

Superseding Map No. 101 of June 30, 1939. Please destroy old issue.

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

Lindenwold Borough Camden County, New Jersey

FEBRUARY 28, 1950

KEY

PROTECTED FIRE ZONE: Shown in Green.

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

Elevations range from 50 to 120 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

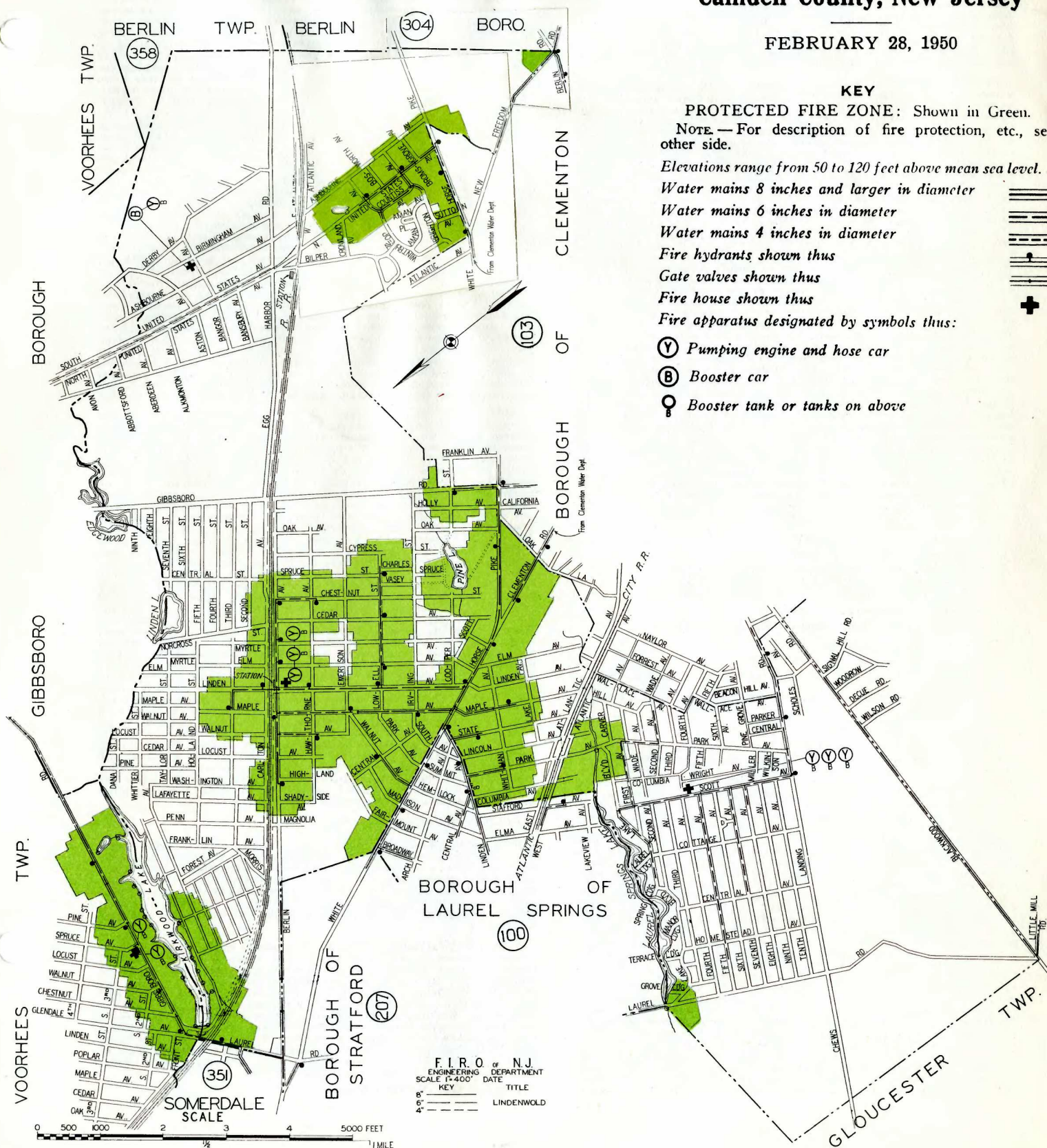
Fire house shown thus

Fire apparatus designated by symbols thus:

(Y) Pumping engine and hose car

(B) Booster car

(T) Booster tank or tanks on above



F.I.R.O. of N.J.
ENGINEERING DEPARTMENT
SCALE 1"=400'
DATE
KEY
TITLE
LINDENWOLD

LINDENWOLD BOROUGH, CAMDEN COUNTY, NEW JERSEY.

Including Kirkwood, Voorhees Township.

Population — 1940 Census — 2,552.

