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AECOM

Nantucket Regional Transit Authority
10-12 Washington Street

Existing Conditions assessment

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Quality information

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Revision History

Revision	Revision date	Details	Authorized	Name	Position

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NANTUCKET REGIONAL TRANSIT AUTHORITY

Prepared by:

AECOM Technical Services, Inc.

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Executive Summary

The Nantucket Regional Transit Authority (NRTA) has retained AECOM to evaluate the Greenhound Building located at 10 and 12 Washington St. in downtown Nantucket.

Purpose of Evaluation
The purpose of the evaluation is to determine what would have to be done to the building to accommodate NRTA Administrative Offices and a Passenger Waiting and Information Center.

This Evaluation:

- Establish a baseline of the current condition of the building structure and systems.
- Identify code issues with the current facility and requirements for the use of the area for alternate proposed use.
- The report offers a general opinion on the condition of the facility based on visual evaluation.
- Provides recommendations (repairs and replacements) needed for the use of the building for the proposed use.

Summary of Overall Condition
The Greenhound Building is generally in good condition. While most systems are operating normally, some of the equipment/systems are reaching the end of their useful life.

Functional Issues
The following functional issues were identified:

- Due to the locked door to the food pantry and the door to the employee bathroom, there is no second means of egress currently from the passenger waiting area.
- Bathroom exhaust ventilation looks to be inoperable at the time of the site visit.
- Based on the observed framing the second floor should not be used as occupied space.
- Indicator lights for Alarm and Trouble are illuminated, indicating an issue with the Fire Alarm system.
- Inadequate separation is provided between the propane tanks and exterior combustible construction.

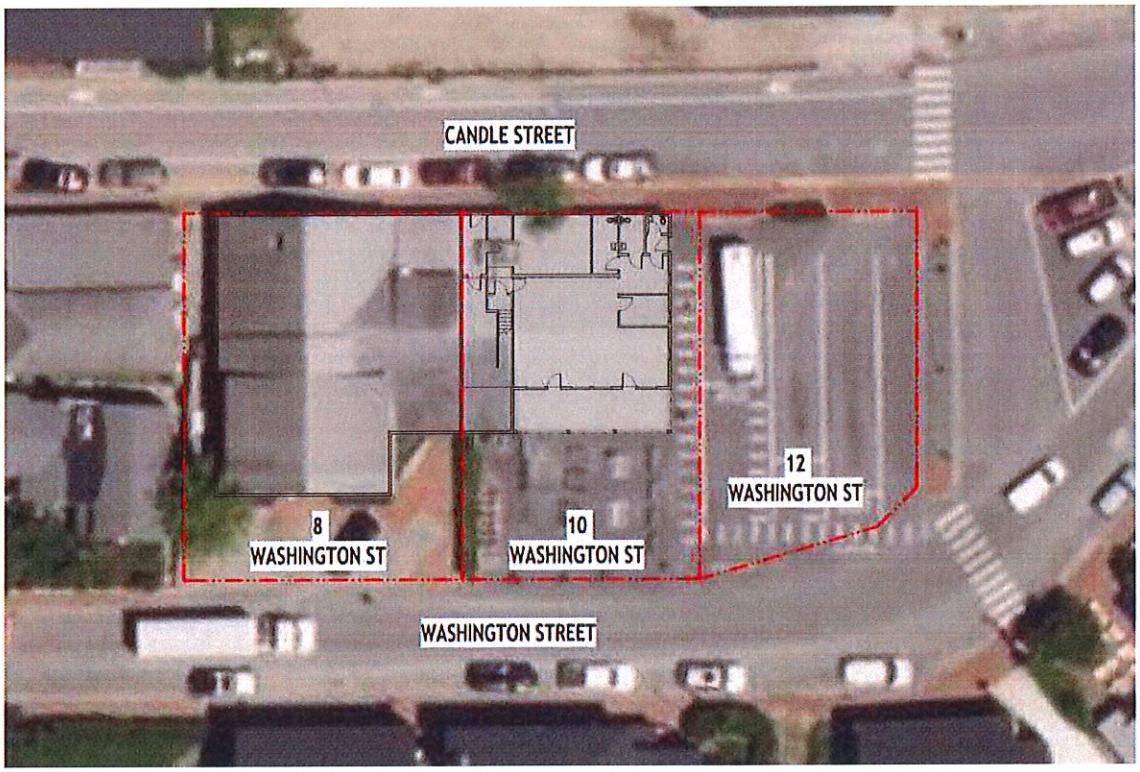
Maintenance Issues
The following functional issues were identified:

