

Chicago Water Tower
800 North Michigan Avenue
at the intersection of East Chicago
Avenue and North Rush Street
Chicago
Cook County
Illinois

HABS No. ILL-1041

HABS
ILL,
16-CHIG,
43-

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
Office of Archeology and Historic Preservation
National Park Service
1730 North Lynn Street
Arlington, Virginia

CHICAGO WATER TOWER

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43-

Location: 800 North Michigan Avenue; at the intersection of East Chicago Avenue, and North Rush Street; Chicago, Cook County, Illinois.

Present Owner: City of Chicago; under control of the Park District.

Present Use: None; Chicago landmark.

Statement of Significance: The Water Tower is perhaps the best known and most venerated architectural landmark in Chicago. A survivor of the 1871 Fire. The structure was built in 1869.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Original and subsequent owners: The tower is located on the west part of Block 21 in Canal Trustees Subdivision of the south fractional section 3-39-14. Recorded May 2, 1848; re-recorded September 24, 1877.

The property has been under the continuous ownership of the City of Chicago.

2. Date of erection: 1869.
3. Architect: William W. Boyington. (For a rather complete biographical sketch of the architect, see A. T. Andreas, History of Chicago, Vol. 2 (Chicago: The A. T. Andreas Company, Publishers, 1885), p. 564.)
4. Original plan and construction of building: There is no record of the original Building Permit for the tower.

Frank A. Randall, A History of the Development of Building Construction in Chicago (Urbana: The University of Illinois Press, 1949), p. 53: "The tower is 154' high with no basement, on spread foundation."

The land on which the tower now stands was originally bounded by Chicago Avenue, Pine and Pearson streets, and Lake Michigan. It was part of the water-works complex only a few feet from the Lake (land-fill projects have now moved the shoreline much further east). The picturesque architecture, variously termed "Gothic revival" or "castellated

Gothic," originally served to conceal the tower's purely unitarian function. Within it stood a three-foot diameter pipe, 154' high. This pipe was needed in order to overcome the pulsation of the pumping system. It provided for the expansion of water up into the vertical pipe from the horizontal water mains between the strokes of the pump, thus maintaining a constant water pressure. The tower itself did not house the machinery and power plant, which was located instead in a nearby building. When an improved system of pumping water was developed, the tower and its "standing pipe" was no longer needed. /Based on an article by Jack Barrett, "The Story of Chicago's most Famous Landmark," Townfolk Magazine (October, 1948), p. 11./

See Supplementary Material for two early descriptions of the Water Tower.

5. Alterations and additions: The entire water works was badly damaged by the Fire of 1871. The Water Tower remained intact, but much of its ornament was blunted or obliterated by the intense heat of the fire. When the water works were rebuilt shortly after the fire, the functionally obsolete tower was retained only as a commemorative landmark. For several decades it continued to fall into a state of disrepair. In 1913 restoration was begun under Mayor Harrison, who directed the Commissioner of Public Works, Lawrence E. McCann and W. Kallat, Department Architect, to begin reconstruction of the crumbling foundations and broken facings /Chicago City Manual, 1913, pp. 34-36/. The restoration project was apparently incomplete when in 1916 the Street Department recommended that the tower be moved out of the way of a proposed extension of Michigan Avenue to the Outer Lake Shore Drive. The threat of collapse prompted the Chicago Historical Society and other civic groups to begin a drive for preservation, the result of which was the authorization of a program of maintenance by the City and the re-routing of Michigan Avenue around the tower. /Barrett, loc. cit./

B. Historical Events and Persons Connected with the Structure:

When completed, the tower was considered one of the most impressive monuments in the city. It later served as a landmark for the multitudes who fled the Chicago Fire in 1871. (Although the Water Tower seems dwarfed by the present-day skyscrapers that surround it, it should be remembered that it approximates the height of a 15-story building.) As a remnant of pre-fire days, the structure is looked upon with nostalgia by Chicagoans. It is noteworthy that the Water Tower was the first structure to illicit public concern for the preservation of historic buildings in Chicago.

C. Bibliography:

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- Magee, Alexander. "The Old Water Tower," Chicago Sunday Tribune, February 27, 1949.

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The Graphic (Chicago), March 20, 1886. p. 41. Picture. Library of the Chicago Historical Society.

