

DIGESTER TANKS

CONSTRUCTED

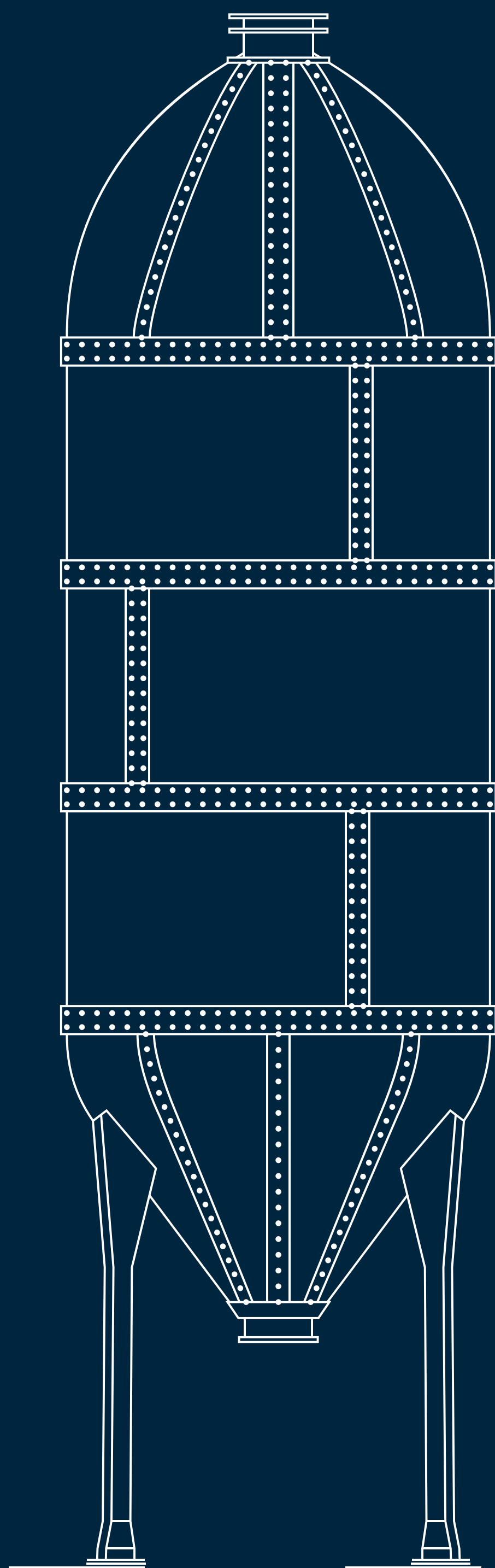
1937

HEIGHT

65 FEET

DIAMETER

18 FEET



These massive digester tanks were the heart of one of the most productive and efficient pulp mills in the world. Looking like spacecraft from an early sci-fi movie, the riveted-steel digesters were enclosed in red brick as part of Puget Sound Pulp & Timber's new pulp mill on former tide flats of Bellingham Bay. Logs from throughout the Pacific Northwest were brought to the mill, debarked, chopped into wood chips, and fed into the top of the digester tanks. The tanks were loaded three times a day with 120 tons of chips to be cooked in acid at 275 degrees Fahrenheit under high pressure for eight hours at a time turning the wood into a cottony mass of pulp used to make paper products. The digester tanks have been kept to showcase the incredible history of Bellingham's industrial waterfront.

