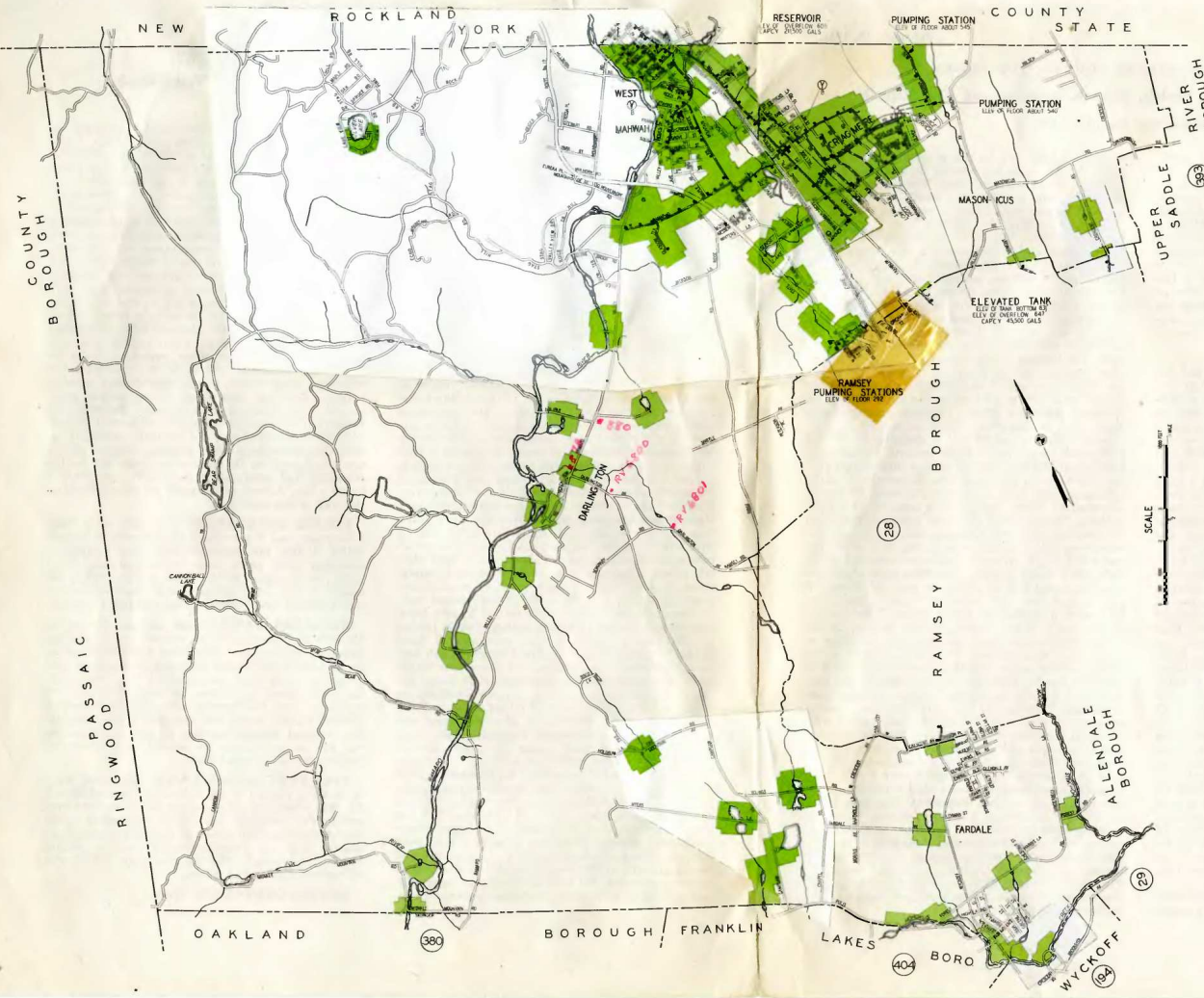


Superseding Map No. 209 of May 31, 1935. Please destroy old issue.



KEY
 PROTECTED FIRE ZONE: Shown in Green.
 Note.—For description of fire protection, etc., see other side.
 Elevations range from 220 to 1171 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 houses shown thus
 Fire apparatus designated by symbols thus:
 Automobile combination pumper and hose car
 Booster tank or tanks on above

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

Mahwah Township
 Including Cragmere, Darlington, Fardale, Masonicus and West Mahwah
Bergen County, New Jersey

FEBRUARY 15, 1947

February 15, 1947.

