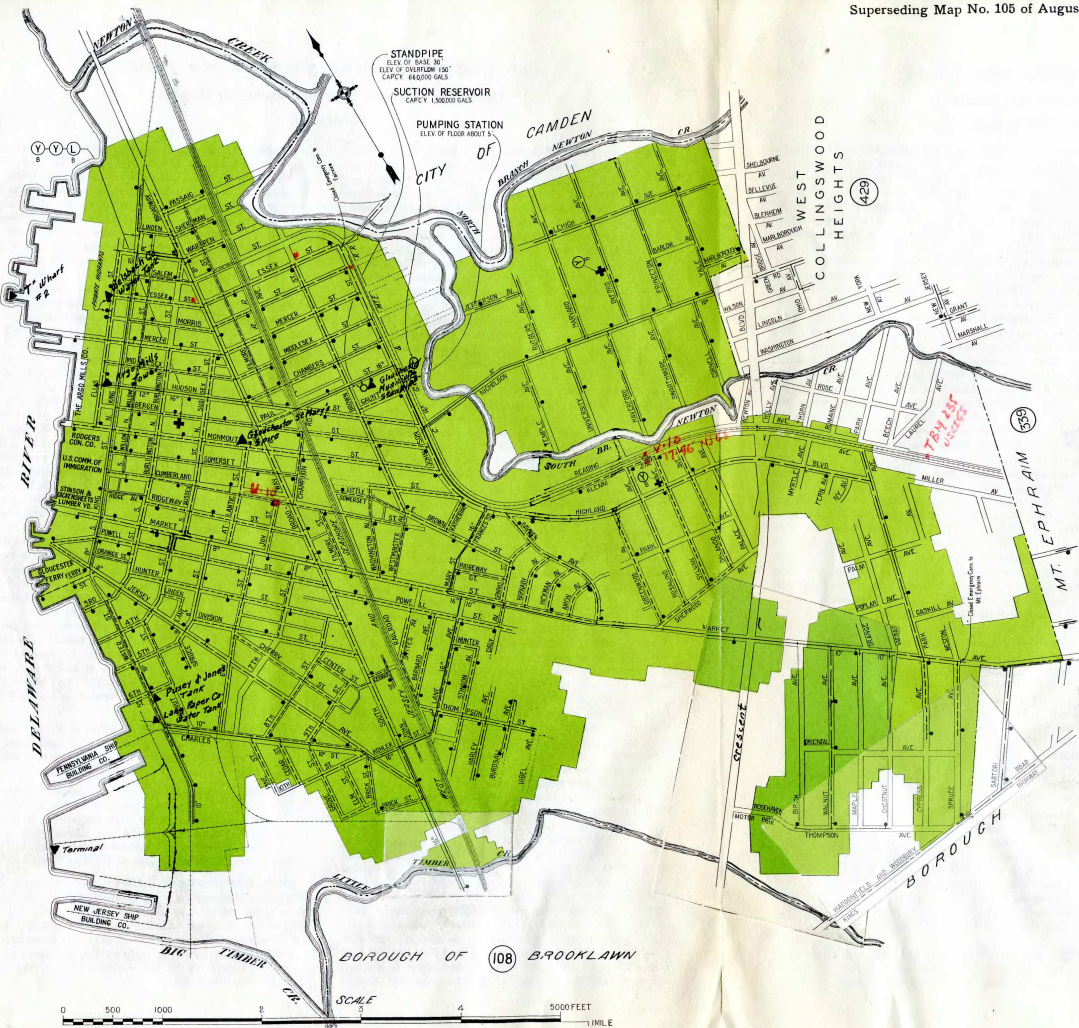


Superseding Map No. 105 of August 15, 1936. Please destroy old issue.



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

Gloucester City
Camden County, New Jersey

AUGUST 15, 1949

KEY
PROTECTED FIRE ZONE: Shown in Green.
NOTE.—For description of fire protection, etc., see other side.

Elevations range from 0 to 25 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
Ⓛ Ladder truck
Ⓚ Booster tank or tanks on above

August 15, 1949.

GLOUCESTER CITY, CAMDEN COUNTY, NEW JERSEY.

(Including Highland Park and Gloucester Heights.)