LOG CHIPPER

CONSTRUCTED

1946

STEEL BLADE LENGTH

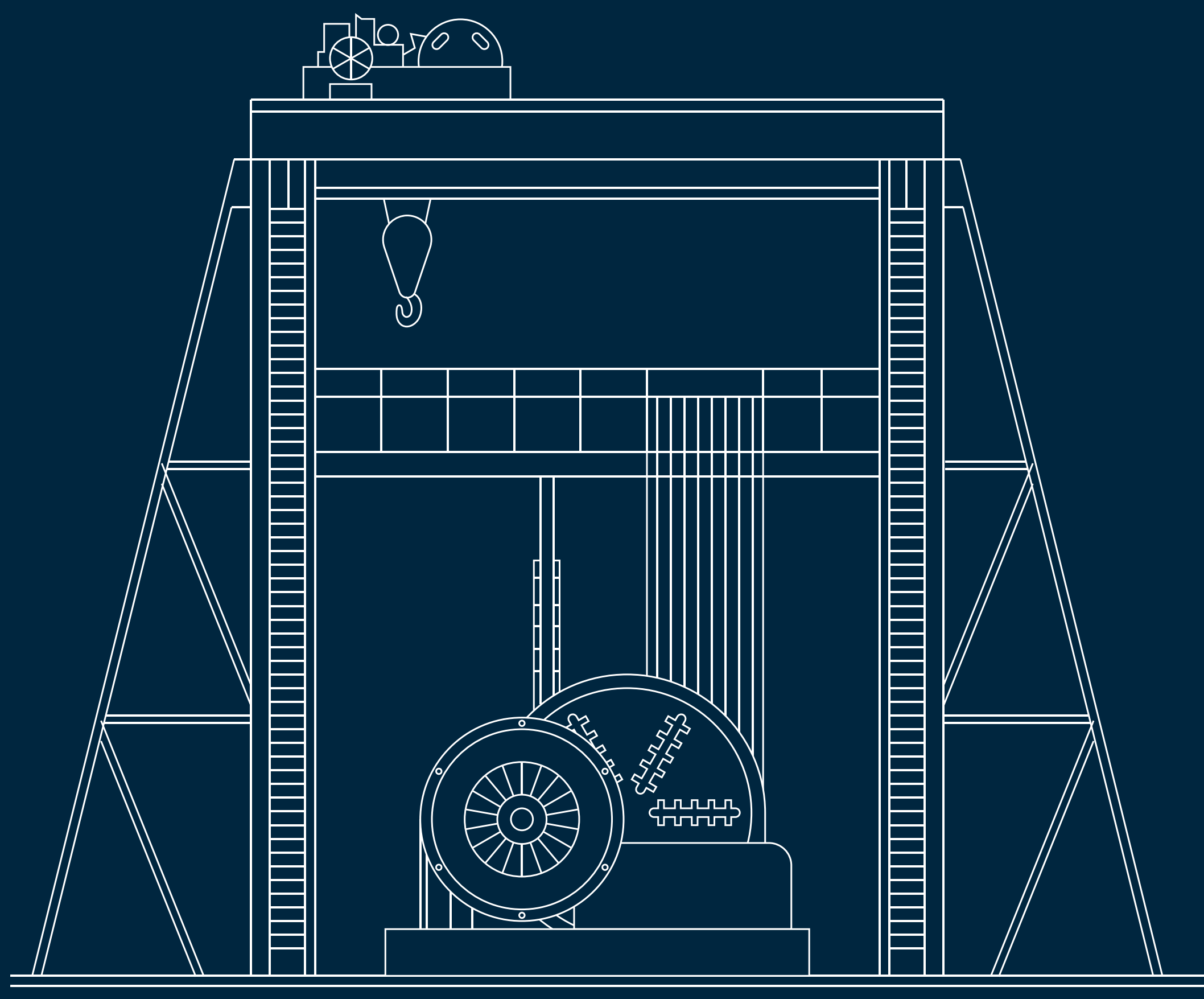
14.5 FEET

SPEED

240 RPM

The log chipper was the largest in the world when it went into operation in 1946. Logs from throughout the Pacific Northwest were brought to Bellingham and stored in the log pond until a chain-belt incline brought them into the mill and a nine-foot circular saw chopped them into 20-foot lengths. The logs were debarked under a high-pressure stream of water and fed into the throat of this log chipper where a

frenzy of whirling blades could turn a three-foot diameter log into a pile of wood chips in ten seconds. In just one week in 1947, the log chipper gargled an astounding 11,876 whole logs. The wood chips were screened for size and carried by conveyor belts to the top of the digester tanks to be cooked into pulp. This log chipper has been kept to showcase the incredible history of Bellingham's industrial waterfront.



