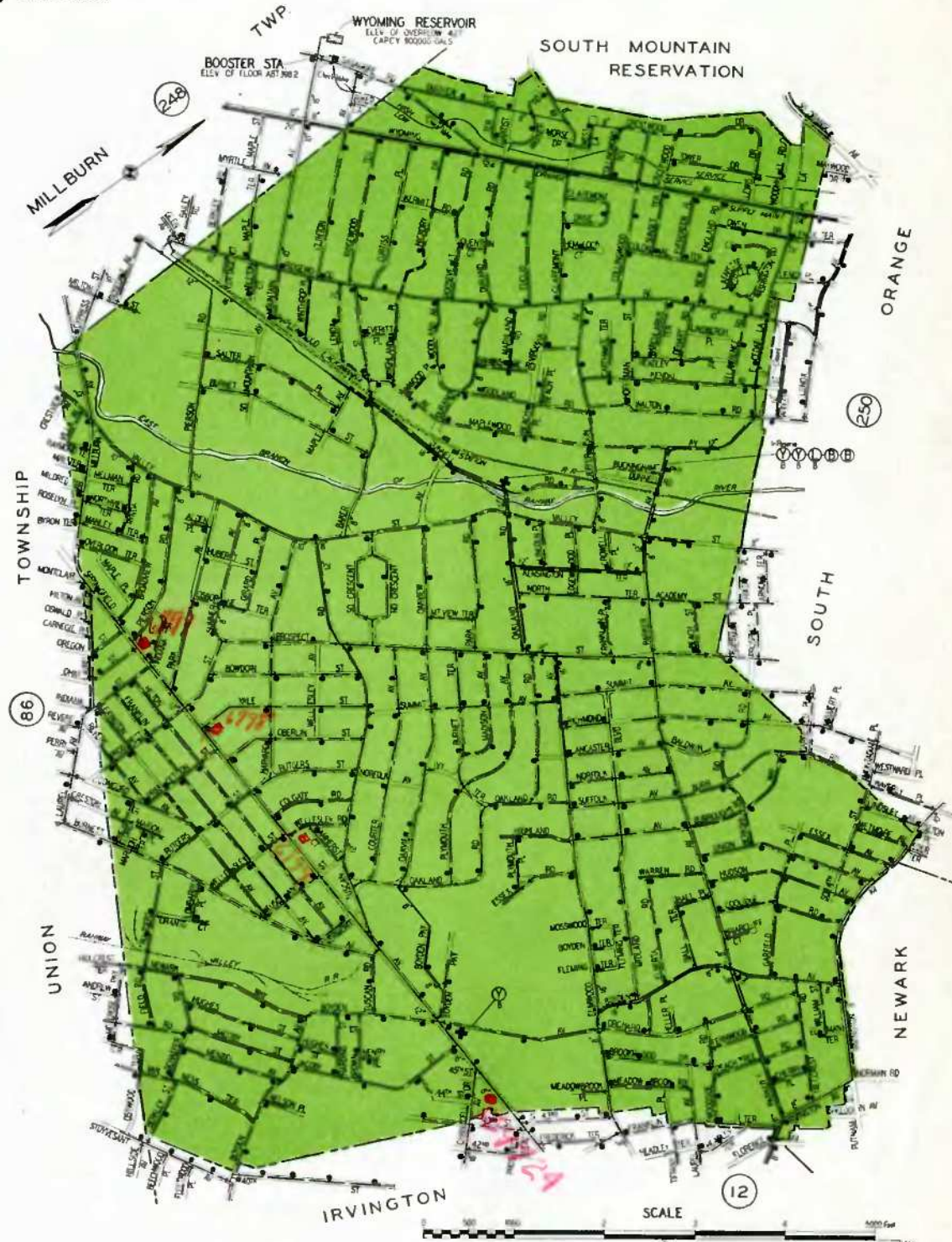


Superseding Map No. 258 of June 30, 1936.
Please destroy old issue.

(new)



KEY

PROTECTED FIRE ZONE: Shown in Green.

