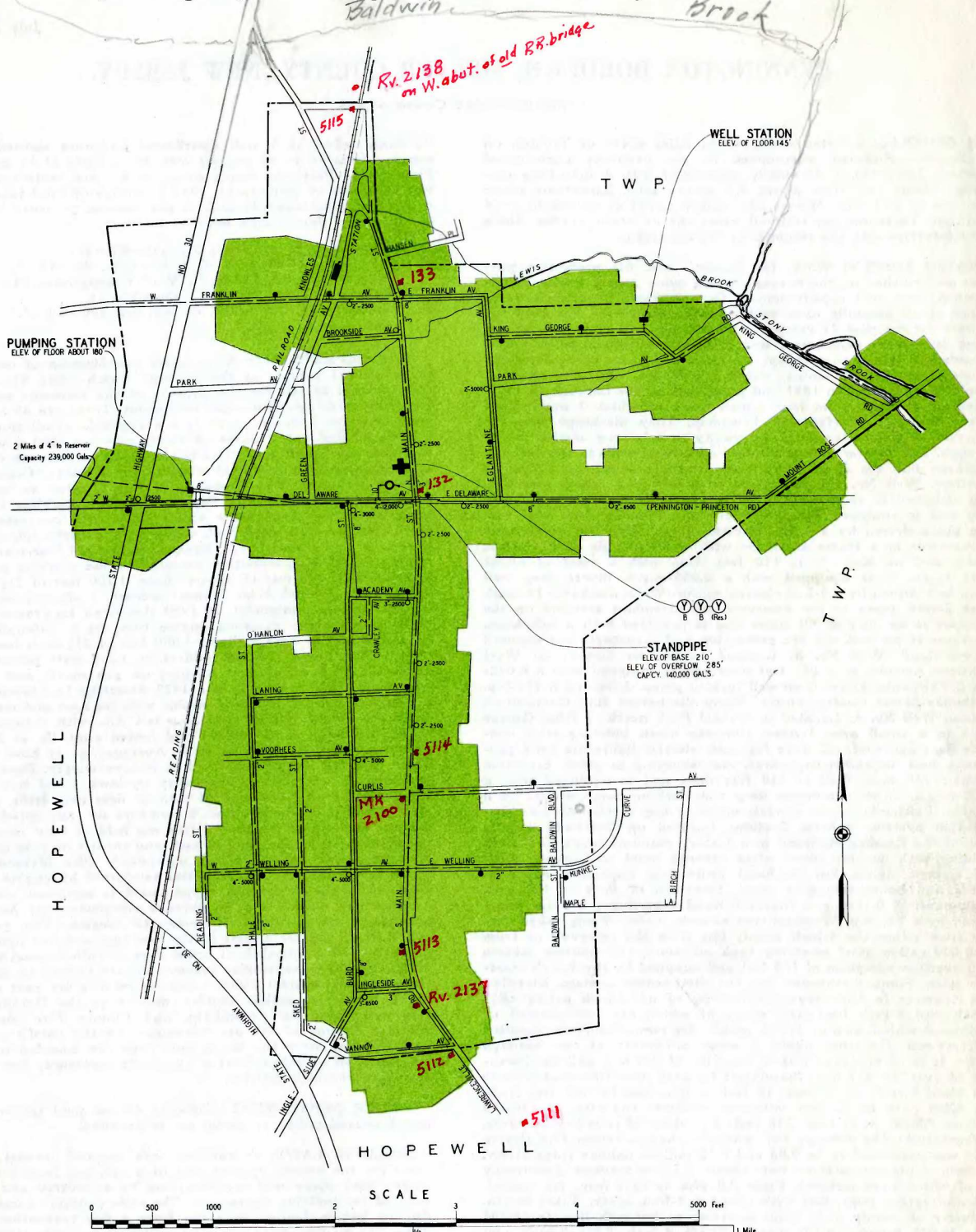


Superseding Map No. 26 of April 15, 1943. Please destroy old issue.



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

**Pennington Borough**  
**Mercer County, New Jersey**

JULY 31, 1950

#### KEY

PROTECTED FIRE ZONE: Shown in Green.

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

Elevations range from 160 to 213 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

# PENNINGTON BOROUGH, MERCER COUNTY, NEW JERSEY.

Population—1940 Census—1,492.

