public parking spaces, including six ADA-accessible parking spaces, provided free of charge, time-limited to four hours, and designated with "Public Shore" parking signs. A minimum of seven ADA-accessible drop-off and loading zones shall also be provided.

i. **Shoreline Drive.** A two-way, two-lane scenic ring-road that will provide the public with vehicular access to the waterfront park and the Bay views. This new shoreline roadway will have 10-foot-wide travel lanes, on-street public parking, raised crosswalks, and other traffic-calming features.

j. **Bicycle Racks.** A minimum of 31 bicycle racks with parking for 62 bicycles in total.

k. **Bus Stop.** A bus stop located along Brickyard Cove Road.

Such improvements shall be consistent with the plans approved pursuant to Special Condition II.A.1 of this authorization.

5. **Public Access and Wayfinding Signage.** Prior to occupancy of any residential unit or commercial space associated with Phase 1 of the project, the permittees shall submit for review and approval by or on behalf of the Commission a comprehensive public access sign program designed to maximize public recognition, use, and enjoyment of the site's public access improvements. The sign program shall provide detail on the location, quantity, and design of wayfinding, interpretive, "Public

Shore," and Bay Trail signs, consistent with Special Condition II.B.4. The sign program shall be reviewed through the plan review process established in Special Condition II.A above.

As part of the development of the public access sign program to be reviewed pursuant to Special Condition II.A, the permittees shall collaborate with the Trails for Richmond Action Committee and the San Francisco Bay Trail Project at the Metropolitan Transportation Commission to prepare a plan for Bay Trail and wayfinding signs' content, design, size, location, and orientation, including but not limited to updated 2-foot by 3-foot Ferry Point Loop orientation map panels to be produced and installed on at least two locations along the Bay Trail at or near the project site, and the production and installation of updated versions of the three other orientation sign panels present on the Ferry Point Loop of the Bay Trail to include the project's new Bay Trail sections along with other recent Bay Trail completions.

6. **Public Art Plan.** Prior to installing any permanent or temporary public art installations within any Public Access Area required by this permit, the permittees shall submit for review and approval by or on behalf of the Commission a public art plan that will identify design and siting criteria for public art installations. The public art plan will be reviewed to ensure design and siting criteria are adequate to provide for use of the Public Access Area by a wide range of users and to maintain important views of the Bay. The public art plan shall be reviewed through the plan review process established in Special Condition II.A above.

7. **Rails-to-Trails Pathway.** The permittees shall construct an ADA accessible "rails-to-trails" pathway approximately 250 feet in length involving reuse of existing railroad tracks east of the Wharf Park, which shall remain in place and be maintained to the extent feasible with anticipated flooding from sea level rise.

8. **Public Access Construction Timing.** The required Public Access Areas and Waterfront Park Improvements, except for the Central Promenade and improvements within that area required in Special Condition II.B.4.g, shall be completed and open to the public by the date of occupancy of any residential unit or commercial space associated with Phase 1 of the project. The Central Promenade and improvements within that area, as required in Special Condition II.B.4.g, shall be completed and open to the public by the date of occupancy of any residential unit or commercial space associated with Phase 2 of the project.

   If the project is developed in five phases instead of two phases, the required Public Access Areas and improvements, except for the Central Promenade and improvements within that area required in Special Condition II.B.4.g, shall be completed and open to the public by the date of occupancy of any residential unit or commercial space associated with Phase 1 of the project (the first multi-family condominium building or the first single-family home). The Central Promenade and improvements within that area, as required in Special Condition II.B.4.g, shall be

completed and open to the public by the date of occupancy of any residential unit or commercial space associated with Phase 4 of the project (the fourth multi-family condominium building or the twelfth single-family home).

9. **Limitations on Public Access During Construction.** Because the Public Access Area abuts the residential portion of the project and because construction of the Waterfront Park Improvements within the Public Access Area will be completed at a point in time when the residential portion of the project remains an active construction site, it may be necessary to restrict public access to certain Public Access Areas and to the improvements within those areas in order to make adequate provision for the protection and safety of the public and for the efficient and cost-effective administration and management of the construction process. In particular, it may be necessary to restrict the public's access to Shoreline Drive and the Public Access Areas located inside this ring-road while construction of the residential portions of the project are being completed. In the event permittees desire to limit the public's access to Public Access Areas or related improvements during construction of the residential portion of the project, they shall submit a plan describing the proposed public access limitations and the reasons the limitations are warranted for review and approval by or on behalf of the Commission. In reviewing the reasonableness of the proposed limitations on public access, considerations of public safety shall be assigned the highest priority and be accorded particular weight.

10. **Tie-Off Pier.** The permittees may retain the tie-off pier as an aesthetic and historical point of reference in recognition of the working role once played by the pier in port operations and the contribution it continues to make to the character of the Terminal One Shoreline. To limit physical access onto the tie-off pier, security fencing may be installed, the design of which shall maximize visual transparency and be reviewed and approved by or on behalf of the Commission through the plan review process established in Special Condition II.A. If, at any time, the Commission determines the condition of the tie-off pier has deteriorated to the point that either public safety or Bay resources are put at risk, the Commission may require the permittees/owners of the tie-off pier to take appropriate actions to mitigate the hazard, which actions may include removal.

11. **Maintenance.** The areas and improvements within the 5.33-acre Public Access Area described above shall be permanently maintained by and at the expense of the permittees. Such maintenance shall include, but is not limited to: repairs to all path surfaces; replacement of any trees or plant materials that die or become unkempt; repairs or replacement as needed of any public access amenities such as signs, benches, trash containers, and lights; periodic cleanup of litter and other materials deposited within the access areas; removal of any encroachments into the access areas; assurance that the public access signs remain in place and visible; and repairs to any Public Access Areas or improvements that are damaged by future subsidence or uneven settlement, flooding, or inundation caused by sea level rise to ensure the

project will continue to provide maximum feasible public access, consistent with the project, to the Bay and its shoreline. Within 30 days after notification by staff, the permittees shall correct any maintenance deficiency noted in a staff inspection of the site. The permittees shall obtain approval by or on behalf of the Commission of any maintenance that involves more than in-kind repair and replacement.

12. **Assignment.** The permittees may transfer maintenance responsibility to a public agency or another party at such time as the property transfers to a new party in interest but only provided that the transferee is accepted by the Executive Director as being reasonably capable of complying with the applicable terms and conditions of this permit and agrees in writing, acceptable to counsel for the Commission, to be bound by all such applicable terms and conditions.

13. **Reasonable Rules and Restrictions.** The permittees may impose reasonable rules and restrictions on the use of the Public Access Areas to correct particular problems that may arise. Such limitations, rules, and restrictions shall have first been approved by or on behalf of the Commission upon a finding that the proposed rules would not significantly affect the public nature of the area, would not unduly interfere with reasonable public use of the public access areas, and would tend to correct a specific problem that the permittees have both identified and substantiated. Rules may include restricting hours of use and delineating appropriate behavior.

C. **Open Space.** The Bay Tidelands Area is a 29,620-square foot (0.68-acre) area of open water located adjacent to and east of the Terminal One Wharf, Bayward of the Mean High Water Line. This undeveloped portion of the Bay provides visitors to the waterfront park with an opportunity to enjoy and experience the marine ecology of the Bay by way of both the shoreline access provided by the Rails-to-Trails Pathway and the in-water access provided by the Ferry Point Beach kayak/canoe launch site located immediately adjacent to the western edge of the Terminal One waterfront park. The Bay Tidelands Area is an open space component of the Public Access Area and shall remain in its undeveloped condition. Accordingly, prior to the commencement of any construction authorized herein, the permittees shall permanently restrict, by an instrument acceptable to counsel for the Commission, the Bay Tidelands Area as open space to remain in its current condition with no further filling or development.

The permittees shall comply with this condition by doing the following: The permittees shall submit to the Executive Director an instrument that creates such an open space restriction and that includes a map that shows all appropriate boundaries, including the shoreline (Mean High Water Line or 5 feet above Mean Sea Level if marsh is present), and a metes and bounds description of the area being restricted as open space. The instrument shall be in a form suitable for recording in the county in which the restricted property is located.

Approval or disapproval of the instrument shall occur within 30 days after submittal for approval. Approval or disapproval shall be based on the sufficiency of the instrument to create the required open space condition. If the Executive Director approves the instrument, the permittees shall record the instrument on all parcels affected by the instrument within 30 days of its approval and shall thereafter provide the Commission with a copy of the recorded instrument. If the Executive Director disapproves the instrument, the permittees shall correct all deficiencies and resubmit the corrected instrument for further staff review within 30 days of receipt of the written notification of disapproval. The Executive Director shall then review the corrected instrument in accordance with this review procedure, and the permittees shall record the approved instrument on all parcels affected by the instrument within 30 days of its approval.

D. **Flooding and Adaptation**

1. **Flood Reports.** If any portion of the Public Access Area, is subject to flooding that results in its closure in whole or in part, the permittees shall submit to the Commission a written report within 30 days after the flooding with documentation of: the date and duration of the closure; the location of the affected site; the recorded water levels during the closure; the source of flooding (e.g., coastal flooding, stormwater backup, or overland flow); the resulting damage or cleanup; and illustrative photographs with site details. Coastal flooding is defined as Bay overtopping of the shoreline during tides, storms, or both.

2. **Adaptation Planning Process.** To address the potential impacts on the Public Access Areas and Waterfront Park Improvements resulting from inundation caused by a rise in sea level of up to 3 feet, the permittees shall implement the "Sea Level Rise Measures" prescribed by "Project Design Feature HYD-2," as set forth at page 6-14 of the Terminal One EIR "Final Mitigation and Features Monitoring and Reporting Program" (see Exhibit B to this permit) and as such measures are further described in the "Detailed Narrative Description of the Terminal One Project" at pages 20-22 (see BCDC Application, Appendix A).

   To address the potential impacts on the Public Access Areas and Waterfront Park Improvements from inundation caused by a rise in sea level of greater than 3 feet, the permittees shall implement the "Sea Level Rise Adaptation Strategies" prescribed by "Project Design Feature HYD-3," as set forth at pages 6-15 through 6-17 of the Terminal One EIR "Final Mitigation and Features Monitoring and Reporting Program" (see Exhibit B to this permit). Project Design Feature HYD-3 requires the permittees to prepare an "Adaptive Flood Risk Management Plan" that includes a "Monitoring and Reporting Program," an "Adaptive Flood Risk Management Strategy," and a "Financing Strategy." The initial adaptation plan is required to be completed by January 1, 2035 and updated every ten years (by January 1, 2045, and so on). As applicable to the Public Access Areas and the Waterfront Park Improvements, the Adaptive Flood Risk Management Strategy shall be designed to ensure that the project will continue to provide maximum feasible public access, consistent with the project, to the Bay and its shoreline.

The initial adaptation plan, as well as each update, shall be submitted for review and approval by the Executive Director on behalf of the Commission through the plan review process established in Special Condition II.A.2. Within 90 days of receipt, the Executive Director shall either approve or disapprove the adaptation plan as submitted. The Executive Director's decision in this regard will be based on whether the adaptation strategy, including the selected adaptation responses and the implementation schedule, is sufficient to ensure that the project will continue to provide maximum feasible public access, consistent with the project, to the Bay and its shoreline. In the event a determination is made to disapprove the plan, the Executive Director shall provide the permittees with a written notice explaining the reasons the plan was not approved. Upon receipt of such notice of disapproval, the permittees shall have the option of submitting a written request for reconsideration to the Executive Director pursuant to Special Condition II.A.2.d.; revising the plan to address the Executive Director's concerns and resubmitting the revised plan for further review and approval; or appealing the Executive Director's determination to the Commission.

After the plan has been approved by or on behalf of the Commission, the permittees shall diligently proceed to implement the measures described in the plan to completion according to the implementation schedule outlined in the plan. The work required to implement the adaptation measures selected, as well as modifications to the public access required by this permit, may require additional Commission review and approval, including a BCDC permit or an amendment to this permit.

E. **Protection of Bay Resources.** The permittees shall reduce impacts to water quality, fish, wildlife, and habitat at the site by implementing the following measures. Minor modifications to the below requirements may be approved by the Executive Director upon a finding that they are no less protective of Bay resources.

1. **Water Board Approval.** Prior to the commencement of construction on the wharf structure, the permittees shall provide documentation of the project's coverage under the San Francisco Bay Regional Water Quality Control Board's (RWQCB) General Order No. R2-2018-0009 and any related or subsequent approvals from the RWQCB for the work associated with this permit. Should any changes to the authorized improvements or special conditions herein become necessary based on the RWQCB's approval(s), the permittees shall notify the Executive Director of such changes and the Executive Director shall determine if further review and approval by or on behalf of the Commission is required.

2. **Best Management Practices.** The permittees shall implement Best Management Practices and measures to protect water quality during construction of the work authorized herein, consistent with the RWQCB General Order No. R2-2018-0009 and including the following:

a. Any in-water construction shall be restricted to the period of June 1-November 30, for the protection of aquatic species.

b. All staging shall occur on adjacent access roads or previously-disturbed areas. Any stockpiling of materials shall be conducted pursuant to Special Condition II.H.

c. Best Management Practices shall be implemented during construction and maintenance activities to avoid impacts to Bay resources such as debris or construction-related materials or wastes entering the Bay.

