

# THE KAPALAMA CONTAINER TERMINAL YARD DESIGN PHASE 1

HONOLULU HARBOR, OAHU, HAWAII

## NEW 84-ACRE CONTAINER YARD:

LARGEST HDOT, HARBORS DIVISION PROJECT IN HISTORY.

WILL SATISFY HAWAII'S PROJECTED SHORTFALL OF CONTAINER YARD AREA FOR THE NEXT 50 YEARS.

WILL DELIVER A 40% INCREASE IN CONTAINER CAPACITY WHILE REDUCING CONTAINERIZED TRUCK TRAFFIC ON CITY AND STATE ROADWAYS BY 50,000 TRIPS A YEAR.

SITE GRADING AND PLACEMENT OF BASE COURSE TO SUPPORT THE 15" THICK PCC PAVEMENT



CONCRETE WHEEL STOPS, 85' TALL HIGH-MAST LIGHT POLES, CONCRETE BOLLARDS, AND FIRE HYDRANTS



COMPLETED 84-ACRE CONTAINER YARD PHOTO COURTESY OF KIEWIT INFRASTRUCTURE WEST CO.

15" PCC PAVEMENT CONSTRUCTION PHOTO COURTESY OF KIEWIT INFRASTRUCTURE WEST CO.

## COMPLEX DESIGN ELEMENTS:

PROJECT INVOLVED HIGHLY CONTAMINATED SOILS, SOFT SOILS OVER A LARGE ANCIENT FISHPOND AREA, FAA FLIGHT OBSTRUCTION FROM CRANES, SEA-LEVEL RISE, POLLUTANTS ENTERING THE OCEAN, SHEARWATER BIRD HAZARDS, COMPOSITE FAST-TRACKED TERMINAL PLANNING, FIRE SYSTEM AND LIGHTING SYSTEM REQUIREMENTS, COMMUNITY TRAFFIC CONCERNS, AND COORDINATION WITH FUTURE DEVELOPMENT.

RMTC SET THE ELEVATION OF THE CONTAINER TERMINAL YARD ABOVE THE ANTICIPATED 50-YEAR SEA-LEVEL RISE TARGET TO ENSURE OPERABILITY OF THE TERMINAL DURING THE DESIGN LIFE. THE DRAINAGE AND WATER QUALITY SYSTEM, PAVEMENT (USE OF HIGH-STRENGTH CONCRETE TO MINIMIZE PAVEMENT THICKNESS), LIGHTING (LED WITH DOWN LIGHTING FIXTURES TO ENSURE THE SAFETY OF SHEARWATERS), ELECTRICAL (MICROGRID SYSTEM TO MINIMIZE CARBON FOOTPRINT), AND GATE EQUIPMENT AND TECHNOLOGY WILL DRASTICALLY INCREASE THE EFFICIENCY OF CONTAINER YARD TERMINAL OPERATIONS IN HAWAII.

PROJECT WAS DESIGNED TWO MONTHS AHEAD OF SCHEDULE, CONSTRUCTED THREE MONTHS AHEAD OF SCHEDULE, AND CONSTRUCTED UNDER BUDGET DUE TO EFFICIENT DESIGN ELEMENTS.

State of Hawaii,  
Owner: Department of Transportation,  
Harbors Division, Honolulu, HI



R. M. TOWILL CORPORATION  
Honolulu, HI

