



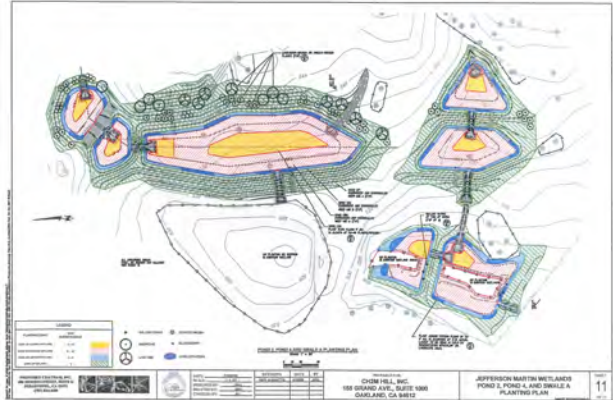
PRUNUSKE CHATHAM, INC.

JEFFERSON MARTIN CONSTRUCTED WETLANDS, 2008-2009

Redwood City, CA

Client: CH2M Hill, Inc.

The Jefferson Martin Constructed Wetlands Project is an example of PCI's unique ability to bring together a number of disciplines under one roof and create a team capable of handling all phases of a restoration project. Our team reviewed the conceptual design, performed hydrologic and hydraulic analyses, biological assessments, produced a set of engineered plans, provided construction management, and acted as the general contractor. PCI is also currently under contract to provide maintenance of the project including erosion control and revegetation, and is responsible for monitoring the wetland species growth for compliance with the permits. Our team of Engineers, Landscape Architects, Construction Superintendents, Foremen, Heavy Equipment Operators, Biologists, Erosion and Sediment Control Specialists, and Revegetation Specialists worked together to produce a successful project on time and on budget. The project was to mitigate for construction that impacted an existing wetland in San Mateo County. The site chosen for the mitigation proved to be a challenge for a number of reasons. The former gravel quarry had a few existing ponds which qualified as wetlands and were models for the new wetlands,



but the site was hilly, and the soil was nutrient deficient and well draining – two qualities not normally associated with wetlands. There were also a number of invasive plant species on site which threatened establishment of native wetland plants. Our designers, working with our biologists and revegetation specialists, came up with a comprehensive construction plan and specifications which addressed these concerns. Five new wetland ponds would be created, and two of the existing wetlands would be expanded. This entailed over-excavation of the ponds, installation of a bentonite clay liner to retain the water, placement of topsoil (made on site using existing soil and adding compost) to finish grade, and revegetation with seed and small container plants. The invasive plant species in and near the wetlands are being controlled by physical removal and spot herbicide application.



One year after construction the new wetlands are thriving. The relative wetland species coverage is close to 100% in most of the ponds. However, some areas in the newly constructed wetland have seen slower growth. At the direction of our Project Manager, this issue was recently addressed by our Revegetation Specialist. Our maintenance crew implemented this plan which included installation of *Juncus effusus* and *Juncus patens* plugs, seeding with a variety of wetland species, and inundating the sites with water to encourage root growth prior to winter rains and eventual inundation.

