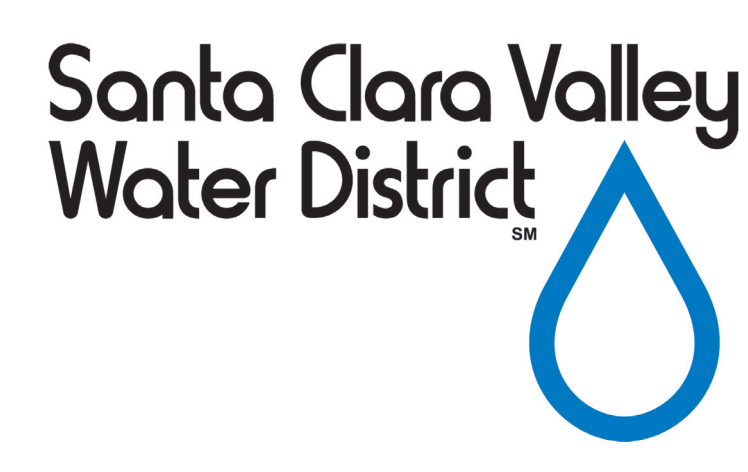


South Bay Salt Pond Restoration Project Phase 2: Balancing Habitat Restoration with Public Access and Flood Risk Management in Construction Designs



Poster Contributors:

Dillon Lennebacker, AECOM, dillon.lennebacker@aecom.com
Seth Gentzler, AECOM, seth.gentzler@aecom.com
Megan Collins, AECOM, megan.collins@aecom.com

Phase 2 of the South Bay Salt Pond (SBSB) Restoration Project will restore approximately 2,200 acres of former salt production ponds into tidal marsh habitat and managed ponds at the Don Edwards San Francisco Bay National Wildlife Refuge (Refuge), located in South San Francisco Bay. AECOM supported the SBSB team with the Environmental Impact Statement/Report development and finalization, as well as the conceptual and detailed engineering design drawings, both of which were completed in 2016. The Phase 2 Project is currently in the process of obtaining regulatory permits for the proposed Phase 2 actions, with hopes to begin construction in 2018 or 2019.

The Project's goals are to:

- restore and enhance wetland habitats,
- provide public access and recreation, and
- maintain existing flood risk management.

Phase 2 proposes to gradually restore and enhance ponds and tidal wetlands with the construction of:

- levee breaches,
- levee enhancements,
- levee lowering,
- levee removal,
- habitat islands,
- upland transition zones,
- ditch blocks,
- water control structures,
- viewing platforms,
- recreational bridges,
- and recreational trails.