F. **Pile Inspection and Monitoring.** Prior to the commencement of construction activities on the wharf structure, the permittees shall submit for review and approval by or on behalf of the Commission a draft Pile Inspection and Monitoring Plan (the "Pile I&M Plan") and shall submit an updated Pile I&M Plan for review and approval upon completion of the initial wharf retrofit authorized herein. The updated Pile I&M Plan shall identify the methods by which the permittees will conduct regular ongoing structural inspections on the underdeck components of the wharf structure by qualified engineers. The first pile inspection shall commence within three years following completion of the wharf park, and subsequent inspections should be initiated every five years thereafter, unless the previous inspection determines that the rate at which deterioration of the piles is occurring warrants an earlier inspection for safety of the wharf structure. The Pile I&M Plan shall specify that results of the ongoing inspections will be submitted to the Commission's office in a timely manner following each inspection, and shall summarize designated or required maintenance activities to correct identified problems. The Executive Director shall be notified prior to any maintenance and retrofit work resulting from the monitoring, as such work may require review and approval by or on behalf of the Commission. When preparing the sea level rise adaptation plan required by Special Condition II.D.2, above, the permittees shall consider whether it is necessary or appropriate to revise the Pile I&M Plan based on the adaptation measures identified or recommended in the adaptation plan and, if so, within 60 days of submitting the adaptation plan, the permittees shall submit an amended Pile I&M Plan for review and approval by or on behalf of the Commission.

G. **Seismic Instrumentation Plan.** The permittees shall develop and submit a seismic instrumentation plan for review and approval by or on behalf of the Commission, pursuant to Special Condition II.A, prior to the commencement of construction of the wharf park at the site.

H. **Stockpiling of Materials.** Prior to stockpiling any materials within the area of the Commission's jurisdiction, the permittees shall submit a stockpiling plan for review and approval by or on behalf of the Commission, pursuant to Special Condition II.A. The plan shall be signed by a qualified engineer and shall demonstrate that the shoreline can physically support stockpiling at the proposed location(s), and that the stockpiling will not result in adverse impacts to the Bay or the public access required by this permit.

I. **Recording.** The permittees shall record this permit or a notice specifically referring to this permit on all parcels affected by this permit with Contra Costa County within 30 days after execution of the permit issued pursuant to this authorization and shall, within 30 days after recordation, provide a copy of the recorded permit to the Commission.

J. **Certification of Contractor Review.** Prior to commencing any grading, demolition, or construction, the general contractor or contractors in charge of that portion of the work shall submit written certification that s/he has reviewed and understands the requirements of the permit and the final BCDC-approved plans, particularly as they pertain to any Public Access Areas or open space required herein, or environmentally sensitive areas.

K. **Certificate of Occupancy or Use**. Prior to occupancy or use of any of the Waterfront Park Improvements authorized herein, the permittees shall submit the Notice of Completion and Compliance required herein and request in writing an inspection of the project site by the Commission staff. Within 30 days of receipt of the written request for an inspection, the Commission's staff will: (1) review all permit conditions; (2) inspect the project site; and (3) provide the permittees with written notification of all outstanding permit compliance problems, if any. The permittees shall not occupy or make use of any improvements authorized herein until the staff has confirmed that the identified permittee compliance problems have been satisfactorily resolved and has provided the permittees with a Certificate of Occupancy or Use. Failure by the staff to perform such review and inspection and notify the permittees of any deficiencies of the project within this 30-day period shall not deem the project to be in compliance with the permit, but the permittees may occupy and use the improvements authorized herein.

III. Findings and Declarations. This authorization is given on the basis of the Commission's findings and declarations that the work authorized herein is consistent with the McAteer-Petris Act, the *San Francisco Bay Plan* (Bay Plan), the California Environmental Quality Act (CEQA), and the Commission's amended coastal zone management program for San Francisco Bay for the following reasons:

A. **Bay Fill.** Section 66605 of the McAteer-Petris Act provides that further filling of the Bay may be authorized by the Commission only when public benefits from fill clearly exceed public detriment from the loss of water area and is limited to water-oriented uses or minor fill for improving shoreline appearance or public access to the Bay. Additionally, fill of the Bay should be authorized only if: no alternative upland location is available for such purpose; the water area authorized to be filled is the minimum necessary to achieve the purpose of the fill; harmful effects to the Bay and its waters are minimized; the fill is constructed in accordance with sound safety standards; the fill establishes, to the maximum extent feasible, a permanent shoreline; and, the applicant has valid title to the property in question. Additionally, the Bay Plan's section on "Fills in Accord with the Bay Plan" Policy No. 1 states that: "[a] proposed project should be approved if the filling is the minimum necessary to achieve its purpose, and if it meets one of the following three conditions: a) The filling is in accord with the Bay Plan policies as to the

Bay-related purposes for which filling may be needed (i.e., ports, water-related industry, and water-related recreation) and is shown on the Bay Plan maps as likely to be needed; or b) The filling is in accord with Bay Plan policies as to purposes for which some fill may be needed if there is no other alternative (i.e., airports, roads, and utility routes); or c) The filling is in accord with the Bay Plan policies as to minor fills for improving shoreline appearance or public access.

a. **Reuse of Historic Wharf.** The project will involve the retrofit and reuse of an existing 49,950-square-foot (555-foot-long by 90-foot-wide) concrete wharf structure, which was built in approximately 1915. The project site was historically used as a bulk terminal to unload and load cargo, and the wharf structure was built for this industrial use. An approximately 95,000-square-foot warehouse is located on and adjacent to the historic wharf, and will be demolished as part of the project. The wharf structure is comprised of a concrete deck supported by precast concrete piles, and will be retrofitted for seismic safety through the construction of a new 9-inch-thick reinforced concrete deck overlay on top of the existing deck, and, at the inland edge of the wharf, the repair and installation of piles.

   The proposed seismic strengthening and retrofit work on the Terminal One wharf structure goes beyond routine repairs, and will significantly extend the life of the structure. Under the Commission's Bay fill policies, substantial replacement or retrofitting of an existing pier to significantly extend the life of a pier is deemed to be new Bay fill. Therefore, the Commission views the portion of the retrofitted Terminal One wharf that is Bayward of mean high water (an approximately 41,040-square-foot portion of the 49,950-square-foot wharf structure) will be new Bay fill located in the Commission's Bay jurisdiction under the McAteer-Petris Act, and any uses on the wharf must be consistent with the McAteer-Petris Act and Bay Plan requirements for Bay fill.

b. **Public Benefits.** The wharf retrofit and reuse as a waterfront park is for a water-oriented use that provides public benefits for increased Bay viewing and unique public access opportunities. Following the seismic strengthening and retrofit work, the Terminal One Wharf will be repurposed as a public waterfront park, of which approximately 41,040 square feet is located within the Commission's Bay jurisdiction. The reuse of the wharf as a public waterfront park will provide for water-oriented recreational use at the site, allowing the public to view and enjoy the Bay over the water and engage with the history of the site. Very few formerly industrial, pile-supported wharves exist around the Bay shoreline, particularly in the East Bay, and the repurposed wharf provides a unique vantage point from which to view the Bay. The park is designed to serve visitors of varying interests and abilities. The project site, which is a former industrial site, does not currently have public access opportunities.

c. **Alternative Upland Location.** There is no alternative upland location for the project that would serve its intended purpose. The purpose of reusing the wharf is to provide for water-oriented Bay viewing and recreation on the historic Terminal One Wharf. While an upland public access area could (and is) being provided by the project, this project is intended to reuse the previously filled area without expanding the footprint of the fill and to provide a significant public benefit.

d. **Minimize Bay Fill.** The authorized fill is the minimum necessary to achieve the purpose of the fill associated with the project, namely retrofits to the historic Terminal One Wharf. The wharf is a pre-existing structure, and the project will not expand the footprint of the structure nor place new solid fill in the Bay. The wharf retrofit will include the addition of a 9-inch-thick concrete deck overlay in the Bay, on top of the existing wharf deck and within the footprint of the existing wharf structure. As the wharf footprint will not be expanded and the pre-existing wharf structure will be reused in its entirety as a public waterfront park, the fill is the minimum amount necessary to achieve the purpose of the project. Special Condition II.A requires final plan review approval in part to ensure that the project is constructed consistent with the design proposed in the application, which does not expand the coverage of the wharf over Bay waters. While reducing the size of the wharf structure would reduce the net coverage of the Bay, it would also reduce the size of the public park and diminish the value of the overall public benefit of the project, which comes in the form of a new public shoreline park that is anticipated to draw people to a previously inaccessible portion of the shoreline.

e. **Effects on Bay Resources.** The wharf retrofit involves the addition of a concrete deck overlay in the Bay, adding to the existing pile-supported fill within the existing footprint, and the repair and installation of piles within the 100-foot shoreline band. As the retrofit work does not involve driving new piles in the Bay, placing other new solid fill in the Bay, or expanding the shadow area of existing structures, it is not anticipated to have significant direct impacts on Bay habitats or species. The application states that "[b]ecause the Project EIR concludes the impact of the project on…special status species or their habitat will be 'less than significant,' neither a Section 7 Consultation/Biological Opinion under the Federal Endangered Species Act nor a Section 1802 Incidental Take Permit under the California Endangered Species Act is required."

   In addition to Section 66605(d) of the McAteer-Petris Act regarding the impacts of fill on Bay resources, the Bay plan contains related policies, including as they relate to water quality. The Bay Plan Water Quality policies state, in part, that "[w]ater quality in all parts of the Bay should be maintained at a level that will support and promote the beneficial uses of the Bay as identified in the San Francisco Bay Regional Water Quality Control Board's (RWQCB) Basin Plan…[and] the policies, recommendations, decisions, advice, and authority of the State Water Resources Control Board and Regional Board should be the basis for carrying out the

Commission's water quality responsibilities." Policy No. 3 states, in part, that "[n]ew projects should be sited, designed, constructed, and maintained to prevent or, if prevention is infeasible, to minimize the discharge of pollutants into the Bay…."

Construction activities associated with the wharf retrofit work have the potential to impact Bay water quality. Given the scope of the wharf retrofit work, the RWQCB staff has indicated that no individual Water Quality Certification for the project will be needed, and that the project will qualify for coverage under Order No. R2-2018-0009, *General Waste Discharge Requirements and Water Quality Certification for: Construction and Maintenance of Overwater Structures San Francisco Bay* ("General Order"). This General Order includes requirements, in part, for the use of Best Management Practices (BMPs) to prevent waste discharges to the Bay, that staging occur on adjacent access roads or previously disturbed areas, and that measures be implemented to protect aquatic species and habitats. However, the RWQCB staff has also indicated that should new information regarding the project scope be submitted as part of the Notice of Intent, the project may require additional permitting from the RWQCB. Special Condition II.E.1 is included to ensure that the permittees submit a copy of the Notice of Intent for the project's coverage under the RWQCB General Order to the Commission prior to commencement of construction on the wharf, and should additional permitting by the RWQCB be necessary that would result in changes to the project authorization or conditions herein, that the permittees apply for and receive approval from the Commission for these changes prior to commencement of construction on the wharf. Special Condition II.E.2 further requires that the permittees implement BMPs and other measures to protect water quality during construction, consistent with the Bay Plan policies on Water Quality.

f. **Safety of Fills.** In addition to Section 66605(e) of the McAteer-Petris Act regarding the seismic and flooding standards by which fill is designed and constructed, the Bay Plan contains related policies. Bay Plan Safety of Fills Policy No. 1 states, in part, "[t]he Commission has appointed the Engineering Criteria Review Board consisting of geologists, civil engineers specializing in geotechnical and coastal engineering, structural engineers, and architects competent to and adequately empowered to:…establish and revise safety criteria for Bay fills and structures thereon…[and] …review all except minor projects for the adequacy of their specific safety provisions, and make recommendations concerning these provisions…." Bay Plan Safety of Fills Policy No. 2 states, in part, that "[e]ven if the Bay Plan indicates that a fill may be permissible, no fill or building should be constructed if hazards cannot be overcome adequately for the intended use…" Bay Plan Safety of Fills Policy No. 3 states, "[t]o provide vitally-needed information on the effects of earthquakes on all kinds of soils, installation of strong-motion seismographs should be required on all

future major land fills" and "…the Commission encourages installation of strong-motion seismographs in other developments on problem soils and in other areas recommended by the U.S. Geological Survey, for purposes of data comparison and evaluation."

The Bay Plan Safety of Fills policies also include policies on sea level rise, which are discussed further under Findings Section III.E, below.

