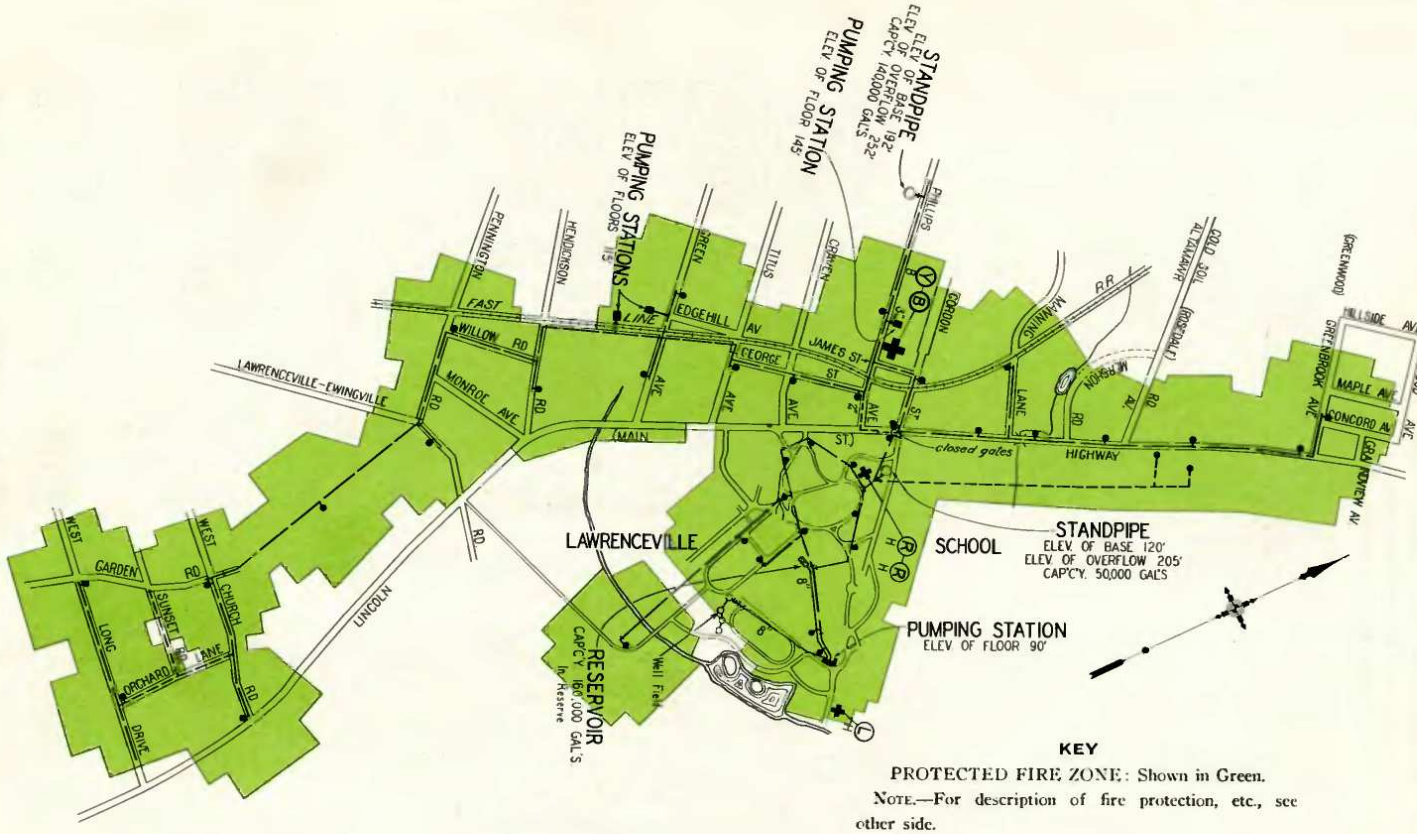

KEY

PROTECTED FIRE ZONE: Shown in Green.