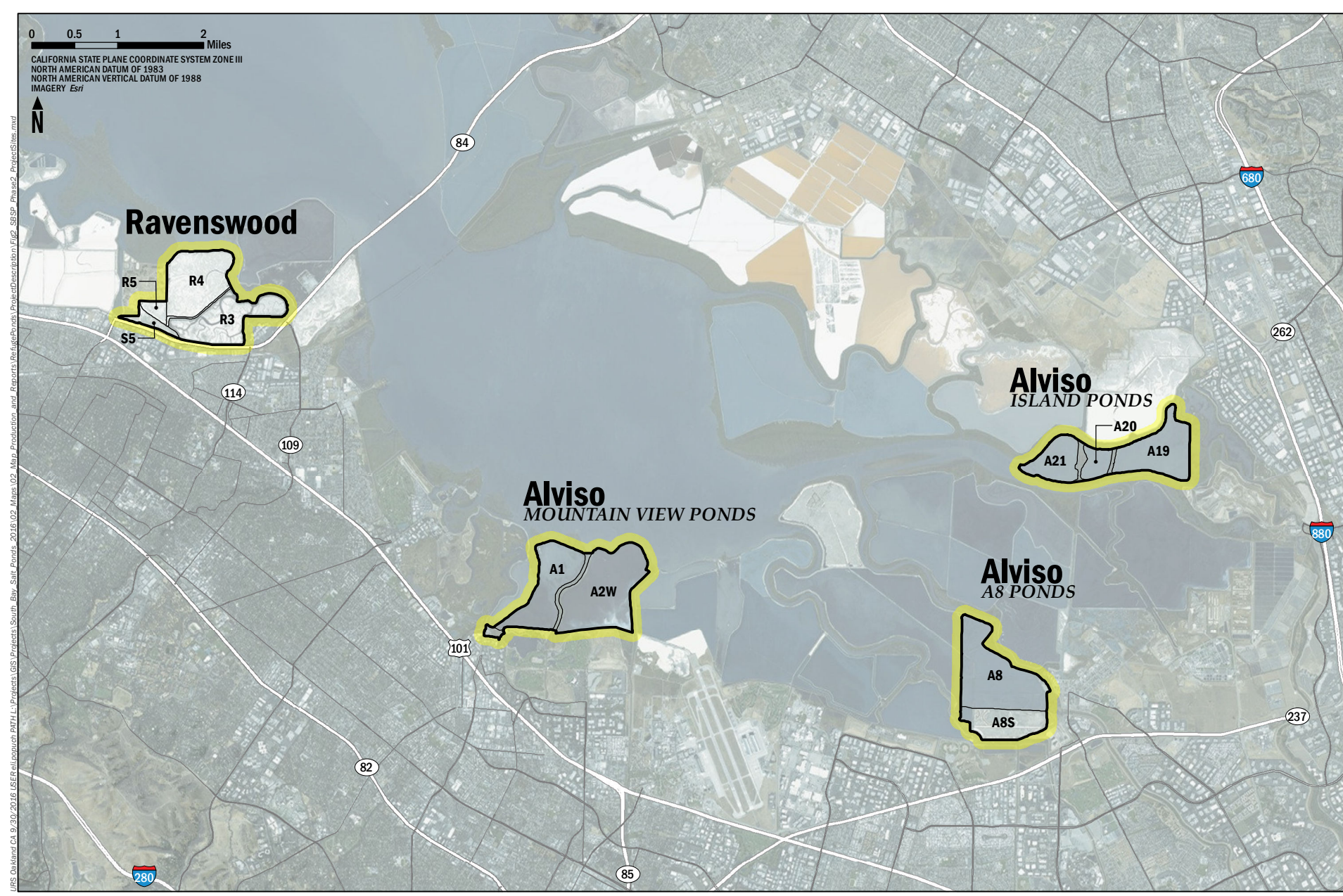
The Phase 2 construction design incorporates the guiding project goals, lessons learned from previous phases' construction, and ongoing research conducted by the Refuge. For instance, upland transition zones constructed from beneficially-reused upland fill are new to the Project in Phase 2.

Levees will be breached, enhanced, lowered or removed at select locations. Levee enhancements include raising, widening, compacting, and otherwise improving existing levees wherever necessary, as well as increasing habitat connectivity and native plant composition. Within specific ponds, **habitat islands or upland transition zones** will be constructed from onsite sources (i.e.

