



THE FIRE INSURANCE RATING
 ORGANIZATION OF N. J.
 ENGINEERING DEPARTMENT
 NEWARK 2, N. J.

Ship Bottom-Beach Arlington Borough
Ocean County, New Jersey

OCTOBER 31, 1949

- KEY**
- PROTECTED FIRE ZONE: Shown in Green.
 - NOTE.—For description of fire protection, etc., see other side.
 - Elevations range from 0 to 10 feet above mean sea level.
 - Water mains 8 inches and larger in diameter
 - Water mains 6 inches in diameter
 - Water mains 4 inches in diameter
 - Fire hydrants shown thus
 - Gate valves shown thus
 - Fire house shown thus
 - Fire apparatus designated by symbols thus:
 - Pumping engine and hose car
 - Booster tank or tanks on above

SHIP BOTTOM — BEACH ARLINGTON BOROUGH, OCEAN COUNTY, NEW JERSEY. Including Bonnet Beach, Bonny Beach, and Edgewater Beach.

Population — 1940 Census — 396.

IN GENERAL: A seashore resort located on Long Beach Island between the Atlantic Ocean and Barnegat Bay 6 miles northeast of Beach Haven. Area 0.7 square miles. Elevations range from 0 to 10 feet. Main roads concrete, others gravel and macadam in fair to poor condition. No conditions which might seriously affect the response of fire apparatus.

WATER SUPPLY: Water for domestic and fire protection purposes is furnished by the borough which owns supply works and distribution system. Department is under the supervision of a water superintendent who is appointed annually by the mayor and council and who has held present position since 1937. Superintendent and one man operate system and make taps. A well-equipped truck is provided. Records consist of a map showing the locations of pipe, hydrants, and valves. Superintendent proceeds to pumping station on receipt of alarms of fire. **Supply Works:** System installed in 1927. Water is obtained from two artesian wells 8 inches in diameter and 589 feet deep with an aggregate capacity of 1.094 m.g.d. It is pumped directly into an aerator whence it flows by gravity to a 25,000-gallon suction basin, whence it is pumped through the pressure filter into the distribution system with standpipe acting as equalizer. The pressure filter can be by-passed. **Well Stations:** Located as shown on the map. Well No. 2 is in a small frame structure with asbestos roof and siding. No heat or hand protection. Exposures moderate. Well No. 3 is in a concrete block structure with wood frame roof, oil stove, and no hand protection. Exposures are negligible. **Equipment:** Both wells are equipped with 330-g.p.m. Deming deep well turbines driven by 15-h.p. U. S. electric motors. Well No. 3 has an auxiliary Wisconsin gasoline engine. There is an 8-inch emergency connection to Long Beach Township and a 6-inch emergency connection to Surf City. **Pumping Station:** Located as shown on map. Building is a small one-story brick structure with a small one-story frame annex housing filter. Pump house has tile covered wood roof, concrete floor, electric lights, and oil stove for heating, while filter house has an asbestos shingle roof and asbestos shingle siding. No hand protection. Exposures moderate. Wiring in conduit. Housekeeping fair. Elevation of pump room floor 5 feet. **Equipment:** One 300-g.p.m. Rumsey triplex pump driven by a 25-h.p. Westinghouse electric motor. A 450-g.p.m. Sterling vertical centrifugal pump driven by a 20-h.p. U. S. electric motor. **Filters:** A 0.75-m.g.d. Roberts horizontal pressure filter. **Distribution System:** In one service; see map. An 8-inch and a 6-inch main run parallel from the northern to the southern boundary of the borough well gridironed, and several 4-inch and 6-inch dead end mains supply hydrants. There are closed emergency connections to the Surf City distribution system and the Long Beach Township distribution system. **Standpipe:** Located as shown on map, steel, 16 by 115 feet, capacity 172,000 gallons. Elevation of base 5 feet. Elevation of overflow 120 feet. **Consumption:** The average and maximum daily consumption for the year ending July 1, 1949 was 0.098 and 0.302 million gallons. On December 31, 1948 there were 806 services, none of which was metered. **Pipe:** Cast iron, tar coated, bell and spigot joint, laid with a 30-inch cover. Total length, 52,100 feet; 28.6% 4-inch, 53.3% 6-inch, 17.0% 8-inch, and 1.1% 10-inch. Some trouble from frozen mains; none from electrolysis. **Gate Valves:** There are 140 of Eddy and Wood makes, set with iron boxes at grade. All turn left to open. They are inspected annually. **Hydrants:** There are 69 on the system of R. D. Wood manufacture of standard type with two 2½-inch and one 4½-inch outlets and 6-inch branches; 13 hydrant branches are gated. Hydrants are inspected twice a year. Those operated during survey were found to be in good condition. All outlets are National Standard. **Pressures:** Gauge in pumping station showed a pressure of 48 pounds. Readings taken at 3 hydrants widely distributed showed pressures of 40 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on July 13, 1949 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Fourth and Ocean Aves., 310—40—*.
Long Beach Blvd. and 21st St., 840—40—25
Thirtieth St. and Ocean Ave., 300—40—*.

