



**KEY**

**PROTECTED FIRE ZONE:** Shown in Green.

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

Elevations range from 70 to 100 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) Chemical tank or tanks on above

(L) Ladders on above

(B) Booster tank or tanks on above

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

**Springfield Township  
Union County, New Jersey**

**JUNE 30, 1947**

# SPRINGFIELD TOWNSHIP, UNION COUNTY, NEW JERSEY.

Population — 1940 Census — 4,148.

**IN GENERAL:** Located on the Rahway Valley Railroad about one mile south of Millburn Township. It is mainly a residential community with a few small industries and several nurseries employing about 100. Area is about 5 square miles. Elevations range from 70 to 100 feet. Streets are improved and in good condition. Railroad crossings at grade are said not to have interfered with the response of fire apparatus.

**WATER SUPPLY:** Water for domestic and fire protection purposes is furnished by the Commonwealth Water Company. The portion of this system in Springfield is on the Canoe Brook Low Service. The Township supply is principally through one 12-inch and one 6-inch supply main interconnected with 16-inch, 20-inch and 24-inch mains from the Canoe Brook Pumping Station. The Wyoming Reservoir functions as an equalizer for this service and provides 0.9 million gallons storage. For a detailed description of the Commonwealth Water Company system see report and map No. 245. There is a 6-inch emergency connection with the Elizabethtown Water Company at the eastern end on Morris Avenue. **Distribution System:** In one service consisting of the Canoe Brook Low Service. See map and description above. **Consumption:** The average and maximum daily pumpage in the entire territory served (31,810 live services) was 12,782 and 20,122 million gallons. There are no available statistics for the consumption in Springfield, but on December 31, 1945 there were 1,419 services in the township, all of which were metered, and on that date there was a total of 31,463 services in the entire territory served. **Pipe:** All pipe is cast iron, tar coated, and with the exception of a small amount of Universal joint, it is bell and spigot, laid with a minimum 3½-foot cover. Total length in Springfield, 112,778 feet; 3.1% 12-inch, 2.0% 10-inch, 16.0% 8-inch, 73.7% 6-inch, and 5.2% 4-inch. No trouble reported from frozen mains or electrolysis. **Gate Valves:** There are 157 in the township of Kennedy, Ludlow, and Darling makes set with boxes at or near grade. Direction of operation is not uniform, but there are no regular inspections of valves at the present time. **Hydrants:** There are 112 in the township of Wood, Darling, Smith, and Ludlow makes of standard type; 66 have one 4½-inch and two 2½-inch outlets and the balance have two 2½-inch outlets. Hose outlets have 3½-inch outside diameter with 6 threads per inch and steamer outlets have National Standard threads; 66 have 6-inch branches, 39 of which are gated; 46 have 4-inch branches, all of which are gated. Hydrants are inspected semi-annually and at time of hydrant tests those operated were found to be in fair condition. **Pressures:** Readings taken at 4 well distributed locations showed pressures ranging from 141 to 148 pounds with an average of 144.5 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on April 10, 1947 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow and pressure during flow were as follows:

Battle Hill Ave. N. of Cain St., 1,260—148—62  
State Highway No. 29 500 ft. E. of Hillside Ave., 682—145—24.  
Marcy Ave. and Severna Ave., 1,320—141—43  
Morris Ave. and Mountain Ave., 1,640—144—83

**FIRE DEPARTMENT:** A volunteer organization of one company with 35 members, 2 paid men and a paid chief under the supervision of the township committee. The township owns house and equipment and appropriated \$13,050 for the support of the department during 1947. The chief and one paid man are on duty during the day and the other paid man is on duty during the night. Volunteer officers include an assistant chief, 2 captains, and 2 lieutenants, appointed annually by the township committee. An average of 28 volunteers are available at night and 16 during the day. Off-shift paid men are subject to call. Paid men may not leave town without permission of chief. Chief and paid men are appointed by the township committee and are protected by Tenure of Office Act. Chief has held present position since 1931. **Company—Springfield Fire Company No. 1:** Located on Mountain Avenue at Trivett Avenue in municipal building. Building is a 2½-story joisted brick structure with asbestos shingle roof, concrete apparatus floor, steam heat, electric lights, telephone, and 3 diaphone horns on roof.