As noted above, the proposed project includes the retrofit of an existing concrete wharf structure through the construction of a new 9-inch-thick reinforced concrete deck overlay on top of the existing deck, and, at the inland edge of the wharf, the repair and installation of piles. Additionally, the project includes the construction of a Deep Soil Mix (DSM) buttress and slurry wall inland of the wharf, which are intended to buffer the wharf from lateral ground displacement in a large earthquake, in addition to serving contamination containment functions (discussed further in Findings Section III.B.4, below). Commission staff sought the advice of the Commission's Engineering Criteria Review Board (ECRB) on whether the proposed wharf retrofit and adjacent soil improvements would be sufficient for the wharf to meet seismic and flood safety standards, consistent with the Commission's policies on Safety of Fills. After four reviews of the project, the ECRB indicated that the engineering criteria for the wharf and soil improvements were considered adequate with regards to the safety of the wharf. As part of their review, ECRB had comments and recommendations related, in part, to ensuring that long-term monitoring and maintenance of the wharf and piles were incorporated into the project, that seismic instrumentation be provided, that the design for the DSM (a design-build element) be peer-reviewed, with the comments and conclusions of the peer reviewer to be submitted to BCDC for review and approval prior to construction, and on sea level rise adaptation.

Special Condition II.F is included to require an ongoing pile inspection and maintenance program to ensure long-term safety of the wharf structure and the public access to be constructed on top of the wharf. Special Condition II.G is included to require that a seismic instrumentation plan be submitted for review and approval by Commission staff through the plan review process.

g. **Valid Title.** The City of Richmond owns the property on which the wharf retrofit will occur.

h. **Public Trust Uses.** The Bay Plan policies on Public Trust state that "[w]hen the Commission takes any action affecting lands subject to the public trust, it should assure that the action is consistent with the public trust needs for the area and, in case of lands subject to legislative grants, should also assure that the terms of the grant are satisfied and the project is in furtherance of statewide purpose."

Two parcels within the Commission's jurisdiction at the project site are subject to the public trust and will be used consistent with the public trust needs for the area. These parcels include the historic wharf structure and a portion of open water area

known as the "Bay Tidelands Area." The project will develop a public waterfront park on top of the wharf structure, as required by Special Condition II.B, and will reserve the Bay Tidelands Area as open space, as required by Special Condition II.C. The waterfront park will provide for water-oriented public recreation, through unique Bay views and diverse opportunities for public use and engagement with the different "rooms" of the park. The reservation of the Bay Tidelands Area as open space will ensure that views, recreational opportunities, and Bay resources within that area are protected into the future.

For the reasons discussed above, the Commission therefore finds that the project, as conditioned, is consistent with the Commission's law and related policies on allowable Bay fill.

B. **Maximum Feasible Public Access.** Section 66602 of the McAteer-Petris Act states, in part, "…existing public access to the shoreline and waters of the…[Bay] is inadequate and that maximum feasible public access, consistent with a proposed project, should be provided." In addition, the Bay Plan policies on public access state, in part, "[a] proposed fill project should increase public access to the Bay to the maximum extent feasible…" and that "…maximum feasible access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline…"

1. **Public Access Impacts and Benefits.** In assessing whether a proposed project increases public access to the Bay and its shoreline, the Commission considers existing conditions at the project site, the proposed public access improvements provided by a project, and the existing and future demand for public access facilities. The McAteer-Petris Act and Bay Plan policies must be read in light of court decisions that have established 1) that a public agency must show a nexus, or essential connection, between any requirements included as a condition of a permit and the public burden created by a private development project, and 2) that the condition must be roughly proportional to the burden.

   In this case, the Commission must evaluate the demand for public access that the Terminal One project will generate and its anticipated impact on the existing and proposed public access at and near the project site.

   a. **Anticipated Public Access Demand.** The housing, employment, and population growth associated with the Terminal One project is expected to generate greater demand for public access on the Bay shoreline at and in the vicinity of the project site. At buildout, the permittees indicate that the Terminal One project is anticipated to accommodate approximately 581 residents (assuming an average of 2.1 persons per household for the 21 single-family homes and 1.9 persons per household for the condominiums, with a 4 percent vacancy factor and 316 residential units in total) and 10 retail employees. However, assuming the City of Richmond average household size of 2.87 persons per household, the project could result in approximately 907 new residents. The project is thus anticipated

to bring approximately 590-920 new residents and employees to the shoreline. These estimates do not reflect short-term visitors at the waterfront park or to the retail and commercial establishments. No estimate was provided as to the number of shoppers and visitors to the site anticipated as a result of the 2,500 square feet of retail and commercial space.

b. **Existing and Nearby Public Access.** No public access exists at the project site, which is not formally accessible to the public. Other shoreline public access areas exist nearby, outside the boundaries of the project site. These facilities can reasonably be expected to see an increased level of use as a result of the addition of the new residents, employees, and visitors generated by the Terminal One project. An existing public pier, public access pathways, and other amenities (authorized under BCDC Permit No. M1996.005.03) are associated with Ferry Point Pier and Ferry Point Beach to the west of the project site, as part of the Miller-Knox Regional Shoreline. Ferry Point Beach is also a designated San Francisco Bay Area Water Trail site.

c. **Public Access Areas.** The Terminal One project involves construction of approximately 5.33 acres of public access areas, including a waterfront wharf park, extensions of the San Francisco Bay Trail, a public plaza, and a pedestrian and bicycle paseo through the residential development. This represents approximately 40 percent of the 13.12-acre project site. The project also includes approximately 0.68 acres of permanently guaranteed open-water area in the Bay.

   Within the Commission's Bay jurisdiction, the project will repurpose the Terminal One Wharf as a public waterfront park. Additional public access improvements within the Commission's 100-foot shoreline band jurisdiction include the shoreline extension of the San Francisco Bay Trail, a new shoreline ring-road together with on-street public parking and loading zones, an elevated walk connecting the Bay Trail to the Wharf Park, and the public Rails-to-Trails Pathway.

   The following is a brief summary of newly constructed public access areas for the Terminal One project:

   i. **Terminal One Wharf Park.** An approximately 1.15-acre public park will be constructed along the waterfront, on an existing historic wharf structure. The park will include portions of an elevated wooden picnic deck with picnic tables and a trellis shade and wind structure, a 30-foot-wide paved pedestrian promenade with seating, a "play theater" with concrete seat steps, a multi-use lawn area, coastal plantings with pathways, an elevated wooden observation deck, a stem wall, and pedestrian walkways. The permit application indicated that the lawn area may be developed with either natural grasses or synthetic turf. Natural grasses are generally preferred within this area, however, Special Condition II.B.4 allows for the

use of synthetic turf if the permittees can demonstrate to the Executive Director that the use of natural grasses would be infeasible, or if synthetic turf would provide for a better overall experience for the public. While synthetic lawns may be preferable to natural grass in some settings or contexts, the size and location of this lawn lends itself primarily to passive uses such as sitting, picnicking, and Bay viewing. Natural grass is generally more inviting and comfortable for the public in this type of park setting.

ii. **Shoreline Drive.** A two-way, two-lane scenic ring-road will be constructed to provide the public with vehicular access to the waterfront park and the Bay views. This roadway will have 10-foot travel lanes, on-street public parking, cross walks, and other traffic-calming features.

iii. **Bay Trail Loop.** An approximately 1,908-foot-long shoreline extension of the San Francisco Bay Trail (the Bay Trail Loop) will be constructed on the Bayward side of Shoreline Drive, a new 20-foot-wide, two-way shoreline road, consisting of a 10-foot-wide paved pedestrian and bicycle path with 2-foot-wide shoulders and a minimum 3-foot-wide landscape buffer between the trail and the roadway edge. Pedestrian crossings will connect the sidewalk and public access within the development to the waterfront park and Bay Trail Loop, and wayfinding signage and bicycle parking will be installed.

iv. **Bay Trail Commuter Extension.** An approximately 440-foot-long extension of the San Francisco Bay Trail (the Bay Trail Commuter Extension) will be constructed along the northern side of Brickyard Cove Road, consisting of a 10-foot-wide paved pedestrian and bicycle path with 2-foot-wide shoulders and a minimum 3-foot-wide landscape buffer between the trail and the roadway edge.

v. **Public Parking Spaces and Bicycle Racks**. Forty-nine on-street public parking spaces will be provided on Shoreline Drive and on Brickyard Cove Road, including at least 4 ADA-accessible spaces and 6 ADA drop-off and loading zones. The application notes that the on-street public parking will be time-limited to four hours to discourage use by residents, guests, and employees. The project will also provide approximately 31 bicycle racks with total capacity for 62 bicycles.

vi. **Shoreline Trail System.** A shoreline trail system will be provided along portions of the shoreline in addition to the Bay Trail Loop, including a 15-foot-wide boardwalk and paved pathway that will connect the Terminal One Wharf Park to the Shoreline Drive frontage and a Rails-to-Trails Pathway involving reuse of existing railroad tracks east of the Wharf Park.

vii. **Terminal One Entry Plaza.** An approximately 7,300-square-foot Entry Plaza will be provided at the northwest corner of the site, near the western intersection of Brickyard Cove Road and Shoreline Drive. The Entry Plaza

will include café seating, bicycle parking, public art, and plantings, and will be located adjacent to approximately 2,500 square feet of ground-floor retail space.

viii. **Central Promenade.** A minimum 21,780-square-foot north-south pedestrian and bicycle paseo (Central Promenade) will be provided to connect the Brickyard Cove Road access corridor to the Shoreline Drive access corridor through the residential development and will be open and available to all members of the public from dawn to dusk. The Central Promenade will also provide a view corridor, with a width of approximately 50 feet at its northern end and approximately 80 feet at its southern end. In addition, the Central Promenade will include pathways and plantings. Emergency vehicle access and a private pedestrian bridge between residential podium courtyards will also be located in this area. Special Condition II.B.4.g requires that no physical obstructions (e.g., gates, fences) be installed within the Central Promenade to maintain its public character and views.

The project is required to construct and open to the public these public access areas and improvements as described above and defined in more detail in Special Conditions II.B.1 and II.B.4. All of the public access improvements, including final location and design of seating, artwork, bicycle parking, signs, lighting, fencing, planting, and other amenities shall be subject to final plan review approval by or on behalf of the Commission, pursuant to Special Condition II.A. This condition is intended to ensure that the final design of the Wharf Park and other public access areas are consistent with the application, the recommendations of the BCDC Design Review Board, and the requirements of this permit.

Bay Plan Public Access Policy No. 6 requires that access provided as a condition of development be permanently guaranteed. Special Conditions II.B.2 and II.B.3 require the recordation of an instrument to provide for the permanent dedication of the public access areas and create legal rights in favor of the public for public access.

Special Condition II.B.11 requires maintenance of the public access amenities to ensure that the project will continue to provide maximum feasible public access, consistent with the project, to the Bay and its shoreline, including by future assignees of the permit as required by Special Condition II.B.12. Special Condition II.B.13 allows for the establishment of reasonable rules and restrictions on use and operation of the public access required by this permit, subject to approval by or on behalf of the Commission.

d. **Public Access Phasing.** The public access improvements and residential development will be constructed over two phases, although the permittees indicate that the residential development could potentially be constructed in up

to five phases. In the permittees' intended two-phase scenario, the Phase 1 residential development includes the construction of three multi-family condominium buildings and 11 single-family homes, while the Phase 2 residential development includes the construction of two multi-family condominium buildings and 10 single-family homes. The phasing schedule proposed as part of the application provided that the Phase 1 public access areas (all public access improvements other than the Central Promenade) would be developed alongside the Phase 1 residential development, and would be completed prior to occupancy of the third multi-family building (Building #3) to be constructed in Phase 1. The remainder of the public access areas (the Central Promenade) would be developed alongside the Phase 2 residential development; the application does not describe the specific completion timeline of the Central Promenade in relationship to completion or occupancy of the Phase 2 residential development.

While the permittees indicate that their present intent is to construct the public access improvements and residential development over two phases, the City of Richmond entitlements allow for the construction of the residential development in up to five phases. In this scenario, Phase 1 would include the construction of one multi-family condominium building and three single-family homes as well as the public access improvements other than the public access components immediately adjacent to the residential development area (Central Promenade and Entry Plaza). Phase 2 would include the construction of the second multi-family condominium building and 4 single-family homes. Phase 3 would include the construction of the third multi-family condominium building and four single-family homes. Phase 4 would include construction of the fourth multi-family condominium building and 5 single-family homes. Phase 5 would include construction of the fifth multi-family condominium building and five single-family homes. The application does not describe the specific completion timeline of the Phase 1 public access areas in relation to completion or occupancy of the Phase 1 development; or the development or completion timeline of the Central Promenade and Entry Plaza in relationship to completion or occupancy of the remaining phases of development.

The phasing proposed by the permittees provides a general timeframe within which the public access areas would be constructed relative to the residential development. However, with the deadlines proposed for completion of construction of the public access areas, it is conceivable that a scenario could arise in which substantial portions of the residential development could be finished and occupied before the corresponding public access phase would be open to the public. In such a scenario, delays to the residential and retail portions of the project might occur such that a substantial portion of the Phase 1 residential development could be completed and occupied prior to opening of the Terminal One waterfront park and other Phase 1 public access areas, that a

substantial portion or all of the Phase 2 residential development (in the permittees' preferred two-phase development scenario) could be completed and occupied prior to opening of the Central Promenade, or even that portions of the public access areas would never be completed and open to the public if the residential development is abandoned or otherwise never completed.

