KOA SOUTH RAMP TAXIWAY & RAMP IMPROVEMENTS

KAILUA-KONA, HAWAII

OWNER: HAWAII DEPARTMENT OF TRANSPORTATION | AIRPORTS DIVISION

FIRM: ORION ENGINEERS & ASSOCIATES | HONOLULU, HAWAII

ACEC ENGINEERING *Excellence* AWARDS

+ **EXPEDITED DESIGN**
+ **PROACTIVE COORDINATION**
+ **SUSTAINABLE TEMPORARY STRUCTURES**
+ **COST-EFFECTIVE ASPHALT MIX**
+ **UNDERGROUND INJECTION CONTROL DRYWELLS**

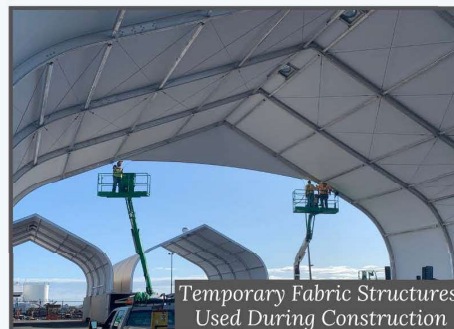**ORION** ENGINEERS & ASSOCIATES

Engineering Excellence + *Connecting Communities*

Ellison Onizuka Kona International Airport at Keahole (KOA) plays a vital role for the Kona District, Hawaii Island, and the State, serving as the primary destination for General Aviation (GA) activities on West Hawaii Island. GA, including all private and charter aviation, air tourism, pilot training, maintenance, and medical emergency air services, enhances the social and economic vitality of the community. KOA provides airport access and support services for GA, creating jobs, bringing in business, generating tax revenue and connecting communities. The KOA South Ramp Taxiway and Ramp Improvements Project relocated the existing GA apron and T-Hangars to allow for a new Federal Inspection Services (FIS) building, which was required by the federal government to permit continued international flight operations, another essential element for the economic vitality of the community.

Consequently, the Project, which included new GA facilities consisting of a taxilane extension, apron with aircraft tie-downs, T-Hangar buildings, and a public access road, encountered unique and complex challenges due to the critical timeline of the FIS project and the need to maintain GA operations during construction. To successfully complete the project, design was fast-tracked, pre-engineered T-Hangars were procured early, and temporary structures were provided for short-term GA tenant relocation. Precise scheduling, logistical coordination, and proactive communication between the design team, HDOT-A, airport management, and the GA tenants were essential in the successful completion of this and all related projects at KOA.

Temporary Fabric Structures with New T-Hangars Under Construction

Temporary Fabric Structures Used During Construction

Completed Construction Aerial View