NH Division of Historical Resources
Determination of Eligibility (DOE)

Date received:	May 7, 2008	Inventory #:	DUR0017
Date of group review:	May 14, 2008	Area:	N/A
DHR staff:	Linda Wilson	Town/City:	Durham
Property name:	Durham Pump Station	County:	Strafford
Address:	Old Landing Road		
Reviewed for:	[ ]R&C [ ]PTI [ ]NR [ ]SR [ ]Survey [x]Other DHR Conservation License Plate (Moose Plate) Program		

Individual Properties

NR	SR
[ ]	[x]Eligible
[ ]	[ ]Eligible, also in district
[ ]	[ ]Eligible, in district
[ ]	[ ]Not eligible
[x]	[x]More information needed
[ ]	[ ]Not evaluated for individual eligibility

Districts

NR	SR
[ ]	[ ]Eligible
[ ]	[ ]Not eligible
[ ]	[ ]More information needed
[x]	[x]Not evaluated @ district

Integrity:	[x]Location [x]Workmanship	[x]Design [x]Feeling	[x]Setting [x]Association	[x]Materials
Criteria:	[x]A. Event [ ]D. Archaeology	[ ]B. Person [ ]E. Exception	[x]C. Architecture/Engineering	
Level:	[x]Local	[ ]State	[ ]National	

STATEMENT OF SIGNIFICANCE:
☐ **IF THIS PROPERTY IS REVIEWED IN THE FUTURE, ADDITIONAL DOCUMENTATION WILL BE NEEDED.**

The Durham Pump Station is located on Old Landing Road within the local Durham Historic District, but beyond the eastern boundary of the National Register-listed Durham Historic District. It was built in the "late 1940s" as the town's first sewage pumping station, in response to the growth of the downtown; by the early 1950s it also accommodated a new residential development of 61 lots. Local growth and sewage treatment needs continued; a new pump station was built on Dover Road in 1965 and at the same time the Durham Parks & Recreation Committee renovated the Old Landing station into an office, with public toilets for visitors to the Old Landing park. By 1974 the Parks and Recreation Committee "abandoned the Pump Station and closed the bathrooms to the public," and the Durham Public Works Department began using the building as a sign workshop, and for storage. In 1996 those uses ended, and the building has remained idle since then. Despite the succession of uses, the interior "wet well" pumping system remains intact.

Sewage pump stations ("lift stations") move waste collected in the "wet well" by gravity flow to a higher elevation for treatment or discharge. The location of the Old Landing station next to the Oyster River suggests that the Durham effluent was not treated but discharged into the river. Despite its utilitarian function that could have been accommodated in a simple box, for the Town of Durham the small, square station was designed in a fully-detailed Colonial Revival style. Its concrete foundation with a sloped water-table top supports English bond brick masonry walls and chimney, a pyramidal hipped roof with slate shingles and wooden gutters supported by wooden brackets, 6/6 double-hung (not casement, as stated on the inventory form) wooden windows and wood-framed screens, and double-leaf wooden entrance doors with four lights each above a raised panel, surrounded with decorative rowlock coursing punctuated with small square stone or concrete cornerblocks. The inventory form notes that the station was designed to harmonize with the landscape; "the craftsmanship of the building gave it an appearance that blended well with the beauty of the area surrounding it." Despite its technological function, its appearance and the high quality of its materials and workmanship conveys the image of a small Colonial Revival office or institutional building.

Date received:	May 7, 2008	Inventory #:	DUR
Date of group review:	May 14, 2008	Area:	N/A
DHR staff:	Linda Wilson	Town/City:	Durham
Property name:	Durham Pump Station	County:	Strafford
Address:	Old Landing Road		
Reviewed for:	[ ]R&C [ ]PTI [ ]NR [ ]SR [ ]Survey [x]Other DHR Conservation License Plate (Moose Plate) Program		

The Durham Pump Station is significant historically, under NR Criterion A, as the town's first sewage pump station, and also as an early example of municipal adaptive reuse in New Hampshire. (UNH apparently had its own separate sewage system much earlier.) The Pump Station is significant architecturally under NR Criterion C as an example of a type (municipal sewage pump stations) and as an excellent and intact example of Colonial Revival style applied to a small, utilitarian municipal structure. Changes of use in 1965 and 1974 have not affected its integrity.

Tanya Kress, DHR Cultural Resources Records Coordinator, searched the DHR's state inventory and found 32 properties identified with Context #81 (water supply, distribution, and treatment). However, most were associated with drinking water, and there were no comparables for the Old Landing Road Pump Station. The area survey form for the 1952 Laconia Sewage Treatment Plant Historic District (2005) provides interesting background information on municipal water collection and treatment in New Hampshire, but that facility was a comprehensive treatment system, not a collection and dispersal system that the Old Landing Road building appears to have served. Nonetheless, a study of town records, maps, and aerial views during the period the Durham pump house was in operation might indicate associated structures or even early treatment facilities that no longer exist, or a differentiation between the pump house site and the park which encompasses it.