MAHWAH TOWNSHIP, BERGEN COUNTY, NEW JERSEY.**Including Cragmere, Darlington, Fardale, Mahwah, Masonicus and West Mahwah.****Population — 1940 Census — 3,908.**

IN GENERAL: Located in the extreme north-west corner of the county on the Ramapo River and Erie Railroad adjoining the New York State Line. It is chiefly a farming area with the western portion being mountainous and undeveloped. The Mahwah Section is fairly well built up and consists chiefly of residences, industries being limited to the American Brake Shoe Foundry and Plant. Area of township is 25.7 square miles. Elevations range from 220 to 1,171 feet. Main thoroughfares are macadam in fair to good condition, with other roads being dirt or gravel in poor condition. Two railroad crossings are not at grade. A number of steep grades in the township are said not to interfere with the response of fire apparatus.

WATER SUPPLY: Water for domestic and fire protection purposes is supplied to the Mahwah, West Mahwah, and Cragmere Sections by the Mahwah Water Company. Protection is afforded to other sections of the township by streams and ponds where natural supplies and pumping engines are available. The Mahwah Water Company owns and operates the supply works and distribution system. **Organization:** Consists of a president with a local plumber functioning as superintendent, and a clerk at the local coal yard office. Extensions are made under contract and the plumber makes minor repairs and service connections and maintains the pumping stations. Records are limited to an incomplete distribution map and some consumption tabulations. A few spare lengths of pipe and some fittings are kept at coal yard. There are no provisions for the regular response of employees to alarms of fire. **Supply Works:** Supply is normally obtained from 8 wells 300 to 655 feet deep, located near East Mahwah Road north of Airmount Road and one additional well 160 feet deep located on East Mahwah Road near the New York State Line. The latter well is of a greater capacity than the pump, the former 8 wells having aggregate capacity in excess of the combined capacities of the pumps which draft from them. In addition there are eight 10-inch wells which are not in operation. **Pumping Stations:** Main pumping station is located on East Mahwah Road north of Airmount Road as shown on map. Building is a small stone structure with concrete floor below ground level, composition on wood roof, portable oil stove for heat, and electric lights. Wiring is in conduit and housekeeping is fair. Exposures are negligible but there is no hand protection. Elevation of floor is about 540 feet. **Equipment:** Two Dean 75-g.p.m. 5-inch by 6-inch single acting triplex pumps each driven by a 5-h.p. G. E. electric motor. One Rumsey 75-g.p.m. similar unit powered by a 5-h.p. Century electric motor. These three pumps draft from wells by direct suction and discharge through

a single 4-inch line to the reservoir and elevated tank. A new pumping station is located on East Mahwah Road near the New York State Line as shown on map. Building is a small 1-story concrete block structure with composition shingle on wood roof, concrete floor, and electric heat. No lights or hand protection. Exposures are negligible. Wiring is in conduit and housekeeping is fair. Elevation of floor about 545 feet. **Equipment:** A 125-g.p.m. Deming deep well turbine, normally operated at 90 gallons per minute, direct driven by a 7½-h.p. electric motor. Pump discharges through a single 6-inch line to the reservoir and elevated tank. **Distribution System:** In two services. A small section of Cragmere at higher elevation is supplied from the elevated tank. The balance of the township is on the low service supplied by the reservoir. Supply is through one 8-inch and one 6-inch artery to a distribution system of 4-inch and 6-inch mains with little or no gridiron. **Elevated Tank:** Located near Mahwah Road east of Beveridge Road on a 31-foot steel tower. Tank is wood, 22 feet in diameter by 16 feet high, with a capacity of 45,500 gallons. Elevation of base about 600 feet. Age of tank is unknown, but it appears to be in fair condition. **Reservoir:** Located adjoining tank. It is of concrete, covered, 60 feet in diameter by 10 feet deep, with a capacity of 211,500 gallons. Elevation of base about 595 feet. Elevation of overflow 605 feet. **Consumption:** Average and maximum daily consumption during 1945 were 0.12 and 0.167 m.g.d. Accurate statistics were not available, but it was estimated that there were about 590 services, about 60% of which are metered. **Pipe:** All pipe is cast iron, tar coated, bell and spigot joint, laid with a 3½-foot to 4-foot cover. Total length 49,200 feet; 22.6% 8-inch, 51.8% 6-inch, 25.6% 4-inch. No trouble was reported from freezing or electrolysis. **Gate Valves:** There are about 37 on the system of Rensselaer and Wood makes set with iron boxes at grade. Direction of operation is not uniform and there is no regular system of inspection. **Hydrants:** There are 74 hydrants of Mathews make, of standard type. All have two 2½-inch outlets with National Standard threads. About 20% have 4-inch gated branches and the balance have 6-inch gated branches. Hydrants are inspected semi-annually. At time of inspection those operated were found to be in fair to good condition, but a high percentage were found to be set too low. **Pressures:** Readings taken at 10 well distributed locations showed pressures ranging from 22 pounds on the high service to 140 pounds on the low service and averaging 96 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:

MAHWAH TOWNSHIP, BERGEN COUNTY, NEW JERSEY.

