



KEY

PROTECTED FIRE ZONE: Shown in Green.

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

Elevations range from 520 to 860 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

(H) Hose car

(O) Booster tank or tanks on above

(C) Chemical tank or tanks on above

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

**Rockaway Borough
Morris County, New Jersey**

SEPTEMBER 30, 1940.

ROCKAWAY BOROUGH, MORRIS COUNTY, NEW JERSEY.

Population—Census of 1930 was 3,132.

IN GENERAL: Located on the D. L. & W. R. R. and the C. R. R. of N. J. about three miles northeast of Dover. It is a residential and industrial community with about 10 manufacturing plants normally employing about 600. Area is 1.5 square miles. Elevations range from 520 to 860 feet. The majority of the streets are improved in fair to poor condition. It is said that railroad crossings at grade do not interfere with the response of fire apparatus.

WATER SUPPLY: Borough owns and operates supply works and distribution system and supplies water for domestic and fire protection purposes to Rockaway Borough. **Organization:** Borough clerk supervises the department which consists of a superintendent and one helper, and other laborers where needed. Yard adjoins the Ogden Avenue Pumping Station and the shop is located in the Union Avenue Pumping Station. Repairs and extensions are in charge of the superintendent who is provided with a small truck. Superintendent proceeds to the pumping station on alarm of fire. There is no distribution map and no records are kept of valve and hydrant locations or inspections. **Supply Works:** Built in 1899. Supply at pumping station on Union Avenue is derived from one driven well 50 feet deep which is said to yield 380 g.p.m. Supply at Ogden Avenue Pumping Station is derived from one driven well 52 feet deep, said to yield 260 g.p.m. **Pumping Stations—Union Avenue Pumping Station:** Located on Union Avenue near Jackson Avenue as shown on map. Building is a small 1-story brick structure with concrete floor, reinforced concrete roof, and electric lights. No heat. No hand protection. Exposures slight. Wiring in conduit. Housekeeping poor. Elevation of floor about 600 feet. Power is obtained from a single overhead electric service. **Equipment:** Consists of one 380-g.p.m. Layne deep well pump driven by a 40-h.p. G. E. motor. **Ogden Avenue Pumping Station:** Located on Ogden Avenue as shown on map. Building is a small 1-story stucco on hollow tile structure with concrete floor, reinforced concrete roof, and electric lights. No hand protection. Exposures negligible. Wiring in conduit. Housekeeping fair. A small portable oil stove supplies heat. Elevation of floor about 600. **Equipment:** One 260-g.p.m. Layne deep well pump driven by a 40-h.p. G. E. motor. Both pumps are operated manually, the one on Union Avenue being operated daily for about 10 hours, while the one at the Ogden Avenue Station is used only about two or three times weekly. **Distribution System:** In one service consisting of 6- and 4-inch lines with a small amount of gridiron and numerous long dead ends. See map. **Reservoir:** Located in Rockaway Township northeast of Mount Hope Road about 1½ miles northwest of the borough limits. It is of concrete construction with a composition on wood roof; dimensions 24 x 24 x 21 feet. capacity 108,000 gallons; elevation of overflow about 845 feet. **Consumption:** Average and maximum daily pumpage during 1939 was 79,000 and 88,000 gallons. There are 749 live services of which 24 are metered. **Pipe:** All pipe is cast iron, tar coated, bell and spigot joint, laid with about 4-foot cover. No trouble was reported from frozen mains or electrolysis. Total length 56,000 feet; 1.8% 10-inch, 22.8% 8-inch, 30.8% 6-inch, 44.6% 4-inch. **Gate Valves:** Statistics were not obtainable as to the number of valves on the system. They are of various makes with valve boxes set at grade and all turn left to open. Inspection is irregular, but fire department is notified when valves affecting hydrant supply are operated. **Hydrants:** There are 100 on the system, 97 of which are of Corey make, the balance being Ludlow, Darling, and Wood makes. All are of standard type with 4- or 6-inch branches, 57 having two 2½-inch outlets, 2 having three 2½-inch outlets, one having four 2½-inch outlets and the balance having two 2½- and one 4½-inch outlets. It is estimated that about 20% of the hydrants have independent gates. Inspection of hydrants is irregular and condition of hydrants at time of inspection was found to be fair. **Pressures:** There is no recording gauge on the system. Readings taken at 16 well distributed hydrants showed pressures ranging from 28 to 90 pounds with an average of 65 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on July 12, 1940 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow and pressure during flow were as follows:

Lindberg La. and Overlook Dr., 210—28—*.
Woodland Ave. and State Highway No. 6, 240—73—*.
Franklin Ave. at D. L. & W. R. R., 80—70—*.
Franklin Ave. 1,200 ft. S/W of E. Main St., 80—*—*.
Franklin Ave. 750 ft. S/W of E. Main St., 200—80—12.
E. Main and Beach Sts., 500—70—22.
Summit St. and Hillside Ave., 140—34—*.
Rockaway Ave. and Jefferson St., 380—80—33.
E. Main St. and State Highway No. 6, 210—70—10.
E. Main St. 750 ft. W. of State Highway No. 6, 430—70—20.
W. Main and Wall Sts., 1,150—70—25.