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

Elevations range from 110 to 440 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) Pumping engine and hose car
- (B) Booster car (L) Ladder truck
- (O) Booster tank or tanks on above

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

Maplewood Township
Essex County, New Jersey

MAY 31, 1947

MAPLEWOOD TOWNSHIP, ESSEX COUNTY, NEW JERSEY.

Population — 1940 Census — 23,139.

IN GENERAL: Located on the D., L. & W. R. R. about 7 miles west of Newark. It is a high class residential community with 15 small industries employing about 630. Area is about 4.0 square miles. Elevations range from 110 to 400 feet. Streets are all improved and in good condition. There are no railroad grade crossings, but a number of steep grades could effect delays in 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 Maplewood is principally on the Canoe Brook Low Service to the east and the Canoe Brook pumping station. A small portion in the northwest at higher elevation is supplied by the Wyoming Booster Station. The township supply is principally through two 16-inch and two 10-inch supply mains interconnected with 16-inch and 18-inch and 24-inch mains from the Canoe Brook and Short Hills Pumping Stations. The Wyoming and West Orange Reservoirs respectively in Millburn and West Orange function as equalizers for this service and provide 1.9 million gallons aggregate storage. For a detailed description of the Commonwealth Water Company system see report and map No. 245. **Distribution System:** In two services consisting of the Canoe Brook Low Service and the Maplewood High Service serving a small area along the ridge northwest of Wyoming Avenue which is supplied by the Wyoming Booster Station. 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 Maplewood, but on December 31, 1945 there were 6,142 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 3 1/2-foot cover. Total length in Maplewood, 320,252 feet; 6.4% 16-inch, 6.0% 12-inch, 3.6% 10-inch, 8.5% 8-inch, 64.1% 6-inch and 11.4% 4-inch. No trouble was reported from frozen mains or electrolysis. **Gate Valves:** There are 548 in the township of Wood, Darling, and Ludlow makes set with boxes at or near grade. Direction of operation is uniform, but there are no regular inspections of valves at the present time. **Hydrants:** There are 410 in the township of Wood, Darling, and Ludlow makes of standard type; 225 have one 4 1/2-inch and two 2 1/2-inch outlets and the balance have two 2 1/2-inch outlets. **Hose outlets** have 3-inch outside diameter with 8 threads per inch, and steamer outlets have National Standard threads; 242 have 6-inch branches, 225 of which are gated and 166 have 4-inch branches, of which 123 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 8 well distributed locations on the low service showed pressures ranging from 53 to 120 pounds with an average of 79 1/2 pounds. A reading taken at one location on the high service showed a static pressure of 72 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on October 9, 1946 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow and pressure during flow were as follows:

Low Service—

Baker St. and Maplewood Ave., 1,940—120—108.
Lafayette Circle and Washington Rd., 420—62—54.
Oakview Ave. and Valley St., 740—113—75.
Summit Ave. and Burnet Ter., 760—67—43.
Fourth St. and Essex Ave., 820—53—31.
Springfield and Boyden Aves., 1,380—64—59.
Schaefer Rd. and Newark Way, 820—84—64.
Springfield Ave. and Indiana St., 2,170—73—45.

High Service—

Tower and Lewis Drives, 480—72—22.