D. Supplementary Material:

1. Andreas, A. T. History of Chicago. Chicago: The A. T. Andreas Company, Publishers, 1885. Vol. 2. p. 69.

"During the early part of 1869, the building for the new pumping works, and the beautiful water tower, were completed. The former was erected upon the site of the old works, and owing to the care necessary to guard against accident to the water supply, operations had naturally been conducted slowly. The style of architecture was castellated Gothic, with heavy battlemented corners, executed with solid rock-faced ashlar stone and cut-stone trimmings, all the details being of a massive and permanent character . . .

About one hundred feet to the west of the main building was the imposing water-tower. The exterior of the shaft was octagonal and rose one hundred and fifty-four feet from the ground to the top of the stone work, which terminate in a battlemented cornice. The whole was surmounted by an iron cupola, pierced with numerous windows, from which might be obtained a magnificent view of the lake, the city and surrounding country. The exterior of the tower was divided into five sections. The first section was forty feet square and surrounded the base of the shaft. The floor and roof of this portion was of massive stone, the latter forming a balcony. The bottom of the interior was hexagonal. Here the base-piece of the stand pipe (a casting weighing six tons) was placed, having six openings, supplying thirty-inch gates, to which the water mains were connected. From this base a thirty-six inch wrought iron stand-pipe ascended to a height of one hundred and thirty-eight feet. Around this pipe was an easy and substantial iron stairway, lead-

ing to the cupola on the top, and lighted throughout with alternating windows. The whole structure was looked upon as thoroughly fire-proof, being composed wholly of stone, brick and iron. Much credit was justly accorded to W. W. Boyington, the architect of the buildings, for the professional skill, taste and judgement displayed in the work entrusted to him."

2. Orear, G. W. Commercial and Architectural Chicago. Chicago: G. W. Orear, Publisher, 1887. p. 19.

"Water Works - The perfect system of water supply has its head at the Water Tower and Pumping Works on the North side. A tunnel of sufficient capacity runs out to what is known as the crib, a distance from the city of two miles. It is said that the largest engine in the world is one of the four that pumps water here for the city consumption. It costs \$200,000, and at each stroke forces 2,750 gallons through the pipes. The buildings are very substantial, the grounds and surroundings very ornamental, and the machinery and all is a great attraction to those visiting the city."

Prepared by Larry J. Homolka
Historian
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J. William Rudd
Supervisory Architect
National Park Service
October 1964

PART 11. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The Chicago Water Tower is the only public building to have withstood the Chicago Fire of 1871.
2. Condition of fabric: Good.

B. Description of Exterior:

1. Number of stories, layout-shape: Square in plan; one story plus tower.
2. Foundations: Joliet limestone.
3. Wall construction, finish, color: Rusticated, yellow-cream Joliet limestone.

4. Structural system: Masonry bearing wall.
 5. Porches, stoops: An entrance stoop exists at each of four entrances which are located at the midpoint of each side.
 6. Openings:
 - a. Doorways and doors: An entrance door exists at the midpoint of each of the four sides of the square. The doors are extensively detailed in "Gothic Revival" molding; the doorways are spanned by segmental arches of Joliet limestone ashlar.
 - b. Windows: Casement windows throughout. Heavy moldings project at the top.
 7. Roof:
 - a. Shape, covering: Flat, built-up.
 - b. Towers: Small Gothic Revival towers exist at each corner of the base. A large central tower, octagonal in plan, rises above a square lower section of the main tower. (This tower houses the standpipe.) The tower is terminated by a battlement with a small cupola set inside the battlement.
- C. Description of the Interior:
1. Floor plans: The interior at the base is a continuous corridor around the perimeter. The center of the first floor originally contained pumping machinery at the base of the standpipe, but is now vacant.
 2. Stairways: A circular steel stair exists in the standpipe tower and carries to the top of the tower. It originally wound around the standpipe.
 3. Flooring: Concrete.
 4. Wall and ceiling finish: Painted limestone walls and plaster ceiling.
- D. Site:
1. General setting and orientation: The building is located on a small plot of land which is bounded by Michigan Avenue, Pearson Street and Chicago Avenue. The area is a prestige hotel and shopping area.
 2. Landscaping: The site is currently a well landscaped park

with grass to the north, west and south of the building. A perimeter walk exists on four sides of the site with access walks to the building on the north and south sides of the building from the east perimeter walk and a walk through the entire site from the north to south and next to the west side of the building. (The building is adjacent to the east walk because of the building's original direct relationship to the pumping station across Michigan Avenue to the east. Michigan Avenue was extended north from Chicago Avenue after the construction of these two buildings.)

Prepared by J. William Rudd
Supervisory Architect
National Park Service
September 1964

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REDUCED COPIES OF DRAWINGS

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