

CATHY LEONG DIRECT TESTIMONY

PRESENTATION HEARING

Land Block 2, Project 4 (Kalae) (KAK 22-024)

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

A Cathy Leong, Licensed Professional Civil Engineer and Director, Transportation Group, Wilson Okamoto Corporation (WOC).

Q How long have you been employed by WOC?

A I joined WOC in 1997 as a Traffic Engineer. I became a Senior Project Manager with the Traffic and Transportation Engineering Group in 2001, and Director of the Transportation Group in 2017.

Q Please describe your educational background and experience.

A Please see my resume, which is marked as an exhibit in this proceeding. I have prepared various traffic reports such as impact studies, parking and loading studies, construction traffic management plans, queuing and delay studies, transportation management plans, and other types of traffic-related documents, including the design of roadways, intersections, and traffic signal systems.

Q How have you been involved in this project, Kalae (Block B)?

A WOC was retained by Victoria Ward, Limited (VWL) to prepare a traffic impact report (TIR) to identify and assess the potential traffic impacts resulting from the proposed project, and to identify necessary measures to mitigate such impacts. The TIR is marked as an exhibit in this proceeding.

Q Please summarize the aspects of Kalae relevant to the TIR.

A Kalae is included in Phase 3 of the overall Ward Village Master Plan. Under Phase 3, The Park Ward Village (Block H) and Ulana Ward Village (Block F) have already been approved, and are expected to be completed by approximately 2025.

The project site for Kalae is bounded by Auahi Street to the north, Ala Moana Boulevard to the south, Ward Avenue to the west, and the future Victoria Ward Makai Park to the east. The project site formerly housed the Ward Warehouse Shopping Center, but has since been cleared except for the parking structure that previously served the shopping center. The parking structure currently provides temporary parking for construction and maintenance crews working within Ward Village.

Primary access to Kalae will be via a new driveway off Auahi Street, which will be restricted to right-turn in and right-turn out movements only due to the driveway's proximity to Ward Avenue.

Access to Kalae service and loading/unloading areas will be via a new driveway off Ward Avenue, which will be restricted right-turn in and right-turn out movements only due to the driveway's proximity to Ala Moana Boulevard and the bicycle facilities along Ward Avenue.

Q Please summarize the methodology, findings, and recommendations of the TIR.

A The TIR analyzes the potential traffic-related effects of the proposed cumulative development. A previous assessment, which included this proposed development, was included in the "Transportation Master Plan and Assessment for the Ward Villages Master Plan" dated October, 2020. This current TIR is a supplemental study to specifically address the proposed development and incorporate the most recent development plans.

Traffic conditions were evaluated for the following conditions: Baseline Year 2024, Year 2025 Without Project, Year 2025 With Project (date of expected project completion). Traffic projections were based on the Institute of Transportation Engineers (ITE) methodology for trip generation and on the Oahu Metropolitan Planning Organization (OMPO) regional travel forecast model for network distribution. Capacity analyses procedures were performed to identify the operational traffic impacts to the surrounding intersections as a result of the proposed project.

Based on the regional growth rates as well as the anticipated traffic generation as a result of the proposed development, the TIR makes several recommendations to mitigate project-related traffic impacts. The recommendations include the following:

1. Provide sufficient sight distance for motorists to safely enter and exit the project driveways to ensure visibility between pedestrians, bicyclists, motorists, or other users at these conflict points.
2. Provide adequate on-site loading and off-loading service areas to accommodate all anticipated vehicle types and prohibit off-site loading operations.
3. Provide adequate on-site turn-around area for service, delivery, and refuse collection vehicles to avoid vehicle-reversing maneuvers onto public roadways. Consider monitoring loading and unloading areas to minimize conflict between vehicles, bicyclists, and pedestrians.
4. Provide sufficient turning radii at all project driveways to avoid or minimize vehicle encroachments to oncoming traffic lanes.

5. Continue coordination with the City and County of Honolulu during the design of Kalae and, as needed, develop alternative schemes to accommodate the potential increase in pedestrian and bicycle use along the corridor.
6. Implement right-in and right-out turning movements off Auahi Street. During the design phase, determine adequate channelization to direct vehicles entering and exiting the driveway.
7. During the design phase, determine sufficient storage for entering vehicles at parking area access controls, if any, to ensure that queues do not extend onto the adjacent roadway.
8. Provide adequate passing areas along drop-off and pick-up area, to ensure traffic flow and minimize queuing.
9. Provide adequate pedestrian waiting areas at the intersection of Ward Avenue, Auahi Street, and Pohukaina Street, and at the intersection of Ala Moana Boulevard and Ward Avenue. Ensure clear pedestrian and cyclist visibility at the intersection.
10. Provide adequate signage for entering vehicles off Auahi Street, regarding the location of the porte-cochere and parking area, to facilitate traffic flow.
11. Coordinate with the City and County of Honolulu Department of Transportation Services to modify bicycle lane striping along Auahi Street at the Kalae driveway.
12. Update the TIR should development, phasing, land use intensity, or land use mix change.
13. Continue to develop and enhance bicycle and pedestrian facilities and public transportation services in the Ward Village area.
14. Continue to coordinate with stakeholders in the Ward Village Transportation Master Plan, including the overall Transportation Demand Management Plan.