Although the inventory form contents are sufficient to make a determination of State Register eligibility, additional information is needed to complete the form. If the pump station has a numerical address on Old Landing Road, that should be supplied. Black/white photos (#35) of all four exterior views and key interior views, processed with black/white processing, should be provided, and a property (sketch) map (#40) should be prepared, in conformance with the NH DHR instructions at http://www.nh.gov/nhdhr/documents/inventorymanual.pdf. If there are comparable sewage treatment structures on the UNH campus, black/white photos of them would be helpful for comparative purposes.

In order for the Pump Station to be listed in the State Register, and to be determined eligible for the National Register, a more detailed discussion of its architectural and historical significance is needed. A boundary justification and description (#47) is also necessary, to delineate the Register-eligible parcel and explain whether other elements in the overall park area (including the immediate setting of the pump house, its connection to the river, and other potential associated structures/ruins) should be included within the Pump House boundary.

Even though the designer's name was not found, it may be discovered with further research. For example, the architect Irving W. Hersey was based in Durham; famed UNH professor Eric Huddleston joined Hersey's firm in 1935, and the Colonial Revival was Huddleston's signature style. Huddleston and Hersey (at one point the state's largest architectural firm) designed UNH academic buildings, fraternity and sorority houses, and other buildings in the town. However, in addition to Huddleston and Hersey, other architectural firms were working on the UNH sewage system during the early 20th century, and one of them might have been used for the Old Landing pump house.

[X] **ENTERED INTO DATABASE**

ACREAGE:	1.44 acres
PERIOD OF SIGNIFICANCE:	Criterion A: c. 1940s—1958 (NR 50 year cut-off) Criterion C: c. 1940 (original construction date).
AREA OF SIGNIFICANCE:	[primary] Architecture, Community Planning & Development; Engineering; Politics/Government; Social History; [secondary] Entertainment/Recreation (1965-1974, outside the current period of significance)
BOUNDARY:	Map 5, Lot 6-6 (Old Landing Park parcel)
SURVEYOR:	Karen Edwards, Town of Durham (May 2008)

FOLLOW-UP: Notify preparer and Town of Durham. A DHR inventory number, a numerical street address, B/W photos and a property (sketch) map are necessary in order to complete the inventory form, along with a more detailed discussion of architectural and historical significance, and a boundary delineation and justification (as noted above). Also note additional possibilities for future research.

Final DOE approved by:

Mary Kate Ryan (MI)

New Hampshire Division of Historical Resources

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INDIVIDUAL INVENTORY FORM

NHDHR INVENTORY #

RECEIVED MAY 07 2008

Name, Location, Ownership

1. Historic name Durham Pump Station
2. District or area Durham Historic District
3. Street and number Old Landing Road
4. City or town Durham
5. County Strafford
6. Current owner Town of Durham

Function or Use

7. Current use(s) Vacant or not in use

8. Historic use(s) Other: First sewerage pump station. for the Town of Durham .

Architectural Information

9. Style Colonial
10. Architect/builder Unknown
11. Source
12. Construction date Late 1940's
13. Source Director of Durham Public Works
14. Alterations, with dates 1965 renovation to make building office use with public restrooms