IN GENERAL: Located along the White Horse Pike and on the Atlantic City Division of the Pennsylvania Railroad about 11 miles southeast of Camden. It is mainly a residential community with no industrial establishments. There is a small amusement park located along Kirkwood Lake in the extreme northern end of the borough. Area about 5 square miles. Elevations range from 50 to 120 feet. Main thoroughfare is concrete; about 25% of the streets are improved and in good condition and the balance are gravel in fair to poor condition. Railroad crossings are not such that they should seriously interfere with the response of fire apparatus.

WATER SUPPLY: The Laurel Springs Water Company, a subsidiary of the Water Utilities Company, owns and operates the supply works and distribution system and supplies water for domestic and fire protection purposes to Lindenwold, adjacent Kirkwood and all or part of eight other nearby communities. For details as to organization, supply works, pumping stations, and storage facilities, see report of Laurel Springs with map No. 100. **Distribution System:** In one service of very incomplete gridiron and 6-inch branches supplied through a 6-inch and 8-inch line in the White Horse Pike from the Borough of Laurel Springs, except for two small sections which are supplied by the Clementon Water Department. Kirkwood service is one long unsupported 6-inch main supplied by the 6-inch main in the White Horse Pike. **Consumption:** The average and maximum daily consumption during 1948 in the entire territory served from Laurel Springs (2,479 services) was 0.463 and 0.725 m.g. On December 31, 1948 there were 490 active services in Lindenwold, only a few of which were metered. **Pipe:** All cast iron, tar coated, bell and spigot joint, laid with 2- to 4-foot cover. No trouble from frozen mains or electrolysis. **Total length,** 32,700 feet; 67.8% 6-inch and 32.2% 4-inch. **Gate Valves:** There are 24 on the system in Lindenwold of R. D. Wood make. **Direction of operation** is uniform. Valves are operated and inspected semi-annually. **Hydrants:** There are 31 in Lindenwold and 6 in Kirkwood of Wood make. All have two 2½- and one 4½-inch outlets, 4-inch barrel and 4-inch ungated branches. The 2½-inch outlets have Jones snap couplings and the 4½-inch outlets have National Standard threads. They are inspected monthly, except during winter months, and oiled annually. They were in fair to good condition at time of inspection. **Pressures:** A recording gauge at the pumping station at Laurel Springs at about elevation 84 showed pressures to be fairly well maintained between 40 and 50 pounds. Readings taken at 4 well distributed hydrants on the Laurel Springs system showed pressures ranging from 33 to 41 pounds with an average of 37 pounds. Readings taken at 2 hydrants on the Clementon Water system showed pressures of 65 and 74 pounds with an average of 69 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Laurel Springs Water Company:

Lindenwold — March 10, 1949.

Gibbsboro Road and Cooper Street, 270—36—*.

Chestnut Street and Berlin Avenue, 290—38—7.

White Horse Pike and Park Avenue, 520—33—19.

Kirkwood — September 21, 1949.

Spruce Avenue and Gibbsboro Road, 310—41—1.

Clementon Water Company:

Lindenwold — March 30, 1949.

Clementon Road, 270 feet S. E. of White Horse Pike, 530—74—*.

White Horse Pike, 200 feet W. of N. United States Avenue, 340—65—4.

*No reading taken.

FIRE DEPARTMENT — LINDENWOLD DEPARTMENT: A volunteer organization of 3 independent companies, under partial control of the borough, which appropriated \$3,000 for the support of the department during 1949. Officers are elected annually by the companies and confirmed by the mayor and council. The borough owns the equipment of the Lindenwold Company No. 1 and the other companies own their apparatus. Quarters are owned by the respective companies. **Lindenwold Fire Co. No. 1:** Membership of 45 including a chief and 2 assistant chiefs, of whom a minimum of 8 are available at all times. Located on Linden Avenue as shown on the map. Building is a one-story concrete block structure with composition on wood roof, concrete apparatus floor, hot water heat, and electric lights. **Equipment:** A 1942 U.S.A. Chevrolet-Barton 500-g.p.m. triple combination pumping engine carrying a 400-gallon booster tank, 500 feet of booster hose, 300 feet of 1½-inch hose, 500 feet of 2½-inch hose, 2 short ladders, 1 gas mask, and fair minor equipment. A 1923 Hale 500-g.p.m. double combination pumping engine carrying 200 feet of 1½-inch hose, 1,300 feet of 2½-inch hose, 2 short ladders, 1 gas mask, and fair minor equipment. **Garden Lake Fire Co. No. 2:** Membership of 80 including a chief and 2 assistant chiefs, of whom a minimum of 8 are available at all times. Located on Scott Avenue as shown on the map. Building is a two-story wooden structure with composition on wood roof, concrete apparatus floor, electric lights, and hot water heat. **Equipment:** A 1945 Ford-Hale 300-g.p.m. triple combination pumping engine carrying a 300-gallon booster tank, 200 feet of booster hose, 400 feet of 1½-inch hose, 300 feet of 2½-inch hose, 1 short ladder, and poor minor equipment. A 1944 U.S.A. Chevrolet-Barton 300-g.p.m. triple combination pumping engine carrying a 300-gallon booster tank, 500 feet of booster hose, 200 feet of 1½-inch hose, 800 feet of 2½-inch hose, 2 short ladders, 1 gas mask, and fair

