

GLENN KUWAYE DIRECT TESTIMONY

PRESENTATION HEARING

Block D (Land Block 4, Project 1) (KAK 23-037)

Q Please state your name, place of employment, and position.

A Glenn Kuwaye, P.E., LEED AP, Vice President & Director of Civil Engineering, Wilson Okamoto Corporation (WOC).

Q How long have you held this position?

A I have been with WOC for approximately 18 years, since 2005. I have held my current position as Vice President & Director of Civil Engineering for approximately 6 years, since 2017.

Q Please describe your educational background and experience.

A Please see my curriculum vitae, which is marked as an exhibit in this proceeding.

Q How are you involved with Block D (Land Block 4, Project 1)?

A WOC was retained by Victoria Ward, Limited (VWL) for the civil engineering design of Block D (Land Block 4, Project 1) and Block E (Land Block 4, Project 2). WOC prepared an Infrastructure Availability Report (IAR) for Block D, Block E, and the Diamond Head Plaza dated February 2023.

The purpose of the IAR study was to determine and confirm the availability of infrastructure utilities to accommodate Blocks D and E, including sanitary/sewer, water, fire safety, drainage, electrical, communication, cable, and gas.

The IAR is included as Appendix G to the Planned Development Permit Application for Block D (Application) (Exhibit 1 in this proceeding), and is summarized at page 47 of the Application.

Q Please describe the aspects of Block D relevant to WOC's Infrastructure Availability Report.

A According to the Application, Block D is currently planned as an approximately 242 unit residential community with parking and commercial uses. WOC, for purposes of preparing its report and findings, evaluated and analyzed infrastructure availability for 300 residential units.

The Project site, which, for purposes of the IAR, also encompasses Block E, and the Diamond Head Plaza, is approximately 4.48 acres, generally located at TMK: 2-3-005:006. The Project site is bounded by Auahi Street to the north, Kamake'e to the west, Ala Moana Boulevard to the south, and the preserved IBM building to the east.

The Project site is currently composed of three commercial/retail buildings and a parking structure with commercial space. Sewer manholes are located in various locations along Auahi Street, Kamake'e Street, and Ala Moana Boulevard, which bound the vicinity of the project area. Drain inlets and drain manholes are observed within the project vicinity to collect and convey storm water runoff.

The Project site is located in the Federal Emergency Management Agency Flood Insurance Rate Map as Zone AE (EL 9-feet) and AE (EL 10-feet). Zone AE is characterized as a special flood hazard area, where the annual chance of flooding (a 100 year flood) is determined as one percent (1%). Block D will be designed to comply with the Base Flood Elevation of 10-feet, which will be above the projected sea level rise exposure.

Q Please summarize the conclusions of WOC's Infrastructure Availability Report.

A All required infrastructure is, or will be available, for Block D.

Sanitary/Sewer

Sewer service is available from the municipal sewer system owned by the City and County of Honolulu (City), and maintained by its Department of Environmental Services. Block D will connect to an 18-inch sewer main, which is to be constructed within Auahi Street and will connect to the existing 36-inch main sewer within Kamake'e Street. See Figure 2-1 of the IAR, which identifies the existing sewer system within the Project vicinity.

A sewer connection application (SCA) was submitted on July 29, 2022 to the City Department of Planning and Permitting (DPP), Wastewater Branch (WWB) to confirm the existing sanitary sewer system can accommodate Block D. Approved 2023/SCA-0161 dated February 13, 2023 confirms available capacity. See Appendix A to the IAR.

Water

Potable water service for Block D will be provided by the City Board of Water Supply (BWS). Block D proposes to connect to an existing 8-inch water main in Auahi Street to accommodate both the residential tower and the commercial space. The size and location of the laterals will be confirmed during the final design phase. See Figure 2-2 of the IAR, which identifies the existing water system.

BWS confirmed in its letter dated January 20, 2023 that the existing water system is currently adequate to accommodate Block D (and Block E) and there is no moratorium on the issuance of new and additional water services. (Appendix A to IAR).

Fire Safety

The Honolulu Fire Department (HFD) was consulted on January 17, 2023 to discuss the proposed fire protection methods for Block D (and Block E). Block D will be protected by public fire hydrants. Water supply from a fire hydrant must be within 400 feet from any point of the Block D building. A fire sprinkler system will also be installed in the Block D building. The size and location of the fire line that will supply for the sprinkler system will be confirmed during the final design phase.

Based on its preliminary assessment, HFD confirmed by email dated January 24, 2023 that it did not identify problems with any of the fire protection methods. (Appendix A to IAR).

Site Drainage and Low Impact Development

Runoff from Block D will be collected via building drains and conveyed underground for connection to existing City owned drainage structures along Auahi Street and Ala Moana Boulevard. Drainage runoff from Block D will not increase the peak flow rate and volume. For this reason, Block D will not adversely impact the existing performance of the City drainage system.

The majority of Block D will be treated by alternative compliance, utilizing a manufactured treatment device. Remaining site areas will utilize appropriate site design strategies.

The City and County of Honolulu DPP Civil Engineering Branch confirmed the general acceptability of the storm water treatment concept by email dated January 24, 2023, with the actual confirmation of the concept and compliance with the storm water quality rules to be made at the time of formal plan review. (Appendix A to IAR).

Electrical

Hawaiian Electric, in a February 18, 2023 will-serve letter, confirmed its intent to work with VWL to provide service to Block D. Existing distribution circuits along Auahi Street could potentially be used to serve Block D. Upgrades to these circuits may be needed depending on the ultimate size of Block D's load. (Appendix A to IAR).

Communication, Cable, and Gas

Hawaiian Telecom and Oceanic Time Warner Cable LLC aka Spectrum confirmed that their existing systems have capacity to serve Block D (and Block E). (Appendix A to IAR).

Hawaii Gas confirmed that the existing gas system from Kamake'e Street or Auahi Street can serve Block D (and Block E). (Appendix A to IAR).

Q Did WOC also evaluate the impact of sea level rise on the Project?

A Yes. The Pacific Islands Ocean Observing System Hawaii Sea Level Rise Viewer shows that portions of the Project site will be within the 3.2-foot sea level rise Exposure Area due to combined passive flooding and annual high wave flooding at the northern side of the Project site (see Figure 1-5 of the IAR). The proposed finish floor of Block D is above the property's Flood Base Elevation, which is higher than the projected sea level rise; therefore, Block D will not be impacted by the 3.2-foot sea level rise.

In addition, project resiliency is a part of Block D's design. There are design solutions and best practices in place. For example:

- Site level planning – as previously noted, the proposed finish floor of Block D is above the property's Flood Base Elevation, which is higher than the projected sea level rise; therefore, the Project will not be impacted by the 3.2-foot sea level rise.
- Block D complies with FEMA flood elevation requirements.
- Through design solutions and best practices, the project weather proofs utility elements, *e.g.*, location of utility elements above FEMA flood elevation, water backflow preventer design, and more.

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