



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

City of Lambertville
Hunterdon County, N. J.

JULY 31, 1948

KEY

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

Elevations range from 20 to 270 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

(V) Automobile combination pumper and hose car

(C) Chemical car

(A) Auxiliary, squad or rescue car

(B) Booster tank or tanks on above

(L) Ladder truck



CITY OF LAMBERTVILLE, HUNTERDON COUNTY, NEW JERSEY.

Population — 1940 Census — 4,447.

IN GENERAL: Located on the Delaware River about 15 miles north of Trenton on the Belvidere Division of the Pennsylvania Railroad. It is principally a manufacturing and mercantile center with about 12 industries normally employing about 600. Area is about 1.1 square miles. Elevations range from about 20 to 270 feet. Main streets are paved and in good condition, others being gravel in fair to good condition. Two railroad grade crossings on the west side of the city are said not to interfere with the response of fire apparatus.

WATER SUPPLY: The Lambertville Water Company, a subsidiary of the General Water Works Corporation of Pine Bluff, Arkansas, owns the supply works and distribution system and furnishes water for domestic and fire protection purposes to the city only. The city owns and maintains the hydrants. Hydrants were installed in 1895 and storage facilities increased in 1924 Organization: The system is in charge of a general superintendent who is assisted by three laborers who maintain system and make taps and repairs. Outside aid is obtained for extensions. Office is located on North Union Street. A fairly well equipped truck is provided. Records are limited to a fairly up-to-date map and records of consumption, but there are no records of hydrant and valve details. **Supply Works:** Water is obtained from springs and from Swans Creek with a drainage area of about 12 square miles. It is stored in an impounding reservoir southeast of the city, flows by gravity through 2 slow sand filters, and thence through an 8-inch transmission main to the city. **Reservoirs:** Reservoir No. 1 and the filters are located about one mile from the city. This reservoir has a capacity of about 16 million gallons and is about 150 feet above the city and 10 feet above the filters. Reservoir No. 2 is about one-half mile above Reservoir No. 1 and about 200 feet above the city and has a capacity of about 70 million gallons. Water flows through natural channel to Reservoir No. 1 or through a 6-inch line to the filters. Water from springs is collected in Reservoir No. 3 which is above No. 2, but is small and of little storage value. Filters at present have a combined capacity of about 0.75 m.g.d., but are being replaced by two new filters which will have an aggregate capacity of 1.0 m.g.d. and which are about 85% complete. **Distribution System:** In one service consisting of two 6-inch mains with numerous 4-inch dead end branches. See map. **Consumption:** The average daily consumption during 1947 was about 0.342 million gallons. It is estimated that the maximum daily consumption is about 0.55 million gallons, but it is to be noted that during operation of a silver plating plant in the city, water is consumed at the rate of about 0.65 to 0.7 m.g.d. There are about 1,150 live services, only 5 of which are metered. **Pipe:** All pipe is cast iron, tar coated, bell and spigot joint, laid with about a 3½-foot cover. Total length, 27,375 feet; 12.3% 8-inch, 42.2% 6-inch, and 45.5% 4-inch. No trouble was reported from freezing, electrolysis, or tuberculation. **Gate Valves:** There are 43 on the system of various makes set with iron boxes at or near grade. Several open in a direction opposite to the majority and there is no record of these valves. There are no regular valve inspections. **Hydrants:** There are 36 hydrants on the system including one private hydrant. Hydrants are of Holyoke and Wood makes. All hydrants have two 2½-inch outlets and one has an additional 4½-inch outlet. About 7 hydrants have gated branches. Two hydrants have 6-inch branches and the balance have 4-inch branches. Hydrant outlets have National Standard threads. Hydrants are inspected semi-annually by members of the fire department. Those operated during resurvey were found to be in fairly good condition. **Pressures:** Readings taken at 9 well distributed locations throughout the city showed pressures ranging from 24 to 38 pounds with an average of 32 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on April 19, 1948 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Bridge and Union Sts., 320—37—9.
 Union and Jefferson Sts., 240—29—4
 Union St. and Cherry La., 200—26—7.
 Main St. N. of Arnett Ave., 120—24—*.
 Delavan St., E. of Main St., 130—37—*.
 York St., E. of Main St., 150—38—*.
 Perry and Main Sts., 80—29—*.
 Main St. 270 ft. S. of Feeder St., 200—36—1.
 Quarry St. near Skillman St., 350—35—4.
 *No reading taken.

