

GENERAL HISTORY

Drydock No. 3 was built in 1916-1917 by the Union Iron Works at a cost of approximately three and a half million dollars. This drydock is an enlargement of the old Drydock No. 1. The first vessels docked were three of the old four stacker destroyers.

The Navy took over the Dock on December 15, 1941. In 1952, the entire drydock floor, which was of timber construction, was replaced with a reinforced concrete floor. Also, additional stairways were provided, sections of the dock wall were repaired, and salt water, compressed air and chemical service lines were provided the full length on both sides near the bottom of the drydocks. The cost for this item of rehabilitation was \$632,000. At the present time, this dock is among the first fifteen largest graving docks in the world.

PUMPING EQUIPMENT AND OPERATION

Pumping equipment consists of four 750 H.P., 143,000 GPM Byron-Jackson, centrifugal pumps, and two 100 H.P., 1900 GPM, Byron-Jackson centrifugal drain pumps. All motors are squirrel cage induction type and utilize 2400 volt power. In 1951-1952, all motors were re-wound, due to deterioration of the insulation, and modified from reduced voltage to full voltage start.

Sewage is disposed of by means of air ejection equipment. The original pump motor controllers, which were of the reduced voltage class and approximately 400% underrated for the available short circuit current, were replaced in 1953 with new full voltage high interrupting capacity combination fused-magnetic starters.

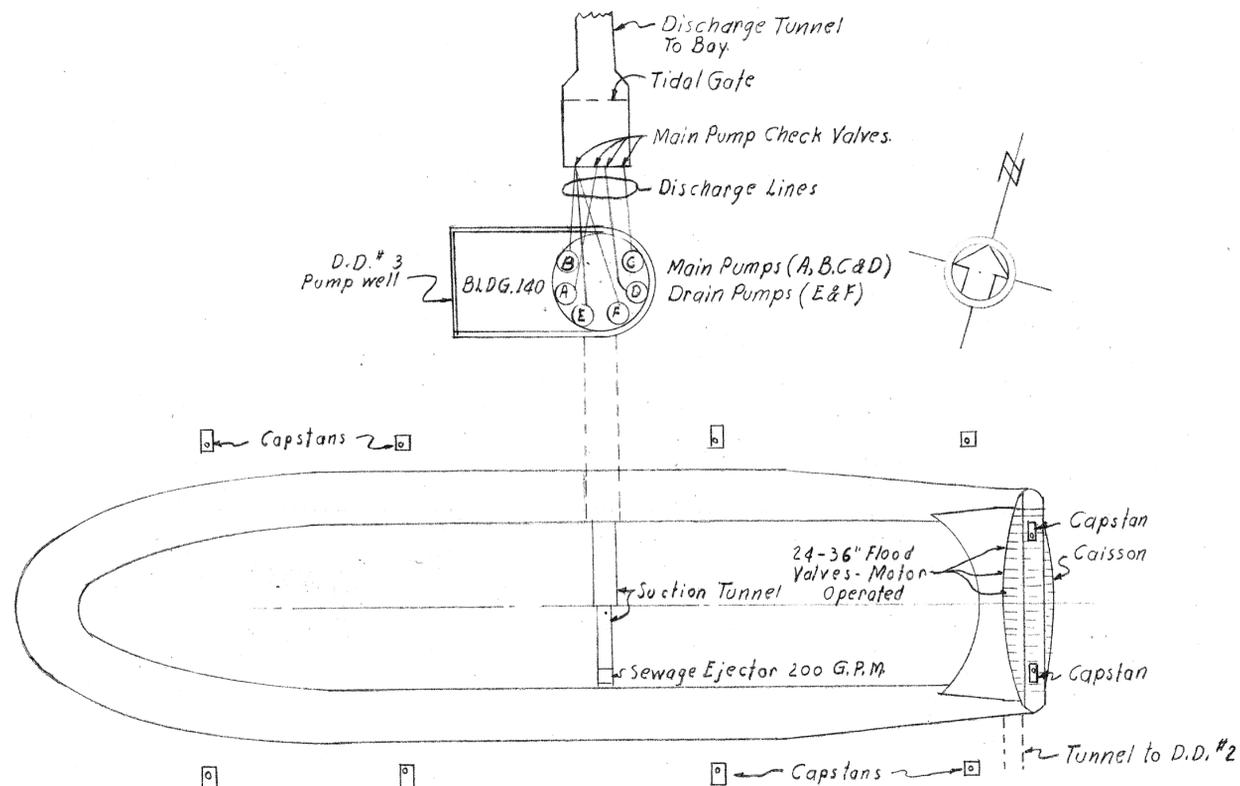
Flooding of the drydock is done through valves in the caisson. On an average the dock can be flooded in an hour with no vessel in the dock. On a straight pumpdown with no vessel in dock, the minimum unwatering time is two and a half hours and utilizing all four main pumps.

CAISSON

The caisson was built by the Union Iron Works at Hunters Point. The mechanical equipment consists of two 50 H.P., GPM Byron-Jackson electrically operated centrifugal type unwatering pumps, twenty-four 36" motor operated valves for flooding the drydock and twelve 8" manually operated valves for the caisson flooding tanks. Transverse and center line bulkheads divide the caisson into six compartments. Four trim tanks and two main ballast tanks control the trim and depth of the caisson. Approximately twenty-five minutes are required to unwater the caisson for handling purposes and thirty minutes to seat it against the dock. Displacement at light load draft is approximately 2500 tons. Not over twenty-five and a half feet of water should be left in the drydock for any length of time as the caisson will not seal off properly against the seat and the dock will fill to tide level.

GENERAL DIMENSIONS

Length.....	1020' - 0"
Width at Coping.....	155' - 6"
Width of Entrance at Coping.....	135' - 0"
Depth over Keel at Mean High Water.....	37' - 1 1/2"
Depth over Keel at Mean Low Water.....	31' - 1 1/2"



SYMBOL	DESCRIPTION	DATE	APPROVAL
REVISIONS			
PWO DRAWING NO. 16020-155	DEPT. OF THE N. Y. NAVAL SHIPYARD	BUREAU OF YARDS & DOCKS SAN FRANCISCO, CALIF.	
DES. DRAWN TR. CHK. SUPV. DESIGN S.	DRYDOCK NO. 3 GENERAL		
APPROVED		DATE	
PUBLIC WORKS OFFICER		7 April 54	
SATISFACTORY TO	SCALE	SPEC	
DATE		SHEET ___ OF ___ NO.	
Y & D DRAWING NO.			