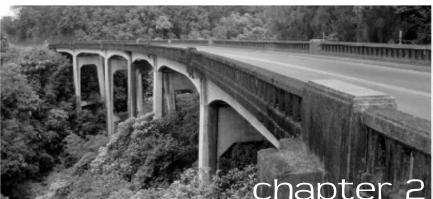
## Exhibit 36

Source: https://historichawaii.org/library/ bridgeSHBIE2014\_03\_Ch2.pdf#page=22





historic contexts

## V. HAWAII BELT ROAD, HAWAII ISLAND: PRE-CONTACT TO 1960s

## HISTORICAL BACKGROUND

Many railroads were established in the Hawaiian Islands during the Kingdom, Republic and early territorial periods by private interests in the sugar industry. For the most part, these sugar trains were narrow gauge lines; however a unique standard gauge rail line was established on the Island of Hawaii to carry sugar cane along the rugged Hamakua coast to ports in Hilo. Fourteen large steel trestle railroad bridges were built in 1911-12; in 1950-53, five of these were modified by the Territorial Department of Transportation for use as highway bridges and another was constructed utilizing trusses from the span over the Wailuku River.

The plantations of South Hilo, North Hilo, and Hamakua districts were producing raw sugar within a few years after the Reciprocity Treaty of 1876. The treaty allowed Hawaiian sugar to be exported to the American mainland duty-free. The treaty was later expanded to include a clause that allowed the United States to build a Naval Station at Pearl Harbor on Oahu. The sugar industry developed rapidly in the islands; and by 1900, one-quarter of the sugar produced in the Territory was grown on the Hamakua coast. The land above the steep coastal bluffs, at the base of the dormant Mauna Kea volcano, was gently sloping and fertile. Most plantations were from two to three miles deep, their altitudes ranging from 250 feet closest to the sea to 2,000 feet at their upper boundaries; their ocean frontage varied from two to six miles. The rain which produced sugar had also produced the myriad gulches that had for so long kept the area isolated. The only road to Hilo's harbor was the government wagon trail that was almost impassable in the rainy season and which suffered from constant bridge washouts. As an alternative to using the road, some plantations had railroads with either locomotive or animal power; others used flumes or cable railways to move cut cane from the high fields to the mills which were usually close to the sea. The mills employed a cumbersome method of derricks and pulleys at various landings high above the coast to load their produce on to ships for market.

Hilo was located at the southern end of the long string of sugar plantations on Hawaii's east coast. Large tracks of prime agricultural land lay to the south of the town, awaiting development by entrepreneurs with vision and capital. In 1898, Benjamin Franklin Dillingham, a noted Hawaiian businessman, drew up plans for a large sugar mill at Olaa, eight miles south of Hilo in the previously uncultivated Puna district. Then he applied for a charter for the railroad that would be needed to transport the raw sugar to the wharf in Hilo. The Hilo Railroad Company was incorporated in 1899 by Dillingham; Lorrin Thurston, the Minister to Washington during the Republic of Hawaii and a former Interior Minister under the monarchy; and Mark Robinson, Minister of Foreign Affairs for Queen Liliuokalani. The charter for the Hilo Railroad, granted by the Republic of Hawaii, was issued on March 28, 1899. Under its charter, the Hilo Railroad was authorized — for a period of fifty years — to build a railroad anywhere on the island of Hawaii, with free use of government lands for the right-of-way, yards, or station areas. Dillingham had just completed a three-foot gauge common carrier on Oahu and was aware that the popularity of narrow-gauge for trunk lines was on the wane; he announced that the Hilo Railroad would be built to standard gauge (4'-8 1/2" wide) — the first and only standard-gauge railroad in the islands.

The railroad barons determined that the wharf in Hilo was inadequate to attract the business of large shipping lines. Freighters anchored in deep water had to use lighters, and the whole operation was relatively unprotected from heavy seas during the storm season. A new wharf, sheltered from the sea by a breakwater, was proposed; but its construction was beyond the means of either the railroad or the Territory of Hawaii. The breakwater, designed by the U.S. Army Corps of Engineers, was financed by the U.S. Congress, leaving the railroad with the responsibility for building the wharf. One of the conditions imposed by the government for the improvement of