BOARD MILL

CONSTRUCTED

1947

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The Boardmill opened in 1947 to turn pulp and recycled tabloids into thick paper used for making folding boxes, toilet-paper tubes, egg cartons, cereal boxes and paper cups. Georgia-Pacific shut down the paper-board plant in 1983 to focus on superior paper products with higher profit margins. The building was repurposed in 1990 to

support pulp mill operations with a new lunchroom, locker rooms, showers, maintenance and carpenter shops, and storage areas. The Port is now working with local developers to transform this historic building into a hotel and conference center and help showcase the incredible history of Bellingham's industrial waterfront.



For more information, visit www.portofbellingham.com/waterfronthistory

ACID BALL

CONSTRUCTED

1938

HEIGHT

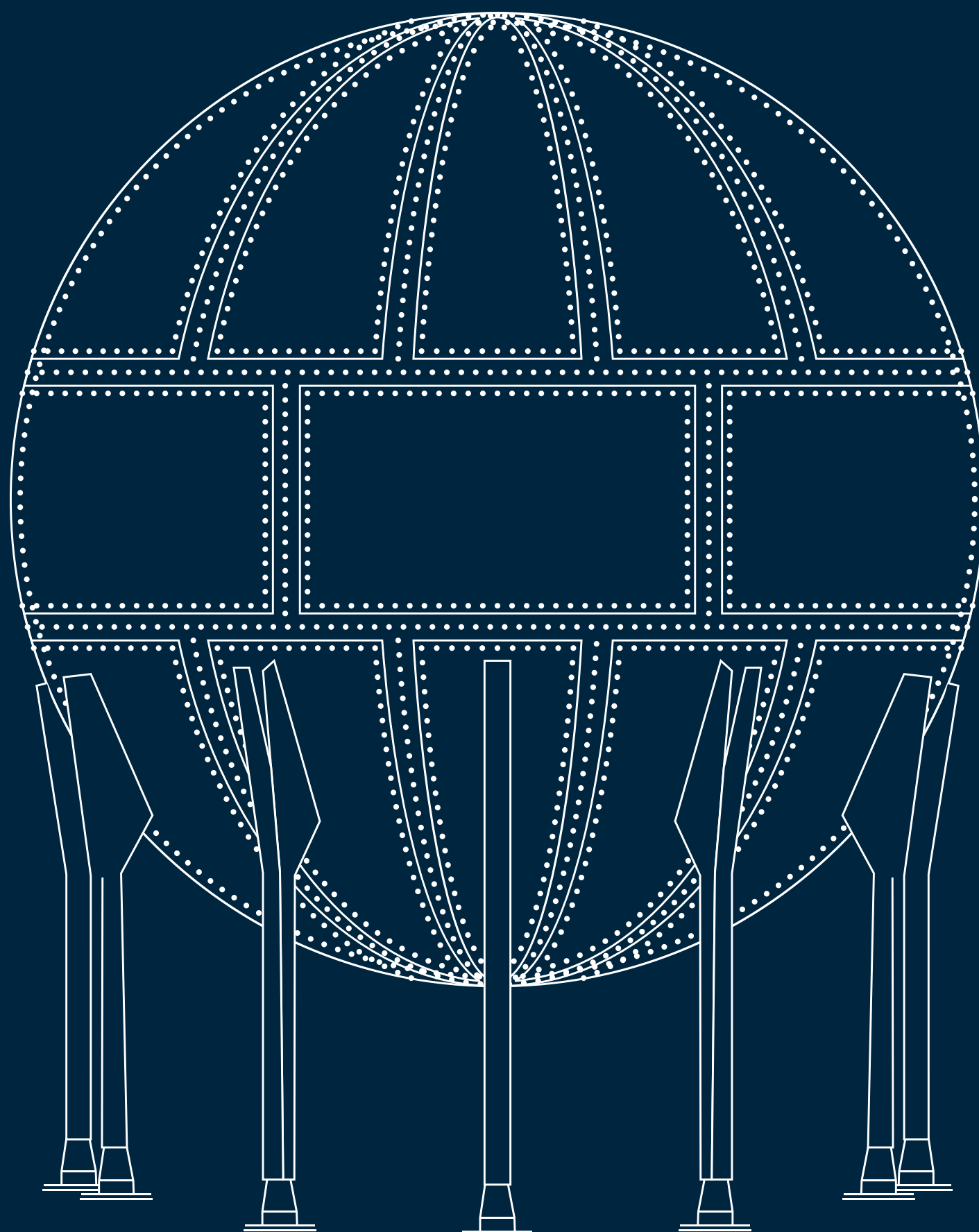
39.5 FEET

WEIGHT

438,000 LBS

This 438,000-pound orb was part of the cooking equipment used to turn raw wood chips into pulp on Bellingham's downtown waterfront. Wood chips were loaded into digester tanks and cooked in acid under high temperature and pressure with the acid ball used as a relief vessel to draw out acid and gas and maintain ideal cooking conditions inside the tanks. The acid ball was moved from next to the digester tanks

to Waypoint Park in 2018 to create a symbol of the transition between historic and new uses of the site. The Port and City hosted a public art competition to engage the community and establish a highly-visible attraction for the waterfront. Of 26 different proposals, an art committee selected a minimalist approach covering this industrial icon with reflective glass beads and using LEDs to light it up at night.



