BONNEVILLE DAM

A Power and Navigation Project

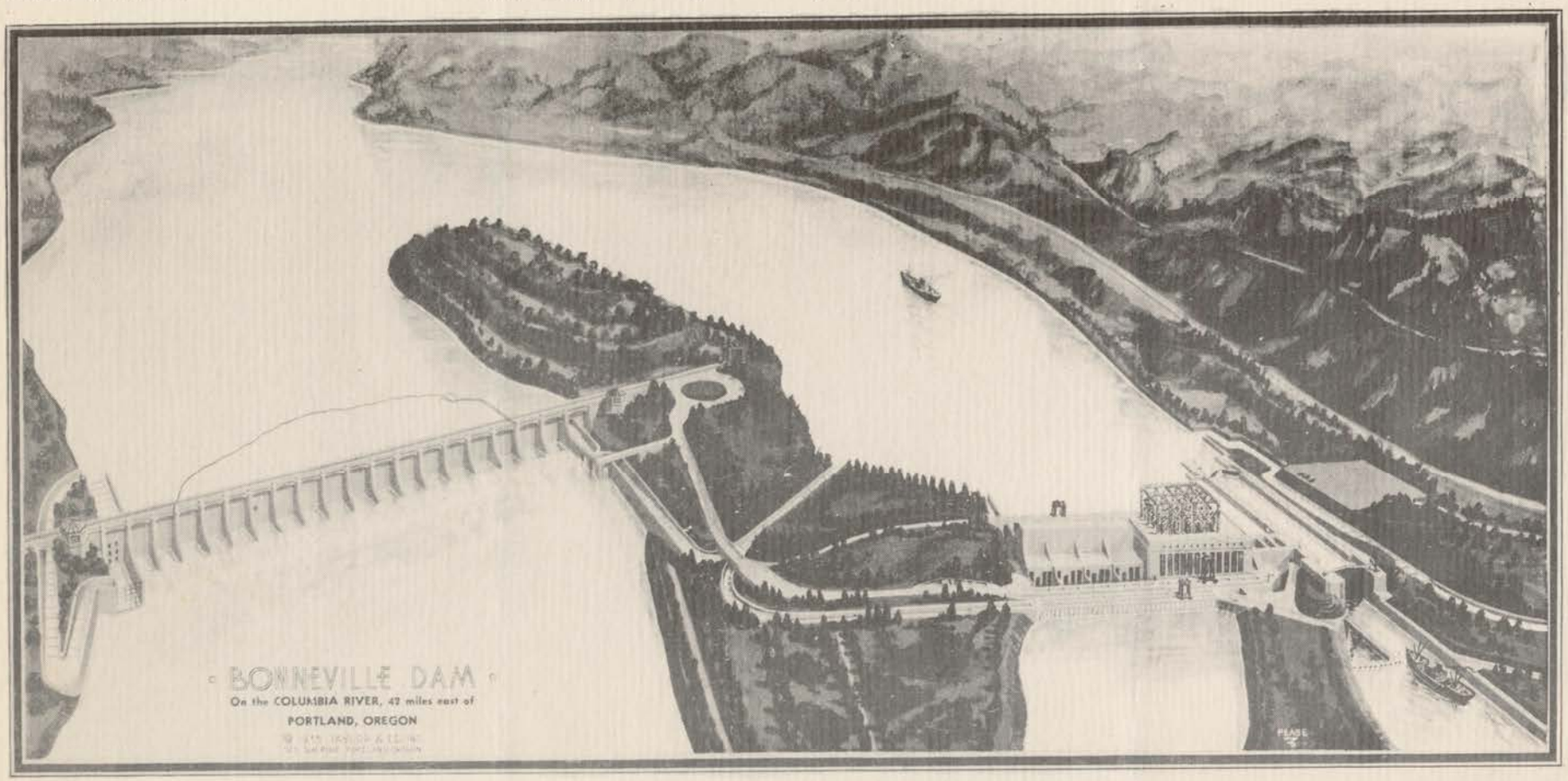
Bonneville Dam is being built under the provision of the National Industrial Recovery Act at a cost of nearly 33 million dollars. The site is 42 miles East of Portland, Oregon, on the Columbia River. When completed it will be the world's largest hydro-electric power project at tidewater and among the largest in America. The water stored behind the dam will form a navigable lake 67 miles long, deep enough for ocean-going vessels.

Spillway Dam

The spillway dam is 1250 feet long, and 75 feet high from the gate sills to the roadway at the top. This, when completed, will be a wall of concrete nearly a quarter of a mile long and higher than a six-story office building. The foundations rest on bedrock 160 feet beneath the surface of the lake.

Navigation Locks

The lock at the right in the picture is the largest single lift ever built. At low water it will raise vessels a height of 66 feet. The lock chamber has an inside clearance 500 feet long and 76 feet wide. The gate shown in the picture is as large as the infield of a regulation baseball diamond.



This drawing shows Bonneville Dam as it will probably look when completed. It is drawn exactly to scale from plans and sketches furnished by the builders.

Fishways

Three huge fish ladders will provide means for salmon and other fish to travel over the dam. These ladders have pools 30 feet wide, 16 feet long, with a one-foot raise between each one. In addition a double fish-lock elevator will be used to further aid fish on their journey up the river. Across the draft tubes of the powerhouse will be a collecting device, leading to the Bradford Island ladder. As an extra precaution a by-pass will be built from the mouth of Tanner Creek to the fore-bay pool, passing south of the navigation lock.

Powerhouse and Equipment

Maximum amount of power to be developed at Bonneville is 600,000 horsepower. The powerhouse shown in the picture will have two generating units of 60,000 h.p. each; space will be available for eight more to be installed as needed. The building will be 608 feet long with an overall width of 210 feet. Each of the two generators weighs 2,000,000 pounds and is 50 feet in diameter.