**Equipment:** A 1927 Mack quadruple combination 50-foot city service ladder truck and 750-g.p.m. pumping engine with ladders ranging from 14 to 50 feet, totaling 236 feet, one 40-gallon chemical tank, 200 feet of chemical hose, 500 feet of 2½-inch hose, and good minor equipment. A 1941 Mack 750-g.p.m. triple combination pumping engine carrying a 100-gallon booster tank, 200 feet of 1-inch booster hose, 1,600 feet of 2½-inch hose, 300 feet of 1½-inch hose, and considerable minor equipment. One 1933 Diamond "T" hose and chemical car carrying one 40-gallon chemical tank, 200 feet of chemical hose, 1,300 feet of 2½-inch hose, and some minor equipment. In addition there is a hose trailer carrying 700 feet of 2½-inch hose, one short extension ladder, and some minor equipment. This trailer can be readily attached to any car. **Hose:** All 2½-inch hose is C.R.L. with screw couplings 3½-inch outside diameter with 6 threads per inch; 4,100 feet of 2½-inch hose is carried on apparatus and 1,000 feet is held in reserve. Approximately 2,400 feet is over 7 years old and 3,400 feet is over 5 years old. It is tested annually at 200 pounds pressure, dried on floor, and shifted and wet at fires and drills. **Operations:** Department is governed by company by-laws. Chief has control of apparatus at all times and of men at fires and drills. There are 7 men who are assigned to drive and operate the apparatus in addition to the paid men. **Drills and Training:** Drills held monthly consist of hose laying, ladder raising and use of equipment. During inclement weather drills consist mainly of lectures. **Fire Methods:** Chemical and booster streams are used on small fires reinforced by hydrant and engine lines with shut-off nozzles. Five salvage covers and 7 gas masks are provided. Heavy stream appliances consist of 2 bent cellar pipes and 1 deck nozzle. **Response to Alarms:** All apparatus responds to all alarms in township. Outside aid may be secured from Millburn, Summit, and Union Township. **Building Inspection:** Chief and one paid man make inspections of mercantile risks. Records consist only of notes made at time of inspection. Cooperation between stores and fire department is reported good. **Records and Reports:** Fire records are kept of all fires, and monthly and annual reports are made to the township committee. **Fire Alarms:** Alarms are telephoned to fire house over a line reserved for fire calls, and sounded on a 7-h.p. siren located in the southern end of township, and by means of a Gamewell transmitter, as a coded signal on a diaphone horn located on roof of municipal building. Alarm circuit carries a punch register, transmitter, and visual indicator at fire headquarters, a gong at fire chief's home, and one at the home of one of the paid firemen. There are 103 phantom box locations in six districts. Diaphones are operated by 2 relays with ordinary storage batteries furnishing power. Batteries and relays are located in apparatus room. A telephone extension is in police headquarters located in the same building with fire headquarters.

**POLICE DEPARTMENT:** Consists of a chief, 3 sergeants, and 7 patrolmen working in 8-hour shifts. Desk man is on duty at all times. Three 3-way radio cars are provided. Patrolmen report over 6 police signaling boxes.

**BUILDING LAWS:** Code adopted October 6, 1927 has a few good fire prevention items, but in general does not conform to the Code of Suggested Ordinances for Small Municipalities as recommended by the National Board of Fire Underwriters. An oil burner ordinance covering most of the essential items of oil burner installations was adopted on October 20, 1938. Fire limits are not established and flammable roof coverings are allowed throughout the township.

**FIRE PREVENTION LAWS:** Code adopted September 13, 1945 provides for the fire chief to be head of the fire prevention bureau and requires inspections 4 times yearly of all premises and buildings other than dwellings. Ordinance closely follows the Code of Suggested Ordinances for Small Municipalities of the National Board of Fire Underwriters. The oil burner ordinance is enforced by the building inspector. 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:** Adopted April 14, 1938