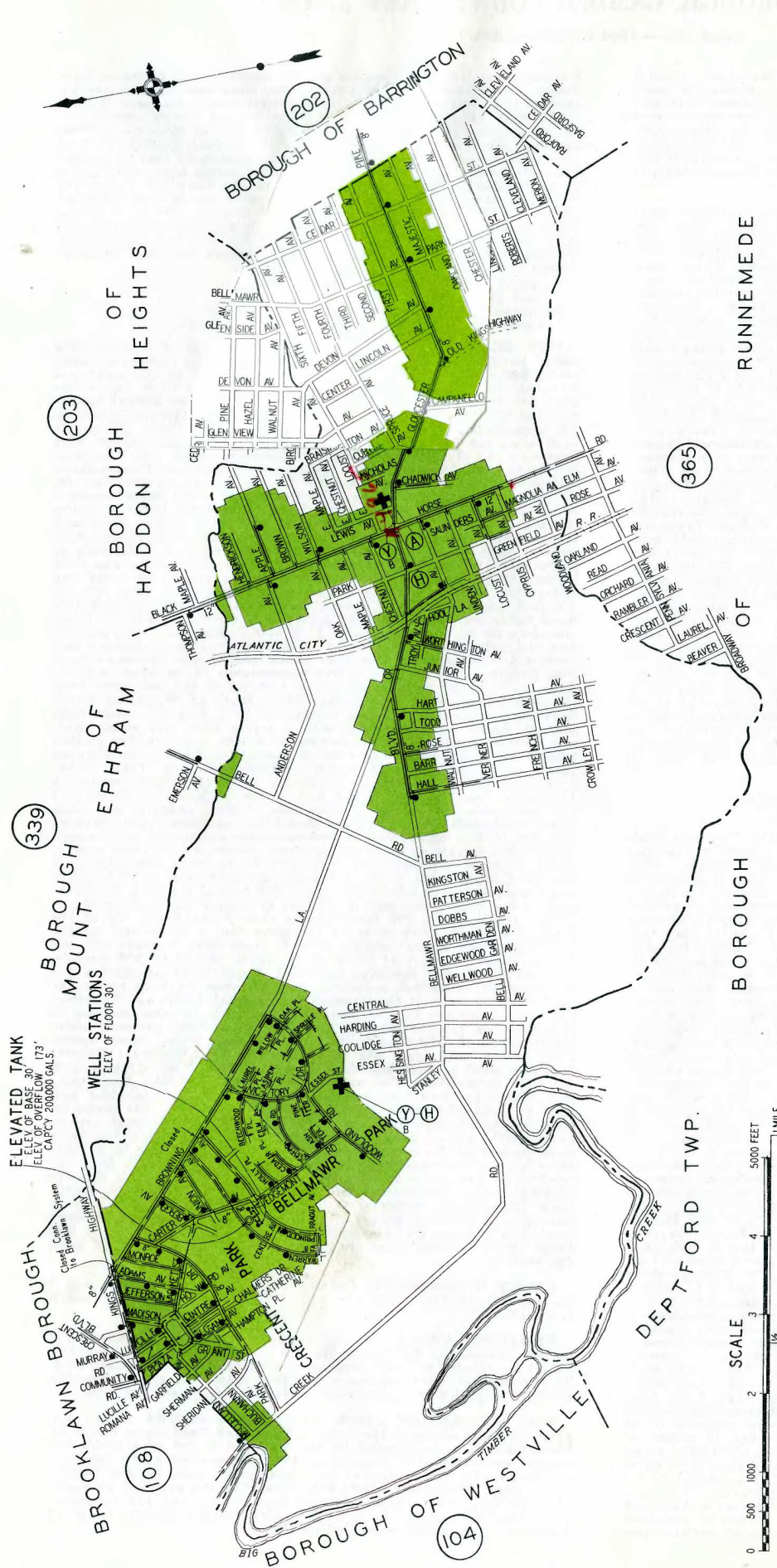


Superseding Map No. 396 of October 31, 1933. Please destroy old issue.



