

San Francisco Bay Conservation and Development Commission

455 Golden Gate Avenue, Suite 10600, San Francisco, California 94102 tel 415 352 3600 fax 415 352 3606

November 2, 2018

TO: Engineering Criteria Review Board (ECRB or Board) Members

FROM: Lawrence J. Goldzband, Executive Director (415/352-3653; larry.goldzband@bcdc.ca.gov)
Rebecca Coates-Maloon, Principal Permit Analyst (415/352-3634; rebecca.coates-maloon@bcdc.ca.gov)
Rafael Montes, Staff Engineer (415/352-3670; Rafael.montes@bcdc.ca.gov)

SUBJECT: Alameda Landing Waterfront Project (Third Review)
(For Board consideration on November 13, 2018)

Staff Summary

Project Name. The Alameda Landing Waterfront Mixed-Use Development, City of Alameda

Applicant. The City of Alameda and Catellus Alameda Development, LLC

Project Representatives. Andrew Thomas (City of Alameda), Bill Kennedy (Catellus), Damir Priskich (Catellus), Dave Irving (Catellus), Haze Rodgers PE GE (Langan), Juan Baez, PhD PE (AGI), Steve Dickenson, PhD PE (New Albion Geotechnical), Doug Schwarm, PE (Atlas Geotechnical), Gayle Johnson PE (SGH), Justin D. Reynolds PE (SGH) and Chris Mills PE (BKF Engineers).

Project Site and Proposed Project. The 22.8-acre project site is located at the north waterfront of the City of Alameda, in Alameda County. The site is located across the Alameda–Oakland Estuary from Oakland’s Jack London Square, at the terminuses of Fifth and Bette Streets. The proposed project would consist of residential, commercial and retail development, and public access improvements including a 4.5-acre waterfront park on an existing historic concrete wharf.

Prior Reviews. The project was first reviewed by the ECRB on March 21, 2017. Since that time, the project scope changed. A revised project was reviewed by the ECRB on September 26, 2018. Although the Board noted its intention not to review the project in the future during its September 26, 2018 meeting, BCDC staff determined that the project sponsor’s responses to the comments and questions raised by the Board at its last meeting could only be evaluated by the Board due to level of expertise required to satisfactorily interpret the responses. Therefore, the staff requests that the Board review the project sponsors’ responses to the comments on the safety criteria and advise the staff on their appropriateness for this project.

At its September 26, 2018 meeting, the Board commented that the project sponsors should do the following:

1. Develop estimates of relative displacements induced by wave passage effect using appropriate MCE time histories for Hayward and San Andreas faults. Determine if seismic joint criteria are consistent with anticipated wave-passage displacements.
2. Augment three component instrumentation suggested for two locations on the wharf with additional instruments on the west end of the wharf and at two locations over the center of the western and eastern segments of the DSM zones.
3. Introduce new notation to refer to average interval shear velocities in bedrock, by designating the depth interval as indicated for an interval of 45 m to 60 m by "Vs45-60". This change in notation is needed to eliminate confusion introduced by incorrectly referring to the bedrock interval velocities using the notation Vs30.
4. Provide a DSM plan that explains installation and performance criteria to minimize potential lateral movement of underlying bay mud induced by addition of fill (soil and buildings) and MCE ground motion.
5. Provide criteria for minimization of potential environmental impacts of DSM and fill emplacement on additional material moving into the Bay.
6. Identify sea level inundation zone and associated criteria for the wharf. Determine if Coastal Zone A is appropriate.
7. Provide criteria for characteristics of fill to be added landward of the wharf, including that of cellular concrete and its buoyancy potential if inundated by water.

Project Proponent's Response to Board Comments. In response to the Board's comments, the project proponent provided the following responses for the Board's consideration:

1. A response from Dr. Juan Baez of Atlas Geotechnical addressing ECRB Comments 1, 2 and 3.
2. A response from Mr. Haze M. Rodgers and Mr. Ramin Golesorkhi of Langan addressing concerns about light weight fill materials and recommendations, ECRB Comment 7.
3. A proposed seismic instrumentation plan prepared by Simpson Gumpertz & Heger, Inc. addressing ECRB Comment 3.
4. A response from Dr. Juan Baez of Advanced Geosolutions, Inc. addressing Comments 1 and 6.
5. A response from SGH addressing Comment 6 addressing the criteria for the wharf associated with sea level inundation.
6. A response from BKF addressing Comment 6 addressing the Base Flood Elevation and area of inundation evaluation of the project (Coastal Zone A comment.)

Commission Findings & Policies

Bay Plan Policies. The BCDC Bay Plan policies relevant to this project include Safety of Fills and Public Access.

Safety of Fills. The policies on the Safety of Fills seek to reduce risk of life and damage to property, special consideration must be given to construction on fill in San Francisco Bay. The following policies apply:

1. **Policy No. 1.** The Commission has appointed and empowered the ECRB to “establish and revise safety criteria for Bay fills and structures thereon.”
2. **Policy No. 2.** The BCDC Bay Plan indicates that even if a fill may be permissible, no fill or building should be constructed if hazards cannot be overcome adequately for the intended use in accordance with the criteria prescribed by the ECRB.
3. **Policy No. 3** requires the installation of strong-motion seismographs on all future major landfills with the guidance of and recommendations by the California Geological Survey, for purposes of data comparison and evaluation.
4. **Policy No. 4** requires that adequate measures 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.

Board Review

Material Enclosed with this Staff Report. The project sponsors provided the following materials for the Board’s review. The Board’s advice and recommendations are sought regarding the engineering criteria for the proposed project. In its review of these materials, the Board should consider its comments from September 26, 2018 (see page 2 above):

1. “Alameda Landing, Waterfront Development Phase/Reply to questions posed by Engineering Criteria Review Board Geotechnical Earthquake Engineering applications,” prepared Wharf Analysis,” prepared by Dr. Juan Baez of Atlas Geotechnical, 31 October, 2018.
2. “Geotechnical Consultation Light Weight Fill Material Recommendations/Alameda Landing Waterfront/Alameda, California/Project No. 731584113,” dated 24 October 2018 by Langan to Mr. Damir Priskich.
3. “Proposed Seismic Instrumentation Plan” 19 October 2019 by Simpson Gumpertz & Heger to Catellus.
4. Memo from Dr. Juan Baez to Mr. Damir Priskich re: “Response to ECRB Comments re Meeting on November 13th, 2018/Alameda Waterfront Project,” October 29, 2018 and prepared by Advanced Geosolutions, Inc.

5. Memo from SGH to Mr. Damir Priskich re: "Project 177517: BCDC ECRB Comment 6, Alameda Landing Waterfront Project, Alameda, CA," 1 November 2018.
6. Memo from Christopher C. Mills, P.E. of BKF to Mr. Bill Kennedy re: "Evaluation of Alameda Landing Waterfront -- Base Flood Elevation and Area of Inundation," 31 October 2018.

More generally, the staff would appreciate the Board's comments on the following aspects of the proposed project.

1. Are the project's DSM criteria reasonable and suitable to minimize the risk of land displacement by the additional fill from soil and buildings towards the historic wharf turned to public access?
2. Are the wharf's deck seismic joint criteria consistent with known magnitude of earthquake displacement?
3. Has the project assessed the appropriate flood risk in relation to the safety of the wharf?