FIRE DEPARTMENT: A full-paid organization of 4 companies under the control of the township. Township owns houses, apparatus, and equipment and during 1946 appropriated \$78,056 for salaries and wages and \$18,590 for other expenses. Department consists of a chief, a captain in charge of the fire prevention bureau, 1 acting captain, 2 lieutenants, and 23 men who operate in alternate 10-hour and 14-hour shifts. In addition there are 3 telephone clerks who operate in 8-hour shifts and maintain constant duty at fire headquarters. Men off duty are required to remain in town and answer fire calls except on one day in 6 when they are off duty for 24 hours and may leave town. Men are not on Civil Service status, but may be retired under the State Pension Law. Vacation schedules permit one officer and three men on leave at one time. Chief and company officers are appointed by the township committee for indefinite terms. Men are promoted by the township committee on recommendation of the chief after submitting to examinations. Eleven men and one officer are on duty at all times at headquarters in addition to the telephone clerk, and 3 men are on duty at all times at Engine Company No. 2. **Companies—Engine Company No. 1:** Alternate 3 or 4 men and 1 driver are on duty at all times. Located in fire headquarters on Dunnell Road and Oakland Road. Building is a 2-story and basement brick structure with slag roof, concrete apparatus floor, steam heat, electric lights, telephone, and hose tower. **Equipment:** A 1926 American La France 1,000-g.p.m. triple combination pumping engine carrying a 100-gallon booster tank, 250 feet of booster hose, 1,000 feet of 2 1/2-inch hose, 3 all-purpose gas masks, 1 cellar nozzle, 2 short ladders, and good minor equipment. **Engine Company No. 3:** Alternate 4 and 3 men on duty at all times. Located in fire headquarters. **Equipment:** A 1936 American La France 1,250-g.p.m. triple combination pumping engine carrying a 100-gallon booster tank, 200 feet of booster hose, 1,500 feet of 2 1/2-inch hose, 3 all-purpose gas masks, 2 one-half-hour oxygen breathing masks, 2 cellar pipes, a 1,250-watt portable electric generator with 3 lights and 3,000 ft. of cable, 2 short ladders and good minor equipment. **Truck Company No. 1:** Two men and one officer on duty at all times. Located in fire headquarters. **Equipment:** A 1923 American La France 50-foot city service ladder truck carrying a 40-gallon booster tank with CO₂ for expellant, 250 feet of 3/4-inch hose, 12 ladders ranging from 12 to 50 feet and totaling 284 feet, a foam generator with 2 cans of foam powder, 1 deluge set, a cellar nozzle, 5 squeegees, 2 mops, 9 salvage covers, 3 all-purpose gas masks, 1 inhalator and good minor equipment. **Engine Company No. 2:** 3 men on duty at all times. Located in the Hilton section at Springfield and Boyden Avenues in a 2-story concrete block and stucco building with concrete apparatus floor, metal roof, steam

