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HULL GUT CROSSING - PEDDOCKS ISLAND/FT. ANDREWS INFRASTRUCTURE CONSTRUCTION

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ABSTRACT: Peddocks Island, located between the coasts of Hull and Quincy, Massachusetts, is one of the largest and most ecologically diverse islands in Boston Harbor. Located on the eastern side of the island, Fort Andrews is a magnificent example of Endicott Period military fortifications. However, since 1947, when it was abandoned by the U.S. Army, the fort has fallen into disrepair. Because of its history, Peddocks Island has been certified as a Historical and Archeological Landmark.

Plans are in place for the rebirth of Fort Andrews into a vibrant family camp and eco-retreat that will be the gemstone of the Boston Harbor Islands. However, before the redevelopment of the fort complex could begin, reestablishment of utility service to the island was necessary. The previously existing 100-year old submarine water and electric services to the fort had been destroyed, and no water or electric service to the island existed, except for a small photovoltaic system. An aged sewer system that discharged directly to the ocean was also unusable.

A feasibility study of alternatives to bring utility service to the island was conducted, with the selected alternative consisting of horizontal directional drilling approximately 2,000 linear feet beneath Hull Gut, a major shipping channel for Boston Harbor, from the Hull main land to Peddocks Island. A single 20-inch diameter steel casing within the drilled bore hole housed HDPE conduits that provided power, communications, wastewater and water service to the fort complex to full fill the projected utility needs for the planned island build-out.