

San Francisco Bay Conservation and Development Commission

375 Beale Street, Suite 510 San Francisco, California 94105 tel 415 352 3600 fax 415 352 3606

State of California | Gavin Newsom – Governor | info@bcdc.ca.gov | www.bcdc.ca.gov

DUTY STATEMENT

NAME: TBD

CLASSIFICATION: SENIOR ENGINEER

WORKING TITLE: SENIOR ENGINEER FOR RESILIENT SHORELINES

UNIT/DIVISION: REGULATORY

SUPERVISOR: DIRECTOR OF REGULATORY

FLSA: EXEMPT

CBID: E48

TENURE/TIMEBASE: FULL TIME, PERMANENT

GENERAL DUTIES

The Senior Engineer assists the San Francisco Bay Conservation and Development Commission (Commission or BCDC) and its staff in carrying out engineering responsibilities. BCDC handles a variety of complex technical issues of statewide and regional significance. The Senior Engineer is required to operate independently and possess the skills and judgment to resolve engineering questions that arise regarding sensitive and complex regulatory, policy, and planning matters, and coordinates with other technical experts in and outside of the agency.

Under the general direction of the Director of Regulatory, the Senior Engineer:

- Oversees an engineering program for BCDC and provides guidance on projects and issues related to, among other things, coastal engineering and processes, safety of the design of in Bay and coastal structures, sea level rise, groundwater, shoreline and flood protection projects, seismic safety and related construction standards, and geotechnical and soil conditions; and
- Provides technical reviews, assessments of, and advice on general and coastal engineering issues related to permitting and planning projects, and provides guidance to the Commission staff, the Commission, and stakeholders.

ESSENTIAL FUNCTIONS

35% Advises, and prepares and presents verbal and written analyses to, BCDC staff, the Commission, ECRB and its stakeholders on engineering aspects of projects (e.g., general construction, shoreline protection, public access, marine oil terminals, seaports, and habitat restoration) to determine whether proposed and permitted projects are consistent with the Commission's laws and policies. This function includes supporting permitting on: project site plans including resolution of engineering issues and deficiencies; review of sea

Senior Engineer
Duty Statement

level rise risk assessments and related studies; review of structural and geotechnical reports for projects; site visits; and independent research on relevant engineering issues.

- 25% Advises, and prepares and presents verbal and written analyses to, BCDC staff, the Commission, ECRB and its stakeholders on engineering aspects of projects (e.g., general construction, shoreline protection, public access, marine oil terminals, seaports, and habitat restoration) to determine whether proposed and permitted projects are consistent with the Commission's laws and policies. This function includes supporting planning, enforcement, and compliance teams on plan review and design analysis including resolution of engineering issues and deficiencies; analysis of climate adaptation plans and related studies; site visits; and independent research on relevant engineering issues.
- 20% Serves as the Secretary to the Commission's Engineering Criteria Review Board (ECRB), and the liaison among the ECRB, project proponents and permit applicants, BCDC staff, the Commission, and other interested parties. This function includes ongoing communication with the ECRB, preparing for and organizing ECRB meetings, preparing written meeting materials, preparing and issuing meeting summaries, and ensuring that ECRB questions and advice are respectively answered and delivered to the appropriate parties.
- 10% Represents BCDC at meetings and public hearings; facilitates groups to review engineering aspects of relevant BCDC work; serves as the primary point of contact on engineering issues, including seismic safety, sea level rise, marine terminal safety, and seismic instrumentation, to other regulatory bodies, including but not limited to the State Lands Commission, Department of Transportation, California Geological Survey (CGS) and the Strong Motion Instrumentation Committee (SMIAC); and coordinates engineering analyses or assessments with other agencies, project proponents and permit applicants, and stakeholders.
- 10% Additional duties include: negotiating with permit applicants and project proponents; providing expert testimony; conducting field investigations and taking field measurements; assessing tidal datums; responding to general public inquiries; performing time-sensitive technical assignments, including handling emergency projects; training BCDC staff about specific engineering concepts or issues; and conducting or managing special engineering studies.