Q As part of the TIR you made a level of service determination. What is a level of service determination and how is that prepared?

A Level of Service (LOS) is a quantitative and qualitative assessment of traffic operations. Levels of Service are defined by LOS “A” through LOS “F”; where LOS “A” represents ideal or free-flow traffic operating conditions and LOS “F” representing unacceptable or potentially congested traffic operating conditions. The LOS rating is generally based on delays experienced by motorists associated with movements at an intersection.

Q Please summarize the level of service determinations made in connection with the TIR for the Kalae project?

A The intersections in the study area included:

- Ward Avenue and Queen Street
- Queen Street and Kamakee Street
- Queen Street and Queens Lane
- Ward Avenue and Halekauwila Street
- Ward Avenue, Auahi Street, and Pohukaina Street
- Kamakee Street and Auahi Street
- Auahi Street, Queens Lane, and Queen Street
- Ala Moana Boulevard and Ward Avenue
- Ala Moana Boulevard, Kamakee Street, and Ala Moana Park Drive

As more fully described in the TIR, with the implementation of the recommendations to mitigate project-related traffic impacts, the level of service operating conditions at the intersections in the vicinity of the Project are, with few exceptions, expected to remain similar to baseline and with and without the Kalae project.

Q The TIR also describes the concept of “trip generation”. What is “trip generation” and how is that relevant to your analysis?

A Trip generation is an estimate of the number of trips that would be generated by the proposed project during the commuter peak hours of traffic on the surrounding roadways. The methodology to calculate the generation rates are based on generally accepted techniques developed by ITE. The ITE rates are developed empirically by correlating vehicle trip generation data with various land use characteristics such as the number of trips generated per dwelling unit. The calculated trips are then superimposed and added to the projected trips to measure the traffic impacts associated with the proposed project utilizing the concept of LOS.

Q How does the proposed project impact pedestrian, bicycle, and transit facilities?

A *Pedestrian Facilities*

The proposed project is expected to maintain the existing pedestrian facilities in the vicinity with additional improvements planned in conjunction with the overall Ward Village Master Plan. Such improvements include, for example, the Auahi Street Promenade project, which will convert Auahi Street from a four-lane roadway into a two-lane roadway to accommodate a pedestrian promenade along the north side of that roadway and the inclusion of trees and other landscaping treatments to enhance the overall pedestrian experience.

Bicycle Facilities

The proposed project will provide short-term and long-term bicycle facilities on-site for residents, guests, and employees. In addition, the proposed project is located within close proximity to a number of BIKI bikeshare facilities. Figure 13 of the TIR depicts the existing and proposed bicycle facilities in the vicinity of the proposed project.

The additional improvements planned in conjunction with the overall Ward Village Master Plan will also include additional pavement striping to convert the existing bike lanes along Auahi Street to buffered bike lanes to provide additional separation between bicyclists and vehicles.

Transit Facilities

There is good transit quality of service in the project vicinity, which is served by public transportation services, including fixed route bus services and HandiVan services provided by the City and County of Honolulu, and trolley companies. The existing transit facilities are expected to be maintained under projected conditions, with the exception of those along Auahi Street.

In conjunction with the planned improvements along Auahi Street, the existing bus stops will be relocated to facilitate access to future planned developments within Ward Village with additional bus stops provided to further enhance convenient access to transit. Service to these stops is not expected to change significantly. All bus and trolley stops along Auahi Street will be modified to include bus/trolley pull-in areas to facilitate through traffic along the roadway. Levels of service for transit in the vicinity of the project are anticipated to remain similar to existing conditions.

Q Do you know if VWL intends to implement all of the recommended mitigation measures that you have proposed?

A Yes. It is my understanding that VWL intends to implement all of the recommended mitigation measures identified in the TIR.

Q In summary, is there an impact to traffic from this specific Project?

A Yes, but any impacts can be mitigated by the recommendations in the TIR, which VWL intends to pursue and implement.

Q Did the City and County of Honolulu review and comment on the TIR?

A Yes, the City and County of Honolulu Traffic Review Branch confirmed in an email dated August 12, 2021 that it has no comments on the TIR.