PULP STORAGE TOWERS

CONSTRUCTED

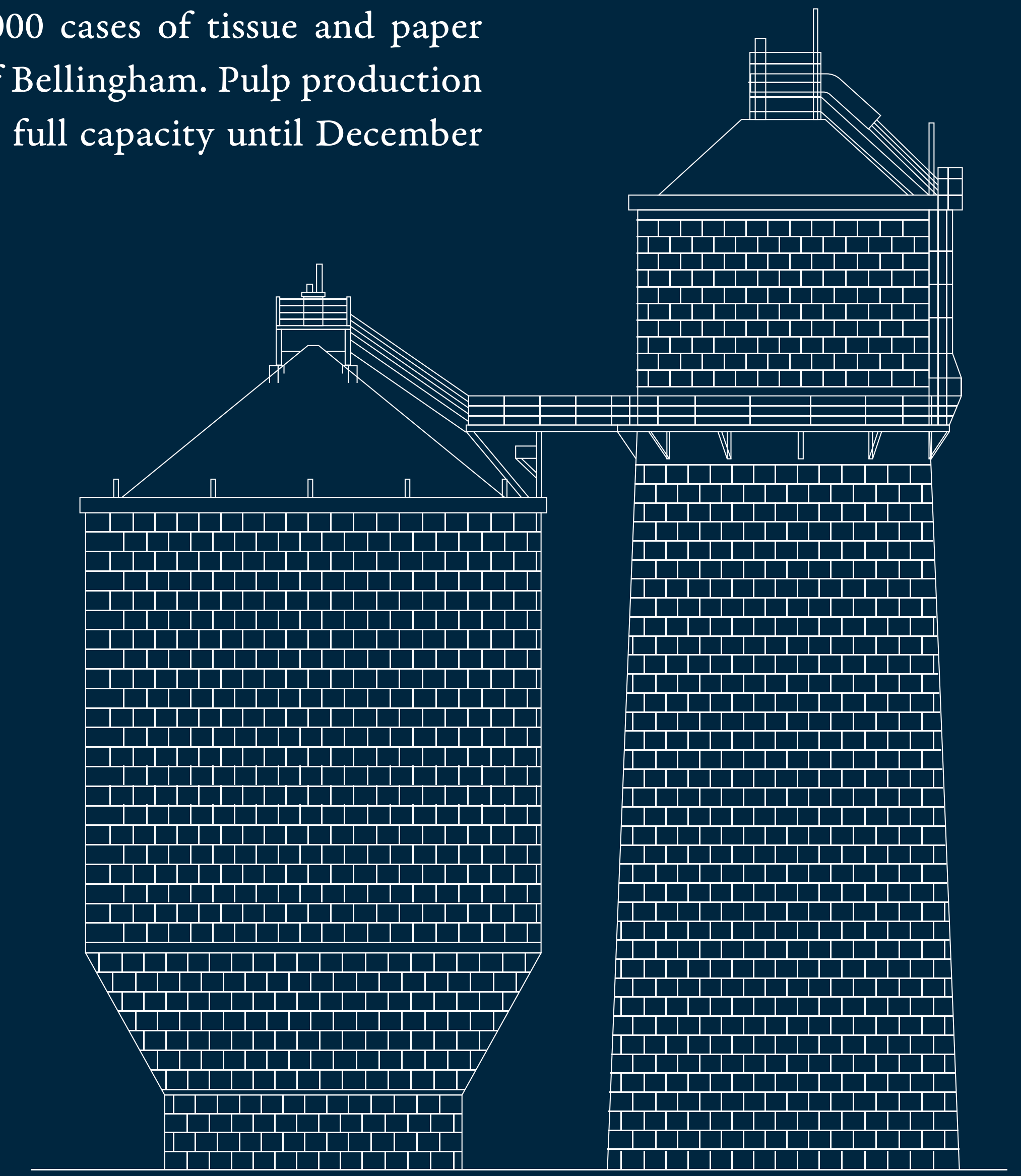
1974/1976

HEIGHT

75/100 FEET

The pulp storage towers were built by Georgia-Pacific in the 1970's to store bleached and unbleached pulp. About 70% of the pulp produced in Bellingham was sold internationally and the rest used locally to manufacture a wide range of paper products - from newsprint and corrugated boxes to high-end stationary and toilet paper. Every day, Georgia-Pacific shipped 15,000 cases of tissue and paper towels out of Bellingham. Pulp production continued at full capacity until December

2000 when extremely high costs for electricity caused by the Enron scandal along with changing market conditions led to the closure of Bellingham's pulp and paper mill. The pulp storage towers have been kept to showcase the incredible history of Bellingham's industrial waterfront.