FIRE DEPARTMENT: A volunteer organization of four companies under partial control of the city which appropriated \$8,000 for the support of the department during 1948. Companies own houses, apparatus, and equipment. Total active membership 163, of whom about 66 are available during the day. Officers include a chief, 3 assistant chiefs, 4 foremen, and 4 assistant foremen who are elected by the companies and confirmed by the mayor and council. Chief serves a 3-year term at the completion of which the assistant chief becomes head of the department. Companies—Union Fire Company No. 1: Membership 50. Located on Church Street near Union Street

in a 2-story brick building with metal roof, wood apparatus floor, electric lights, steam heat, tape register, and gong. **Equipment:** A 1923 Ahrens-Fox 900-g.p.m. triple combination pumping engine carrying a 60-gallon booster tank, 200 feet of booster hose, 1,500 feet of 2½-inch hose, 2 short ladders, and meager minor equipment. A 1926 Studebaker service car carrying 200 feet of 2½-inch hose, 150 feet of ¾-inch hose, 2 all-purpose gas masks, and meager minor equipment. **Hibernia Fire Company No. 2:** Membership 50. Located on Main Street at Swan Street in a 3-story brick building with metal roof, wood apparatus floor, electric lights, hot water heat, tape register, and gong. **Equipment:** A 1923 Ahrens-Fox 750-g.p.m. triple combination pumping engine carrying a 50-gallon booster tank, 150 feet of booster hose, 1,300 feet of 2½-inch hose, 2 short ladders, 1 salvage cover, and meager minor equipment. A 1930 Studebaker service car carrying a 50-gallon chemical tank, 150 feet of chemical hose, 300 feet of 2½-inch hose, a 2-way mounted deck nozzle, 1 salvage cover, 2 nozzle holders, and meager minor equipment. **Columbia Fire Company No. 4:** Membership 33. Located on North Union Avenue near Buttonwood Street in a 2-story joisted brick building with metal roof, wood apparatus floor, steam heat, electric lights, siren on roof, tape register, and gong. **Equipment:** A 1924 Seagrave booster and chemical car carrying three 60-gallon chemical tanks, 500 feet of ¾-inch hose, a 150-g.p.m. booster pump, a 160-gallon booster tank, 250 feet of 1½-inch hose, 2 short ladders, and meager minor equipment. A 1932 Diamond "T" service car carrying a 3-k.w. portable electric generator, 8 portable flood lights, 1,100 feet of cable, 650 feet of 1½-inch hose, 50 feet of ¾-inch hose, and meager minor equipment. **Fleet Wing Hook and Ladder Company:** Membership 30. Located on Main Street north of Bridge Street in a 2-story joisted brick building with metal roof, wood apparatus floor, electric lights, hot water heat, tape register, and gong. **Equipment:** A 1929 Seagrave 55-foot city service ladder truck carrying a 75-g.p.m. booster pump, a 100-gallon booster tank, 250 feet of booster hose, 15 ladders ranging from 10 to 55 feet and totaling 375 feet, 2 all-purpose gas masks, and fair minor equipment. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. It is shifted and tested semi-annually at about 200 pounds pressure and repacked wet on the apparatus. The supply totals 3,350 feet, of which 650 feet is kept in reserve. About 50% is over 5 years old. **Operations:** Department is governed by city ordinance. The chief has control of apparatus at all times and of men at fires and drills. He may suspend members pending a hearing before the mayor and council. Motors are started at least semi-weekly, and practically all members may drive apparatus and operate pumps. **Drills and Training:** Drills are limited to about 8 per year and consist of hose laying, occasional pumping from draft, and some ladder work. **Fire Methods:** Booster and chemical lines are used on incipient fires reinforced by hydrant and engine lines with shut-off nozzles. Department is provided with 4 all-purpose gas masks and one Scott Air-Pak. Heavy stream appliances are limited to a 2-way mounted deck gun, and there is practically no salvage equipment. **Response to Alarms:** Entire department responds to all alarms within the city and aid may be secured from New Hope, Pa., Stockton, Flemington, and Trenton. **Building Inspection:** No regular inspections are made, but chief makes occasional inspections upon request. **Records and Reports:** Fairly good records are kept of all fires and drills, and chief makes a monthly report to the mayor and council. **Fire Alarm System:** Consists of 2 box circuits, 1 alarm circuit, and a whistle circuit. Headquarters equipment consists of a 4-circuit slate operating board and a 4-circuit repeater which are located on the second floor of the city jail, a stone building of ordinary construction located on York Street west of Main Street. Current for operation is provided by two oxide film rectifiers with 35 cells floating mounted on wood racks. Circuits are protected by 3/10-ampere sneak fuse and carbon block lightning arresters. Circuits are of No. 10 iron or copper wire, triple braided weatherproof, carried on utility company poles. There are 22 boxes of Gamewell make and Gardner type generally mounted on utility poles with red indicating bands, but no lights. Leads to boxes are in conduit and boxes are grounded in all instances. They are shunt tested every three months and circuits are tested frequently for current, voltage, and grounds, and records are kept of tests. There is an air whistle mounted on a steel tower outside of headquarters with compressor and tank in alarm headquarters. Each fire house is provided with a tape register and gong on the alarm circuit. Telephone alarms are transmitted to the homes of the chief or members of the fire department.

POLICE DEPARTMENT: Consists of three paid men, one of whom is on duty at all times. They are provided with uniforms and one patrol car.

BUILDING LAWS: No municipal regulations

FIRE PREVENTION LAWS: No municipal regulations. State laws adequately cover the storage and shipment of explosives, the transportation of flammables, and the construction of motion picture booths. They also restrict the discharge of fireworks to responsible bonded parties.

ZONING ORDINANCE: None.