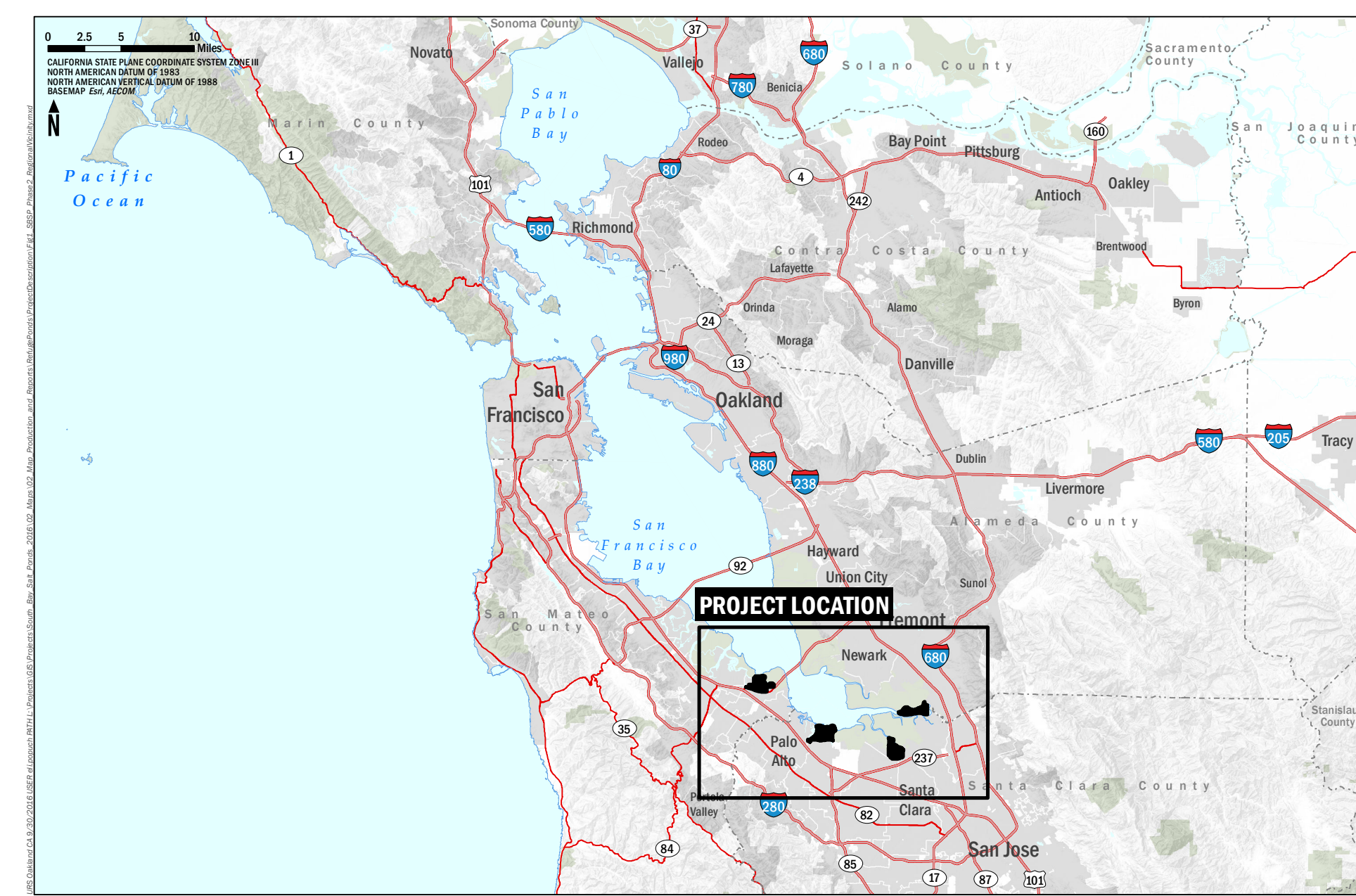
existing levees) and imported fill. These features will increase the quality, complexity, and availability of bird habitat in the Refuge. At four locations within the Ravenswood Ponds, **water control structures** would be installed to better manage water levels and water quality in the ponds. **Ditch blocks** would be placed within existing borrow ditches to enhance natural channel development. The Phase 2 plans also incorporate **public access** features that balance public engagement with wildlife sensitivities.

All of these project features resulted from a compilation of knowledge from engineers, environmental scientists, stakeholders, biologists, the public, and the ongoing research conducted by the Refuge and its partners.