15. Moved? no XX yes ☐ date:

Exterior Features

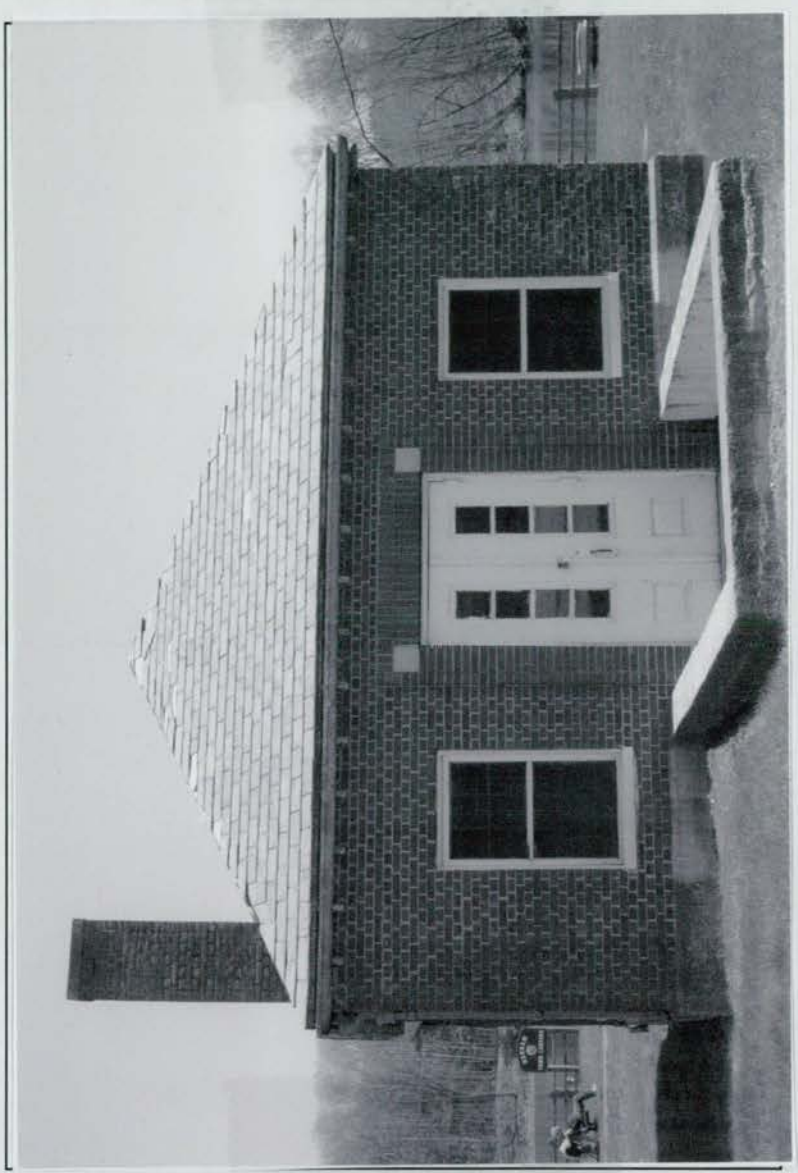
16. Foundation Cement
17. Cladding Brick
18. Roof material Slate
19. Chimney material Brick
20. Type of roof Hip roof with four sides
21. Chimney location Both ends double interior
22. Number of stories One
23. Entry location Façade, center
24. Windows Casement

Replacement? no XX yes ☐ date:

Site Features

25. Setting Rural local road

26. Outbuildings None



35. Photo #1 36. Date 5/5/2008
37. Roll # Frame # Direction:
38. Negative stored at:

27. Landscape features Fence, paths, river
28. Acreage 1.44 Acres
29. Tax map/parcel # Map 5, Lot 6-6
30 UTM reference Unknown
31. USGS quadrangle and scale Unknown

Form prepared by SP: 1184502 231448

32. Name Karen Edwards
33. Organization Town of Durham
34. Date of survey May 5, 2008

39. LOCATION MAP: See attached

40. PROPERTY MAP: See attached

See attached for all of these

41. Historical Background and Role in the Town or City's Development:

42. Applicable NHDHR Historic Contexts:

43. Architectural Description and Comparative Evaluation:

44. National or State Register Criteria Statement of Significance:

45. Period of Significance:

46. Statement of Integrity:

47. Boundary Discussion:

48. Bibliography and/or References:

Surveyor's Evaluation:

NR listed:	individual	_____	NR eligible:		NR Criteria:	A	_____
	within district	_____		individual _____		B	_____
				within district _____		C	_____
Integrity:	yes	_____		not eligible _____		D	_____
	no	_____		more info needed _____		E	_____

New Hampshire Division of Historical Resources | Page of

INDIVIDUAL INVENTORY FORM | **NHDHR INVENTORY #**

Address: Old Loading Road Date taken: 5/5/08 Negative stored at:

Photo #2 description:
Roll #: Frame #: Direction:

Photo #3 description:
Roll #: Frame #: Direction:

NH Individual Inventory Form
Durham Pump Station

Historical Background and role in the Town's Development

The Durham Pump Station was built in the late 1940's on Old Landing Road as the Town's first sewage pumping station. It was built to address the sewage pumping needs of the downtown area as that area began to grow. In September of 1953 and January of 1954 the residential development known as the Red Tower Development was approved. This development would bring 61 new single family homes to Durham, and the Durham Pump Station was the facility that served these lots. By 1965 another Pump Station on Dover Road was built to service the increased demand, and the Old Landing Pump Station ceased to be operational. That same year the Durham Parks and Recreation Committee renovated the now unused Pump Station into an office. The renovations also included public restrooms for those who visited the Old Landing park[1]. By 1974 the Parks and Recreation Committee had abandoned the Pump Station and closed the bathrooms to the public. In 1974 the Durham Public Works Department began using the building for storage of water meters, repair clamps, cooper tubing, brass fittings and tools, and as a workshop for making signs. The Public Works Department abandoned this use in 1996. The Station has set idle ever since, becoming more run-down with each passing year.

