

Superseding Map No. 380 of December 15, 1934. Please destroy old issue.



KEY
PROTECTED FIRE ZONE: Shown in Green.
 Note.—For description of fire protection, etc., see other side.
 Elevations range from 500 to 1,013 feet above mean sea level
 Water mains 8 inches and larger in diameter
 Water mains 6 inches in diameter
 Fire hydrants shown thus
 Gate valves shown thus
 Fire apparatus designated by symbols thus:
 Automobile combination pumper and hose car
 Booster tank or tanks on above

Schedule Rating Office of New Jersey
 ENGINEERING DEPARTMENT
 NEWARK, N. J.

Denville Township
 Morris County, New Jersey

MAY 31, 1945

DENVILLE TOWNSHIP, MORRIS COUNTY, NEW JERSEY.

Population—1940 Census—2,927.

Summer Estimate—10,000.

IN GENERAL: Located along the Rockaway River at the junction of the Morris and Essex Division of the D. L. & W. R. R. about 6 miles north of Morristown. It is a residential community with a few small industries and extensive permanent and summer colonies with numerous natural and artificial lakes. Area about 14 square miles. Elevations range from 500 to 1,033 feet. Main thoroughfares and streets in developed residential areas are concrete or macadam. Some outlying roads are gravel in fair to poor condition. Grades are severe in some sections. Grade crossings and other features are such that there should be no serious delays in the operations of the fire department, except that heavy weekend and holiday traffic on the through highway could effect delays in response.

WATER SUPPLY: The township owns and operates the supply works, distribution system and appurtenances supplying water for domestic and fire protection purposes to Denville and a small adjoining section of Randolph Township to the west. **Organization:** Water department is under the control of the township committee and is in charge of a qualified superintendent of public works with one assistant who are appointed annually by the township committee. One clerk in municipal building performs all clerical duties. Additional laborers are hired as needed. A shop and yard are located at Well Station No. 1. A truck with emergency and repair equipment is provided and the superintendent, who is a fireman, responds to alarms. Records are fairly complete and consist of operating data, a general distribution map and details of valve and hydrant locations. **Supply Works:** Built in 1928 and supplemented during 1933 under the supervision of a consulting engineer. Supply is obtained from two deep wells equipped with automatically controlled pumps which discharge to a segregated distribution system with two storage tanks acting as equalizers. Venturi meters are installed in each well station. **Well Stations—Station No. 1:** Located in Denville Township on Dunkirk Road near Morris Avenue as shown on map. Building is a 1-story brick structure with concrete floor and roof, wood scuttle, electric lights, and coal stove. Wiring is well located in conduit. Exposure is negligible. Elevation of floor 507 feet. Well is 8-inch, 100 feet deep, equipped with a Layne-New York 285-g.p.m. deep well turbine driven by a 40-h.p. Westinghouse electric motor. Well is capable of delivering 350 gallons per minute against reduced head. **Well Station No. 2:** Located in Randolph Township about 700 feet west of Denville limits as shown on map. Building is a 1-story brick structure with concrete floor and roof, wood scuttle, electric lights, and coal stove. Wiring is well installed in conduit. Exposure is negligible.

Elevation of floor 546.4 feet. Well is 10-inch, 139 feet, equipped with a Layne-New York 570-g.p.m. deep well turbine driven by a 75-h.p. G. E. electric motor. Well is capable of delivering 660 g.p.m. against a reduced head. **Distribution System:** The distribution system is segregated into 3 services with Well Station No. 2 and a storage tank supplying a high service on the westerly territory under full tank pressure, and an intermediate service in the central portion through a pressure regulator and a low service supplied from Well Station No. 1 and a storage tank in the easterly section. A check valve on Savage Road near State Highway No. 6 permits the delivery of the supply from the low service to the intermediate service when pressures are reduced below normal. A closed valve on Diamond Spring Road west of the Rockaway River affords segregation between the intermediate and low services at that point. The distribution system consists primarily of two 8-inch arteries supplying 6-inch gridiron and some 4-inch and 6-inch dead ends. See map. **Storage Tanks—No. 1:** Located on Hill Crest Drive 1,350 feet east of Kitchell Road as shown on map. Tank is steel, 40 feet in diameter by 27 feet high with a capacity of 250,000 gallons. Elevation of base 686 feet. Elevation of overflow 213 feet. **No. 2:** Located in Denville Township about 500 feet north of Valley View Road and 1,200 feet west of Palmer Road as shown on map. Tank is steel, 62 feet in diameter by 30 feet high, with a capacity of 500,000 gallons. Elevation of base 760 feet. Elevation of overflow 790 feet. **Consumption:** The average and maximum daily consumption during the twelve-month period ending September 30th, 1944 was 0.283 and 0.556 million gallons. At time of inspection there were about 1,800 services, about 85% of which are metered. **Pipe:** All cast iron, tar coated, bell and spigot joint, Class 150 with the exception of about 3 miles of Transite, Class 150 cement asbestos pipe and a small amount of 4-inch galvanized iron pipe. Pipe is laid with about a 4-foot minimum cover and no trouble has been reported from frozen mains or electrolysis. Total length in Denville Township 169,900 feet; 2.2% 12-inch, 31.7% 8-inch, 49.2% 6-inch, and 16.9% 4-inch. **Gate Valves:** There are 141 on the system in Denville of Ludlow make set with valve boxes at grade. Direction of operation is uniform. No regular inspection practice established. **Hydrants:** There are 157 on the system in Denville mainly of Darling make of standard type with one 4½-inch and two 2½-inch outlets except that a few have only two 2½-inch outlets. Branches are 6-inch and only about 15% are gated. Hydrant outlet threads are National Standard. Hydrants are inspected twice annually and were found to be in good condition at time of inspection. **Pressures:** A direct reading gauge on the low service in the operating office at shop at about elevation 510 feet showed 95 pounds at time