**IN GENERAL:** Located about seven miles north of Trenton on the Reading Railroad, surrounded by the generally agricultural Hopewell Township. It is chiefly residential with 3 industries employing about 100. Area about 0.9 square mile. Elevations range from 160 to 213 feet. Streets are mainly paved or gravel in good condition. There are no railroad crossings or steep grades which might interfere with the response of fire apparatus.

**WATER SUPPLY:** Water for domestic and fire protection purposes is furnished by the borough which owns supply works, distribution system, and appurtenances. Organization: Department is in charge of an annually appointed superintendent who has held the position for the past 27 years. He is assisted by 2 employees of the street and water department and is provided with a small truck. Records are limited to pumpage statistics and a not up-to-date map showing location of mains, valves, hydrants, and fire cisterns. **Supply Works:** Built in 1891 and purchased by the borough in 1923. Supply is obtained from four 6-inch wells, of which 2 are located at the reservoir in Hopewell Township. They discharge into the reservoir whence water flows by gravity to a booster station in the borough. The booster pumps and two additional wells in the borough discharge into the distribution system with a standpipe acting as equalizer. **Well No. 1:** Located at reservoir in a frame structure with composition roof, electric lights, and no heat. Well is 159 feet deep and is equipped with a 0.086-m.g.d. Pomona deep well turbine pump driven by a 5-h.p. electric motor. **Well No. 2:** Located at reservoir in a frame structure with wood shingle roof, electric lights, and no heat. It is 170 feet deep with a yield of about 0.036 m.g.d. It is equipped with a 0.065-m.g.d. Myers deep well pump belt driven by a 5-h.p. electric motor. Wells discharge through short 2-inch pipes to the reservoir. An attendant residing on the premises is on duty at all times and is provided with a telephone, but there is no first aid fire protection and structures are exposed by woodland. **Well No. 3:** Located in booster station on West Delaware Avenue; it is 653 feet deep and is equipped with a 0.072-m.g.d. Fairbanks-Morse deep well turbine pump driven by a 7½-h.p. Fairbanks-Morse electric motor. Pump discharges into distribution system. **Well No. 4:** Located in Kunkel Park north of King George Road in a small area 1-story concrete block building with concrete floor and roof, oil stove for heat, electric lights, no hand protection, and negligible exposures. Housekeeping is good. Elevation of floor 145 feet. Well is 650 feet deep and is equipped with a 0.072-m.g.d. Fairbanks-Morse deep well turbine pump driven by a 7½-h.p. Fairbanks-Morse electric motor. Pump discharges into distribution system. **Booster Station:** Located on Delaware Avenue west of the Reading Railroad in a 1-story concrete block and brick building with concrete floor, slate covered wood roof, steam heat, and electric lights, but no hand protection. Exposures are negligible and housekeeping is good. Elevation of floor is 180 feet. **Equipment:** A 0.18-m.g.d. Ingersoll-Rand centrifugal booster pump driven by a 7½-h.p. Westinghouse electric motor. Pump takes suction from either the 4-inch supply line from the reservoir or from a 60,000-gallon steel receiving tank adjoining the booster station with overflow elevation of 180 feet and supplied by the 4-inch reservoir main. Pump discharges into the distribution system. **Distribution System:** In one service consisting of an 8-inch artery with 4-inch and 6-inch branches, many of which are unsupported or griddoned with 2-inch or 3-inch mains. See map. **Reservoir:** Located in Hopewell Township about 2 miles northwest of the borough limits. It is of concrete with a capacity of 239,000 gallons. Elevation of overflow 257 feet. **Standpipe:** Located near Delaware Avenue and Main Street; it is steel, 18 feet in diameter by 100 feet high, but filled only to 75 feet with an available capacity of 140,000 gallons. Elevation of base 210 feet. Elevation of overflow 285 feet. **Consumption:** The average and maximum daily consumption during 1949 was estimated to be 0.08 and 0.12 million gallons respectively. At time of inspection there were about 475 live services, practically all of which were metered. **Pipe:** All pipe is cast iron, tar coated, bell and spigot joint, laid with about a 4-foot cover. Total length, exclusive of supply main from reservoir to borough line, is 40,400 feet; 23.0% 8-inch, 29.7% 6-inch, 21.3% 4-inch, 8.9% 3-inch, and 17.1% 2-inch. No trouble from freezing or electrolysis. **Gate Valves:** There are 52 on the system of Mathews make set with valve boxes at grade. Direction of operation is uniform. Valves are inspected annually. **Hydrants:** There are 36 in the borough of standard type with 4-inch, 6-inch, or 8-inch branches, all of which are gated. Twelve have one 2½-inch and one 4½-inch outlets, the balance having an additional 2½-inch outlet. All outlets have National Standard threads. Hydrants are inspected three times annually. At time of resurvey those operated were found to be in generally good condition. **Cisterns:** There are 16 fire cisterns, adequately distributed, constructed of concrete with iron manhole covers set at grade on inside of curbing. Capacities range from 2,000 gallons in residential sections to 12,000 gallons in mercantile area with an average of 4,400 gallons. Supply is through 2-inch, 3-inch, and 4-inch gated connections to the distribution system. Water level in cisterns is maintained within 3 feet of grade. **Pressures:** A direct reading gauge at booster station showed a pressure of 39 pounds.