NHDHR Historic Contexts:

The Durham Pump Station has local historic context in that it is a physical representation of the design and history of the Town's sewer pumping system. It demonstrates the technology and engineering of small town, rural New Hampshire at the end of the Industrial Age.

Architectural Description and Comparative Evaluation

The Durham Pump Station sits within the Durham Historic District, within an area known as Old Landing (formerly known as Shipyard Landing) along the Oyster River. This area has a rich history as it was the site of Durham's shipyards and warehouses during the eighteenth and nineteenth centuries.[2] The view from the Pump Station is of the beautiful Oyster River and, across the River, of the General John Sullivan home which was built in 1740. During the summer many of Durham's citizens come down to this area of Old Landing to picnic and just enjoy the beauty of the Oyster River. It is one of Durham's favorite recreational areas.

Not only does the Pump Station sit within an historical area, its design is significantly historical as well. The windows are wooden with hand-made screens. The door is wooden surrounded by intricate brick work. The roof is a hip roof with four sides and the shingles are slate. The wooden gutter supports are intricately designed as part of the roof rafters, and the gutters are wooden and hand-made as well. Unfortunately, the Pump

[1] Durham New Hampshire a history 1900-1985, Durham Historic Association, p. 292
[2] Images of America, Durham, A Century in Photographs, William E. Ross & Thomas M. House, p. 13

Station is currently run down and decaying due to neglect. The Town of Durham is currently looking to make some repairs to the facility to retain its historic integrity.

Statement of Significance

The Durham Pump Station is significant in its distinctive characteristic of the period of time in which it was built and in its method of construction. The essential, exterior physical features which make this building significant are visible upon inspection. The bricks were hand made as were the windows and screens. The wooden gutter supports are intricately designed as part of the roof rafters, and the gutters are wooden and hand-made as well. The interior pumping mechanism was called a "wet well" and would have been manufactured in the late 1920's. This mechanism is still located within the Pump Station.

Period of Significance

The period of significance for the Durham Pump Station would be from its construction in the late 1940's until the mid 1960's when it ceased to be an operation pump station.

Statement of Integrity

The integrity of the Durham Pump Station comes from its location and design. As the Town of Durham developed, the location of the Pump Station was chosen due to its proximity to the Oyster River, as it was necessary to locate a sewerage pumping station near a river. Its design, however, was small and unobtrusive so as not to scar the landscape within which it was located. The craftsmanship of the building gave it an appearance that blended well with the beauty of the area surrounding it.

Boundary Discussion

The Durham Pump Station sits within the Historic District of the Town of Durham (see enclosed map). It is within boundaries of the property known as the Old Landing Park on the shore of the Oyster River.

Bibliography

Durham Historic Association, Durham New Hampshire a history 1900-1985, 1985
Ross, William E. & House, Thomas M. Images of America, Durham, A Century in Photographs, 1996

Durham Historic District

N

Main Street
School House Lane
Mill Pond Road
Old Landing Road
Newmarket Road
Durham Point Road

Historic District Zoning

ZONE

- C
- CB
- CH
- RA
- RB
- RC

0 0.035 0.07 0.14 Miles

1 inch equals 0.06 miles

Map created July 2006 by the Town of Durham
using ArcGIS 9.0.

THIS MAP IS FOR REFERENCE ONLY.
IT IS NOT INTEDED FOR LEGAL DESCRIPTION OR CONVEYANCE.

Map 5

N

PROPERTY MAP
DURHAM
NEW HAMPSHIRE

Legend

- Adjacent Map Sheets
- Current Map Sheet

1 inch equals 230 feet

This map was originally produced by Strafford Regional Planning Commission in October 2004, and was updated by the Town of Durham in January 2008.

THIS MAP IS FOR ASSESSMENT PURPOSES. IT IS NOT INTENDED FOR LEGAL DESCRIPTION OR CONVEYANCE.

N

Kress, Tanya

From: Wilson, Linda
Sent: Monday, May 12, 2008 5:51 PM
To: Bastedo, Russell; Boisvert, Richard A; Feighner, Edna; Garvin, James; Kress, Tanya; Michaud, Peter; Muzzey, Elizabeth; Peterson, Nadine; Rankie, Christine Fonda; Ryan, Mary Kate; St.Louis, Christina; Williams, Mae; Wilson, Linda
Subject: Seeking sewage treatment contextual information

Do we have a context (or pre-contextual information) regarding sewage treatment facilities in NH? Was anything submitted with the 106 materials for the Laconia treatment facility that had contextual content?

If so, where do I look for the file/s?