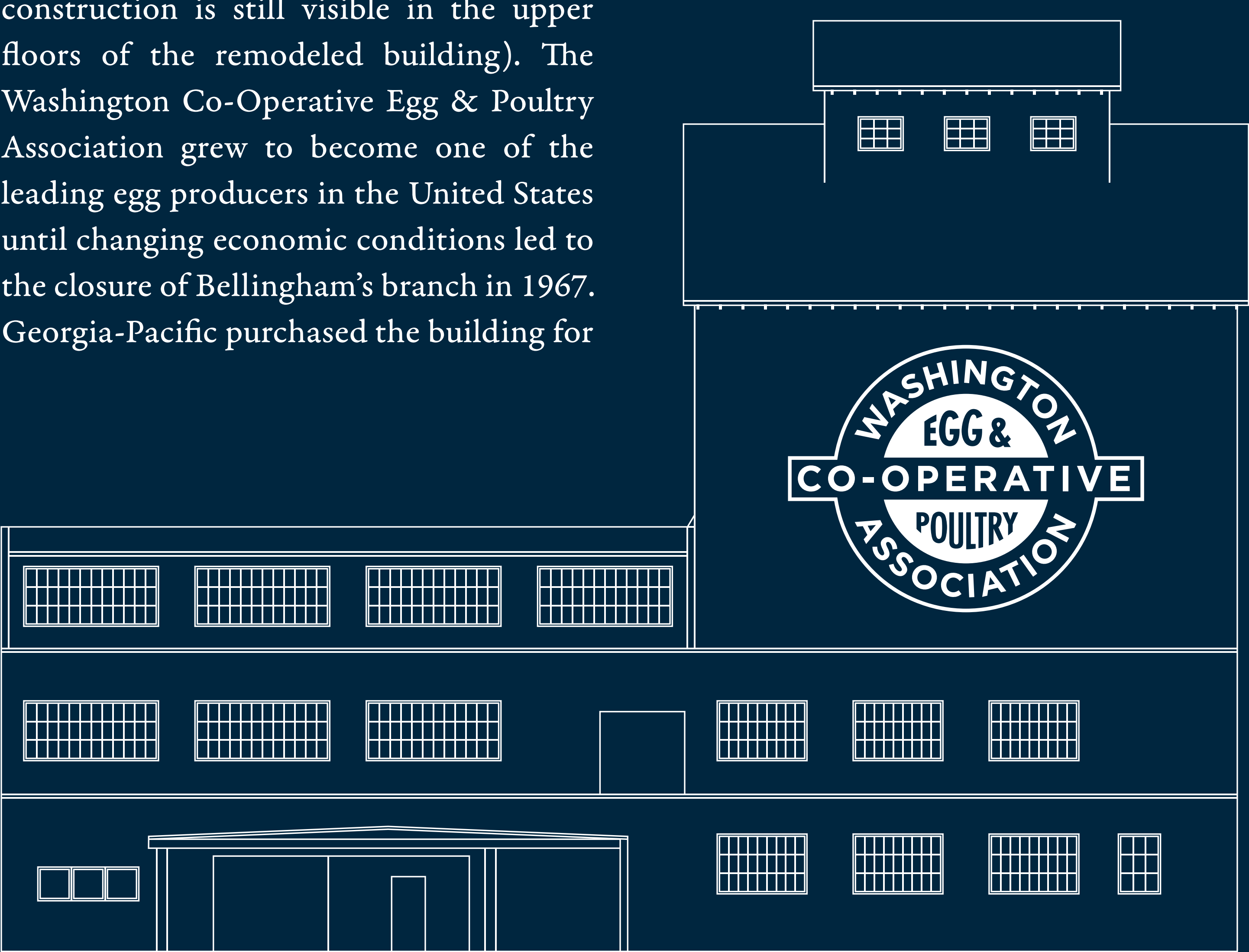
GRANARY BUILDING

CONSTRUCTED

1929

The Granary Building opened in 1929 as a distribution center for the Washington Co-Operative Egg & Poultry Association. Local farmers brought eggs and chickens to be processed and shipped to distant markets and left with chicken feed and other supplies purchased in bulk by the cooperative. Chicken feed was mixed and stored in the upper tower of the Granary Building in ten silos built from stacked 2x4, 2x6 and 2x8 timbers spiked together to withstand the weight of the grain (the stacked timber construction is still visible in the upper floors of the remodeled building). The Washington Co-Operative Egg & Poultry Association grew to become one of the leading egg producers in the United States until changing economic conditions led to the closure of Bellingham's branch in 1967. Georgia-Pacific purchased the building for

shipment receiving and storage and leased a small portion of the building to the Bellingham Fish Company for use as a community fish market. The Port acquired the Granary Building in 2005 and sold it in 2015 to be adaptively reused as retail and office space to help showcase the incredible history of Bellingham's industrial waterfront.