As Bay Plan Public Access policies require that "maximum feasible access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline," it is necessary for the Commission to ensure that public access be provided alongside the project. Without firm deadlines as to when each phase of the public access area must be completed and open to the public, it is possible that the required public access areas would not be completed in a timely manner relative to the adjacent residential and retail development, or perhaps not opened at all. Special Condition II.B.8 is therefore included to ensure that construction of public access improvements associated with each phase of development will be completed and open to the public prior to occupancy of residential or retail space for the corresponding development phase. The Commission recognizes that the project will be developed in phases, and that it may become necessary to reasonably restrict public access areas after they are opened for public safety purposes to permit for construction activities of the residential component of the project. Therefore, Special Condition II.B.9 is included to allow the permittees to submit a plan for review by or on behalf of the Commission which would allow reasonable limitations or partial closure of the public access areas to facilitate construction of later phases of the development.

e. **Tie-Off Pier.** The project site includes an approximately 350-square-foot (70-foot-long by 5-foot-wide) existing tie-off pier, located in the Bay and 100-foot shoreline band adjacent to the Rails-to-Trails Pathway. The structural condition of the tie-off pier is unknown, no repairs to the pier were proposed as part of the project, and the project will fence off the tie-off pier to limit access. Special Condition II.B.10 is included to recognize that the permittees may retain the tie-off pier as an aesthetic and historical point of reference in recognition of the working role once played by the pier in port operations and the contribution it continues to make to the character of the Terminal One Shoreline. To limit physical access onto the tie-off pier, security fencing may be installed, the design of which shall maximize visual transparency and be reviewed and approved by or on behalf of the Commission through the plan review process established in Special Condition II.A. If, at any time, the Commission determines the condition of the tie-off pier has deteriorated to the point that either public safety or Bay resources are put at risk, the Commission may require the permittees to take appropriate actions to mitigate the hazard, which actions may include removal.

2. **Comparable Projects Approved by the Commission.** The Commission considers its previous actions on comparable projects to help partially inform a decision about whether public access proposed as part of a project represents the maximum feasible scope and type consistent with the project. The Commission has approved several residential or mixed-use development projects at a scale relatively similar to the Terminal One project: the Alameda Landing Waterfront Mixed-Use Development, the Blu Harbor Residential Development, the Signature at the Estuary Residential Development, and the Hercules Bayfront Creekside Apartments (Table 1).

   a. The Alameda Landing Waterfront Mixed-Use Development (BCDC Permit No. 2018.004.00), a 300-400-unit residential development project with commercial and retail space in the City of Alameda, Alameda County, provided 5.43 acres of public access at a 22.8-acre project site, or 24 percent of the total project area. This included a 4.6-acre waterfront park constructed on top of an historic wharf.

   b. The Blu Harbor Residential Development (BCDC Permit No. 2014.004.00), a 411-unit residential development project at the confluence of Smith Slough and Redwood Creek, in the City of Redwood City, San Mateo County, provided public access improvements on areas totaling approximately 2.55 acres of a 13.81-acre project site, or 18 percent of the project site.

   c. The Signature at the Estuary Residential Development (BCDC Permit No. 2003.003.00), a 100-unit condominium residential development project in the City of Oakland, Alameda County, provided 1.31 acres of public access at a 4.17-acre site, or 31 percent of its total project area. An 8,826-square-foot area of the total public access was provided as a permanently guaranteed open-water area, with the remaining 1.04 acres (25 percent of the total project area) provided as dedicated public access within the 100-foot shoreline band.

   d. The Hercules Bayfront Creekside Apartments (BCDC Permit No. 2017.002.00), a 172-unit residential development in the City of Hercules, Contra Costa County, provided public access improvements on areas totaling 0.45 acres of a 2.2-acre site, or 20 percent of the project site.

   The Terminal One project will have approximately 316 residential units in total, closest to the unit count of the Alameda Landing project and Blu Harbor Residential Development, and slightly larger than the Signature at the Estuary Residential Development and Hercules Bayfront Creekside Apartments. The Terminal One project will provide 5.33 acres of public access on a 13.12-acre site. The project also includes approximately 0.68 acres of permanently guaranteed open-water area which can be readily accessed from the Ferry Point Beach kayak/canoe launch site located immediately adjacent to the Terminal One site's western boundary. As a result, the public access area provided by the Terminal One Project, as a percentage of the total project area, is comparable or greater to that of the Alameda Landing

project (24 percent), the Blu Harbor project (18 percent), and the Hercules Bayfront project (20 percent), and approximately one-third higher than the Signature Estuary project (31 percent). This makes the area of public access as a percentage of total project area provided by the Terminal One project significantly higher than that of the other projects of its scale shown in Table 1.

Table 1. Public Access Provided in Comparable BCDC-Approved Projects

Project Name	BCDC Permit Number	Number of Residential Units	Total Project Area (Acres)	Public Access Area (Acres)	Public Access as a Percentage of Total Project Area
Alameda Landing Waterfront Mixed-Use Development	2018.004	300-400	22.8	5.43	24%
Blu Harbor Residential Development	2014.004	402	13.81	2.55	18%
Signature at the Estuary Residential Development	2003.003	100	4.17	1.31	31%
Hercules Bayfront Creekside Apartments	2017.002	172	2.2	0.45	20%
Terminal One (Project)	**2018.006**	**316**	**13.12**	**5.33**	**41 % (45% including open space area in Bay)**

3. **Waterfront Access and Roads.** Bay Plan Public Access Policy No. 9 states, in part, that "[a]ccess to and along the waterfront should be provided by walkways, trails, or other appropriate means and connect to the nearest public thoroughfare where convenient parking or public transportation may be available." Bay Plan Public Access Policy No. 10 states that "[r]oads near the edge of the water should be designed as scenic parkways for slow-moving, principally recreational traffic. The roadway and right-of-way design should maintain and enhance visual access for the traveler, discourage through traffic, and provide for safe, separated, and improved physical access to and along the shore. Public transit use and connections to the shoreline should be encouraged where appropriate."

A new shoreline ring-road (Shoreline Drive) will be constructed as part of the project. Shoreline Drive will be a two-lane road intended primarily for public use to access the Terminal One Waterfront Park and enjoy views of the Bay. Private parking for residents of both the 295 condominium flats and the 21 single-family homes, their guests, and employees will be contained inside two podium parking garages, which will have a total of 588 parking spaces (greater than the City of Richmond parking requirement of 552 spaces). The project design locates the entrances and exits to the residential podium parking garages off of Brickyard Cove Road, rather than Shoreline Drive, which is intended to eliminate the need of residents, their guests, or project employees to use Shoreline Drive for access to residential units or workspace. As a result, the Shoreline Drive streetscape will be distinguished by the absence of curb-cuts, driveways, garage doors, or other visual reminders of the automobile. The application noted that the design of Shoreline Drive also includes traffic-calming features including "two sweeping curves that require automobiles approaching and exiting Shoreline Drive's southern reach to reduce speeds" and "raised crosswalks/speed tables, stop signs, 10 foot wide travel lanes, on-street parking, and a potential 'Safety Zone' designation with a posted speed limit of 20 mph." These features are intended to encourage through traffic to make use of Brickyard Cove Road which will operate in a bypass capacity and to otherwise provide for the safety of pedestrians and bicyclists. To minimize view impacts, the application stated that "[o]n-street [public] parking is provided along Brickyard Cove Road and the western and eastern legs of Shoreline Drive, leaving Shoreline Drive's southern reach free of non-ADA accessible on-street spaces…"

In addition, the project will provide an extension of the Bay Trail (Bay Trail Loop) along the Bayward edge of Shoreline Drive, as well as a shoreline trail system that includes the Rails-to-Trails Pathway. This segment of the Bay Trail and trail system will provide for pedestrian and bicycle access along the waterfront in a location where no public access currently exists. The Bay Trail connects to Brickyard Cove Road at both ends of the Shoreline Drive Loop and will connect with the main portion of the Bay Trail in this area via the Bay Trail Commuter Extension. On-street public parking spaces will be provided as part of the project, primarily along Brickyard Cove Road. The nearest public transportation service is a bus stop located approximately 1.0 miles away at the intersection of Dornan Drive and East Richmond Avenue. The application stated that an AC Transit bus stop will be constructed as part of the improvements along Brickyard Cove Road.

4. **Safety of Public Access.** Bay Plan Public Access Policy No. 7 states, in part: "Public access improvements provided as a condition of any approval should…provide for the public's safety and convenience."

   The project site is a former industrial site that was used from approximately 1915 to the mid-1990s as a port facility, tank farm, and warehousing and distribution hub, which resulted in both soil and groundwater contamination at the site, including in areas proposed for public access and use. This contamination has been the subject

of San Francisco Bay Regional Water Quality Control Board (RWQCB) ongoing regulatory oversight. RWQCB adopted Cleanup Order No. R2-2004-0045 in June 2004 and approved a Remedial Action Plan (RAP) in December 2004, which included a combination of remediation, risk management, institutional controls, and monitoring. The site remediation was partially completed by the City of Richmond in 2005 and 2006 but put on hold in 2007 when the previous developer of the Terminal One property decided not to pursue development of the site. In 2015, permittees commenced a further site investigation consisting of additional soil and groundwater testing and monitoring to better understand current environmental conditions and inform revisions to the 2004 RAP. In June 2018, the City submitted a Draft Remedial Action Plan Addendum (the 2018 RAP Addendum) to RWQCB. The Regional Water Board found the 2018 RAP Addendum to comply with the requirements of the existing Cleanup Order and approved the Addendum on March 21, 2019. The City has more recently submitted for RWQCB review both a draft Remedial Design Report (RDR) which provides implementation-plan-level detail with respect to the remedial measures prescribed in the 2018 RAP Addendum, and an amended Soil Risk Management Plan (SRMP) to address the risk associated with residual soil contamination at the site. Upon acceptance of the RDR and amended SRMP by RWQCB's Executive Director, the permittees will undertake the additional remedial actions required to complete the cleanup of the site in accordance with the 2004 Cleanup Order and the 2018 RAP Addendum. The permit application indicates that no final occupancy permits for the residential development will be granted "prior to review and approval by the RWQCB of a report documenting the completion of all required remedial and mitigation measures and confirming the correct installation and functioning of any and all required mitigation systems." Portions of the site preparation work authorized herein, including the Deep Soil Mix (DSM) barrier and slurry wall, serve functions both for contamination containment and for soil stability related to the wharf structure.

5. **Barrier-Free Access.** Bay Plan Public Access Policy No. 7 states, in part: "Public access improvements provided as a condition of any approval…should permit barrier free access for persons with disabilities to the maximum feasible extent."

   The application stated that "[a]ll Terminal One Waterfront Park facilities will be ADA accessible, including the Wharf's Waterfront Promenade, Picnic Pavilion, Play Theater, Multi-Use Turf Area, Coastal Gardens, and Viewing Deck…" and that "[a]ll of the park facilities, including in particular the Terminal One Wharf, the Entry Plaza, and the Central Promenade have been designed with ADA access foremost in mind and incorporate changes in grade that are both gradual and modest in scale, with ramp transitions wherever grade differentials would otherwise constrain access. The Project's frontage on Shoreline Drive and Brickyard Cove Road provides 6 designated ADA accessible on-street public parking spaces and 7 ADA passenger drop-off/pick-up/loading zones. In addition, the park improvements and facilities…all emphasize the use of single-level unobstructed surfaces and are ADA accessible."

Special Condition II.A, which requires final plan review approval, will ensure review of the final construction plans for public access improvements to ensure their design provides barrier-free access to the maximum feasible extent consistent with the measures described in the permit application.

6. **Operations and Maintenance.** Bay Plan Public Access Policy No. 7 states, in part: "Public access improvements provided as a condition of any approval…should include an ongoing maintenance program."

   The City of Richmond will own and maintain all of the public access areas other than the Entry Plaza and Central Promenade, which will be owned and maintained by the Latitude Homeowners Association ("HOA") associated with the residential units developed on the project site. The application stated that "[a]lthough the City will maintain the public access areas it retains and the Latitude HOA will maintain the Entry Plaza and Central Promenade, the Latitude HOA will be principally responsible for funding the work of maintaining the public areas whether performed by the City or the HOA." Special Condition II.B.11 requires that public access areas required of the permit be maintained on an ongoing basis and that maintenance issues be addressed by the permittees or their successors in a timely fashion.

For the reasons discussed above, the Commission therefore finds that the project, as conditioned, is consistent with the McAteer-Petris Act laws and Bay Plan policies on Public Access.