Merci, lrw

Linda,
I couldn't find any contextual info in the archaeology reports. :(
Here's a list of properties that have Context #81 (water supply, distribution & treatment).
Tanya

Context #81

~~qry Both contexts~~

5/13/2008

PropertyID	PropertyName	Address	TownName	DOEEval
BAT0048	Alvah Conant House	Route 302, west side .37 mi. s	Bath	Not evaluated for individual eligibility
BAT0048	Alvah Conant House	Route 302, west side .37 mi. s	Bath	NR eligible within an NR district
MER0017	Harris Pond Intake Structure	Harris Pond	Merrimack	NR eligible within an NR district
MER0017	Harris Pond Intake Structure	Harris Pond	Merrimack	Not evaluated for individual eligibility
NAS1153	Snow Pumping Station	200 Concord Street	Nashua	Not evaluated for individual eligibility
NAS1156	Dean and Main Pumping Station	210 Concord Street	Nashua	NR eligible within an NR district
NAS1155	Supply Pond Dam	210 Concord Street	Nashua	Not evaluated for individual eligibility
NAS1155	Supply Pond Dam	210 Concord Street	Nashua	NR eligible within an NR district
NAS1157	Harris Pond Dam	Harris Pond	Nashua	NR eligible within an NR district
NAS1154	Pumping Station No.1 (Worthington	210 Concord Street	Nashua	NR eligible within an NR district
NAS1157	Harris Pond Dam	Harris Pond	Nashua	Not evaluated for individual eligibility
NAS1153	Snow Pumping Station	200 Concord Street	Nashua	NR eligible within an NR district
NAS1152	Treatment Plant	200 Concord Street	Nashua	Not eligible for NR
NAS1151	Engineer's Residence	200 Concord Street	Nashua	Not evaluated for individual eligibility
NAS1151	Engineer's Residence	200 Concord Street	Nashua	NR eligible within an NR district
NAS1154	Pumping Station No.1 (Worthington	210 Concord Street	Nashua	Not evaluated for individual eligibility
NAS1158	Bowers Pond Dam	Bowers Pond	Nashua	Not eligible for NR
NAS1159	Holt Dam	Thornton Road	Nashua	NR eligible within an NR district
NAS1159	Holt Dam	Thornton Road	Nashua	Not evaluated for individual eligibility
NAS1156	Dean and Main Pumping Station	210 Concord Street	Nashua	Not evaluated for individual eligibility
NWN0228	Portsmouth Water Booster Station	off Spaulding Tnpk/ off Arbore	Newington	NR eligible, individually
NWN0228	Portsmouth Water Booster Station	off Spaulding Tnpk/ off Arbore	Newington	Not evaluated as a district
RIN0003	Converse Mill Site and Dam	off Converseville Road	Rindge	SR eligible, individually
SOM0100	Pumping Station Building	Wells Street	Somersworth	NR eligible, individually
SOM0100	Pumping Station Building	Wells Street	Somersworth	SR eligible, individually
SOM0100	Pumping Station Building	Wells Street	Somersworth	More information needed
SWA0017	Homestead Woolen Mills and Dam	2 South Winchester Street	Swanzey	More information needed
SWA0017	Homestead Woolen Mills and Dam	2 South Winchester Street	Swanzey	NR eligible within an NR district
SWA0017	Homestead Woolen Mills and Dam	2 South Winchester Street	Swanzey	NR eligible, individually
SWA0017	Homestead Woolen Mills and Dam	2 South Winchester Street	Swanzey	SR eligible within an SR district
SWA0017	Homestead Woolen Mills and Dam	2 South Winchester Street	Swanzey	SR eligible, individually
TAM0001	Chocorua Grange Hall	13 Gregs Way	Tamworth	SR eligible, individually

NH Division of Historical Resources
Determination of Eligibility (DOE)

Date received:	February 16, 2005, Nov. 16, 2005	Inventory #:	NWN0228
Date of group review:	March 23, 2005, April 13, 2005, Dec. 14, 2005	Area:	Newington-Dover Project Area (ND)
DHR staff:	Linda Wilson	Town/City:	Newington
Property name:	Portsmouth Water Booster Station	County:	Rockingham
Address:	off Spaulding Turnpike & Arboretum Drive		
Reviewed for:	[X]R&C [ ]PTI [ ]NR [ ]SR [ ]Survey [ ]Other NH DOT/FHWA: Newington-Dover, NHS-027-1(37), 11238		

Individual Properties

NR	SR
[X]	[X]Eligible
[ ]	[ ]Eligible, also in district
[ ]	[ ]Eligible, in district
[ ]	[ ]Not eligible
[ ]	[ ]More information needed
[ ]	[ ]Not evaluated for individual eligibility

Districts

NR	SR
[ ]	[ ]Eligible
[ ]	[ ]Not eligible
[ ]	[ ]More information needed
[X]	[X]Not evaluated @ district

Integrity: [X]Location [X]Design [X]Setting [ ]Materials
[X]Workmanship [X]Feeling [X]Association

Criteria: [X]A. Event [ ]B. Person [X]C. Architecture/Engineering
[ ]D. Archaeology [ ]E. Exception

