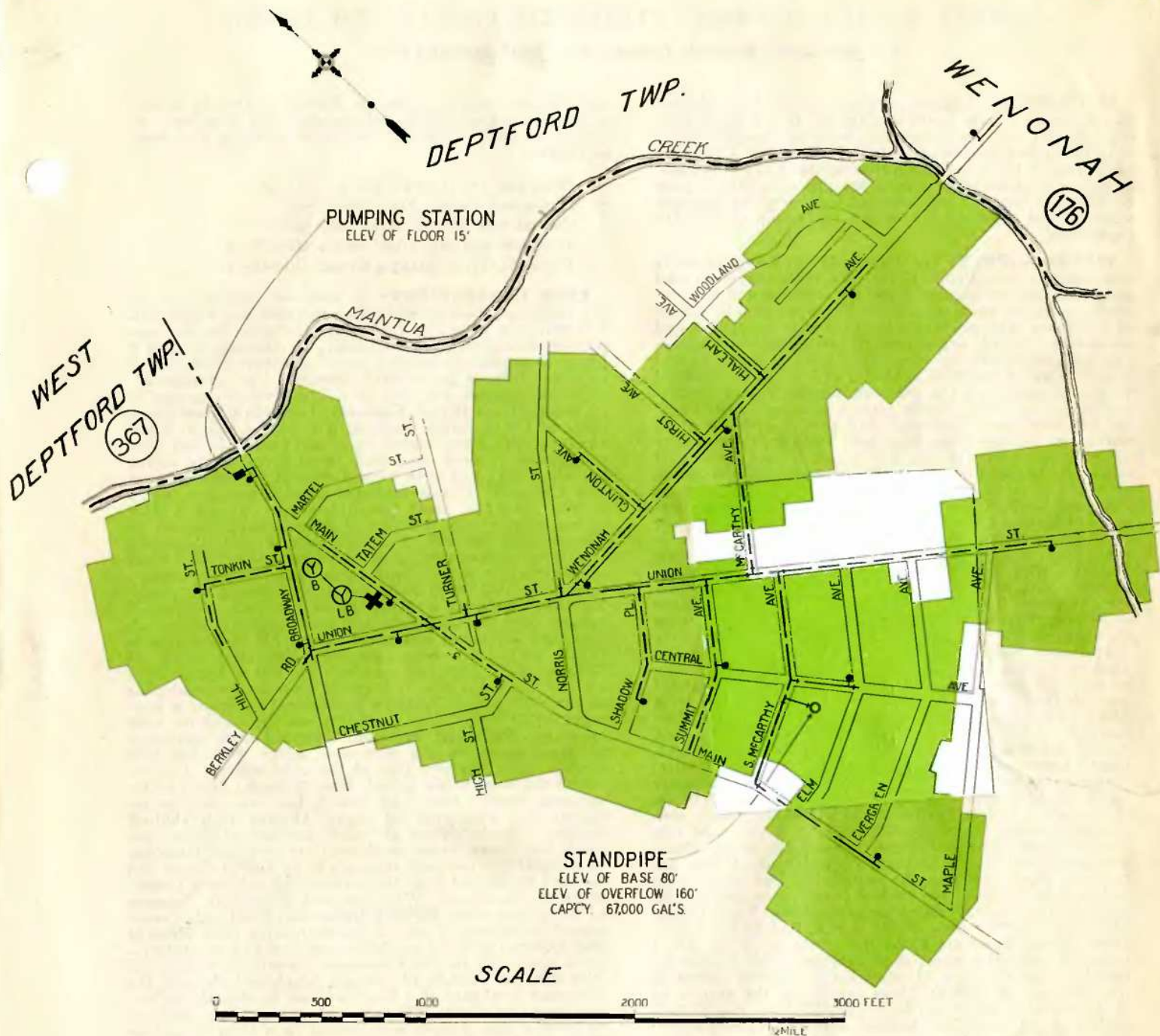


#329



KEY

PROTECTED FIRE ZONE: Shown in Green.

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

Elevations range from 0 to 80 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:

⊙ Automobile combination pumper and hose car

○ Ladders on above

⊙ Booster tank or tanks on above

The Fire Insurance Rating
Organization of N. J.
ENGINEERING DEPARTMENT
NEWARK 2, N. J.

Mantua, Mantua Township
Gloucester County, N. J.

NOVEMBER 15, 1945

MANTUA, MANTUA TOWNSHIP, GLOUCESTER COUNTY, NEW JERSEY.

Population—1940 Township Census: 2,433. Local Estimate: 1,500.

IN GENERAL: Located on the south bank of Mantua Creek about 11 miles south of Camden. It is a small residential community with no manufacturing establishments. Area of mapped portion about 0.55 square miles. Elevations range from 0 to 80 feet. Main thoroughfares are paved and in good condition; other streets are gravel in fair to poor condition. There are no unusual conditions or features which would adversely affect the operations of the fire department.