- Testing revealed that batteries in emergency lights are not working and should be replaced.
- Windows are all single-pane and exhibit areas of minor deterioration.
- Several holes were found around the building's exterior that were not properly repaired/sealed.
- Vegetation is growing within the roof rain gutters and at several locations where utilities are present, vegetation should be removed.

1. Introduction

The Greenhound Building is located at 10-12 Washington St, in the heart of Downtown Nantucket. Based on available information, the building was constructed in 1939. The building is currently owned by the Town of Nantucket, who purchased the building from ReMain in approximately 2022 for $4.75 million. The building has had numerous owners and uses from a gas station (unconfirmed) to a liquor store and now a transit hub and food pantry since 2008. At the time of its transformation into a transit hub, the building was renovated using local materials and contractors, following the principles of "Nantucket's Think Local - Buy Local - Hire Local" campaign.

8 Washington St is the adjacent structure build of similar age and construction. The building is divided by a common wall running the full length of the building. The common wall is built of Concrete Masonry Unit (CMU) blocks and non-bearing. Based on observations, no shared utilities exist between the two halves.

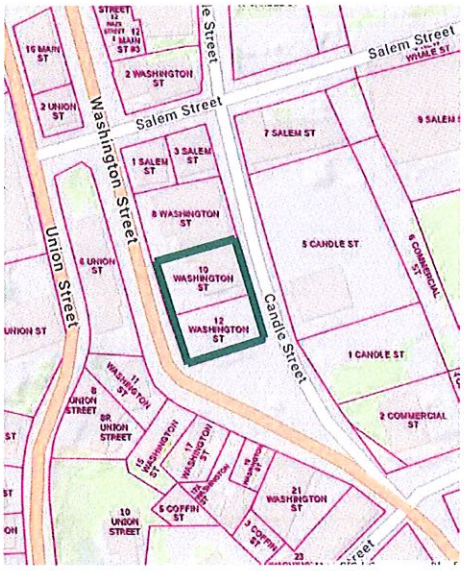


2. Existing Conditions Assessment

2.1 General

10 Washington Street is divided into two tenant spaces, Nantucket Food Pantry and Nantucket Regional Transit Authority (NRTA). 10 Washington Street is attached to a larger overall structure that includes 8 Washington Street. The overall footprint of 8 and 10 Washington Street is approximately 5,500 square feet. 8 Washington Street has multiple individual tenant spaces, including a second floor. Access to 8 Washington was limited to exterior observations. 12 Washington Street is currently used by NRTA for their bus parking.

The building is located within the Town of Nantucket - Old Historic Districts (refer to Appendix A). Any modifications to the building will need to abide by the Nantucket Historical Commission.

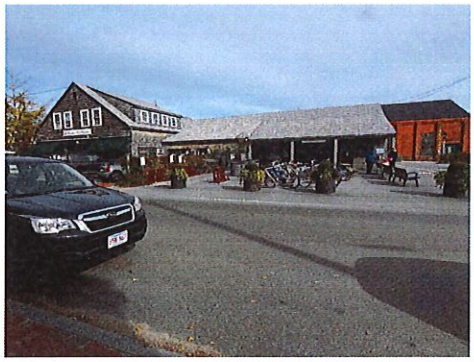


Location Map

2.2 Primary Construction

The primary construction is Type V wood construction. Exterior walls are wood framed and are thick. We anticipate there are 6" wood studs with ½" interior finish, exterior sheathing and then the exterior finish applied over the sheathing. Batt insulation was observed in some of the food pantry areas, concealed by interior finish typically. The roof sheathing and framing are partially concealed with batt insulation and spray foam insulation. 2x6 and 2x8 wood framing were observed, which is typical framing for the period this building was constructed.