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

Bellmawr Borough
Camden County, New Jersey

MAY 31, 1948

KEY

PROTECTED FIRE ZONE: Shown in Green.
NOTE.—For description of fire protection, etc., see other side.

Elevations range from 0 to 83 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:

Ⓢ Pumping engine and hose car

④ Hose car

Ⓐ Ambulance, Squad or Auxiliary car

Booster tank or tanks on above

BELLMAWR BOROUGH, CAMDEN COUNTY, NEW JERSEY.

Population — 1940 Census — 1,250.

IN GENERAL: Located on the Black Horse Pike about 5 miles south of the City of Camden. It is a residential community of small dwellings with a Government housing project at Bellmawr Park and an adjoining development at Crescent Park in the westerly portion of the Borough, and a few small scattered mercantile risks. Area about 2.9 square miles. Elevations range from 0 to 83 feet. Main thoroughfares and streets in built-up portions are macadam in fair to good condition. Some secondary streets in outlying areas are gravel in fair to poor condition.

WATER SUPPLY: Water for domestic and fire protection purposes is furnished to the easterly area along the Black Horse Pike by the New Jersey Water Company and to the Crescent Park and Bellmawr Park areas in the westerly portion of the borough by a municipally owned and operated system. New Jersey Water Company System: The supply from this system is delivered through a 12-inch main in the Black Horse Pike from the 6-inch Haddon Heights and Runnemede distribution systems respectively to the north and south served by this company. For details as to organization, supply works, pumping station, and storage facilities see report on Haddon Heights with map No. 203. **Consumption:** The average and maximum daily consumption during 1946 in the entire territory served on the Haddon Division (8,524 services) was 2,329 and 2,374 million gallons. On September 30, 1947 there were 262 services in Bellmawr and 8,849 on the Haddon Division as of this date, all of which were metered. In addition to these services, water is supplied at wholesale to Mount Ephraim on which system there is an average daily demand of approximately 0.10 million gallons. **Distribution System:** In one service consisting primarily of the 12-inch artery with a crossing 8-inch artery supplying a few short dead end 6-inch lines. Pipe: Pipe is cast iron, tar coated, bell and spigot joint, some of which is cement lined, laid with a 3 1/2-foot cover. Total length, 19,500 feet; 20.0% 12-inch, 43.1% 8-inch, and 36.9% 6-inch. No trouble reported from frozen mains or electrolysis. **Gate Valves:** There are 35 on this system in Bellmawr of Rensselaer make set with iron boxes at grade. Direction of operation is uniform and valves are subject to occasional complete service and are operated annually. **Hydrants:** There are 17 on the system in Bellmawr of Corey make of standard type. All have one 4 1/2-inch and two 2 1/2-inch outlets. Small hydrant outlets are Jones Snap fittings. The large outlets have 7 threads per inch with 5-9/16 inches outside diameter. Hydrants are inspected twice annually and were found to be in good condition at time of inspection. **Pressures:** Pressure recording gauge in water company office in Haddon Heights at about elevation 89 shows pressures to be well maintained between 47 and 52 pounds, averaging about 48 pounds during the day. Readings taken at 3 well distributed hydrants showed pressures ranging from 51 to 65 pounds with an average of 59 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on October 23, 1947 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Gloucester Pike and Park St., 580—61—13.5.
Black Horse Pike and Walnut Ave., 830—65—19.5.
Bellmawr Blvd. and Hart Ave., 450—51—10.

