

Single-Source System Provider

Water-to-Wire, Turbine-Valve-Controls Integration,
Motion & Control Engineered Systems

Gate Controls for Boston's Big Dig CSO System Installed in Six Precast Concrete Vaults

As part of what turned out to be, at the time, the most expensive public works project in the United States, Sorensen Systems was selected by Barletta Company of Massachusetts to furnish six hydraulic gate operating systems as part of the North Dorchester Bay CSO (Combined Sewer Overflow) Tunnel Project. The tunnel project was one of the final phases of the so-called Boston "Big-Dig" project providing a system to hold up to 19 million gallons of combined sewer and storm water overflows caused by heavy rainfall.

The sewer overflow project was part of the Central Artery/Tunnel Project, known unofficially as the Big Dig, which was intended to reroute part of Interstate 93, the construction of the Ted Williams tunnel extending Interstate 90 to Logan International airport, and the creation of the Rose Kennedy greenway. A long time concern for the state had been focused on how the combined sewer overflows had discharged at six outfalls along South Boston's public beaches. The sewer tunnel, as designed, eliminated the combined sewer overflow to the Bay, protecting beaches, shell fish beds and other sensitive waters.

The challenge for Sorensen Systems was to furnish six precast concrete vaults complete with a hydraulically operated stainless steel gate operating system. The system included a hydraulic power unit, hydraulic accumulator, remote control panel, accumulator isolation ball valve,



Harbor Clean Up

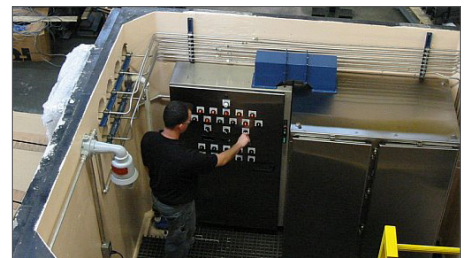
At six existing outfalls along the Boston Harbor coastline, combined sewer and storm runoff was contaminating local beaches and shellfish beds.

and associated wiring and accessories. Each operating unit was installed inside the precast concrete vaults. The individual vaults were transported to Sorensen System headquarters in Northborough, Mass., one at a time, to be fitted out with the operating system. As each vault was too large to fit through the fabrication facilities overhead door, a new larger door was installed to accommodate the oversize vault. Upon completion of each unit, they were delivered to the installation site. Sorensen Systems was responsible for the on-site start-up and O&M training.



Precast Concrete Vaults

Each of six precast concrete vaults were brought to headquarters in Northborough, Mass., to be outfitted with gate operating systems.



Part of Boston Big Dig

The North Dorchester Bay CSO tunnel project was part of the most expensive public works project in the United States at the time.

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