

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

Barnegat
Union Township
Ocean County, New Jersey

OCTOBER 30, 1943

KEY

PROTECTED FIRE ZONE: Shown in Green.

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

Elevations range from 20 to 70 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) Automobile combination pumper and hose car

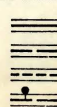
(R) Hose reel

(L) Ladders on above

(B) Booster car

(T) Booster tank or tanks on above

(H) Hand drawn apparatus



BARNEGAT, UNION TOWNSHIP, OCEAN COUNTY, NEW JERSEY.

Population—Township Census of 1940 was 1,045. Estimated Summer Population—1,500.

IN GENERAL: Located on the southern subdivision of the Central Railroad of N. J. about 2 miles from Barnegat Bay and 16.7 miles south of Toms River on State Highway No. 4. It is a summer resort with a very small amount of manufacturing and salt hay and fishing industry. One saw mill employs 25 men. Area of developed section 0.4 miles. Elevations range from 20 to 70 feet. Main road concrete, others gravel in good condition. It is reported that grade crossing has not delayed response of fire apparatus.

WATER SUPPLY: The Barnegat Water Company, a subsidiary of Delaware Valley Utilities, owns and operates the water system and supplies water for domestic and fire protection purposes to the Barnegat section of Union Township. **Organization:** Superintendent operates pumping station, maintains system, and attends to billing and collecting. Local plumber makes repairs, taps, and extensions. Records incomplete. **Supply Works:** Built in 1909. Water is obtained from two 8-inch wells, 150 feet deep, by natural flow to receiving well of 30,000 gallons capacity, or by direct suction and discharged into mains with elevated tank acting as equalizer. Well yield estimated at 0.212 m.g.d. **Pumping Station:** Located as shown on map. Building is a small area 1-story concrete block structure with wood shingle roof, concrete floor, electric lights, and pot type oil stove for heat. No hand protection. Exposure negligible. Wiring in conduit. Housekeeping fair. Elevation of pump room floor about 35 feet. **Equipment:** One Worthington centrifugal pump, 180 g.p.m. capacity, directly connected to a 10-h.p. G. E. electric motor. One Deming triplex pump in reserve, rebuilt in 1941, rated capacity 500 g.p.m. operated at 300 g.p.m., directly connected to a 25-h.p. Otto K. O. engine. **Distribution System:** In one service consisting of an 8-inch artery supplying a small amount of 4- and 6-inch gridiron and dead end mains. **Elevated Tank:** Steel, with hemispherical bottom, on a 100-foot steel tower 35' x 10'; capacity 50,000 gallons. Elevation of base 36. Elevation of overflow 171. **Consumption:** The average and maximum daily consumption is 40,000 and 80,000 gallons. There are 250 services, one of which is metered. **Pipe:** Cast iron, tar coated, bell and spigot joint, A.W.W.A. Class "B," laid with 3½- to 4-foot cover. Total length, 16,070 feet; 56.1% 4-inch, 37.6% 6-inch, 6.3% 8-inch. No trouble reported from freezing or electrolysis. **Gate Valves:** There are 21 gate valves on the system of Pratt and Cady and Wood makes. They are set with iron boxes to grade and operate uniformly. Gate valves are inspected quarterly and fire department is notified when valves are operated affecting hydrant supply. **Hydrants:** There are 31 hydrants on the system of standard type of Mathews, Cory, and Pratt & Cady makes. All have 4-inch ungated branches except one with a 6-inch branch, and all have two 2½-inch outlets; eight have one 4-inch outlet in addition. The 2½-inch outlets are National Standard but the 4-inch outlets are 5-inches outside diameter with 4 threads per inch. Hydrants are inspected quarterly and at time of survey those examined were found in good condition. **Pressures:** Recording and direct reading pressure gauges at pumping station show 50 pounds when tank is full. Readings taken at 6 hydrants showed pressures ranging from 41 to 57 pounds with an average of 50.8 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured in 1921 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. last hydrant north, 640—54—28.
Main St. and Bay Ave., 1,195—49—22.
Bay Ave. next to last hydrant east, 250—54—2.
Bay Ave. last hydrant east, 240—*—*.
Main St. next to last hydrant south, 250—*—*.
Main St. last hydrant south, 190—41—1.
School St. at bend, 600—50—18.
Bay Ave. next to last hydrant west, 280—57—6.