heat, electric lights, and telephone. **Equipment:** A 1941 American La France 750-g.p.m. triple combination pumping engine carrying a 150-gallon booster tank, 250 feet of booster hose, 1,500 feet of 2 1/2-inch hose, a cellar pipe, 2 cans of foam powder, 3 all-purpose gas masks, 2 short ladders, and good minor equipment. **In Reserve:** Located at fire headquarters. A 1917 American La France 750-g.p.m. triple combination pumping engine carrying a 40-gallon booster tank, 200 feet of booster hose, 1,000 feet of 2 1/2-inch hose, a deck gun, 2 all-purpose gas masks, 3 short ladders, and fair minor equipment. This apparatus when needed is manned by off-duty members. In addition, at fire headquarters, there is a 1946 Pontiac chief's car carrying one all-purpose gas mask and a 1937 Ford pick-up truck carrying a 40-gallon water tank with CO₂ for expellant, 200 feet of booster hose, and 2 short ladders. **Hose:** All 2 1/2-inch hose is C.R.L. with screw couplings having 3-inch outside diameter and 8 threads per inch. It is dried in hose tower at headquarters, shifted bi-monthly and tested semi-annually at 200 pounds pressure. Complete hose records are maintained showing number, make, age, repairs, and tests for each length. Of the total supply of 11,250 feet, 4,000 feet is carried on the apparatus and 7,250 feet of reserve is kept at fire headquarters. About 7,650 feet is over 5 years old and 6,550 feet is over 7 years old. **Operations:** Department is governed by township ordinance. Motors are started monthly in addition to regular use. Each shift of men has regular drivers for the apparatus. **Drills and Training:** Weekly drills are held under the supervision of the acting captain who serves as drillmaster. **Fire Methods:** Booster lines are used on incipient fires reinforced by hydrant and engine lines with shut-off nozzles. Department is provided with 15 all-purpose gas masks and two 1/2-hour oxygen breathing masks, 9 salvage covers, 3 tarpaulins, 5 squeegees, 2 mops, a supply of lath for salvage work, 1 deck gun, 1 deluge set, 3 cellar pipes, 1 foam generator, and about 500 pounds of foam powder. **Response to Alarms:** In the territory southeast of Yale Street and Summit Avenue one engine company and one truck company respond in addition to Engine Company No. 2. In the territory northwest of Yale Street and Summit Avenue two engine companies and the truck company respond from headquarters. Outside aid may be secured from the paid departments of Newark, Irvington, and South Orange in addition to the Millburn Fire Department. **Building Inspection:** A complete and well enforced fire prevention ordinance is in effect and a captain in charge of the fire prevention bureau directs quarterly inspections by the firemen. Complete records are maintained of all inspections and files kept of matters pertaining to violations. **Records and Reports:** Chief maintains complete records of all department activities and makes a monthly report to the township committee, submitting a copy of this report to the chairman of the fire committee. **Fire Alarms:** The fire alarm system is under the control of the township committee and is in charge of the superintendent of electrical equipment who maintains the system with one electrician and one lineman. **Headquarters equipment** is located in segregated rooms in the basement of the fire resistive municipal building on Valley Street. **Apparatus** is of Gamewell make and consists of a three-fold automatic Master Control Switchboard with panels for four box and two alarm circuits and automatic high rate sequence rectifier equipment. All inside wiring is in lead cable and conduit well installed and protected. Circuits are protected by 2,000-volt 3-ampere fuses, lightning arresters and 1-ampere sneak fuses in cabinet at entrance. Current for operating the system is supplied by 120 cells in six banks with 26 cells on each of four box circuits and a 24-volt local circuit battery on standard steel mounting in segregated adjoining battery room automatically charged by eight low rate rectifiers and one automatic high rate rectifier. Batteries are protected by 3-ampere fuses in standard wall cabinet at rear of switchboard. Circuits are 27 miles in length and are overhead except for one block between headquarters and Oakland Road. Wire is No. 10 hard-drawn copper, triple braided, weatherproof, carried on utility company poles below power wires. Both alarm circuits extend to police headquarters carrying a 6-inch gong at that location. One alarm circuit extends to fire headquarters and one to Engine Company No. 2. There are four gongs in the residences of the chief and captains and a register in the chief's residence, fire alarm headquarters and each fire station. There is a breakwheel transmitter at watch desk in fire headquarters. The box circuits carry 59 succession boxes, 28 of which are of three-fold type and balance are presently being replaced with same type. Boxes are mounted on utility company poles with red and white indicating bands, but no lights except that one box is pedestal mounted. Boxes are tested every four months with repeater off circuit. Circuits are tested daily for current voltage and grounds and complete record charts are maintained. Telephone alarms are transmitted direct to fire headquarters switchboard over one of two trunk lines from the public exchange neither of which are reserved exclusively for fire calls. Off-shift are called by telephone.

POLICE DEPARTMENT: Consists of a chief, captain, 3 lieutenants, 2 sergeants, and 33 men who work in 8-hour shifts and maintain constant watch at the police headquarters on Dunnell Road near fire headquarters. Police have 34 street telephone boxes with 4 recall lights and bells. There are 4 trunk telephones at the police desk. Department is provided with 9 patrol cars, 6 of which are equipped with 3-way short wave radios, a police chief's car and a Cadillac ambulance in addition to 2 motorcycles which are not in use. Police respond to all alarms of fire and report unauthorized building construction to the building inspector.

BUILDING LAWS: Code adopted August 4, 1931 provides for the appointment of a building inspector who must be qualified through experience in the building trades. The code closely follows the code recommended by the National Board of Fire Underwriters and covers fire limits, building heights, wall thicknesses, and fire stops and prohibits frame construction and wood shingled roofing within the fire limits.

FIRE PREVENTION LAWS: A fire prevention ordinance adopted July 16, 1946 closely follows the recommended fire prevention ordinance of the National Board of Fire Underwriters and in numerous instances has more stringent requirements than those in the recommended ordinance. Ordinance appears to be well enforced by the fire prevention bureau which is a part of the fire department. 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 July 16, 1940.