Phase 2 Restoration Figures



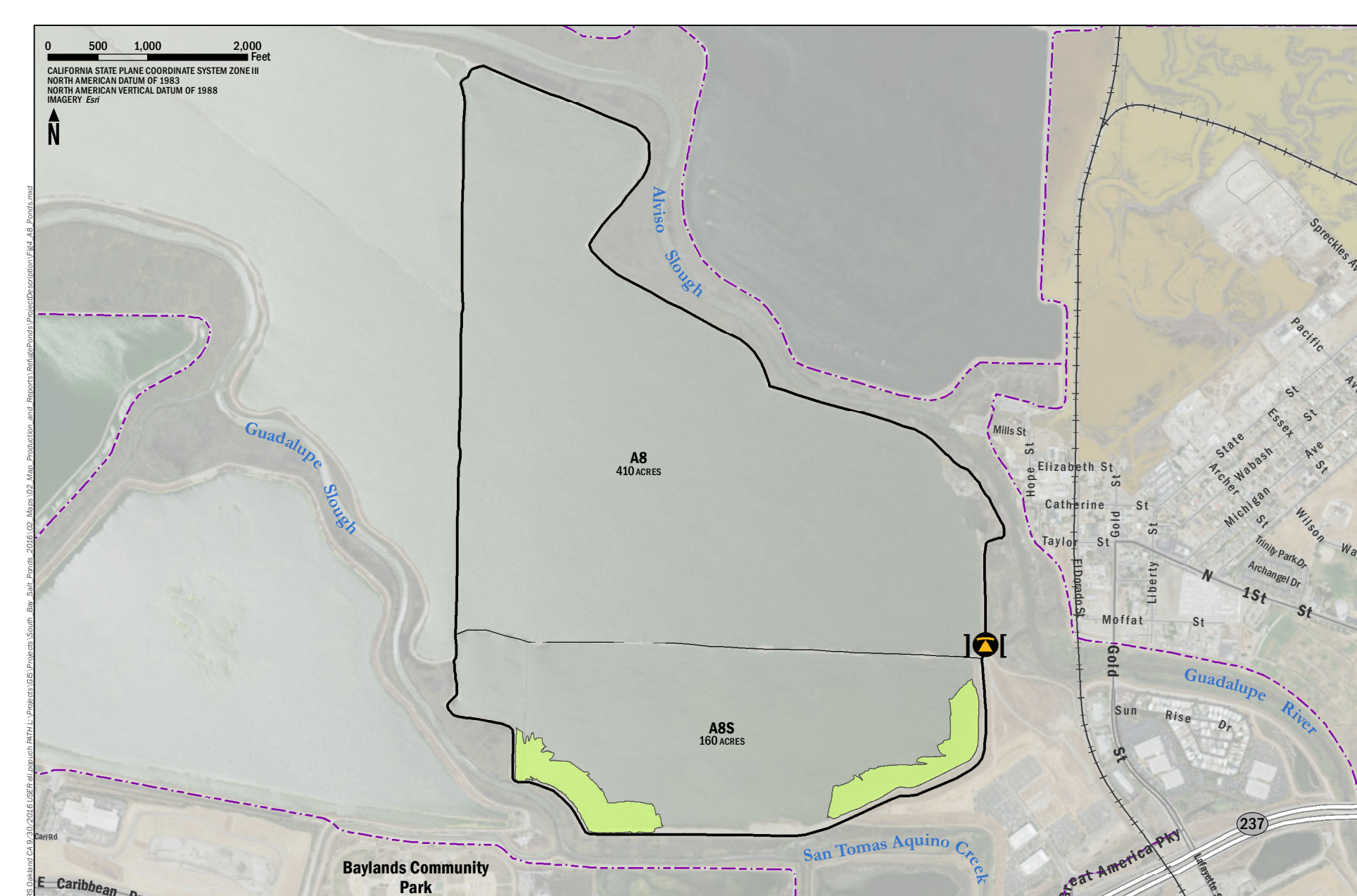
SBSB Phase 2 Project Sites



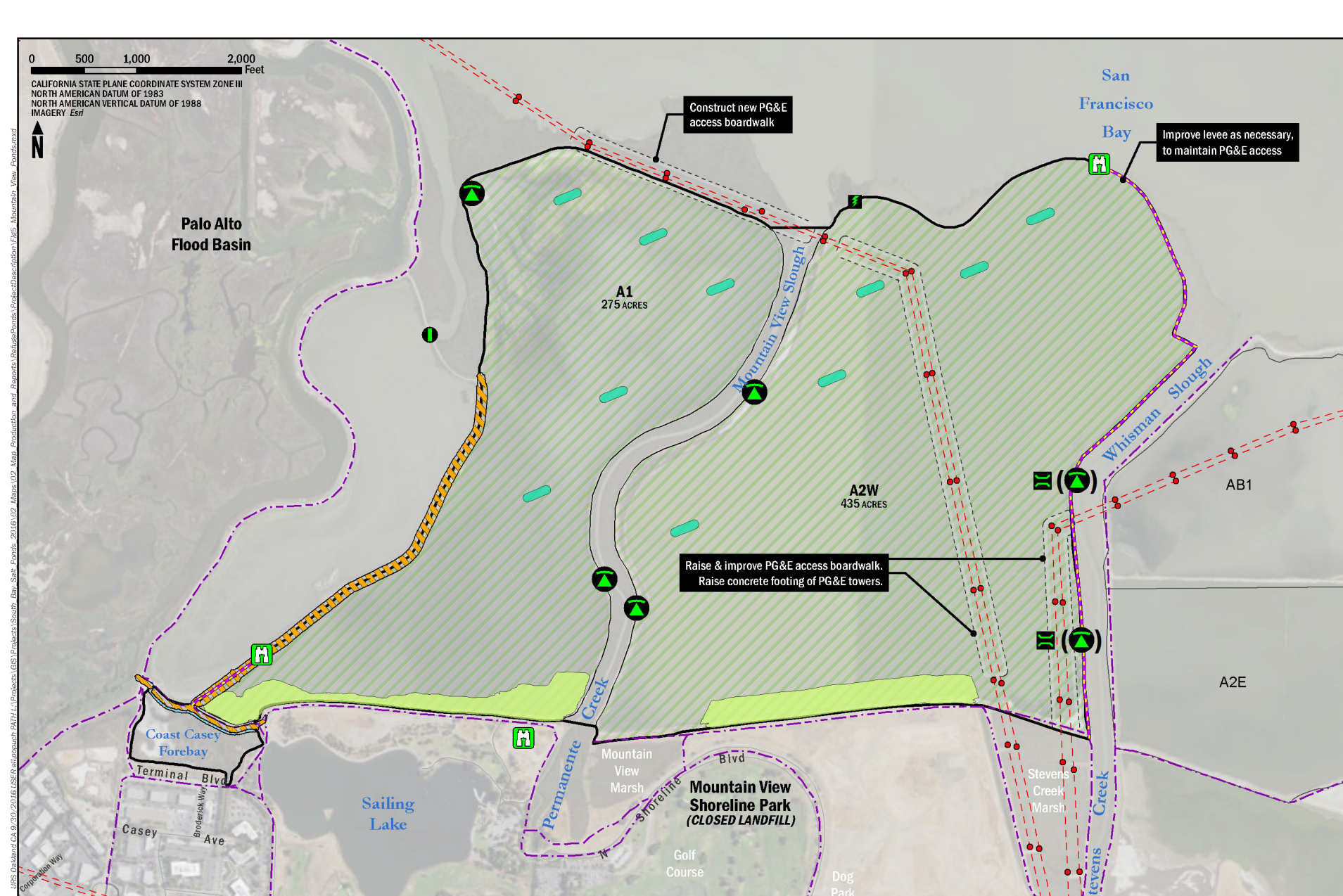
SBSB Phase 2 Regional Location



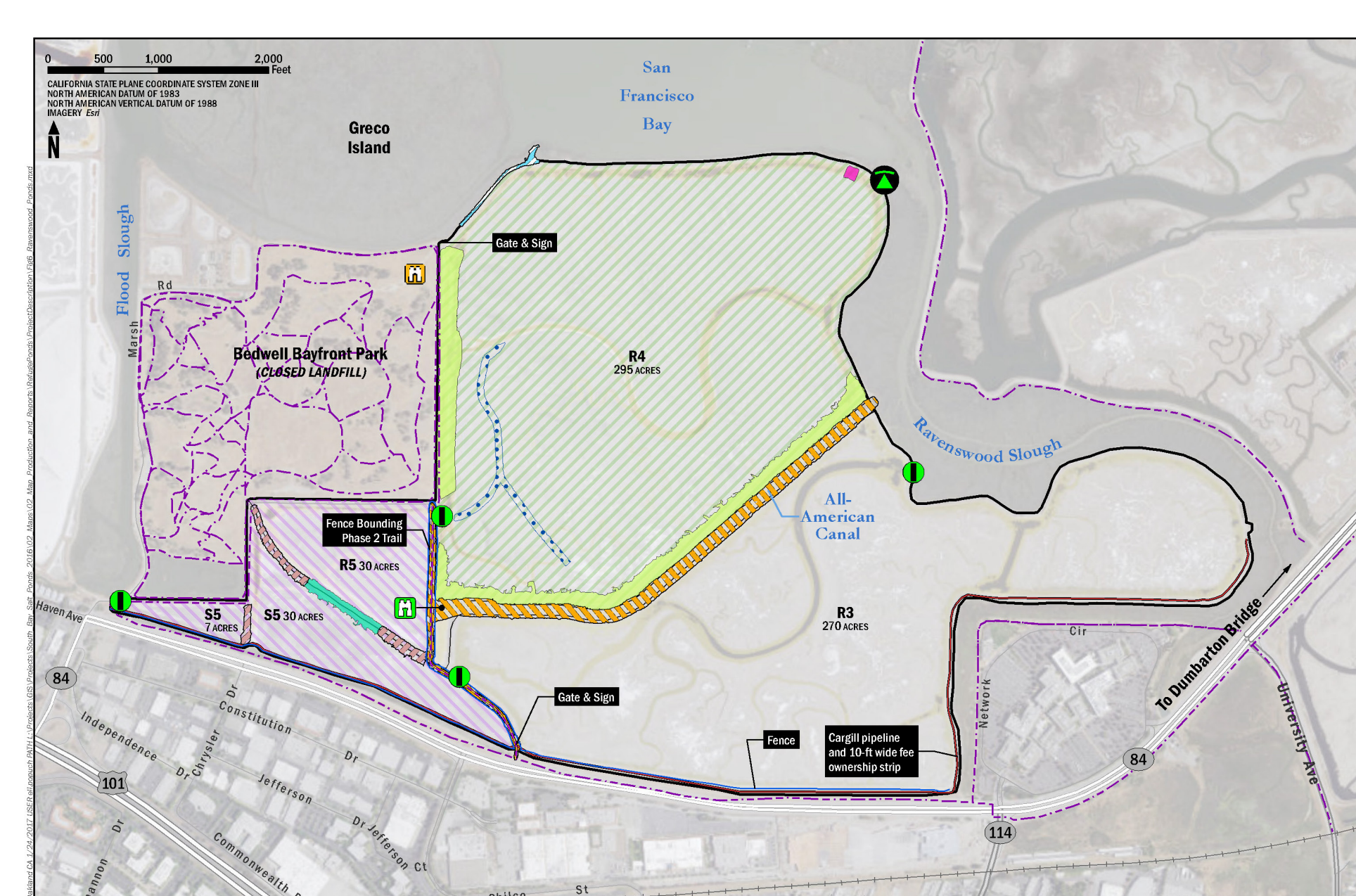
Alviso Island Ponds



