NPS Form 10-900
(Rev. 8-86)

3106

OMB No. 1024-0018

United States Department of the Interior
National Park Service

DEC 02 1988

NATIONAL REGISTER

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Chemical Building, Fields Point Sewage Treatment Plant
other names/site number Blower Building

2. Location

street & number Ernest Street (east end, at Fields Point) n/a not for publication
city, town Providence n/a vicinity
state Rhode Island code RI county Providence code 007 zip code 02905

3. Classification

Ownership of Property
- [ ] private
- [ ] public-local
- [x] public-State
- [ ] public-Federal

Category of Property
- [x] building(s)
- [ ] district
- [ ] site
- [ ] structure
- [ ] object

Number of Resources within Property

Contributing	Noncontributing	
1		buildings
		sites
		structures
		objects
1	0	Total

Name of related multiple property listing:
Historic and Architectural Resources of Providence, 1636-present (Sewage Treatment, 1895-1935)

Number of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this [x] nomination [ ] request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property [x] meets [ ] does not meet the National Register criteria. [ ] See continuation sheet.

Signature of certifying official — Date: 22 Nov 1988

State or Federal agency and bureau

In my opinion, the property [ ] meets [ ] does not meet the National Register criteria. [ ] See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

- [✓] entered in the National Register. [ ] See continuation sheet.
- [ ] determined eligible for the National Register. [ ] See continuation sheet.
- [ ] determined not eligible for the National Register.
- [ ] removed from the National Register.
- [ ] other, (explain:) _____

for Signature of the Keeper — Date of Action: 1-13-89

6. Function or Use

Historic Functions (enter categories from instructions)
GOVERNMENT: Public Works

Current Functions (enter categories from instructions)
GOVERNMENT: Public Works

7. Description

Architectural Classification
(enter categories from instructions)

LATE VICTORIAN: Other: Industrial Mill

Materials (enter categories from instructions)

foundation concrete
walls brick
roof asphalt
other

Describe present and historic physical appearance.

The Chemical Building (also known as the Blower Building) is located toward the western edge of the Field Point sewage treatment plant operated by the Narragansett Bay Commission in Providence. It is a 2 1/2 story structure with exterior dimensions of approximately 103′ by 38′. Foundations and floor are of concrete, exterior walls are of red brick. The gable roof and its wooden monitor are clad with composition shingling.

The structure of the long north and south exterior walls consists of brick piers that rise to level of the corbelled cornice. On the interior, brick "knees" corbelled out from the tops of these piers support exposed wooden roof trusses. On the exterior, these piers divide each elevation into 9 symmetrically arranged vertical bays. The wall surfaces between piers are pierced by large window openings with bluestone sills. Those of the second story on both elevations have broad segmental arches and paired circular openings in each bay, originally fitted with 1/1 sash and"sidelights". On the north, this story is marked by three small segmental-arched openings in each bay, all of which have been filled in. Centered in the north elevation is a three-level gable-roofed projecting pavilion or "porch", with tall, round-arched entrance, corner pilasters, and corbelled cornice. On the west gable end, which features a corbelled cornice with partial returns, is a square, hipped-roofed brick unit of one room, above which is a large, filled-in window opening. The east gable end, which nearly abuts the adjacent incinerator building, retains a corbelled cornice, but its windows have been filled in.

The interior of the building is essentially one large room, open to the roof trusses, in which are located five air compressors or "blowers". A metal catwalk is located at second story level along the east and north walls.

The Chemical Building, completed in 1901, has experienced a variety of alterations. Ground story windows on the north side have been filled in. Several of the round-arched openings in the south elevation have been enlarged and either filled in or fitted with overhead roll doors. Windows in the east and west gable ends have been modified to contain large louvers. On the north side,

[X] See continuation sheet

the original grade level has been substantially lowered, thereby exposing several feet of the concrete foundation on this side.

The interior was originally divided into three levels: a concrete ground level, a second level with wood floor carried on cast-iron columns and steel I-beams, and a "loft" level, carried on the lower chord of the roof trusses, consisting of a wooden T-shaped catwalk that extended longitudinally (east to west), the "stem" being a short segment leading into the "porch" on the north side. The removal of these levels occurred in 1930-34, when the building's function was completely changed as a result of the conversion of Fields Point from the chemical precipitation to activated sludge process.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

☐ nationally ☐ statewide ☒ locally

Applicable National Register Criteria ☒ A ☐ B ☐ C ☐ D

Criteria Considerations (Exceptions) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

Areas of Significance (enter categories from instructions): Community Planning and Development