C. **Recreation.** Bay Plan Recreation Policy No. 1 states, in part: "Diverse and accessible water-oriented recreational facilities, such as launch ramps, beaches, and fishing piers, should be provided to meet the needs of a growing and diversifying population, and should be well distributed around the Bay and improved to accommodate a broad range of water-oriented recreational activities for people of all races, cultures, ages and income levels…"

   Bay Plan Recreation Policy No. 4 speaks to facilities that should be provided in waterfront parks, such as the proposed waterfront park that would be constructed as part of this project. The policy states: "Where possible, parks should provide…docking and picnic facilities for boaters…. Recreational facilities that do not need a waterfront location, e.g., golf courses and playing fields, should generally be placed inland, but may be permitted in shoreline parks if they are part of a park complex that is primarily devoted to water-oriented uses, or are designed to provide for passive use and enjoyment of the Bay when not being used for sports…. Trails that can be used as components of the San Francisco Bay Trail…should be developed in waterfront parks. San Francisco Bay Trail segments should be located near the shoreline unless that alignment would have significant adverse effects on Bay resources… Bus stops, kiosks and other facilities to accommodate public transit should be provided in waterfront parks to the maximum extent feasible. Public parking should be provided in a manner that does not diminish the park-like character of the site. Traffic demand management strategies and alternative transportation systems should be developed where

appropriate to minimize the need for large parking lots and to ensure parking for recreation uses is sufficient…. Interpretive information describing natural, historical and cultural resources should be provided in waterfront parks where feasible….”

The project will provide new public access to the Bay, through the construction of the Wharf Park, extensions of the Bay Trail, a scenic ring-road, a plaza, and a pedestrian and bicycle paseo. The project will provide amenities for walking, running, cycling, picnic facilities, and historical education and interpretation, in line with the Bay Plan policies for waterfront parks. The project includes an extension of the San Francisco Bay Trail along the entire waterfront of the site, connecting with a commuter extension of the Bay Trail along the northern edge of the site. Public parking will be provided on Shoreline Drive and Brickyard Cove Road, primarily in locations that are not along the Bayward edge of the site, but will also provide for ADA-accessible parking spaces that are closer to the waterfront park than the remainder of the parking. A signage plan will be incorporated into the waterfront park and public access areas, including wayfinding and interpretive signage, as required in Special Condition II.B.5.

A bus stop will be constructed as part of the improvements along Brickyard Cove Road, and the project will provide pedestrian and bicycle trails, bicycle parking, and public parking, as required in Special Condition II.B.4, to encourage public use of the site. The Bay Trail Loop will be located adjacent to the shoreline for most of the project site but will remain inland of the wharf structure rather than being constructed along the edge of the wharf structure and waterfront park. This issue was discussed as part of the Design Review Board’s review of the project, and the alignment of the Bay Trail along the inland side of the wharf will in part minimize conflicts between pedestrians and bicycles within the waterfront park and allow the park to provide more dedicated opportunities for relaxation and Bay viewing.

The project does not include facilities for in-water access to the Bay, such as launching facilities or boat docks, but public in-water access to the Bay Tidelands Area is already provided at Ferry Point Beach – a part of the neighboring 306-acre Miller-Knox Regional Shoreline Park and a feature of the San Francisco Bay Water Trail. The Ferry Point Beach kayak/canoe launch site is located to the west of and immediately adjacent to the project’s entry plaza and includes a sand beach, visitor parking, a staging area, a kayak/canoe drying rack, a shower tower, drinking fountains, a fish cleaning station and restrooms.

For the reasons discussed above, the Commission therefore finds that the project, as conditioned, is consistent with the Bay Plan policies on Recreation.

D. **Appearance, Design, and Scenic Views.** The Bay Plan Appearance, Design, and Scenic Views policies state, in part, that “[a]ll bayfront development should be designed to enhance the pleasure of the user or viewer of the Bay” and that “[m]aximum efforts should be made to provide, enhance, or preserve views of the Bay and shoreline, especially from public areas…” Furthermore, “[s]tructures and facilities that do not take advantage or complement the Bay should be located and designed so as not to impact

visually on the Bay and shoreline. In particular, parking areas should be located away from the shoreline…." The policies also state that "[s]horeline developments should be built in clusters, leaving areas open around them to permit more frequent views of the Bay…" and that "[v]iews of the Bay from vista points and from roads should be maintained by appropriate arrangements and heights of all developments and landscaping between the view areas and the water."

The residential development associated with the Terminal One project will consist of 4- to 5-story buildings, which can impact public views from both Brickyard Cove Road and lower portions of the adjacent Miller-Knox Regional Shoreline Park. However, the majority of the public access areas are located on the Bayward side of the residential development, including the waterfront park and Bay Trail Loop, which will provide views of the Bay from these public areas. The north-south pedestrian promenade ("Central Promenade"), which cuts through the residential development, will provide waterfront views through the development. The residential development will be built in two main clusters of buildings, each located over a podium parking garage. These residential parking podiums will be located farther from the waterfront and edges of the site so as to minimize impacts on views, and the on-street public parking will be primarily located along Brickyard Cove Road and the portions of Shoreline Drive that are not immediately adjacent to the waterfront park and primary Bay frontage. ADA parking spots and drop-off areas will be located closer to the waterfront park.

Adjacent to the Terminal One Wharf Park, the project includes an approximately 29,620-square-foot (0.68-acre) area of open water (Bay Tidelands Area), which will provide for passive Bay viewing from the waterfront park and for active in-water recreational use by the paddling community accessing the Bay Tidelands Area from the canoe/kayak launch facility located at Ferry Point Beach immediately adjacent to the project's western boundary. Special Condition II.C requires that this area be dedicated as open space to establish a permanent shoreline at the site that ensures the preservation of open water views at this location.

For the reasons discussed above, the Commission therefore finds that the project, as conditioned, is consistent with the Bay Plan policies on Appearance, Design, and Scenic Views.

E. **Sea Level Rise and Flooding**

1. **Flooding and Sea Level Rise Risk**

a. **Applicable Policies.** Bay Plan Climate Change Policy No. 2 states, in part, "[w]hen 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 and current flood protection and planned flood protection that will be funded and constructed when needed to provide protection for the proposed project or shoreline area. 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. Inundation maps used for the risk assessment should be prepared under the direction of a qualified engineer. 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."

b. **Risk Assessment Prepared.** As part of the permit application, the permittees submitted a report prepared by the engineering firm BKF, dated January 15, 2015, entitled "Evaluation of Terminal One Base Flood Elevation and Area of Inundation." The report included an evaluation of flood risk at the project site and design parameters to be followed in mitigating the flood risks associated with a 100-year storm event and with project sea level rise of 3 feet or more. Subsequently, as requested by the Commission's Engineering Criteria Review Board (ECRB), the permittees submitted a follow-up report by BKF, dated July 24, 2017, entitled "Terminal One – Project Design Features and Adaptive Measures to Mitigate Flood Risk Associated with 100-Year Storm Events and Sea Level Rise."

The reports show that most areas of the project site will be sufficiently elevated to avoid flooding under today's 100-year flood event conditions. According to the Federal Emergency Management Agency (FEMA), current Base Flood Elevation (BFE) for the project site is +11 feet NAVD88. BFE is the total elevation to which flood waters are anticipated to rise during a 100-year flood event, which has a 1 percent chance of occurrence in any given year. The deck of the Terminal One Wharf was constructed at +13 feet NAVD88, and will be retrofitted to raise the elevation of the deck to +13.75 feet NAVD88, or 2.75 feet above the BFE. Most other public access areas will likewise be constructed a minimum of 3 feet above the BFE. However, an approximately 250-foot-long segment of the shoreline between the wharf and the property line will be maintained at its existing elevation of approximately +8 to +9 feet NAVD88. This segment of the shoreline, which includes the Rails-to-Trails Pathway and is discussed below, is subject to flooding beginning with a 5-year storm under current conditions. The Commission's Climate Change policies require that the risk assessment provide a range of sea level rise projections based on the "best scientific data available." The Commission generally relies on the sea level rise estimates provided in the 2018 State of California Sea Level Rise Guidance from the Ocean Protection Council and Natural Resources Agency ("2018 State Guidance"), which it considers to represent the best scientific data available. Both of the assessments prepared by BKF predate the release of the 2018 State Guidance. However, these assessments were developed in close alignment to the process outlined in the 2018 State Guidance, and the findings of the reports are appropriate to inform the discussion of flood risk at mid-century and beyond.

c. **Sea Level Rise Projections.** The 2018 State Guidance outlines an approach to planning that requires establishing the level of risk aversion that can be tolerated for the project given the consequences of future flooding, then making use of probabilistic projections of sea level rise that relate to the chosen degree of risk aversion. These scenarios range from a "low risk" aversion planning scenario, for projects where the consequences of failure are low, to an "extreme risk" aversion planning scenario, for projects where there is little-to-no potential for adaptive capacity, or the consequences of flooding to public health, public safety, or environmental impacts would be great. In analyzing this project, the Commission relies on the "medium-to-high" risk aversion scenario. According to the 2018 State Guidance, this planning scenario is appropriate to provide "a precautionary protection that can be used for less adaptive, more vulnerable projects or populations that will experience medium to high consequences as a result of underestimating sea-level rise (e.g., coastal housing development)."

For use in "medium-to-high" risk aversion decisions such as those involving the Terminal One project, the 2018 State Guidelines recommend using the following probabilistic projections relative to sea level rise:

- Assuming a high-emissions scenario (based on a "business-as-usual" approach to emission reductions), there is a "1-in-200 chance" (a 0.5 percent probability) that "sea-level rise meets or exceeds" 1.9 feet by the year 2050. A rise in sea level of 1.9 feet would result in a Mean Higher High Water (MHHW) level of +8.0 feet NAVD88 and a total water level during a 100-year (one percent likelihood) storm of +12.9 feet NAVD88.
- Assuming a low-emission scenario (based on greenhouse gas reductions consistent with the 2015 Paris Accord), there is a 1-in-200 chance (a 0.5 percent probability) that a rise in sea level will meet or exceed 5.7 feet by 2100. A rise in sea level of 5.7 feet would result in a MHHW level of +11.8 feet NAVD88 and a total water level during a 100-year storm of +16.7 feet NAVD88.
- Assuming a high-emissions scenario (based on a "business-as-usual" approach to emission reductions), there is a 1-in-200 chance (a 0.5 percent probability) that, by 2100, sea-level rise will meet or exceed 6.9 feet. A rise in sea level of 6.9 feet would result in a MHHW level of +13.0 feet NAVD88 and a total water level during a 100-year storm of +17.9 feet NAVD88.

The BKF reports identify that the project site is subject to risk from future flooding to different degrees depending on the element of the project in question. The Commission is primarily concerned with flood risk for three areas of the project, (1) the Bay Trail Loop and those public access areas located inboard of it; (2) the Wharf Park and those public access areas directly adjacent

to it; and (3) the riprapped area of the shoreline where the Rail-to-Trails Pathway is located. The following is a summary of the elevation of these elements relative to the shoreline:

- *Areas Inside the Bay Trail Loop.* The Bay Trail Loop will be constructed at an elevation of approximately +14.5 feet NAVD88. The Bay Trail Loop is intended to provide flood protection for project elements located inland of the loop, such as Shoreline Drive at a minimum elevation of +12.5 feet NAVD88 and the residential buildings and parking garages at a minimum elevation of +14.1 feet NAVD88. The project's contamination containment elements, including a Deep Soil Mix (DSM) barrier and slurry wall, are also located underneath or just inland of the Bay Trail Loop; the flood protection for containment of site contamination is therefore interrelated with the resilience and adaptation of the Bay Trail Loop.
- *Wharf Park and Adjacent Areas.* Following the construction of the concrete deck overlay on the Terminal One Wharf, the wharf deck will be at elevation of approximately +13.75 feet NAVD88. Also on the deck will be elevated program areas, built at an elevation of approximately +15 feet NAVD88, including the picnic deck, lawn area, coastal gardens, and overlook deck. Directly adjacent to the wharf are a number of improvements that will be constructed at a minimum elevation of +14 feet NAVD88, including a boardwalk and paved pathway that connect the Bay Trail to the Wharf Park, and a Native Coastal Gardens area.
- *Rails-to-Trails Area.* The Rails-to-Trails Pathway along the shoreline to the east of the wharf will be approximately +8 to +9 feet NAVD88, the lowest elevation of any project element.

1. **Sea Level Rise Resilience and Adaptation Measures**

   a. **Applicable Policies.** The Bay Plan Climate Change Policy No. 3 establishes that, "within areas that a risk assessment determines are vulnerable to future shoreline flooding that threatens public safety," measures should be implemented to address projected sea level rise and flooding risk:

   - *Projects are to be designed to be resilient to projections for 2050 sea level rise*: "To protect public safety and ecosystem services, within areas that a risk assessment determines are vulnerable to future shoreline flooding that threatens public safety, all projects…should be designed to be resilient to a mid-century sea level rise projection."
   - *Beyond 2050, adaptive management plans are to be required to address sea level rise impacts*: "If it is likely the project will remain in place longer than mid-century, an adaptive management plan should be developed to address

the long-term impacts that will arise based on a risk assessment using the best available science-based projection for sea level rise at the end of the century."

Depending on the aspect of the project that is being analyzed, the Bay Plan establishes slightly different standards for the Commission to consider likely impacts to a project into the future.