minor equipment. A 1935 International-Barton 500-g.p.m. triple combination pumping engine carrying a 500-gallon booster tank, 450 feet of booster hose, 200 feet of 1½-inch hose, 2 short ladders, and fair minor equipment. **Lucaston Volunteer Fire Company No. 3:** Membership of 25 including a chief and 2 assistant chiefs, of whom a minimum of 6 are available at all times. Located on Bangor Avenue as shown on the map. Building is a two-story concrete block and frame structure with composition on wood roof, concrete apparatus floor, electric lights, and hot air heat. **Equipment:** A 1942 U.S.A. Chevrolet-Barton 300-g.p.m. triple combination pumping engine carrying a 300-gallon booster tank, 500 feet of booster hose, 450 feet of 1½-inch hose, 2 short ladders, and meager minor equipment. A 1936 International booster car equipped with a Briggs-Stratton 100-g.p.m. pump and carrying a 550-gallon booster tank, 200 feet of booster hose, 1 short ladder, and poor minor equipment. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings or Jones snap couplings. It is repacked occasionally at drills and subject to test at normal pump operating pressures. No adequate drying facilities provided. There is no serviceable reserve hose and approximately 2,000 feet of hose is over 5 years old. **Operations:** The department is governed by the respective company by-laws. The respective chiefs have charge of equipment at all times and of men at fires and drills. Motors are started at least twice weekly and at least 6 members are appointed as drivers for each piece of apparatus. **Drills and Training:** Company drills are held monthly under the direction of the chief officers. They consist of pump operation and hose and ladder work. **Fire Methods:** Booster streams are used on incipient fires supported by engine streams with shut-off nozzles. No salvage equipment, nor heavy stream appliances are provided. **Response to Alarms:** All companies respond within their immediate district. Aid may be secured from the surrounding volunteer departments at Clementon, Berlin, Stratford, and Laurel Springs. **Building Inspection:** No routine inspections by the fire department, but the borough fire marshal investigates hazardous conditions reported. **Records and Reports:** Records consist of tabulations showing nature of alarms and attendance. Monthly reports are made to the borough fire council. **Fire Alarms:** Telephoned through the Laurel Springs Exchange to private homes and stores near the fire stations and sounded on siren at each station.

KIRKWOOD DEPARTMENT: A volunteer organization of one company under partial control of Voorhees Township which appropriated \$1,000 for the support of the department in 1949. Building, apparatus and equipment are owned by the department. Total active membership of 45 including a chief, 2 assistant chiefs, and 2 captains, of whom a minimum of 8 are available at all times. **Company:** Located on Spruce Avenue and Gibbsboro Road as shown on Lindenwold Zone Map No. 101. Building is a 1½-story frame structure with composition on wood roof, concrete apparatus floor, electric lights, hot water heat, and telephone. **Equipment:** A 1928 Sea-grave 350-g.p.m. triple combination pumping engine carrying a 250-gallon booster tank, 150 feet of booster hose, 300 feet of 1½-inch hose, 1,000 feet of 2½-inch hose, 2 short ladders, and fair minor equipment. A 1929 Chevrolet-Barton 300-g.p.m. triple combination pumping engine carrying a 150-gallon booster tank, 150 feet of booster hose, 300 feet of 1½-inch hose, 900 feet of 2½-inch hose, 2 short ladders, and fair minor equipment. **Hose:** Of the total supply of 1,900 feet of 2½-inch hose, 1,000 feet is over 5 years old and all is equipped with Jones snap couplings. Hose is tested and shifted at drills. Drying facilities are not available. **Operations:** Department is governed by company by-laws. The chief officers have full control of apparatus and men at fires and drills. Motors are started weekly and at least 10 men are trained to act as drivers and operators. **Drills and Training:** Company drills consisting of pump operation and hose and ladder work are held monthly under the direction of the chief officers. **Fire Methods:** Booster lines are used on incipient fires supported by 1½- and 2½-inch lines with shut-off nozzles. **Response to Alarms:** The company responds to all alarms in their district and responds to other nearby communities on call. Outside aid may be secured from nearby departments. **Building Inspection:** None by the fire department. **Records and Reports:** Records are mainly limited to fire reports including time and nature of alarm and attendance. **Fire Alarms:** Fire alarms are telephoned through the Laurel Springs exchange to a nearby store and sounded on a siren by means of a push-button.

POLICE DEPARTMENT: None.

BUILDING LAWS: The Lindenwold building code adopted October 21, 1929, provides for the appointment of a building inspector and embodies some general construction regulations, but is not sufficiently comprehensive from a fire protection standpoint. No fire limits nor combustible roof limits are established. 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 regulations except that the 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. General local jurisdiction is exercised by the borough fire marshal.

ZONING ORDINANCE: None.