



Boston Harbor Outfall Tunnel Ventilation Piping System

B O S T O N , M A S S A C H U S E T T S

The effluent outfall for the Deer Island Treatment Plant was an important part of the MWRA's wastewater management program. This outfall, which started up in September of 2000, discharges treated sewage (effluent), into Massachusetts Bay instead of into the shallower waters of the Harbor, which has helped the Harbor's recovery. The outfall begins with a deep rock tunnel extending under Massachusetts Bay to a point about 9.5 miles east of Deer Island. The outfall site was chosen after considerable scientific and technical study and extensive public participation. Cashman, which had also been involved with the Deer Island Treatment Plant Project, re-mobilized our deep-water jack-up barge used on the initial MWRA Outfall Diffusers contract to provide the final connections to the Outfall Tunnel using an innovative ventilation pipe system.

PROJECT HIGHLIGHTS

- Cashman engineers developed an innovative method to permit construction of the final connection of the Outfall Tunnel for the Deer Island Project.
- Designed a steel caisson "ventilation" system providing a water-tight connection at the sea-bed interface in 120 feet of water.
- Installed the ventilation system and final connections in approximately three months.
- Cashman received the prestigious NOVA Award for "Innovation in Construction" from the Construction Innovation Forum.

Location:	Boston Harbor, MA
Contractor:	Joint Venture: Jay Cashman, Inc./ Interbeton
Contract Dates:	Sept. 2000 - Dec. 2000
Dollar Value:	\$12.2 Million
Awarding Authority / Owner:	Massachusetts Water Resources Authority (MWRA)

Cashman was part of the team responsible for the historic changes in secondary sewage treatment that helped clean up Boston Harbor. The team designed and installed a steel caisson ventilation system providing a water-tight connection at the sea-bed interface in 120 feet of water. Work was performed at 55 diffuser locations, nine miles offshore in Boston Harbor.