- *For public access required of the project, either the access provided should remain viable given future sea level rise, or equivalent access should be provided nearby*. Bay Plan Public Access policies state, in relevant part: "…public access should be sited, designed, managed and maintained to avoid significant adverse impacts from sea level rise and shoreline flooding" (Bay Plan Public Access Policy No. 5). In addition, "any public access provided as a condition of development should either be required to remain viable in the event of future sea level rise, or equivalent access consistent with the project should be provided nearby" (Bay Plan Public Access Policy No. 6).
- *For new work on Bay fill, including work to and on the wharf structure, a variety of responses to future flooding are acceptable, including building above projected flood elevations, having flood-tolerant designs, or other effective methods*. Bay Plan Safety of Fills Policy No. 4 states, in relevant part: "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….New projects on fill or near the shoreline should…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."

b. **Two-Phased Sea Level Rise Strategy.** The permit application summarizes a two-phased strategy for the project to address flood risk associated with increases in water levels and storm-driven flooding due to sea level rise. The first phase primarily consists of measures to achieve resilience to sea level rise of up to 3 feet. The second phase would include developing and implementing an Adaptive Flood Risk Management Plan to address flood risks associated with a sea level rise of over 3 feet.

c. **Phase One: Resiliency Measures.** The Bay Plan establishes that projects are to be designed to be resilient to a 2050 sea level rise projection. The 2018 State Guidance's "medium-to-high" risk aversion scenario projects a 0.5 percent probability that sea level rise will meet or exceed 1.9 feet by 2050. The first phase of the project's sea level rise strategy consists primarily of implementing design features that are intended to avoid or mitigate flooding from a 100-year storm event that occurs in combination with a rise in sea levels of up to 3 feet.

Therefore, the resiliency measures to be constructed as part of the project would be anticipated to achieve resilience for most aspects of the project through roughly 2070. The exception is within the Rails-to-Trails Pathway area, which is not designed to be resilient to mid-century sea level rise, as discussed below:

- *Resiliency Measures for the Area Inside the Bay Trail Loop.* The Bay Trail is to be constructed at a minimum elevation of +14.5 feet NAVD88 to provide resilience to flooding during a 100-year storm event, assuming sea level rise of up to 3.5 feet. Constructed to this elevation, the Bay Trail, as well as all those improvements located inboard of the Bay Trail such as Shoreline Drive and other public access areas, would not be anticipated to experience flooding at mid-century.
- *Resiliency Measures for the Wharf Park and Adjacent Areas.* The Wharf Park (+13.75 to +15.25 feet NAVD88) and adjacent public access areas (minimum +14 feet NAVD88) are to be constructed at an elevation that will provide for resiliency during a 100-year storm with approximately 2.75 to 3 feet of sea level rise. The public access areas on the wharf and directly adjacent to the wharf are anticipated to have an extremely low probability of flooding at mid-century, even during a storm event, because they will all be constructed at an elevation above the projected water levels during a 100-year storm.
- *Resiliency of the Rails-to-Trails Pathway Area.* The Rails-to-Trails Pathway is to be constructed at the site's existing grade in the portion of the shoreline running the 250-foot length between the Terminal One Wharf and the Richmond Yacht Club property line. The shoreline at this location is at approximately +8 to +9 feet NAVD88. The 2018 State Guidelines project a 0.5% probability that there will be a rise in sea level of 1.9 feet or greater by 2050, which will in turn result in a MHHW elevation of +8 feet NAVD88. As a result, almost any storm event will generate inundation levels in excess of the MHHW elevation. For example, assuming sea level rise of 1.9 feet by 2050, during a King Tide (1-year storm), the area would be flooded by approximately 1.2 feet. This area is therefore not resilient to flooding during mid-century sea level rise projections. The pathway would be subject to increasingly frequent flood episodes until the point when daily flooding would require either its closure or the implementation of adaptation measures to extend the life of this area for public access purposes. Possible adaptation measures are discussed in the section below, however the permit application also states that public access may instead be restricted within this 250-foot length of the shoreline as it becomes subject to more frequent flooding.

In summary, all components of the project are designed to be resilient to projected sea level rise with the exception of the Rails-to-Trails Area. While this area will not remain resilient to flooding and a viable feature of the public access program for the anticipated life of the project, the intent in maintaining access to this low-lying area of the shoreline is to highlight the historic maritime industrial uses of the site, in much the same way as retaining the wharf structure serves to highlight the site's history. Though public access is not guaranteed to be provided in this area after it becomes subject to regular flooding (unless adaptation measures are pursued to protect this portion of the shoreline) it will serve a valuable purpose in the intervening time in providing a public access opportunity in the area of the shoreline closest to the water, and also by highlighting a historic element of the site. Should wave runup or storm-driven floods result in any damage to the public access area prior to the time it is closed or otherwise modified to address rising sea levels, Special Condition II.B.11 is included to ensure that timely maintenance occur to repair flood damage. Standard Condition IV.M is included to ensure that, the Rails-to-Trails Pathway and any other improvements in this area be removed at such time as flooding creates a hazard to public health, safety or welfare. Alternatively, the permittees may elect to adapt this area as discussed further in the section below.

d. **Phase Two: Adaptation Planning and Implementation.** The Bay Plan requires that for projects that will remain in place longer than mid-century, an adaptive management plan be developed to address the long-term impacts based on a risk assessment using the best available science-based projections for sea level rise at the end of the century. The second phase of the project's sea level rise strategy includes the preparation and implementation of an Adaptive Flood Risk Management Plan designed to address flood risks associated with a sea level rise of over 3 feet. As the 2018 State Guidance's "medium-to-high" risk aversion scenario projects a 0.5 percent probability that sea-level will rise by 5.7 to 6.9 feet or greater by 2100, well over 3 feet, such a plan will likely need to be in place to address the end-of-century projections for flooding from sea level rise.

   Various adaptation responses are possible at the project site. For instance, the grade of the Bay Trail might be raised to allow the Bay Trail Loop to serve as a flood protection measure for those areas inside it. Alternatively, another flood protective device may be installed outboard of the Bay Trail. The Wharf Park and the adjacent public access areas have somewhat less adaptive capacity than the public access areas within the Bay Trail Loop. While the Bay Trail Loop can be modified to serve as a protective embankment, the wharf structure would potentially require expensive retrofits or even replacement to ensure that it would continue to function, at least in full, as a waterfront park at the end of the century, when it is projected to experience overtopping and flooding. At that time, measures could be implemented to prolong the life of the Wharf Park. For instance, a low curb wall or a redesigned railing could be installed to extend the

period of time before the wharf deck experiences flooding from overtopping. If the wharf cannot be replaced, repaired, or retrofitted, then equivalent access is to be provided nearby. The Wharf Park provides a varied mix of program activities that could be replicated in another location within the project site. To do so would require redesigning a portion of the waterfront to incorporate new public access features. For instance, in the future, an area inside the Bay Trail Loop such as Shoreline Drive could be redesigned to provide some of the functions of a waterfront park that are provided by the Wharf Park.

According to the permit application, an Adaptive Flood Risk Management Plan will be prepared starting in 2035, well in advance of the time when adaptation measures to address more than 3 feet of sea level rise is anticipated to be necessary. After its initial preparation in 2035, the plan would be updated on an ongoing basis, every 10 years, to reflect the updated projections for sea level rise and to establish the appropriate triggers and timeframes for implementing selected adaptation measures. As described in the permit application, the Adaptive Flood Risk Management Plan includes the following elements:

- A “Monitoring and Reporting Program,” that assess the 100-year flood risks and potential impacts associated with a rise in sea level of greater than 3 feet.
- An “Adaptive Flood Risk Management Strategy” that includes mitigation measures to address the identified 100-year flood risks and related impacts associated with a rise in sea level of greater than 3 feet.
- A “Financing Strategy” that identifies the sources of funding that will be employed in financing the adaptive flood risk management measures and that includes an implementation schedule to ensure such measures are implemented on a timely basis to address the identified flood risks and related impacts.

Special Condition II.D is included to require that the Adaptive Flood Risk Management Plan is submitted for review and approval by or on behalf of the Commission by January 1, 2035. The plan shall be revised and resubmitted every 10 years thereafter (i.e., by January 1, 2045, and so on). The plan shall describe adaptation measures that ensure that the project will continue to provide maximum feasible public access, consistent with the project, to the Bay and shoreline. The plan shall also provide a schedule to ensure successful implementation of the selected adaptation measures. Various adaptation responses could be developed in the future to achieve these objectives, and depending on the selected response, an amendment to this permit or another BCDC permit may be required to allow for selected work, or to permit for modifications to the public access areas required herein.

F. **Review Boards**

1. **Engineering Criteria Review Board.** The Commission's Engineering Criteria Review Board (ECRB) and Design Review Board (DRB) received a joint briefing on the project on June 7, 2016. The project was then reviewed by the ECRB on May 24, 2017, August 8, 2017, November 1, 2017, and September 26, 2018. The ECRB's review primarily focused on criteria regarding the seismic and engineering design safety of the historic wharf and adjacent soil improvements. Through their four reviews of the project, the ECRB requested and evaluated information related, in part, to wharf pile deterioration status and potential progression to more severe levels of damage, wharf and pile maintenance needs over time, function of the proposed Deep Soil Mix (DSM) barrier under seismic events and its ability to buffer the wharf from lateral ground displacement in a large earthquake, strength parameters and characterizations of soil and mud underneath and adjacent to the wharf structure, geotechnical and seismic instrumentation, and the impacts of sea level rise on the wharf structure. The ECRB accepted the proposed engineering criteria for the wharf and soil improvements as being adequate. Through their review of the project, the ECRB had comments and recommendations related, in part, to ensuring that long-term monitoring and maintenance of the wharf and piles were incorporated into the project, that seismic instrumentation be provided, that the design for the DSM (a design-build element) be peer-reviewed, with the comments and conclusions of the peer reviewer to be submitted to BCDC for review and approval prior to construction, and consideration of a long time horizon and specific adaptation strategies for sea level rise.

2. **Design Review Board.** The Commission's ECRB and DRB received a joint briefing on the project on June 7, 2016. The project was then reviewed by the DRB on August 7, 2017. The DRB commented favorably on developing the Rails-to-Trails Pathway along the location of the historic rail line, recognizing that in time this area would be inundated by flooding. Board members considered whether it would be preferable to install artificial turf or plant natural grass within the lawn area of the Wharf Park. Board members commenting on the choice favored use natural grasses rather than artificial turf in the waterfront park due to maintenance and durability questions, and because natural grass would be more comfortable for users on warm days. Board members also discussed the ideal alignment for the Bay Trail, including whether it should run along the edge of the wharf or along the alignment proposed in the application. Board members were split over the alignment that worked best, but those in support of the proposed alignment said that it allowed for people to enjoy the edge of the wharf deck without worrying about conflicts from bicycles.

G. **Environmental Review.** The City of Richmond, the lead agency for the Terminal One project, certified a Final Environmental Impact Report on July 5, 2016 and adopted a Mitigation Monitoring and Reporting Program, pursuant to the California Environmental Quality Act (CEQA).

H. **Coastal Zone Management Act.** The Commission further finds, declares, and certifies that the activity or activities authorized herein are consistent with the Commission's Amended Management Program for San Francisco Bay, as approved by the Department of Commerce under the Federal Coastal Zone Management Act of 1972, as amended.

I. **Enforcement Program and Civil Penalties.** The Commission has an enforcement program that reviews its permits for compliance. The Commission may issue cease and desist and civil penalty orders if violations are discovered. The McAteer-Petris Act provides for the imposition of administrative civil penalties ranging from $10 to $2,000 per day up to a maximum of $30,000 per violation. The Act also provides for the imposition of court-imposed civil penalties of up to $30,000 in addition to any other penalties, penalties for negligent violations of between $50 and $5,000 per day, and penalties for knowing and intentional violations of between $100 and $10,000 per day, and exemplary penalties, which are supplemental penalties, in an amount necessary to deter future violations. In addition, anyone who places fill, extracts materials, or makes any substantial change in use of any water, land or structure within the area of the Commission's jurisdiction without securing a permit from the Commission is guilty of a misdemeanor.

J. **Conclusion**. For all the above reasons, the Commission finds, declares, and certifies that, subject to the Special Conditions stated herein, the project authorized herein is consistent with the McAteer-Petris Act, the *San Francisco Bay Plan*, the Commission's Regulations, the California Environmental Quality Act, and the Commission's Amended Management Program for the San Francisco Bay segment of the California coastal zone.

IV. Standard Conditions

A. **Permit Execution**. This permit shall not take effect unless the permittees execute the original of this permit and return it to the Commission within ten days after the date of the issuance of the permit. No work shall be done until the acknowledgment is duly executed and returned to the Commission.

B. **Notice of Completion**. The attached Notice of Completion and Declaration of Compliance form shall be returned to the Commission within 30 days following completion of the work.