Period of Significance: 1900-1935

Significant Dates: 1900

Cultural Affiliation: N/A

Significant Person: N/A

Architect/Builder: Office of the City Engineer, Providence

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

The Chemical Building at Fields Point is significant in the area of Community Planning and Development under Criterion A for its association with the historical development of sewage treatment facilities in Providence. It represents a property type associated with the historic context Historic and Architectural Resources of Providence, 1636-present (The Making of a Metropolis, 1865-1945; Public Works and Utilities: Sewage Treatment, 1895-1935). This property type consists of buildings and structures designed and built to function in the processing and treatment of sewage, constructed under city auspices between 1895 and 1935. The Chemical Building conforms to this property type definition, having been built in 1900-1901 as an integral component of Providence's then-new sewage treatment plant at Fields Point, which was put into service in April, 1901. The building's associational importance is two-fold: it is one of two remaining structures that date from the original construction of the facility, and it is the only one that can be directly associated with the chemical precipitation process that was used to treat sewage here from 1901 until the conversion of the plant to the activated sludge process in 1930-34. Although the original process was discontinued, and the building correspondingly remodeled for a new use, it retains (despite several detracting treatments to windows) much of its original exterior architectural character, as well as several features that specifically recall its original function. As such the Chemical Building retains a sufficient level of integrity, in terms of location, design, materials and workmanship to convey the association for which it is important.

As the name suggests, chemical precipitation was a process by which chemicals (in this case lime and ferrous sulfate) were added to raw sewage to facilitate deposition of solids by forming

☒ See continuation sheet

9. Major Bibliographical References

City Engineer, Providence, Annual Reports for 1899, 1900, 1901.
Narragansett Bay Commission, Drawing Files, FP-139 through FP-146; FP-382 through FP-384.

Hardenbergh, W.H. Sewerage and Sewage Treatment (second edition). International Textbook Co., Scranton, PA, 1942.

☐ See continuation sheet

Previous documentation on file (NPS):
- ☐ preliminary determination of individual listing (36 CFR 67) has been requested
- ☐ previously listed in the National Register
- ☒ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ recorded by Historic American Buildings
  Survey # _____
- ☐ recorded by Historic American Engineering
  Record # _____

Primary location of additional data:
- ☐ State historic preservation office
- ☒ Other State agency
- ☐ Federal agency
- ☐ Local government
- ☐ University
- ☐ Other

Specify repository: Narrangansett Bay Commission

10. Geographical Data

Acreage of property less than one acre

UTM References

	Zone	Easting	Northing
A	19	301380	4629520
B			
C			
D			

☐ See continuation sheet

Verbal Boundary Description

☒ See continuation sheet

Boundary Justification

☒ See continuation sheet

11. Form Prepared By

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a precipitate, carrying suspended and colloidal matter, which was settled out in tanks. Thus, the Chemical Building represented the first step in the process as used at Fields Point. Its functions were to receive and store the lime and ferrous sulfate, mix appropriate portions of each together, and, via drains, introduce the chemicals into the raw sewage entering an open "mixing channel" at the east end of the 88-inch main from the Ernest Street Pumping Station.

In the building, the ground floor, which included a tool room at the east end, was furnished with concrete mixing vats and steel mixing tanks, in the latter of which compressed air was used to reduce the chemicals to solution. The chemicals (prior to mixing) were stored on the second level in large wooden bins approximately 10 feet high.

The chemicals were brought in rail cars to the freight porch on the north side of the building. At the time, the grade level on this side was about 7 feet above that on the south: thus the chemicals could be wheeled directly from the cars into the building for immediate use. If they were not to be so used, the chemicals were hoisted through a trap door in the upper level of the porch (corresponding to the third level of the building proper) and deposited in the storage bins from the catwalk.

Eighty-six years after the Chemical Building was put into service, its original floor levels (despite removal of the upper levels) can still be identified, indicated by the pattern of fenestration, and the exterior design intent of the building remains readily appreciable. The freight porch also remains, with its tall round-arched unloading entry, and the (now blind) oculi that once illuminated its upper level. The wooden roof trusses also remain. The use of this material rather than steel (the latter was used in the nearby Sludge Press House, erected at the same time) appears to be directly related to the building's original use: wood was not subject to corrosion or other deterioration from the presence of the chemicals. The small unit at the west end of the building, originally called the "weir room", is believed to have been associated with the conduits or drains through which the mixed chemicals were introduced into the sewage.

Verbal Boundary Description:

The boundaries conform to the exterior dimensions or footprint of the Chemical Building, with overall measurements of 115′ x 44′.

Boundary Justification:

Due to the extensive renovation and new construction at Fields Point, both after 1935 and in process today, features adjacent to or in the vicinity of the Chemical Building which in the past could be associated with this resource and contribute to its significance have been completely removed or altered beyond reasonable recognition of their original character. While Fields Point continues to perform, in a broad sense, its historic function, the built environment in which the Chemical Building achieved significance no longer exists. Restriction of the boundary to the outer edges of the structure permits inclusion of all significant elements, and excludes no features which contribute to the importance of the resource.