*No reading taken.

FIRE DEPARTMENT: A volunteer organization of one company under partial control of the borough. Company owns house, apparatus, and equipment. The Borough of Ship Bottom-Beach Arlington appropriated \$1,500, the Borough of Surf City appropriated \$250 and the Township of Long Beach appropriated \$1,000 for the support of the fire department. Active membership 23, of whom about 6 are available at all times. There are a chief, assistant chief, and a foreman who are elected annually by the company. **Company — Ship Bottom-Beach Arlington Volunteer Fire Company No. 1:** Located on Central Avenue near 21st Street. Building is a one-story frame structure with a wood shingle roof, wood apparatus floor, oil stove for heat, and electric lights. **Equipment:** A 1933 Mack 500-g.p.m. triple combination pumping engine carrying an 80-gallon booster tank, 200 feet of booster hose, 1,100 feet of 2½-inch hose, 2 short ladders, and fair minor equipment. A 1937 Ford-Pirsch 500-g.p.m. triple combination pumping engine carrying a 200-gallon booster tank, 300 feet of booster hose, 1,000 feet of 2½-inch hose, 350 feet of 1½-inch hose, 2 short ladders, and fair minor equipment. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. It is tested twice a year at 200 pounds and shifted four times a year; 1,600 feet of 2½-inch hose is over five years old and there is 600 feet in reserve. **Operations:** Department governed by borough ordinance and company by-laws. Chief has control of apparatus at all times and of men at fires and drills. He can suspend members. Motors are started twice a week. All members drive, but there are 10 members who are assigned to operate the pumps. **Drills and Training:** Monthly drills are held under the supervision of the chief officers. **Fire Methods:** Booster streams used on incipient fires reinforced with engine and hydrant lines with shut-off nozzles. Engine usually hooks up. No gas masks, salvage equipment, nor heavy stream appliances are provided. **Response to Alarms:** Entire department responds to all alarms in the borough, to Surf City, and to sections of Long Beach Township. Outside aid may be secured from Beach Haven. **Building Inspection:** The chief makes an occasional inspection of schools and stores. **Records and Reports:** Records of all fires are kept by secretary in minutes of company. **Fire Alarms:** Alarms of fire are telephoned to homes of various members and are sounded on siren at fire house from either a remote control switch in the business district or switch at fire house.

POLICE DEPARTMENT: Consists of a chief and 2 officers. A car with 2-way radio is provided. Police respond to all alarms of fire.

BUILDING LAWS: Code adopted August 28, 1937 provides for the appointment of a building inspector and requires that permits be secured before building operations may begin. Code has some good regulations from a fire protection standpoint, but in general does not conform to the recommended National Building Code. Fire limits are not established and combustible roof coverings are allowed throughout the borough. State laws provide some good regulations for construction of factories, tenement houses, and public schools, and fire protection and safety features for hotels.

FIRE PREVENTION LAWS: No municipal regulations. State laws adequately cover the manufacture, storage, and handling of explosives, and provide for regulations governing their intrastate transportation. They also restrict the discharge of fireworks to responsible bonded parties and embody good requirements for motion picture booths and the hazard incident to the display of motion pictures except that flammable film and portable booths are permitted for temporary exhibitions, and enclosures for projection equipment are not required in schools. The State Tenement House Act restricts keeping and handling of certain combustible materials in tenements.