



KEY

PROTECTED FIRE ZONE: Shown in Green.

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

Elevations range from 130 to 200 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
- (B) Booster tank or tanks on above
- (L) Ladders on above

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

Fanwood Borough
Union County, New Jersey

APRIL 15, 1948

FANWOOD BOROUGH, UNION COUNTY, NEW JERSEY.

Population — 1940 Census — 2,310.

IN GENERAL: Located on the C. R. R. of N. J. adjoining the northeasterly limits of Plainfield. No manufacturing. It is a residential community with good transportation facilities. Area one square mile. Elevations range from 130 to 200 feet. Main roads concrete, others macadam in good condition.

WATER SUPPLY: Supply for domestic and fire protection purposes is furnished by the Plainfield-Union Water Company. (See report with map No. 124.) **Distribution System:** See map. North side of railroad supplied from 24-inch and 12-inch line from pumping station and south side from 12-inch transmission line extending from pumping station to the territory served to the east. **Consumption:** The average and maximum daily consumption in the entire territory served (37,208 consumers) during 1946 was 10.34 and 12.2 m.g.d. On December 1, 1947 there were 783 consumers in Fanwood. Practically all services are metered. **Pipe:** Cast iron, tar coated, bell and spigot joint, laid with 3-foot cover. No trouble from frozen mains or electrolysis. Total length, exclusive of the 12-inch, 16-inch, and 24-inch transmission lines, 43,350 feet; 100% 6-inch. **Gate Valves:** There are 88 on the distribution system of various makes, located as shown on map. All open to right and are set with iron boxes at grade. No regular valve inspection. Fire department notified when valves are operated. **Hydrants:** There are 69 of various makes, 35% with two 2½-inch outlets, 4-inch barrel and 4-inch gated branch, and balance with two 2½-inch and one 4½-inch outlets, 6-inch barrel and gated branch. Hydrants are inspected annually. Small outlets are 3-inch outside diameter with 8 threads per inch. Large outlets are National Standard. **Pressures:** Readings taken at 3 hydrants showed pressures ranging from 39 to 54 pounds with an average of 46 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on July 12, 1934 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Harold and Second, 860—39—11.5.

North and Martine, 1,850—45.5—31.

Farley and Midway Ave., 780—54.5—10.5.

FIRE DEPARTMENT: A volunteer organization of one company under the control of the borough. Borough owns engines and hose; fire company owns house and other equipment. Appropriation for 1947 was \$2,200. Chief elected annually by company and confirmed by council. Total membership 40, of whom about 16 are available at all times. Department quarters are located on Watson Road near Martine Avenue. Building is a 1½-story frame structure with concrete floor, composition shingle roof, hot water heat, electric lights, and telephone. Siren and bell on tower outside. Electric hose dryer installed in this building. **Equipment:** One 1947 Mack 500-g.p.m. triple combination pumping engine carrying a 250-gallon booster tank, 150 feet of booster

hose, 1,000 feet of 2½-inch hose, 2 short ladders, 1 salvage cover, and fair minor equipment. One 1936 Mack 750-g.p.m. quadruple combination pumping engine carrying a 100-gallon booster tank, 200 feet of booster hose, 1,000 feet of 2½-inch hose, 10 ladders ranging from 12 to 45 feet and totaling 240 feet, 2 salvage covers, 3 gas masks, 1 electric generator, 4 floodlights, inhalator, and good minor equipment. One 1923 Reo-Buffalo 300-g.p.m. triple combination pumping engine carrying an 80-gallon booster tank, 150 feet of booster hose, 2 short ladders, and poor minor equipment is held as a reserve apparatus. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. After use at fires and drills hose is washed and dried in electric dryer. Hose is shifted every three months, 50% being over 7 years old. It is tested yearly at 150 pounds pressure. There was 600 feet in reserve. **Operations:** Department governed by municipal ordinance and company by-laws. Chief has control of apparatus at all times and of men at fires and drills. He has no power to suspend, but may prefer charges to mayor and council. Fifteen men are appointed as drivers. **Drills and Training:** Drills held monthly, consist of stretching hose, making and breaking couplings, and handling streams. **Fire Methods:** Small streams backed by large line. Engine connected when thought necessary. Some salvage equipment is available; but heavy stream appliances are lacking. **Response to Alarms:** Entire department responds to all alarms. Aid secured from Plainfield, Westfield, and nearby communities. **Building Inspection:** Fire committee makes infrequent inspections. **Records and Reports:** Annual report is made to mayor and council giving fires and losses. **Fire Alarms:** Fire alarms are transmitted by telephone to police desk in borough hall adjoining the fire station where constant watch is maintained. Siren is operated from desk or outside fire station.

POLICE DEPARTMENT: Consists of a chief, 5 uniformed officers, and 10 special officers. At least one officer responds to alarms of fire and desk watch is constantly maintained. Two radio cars are available.

BUILDING LAWS: Code adopted July 3, 1934 contains some provisions for wall thickness, height, and fire stopping and generally good requirements for garages, but does not establish fire limits, or combustible roof limits.

FIRE PREVENTION LAWS: Some provisions of the building code contain requirements for inspection, storage of combustible material, gasoline, explosives, and other flammable material, but requirements are not sufficiently comprehensive. Ordinance passed June 13, 1934, provides for good requirements for installation of oil burning equipment. 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.