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Continued.

of inspection. Readings taken at 12 well distributed hydrants showed pressures ranging from 36 to 90 pounds with an average of 68.7 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on November 13th, 1934 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow and pressure during flow were as follows:

Lake Circuit West, N. of Watch Tower Rd., 275—40—8.

Lake Circuit East at Highland Ave., 430—45—*.

Diamond Spring Rd. N. of Entrance Way, 560—60—14.

Laurelwood Dr. and Ridgewood Dr., 680—78—*.

Main St. opposite Diamond Spring Rd., 590—90—76.

Main St. and Lake Rd., 1,050—85—45.

Main St. and Station Rd., 595—76—23.

Hilltop Trail and Highland Trail, 420—36—10.

East Shore Trail S. of Lenape Trail, 440—83—35.

Broad and Mendes Sts., 455—75—15.

N. Shore Trail and Tomahawk Trail, 665—85—40.

Franklin Rd. S. of Heighwood Trail, 770—72—61.

*No reading taken.

FIRE DEPARTMENT: A volunteer organization of one company under the control of the township which owns quarters, apparatus, and equipment and appropriated \$4,000 for the support of the department during 1944. Total active membership 18. In addition 10 active members are in the armed services. A minimum of 10 members are available at all times. Officers including a chief, 2 assistant chiefs, a captain, and lieutenant, are elected annually by the company and confirmed by the township committee. **Company:** Located on Main Street south of Bloomfield Avenue, as shown on map. Building is a 2-story structure with brick veneer front, asbestos shingle roof, concrete apparatus floor, electric lights, steam heat, and siren. **Equipment:** One 1927 American La France 1,000-g.p.m. triple combination pumping engine carrying one 40-gallon booster tank, 250 feet of booster hose, 1,300 feet of 2½-inch hose, two short ladders, and some minor equipment. One 1935 American La France-Dodge 500-g.p.m. triple combination pumping engine carrying one 200-gallon booster tank, 150 feet of booster hose, 800 feet of 2½-inch hose, 2 short ladders, and some minor equipment. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. In addition to that carried on the apparatus there is 1,100 feet of reserve hose which is rolled in racks in apparatus room. Hose is shifted and tested at about

150 pounds in part at drills. Of the total supply about 75% is more than 5 years old and no adequate means are provided for drying. **Operations:** Department is governed by municipal ordinance and company by-laws, under the supervision of the chief officer and the chairman of the public safety committee. Motors are started twice weekly and there are 6 appointed drivers for each apparatus. **Drills and Training:** Company drills are held monthly under the direction of chief officers. They consist of hose and ladder work, pump operation, and use of equipment. **Fire Methods:** Hand extinguishers and booster and chemical streams are used on incipient fires supported by engine streams with shut-off nozzles. Three gas masks are provided, but lighting equipment, heavy stream appliances, and salvage appliances are lacking. **Response to Alarms:** Company responds to all township alarms and substantial outside aid may be secured from the surrounding volunteer departments at Boonton, Mountain Lakes, Parsippany-Troy Hills, Rockaway, and Dover. **Building Inspection:** Fire department building inspections are limited to investigation of complaints and annual inspection of public buildings. **Records and Reports:** Company records consist of attendance tabulations, nature of alarms and equipment used. Annual reports are made to the township committee. **Fire Alarms:** Telephoned through a modern local central office to dwelling or store near fire station and sounded on siren.

POLICE DEPARTMENT: Consists of a full paid chief and 1 officer and 20 special officers who are compensated for duty performed. Two radio equipped cars are provided.

BUILDING LAWS: Building code adopted on September 10th, 1930 and amended to April 1st, 1931 provides for the annual appointment of a building inspector, requires the approval of plans and the securing of permits for building operations, and contains many of the essential features embodied in the "Code of Suggested Ordinances for Small Municipalities" recommended by the National Board of Fire Underwriters. Fire limits including all mercantile and manufacturing areas have been established within which combustible roofs are prohibited.

EXPLOSIVES AND FLAMMABLES: Local regulations are limited to an explosives ordinance, and the 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 24th, 1929.