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

Elevations range from 100 to 192 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) *Automobile combination pumper and hose car*

(L) *Ladder truck* (R) *Hose reel*

(B) ***Booster car*** ○ *Hand drawn apparatus*

Booster tank or tanks on above

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

Lawrenceville, Lawrence Twp.

Mercer County, New Jersey

DECEMBER 30, 1939

Superseding Map No. 309 of March 14, 1936. Please destroy old issue.

309

LAWRENCEVILLE, LAWRENCE TOWNSHIP, MERCER COUNTY, NEW JERSEY.

Population—1930 Township Census was 6,293.

Estimated Local Population 1,000.

School Attendance about 500.

IN GENERAL: A small community which is the site of the Lawrenceville Preparatory School, located about 6 miles north of Trenton and served by a trolley line operating between Princeton and Trenton. It is essentially an educational center with no manufacturing. Area of mapped portion about 1.0 square miles. Elevations range from 90 to 192 feet. Main thoroughfares, including roads on the school grounds, are improved and in fair to good condition; others are dirt in fair to poor condition. There are no conditions which should seriously interfere with the response of fire apparatus

WATER SUPPLY: Water for domestic and fire protection purposes is furnished to the Village by the Lawrenceville Water Company which owns and operates the supply works and distribution system. The school system is owned and operated by the institution and serves only the properties owned by and connected with it. The two systems are interconnected through a single 6-inch emergency connection equipped with two normally closed valves **Lawrenceville Water Company:** Organization consists of regular company officers and a part-time plumber who functions as a superintendent, operates pumps and supervises extensions and maintenance. The company has the services of a hydraulic engineer who is a stockholder. No office is maintained, but a few supplies are on hand at the Phillips Avenue Well Station. A small truck owned by the school is available for emergency work and the superintendent or the foreman at the school responds to alarms of fire. Records are very incomplete. **Supply Works:** The supply is normally obtained from two 8-inch and one 12-inch wells. The 8-inch wells each yield about 50,000 g.p.d. and the 12-inch well yields about 72,000 g p d. One 8 inch well 230 feet deep is located on Phillips Avenue the other, 180 feet deep, is located south of Green Avenue along the Fast Line R R. right of way, and the 12-inch well 150 feet deep is located on Green Avenue at Fast Line R. R. Well pumps discharge directly to the distribution system with a standpipe acting as an equalizer. **Well Stations—Phillips Avenue:** Building 1-story, small area, stucco on hollow tile, concrete floor, asbestos shingled wood roof, electric lights and gas heat. Housekeeping is fair No hand protection. Exposure negligible. Elevation of floor about 145. **Equipment:** One 40-g p m. Fairbanks-Morse turbine driven by a 5-h.p. Fairbanks-Morse electric motor **Green Avenue:** Two buildings are 1-story, small area, stucco on tile and concrete block with concrete floor, asbestos shingled wood roof, electric lights and oil heater. Housekeeping good. No hand protection. No exposure. Elevation of floor about 115 **Equipment:** One 25-g p m Myers deep well pump belt-driven by a 3-h.p electric motor One 150-g p m Worthington deep well turbine driven by a 10-h p electric motor. **Lawrenceville School:** The system is under the supervision of the Institution Head Master and Business Manager and in charge of a foreman, assisted by regular employees. The foreman functions as a superintendent who operates pumps and supervises maintenance. The services of a consulting engineer are available and the Lawrenceville Water Company superintendent assists in the maintenance of the system. Records are limited to distribution maps and operating data. **Supply Works:** The supply is normally obtained from a well field on the premises which consists of two covered shallow wells 25 feet in diameter, in one of which there is a 6 inch deep well 125 feet deep and two 6-inch deep wells 160 and 200 feet deep. The three deep wells discharge under natural head through a single header to the shallow wells, from which pumps take suction and discharge to the distribution system with a standpipe acting as an equalizer. The aggregate