LOG ROLLERS

CONSTRUCTED

1946

MAXIMUM LOG DIAMETER

7 FEET

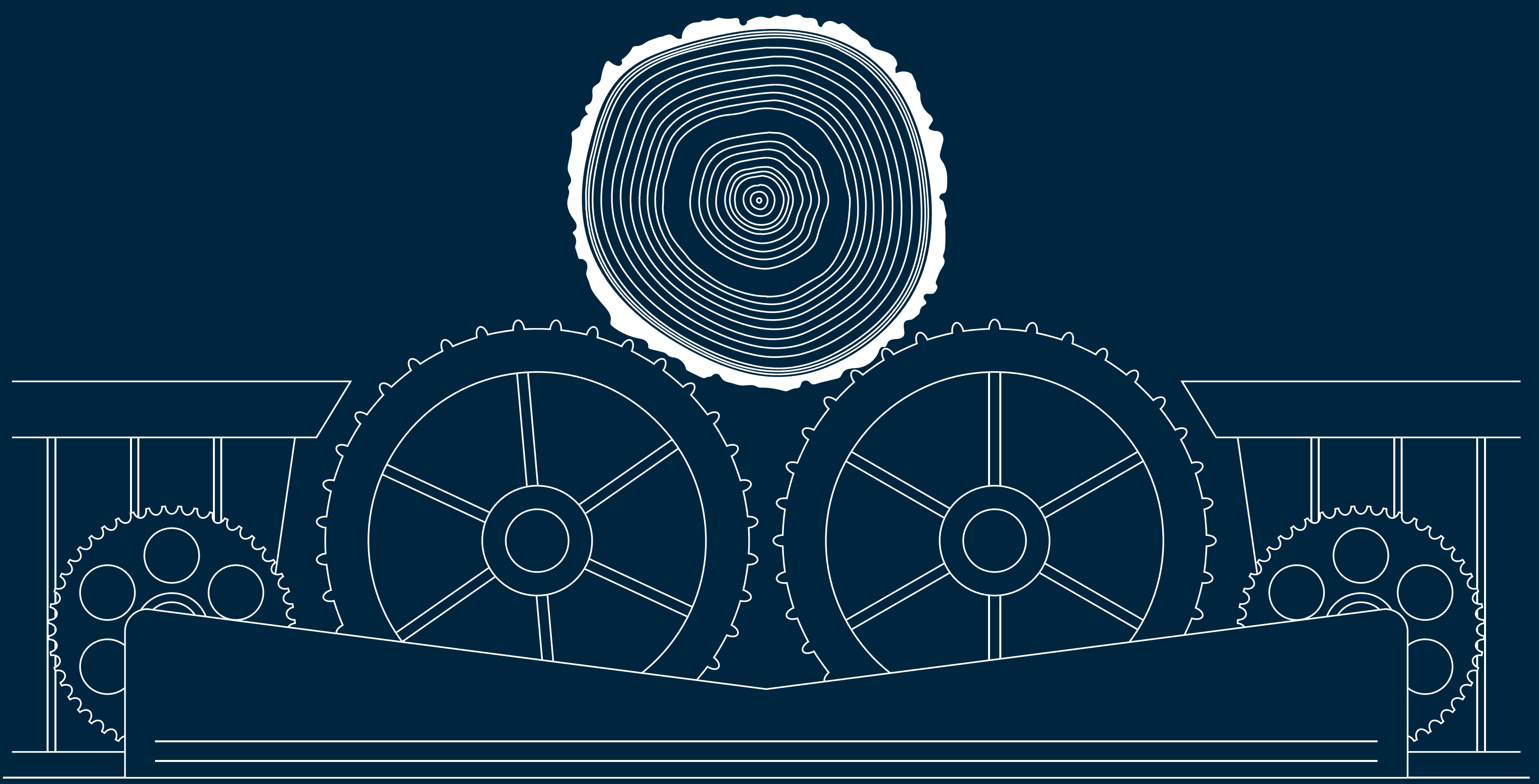
ROTATIONAL SPEED

65 RPM

These log rollers helped revolutionize the pulp and paper industry. The large steel wheels were part of the “Bellingham Barker,” an innovative technology designed and patented by local mill engineers (including Dan Robbins, the father of former Port Commissioner Dan Robbins) and sold to pulp mills throughout the world. The log rollers rotated logs up to 7 feet in diameter at high speeds while a jet stream of water ripped the bark away. The Bellingham

Barker was so powerful it would cut right through whole trees if they were not rotated quickly on the log rollers.

In 1947, the mill reported using the Bellingham Barker to remove bark from 11,876 trees...in one week! This operation was the loudest of any at the pulp mill and used up to 70 million gallons of water per day from Lake Whatcom. The log rollers have been kept to showcase the incredible history of Bellingham’s industrial waterfront.



ALCOHOL PLANT

CONSTRUCTED

1945

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The Alcohol Plant was built during World War II to help win the war by producing rubber from pulp mill waste. After bombing Pearl Harbor, Japan invaded Southeast Asia taking over 90% of the world's natural rubber supplies. This created a crisis for the American army which needed large amounts of rubber to support the war effort. In response, the United States lowered the national speed limit to "Victory Speed" of 35 mph, strictly limited how much rubber people could buy, started a nationwide rubber recycling program, and built the Alcohol Plant in Bellingham and other commercial laboratories to synthetically produce rubber (in 1940, only 4% of rubber in the US came from artificial sources). By the end of the war, the US spent as much on its rubber program as it did on the atomic bomb.

Following World War II, Puget Sound Pulp & Timber bought the Alcohol Plant and developed one of the largest wood waste laboratories in the world where some of the world's leading scientists patented hundreds of consumer and industrial products—from vanilla flavoring, pharmaceuticals and anti-freeze to solvents, preservatives, dyes and stains. Each ton of pulp manufactured at the pulp mill could produce 20 gallons of extremely pure, 190 proof ethyl alcohol and the Alcohol Plant had an annual output of 3,200,000 gallons. The Alcohol Plant has been kept for potential adaptive reuse to showcase the incredible history of Bellingham's industrial waterfront.

