I. Name, Place of Employment, Position

Jay Stone, P.E., BCEE, CFM, CPESC, CPSWQ, ESCPC, CESCPP, CWPPP, LEED AP, Associate / Civil Engineering Senior Manager at Bowers + Kubota Consulting, Inc.

II. Educational Background and Experience

I graduated from Maryknoll High School and have a BS in Civil Engineering from University of Notre Dame.

Since 1998, I have been licensed as a civil engineer in Hawaii. I started my career in 1993 as an environmental engineer focusing on wastewater, solids handling, and water treatment. At my previous firm, I managed a variety of infrastructure and environmentally sustainable projects, mostly focusing on stormwater management, best management practices, and ecosystem restoration.

At Bowers + Kubota, which merged with Belt Collins Hawaii LLC, I am working on various government infrastructure projects as well as private development projects. I have extensive experience in water distribution system design and treatment, drainage system design, wastewater collection system design and treatment, site development design, erosion and sediment control, and stormwater best management practices design. I have specialized experience in training wastewater treatment operators and water distribution system operators and the start-up and optimization of wastewater treatment plants and stormwater management. For more information, please see my resume. See Exhibit 11.

As part of my current role at Bowers + Kubota, I am responsible for supervising all work on this Project and kept abreast of the communications and progress to ensure that the work met KG’s specifications.

III. Bowers + Kubota’s Experience

Bowers + Kubota Consulting was founded in 1980 and provides project management, planning, architectural and engineering design, and construction management services throughout the Hawaiian Islands and Pacific Rim. The firm has offices on all major islands, including Oahu, Maui, Hawaii, Kauai, and Molokai. Bowers + Kubota is a winner of the Hawaii State ‘Oihana Maika‘i, which is based on the Malcolm Baldrige National Quality Award.
In 2020, Bowers + Kubota merged with planning, design, and consulting firm Belt Collins Hawaii to offer enhanced services and capabilities to their clients. Belt Collins was founded in Honolulu in 1953 and is a planning, design, and consulting firm focused on providing value to its clients’ land-based assets and promoting sustainable development. The firm employs multidisciplinary professional and support staff providing civil and environmental engineering, entitlements and land planning, interpretive planning, landscape architecture, GIS, and graphic design.

Completed projects total over 16,000, located on all the major islands of Hawaii, as well as elsewhere in the Pacific Basin and continental U.S., Asia, Australia, India, Europe, and the Middle East.

IV. Bowers + Kubota’s Scope of Work for this Project

Bowers + Kubota was retained as the civil engineering consultant on the Project. Our specific scope of work includes but is not limited to submitting the request for water availability, the sewer connection application, assessing the flood hazard condition, developing a conceptual site utility plan for coordination of utility line routings within the property in coordination with the design team, developing the site erosion control and drainage plans, and preparing the civil engineering construction documents.

V. Water Availability

On February 17, 2022, we sent a letter to the City and County of Honolulu Board of Water Supply (“BWS”) requesting comments on the availability of water and flow and pressure data for the proposed Project. Water availability has obviously been a concern due to the Navy’s Red Hill Bulk Storage tank fuel contamination. Fortunately, on June 7, 2022, BWS issued a letter confirming that the existing water system is currently adequate to accommodate the proposed development. See Exhibit 12. The letter further confirmed that there is presently no moratorium on the issuance of new and additional water services and that water distributed via the BWS water systems remains safe for consumption.

VI. Water Conservation and Stormwater Drainage

As described in the letter from BWS, certain water conservation measures are required for all proposed developments, including utilization of non-potable water for irrigation using rain catchment, drought tolerant plants, xeriscape landscaping, efficient irrigation systems, such as a drip system and moisture sensors, and the use of Water Sense labeled ultra-low flow water fixtures and toilets. In addition, KG must meet city stormwater drainage standards and stormwater quality standards. To reduce water consumption and decrease stormwater drainage, KG is in the process of evaluating various water conservation methods, such as designing a stormwater reclamation or reuse system. KG is leading the industry in integrating these types of conservations goals early in the planning process, which is vital to ensuring the proper design elements are in place.
VII. Sewer Connection

We submitted an application with the City and County of Honolulu Department of Planning and Permitting to connect to the existing sewer infrastructure in the area and received approval on March 18, 2022. See Exhibit F-7. There are no anticipated issues or concerns with the sewer connection.

VIII. Flood Hazard Analysis

The Project falls within the AE flood hazard zone as defined by the Federal Emergency Management Agency (FEMA), which is an area that presents a 1% annual chance of flooding. The base flood elevation (BFE) is predominantly at 7 feet mean sea level (MSL) with the southeast corner at elevation 8 feet MSL, and the northwest corner at elevation 6 feet MSL. Section 21-9.10 of the Revised Ordinances of Honolulu applies to this project. The building is considered residential for the purposes of the Flood District ordinance. Sewer, drain, and grease trap manhole covers located below the BFE will need to be watertight. The following documents and certifications are required:

- Building plans indicating flood boundary and elevation
- Flood Hazard District Certification
- Floodproofing Certification
- Post-construction Certification (FEMA Elevation Certification)

The site will need to be raised approximately 2 feet in elevation at the building envelope to meet the Flood District ordinance requirements. A moderate amount of ramping, stairs, embankment fill slopes, and site retaining walls are anticipated.