

**KEY**

**PROTECTED FIRE ZONE:** Shown in Green.

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

Elevations range from 10 to 101 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  
 (Q) Booster tank or tanks on above (B) Booster car

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

**Blackwood  
 Gloucester Township  
 Camden County, New Jersey**

**DECEMBER 31, 1948**

**BLACKWOOD, GLOUCESTER TOWNSHIP, CAMDEN COUNTY, NEW JERSEY.**

Population — 1940 Township Census — 6,198. Estimated Local Population about 1,200.

**IN GENERAL:** Located on the Pennsylvania-Reading Seashore Lines Railroad about 10 miles south of Camden. Mainly a residential district with some seasonal development along Blackwood and Morgan Lakes. Three small plants employ about 76. Area of mapped portion about 0.5 square miles. Elevations range from 10 to 104. Main thoroughfares are concrete or macadam; other roads are gravel in fair condition. Two railroad crossings at grade and traffic on the Black Horse Pike could effect delays in the response of fire apparatus.

**WATER SUPPLY:** Water for domestic and fire protection purposes is supplied to Blackwood only by the Blackwood Water Company. **Organization:** System is in charge of a manager with office in Camden and a superintendent who is a local plumber and makes extensions and service connections. A consulting engineer is employed when needed. Plumber has a truck, and a shop is located at pumping station. There are no provisions for the response of employees to alarms of fire. Records are limited to an incomplete distribution map and pumping statistics. **Supply Works:** Built in 1908. Water is obtained by direct suction from one 6-inch well 120 feet deep and through a low lift deep well turbine from an 8-inch well 387 feet deep which discharges to a 14,000-gallon receiving basin. A similar 6-inch direct suction well was out of service at time of inspection. High lift pumps take suction from a header on the 6-inch wells or from the receiving basin and discharge to the distribution system with an elevated tank acting as an equalizer and providing storage. The deep well pump is housed in a small cement block building to the rear of the pumping station; it consists of a 0.36-m.g.d. Fairbanks-Morse deep well turbine automatically driven by a 7½-h.p. Fairbanks-Morse electric motor. The aggregate yield of the field is estimated to be 0.415 m.g.d., of which about .055 m.g.d. can be obtained from the 6-inch wells. **Pumping Station:** Located on Church Street at Morgan Lake as shown on map. Building is a 1-story brick structure with wood and concrete floors, slate roof, stove, and electric lights. No telephone installed. Elevation of pump room floor about 10. Housekeeping fair. No hand protection. Exposures negligible. **Equipment:** One 7-inch by 8-inch Deming triplex pump rated at 0.346 m.g.d. but normally operated at 0.115 to 0.174 m.g.d. by an 11-h.p. water wheel. This unit can be operated at capacity when water is available and during fire flow demand ample water power would be available in lake storage. One 7-inch by 8-inch Deming triplex pump rated at 0.36 m.g.d. driven by a 15-h.p. G. E. motor. **Elevated Tank:** Located on Prospect Street near Race Street as shown on map. Unit is steel on a 60-foot steel tower with base at about elevation 90. It is 16 feet in diameter by 30 feet high with a capacity of 30,000 gallons. Elevation of overflow 180 feet. **Consumption:** The average and maximum daily pumpage during 1947 were 0.0968 and 0.129 m.g.d. respectively. There are about 300 live services, practically none of which is metered. **Distribution System:** In one service of incomplete 4-inch and 6-inch gridiron without adequate artery reinforcement; see map. **Pipe:** Cast iron, tar coated, bell and spigot joint, laid with about a 3-foot cover. No recent trouble from frozen mains or electrolysis. Total length, 20,600 feet; 46.6% 6-inch, 53.4% 4-inch. **Gate Valves:** There are 31 on the system of Wood make. Direction of operation is uniform. Set with iron boxes at grade, except that a few are below grade. Inspected and operated only when necessitated by system maintenance. **Hydrants:** There are 34 on the system of Wood make with 4-inch barrels and 4-inch ungated branches and two 2½-inch outlets. Hydrant outlets have 3-inch outside diameter with 8 threads per inch. They are inspected twice annually, and at time of inspection they were in good condition. **Pressures:** Readings taken at 4 well distributed hydrants showed pressures ranging from 33 to 45 pounds with an average of 40.5 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured by means of Pitot tubes. Loca-

tion of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Black Horse Pike and Church St., 404—33—5  
Black Horse Pike and Lake Ave., 414—42—4.  
Lake Ave. opposite Pine Ave., 282—45—2  
Lake Ave. and Jersey Ave., 500—42—\*.  
Indiana Ave. and Clementon Rd., 197—\*—\*

\*No reading taken.

**FIRE DEPARTMENT:** A volunteer organization of one company partially under the control of the township. Company owns house and township owns apparatus and equipment and makes an annual appropriation for the support of the department. Total active membership 20, of whom a minimum of 8 are available at all times. Officers, including a chief and assistant chief, are elected by the company annually and confirmed by the township committee. **Blackwood Fire Company No. 1:** Located on Central Avenue west of Main Street (Black Horse Pike) as shown on map. Building is a 2-story concrete block structure with composition shingled roof, concrete apparatus floor, steam heat, electric lights, telephone, and roof siren. **Equipment:** One 1929 Buffalo-Studebaker 500-g.p.m. triple combination pumping engine carrying one 100-gallon booster tank, 150 feet of booster hose, 1,200 feet of 2½-inch hose, 400 feet of 1½-inch hose, one all-purpose gas mask, two short ladders, and meager minor equipment. A 1936 Ford booster car with a 100-g.p.m. booster pump, two 240-gallon booster tanks, 200 feet of booster hose, one all-purpose gas mask, one 30-foot ladder, and some brush-fire equipment. **Hose:** All 2½-inch hose is C.R.L. with Jones Snap couplings. No hose is over 2 years old and there is none in reserve. Hose is not regularly tested and there are no suitable provisions for drying. **Operations:** Company is governed by by-laws and municipal ordinance. The chief has full control of apparatus and of men at fires and drills. Motors are started every two or three days and there are 8 appointed drivers. **Drills and Training:** Monthly company drills are held under the direction of the chief officers. They consist of pump operation, hose laying, and some ladder work. **Fire Methods:** Booster streams are used on incipient fires reinforced by engine streams with shut-off nozzles. Department is provided with 2 all-purpose gas masks, but no heavy stream appliances nor salvage equipment. **Response to Alarms:** The company responds to all township alarms and aid may be secured from numerous surrounding volunteer departments including Chews Landing, Glendora, Laurel Springs, Clementon, and Woodbury. **Building Inspection:** Annual inspections of mercantile occupancies are made by designated firemen. No suitable municipal regulations for control of hazardous conditions. **Records and Reports:** Records are incomplete and consist of time of alarm, location, and attendance. Chief makes an annual report to the township committee. **Fire Alarms:** Telephoned through local exchange to home or place of business of member and sounded on siren by means of push buttons located in business district and on fire station.

**POLICE DEPARTMENT:** Consists of 3 uniformed township officers. One patrol car is provided.

**BUILDING LAWS:** Code adopted April 1, 1946 has some good provisions regarding wall thicknesses, chimneys, and fire stops, but does not establish fire limits nor restrict the use of flammable roof covering materials and is not sufficiently comprehensive from a fire prevention standpoint.

**FIRE PREVENTION LAWS:** No municipal regulations. State laws adequately cover the storage and shipment of explosives, the transportation of flammables, and the construction of motion picture booths. They also restrict the discharge of fireworks to responsible bonded parties.

**ZONING ORDINANCE:** None.