C. **Permit Assignment**. The rights, duties, and obligations contained in this permit are assignable. When the permittees transfer any interest in any property either on which an activity authorized by this permit is to occur or which is necessary to achieve full compliance with one or more conditions to this permit, the permittees/transferors and the transferee(s) shall execute and submit to the Commission a permit assignment form acceptable to the Executive Director. An assignment shall not be effective until the Executive Director receives an acknowledgment, executed by the assignee(s), that the assignee(s) have read and understand the permit and agree to be bound by the terms and conditions of the permit, and the assignee(s) are accepted by the Executive Director as being reasonably capable of complying with the terms and conditions of the permit.

D. **Permit Runs With the Land**. Unless otherwise provided in this permit, the terms and conditions of this permit shall bind all future owners and future possessors of any legal interest in the land and shall run with the land.

E. **Other Government Approvals**. All required permits and approvals from governmental bodies must be obtained before the commencement of work; these bodies include, but are not limited to, the U. S. Army Corps of Engineers, the State Lands Commission, the Regional Water Quality Control Board, and the city or county in which the work is to be performed. This permit does not relieve the permittees of any obligations imposed by State or Federal law, either statutory or otherwise.

F. **Built Project must be Consistent with Application**. Work must be performed in a manner and at locations that are in conformance with the permittees' BCDC permit application, as such may have been modified by the terms of the permit and any plans subsequently approved in writing by or on behalf of the Commission.

G. **Life of Authorization**. Unless otherwise provided in this permit, all the terms and conditions of this permit shall remain effective for so long as the permit remains in effect or for so long as any use or construction authorized by this permit exists, whichever is longer.

H. **Commission Jurisdiction**. Any area subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission under either the McAteer-Petris Act or the Suisun Marsh Preservation Act at the time the permit is granted or thereafter shall remain subject to that jurisdiction notwithstanding the placement of any fill or the implementation of any substantial change in use authorized by this permit. Any area not subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission that becomes, as a result of any work or project authorized in this permit, subject to tidal action shall become subject to the Commission's "bay" jurisdiction.

I. **Changes to the Commission's Jurisdiction as a Result of Natural Processes**. This permit reflects the location of the shoreline of San Francisco Bay when the permit was issued. Over time, erosion, avulsion, accretion, subsidence, relative sea level change, and other factors may change the location of the shoreline, which may, in turn, change the extent of the Commission's regulatory jurisdiction. Therefore, the issuance of this permit does not guarantee that the Commission's jurisdiction will not change in the future.

J. **Violation of Permit May Lead to Permit Revocation**. Except as otherwise noted, violation of any of the terms of this permit shall be grounds for revocation. The Commission may revoke any permit for such violation after a public hearing held on reasonable notice to the permittees or their assignees if the permit has been effectively assigned. If the permit is revoked, the Commission may determine, if it deems appropriate, that all or part of any fill or structure placed pursuant to this permit shall be removed by the permittees or their assignees if the permit has been assigned.

K. **Should Permit Conditions Be Found to be Illegal or Unenforceable**. If any term or condition of this permit is held by a court of competent jurisdiction to be legally invalid, void as a matter of law, or otherwise unenforceable, all other terms and conditions of this permit shall continue in full force and effect. If this permit is held by a court of competent jurisdiction to be invalid or null and void in its entirety, any fill or structures placed in reliance on this permit shall be subject to removal by the permittees or their assignees if the permit has been assigned to the extent that the Commission determines that such removal is appropriate, and any uses authorized shall be terminated to the extent that the Commission determines that such uses should be terminated.

L. **Permission to Conduct Site Visit**. The permittees shall grant permission to any member of the Commission's staff to conduct a site visit at the subject property during and after construction to verify that the project is being and has been constructed in compliance with the authorization and conditions contained herein. Site visits may occur during business hours without prior notice and after business hours with 24-hour notice.

M. **Abandonment**. If, at any time, the Commission determines that the improvements in the Bay authorized herein have been abandoned for a period of two years or more, or have deteriorated to the point that public health, safety or welfare is adversely affected, the Commission may require that the improvements be removed by the permittees, their assignees or successors in interest, or by the owner of the improvements, within 60 days or such other reasonable time as the Commission may direct.

N. **Best Management Practices**

1. **Debris Removal.** All construction debris shall be removed to an authorized location outside the jurisdiction of the Commission. In the event that any such material is placed in any area within the Commission's jurisdiction, the permittees, their assignees, or successors in interest, or the owner of the improvements, shall remove such material, at their expense, within ten days after they have been notified by the Executive Director of such placement.

2. **Construction Operations.** All construction operations shall be performed to prevent construction materials from falling, washing or blowing into the Bay. In the event that such material escapes or is placed in an area subject to tidal action of the Bay, the permittees shall immediately retrieve and remove such material at their expense.

O. **In-Kind Repairs and Maintenance.** Any in-kind repair and maintenance work authorized herein shall not result in an enlargement of the authorized structural footprint and shall only involve construction materials approved for use in San Francisco Bay. Work shall occur during periods designated to avoid impacts to fish and wildlife. The permittees shall contact Commission staff to confirm current restricted periods for construction.

PUBLIC SITE FEATURES

- A Existing Bay Trail
- B Proposed Bay Trail extension
- C Trash collection area
- D Existing tie-off pier
- E Existing rail line
- F Rip-Rap revetment
- G Stormwater treatment gardens
- H Way-Finding graphics/bike parking
- I Entry Plaza
- J Maritime artifact/public art
- K Ground floor retail
- L Way-finding graphics
- M Existing pump station
- N Loading/drop-off zone, typ.
- O Speed Table Pedestrian Crossing
- P Public On-Street Parking, TYP.
- Q Central Promenade at ground level- ped/bike only w/emergency access
- R Lawn with "Turf Block" for emergency access

PRIVATE SITE FEATURES

- 1 Fire pit lounge area on podium
- 2 Pool and spa area on podium
- 3 Amenity area/trellis on podium
- 4 Pedestrian bridge & bay overlook
- 5 Podium terrace access
- 6 Podium play area
- 7 Garden planting on podium, TYP.
- 8 Private patio, TYP.
- 9 Stormwater flow-through planter on podium, TYP.
- 10 Garage access

+13.5' Spot Elevation

Edge of Podium

TERMINAL ONE WATERFRONT PARK

Bay Conservation and Development Commission December 5, 2019

EXHIBIT A -1
PERMIT NO. 2018.006.00

ANNOTATED SITE PLAN

100ft

N

LACONIA DEVELOPMENT LLC

CMG

TERMINAL ONE WATERFRONT PARK

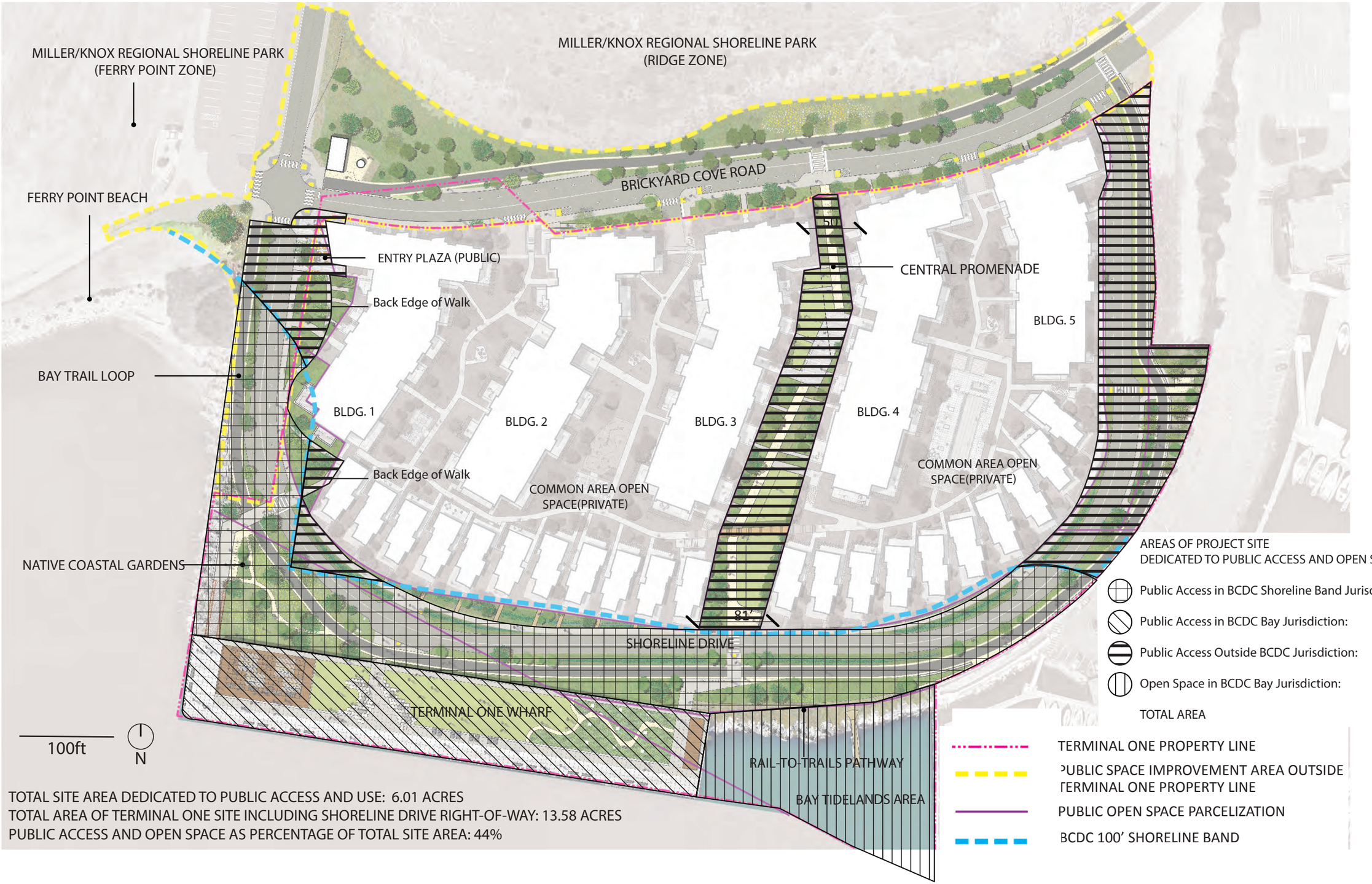
Bay Conservation and Development Commission December 5, 2019

EXHIBIT A -2
PERMIT NO. 2018.006.00

PRINCIPAL FEATURES OF WATERFRONT PARK

LACONIA DEVELOPMENT LLC

CMG



TERMINAL ONE WATERFRONT PARK

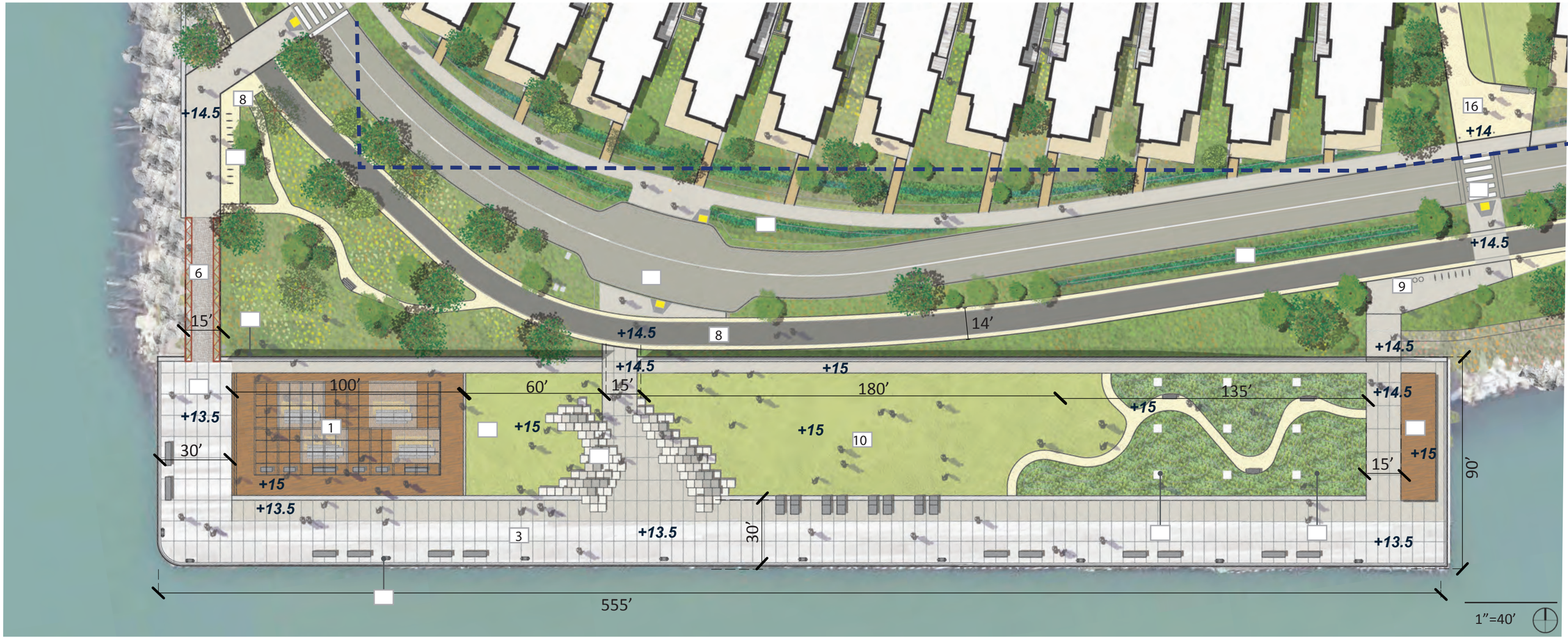
Bay Conservation and Development Commission December 5, 2019

