

Protecting the Environment While We Work

The SFPUC has an extensive mitigation and monitoring program in place to protect any cultural and biological resources in the work area. All personnel on site receive special training to identify



and endangered species, including the Salt Marsh Harvest Mouse (pictured), California Tiger Salamander, and several special-status shorebirds such as the California Clapper Rail. Special fencing has been installed around the perimeter of the site to keep these animals out of the work areas. Environmental inspectors and specialty biological monitors are also on site regularly to ensure compliance with the project's environmental mitigations measures, regulatory permits and other SFPUC best practices.

Construction Hours:

Normal work hours are 7 a.m. to 6 p.m. When tunneling begins, underground work will be 24-hours a day due to project demands. Work will be monitored closely to ensure that noise and light are minimized. Construction is expected to be completed in 2015.

Need More Information?

If you have questions about the project, please call our 24-hour answer line: 800-571-6610 or e-mail us at baydivision@sfwater.org. For more information please visit our website at www.sfwater.org/baytunnel.



San Francisco Water, Power and Sewer
Communication and Public Outreach
1155 Market Street, 11th Floor
San Francisco, CA 94103



Bay Tunnel Project Update Fact Sheet



Services of the San Francisco
Public Utilities Commission

www.sfwater.org

Summer 2011

Project Update

The Tunnel Boring Machine (TBM) arrived in May and has been lowered into the Ravenswood launch shaft and it is currently being assembled for an expected tunnel launch this summer. A 15-foot diameter tunnel will be excavated by the TBM 40ft below the floor of the Bay and will emerge in a similar shaft in Newark in the East Bay.

The Contractor is now installing all the necessary construction utilities to support the tunnel excavation operations in the Ravenswood shaft on the Peninsula. The Receiving shaft in Newark, East Bay will be excavated later in construction.

Manufacturing of concrete segments that will line the tunnel has started in a precast plant located in Stockton, California and will continue through the tunneling phase.

Construction Details

The Contract:

Contractor: Michels / Jay Dee / Coluccio Joint Venture
Contract Value: \$215.2M
Percent Complete: 23.2% as of May 25th 2011
Notice To Proceed: April 2010
Final Completion: March 2015

The Tunnel and Shafts:

Length: 5 Miles
Diameter: 15ft excavated diameter
Tunnel Lining: 10-in thick precast concrete segments
108in diameter steel pipe
Launch Shaft: Menlo Park, CA
124ft finished depth
58ft inside diameter
Receiving Shaft: Newark, CA
86ft finished depth
28ft inside diameter

The Tunnel Boring Machine (TBM):

Diameter: 14Ft-11-5/10in (4.56m)
Trailing Gear: 600Ft



The 5-mile Bay Tunnel passes through environmentally sensitive marshlands and mudflats on both sides of the San Francisco Bay.

FIRST TUNNEL UNDER SAN FRANCISCO BAY BEGINS ASSEMBLING TBM



Pieces of the 225-metric-ton tunnel boring machine (TBM) have been lowered into the shaft for assembly. When complete, it will include a 600-foot conveyor belt to transport spoils back to the surface for re-use at nearby Bair Island South Bay Salt Pond restoration site.

The tunnel boring machine (TBM) was built by Hitachi Zosen (Hitz) Corporation in Osaka, Japan.



The TBM cutterhead and shield are being lowered and assembled at the bottom of the 124-foot-deep and 58-foot-diameter Ravenswood shaft.



The Tunnel Boring Machine (TBM) is being inspected by the Construction Management team at the Hitachi plant in Osaka, Japan.



A temporary electrical substation has been assembled on site to provide electricity for the TBM and the rest of the equipment. The contractor has opted to use electric equipment over diesel to minimize noise and to provide better ventilation.

The Bay Tunnel Project consists of a 5-mile-long tunnel under the San Francisco Bay, passing through environmentally sensitive marshlands and mudflats with vertical shafts at each end of the tunnel.

The San Francisco Public Utilities Commission (SFPUC) delivers water from the Hetch Hetchy Reservoir in Yosemite National Park to 2.5 million people throughout the Bay Area. Many portions of the Hetch Hetchy System are aging and in need of upgrades. As part of its Water System Improvement Program, the SFPUC will be decommissioning its older pipelines where they cross the San Francisco Bay and replacing them with a new Bay Tunnel.