

City of Madison Landmarks Commission
LANDMARKS AND LANDMARK SITES NOMINATION FORM (1)

Name of Building or Site

Common

Madison Water Works

Historic (if applicable)

Nichols Station

Location

Street Address

427 E. Gorham Street

Aldermanic District

Second

Classification

Type of Property (building, monument, park, etc.)

building

Zoning District

PCD-SIP

Present Use

apartments

Current Owner of Property (available at City Assessor's office)

Name (s)

DiVall Nichols Station c/o DiVall Investment

Street Address

P. O. Box 45058
Madison, WI 53744

Telephone Number

Legal Description (available at City Assessor's office)

Parcel Number

0709-133-2209-9

Legal Description

See attached.

Condition of Property

Physical Condition (excellent, good, fair, deteriorated, ruins)

good

Altered or Unaltered?

altered

Moved or Original Site?

original site

Wall Construction

brick

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LANDMARKS AND LANDMARK SITES NOMINATION FORM (2)

Legal Description:

Original Plat, part of Lots 1, 2, and 3, Block 264, described as follows: Beginning at the Northerly corner of Block 264 of said plat; thence South $45^{\circ}41'30''$ East along the Northwesterly line of Franklin Street 173.99 ft; thence South $44^{\circ}25'06''$ West, 146.51 ft; thence North $45^{\circ}34'54''$ West, 173.66 ft. to the Southeasterly line of Gorham Street; thence North $44^{\circ}17'20''$ East along the Southeasterly line of Gorham Street 146.18 ft. to the point of beginning.

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Describe Present and Original Physical Construction and Appearance.

The Madison Water Works building is a reinforced concrete and brick industrial-type structure approximately 134 feet by 109 feet in area. The easternmost third of the building, the boiler room section, was originally approximately sixty feet tall, twice as tall as the remaining two thirds. The building occupies the block bounded by Johnson, Gorham, Hancock, and Franklin Streets, in a primarily residential neighborhood. The building has an uninterrupted view of Lake Mendota across James Madison Park.

The building is veneered with tan brick. Horizontal joints are of raked colored mortar, while vertical joints are narrower and of flush neutral mortar. False turret gables, copings, guttae and many other trim pieces are of stone. Doors as well as window frames and mullions are of metal; all windows have multiple panes. The entire building rests on a battered foundation of concrete, 2 1/2 feet of which is visible above ground. With the exception of the monitor above the boiler room section, all roofs are concealed from view from ground level behind parapets, decorative gables, and false turrets. All roofs, including the monitor, are shallow-pitched and supported by steel trusses. A smokestack that stood in an alcove on the Franklin Street side of the building was removed several years ago.

The main, Hancock Street, facade is organized symmetrically into five bays, with a central entryway flanked by two windows on a side. The windows are set in larger panels of recessed brickwork. The entryway projects slightly from the plan of the facade. Stone capped pilasters and a lintel of vertically coursed brick frame the doorway of multiple-paned windows and paired doors. Above the entryway, a decorative gable is set off from the parapet by crenels. Similarly, crenels set off the false turrets at the corners of the building. Distinctive triplets of guttae that flare at the foot accent the turrets. Above the outer bays, and turning the corners of the building, are decorative horizontal bands of brick and stonework that terminate in tees. The vertical portions of the tees are repeated across the facade, accenting the window panels of the other bays. These stylistic elements are repeated in the other facades, although in these, symmetry often is sacrificed to utility.

The taller boiler room section dominates the entire building. Its monitor roof gives it distinct gable ends, facing Hancock and Franklin Streets. The gables are flanked by false turrets that are separated by crenels. The sides of the monitor are entirely fenestrated. Between turrets, parapets decorated with brick and stonework run uninterrupted the length of the section. Beneath the turrets, this decoration becomes horizontal bands that turn the corners to terminate in tees on the gable ends. The Gorham Street side of the boiler section has eight tall narrow windows in recessed panels; these are organized symmetrically in pairs. The Johnson Street side has no windows, but has three squat recessed panels.

The pump room, on the Gorham Street side of the building originally contained a pair of twin Allis-Chalmers corliss-type steam powered pumping units, each having a rated capacity of eight million gallons per day. One of the engines recently was removed to the House on the Rock,

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a tourist attraction in Iowa County, where it will be on public display. The remaining engine is approximately twenty-six feet long and twelve feet wide; its flywheel is about ten feet in diameter. The engine weighs about 105 tons. At full throttle it demands 105 psi of live steam and is capable of 40 rpm. In its conversion to housing, the major exterior change to the building was the installation of new fenestration in the existing openings. Another building has been added to the south and west portions of the block, which is not included in the nomination.