EXHIBIT A -3
PERMIT NO. 2018.006.00

PRINCIPAL FEATURES OF WATERFRONT PARK

LACONIA DEVELOPMENT LLC

CMG



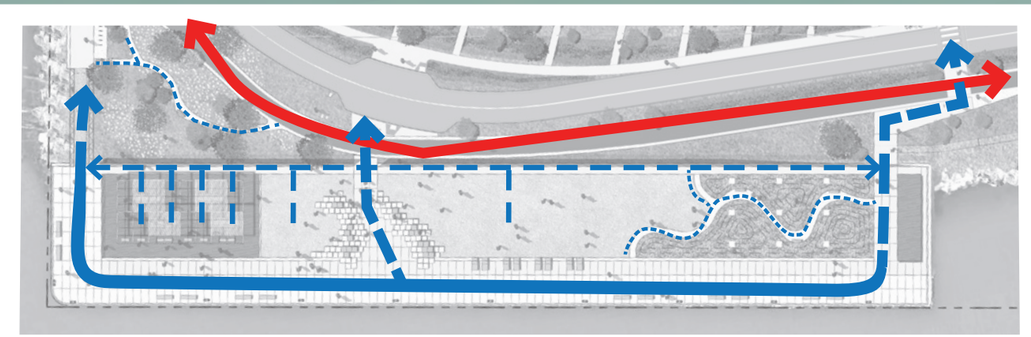
FEATURES:

1. Elevated picnic deck
2. Overlook deck
3. Wharf promenade
4. Play theater
5. Repaved wharf
6. Elevated walk connecting Bay Trail to Wharf Park
7. Existing mooring bollard preserved in place, Typ.
8. Bay Trail shoreline extension
9. Bike parking & wayfinding graphics
10. turf flexible use area
11. Coastal planting areas
12. Stormwater treatment area
13. ADA parking and loading
14. Re-use wharf pediment sign at park entry
15. Raised table crossing
16. Public Promenade entry plaza
17. Potential sculpture location

LEGEND

+14.5 SPOT ELEVATION

BCDC 100' SHORELINE BAND



ACCESSIBLE PATHS

PROMENADE, 30'

ENTRY PATHS, 9-15'

SECONDARY PATH, 5'

GARDEN PATH, MIN. 4'

BAY TRAIL 14'

ACCESS AND CIRCULATION

TERMINAL ONE WATERFRONT PARK

Bay Conservation and Development Commission December 5, 2019

EXHIBIT A -4
PERMIT NO. 2018.006.00

ANNOTATED WHARF PARK SITE PLAN

LACONIA DEVELOPMENT LLC

CMG

TERMINAL ONE WATERFRONT PARK

Bay Conservation and Development Commission December 5, 2019

EXHIBIT A -5
PERMIT NO. 2018.006.00

PRINCIPAL FEATURES OF WHARF PARK

LACONIA DEVELOPMENT LLC

CMG

VIEW A: An open plaza with special paving offers seating, public art, and open views to the west. Tree planting is organized to open up these views and to provide wind screening to the southwest to protect from prevailing winds.

VIEW B: Entry Plaza and corner retail space with outdoor seating.

TERMINAL ONE WATERFRONT PARK

Bay Conservation and Development Commission December 5, 2019

EXHIBIT A -6
PERMIT NO. 2018.006.00

PUBLIC ENTRY PLAZA

LACONIA DEVELOPMENT LLC CMG

Exhibit B:

Excerpt from Chapter Six of the Terminal One EIR "Final Mitigation and Features Monitoring and Reporting Program"

Pages 6-14 through 6-17

TABLE 6-1 (Continued)
MITIGATION AND FEATURES MONITORING AND REPORTING PROGRAM

Project Design Features and Mitigation Measures	Implemented By	Monitored By	Monitoring and Reporting Action	Monitoring Schedule	Verification of Compliance
4.8 Hydrology and Water Quality (cont.)					
construction-related materials. The measures identified in the MMDP shall be based on the Best Available Technology, and will include, but not be limited to, the following: a. During construction, any barges performing the work shall be moored in a position to capture and contain the debris generated during any sub-structure or in-water work. In the event that debris does reach the Bay, personnel in workboats within the work area shall immediately retrieve the debris for proper handling and disposal. All debris shall be disposed of at an authorized upland disposal site; b. Construction waste shall be collected and transported to an authorized upland disposal area, and per federal, state, and local laws and regulations; c. All construction material, wastes, debris, sediment, rubbish, trash, fencing, etc., shall be removed from the site once the proposed project is completed and transported to an authorized disposal area, in compliance with applicable federal, state, and local laws and regulations. The MMDP shall be submitted to the San Francisco Bay RWQCB for review and approval.					
PROJECT DESIGN FEATURE HYD-2: Sea Level Rise Measures. The applicant will ensure that the project design includes the following measures to address sea level rise of up to 3 feet: 1. Placement of finished floor elevations of residential structures above 14.5 feet NAVD88, an elevation greater than the current site BFE, or 11 feet NAVD88, plus 3 feet of sea level rise and a 0.5 feet additional margin; and 2. The installation of appropriate stormwater inlet infrastructure, and/or the installation of back flow prevention devices on storm drain lines (and/or the design of the stormwater infrastructure to accommodate the future installation of back flow prevention devices on an as-needed basis). 3. Placement of the finished elevation of the Bay Trail Loop at or above 14.1 feet NAVD88, an elevation greater than the current site BFE (11 feet NAVD88) plus 3 feet of sea level rise; If feasible, design of the Bay Trail Loop to function as a flood mitigation embankment either as initially constructed or as retrofitted on an as needed basis. Because the project site's shoreline is a VE zone, indicating it is currently susceptible to wave overtopping, the Bay Trail Loop embankment may be subject to wave runup and overtopping. These processes shall be considered when setting the Bay Trail Loop's final design and evaluating its flood mitigation performance.	Project Applicant	City of Richmond Building Division and Engineering Services Department	The City shall review and approve Project Design and Bay Trail Loop to ensure this mitigation is incorporated in the final design.	Prior to issuance of building permit.	*Verified by:* *Date:*

TABLE 6-1 (Continued)
MITIGATION AND FEATURES MONITORING AND REPORTING PROGRAM

Project Design Features and Mitigation Measures	Implemented By	Monitored By	Monitoring and Reporting Action	Monitoring Schedule	Verification of Compliance
4.8 Hydrology and Water Quality (cont.)					
PROJECT DESIGN FEATURE HYD-3: Sea Level Rise Adaptation Strategies: The applicant shall include provisions in the project's Covenants, Conditions, and Restrictions that require the Homeowner's Association to engage a degreed coastal geomorphologist, a licensed engineer, or a comparably qualified expert in the management of flood risks associated with sea level rise to prepare an Adaptive Flood Risk Management Plan. The initial adaptive management plan shall be completed and submitted to the City for review and comment by January 1, 2035. The plan shall be updated every ten years, with the first plan update to be completed and submitted to the City for review and comment by January 1, 2045 and with subsequent updates to be completed and submitted to the City on January 1 every ten years thereafter. The Adaptive Flood Risk Management Plan shall include: 1. A Monitoring and Reporting Program – to include: a. A review of scientific literature including up-to-date estimates of local sea level rise and available data and studies from other shoreline sites in Richmond as well as neighboring/regional jurisdictions to estimate the actual increase in sea level at the site; b. A review of federal, State, local, and regional law, regulations, and guidance that address sea level rise; c. A report that addresses the following points: i. A discussion of any estimated difference in sea level at the site since the previous 10-year report; ii. A discussion of how the project complies with any new applicable statutory or regulatory requirements; iii. A discussion of the observed characteristics and impacts, if any, related to flooding on the site, based on site observations and photos as well as conversations with site residents and City Public Works staff; iv. A discussion of the monitoring triggers that will be used to determine the installation schedule for: • Any backflow prevention devices that are required to address flood impacts associated with a 2 foot increase in sea level; • Any protective features that will enable the Bay Trail Loop (and/or other protective features as needed) to serve as a flood protection measure to address flood impacts associated with a 3-foot increase in sea level; and/or	Project Applicant	City of Richmond Building Division and Engineering Services Department	Building Division to ensure mitigation language is provided in the projects Covenants, Conditions, and Restrictions. Engineering Services Department to receive and review Plan.	Prior to certification of occupancy. Receipt for review January 1, 2035, with subsequent updates every 10 years thereafter.	*Verified by:* *Date:*

TABLE 6-1 (Continued)
MITIGATION AND FEATURES MONITORING AND REPORTING PROGRAM

Project Design Features and Mitigation Measures	Implemented By	Monitored By	Monitoring and Reporting Action	Monitoring Schedule	Verification of Compliance
4.8 Hydrology and Water Quality (cont.)					
• Any additional adaptive flood risk management measures that will be required to address flood impacts associated with a rise in sea level of greater than 3 feet.					
v. A recommended schedule for implementing the adaptive flood risk management measures referenced in subsection iv. above and/or an update to a previously presented recommended schedule; and					
vi. A report on the adaptation measures financing mechanism (see subsection 3. below), and an estimated projection of funds that would be available 10 years into the future.					
2. An Adaptive Flood Risk Management Strategy to address 100-year flood impacts associated with a rise in sea level of greater than 3 feet. If the monitoring program and the updated monitoring report prepared every ten years results in a projection that the rise in sea level will exceed 3 feet during the subsequent 25-year period, the Adaptive Flood Risk Management Plan shall also include:					
a. An analysis of adaptive measures which, if implemented, either on a stand-alone basis or in combination with other measures, would prevent or substantially reduce human health and safety impacts as well as property loss and damage related to 100-year flooding and an increase in sea level of greater than 3 feet;					
b. The formulation of an adaptive measures strategy which reflects a best practices and cost-effective approach to addressing the 100-year flood risk associated with an increase in sea level greater than 3 feet; and					
c. An estimate of the costs and timeframes involved in implementing the adaptive measures strategy formulated in accordance with subsection b. above.					
The nature of the adaptation measure/s to be implemented will be reviewed and approved by the City Planning Division and Public Works Department and other regulatory agencies as necessary, and will be based on the results of monitoring and reporting.					
3. A Financing Strategy which will be designed to:					
a. Generate sufficient resources to cover the costs of:					
i. The backflow prevention devices as required to address flood impacts associated with a 2 foot increase in sea level (to the extent these devices were not already installed when the storm drain system was initially constructed);					

TABLE 6-1 (Continued)
MITIGATION AND FEATURES MONITORING AND REPORTING PROGRAM

Project Design Features and Mitigation Measures	Implemented By	Monitored By	Monitoring and Reporting Action	Monitoring Schedule	Verification of Compliance
4.8 Hydrology and Water Quality (cont.)					
ii. The protective features as required to enable the Bay Trail Loop to serve as an effective barrier to address flood impacts associated with a 3-foot increase in sea level (to the extent these protective features were not already incorporated in the Bay Trail Loop when it was originally constructed); and iii. The adaptive measures strategy formulated to address flood impacts associated with an increase in sea level of greater than 3 feet; b. Generate such funds and to make such funds available within a timeframe to cover the flood improvement costs as they are incurred in accordance with the implementation schedule. The financing strategy may include funding from the following private and public financing mechanisms: a. Homeowner Association fees; b. Mello Roos Community Services District special taxes; c. Assessment District Assessments; and d. Other public or private financing mechanisms as determined by the Homeowner Association and the City to be appropriate and feasible.					
4.9 Land Use and Planning					
None required.					
4.10 Noise					
Mitigation Measure NOI-1a: Construction Noise Control Measures. The applicant shall employ site-specific noise attenuation measures during project construction to reduce the generation of construction noise, including pile-driving noise. These measures shall be included in a Noise Control Plan that shall be submitted for review and approval by the City of Richmond Planning and Building Services Department to ensure that construction noise is consistent with the standards set forth in the City's Noise ordinance and other standards as appropriate. Measures specified in the Noise Control Plan and implemented during project construction shall include, at a minimum, the following noise control strategies: • Equipment and trucks used for construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds);	Project Applicant / Contractor	City of Richmond Building Division and Engineering Services Department	Engineering Department to review and approve project specifications and grading and construction plans for inclusion of this measure into specifications. Building Division to inspect site during construction to ensure compliance with project construction plans.	Prior to issuance of building permit. Field inspections during construction	*Verified by:* *Date:*