Level: [X]Local [ ]State [ ]National

STATEMENT OF SIGNIFICANCE:
☐ **IF THIS PROPERTY IS REVIEWED IN THE FUTURE, ADDITIONAL DOCUMENTATION WILL BE NEEDED.**
April 13, 2005 – The Portsmouth Water Booster Station is eligible for the National Register for its historic associations with two locally important historic contexts – the construction and effects of Pease Air Force Base and 20th century improvements to municipal water distribution – as well as for its architectural and engineering significance as an unaltered example of a Modern water works structure.
To finalize this determination of eligibility, a boundary justification, based on the property's significance, is needed.
The boundary description on page 7 repeats what is shown on the map.
Dec. 14, 2005 – Boundary information received and approved. Regarding the last sentence on page A1, this eligible boundary considers only the water booster station and the water storage tank; future consideration could also be given to other aspects and structures of the system, which stretched between Portsmouth and Madbury.

☑ **ENTERED INTO DATABASE**

ACREAGE:	2.82 acres
PERIOD OF SIGNIFICANCE:	1956 – to the NR's 50 year cut-off
AREA OF SIGNIFICANCE:	A: Engineering & Military; C: Architecture (Engineering)
BOUNDARY:	to be determined
SURVEYOR:	Preservation Company: December 1991 and November 2004
FOLLOW-UP:	Notify surveyor and agencies.

Final DOE approved by: EJH Murphy

Name, Location, Ownership

1. Historic name: Portsmouth Water Booster Station
2. District or area: none
3. Street and number: off Spaulding Turnpike / off Arboretum Drive
4. City or town: Newington
5. County: Rockingham
6. Current owner: City of Portsmouth

Function or Use

7. Current use(s): Government, public works
8. Historic use(s): Government, public works

Architectural Information

9. Style: None; municipal building
10. Architect/builder: Unknown
11. Source: N/A
12. Construction date: 1956
13. Source: Oral history, Research
14. Alterations, with dates:
15. Moved? no ☒ yes ☐ date: N/A

Exterior Features

16. Foundation: Concrete, poured
17. Cladding: Brick
18. Roof material: unknown
19. Chimney material: Brick
20. Type of roof: Flat
21. Chimney location: Other
22. Number of stories: 1
23. Entry location: Facade, center
24. Windows: Other

    Replacement? no ☒ yes ☐ date: n/a

Site Features

25. Setting: Other: highway
26. Outbuildings: Water tower (1956); electrical generator (1970s)
27. Landscape features: N/A.

35. Photo #1 36. Date January 2005
37. Roll #: 2005-3 Frame #:1 Direction: N
38. Negative stored at: NHDHR

28. Acreage: 2.82
29. Tax map/parcel: 19-22
30 UTM reference: 19.352490.4773360
31. USGS quadrangle and scale: Portsmouth, 1:24000

Form prepared by

32. Name: Lynne Monroe
33. Organization: Preservation Company
34. Date of survey: October 18, 2004

41. Historical Background and Role in the Town or City's Development:

The Portsmouth Water Booster Station was constructed ca. 1956 for the City of Portsmouth by the United States Air Force on land adjacent to the Strategic Air Command (SAC) bomber base, later named Pease Air Force Base. The station was built as mitigation for the federal government's eminent-domain taking of the principal sources of the City of Portsmouth's water supply for the creation of the SAC base. The facility's is part of a much larger Water Works system, built by Army Corps of Engineers, that includes a reservoir and filtration plant. The Station's purpose is to boost the water pressure of the water piped from the Madbury Reservoir to city residents.

History of Strategic Air Command bomber base

Prior to the Air-Force period of occupation of the bomber base, a considerably smaller area—300 acres—was used as a municipal airfield (ca. 1930). One of its first commercial users was Northeast Airlines (PDA history). The Navy leased the airfield from the onset of World War II until 1946, when it transferred the lease to Air Force. In 1951, the Air Force identified the airfield for a development of a SAC bomber base, but additional land was necessary for a viable base. Therefore, approximately four thousand acres were taken by eminent domain from the City of Portsmouth and Town of Newington during 1952 and 1953. Newington lost 47 percent of its total land area to the SAC base (Newington Master Plan, 24). A Newington town publication reflected that "approximately 40 pieces of real estate with homestead on them were lost to progress" (*Bicentennial Observance* 1964). Construction of the base was completed by early 1956 (FEIS 3-3); it covered 4,365 acres with more than 140 buildings, and was populated by approximately 7,000 serviceman and their families as well as civilians (Portsmouth Annual Report, 1959).