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LANDMARKS AND LANDMARK SITES NOMINATION FORM (5)

Original Owner City of Madison Water Utility	Original Use water pumping station
Architect or Builder Balch and Lippert, architects; Mead and Seastone, engineers	Architectural Style Prairie Style
Date of Construction 1917	Indigenous Materials Used not applicable

List of Bibliographical References Used

Allis-Chalmers Manufacturing Company, Horizontal Pumping Engines: Details and Parts, Bulletin #1645, May 1929.

Brania, Jerzy W., interview, February 11, 1980.

_____, "Pumps from the Past," This is Madison, July 1976.

Griffin, Douglas L., to Richard Erney, May 2, 1979.

Madison Water Utility, original architectural plans and engineering studies for the Madison Water Works, 1916-1919.

"The New Madison Water Works," Power, L:4, July 22, 1919.

Nichols Station, prospectus, Real Estate Division, City of Madison, n.d. (1978?).

Smith, Leon Albert, A Brief Historical Sketch of the Madison Waterworks (Madison, 1939).

Form Prepared By:

Name and Title

David Donath and Katherine Rankin

Organization Represented (if any)

City of Madison

Address

P. O. Box 2985
Madison, WI 53701-2985

Telephone Number

266-6552

Date Nomination Form Was Prepared

February 26, 1993

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LANDMARKS AND LANDMARK SITES NOMINATION FORM (6)

Significance of Nominated Property and Conformance to Designation Criteria:

The Madison Water Works (Nichols Station) is significant to the public works history of Madison as a facility that played an important role in the development of the City's water supply system. The building is of architectural interest as its design reflects the influence of the Prairie School, employed in an industrial-type structure. Its stylistic elements have become a kind of architectural trademark for the City's water supply system as they have been employed in most of the system's later buildings. The station retains one of its original twin Allis-Chalmers steam-driven pumping engines, a massive machine which has been described by the historic American Engineering Record (HAER) as "of great significance in representing Wisconsin's municipal engineering heritage. . . There are relatively few examples of large steam pumping engines that still survive in the United States, and every effort should be made to preserve those that remain" (letter, Douglas L. Griffin, Chief, HAER, to Richard Erney, Wisconsin SHPO, May 2, 1979).

The planning of a new water works for the City of Madison began in 1914 when the inadequacy of the existing water supply system became apparent. The plan called for the replacement of the previously used artesian wells with water from Lake Mendota as the primary supply, and for the erection of a new pumping station on the site of the existing station. The project became a major turning point in the development of Madison's water utility. Also, it was of such technological importance that it was written up in Power, a national engineering professional journal (Power, L:4, July 22, 1919).

The architectural firm of Balch & Lippert, which had offices on State Street in Madison between 1917 and 1919, designed the water works building. Construction began in May 1917 (ibid., p. 130). The new structure was built around, and eventually enclosed the still-operating old pumping station. Balch & Lippert employed stylistic elements suggestive of the Prairie School in the utilitarian structure. The parapeted roofline is broken by decorative gables and false turrets that suggest low-pitched rooflines. The turrets are accented by stone guttae, as was the smokestack which has since been removed. The tan brickwork suggests horizontality through the contrast of raked horizontal joints of colored mortar with narrower flush vertical joints of neutral mortar. The stylistic influence of Balch & Lippert's design is evident in the designs of most subsequent water utility facilities built in Madison until recently.

Daniel W. Mead and Charles V. Seastone, of Madison, were selected as project engineers. Their task was complicated by the need to construct an entirely new facility on the site of the old pumping station without seriously interrupting the supply of water to the City. A pair of Allis-Chalmers steam-driven pumping units, of eight-million gallon per day capacity each, were selected as the main pumps. The first went into operation in 1918, and the second three years later. Coal-fired boilers fed from a huge hopper supplied steam to the engines. The spent steam was used to heat municipal buildings north of the Capitol. The new Madison Water Works was the sole pumping station for the City until 1923 when the first of a series of local unit pumps was added to the system.

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The main works, later renamed Nichols Station, continued in operation until 1976.

Although the City itself had no further use for Nichols Station, it recognized its historic and architectural value and sought a developer with a plan to reuse the station in a sensitive manner. The developers that the City selected converted the interior space to office, residential, and recreational use while making few exterior alterations.