WATER SUPPLY: The Mantua Water Company owns and operates the supply works, distribution system, and appurtenances and supplies water for domestic and fire protection purposes to Mantua only. The system is in charge of the owner who employs a local plumber for repairs and extensions. Records are limited to an incomplete distribution map and operating data. Meter shop at pumping station. The owner responds to alarms of fire, but no equipped vehicle or supply yard is provided. **Supply Works:** Supply is obtained by direct suction from 3 wells, one 3-inch well 210 feet deep, one 4½-inch well 210 feet deep, and one 8-inch well about 285 feet deep. Each well has a capacity of over 100 gallons per minute. The 8-inch well is used for normal operation. Wells discharge to the system with the standpipe acting as an equalizer and providing some storage. **Pumping Station:** Located on Broadway, about 150 feet south of Mantua Creek, as shown on map. Building is a low small area concrete structure with wire glass windows in pump room and ordinary communication to a cinder block extension with composition covered wood roof, coal stove, electric lights, and plain glass windows. Exposure is moderate to severe from a 2½-story frame building at a distance of 20 feet. Fuel is stored in outside buried tanks. A non-standard gasoline tank and pump is installed in station. Elevation of floor about 15 feet. **Equipment:** One 100-g.p.m. Deming 5½-inch by 6-inch triplex pump belt driven from an overhead shaft by a 10-h.p. Fairbanks-Morse Diesel engine. A 7-inch by 8-inch Gould triplex pump driven by a 25-h.p. Fairbanks-Morse Diesel engine. **Distribution System:** In one service consisting of a 6-inch artery with 3-inch, 4-inch, and 6-inch unsupported branches; see map. **Standpipe:** Located on South McCarthy Avenue south of Central Avenue as shown on map. It is steel, 12 feet in diameter by 80 feet high with a capacity of 67,000 gallons. Elevation of base about 80 feet. **Consumption:** The average daily consumption during 1944 was 0.022 m.g.d. It is estimated that the maximum daily consumption was 0.038 m.g.d. There are approximately 225 services, of which about 80% are metered. **Pipe:** Cast iron, tar coated, bell and spigot joint and steel, laid with 3-foot to 4-foot cover. No serious trouble reported from frozen mains or electrolysis. Total length, 14,000 feet; 5.7% 3-inch, 57.2% 4-inch, and 37.1% 6-inch. **Gate Valves:** There are 20 on the system of R. D. Wood make set with valve boxes at or near grade. No regular inspection. The direction of operation is uniform except in one instance. **Hydrants:** There are 16 on the system of R. D. Wood make of standard type. All have two 2½-inch outlets except one 3-inch hydrant with one 2½-inch outlet. About 35% have 4-inch barrels and 55% have 4-inch branches; the balance have 5-inch barrels and 6-inch branches, and branches are 35% gated. Outlet threads are National Standard. Hydrants are inspected annually and were in fair to good condition at time of inspection. **Pressures:** No recording gauge on the system. A direct reading gauge at the pumping station at about elevation 19 showed 60 pounds with standpipe about 7 feet below the full level. Readings taken at 5 well distributed hydrants at the time of the original survey showed pressures ranging from 25 to 43 with an average of 35 pounds. Readings taken at time of inspection showed them to average about 44 pounds. **Fire Flow Tests:** Probable supply available for fire protec-

tion purposes was measured on March 2d, 1927 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow and pressure during flow were as follows:

Broadway and Tomkin St., 410—38—0.
Union and Turner Sts., 530—35—11.
Central and Summit Aves., 340—25—0.
Wenonah and McCarthy Aves., 470—35—8.
Union St. W. of Mantua Creek, 310—43—0.

FIRE DEPARTMENT: A volunteer organization of one company which owns house, apparatus, and equipment. The township makes an annual appropriation for the support of the department. Total active membership 13, plus 6 junior members, including a chief, assistant chief, and 2 foremen. Officers are elected annually. The average response to daytime fires is 5 men. The average response to nighttime fires is 15 men. **Company:** Located on Main Street north of Union Street. Building is a 2-story cement block structure with frame second story and frame addition with composition covered wood roof, wood floor, electric lights, hot water heat, and siren located on roof. **Equipment:** One 1937 Diamond "T" quadruple combination pumping engine with a 500-g.p.m. front mounted pump carrying a 325-gallon booster tank, 200 feet of booster hose, 300 feet of 2½-inch hose, 400 feet of 1½-inch hose, 4 ladders ranging from 16 to 40 feet, totaling 94 feet, 4 salvage covers, 1 flood light generator with 2 flood lights, and fair minor equipment. One 1945 Mack 500-g.p.m. triple combination pumping engine carrying a 200-gallon booster tank, 150 feet of booster hose, 200 feet of 1½-inch hose, 1,500 feet of 2½-inch hose, and fair minor equipment. **Hose:** All 2½-inch hose is C.R.L. with Jones Snap couplings. The total supply of 2½-inch hose is 1,800 feet, of which 500 feet is over 7 years old and 500 feet is new. It is tested about 3 times each year at about 120 pounds pressure. **Operations:** Company is governed by by-laws. Three operators are appointed for each apparatus. **Drills and Training:** Company drills consisting of pump operation and hose and ladder work are held weekly under the direction of the chief officers. Officers attend the county fire school. **Fire Methods:** Hand extinguishers, booster lines, and 1½-inch lines are used on incipient fires supported by engine streams with shut-off nozzles. Salvage covers are used, but no all-service gas masks nor heavy stream appliances are provided. **Response to Alarms:** The company responds to all district alarms and aid may be secured from the surrounding volunteer departments in Woodbury, Wenonah, and Pitman at distances of one to four miles. **Building Inspection:** Chief makes semi-annual inspections of schools and mercantile risks. **Records and Reports:** Records are fairly complete and monthly reports are made to the Gloucester County Fire Marshal. **Fire Alarms:** Alarms of fire are telephoned through the Wenonah Exchange to 2 locations, one for day alarms and one for night alarms. There is someone at these locations 24 hours a day. Alarms are sounded on a siren located on the roof of the fire house.

POLICE DEPARTMENT: There is no regular township department, but special officers are available. In the Mantua section there are 8 special officers.

BUILDING LAWS: None.

FIRE PREVENTION LAWS: No municipal regulations. 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.