Readings taken at 5 well distributed hydrants showed pressures ranging from 30 to 42 pounds with an average of 35 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on January 31, 1950 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Delaware Ave. and Main St., 660—37—33.  
Curlis Ave. 1,000 ft. E. of S. Main St., 80—42—\*.  
Lawrenceville Rd. 350 ft. N. W. of Vannoy Ave., 310—33—16.  
Welling Ave. and Sked St., 380—30—18.  
Franklin Ave. 350 ft. W. of railroad, 400—35—\*.

\*No reading taken.

**FIRE DEPARTMENT:** A volunteer organization of one company under partial control of the borough which owns fire house and appropriated \$1,300 for the support of the company during 1950. Company owns apparatus and equipment. There are 45 active members, of whom a minimum of 12 are available at all times. Officers include a chief and 3 assistant chiefs who are elected annually by the company. Election of chief is confirmed by borough council, and present incumbent has held position for 9 years. **Company—Pennington Volunteer Fire Company No. 1:** Located in borough hall on N. Main Street north of Delaware Avenue. Building is a 2-story brick structure of ordinary construction with concrete apparatus floor, slate covered wood roof, steam heat, electric lights, telephone, hose rack, and siren on roof. **Equipment:** A 1940 American La France 600-g.p.m. triple combination pumping engine carrying a 150-gallon booster tank, 200 feet of booster hose, 1,100 feet of 2½-inch hose, 300 feet of 1½-inch hose, 2 short ladders, 1 all-purpose gas mask, and fair minor equipment. A 1950 American La France 750-g.p.m. triple combination pumping engine carrying a 300-gallon booster tank, 150 feet of booster hose, 1,000 feet of 2½-inch hose, 200 feet of 1½-inch hose, 2 short ladders, a 1,250-watt portable electric generator, 3 floodlights, 1 all-purpose gas mask, and fair minor equipment. Held in reserve is a 1922 American La France 600-g.p.m. double combination pumping engine with no hose and meager minor equipment. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. It is shifted and tested annually at 200 pounds pressure and dried on hose rack. Average age of hose is 5 years. There is 1,000 feet of hose held in reserve supply. **Operations:** Department is governed by company by-laws. Chief has control of apparatus at all times and of men at fires and drills. Motors are started every other day, and 8 members are appointed as regular drivers. **Drills and Training:** Drills are held at least monthly under the supervision of the chief officers and consist of hose laying, pump operation, and use of minor equipment. **Fire Methods:** Booster streams are used on incipient fires reinforced by engine or hydrant lines with shut-off nozzles. Department is equipped with two all-purpose gas masks, but no salvage equipment nor heavy stream appliances are provided. **Response to Alarms:** Two pumpers respond to all regular alarms in the borough, and one pumper is dispatched to all automobile or brush fires or calls beyond the borough limits. **Building Inspection:** Inspections are limited to schools only. **Records and Reports:** Fairly complete records are kept of fires and drills, and chief makes regular reports to the Borough Council, Hopewell Township Committee, and County Fire Marshal. **Fire Alarms:** Alarms of fire are telephoned to the chief's residence or to a dwelling near the fire house. They are sounded on the siren by means of switches located at chief's residence, fire house, and store in mercantile district.

**POLICE DEPARTMENT:** Consists of one paid uniformed officer and 6 special police. A patrol car is provided.

**BUILDING LAWS:** A building code adopted August, 1941 provides for the annual appointment of a building inspector. Code requires that plans and specifications be submitted and permit be secured for building operations. The code contains some good conditions, but is limited in scope from a fire prevention viewpoint. There are no fire limits nor combustible roof limits. 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 the intrastate transportation of explosives and flammable liquids. 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.

**ZONING ORDINANCE:** None.