



KEY

PROTECTED FIRE ZONE: Shown in Green.

NOTE.—For description of fire protection, etc., see other side.

Elevations range from 0 to 26 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:

- (Y) Pumping engine and hose car
- (L) Ladder truck
- (O) Booster tank or tanks on above

Schedule Rating Office of New Jersey
ENGINEERING DEPARTMENT
NEWARK, N. J.

Avon by the Sea Borough
Monmouth County, N. J.

OCTOBER 31, 1942

AVON-BY-THE-SEA BOROUGH, MONMOUTH COUNTY, NEW JERSEY.

Population—Census of 1940 was 1,211.

Estimated Summer Population 5,000.

IN GENERAL: Located on the Atlantic Ocean on the New York and Long Branch Railroad south of Bradley Beach Borough. Chiefly a residential community and a summer resort. Area 0.4 square miles. Elevations range from 0 to 26 feet. Main roads concrete, others gravel and macadam in good condition. Traffic in business district is said never to have interfered with 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 and supplies water to the borough only. **Organization:** System is under the supervision of the commissioner of public works. A superintendent maintains and operates system using laborers from the street department for extensions and construction. Superintendent is appointed annually by board of commissioners. He responds to all alarms of fire. A well equipped truck is provided. Records consist of a distribution map which is slightly incomplete. **Supply Works:** Water is obtained from two 12-inch wells 510 feet deep with a capacity of 0.5 m.g.d. each and from one 18-inch well 1,150 feet deep with a capacity of 1.15 m.g.d. The deepest well is held in reserve as water from this well has to be passed through water softeners. Water is discharged directly into distribution system with elevated tank acting as equalizer. There is an 8-inch closed emergency connection to the Monmouth Consolidated Water Co. distribution system in Bradley Beach. **Well Stations:** One well is located on Stanton Place adjacent to fire house as shown on map. Building is a 1-story small area brick structure with a slag roof, electric lights, coal stove for heat, and wired glass windows. No exposures. No hand protection. Wiring in conduit. Housekeeping good. Elevation of floor about 20 feet. **Equipment:** A 0.5-m.g.d. Layne deep well turbine driven by a 50-h.p. G. E. electric motor. The other well station is located on Woodland Avenue near New York and Long Branch Railroad tracks as shown on map. Building is a 1-story hollow tile structure with a slag roof, electric lights, coal stove for heat, and one 2½-gallon soda and acid extinguisher. Mild exposures. Wiring in conduit. Housekeeping poor. Elevation of floor about 20 feet. A 0.5-m.g.d. Layne deep well turbine driven by a 50-h.p. G. E. electric motor. A 1.15-m.g.d. Layne deep well turbine driven by a 75-h.p. G. E. electric motor. Two 1.0-m.g.d. Permutit water softeners. **Distribution System:** In one service; see map. Supply from elevated tank and well stations is through a single unsupported 10-inch line extending east to Main Street whence an 8-inch artery extends north and south to supply a 6-inch gridiron. Arterial system is generally poor with a few unsupported 6-inch lines supplying hydrants. **Elevated Tank:** Located on Woodland Avenue as shown on map; steel, on a 100-foot steel tower. Elevation of base about 20 feet. Elevation of overflow 148 feet. Capacity 200,000 gallons. **Consumption:** The average and maximum daily consumption during 1941 was 0.190 and 0.264 m.g.d. On December 31, 1941 there were 910 services; all of which were metered. **Pipe:** Cast iron, tar coated, bell and spigot joint, laid with about a 3½-foot cover. Total length 36,600 feet; 49% 10-inch, 60% 8-inch, 83.1% 6-inch and 60% 4-inch. No trouble reported from frozen mains, electrolysis, nor tuberculation. **Gate Valves:** There are 92 of Rensselaer make set with iron boxes to grade. Direction of operation is uniform. No regular inspection. **Hydrants:** There are 48 of Corey make of standard type with two 2½- and one 4½-inch outlets and 4- or 6-inch branches, of which 10 are gated. Hydrant hose outlet threads are National Standard Steamer outlet threads are 4-inches outside diameter and have 7½ threads per inch. **Pressures:** A recording gauge in borough hall on Main Street showed pressures ranging from 50 to 60 pounds. Readings taken at 3 well distributed hydrants showed pressures ranging from 54 to 55 with an average of 55 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on September 14, 1942 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow and pressure during flow were as follows:

Main St and Garfield Ave., 565—54—50

1st Ave and Eastend Ave., 940—55—24

Ocean Ave., 200 ft S of Lincoln Ave., 930—55—40.