REQUIRED QUALIFICATIONS

1. Valid certificate of registration as a civil engineer issued by the California State Board of Registration for Professional Engineers.
2. Education equivalent to graduation from college with major work in coastal and/or civil engineering or engineering geology. Additional qualifying experience may be substituted for the required education on a year-for-year basis.
3. Five years of progressively responsible civil or coastal engineering work, which shall have included at least two years in soil mechanics, foundation engineering for major structures, earthquake engineering and hydraulics.

Senior Engineer
Duty Statement

4. Work must be of a high technical quality to support BCDC's actions on permitting and federal consistency decisions.
5. Knowledge of:
 - a. Principles and practices of coastal and/or civil engineering, with particular emphasis in at least one of the following: soil mechanics and foundation engineering, engineering geology, earthquake engineering, seismology, structural engineering, hydraulics, and their application to waterfront construction, surveying, water quality and pollution;
 - b. Engineering, sea level rise, and coastal management trends; and
 - c. Related federal, state, regional and local agencies codes and regulations.
6. Ability to:
 - a. Interpret and apply relevant local, state and federal agency laws, rules, regulations and policies;
 - b. Interpret engineering plans, estimates and specifications;
 - c. Direct major studies and conduct special studies;
 - d. Analyze technical data and prepare recommendations for action;
 - e. Work effectively with government and private interests to achieve specific goals or objectives;
 - f. Establish and maintain a positive, cooperative relationships with those contacted in the course of work; consider and respond appropriately to the needs, feelings, and capabilities of different people in different situations; be tactful and treat others with respect; value cultural diversity and other individual differences in the workplace; and exercise common sense and good judgment;
 - g. Computer skills needed to digitally review engineering plans and permit applications, including experience with Microsoft Word, PowerPoint, Excel, and Adobe Acrobat, as well as basic knowledge of the internet;
 - h. Speak and write effectively with both technical and non-technical audiences;
 - i. Analyze situations accurately and take effective action;
 - j. Inspire confidence and effective working relationships with others in the public and private sector; and
 - k. Contribute to an inclusive, safe, and secure work environment that values diverse perspectives.

DESIRED QUALIFICATIONS

1. Knowledge and experience in coastal and/or civil or environmental engineering;
2. Possession of a Masters degree in Civil Engineering, Coastal Engineering, or Engineering Geology;
3. Experience related to structures on bays, estuaries, or coastal sites;
4. Experience managing grants and contracts;
5. Demonstrate strong interpersonal skills; and

Senior Engineer
Duty Statement

6. Strong computer skills, and ability to prepare and present presentations on technical topics.

WORKING CONDITIONS

1. Work in a stationary position (such as sitting or standing) in an office for long periods of time using a keyboard and video display terminal.
2. Interact by phone, in person, by mail and email with the general public, public officials, other regulatory agencies, regional/environmental justice/community task forces consisting of advocacy groups and citizens, applicants and client representatives.
3. Make site visits, inspections, and attend internal and external meetings and workshops.
4. Must use sound judgment under stress, effectively communicate information and consult with staff at all levels within and outside the department to complete work assignments.
5. Must be able to complete assigned work accurately and on time, establish cooperative working relationships with staff at all levels within and outside the department and provide recommendations and/or feedback to all levels of staff both within and outside State civil service.
6. Required to maintain a valid Defensive Drivers training card if operation of a State vehicle is needed to perform work. Occasion assignments may require extended travel and overnight activity.
7. Work within one or more of the staff sections, depending upon the needs and priorities of the agency.
8. Work in a multi-story office building, Monday through Friday 0800- 1700 (normal working hours). Flexible hours and telework may be considered in compliance with the BCDC Telework Policy.

I have read and understand the duties and essential functions of the position and can perform these duties with or without reasonable accommodation.

Senior Engineer

DATE

Regulatory Director

DATE