Alviso A8 Ponds

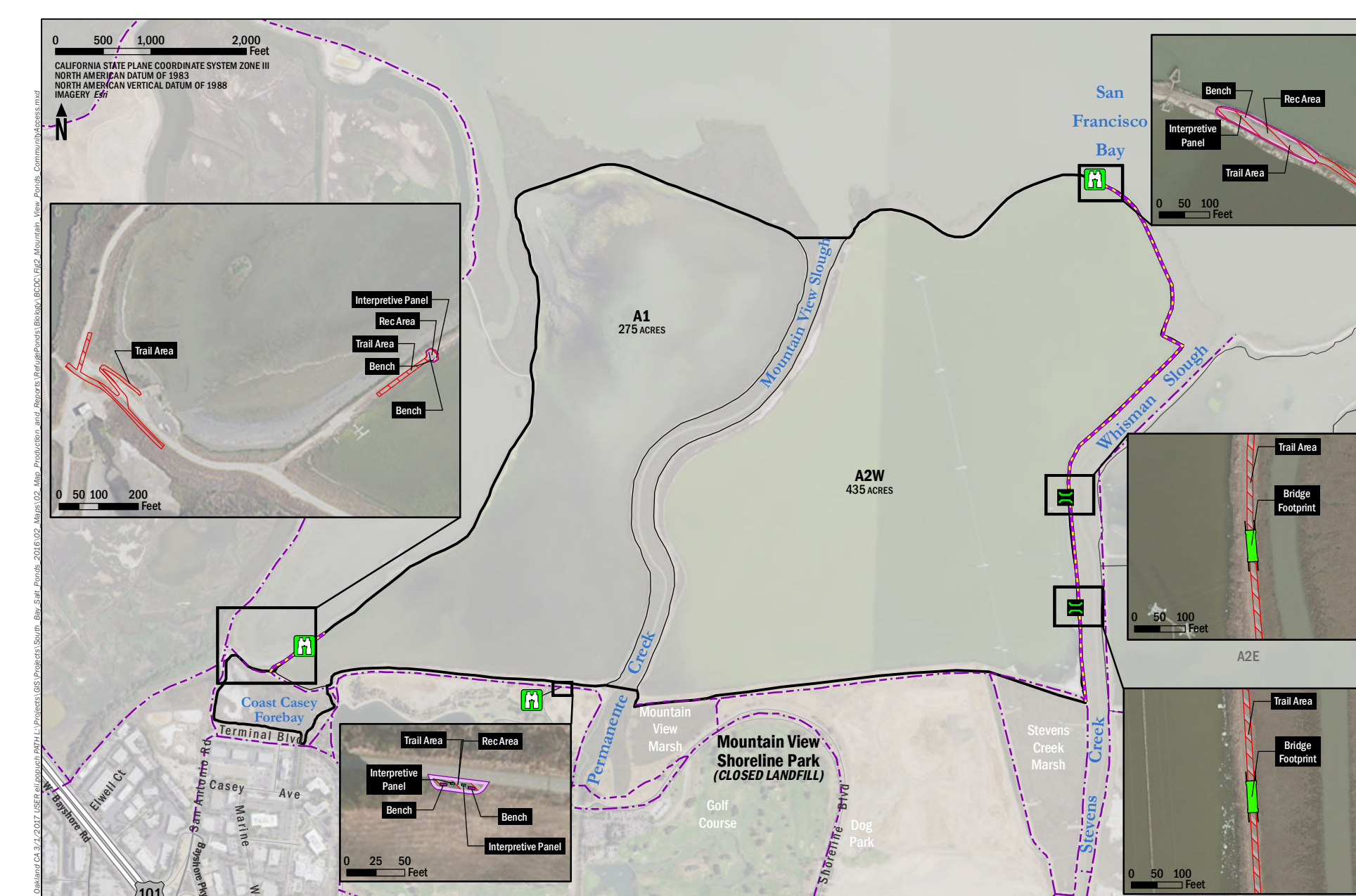


Alviso Mountain View Ponds

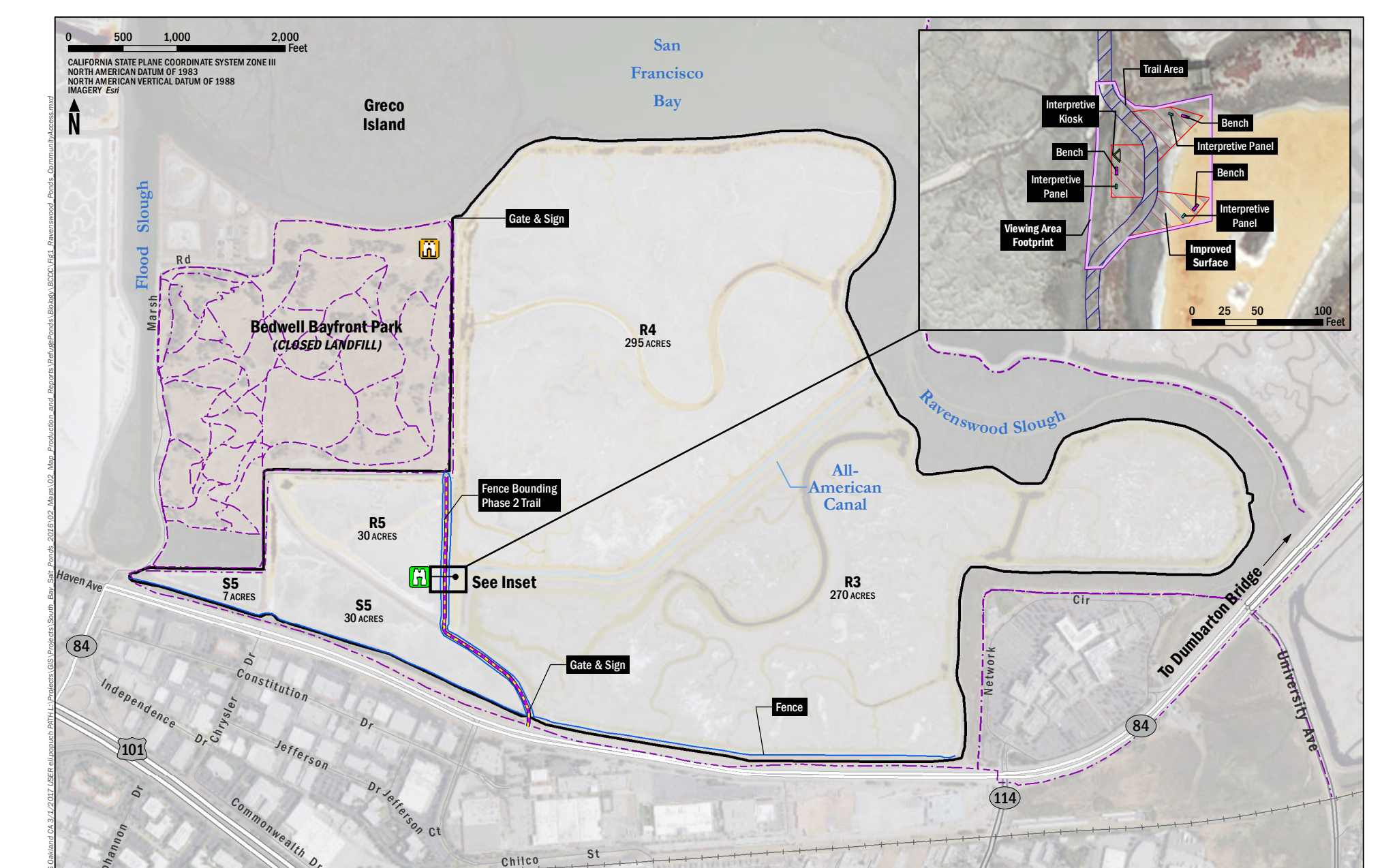


Ravenswood Ponds

Phase 2 Trail and Public Access Figures at Ravenswood and Mountain View Ponds