Construction of the Portsmouth Water Works

The land purchased from the City of Portsmouth for the SAC base contained the Peverly Pond; an aquifer; and the Haven and Smith water wells. They contributed significantly to the water supplied to the communities of Portsmouth, Newington, Greenland, and New Castle (*The Newington Neighbor*, 13). The federal government was obligated to "furnish replacement facilities in exchange for taking Portsmouth's water supply then located within the confines of Pease Air Force Base" (Portsmouth Annual Report, 1961). To fulfill its obligation, the federal government undertook two actions.

In 1959, the Army Corps of Engineers constructed the Bellamy Reservoir by damming the Bellamy River and flooding approximately 1,000 acres of land in Madbury (*The Newington Neighbor*, 13). In addition, the Corps constructed what is known today as the Portsmouth Water Works system, comprised of the water-filtration and distribution infrastructure necessary to pipe and pressurize the water from Madbury to its various destinations. Four miles of pipe were laid between the reservoir and a water treatment plant on Freshet Road in Madbury. Additional piping (approximately 21,900 feet) was laid between the Freshet-Road facility and the Portsmouth filter plant. From the filter plant, two-and-one-half miles of pipe were run across the Little Bay and underneath Fox Point Road (EIS 3-27). In 1954, Newington was notified that the federal government had taken by "eminent domain proceedings a right-of-way along the Fox Point Road...for the purpose of laying a pipeline from the Town of Madbury to a water tower [and Booster Station] within the limits of the Air Force Base and further connected to the existing water system of the City of Portsmouth" (Correspondence October 25, 1954). The Booster Station was located at the Portsmouth Avenue / Spaulding Turnpike Base entrance of the Base, which had a guard checking station, a traffic triangle and a skeet range (Plan 1979).

The purpose of the Booster Station was to literally boost the Madbury-sourced water pressure to the level of the City's water pressure. It was originally designed to "operate during periods of high

consumption to maintain pressures throughout the system;" now it operates continuously (Allen, Appendix and Rice, 2005). The system was designed such that from the Portsmouth Water Booster Station, the majority of the water was piped to Portsmouth, Greenland, Rye, and New Castle and some was pumped into the Newington water system (FEIS, 3-27).

The Booster Station was designed with a 1.5-million-gallon ground storage tank--the City's third tank. Both of the existing tanks, Spinney Road and Seacrest Village, were elevated tanks added to the municipal system in 1941 (Allen, Appendix). However, the Booster Station ground tank was significantly larger. (Spinney Road had a 551,000-gallon capacity and Seacrest Village had a 200,000 gallon capacity.) Water storage tanks are generally considered extremely beneficial to water distribution systems. They reduce peak pumping rates, stabilize water pressures, increase reliability, and can also provide a redundant source of water during emergencies, such as fires; water main breaks, and pump-station power outages (American Water Works Association).

The original design of the City of Portsmouth Water Works called for four connections between the City system and the SAC base. These enabled the City and base systems to aid each other in the event of an emergency. The City of Portsmouth negotiated the contract to provide the water supply to the base until the Portsmouth Water Works was operational (Portsmouth Annual Report, 1960). Upon transfer of the new facilities to Portsmouth, the SAC base, by then renamed Pease Air Force Base, became self-sustaining, and the City reported a significant drop in water revenue (Portsmouth Annual Report, 1963). (Since 1992, shortly after the Pease Air Force Base closure, the City of Portsmouth Water Division has been responsible for the operations and maintenance of the Pease International Tradeport water system. However, Pease Tradeport tenants are served exclusively by the Haven and Smith Wells located under the old base).

In 1950, just before federal government took the City's wells underneath the SAC, Portsmouth Water Department served 27,000 households in Portsmouth, Greenland, Rye and New Castle. Annual consumption was 7.93 million gallons—an increase of 1.65 million gallons per year from 1941 (Allen 39). Water was supplied from 121 wells around Greenland, and the Gosling Station and Sherburne Road in Portsmouth (Allen 37). In the 1950s, it became apparent to the Administration that the existing wells drawing from the same supply; with the water table dropping and demand increasing, the search for new sources of water would be inevitable (Allen 39). During the eight years that the City's water facilities were being reconstructed by the federal government, area residents lived with summer water bans as fewer wells contributed to the water system. In anticipation of the new system's completion, the City Manager's Annual Report indicated, "the ample water supply which we will have, will be a great asset to the City" (Portsmouth Annual Report, 1961).

In the early 1960s, regional discussions took place regarding which entity would operate the Bellamy Reservoir, dam, and its allied facilities (City of Portsmouth Annual Report, 1960). The creation of a metropolitan water district was discussed but never realized. This was the preference of a number of Seacoast towns. The transfer of the reservoir and associated facilities to the City of Portsmouth was heavily litigated. In 1962, the City of Dover and other area communities attempted to "enjoin the transfer of the facility to the City of Portsmouth" (Portsmouth Annual Report, 1962). Despite an on-going legal battle, the title transferred to the City in 1963 (Portsmouth Annual Report, 1963). The City of Portsmouth continues to own and operate the Portsmouth Water Booster Station located in Newington.