Population — 1940 Census — 13,692.

IN GENERAL: Located on the Delaware River adjoining the southerly limits of Camden. It is mainly a manufacturing community with an area of about 3.4 square miles. Elevations range from 0 to 25 feet. Streets are mainly paved or hard surfaced in fair to good condition. Railroad crossings at grade should not seriously affect the operations of the fire department.

WATER SUPPLY: The city owns and operates the supply works and distribution system furnishing water for domestic and fire protection purposes to Gloucester City only. **Organization:** The system is in charge of a water superintendent who is appointed for an indefinite term and is responsible to a water committee composed of three members of the city council. The water superintendent and 11 regular employees operate and maintain the system. Extra help is obtained when needed. A gong, connected to the fire alarm system, is located in the pumping station and one man with a truck and supplies is always available for emergency aid in case of fire. Records of pumping statistics are kept but pipe and valve data are not reliable. **Supply Works:** Original plant was built in 1883. Since that time many changes and improvements have been made. A number of new wells have been installed since 1938. There are 9 wells with a total yield of at least 4,608 m.g.d. which is the total capacity of the well pumps. Six wells are in the open and three are located in small area one-story frame structures near the pumping station. Well No. 2 is 175 feet deep, with an 8-inch casing and is operated by a 0.360-m.g.d. Sterling deep well turbine equipped with a 10-h.p. electric motor. Well No. 30 is 175 feet deep with an 8-inch casing and is operated by a 0.432-m.g.d. Cook deep well turbine equipped with a 10-h.p. electric motor. Well No. 32 is 175 feet deep with an 8-inch casing and is operated by a 0.648-m.g.d. Cook deep well turbine equipped with a 15-h.p. electric motor. Well No. 33 is 240 feet deep with a 16-inch casing and is operated by a 0.504-m.g.d. Cook deep well turbine equipped with a 25-h.p. electric motor. Well No. 34 is 175 feet deep with an 8-inch casing and is operated by a 0.360-m.g.d. Cook deep well turbine equipped with a 10-h.p. electric motor. Well No. 35 is 130 feet deep with an 8-inch casing and a 0.576-m.g.d. Cook deep well turbine equipped with a 10-h.p. electric motor. Well No. 36 is 120 feet deep with an 8-inch casing and a 0.432-m.g.d. Cook deep well turbine equipped with a 10-h.p. electric motor. Well No. 37 is 130 feet deep with an 8-inch casing and a 0.576-m.g.d. Cook deep well turbine equipped with a 15-h.p. electric motor. Well No. 38 is 300 feet deep with a 10-inch casing and a 0.720-m.g.d. Cook deep well turbine equipped with a 15-h.p. electric motor. Water is pumped from wells through an aerator to a 90,000-gallon settling tank; thence it flows by gravity through 6 rapid sand filters of 0.5-m.g.d. capacity each; thence by gravity to an open concrete reservoir of 1.5 million gallons capacity. High lift pumps take suction from reservoir under a slight head and pump into the distribution system with a standpipe acting as an equalizer. **Pumping Station:** Located on Johnson Street near Gaunt Street. Elevation of floor about 5 feet. Building is a one-story cement block and brick structure with a concrete floor, unprotected steel truss roof with gypsum and asbestos

