

Project Name

Kukio Bay Development Wastewater Treatment Facilities, Kona, Hawaii

Client / Owner

W. B. Kukio, LLC

Year Completed

2002

Project Description & Firm's Responsibility

The Kukio Bay Development is a new resort along Queen Kaahumanu Highway on the western coastline of the Island of Hawaii. The resort development is situated on both sides of the highway and consists of a golf course, beach club, 120 high-end residential units, and lodge.

Wastewater generated by the development is treated to a tertiary level at a private treatment facility, and effluent will be used to irrigate ornamental shrubbery and landscape of the resort. Work included the planning, permitting, and overall design of a treatment plant and five wastewater pump stations. While the process units were designed and provided by the package plant equipment manufacturer, the integrated design and effluent reuse concepts and the effluent pump station design were developed by our firm.

The treatment facility is a 200,000 gallons per day activated sludge and rapid sand filtration facility. Situated at grade on volcanic strata, the area surrounding the treatment facility has been graded, mounded, and landscaped so that it is not in the view plane from the highway.