yield of the wells is estimated to be 500,000 g.p.d. An underground reservoir connected with a rain water collection system has a capacity of about 160,000 gallons, which is available as a source of engine supply and to the pumping equipment in emergency through a 2½-inch connection. In addition a lake on the premises affords excellent engine supply at a location about 800 feet distant from the center of the institution buildings. **Pumping Station:** Pumping equipment is located in a non-cut-off section of the boiler house and laundry. Building is a 2-story brick structure with metal and slate roof and concrete floor. No hand protection. General care and cleanliness is fair. Exposure is moderate from nearby buildings of similar and frame construction. The power house is operated in three 8 hour shifts of 2 men each. **Equipment—Domestic Service Pump:** One 81 g.p.m. Worthington 6 x 4 x 6-inch duplex steam pump. **Fire Pump:** One 350-g.p.m. Worthington 8 x 8½ x 12-inch duplex steam pump. **Boilers:** Steam for entire school is supplied by a bank of six Coatesville 150-h.p. boilers, four of which are under steam at all times, except that during vacations pressure is maintained on one unit only. Steam piping is well installed in a single loop. **Distribution System:** In two services, see map; one in village proper and one in the school premises. The two systems may be interconnected through a normally closed 6-inch connection. The village system is practically all 6-inch dead end mains and the school system consists of a single 6-inch loop with 6-inch branches to pumps, standpipe and emergency connection **Pipe:** All pipe is cast iron, tar coated, bell and spigot joint, laid with about 3½-foot cover. No serious trouble reported from frozen mains or electrolysis Total length on school system, 17,900 feet; 91 2% 6-inch, 8 8% 4-inch. Total length on school system exclusive of pump supply lines, 7,270 feet; 64.0% 6 inch, 36.0% 4-inch. **Standpipes:** The company standpipe is located on Phillips Avenue about 1,800 feet west of Main Street as shown on map It is steel, 20 feet in diameter, 60 feet high, with a capacity of 140,000 gallons Elevation of base about 192 The school standpipe is located near the extension of Gordon Street on the school premises about 300 feet east of Main Street as shown on map. It is steel, 10 feet in diameter, 85 feet high with a capacity of 50,000 gallons. Elevation of base about 120 **Consumption:** The average and maximum daily consumption on the village system is about 32,800 and 72,000 gallons. The corresponding consumption on the school system is about 55,000 and 100,000 gallons On December 31, 1938 there were about 130 unmetered connections on the village system **Gate Valves:** On the village system there are 15 of Eddy make and on the school system there are 14 of Jenkins and Wood makes. All are set with valve boxes at grade and direction of operation is uniform. They are inspected twice annually. **Hydrants:** There are 23 on the village system of Corey and Mathews makes of standard type, of which 12 have one 4½-inch and two 2½-inch outlets, and 6 inch gated branches while the balance have two 2½ inch outlets and 4 inch ungated branches. There are 15 on the school system of Corey and Mathews makes of standard type of which 9 have one 4½-inch and two 2½-inch outlets and 6 inch gated branches while the balance have two 2½-inch outlets and 4-inch gated branches. Direction of operation of all hydrants is uniform. Hydrants are inspected twice annually and at time of inspection they were found in good condition. **Pressures:** Direct reading gauges at the Phillips Avenue well station on the village system and in the pump room on the school system showed respective readings of 57 and 49 pounds at time of inspection. Pressures increase about 3 pounds with full standpipes. Readings taken at six hydrants on the village system showed pressures ranging from 42 to 60 with an average of 50 pounds Readings taken at four hydrants on the school system showed pressures ranging from 32 to 48 with an average of 41 pounds **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on January 14, 1936 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow and pressure during flow were as follows:

School System:

West corner Gymnasium, 670—48—36
N. E corner Upper House, 430—44—12.
S. W. corner Dickinson Bldg, 480—40—19.
Between Rosehill and Doris Dwellings, 50—32—0

Lawrence Water Company Village System.