Municipal Water System: This system serves the Crescent Park area through municipally owned and operated supply works and distribution system and supplies the adjoining Bellmawr Park Housing Project system through a master meter. This system is in charge of an experienced well qualified superintendent who performs all duties with assistance from the Road Department and additional laborers as needed, and is subject to annual appointment. Records consist primarily of original drawings and very complete operating data. Very complete records based on field survey of actual installation were being prepared by the superintendent at time of inspection. **Supply Works:** Supply is obtained from two 12-inch wells 162 feet and 164 feet deep, each yielding 1.44 m.g.d. equipped with pumps rated at 600 g.p.m. Deep well pumps discharge to an adjacent elevated tank which supplies the distribution system by gravity. A connection with a 6-inch master meter supplying Bellmawr Park connects to the discharge line near the pumping station. **Pumping Station:** Pumping stations housing deep well pumps are small brick structures with asbestos shingle wood roofs, concrete floors, electric lights, and coal stoves. Elevation of floors about 30 feet. **Equipment:** Two 600-g.p.m. Cook deep well turbines driven by 50-h.p. U. S. motors. Pumps are used alternately and are automatically controlled. **Distribution System:** In one service consisting of an 8-inch discharge main from the supply works supplying a small 8-inch and 6-inch gridironed system and elevated tank in Crescent Park. There is a 6-inch connection with master meter to a small 6-inch distribution system serving Bellmawr Park. The two distribution systems are also interconnected by a normally closed valve on Browning Lane near Princeton Avenue to the northeast of the supply works and elevated tank. **Elevated Tank:** Located near Carter and Browning Avenues as shown on map. It is a steel unit 38 feet in diameter with a height of 17 feet 6 inches above the 125 foot 6 inch steel tower with a capacity of 200,000 gallons. Elevation of base 30 feet. Elevation of overflow 173 feet. **Consumption:** The average daily pumpage during the first nine months of 1947 was 0.17 million gallons. It is estimated that the maximum daily consumption is 0.31 million gallons. At the time of inspection there were approximately 280 metered services in the Crescent Park area and approximately 500 unmetered services in the Bellmawr Park area served through the master meter. **Pipe:** All pipe on the municipal system in Crescent Park is cast iron, tar coated, bell and spigot joint. That in the Bellmawr Park area is Transite. All pipe is laid with about 3-foot cover. Total length on the municipal system in Crescent Park, 9,100 feet; 28.6% 8-inch, 71.4% 6-inch. Total length in Bellmawr Park, 13,900 feet; 61.1% 6-inch, and 38.9% 4-inch. No trouble reported from frozen mains or electrolysis. **Gate Valves:** There are 40 valves of R. D. Wood make in Crescent Park and 35 valves of Mueller make in Bellmawr Park, all set with iron boxes at grade. Direction of operation is uniform and inspection is limited to that necessitated by hydrant maintenance. **Hydrants:** There are 17 hydrants on the system in the Crescent Park area of Mueller and Mathews makes, and 19 in the Bellmawr Park area of Mathews make; all are of standard type with two 2 1/2-inch and one 4 1/2-inch outlets. Small outlets have

6 threads per inch and 3 inches outside diameter. All hydrants have 6-inch gated branches. Hydrants on the municipal system are inspected four times per year by the superintendent, and those in Bellmawr Park are inspected frequently by housing project employees. All were found to be in good condition at time of inspection. **Pressures:** A direct reading pressure gauge in Pumping Station No. 1 at the elevated tank showed a pressure of 67 pounds at time of inspection with tank at minimum level maintained under automatic operation. Readings taken at one hydrant in the Crescent Park area showed a static pressure of 65 pounds, and one in the Bellmawr Park area showed a static pressure of 57 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on October 3, 1947 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Crescent Park Section—
Park Dr. and Center Ave., 1,160—65—28.
Bellmawr Park Section—
Victory Dr. east of Woodland Rd., 700—57—30.