FIRE DEPARTMENT: A volunteer organization of two companies under full control of borough which owns house, apparatus, and equipment and appropriated \$2,400 for the support of the department during 1942. Total active membership 37, of whom an average of 20 are available during the day and 22 during the night. A chief, an assistant chief, 2 foremen, and 2 assistant foremen are elected annually by the company and confirmed by the commissioners. **Companies—Avon Hose Company:** Membership 19. Located on Main Street and Stanton Place. Building is a 2-story cement block and frame structure with a slate roof, concrete apparatus floor, steam heat, and electric lights. **Equipment:** A 1922 American La France 500-g.p.m. double combination pumping engine carrying 900 feet of 2½-inch hose, 250 feet of 1½-inch hose, 2 short ladders and some minor equipment. A 1939 Ward La France 500-g.p.m. triple combination pumping engine carrying a 250-gallon booster tank, 150 feet of booster hose, 1,050 feet of 2½-inch hose, 2 gas masks, 2 short ladders, and fair minor equipment. **Active Company:** Membership 18. Housed with Avon Engine Company. **Equipment:** A 1922 Mack city service ladder truck carrying 9 ladders ranging from 12 to 50 feet and totaling 236 feet, a 40-gallon booster tank with CO₂ for expellant, 200 feet of booster hose, 2 gas masks, 2 salvage covers, and fair minor equipment. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. It is tested at drills at from 250 to 300 pounds pressure, shifted at fires and drills, and dried on hose rack. There is a total supply of 1,950 feet of 2½-inch hose, of which none is held in reserve and none is over seven years old. **Operations:** Department is under the supervision of the commissioner of public safety and is governed by borough ordinances and company by-laws. Chief has control of apparatus at all times and of men at fires and drills. He may suspend members pending a hearing before company. Motors are started daily. There are 9 members of the department who are assigned to drive apparatus. **Drills and Training:** Drills held monthly under the supervision of chief officers consist of hose laying, pump operation, ladder raising, and use of equipment. **Fire Methods:** Booster streams used on incipient fires reinforced by engine lines with shut-off nozzles. Gas masks and salvage equipment are provided, but no heavy stream appliances are carried. **Response to Alarms:** Entire department responds to all alarms in borough. Outside aid may be secured from Bradley Beach, Neptune City, and Belmar. **Building Inspection:** None by the department. **Records and Reports:** Records consisting of attendance and location are kept of all fires. **Fire Alarms:** Alarms of fire may be telephoned through the Asbury Park exchange over one of three trunks, none of which is reserved exclusively for fire calls, to the borough hall during the day or police station during the night. Alarms are sounded manually on air horn at fire station.

POLICE DEPARTMENT: Consists of an acting chief, 4 patrolmen, and 2 specials working in 9-hour shifts. A car equipped with one-way radio is provided. There are 3 police signaling boxes over which men report. Patrolmen respond to all alarms of fire and report unauthorized building construction to building inspector.

BUILDING LAWS: Code adopted April 4, 1939 provides for the appointment of a building inspector and requires that plans be submitted and permits issued before building operations may begin. Code closely follows the Code of Suggested Ordinances as recommended by the National Board of Fire Underwriters. Fire limits are established and flammable roof coverings are prohibited throughout the borough.

EXPLOSIVES AND FLAMMABLES: An ordinance adopted March 21, 1939 closely follows the Code of Suggested Ordinances as recommended by the National Board of Fire Underwriters. The building inspector is placed in charge of enforcement. State laws adequately cover the storage and shipment of explosives and flammables and the construction of motion picture booths. They also restrict the discharge of fireworks to responsible bonded parties.