Existing/Planned Community Access Ravenswood Ponds



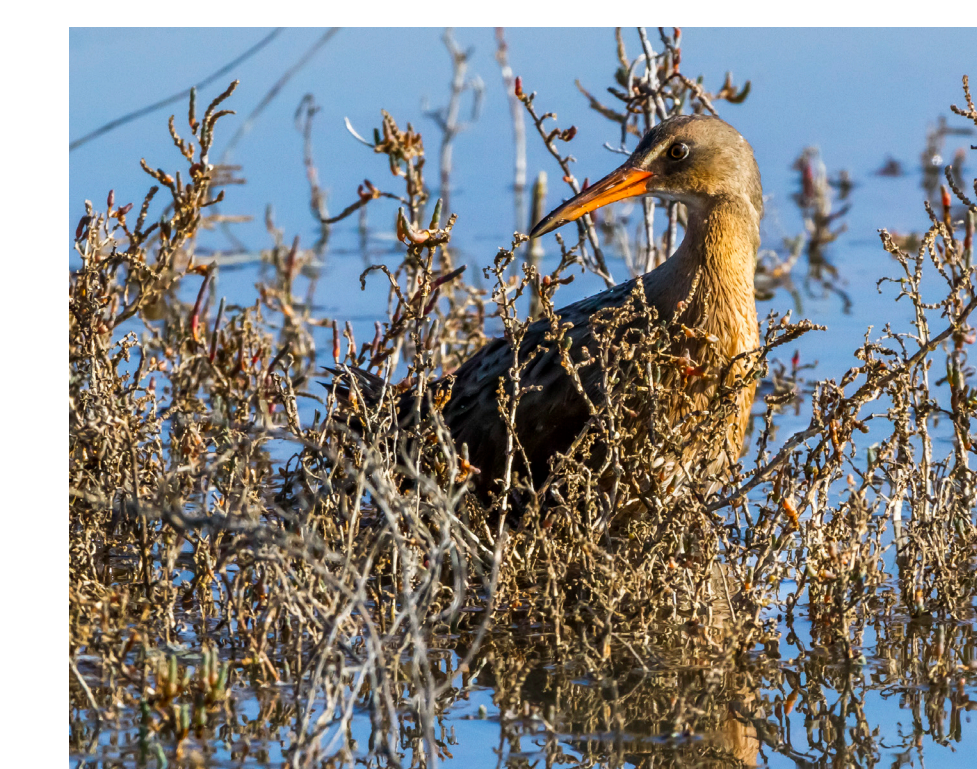
Existing/Planned Community Access Alviso Mountain View Ponds



Greco Island and Ravenswood Pond R4
AECOM, 2016



Snowy Plover Chick
Jenny Erbes, 2013



California Ridgeway's Rail
Julie Kitzenger, 2015



Salt marsh harvest mouse sitting on pickleweed
Judy Irving, 2010



Aerial Flyover shot, Alviso Pond Complex
USFWS, 2005



Excavator Levee Breach, Alviso Island Ponds
Marc Bittner, 2007



Existing Bench, Alviso Mountain View Ponds
AECOM, 2016



Black-crowned night heron fishing and Alviso Pond A8
Judy Irving, 2008



Kite pond shots, Alviso Island Ponds
Chris Benton, 2010