

# Durability of Concrete Exposed to Marine Environment

Funded by  
Hawaii Department of Transportation  
Harbors Division

2000-2008



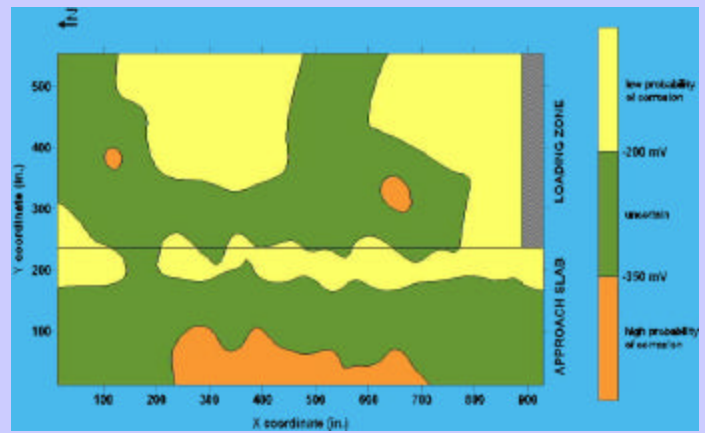
Honolulu Harbor  
Pier 38  
Field Corrosion Panels



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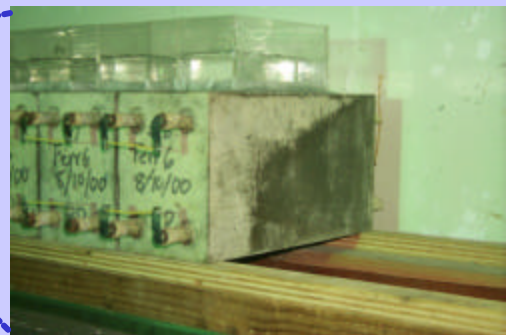
## Phase I - Field Investigation of Harbor Piers

- 8 Pier locations on Oahu
- Half-Cell Potential and Resistivity Measurements
- Evaluation of corrosion potential



## Phase II - Accelerated Laboratory Corrosion Tests

- 70 concrete mixtures
- 8-12 Specimens each
- 6 Corrosion Inhibiting Admixtures
- Monthly NaCl cycling
- Electrical monitoring



## Phase III - Field Exposure

- Mean Sea Level at Pier 38
- 24 Concrete Panels
- Annual monitoring