*No reading taken.

FIRE DEPARTMENT: A volunteer organization of one company under partial control of the township which partially owns quarters and equipment, and appropriated \$2,000 for the support of the department during 1943. Total active membership 19, of whom an average of 7 men are available during the day and 12 at night. Chief, assistant chief, foreman, and assistant foreman are elected annually by the company and confirmed by the township. Fire chief is employed out of town and is available approximately 3 days a week. **Company:** Fire house located on Bay Avenue between Main and Church Streets. Building is a 2-story brick and concrete block structure with a concrete apparatus floor, slag roof, electricity, hot air heat, and a 5-h.p. Federal electric siren located on roof. **Equipment:** One 250-g.p.m. 1940 Reo-Hale booster car equipped with a 1,100-gallon booster tank, 275 feet of booster hose, 600 feet of 1½-inch hose, 3 shut-off nozzles, 24 feet of 2½-inch hard suction and some minor equipment. One 1924 350-g.p.m. Reo-Hale triple combination pumper carrying one 185-gallon booster tank, 250 feet of booster hose, 800 feet of 2½-inch hose, 200 feet of 1½-inch hose, 3 lengths of hard suction, 3 shut-off nozzles, two 15-pound CO₂ extinguishers, 2 soda and acid extinguishers, and some minor equipment. One 500-g.p.m. 1930 Reo-Hale triple combination pumper carrying a 65-gallon booster tank, 225 feet of 1-inch booster hose, 1,200 feet of 2½-inch hose, 30 feet of 4½-inch hard suction, 3 shut-off nozzles, 2 all-service masks, 2 short ladders, and considerable minor equipment. One hand drawn reel with 300 feet of 1-inch hose, 2 spanners, 2 play pipes, and shut-off nozzle. One hand drawn reel with no hose, 2 spanners, 2 play pipes, and 6 ladders from 12 to 40 feet, totaling 125 feet. Reels are kept in reserve. **Hose:** All hose is C.R.L. with National Standard threads. Hose is shifted on apparatus and water run through it once a month and dried on the apparatus floor. Twenty percent of hose is over 5 years old, 60% under 5 years old, and 20% is new. Hose is tested annually at 250 pounds pressure. There is 500 feet of 2½-inch and 200 feet of 1½-inch hose in reserve, stored in rolled lengths on apparatus floor. **Operations:** Chief has control of apparatus at all times and of men at fires and drills. He has no power to suspend members, but may prefer charges. Motors are started once a week. There are 8 members appointed as drivers. **Drills and Training:** Drills are held weekly during the summer and monthly during the winter under supervision of acting assistant chief. They consist of hose laying, pump operation, and lectures on use of equipment. **Fire Methods:** Booster streams are used on incipient fires reinforced by engine streams with shut-off nozzles. Gas masks are carried, but neither salvage covers nor heavy stream appliances are provided. **Response to Alarms:** All apparatus responds to alarms in township except hand reels which are sent for if needed. Aid may be secured from Waretown, Manahawkin, Beach Haven, and Tuckerton from 4 to 17 miles distant. **Building Inspection:** Some inspections are made by chief officers, but no suitable regulations for enforcement of recommendations are provided. **Records and Reports:** Consist primarily of attendance and incomplete fire reports. **Fire Alarms:** Alarms of fire are telephoned to business places or homes of assistant chief and members, or by runner and sounded on siren at fire house.

POLICE DEPARTMENT: Consists of a chief and 2 paid patrolmen and 4 volunteer marshals. Patrolmen work on 12-hour shifts. Chief is subject to call. No municipally owned vehicles are provided.

BUILDING LAWS: No municipal regulations.

EXPLOSIVES AND FLAMMABLES: No municipal regulations. 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.

ZONING ORDINANCE: None.