Mt. Pleasant and Easton Aves., 80—45—0.
Chestnut Ter. and Hickory Ave., 360—34—*.
White Meadow Ave. and John St., 120—55—0.
Hibernia Ave. and Union St., 540—90—25.
Hibernia Ave. and Oak St., 440—90—15.
Broad St. 750 ft. E. of Beach St., 140—84—*.

* No reading taken.

FIRE DEPARTMENT: A volunteer organization of three companies under partial control of the borough. The borough owns the house, apparatus and equipment and appropriated \$2,000 for 1940 for the department's support. Total active membership 53 of whom about half are available at all times. Officers include a chief, first and second assistant chiefs, and for each company a foreman and first and second assistant foremen. They are elected annually by the companies with the approval of the borough council. **Companies:** All three companies are located on the first floor of the borough hall which is on East Main Street at East New Street as shown on map. Building is a 2½-story brick structure with slate roof, concrete apparatus floor, steam heat and telephone. **Engine Company No. 1:** Membership 21. **Equipment:** Consists of a 1925 American La France 400-g.p.m. triple combination pumping engine carrying a 120-gallon booster tank, 200 feet of booster hose, 1,100 feet of 2½-inch hose, 2 lengths of hard suction hose and one length of soft suction hose, 1 all-service gas mask, 2 short ladders, and good minor equipment. **Engine Company No. 2:** Membership 16. **Equipment:** Consists of a 1927 American La France 600-g.p.m. triple combination pumping engine carrying a 120-gallon booster tank, 150 feet of booster hose, 900 feet of 2½-inch hose, 2 lengths of hard suction hose and 1 length of soft suction hose, 1 turret nozzle, 1 all-service gas mask, 2 short ladders, and good minor equipment. **Hose Company No. 1:** Membership 16. **Equipment:** Consists of a 1927 Star hose car carrying 550 feet of 2½-inch hose, 300 feet of 1½-inch hose, 2 all-service gas masks, 2 salvage covers, 2 short ladders, and good minor equipment. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. It is dried on the apparatus floor, shifted about every three months and tested about twice annually. Almost none of the hose is over five years old. There is no reserve supply of hose. **Operations:** Department is governed by borough ordinance and company by-laws. Chief has full control of apparatus at all times and of men at fires and drills. He has power to suspend members pending a hearing before the council. Motors are not started regularly. Each company has five appointed drivers who also act as pump operators. **Drills and Training:** Drills are held about once monthly under the supervision of the company officers. They consist of pump operation, hose and ladder work and the use of minor equipment. All three companies regularly drill as a department. **Fire Methods:** Booster lines are used on incipient fires reinforced with engine and hydrant lines with shut-off nozzles. One engine hooks up to hydrant upon arrival at fire unless the fire is known to be a grass fire. Four all-service gas masks are provided and there are two waterproof covers as well as a distributor nozzle and turret nozzle, but there are no other heavy stream appliances or salvage equipment. **Response to Alarms:** All three companies respond to all alarms within the borough. Outside aid may be secured from the volunteer departments of Wharton, Dover, and Denville. **Building Inspection:** There are no regular inspections made. **Records and Reports:** Fairly complete records are kept by the secretary of the department who submits a monthly report to the borough council. **Fire Alarms:** Alarms of fire are telephoned by means of a private line reserved for fire calls, to the Liondale Bleach and Dye Company where there is an attendant on duty at all times. Alarms are sounded by code on the factory whistle.

POLICE DEPARTMENT: Consists of one full-time chief, and one lieutenant and one patrolman on call duty. Chief uses his own car.

BUILDING LAWS: Code adopted February 18, 1936 provides for the appointment of an inspector, requires that plans and specifications be submitted and a permit obtained before building construction may commence, and covers such points as chimney construction and firestopping, but it not sufficiently comprehensive from a fire protection standpoint. Fire limits are not defined and wooden shingle roofs are permitted within the business district.

EXPLOSIVES AND FLAMMABLES: No municipal regulations. State laws adequately cover the storage and shipment of explosives and the construction of motion picture booths and restrict the discharge of fireworks to responsible bonded parties.

ZONING ORDINANCE: Adopted July 9, 1936.