FIRE DEPARTMENT: A volunteer organization of 2 companies under partial control of the borough which owns quarters, apparatus, and equipment of Company No. 1. Located in the municipal building. Quarters and apparatus of the Bellmawr Park Fire Company are owned by the company. Borough makes an annual appropriation for the support of the companies. Total active membership 80; a minimum of 15 of whom are available at all times. Officers in each company include a chief and 2 assistant chiefs, except that Company No. 1 has one additional assistant chief and Company No. 2 has a chief engineer and 2 lieutenants in addition. **Companies—Bellmawr Volunteer Fire Company No. 1:** Active membership 40, of whom a minimum of 10 to 12 are available at all times. Located in municipal building on Browning Lane (Gloucester Pike) at Lewis Avenue as shown on map. Building is a 2-story cinder block and frame structure with concrete floor in apparatus room, composition covered roof, oil-fired hot air heat, and siren on roof. Telephone in police headquarters adjacent to apparatus room. **Equipment:** One 1942 Hahn 500-g.p.m. triple combination pumping engine carrying one 350-gallon booster tank, 500 feet of 2 1/2-inch hose, 350 feet of 1 1/2-inch hose, 250 feet of booster hose, two 500- and one 250-watt flood lights and one 1,250-watt generator, 2 short ladders, and fairly complete minor equipment. One 1938 G.M.C. hose car carrying 500 feet of 2 1/2-inch hose, 150 feet of 1 1/2-inch hose, 2 short ladders, and some minor equipment. One 1941 Buick ambulance. **Bellmawr Park Fire Company No. 2:** Total active membership 39, of whom a minimum of 5 are available at all times. Located in the Bellmawr Park Housing Development near Essex Street south of Woodland Road. Building temporarily housing apparatus is a 1-story composition covered frame one-car garage with concrete floor, hot water heat, and electric lights. The construction of a new masonry fire station nearby was contemplated at time of inspection. Siren is installed on tower of community hall nearby. **Equipment:** One 1946 Ward-Lafayette 500-g.p.m. triple combination pumping engine carrying a 150-gallon booster tank, 1,200 feet of 2 1/2-inch hose, 500 feet of 1 1/2-inch hose, 300 feet of booster hose, 2 short ladders, and some minor equipment. One 1930 Ford Model "A" auxiliary truck carrying 200 feet of 2 1/2-inch hose and meager minor equipment was temporarily kept outside at time of inspection. **Hose:** All 2 1/2-inch hose is C.R.L. That in Company No. 1 carries Jones Snap couplings, and that in Company No. 2 has 6 threads per inch with 3-1/32 inches outside diameter. In addition to the 1,000 feet of 2 1/2-inch hose carried on the apparatus there is 200 feet in reserve at Company No. 1. Of the total supply 400 feet is more than 5 years old. All of the 1,400 feet of 2 1/2-inch hose at Company No. 2 is carried on the apparatus, and of this supply none is more than 5 years old. All hose is tested in part at drills at pressures of 250 to 300 pounds. No suitable drying facilities provided. **Operations:** Companies are governed by municipal ordinance and company by-laws under the general supervision of the borough fire marshal. **Drills and Training:** Company drills are held at least twice monthly in good weather in Company No. 1, and weekly in Company No. 2. They are held under the direction of chief officers and consist of hose laying, pump operation, ladder work, and use of appliances. **Fire Methods:** Booster lines are used on incipient fires supported by engine streams with 1 1/2-inch leader lines. Two salvage covers, 8 gas masks, foam solution equipment, and foam nozzles and applicators are provided and used to good advantage. No heavy stream appliances are installed. **Response to Alarms:** Both companies respond to all borough alarms and outside aid may be obtained from the surrounding volunteer departments at Runnemede and Mount Ephraim. **Building Inspection:** No regular inspections by the fire department except that annual visits are made to schools and public buildings and the fire marshal makes inspections of new construction and investigates fires. **Records and Reports:** Company records consist primarily of fire reports showing nature of alarm, attendance, and equipment used. **Fire Alarms:** Fire alarms are telephoned to police headquarters from which location they are sounded on sirens at or near each fire station.

POLICE DEPARTMENT: Consists of a chief, 2 patrolmen, and 2 special officers. One radio car is provided and 24-hour desk watch is maintained.

BUILDING LAWS: A building code modeled on the Code of Suggested Ordinances for Small Municipalities published by the National Board of Fire Underwriters was adopted in September, 1933. This ordinance provides for a building inspector, establishes fire limits, and prohibits combustible roofs throughout the borough.

FIRE PREVENTION LAWS: An ordinance modeled on the fire prevention ordinance in the Code of Suggested Ordinances for Small Municipalities recommended by the National Board of Fire Underwriters was adopted in September, 1933. It provides fairly complete regulations for the control of such hazards as exist in this type of community. 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.