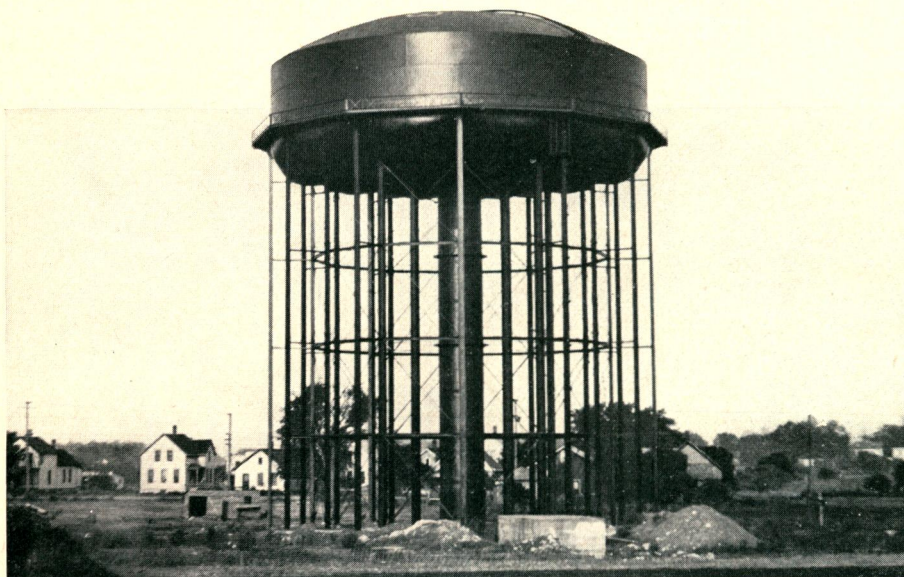


## Sandusky Installs New 1,000,000-Gallon Radial-cone Bottom Tank

**Reduces Variation in Water Pressure to 5 Pounds and Cuts Maximum Pumping Rate Materially**



Sandusky, Ohio, a city of 25,000 population located on the south shore of Lake Erie, has installed a 1,000,000-gallon radial-cone bottom elevated tank to improve the pressure in its waterworks system and to reduce operating costs.

The tank, which is of a relatively new design, is 85 ft. in diameter and 80 ft. 6 in. to bottom. The tank proper is only 22 ft. 6 in. deep, making the maximum difference in head between the upper and lower levels of the tank 10 lbs. The majority of the time, however, the level of the water in the tank remains within a range of several feet.

The readings on typical pressure charts before and after the installation of the tank are as follows:

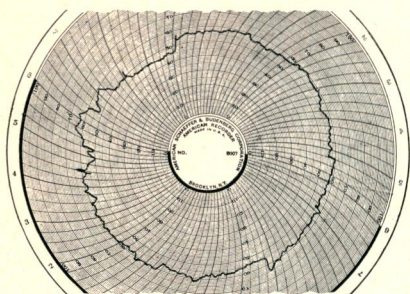


Chart showing pressure in water mains on July 19-20, 1930, before the elevated tank was installed.

Date	Before Tank Installed		
	Maximum Pressure	Minimum Pressure	Pressure Variation
July 19-20, 1930	65	45	20
July 25-26, 1930	68	50	18

Date	After Tank Installed		
	Maximum Pressure	Minimum Pressure	Pressure Variation
Dec. 2-3, 1930	63	58	5

The installation of the elevated tank also made a very marked reduction in the variation of the pumping rate. Typical figures are as follows:

Date	Before Tank Installed		
	Maximum Rate g.p.d.	Minimum Rate g.p.d.	Variation in Rate g.p.d.
July 15-16, 1930	7,000,000	2,700,000	4,300,000
July 16-17, 1930	7,400,000	2,700,000	4,700,000

Date	After Tank Installed		
	Maximum Rate g.p.d.	Minimum Rate g.p.d.	Variation in Rate g.p.d.
Nov. 7-8, 1930	4,400,000	2,300,000	2,100,000

The Roberts-Wright Company, engineers at Cleveland, made the engineering survey to determine the size and location of the tank.

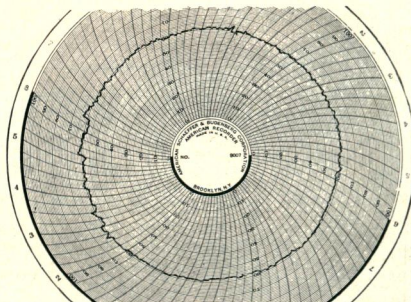


Chart showing pressure in water mains on Dec. 2-3, 1930, after the elevated tank was installed.

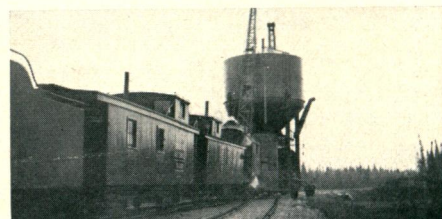
### C. N. R. Moves Tank Four Miles to New Location

Alterations in operating conditions made it more convenient for the Canadian National Railways to have one of their tanks at a new location. Instead of dismantling the structure, which was a 50,000-gallon steel tank, they picked it up bodily and moved it four miles to the new site. Not even the indicator spout or frost casing were removed.

The new foundations were installed before hand and preparations made so that the entire operation was completed in a few hours. C. P. Disney is Bridge Engineer of the Central Region, in which the tank is located. C. E. Osler of his office supervised the work in the field.



Picking up 50,000-gallon tank on the Canadian National Railways in Northern Ontario.



All Aboard!



On the way.



Placing tank on new foundations four miles from former location.