shingles. Space heaters, electric lights, and hand protection are provided. Housekeeping is excellent. Exposures are negligible except on one side from filter and storage building. Station is operated in 3 shifts with 2 men on night shift and 3 during the day shifts. **Equipment:** Two 180-h.p. Diesel engines each driving a 120-k.w. electric generator which is used for standby power. Public Service power is normally used for station operation. One 1.0-m.g.d. high lift Buffalo centrifugal pump driven by a 40-h.p. electric motor. One 2.0-m.g.d. high lift Buffalo centrifugal pump driven by a 100-h.p. electric motor. One 10-inch x 8-inch Ingersoll-Rand air compressor driven by a 20-h.p. electric motor. **Distribution System:** In one service; see map. There are two 16-inch arteries supplying the distribution system which contains many old 4-inch mains of very small carrying capacity. **Standpipe:** Located as shown on map, is steel 30 feet in diameter and 125 feet high, capacity about 660,000 gallons. Elevation of base is 30 feet. Elevation of overflow is 150 feet. **Consumption:** The average and maximum daily pumpage during 1948 was 2.18 million gallons and 2.60 million gallons. There are approximately 4,200 services, 18 of which are metered. **Pipe:** Cast iron, tar coated, bell and spigot joint, laid with 2½- to 3-foot cover. No trouble from frozen mains or electrolysis, but fire flow tests indicate poor condition. Total length, 170,700 feet; 48.5% 4-inch, 33.4% 6-inch, 5.3% 8-inch, 6.9% 10-inch, 0.3% 12-inch, and 5.6% 16-inch. **Gate Valves:** There are about 378 which are of 10 or 12 different makes, some of which open to right and some to left. Records of valve locations are poor. No inspection. **Hydrants:** There are 226 of R. D. Wood, Darling, Ludlow, Gloucester Iron Works, Chapman, and Corey makes, generally with two 2½-inch outlets. New hydrants have two 2½- and one 4½-inch outlets. Branches are mostly 4-inch, some of which are gated. Some open to right and some to the left. Hydrants generally in fair condition. Inspected semi-annually. All 2½-inch outlets, with the exception of the female butts, have Jones snap fittings. **Pressures:** A direct reading pressure gauge, a recording gauge, and a Venturi meter are located in pumping station. A 45-pound discharge pressure is well maintained at pumping station. Readings taken at 9 well-distributed hydrants showed pressures ranging from 35 to 42 pounds with an average of 39 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on March 14, 1949 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Broadway and Warren St., 520—40—13.
Hudson St. and Broadway, 620—42—40.
King and Somerset Sts., 450—38—30.
Fifth St. and Jersey Ave., 390—37—22.
Sixth St. S. of Powell St., 420—35—20.
Jersey Ave. and Charles St., 140—41—38.
Thompson St. and Harley Ave., 290—40—15.
Market St. and Cypress Ave., 480—37—19.
Yale Ave. S. of Lehigh Ave., 510—40—18.

FIRE DEPARTMENT: A part-paid and volunteer organization of three companies under control of the city which owns houses, apparatus, and equipment. There are

GLOUCESTER CITY, CAMDEN COUNTY, NEW JERSEY.

(Including Highland Park and Gloucester Heights.)

Continued.

8 paid men and 92 volunteers. Officers include a chief, deputy chief, 3 captains, and 4 lieutenants who are all appointed by the governing body for an indefinite period and may be removed on charges only. **Companies—Headquarters Fire Company No. 1:** In this company the membership consists of 8 paid men working in 8-hour shifts with 2 men on each of the day shifts and 3 men on the night shift. In addition there are 42 volunteer members. A minimum of 15 volunteers are available during the day and 36 at night. Located on Bergen Street between Burlington and Sussex Streets in the municipal building, a 2-story joisted brick structure with steam heat, gas and electric lights, and a brick hose tower. Fire alarm equipment is located in a communicating section of the building. **Equipment:** A 1949 Seagrave 750-g.p.m. triple combination pumping engine carrying a 150-gallon booster tank, 150 feet of booster hose, 1,500 feet of 2½-inch hose, 100 feet of 1½-inch hose, 2 short ladders, and good minor equipment. One 1924 Seagrave 750-g.p.m. double combination pumping engine carrying 1,500 feet of 2½-inch hose, 100 feet of 1½-inch hose, 2 short ladders, and fair minor equipment. This apparatus is to be rebuilt. One Seagrave 65-foot aerial ladder truck carrying ground ladders ranging from 14 feet to 50 feet and totaling 208 feet, a booster pump, 100-gallon booster tank, 6 salvage covers, and good minor equipment. **Highland Park Fire Company No. 3:** Membership 25 volunteers. A minimum of 5 men are available during the day and 15 at night. Located at Highland Boulevard and Sylvan Avenue. Building is a one-story cement block structure with face brick, asphalt roof, concrete floor, electric lights, gas fired space heater, punch register, gong, visual indicator, telephone, and siren. **Equipment:** One 1935 Ford-Seagrave 500-g.p.m. triple combination pumping engine carrying an 80-gallon booster tank, 150 feet of booster hose, 1,000 feet of 2½-inch hose, 400 feet of 1½-inch hose, 2 short ladders, 1 Scott Air-pak, 2 salvage covers, and good minor equipment. **Gloucester Heights Fire Company No. 4:** Membership 25 volunteers. A minimum of 5 men are available during the day and 15 at night. Located on Oxford Avenue north of Nicholson Road. Building is a one-story cement block and frame structure with a composition covered wood roof, concrete floor, electric lights, gas radiator heat, siren, punch register, gong, visual indicator, and telephone. **Equipment:** A 1935 Ford-Seagrave 500-g.p.m. triple combination pumping engine carrying an 80-gallon booster tank, 100 feet of booster hose, 1,000 feet of 2½-inch hose, 200 feet of 1½-inch hose, one all-purpose gas mask, 2 salvage covers, 2 short ladders, and fair minor equipment. **Hose:** All 2½-inch hose is C.R.L. with Jones snap couplings. There is a total supply of 7,250 feet of 2½-inch hose, of which 5,000 feet is carried on the apparatus and 2,250 feet is in reserve. There is 1,650 feet of 1½-inch hose, of which 900 feet is carried and 750 feet is in reserve. A large percentage of the hose is new and none of it is over 7 years old. It is dried in the hose tower at headquarters and shifted occasionally. It is tested at least annually at 150 pounds pressure. **Operations:** Department is governed by municipal ordinance. Chief has control of apparatus and paid men at all times and volunteers at fires and drills. He has power to suspend members pending a hearing before the city council. Motors