Including Cragmere, Darlington, Fardale, Mahwah, Masonicus and West Mahwah.

Continued.

October 22, 1946—

Low Service—

Franklin Tpk. and Ramapo Ave., 680—123—78.

Mahwah and Malcolm Rds., 350—84—52.

Airmount and Armour Rds., 120—38—*.

Franklin Tpk. and Airmount Rd., 500—117—71.

Long and Meadow Aves., 310—133—20.

Ramapo Valley and Island Rds., 460—125—34.

Ramapo Ave. 600 ft. E. of Ramapo Valley Rd.,
210—135—35.

High Service—

Miller and E. Mahwah Rds., 440—22—15.

Mahwah and Beveridge Rds., 540—46—29.

November 19, 1946—

Low Service—

Franklin Tpk. 650 ft. N. of Christie Ave., 720—
140—35.

*No reading taken.

FIRE DEPARTMENT: A volunteer organization of two companies under the control of the township which owns house, apparatus, and equipment and appropriates about \$1,800 annually for the support of the department. Total active membership 50, of whom a minimum of about 10 men from each company are available at all times. Officers include a chief, 2 assistant chiefs, 2 foremen, and 2 assistant foremen who are elected annually by the companies. Elections are confirmed by the township committee. **Companies—Company No. 1:** Membership 27 men. Located in township hall on Miller Road east of Franklin Turnpike. Building is a 2-story stone structure with slate roof, concrete floor, steam heat, electric lights, telephone, and air horn on roof. **Equipment:** A 1939 Mack 750-g.p.m. triple combination pumping engine carrying a 300-gallon booster tank, 150 feet of booster hose, 1,250 feet of 2½-inch hose, a 35-foot aluminum extension ladder, 1 short ladder, a 1,250-watt portable electric generator, 3 flood lights, 3 lengths of hard suction, 1 length of soft suction, 2 all-service gas masks, and fair minor equipment. **Company No. 2:** Membership 23 men. Located in the basement of a private dwelling on Ramapo Valley Road west of Island Road in West Mahwah Section. Building is 2½-story frame and concrete block with concrete apparatus floor, composition on wood roof, steam heat, and electric lights. Quarters are small and building is not suitable for housing fire apparatus. **Equipment:** A 1929 Pirsch 500-g.p.m. triple combination pumping engine carrying two 80-gallon booster tanks, 200 feet of booster hose, 1,250 feet of 2½-inch hose, 200 feet of 1½-inch hose, 2 short ladders, and meager minor equipment. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. It is shifted and tested annually at 300 pounds pressure and repacked wet on apparatus. All hose is over seven years old, but appears to be in good condition. There is no re-

serve hose. **Operations:** Department is governed by township ordinance and company by-laws. Chief has control of apparatus at all times and of men at fires and drills. Motors are started about 4 times weekly and there are about 8 appointed drivers in each company. No other members may drive apparatus. **Drills and Training:** Semi-monthly company drills are held under the supervision of company officers. Department drills as a unit 3 times per year. Drills consist chiefly of pump operation with some hose and ladder work and use of minor equipment. **Fire Methods:** Booster lines are used on incipient fires reinforced with hydrant or engine lines with shut-off nozzles. Department is provided with 2 gas masks, but there is neither salvage nor heavy stream equipment. **Response to Alarms:** Both companies respond to all alarms within the township, with outside aid being obtained when necessary from the paid department of Suffern, N. Y., and from the volunteer departments of the neighboring municipalities. **Building Inspection:** Chief makes semi-annual inspections of schools only. **Records and Reports:** Fairly complete records are kept of all fires and drills and chief makes a monthly report to the township committee. **Fire Alarms:** Alarms of fire are telephoned to the police headquarters in the township hall where there is someone on duty 24 hours a day. Alarms are sounded on the air horn on the roof of the town hall.

POLICE DEPARTMENT: Consists of a chief, 1 sergeant, and 2 patrolmen who operate in 8-hour shifts. Police are provided with one patrol car equipped with short wave radio communicating with the Ramapo, N. Y., Town Police. Police respond to fires when possible and report unauthorized building construction to the building inspector.

BUILDING LAWS: Code adopted December 15, 1938 provides for the appointment of a building inspector and requires that plans and specifications be submitted and permit obtained for building construction. Code does not establish fire limits, but has some good provisions for protection of wall openings, wall thicknesses, chimneys and heating appliances, fire stops, and parapets. Code prohibits use of wood shingled roofing on new construction, but has no provisions for partial replacement of existing wood shingled roofs.

FIRE PREVENTION LAWS: Municipal regulations are limited to an ordinance adopted March 17, 1938 which requires a permit for all outdoor fires within the township. 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: None.