Lincoln Highway and Gordon St., 450—47—10
Lincoln Highway and Greenbrook Ave, 315—47—3.
W. Long Drive and Orchard Lane, 120—52—3.

FIRE DEPARTMENT: The village department is a volunteer organization of one independent company. The township appropriates $1,000 annually for the support of three companies and in addition the Lawrenceville Company receives occasional contributions from the local preparatory school. The active membership is 29 and exempt members provide additional manning. A minimum of about 25 are available at all times. Officers including a chief, assistant chief and two lieutenants are elected annually by the company which owns house, apparatus and equipment. **Company:** Located on Phillips Avenue west of James Street as shown on map. Building 2-story brick and frame with slate roof, concrete apparatus floor, steam boiler in apparatus room, hose rack, and no telephone. **Equipment:** One 1930 Buffalo-Hale 100 g p.m. booster engine carrying three 100-gallon booster tanks, 400 feet of booster hose, four 2½-gallon extinguishers, 150 feet of 2½-inch hose, 3 short ladders and meagre minor equipment. One 1927 American La France 400-g.p.m. pumping engine carrying one 60-gallon booster tank, 1,000 feet of 2½-inch hose, 300 feet of 1½-inch hose, two short ladders and fair minor equipment. (The pump on this apparatus was rebuilt during 1935.) **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. There is 400 feet of reserve hose, and 900 feet of hose is available from the school. Hose is not over five years old and is shifted and tested at 200 pounds in part at bi-monthly drills **Operations:** The department is governed by company by-laws. The chief has full control of apparatus at all times and of men at drills and fires. Ten drivers are assigned to operate apparatus. Motors are started about twice weekly. **Drills and Training:** Company drills consisting of hose laying, pump operation and ladder work are held bi-monthly. **Response to Alarms:** The company responds to all alarms in Lawrenceville and at the school. Two other township companies are available and outside aid may be secured from Princeton and Trenton. **Fire Methods:** Booster streams and hand extinguishers supported by 1½-inch and 2½-inch engine streams are used on all fires. **Building Inspection:** None by fire department. **Records and Reports:** Records are incomplete and consist chiefly of alarm and attendance at fires and drills, and reports are made monthly to the County Fire Chiefs' Association **Fire Alarms:** Telephoned to the chief's home or place of business and sounded on a split locomotive tire and two sirens on the school premises

SCHOOL FIRE BRIGADE: A complete organization of students in charge of the Head Master, two fire chiefs and sixteen masters has been established The brigade drills occasionally in life saving and fire extinguishment to the extent that about six complete drills are held each year. **Equipment:** Two hand drawn hose reels each carrying 450 feet of new 2½-inch C.R.L. hose housed in cut-off brick extension to the Dickinson House near the main entrance. One hand drawn ladder truck carrying ladders ranging from 12 to 40 feet and totaling 112 feet, 1 life net, 2 axes, 2 bars, 1 pick, 4 pike poles, 4 lanterns and 1 pulldown hook, housed in a cement block and frame open garage located in the extreme easterly portion of the building group. Two 40-gallon portable chemical engines are housed at the Brook and George dwellings located near the Main Street at the extreme southerly and northerly sections of the premises.

POLICE DEPARTMENT: Consists of a uniformed chief and five uniformed patrolmen and numerous special officers subject to call

BUILDING LAWS: Code adopted in 1922 provides for the appointment of a building inspector, requires that plans and specifications be filed and permits secured for building operations. Beyond designating size of chimneys and their projection above the roof, they are of little value from a fire protection standpoint. No fire limits established, and wood shingle roofs are not prohibited.

EXPLOSIVES AND FLAMMABLES: No local regulations The state laws adequately cover the storage and shipment of explosives and regulate the construction of motion picture booths. They also restrict the use of fireworks to responsible bonded parties.