are started daily at headquarters; weekly in other companies. Paid men are drivers at headquarters and 6 men at each of the other companies act as drivers. **Drills and Training:** At least 12 combined drills are held each year and companies numbers 3 and 4 have extra drills supervised by the respective captains. They consist of pumper operation and hose and ladder work together with the usual evolutions. **Fire Methods:** Booster lines and 1½-inch lines are used on incipient fires reinforced by 2½-inch lines with shut-off nozzles. Two masks, 10 salvage covers, 8 asbestos suits, and one portable deluge set are provided. **Response to Alarms:** Each company responds in its own area on first alarm. Aid may be secured from Camden and the surrounding volunteer departments. **Building Inspection:** The chief, who is the enforcing officer of the Fire Prevention Code, makes an average of 15 or 16 inspections each month. Records of such inspections are incomplete. **Records and Reports:** The captains of each of the companies make monthly reports to the chief who files a combined report with the city council. Reports are fairly complete. **Fire Alarms:** System is of Gamewell make and is part of the fire department. It is maintained by a local electrician. It consists of 4 circuits of No. 10 copper wire, weatherproofed, carried on utility company poles below power wires. There are 41 boxes, 70% of which are 3-fold and 30% are Peerless non-interfering type. Boxes are all mounted on utility company poles with red indicating bands but no lights. Current is supplied by the Public Service Corporation with 24 cells of battery floating on each circuit. Batteries and instruments are mounted in a modern Gamewell cabinet with standard switches for testing. Cabinet is located in a room communicating with the fire apparatus room. A breakwheel transmitter is located at headquarters together with a telephone reserved for fire calls, a punch register, gong, visual indicator, and air horn which sounds a coded signal. Each of the other fire houses is provided with a telephone reserved for fire calls, a punch register, visual indicator, and siren. One box is tested each week and system is automatically checked for breaks and grounds continuously. Gongs are located in 4 of the officers' homes.

POLICE DEPARTMENT: Consists of a chief and 18 men. Two cars equipped with radio and 1 motorcycle are provided. Police answer all fire alarms and report unauthorized building construction to building inspector.

BUILDING LAWS: A building code adopted December 29, 1939 provides for the appointment of a building inspector and fairly good provisions for area limitations, protection for vertical openings, wall thicknesses, chimneys, fireproof construction, and fire stops. Wood shingle roofs are permitted in about 70% of the area of the municipality.

FIRE PREVENTION LAWS: The Suggested Fire Prevention Ordinance of the National Board of Fire Underwriters was adopted by reference July 3, 1941. The fire chief is the enforcing officer. State laws adequately cover the storage and shipment of explosives, the transportation of flammable liquids, and the construction of motion picture booths. They also restrict the discharge of fireworks to responsible bonded parties.