42. Applicable NHDHR Historic Contexts:

8. New Hampshire's coastal defenses, 1775-1960.

86. Water supply and distribution in New Hampshire, 1850-present.

43. Architectural Description and Comparative Evaluation:

The Portsmouth Water Booster Station is a one-story, red brick built in 1956 by the Army Corps of Engineers for the City of Portsmouth Water Works system. The Booster Station was part of the base design and was sited to orient laterally to the Air Base entrance. It would have been the first building viewed by visitors to the Spaulding Turnpike / Portsmouth Avenue entrance to the Base. It was one of two known buildings at the entrance; the other was the guard check-in station, not on the same parcel.

The form of the building is most closely associated with the Modern-style influenced by the WPA Art-Moderne themes for public buildings earlier in the twentieth-century. It has no derivative ornamentation.

The 7 x 3-bay, one-story building is a rectangle. It is constructed of brick on a poured-concrete foundation, with a simple, 12" cast-stone skirt with a lip. Three sides have parapet walls with cast-stone coping. The tall, square brick chimney also has cast-stone coping.

The single-story building has a flat roof. It is symmetrical with three rectangular window bays on each side of the center entry. The center bay is the most expressive part of the building. It projects and is slightly higher than the roof parapet edge. The paired entry doors are utilitarian flat steel; there is a metal awning above them. They are flanked by full height brick pillars, which are on top of a shorter, narrow pier creating a stepped effect that accents the entry.

The rectangular window openings have five-light metal jalousie windows. The front and side elevations have individual jalousie windows as well as secondary pedestrian exits. The rear elevation has three pairs of jalousie windows and a single-bay, metal garage door.

The Booster Station has a 1.5-million-gallon metal, ground storage tank located behind it (north). The tank is 140' high and 80' wide (Allen Appendix). It is round with a domed cap. The site is landscape with mature specimen trees and shrubs.

The Portsmouth Water Booster Station is the only Booster Station in the Portsmouth Water Works system that serves Portsmouth, Greenland, Rye, New Castle, and Newington. It may be the only building in the system, but that was not proved for this report.

It is a good example of mid-1950s municipal buildings built by the Army Corps of Engineers, although other examples were not researched for this report.

44. National or State Register Criteria Statement of Significance:

The Portsmouth Water Booster Station will be eligible for the National Register of Historic Places in 2006. It possesses historical and architectural significance and maintains full integrity, and will meet the 50-year date criterion in a few months.

Criterion A: The pump buildings and storage tank are eligible for association with two historic trends.

First, the Booster Station was built by the federal government for the municipality of Portsmouth, because it took the City's water supply when it created the new Strategic Air Command bomber base during the first decade of the Cold War. Air Force bombers stationed at Pease were trained for global strategic bombardment and air-refueling missions (Hildreth 2005). The development of the Booster Station, as a

result of displacement of the City's water supply, illustrates relationship of federal and local government in the twentieth century.

Second, the Booster Station and the associated water system is an example of mid-twentieth-century improvements in municipal water distribution. In the nineteenth century, pumping stations were often massive, high-style buildings that housed stream-powered pumping engines and equipment. With the introduction of electricity, pumping stations could be powered without coal-generated steam boilers. As a result, smaller pumping equipment could be employed and more compact facilities could be built. In addition, with electricity, municipalities did not have to rely solely on proximately located, gravity-fed systems. Large municipalities, e.g. New York City and Boston, were impounding water in reservoirs and controlled lakes located more than fifty miles away to serve their growing populations. In the nineteenth-century, the buildings were located on the pastoral setting generated by the reservoir. However, by the mid-twentieth century, because reservoirs, purification and pumping facilities could be located farther from both the water source and the Water Works patrons, they were often sited in obscure areas that did not command high-style architecture. This building was created to look significant in the landscape, illustrating its perceived importance to the public.

Criterion B: The Booster Station is not associated with any significant individuals.

Criterion C: The Booster Station is an intact, unaltered example of a mid-1950s Modern public building designed to house the pumps associated with the Portsmouth Water Works. The choice of Modern style and materials make it an excellent example of this period and type of building.

45. Period of Significance:

1956

46. Statement of Integrity:

The Portsmouth Water Booster Station (pump and storage tank) maintains integrity of setting and location, sited at the edge of the Spaulding Turnpike (1956) and at a former entrance gate to the Air Force Base. The entrance roads and guard checking station still exist. It also retains integrity of design, materials, and workmanship having only had equipment replacement and no exterior physical changes.

In addition, the Booster Station retains integrity of feeling and association with its original purpose, design intent, and spatial relationship with the former Air Force base, despite its change in land use.