

Cape Cod Canal

A Journey through Time

Cape Cod Canal: A Dream

The idea of constructing a canal through the isthmus of Cape Cod dates back to the 1620s. Captain Miles Standish and Governor William Bradford wanted to facilitate trade between Plymouth Colony, the local Wampanoag tribes and the Dutch merchants sailing from New York. The isthmus was only about eight miles wide, and approximately five of them were navigable. This trade route was far preferable to hauling goods on their backs along a 20-mile overland route, or sailing the all-water route around Cape Cod.

Arguing various economic and life saving benefits, countless numbers of proposals and studies occurred throughout the 1600s, 1700s and 1800s. The only route for vessels was to sail around Cape Cod, taking more time, costing more money and exposing sailors to hazardous shoals, rough seas, and during times of war, enemy fire. A Cape Cod Canal would save money and lives.

Cape Cod Canal: A Reality

In 1904, a wealthy financier named August Belmont Jr. purchased the Boston, Cape Cod and New York Canal Company. The company held a charter to construct the canal. To oversee the project, Belmont hired a well respected and experienced engineer named William Barclay Parsons. Belmont and Parsons were confident they could succeed

On June 19, 1909, a heavily loaded schooner sailed into Cape Cod Bay with a cargo of granite. It stopped one quarter mile from shore. With the help of derrick lighters, crews unloaded the first massive blocks of stone into the water. Those blocks began the breakwater seen today at the Canal's eastern entrance, off Scusset Beach. This marked the first real sign of construction.

To construct the Canal, a total of 26 different dredges were used throughout the course of the project. A combination of dipper and hydraulic style dredges of various sizes dug from each bay towards the middle.

Progress was slow due to bad weather, the presence of clay and above all, the presence of large boulders. The larger boulders required other means of removal. Divers set charges to shatter them with dynamite. This process was noisy, expensive, slow and dangerous.

To compensate for the delays, Parsons decided to use steam shovels and narrow gauge railroad equipment to dig in the dry section through the middle of the isthmus. This method proved to be effective, and progress picked up again.

To span the new Canal, Belmont's company constructed three bridges, two for motor vehicles and one for the railroad. Belmont also established free passenger ferry service across the Canal in Bourne. The highway bridges were drawbridges. When in the lowered position they had a 41-foot clearance above mean sea level which allowed small craft to pass underneath without having to open the draw. The railroad bridge lifted using a single counter weight on its north side. With only a 12-foot clearance above the water, this was frequently necessary. Each bridge

only provided a 140-foot wide opening for passing vessels.

After five years of construction, the Cape Cod Canal finally opened to vessel traffic on July 29, 1914. Operated as a toll waterway, the Canal could only accommodate vessels with a draft of less than 15 feet. It took another two years of dredging before the Canal reached its required charter depth of 25 feet. Traffic steadily increased with the continued deepening of the Canal reaching 4,634 trips in 1916.

Belmont's Canal, however, never achieved the level of traffic or revenue its investors envisioned. What kept mariners away? A variety of reasons were reported by the industry including frequent shoaling, narrow openings through the bridges, tricky currents, high tolls, and sharp turns on the approach channels. In the end, Belmont's Canal was a financial failure.

Cape Cod Canal: A Success

The federal government first took over the Canal during World War I when German submarines off the shores of Cape Cod became a threat to American vessels. After the war the Canal was returned to private ownership until March of 1928 when the federal government purchased the Canal for \$11.5 million. The US Army Corps of Engineers was assigned the task of improving the waterway to make it safe for navigation, and operating it as a toll free waterway.

The US Army Corps of Engineers directed a massive reconstruction of the Canal throughout the 1930s. It was the time of the Great Depression and many men found much needed work.

To provide a safer, more viable intra-coastal waterway, the Corps replaced the original bridges, widened and deepened the channel to 480 and 32 feet respectively, straightened the approach channels, and lined the banks of the Canal with rocks, called riprap, to limit erosion.

By 1940, the reconstruction of the Cape Cod Canal was complete, making it the widest sea-level canal in the world. The US Army Corps of Engineers continues to this day to operate, maintain and improve this toll-free Canal as a vital waterway for thousands of commercial, military and recreational vessels alike.