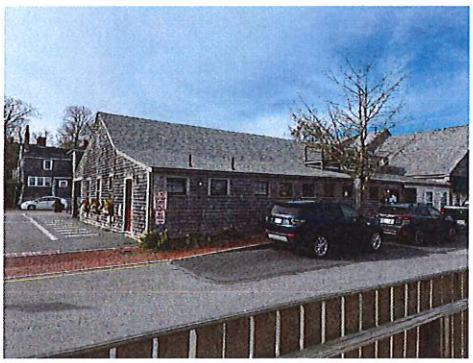
The building appears to have had an addition added to the front and rear of the building. The addition limits are visible on the side elevation, where the roof lines change slopes. The limits are also visible in the food pantry. Some of the walls appear to have been modified as well as variations in the floor elevations are present and should be investigated further to understand the scope required for any renovation.


Exterior Façade – facing Washington Street

2.3 Exterior Envelope

• Exterior Wall Finish

The finish on the exterior of the building is cedar shingles for much of the building with wood accent trim. There is one wall of wooden cladding under the canopy. The overall condition is good, with only a few areas of concern. There is a patch under the front canopy as well as a patch near the hose bib that should be repaired.


Exterior Façade – facing Candle Street

• Roofing

The building has asphalt shingle roofing. Access to the roof was not provided, but there were no missing shingles or signs of any roof leaks in the interior. Note, the sheathing is concealed by insulation in the attic throughout. Recommend attaining historical data on how old the roof is, to further evaluate how long till the roof

needs to be replaced. Asphalt shingles have a 15 ~ 30 year life expectancy.

• Exterior Windows

Exterior windows are wood framed with single pane glazing. All windows have divided lites to meet the architectural aesthetic. Conditions of the wood sashes and frames are fair, with some signs of water intrusion.

Recommend planning to replace the windows within the next ten years with insulated, multi-pane type windows.

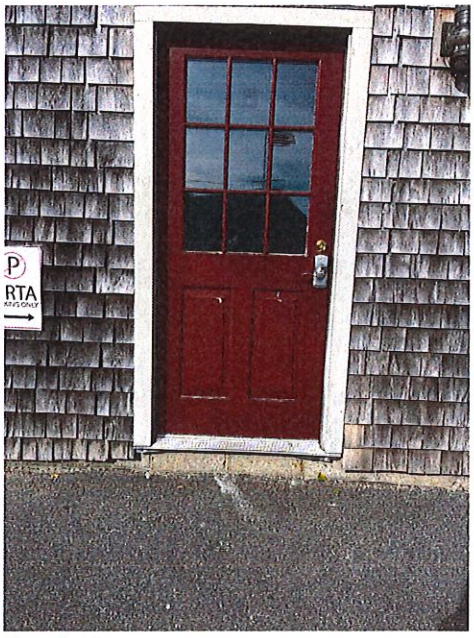
• Exterior Doors

Exterior doors are wood with wood frames. Three of the exterior doors have divided lights to meet the architectural aesthetic. The glazing is single pane glazing. The fourth exterior door has no glazing and serves as the primary entrance to the food pantry area.

Recommend planning to replace the exterior doors that have glazing within the next ten years with insulated type doors with insulated glazing for energy efficiency.

Exterior Window

Exterior Window



Exterior Door

2.4 Interiors

• General

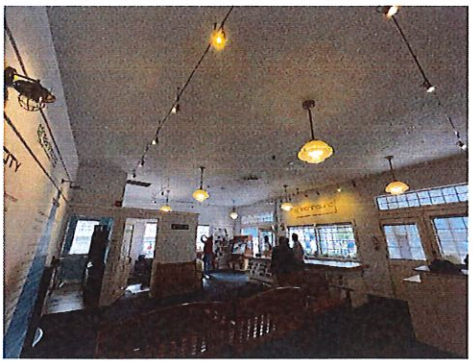
The NRTA areas are all finished spaces, with painted walls and ceilings. The walls and ceilings appear to be lath and plaster type construction. The ceilings have a popcorn finish. The floor throughout the NRTA space is level, with no changes in elevation.

The food pantry areas have some spaces that are finished, with painted walls and ceilings, and a storage room that has no finish. The floor in the food pantry area has multiple elevation changes, this condition should be investigated further. All the floors at the food pantry are down +-4" from the NRTA offices, with some areas being lower.

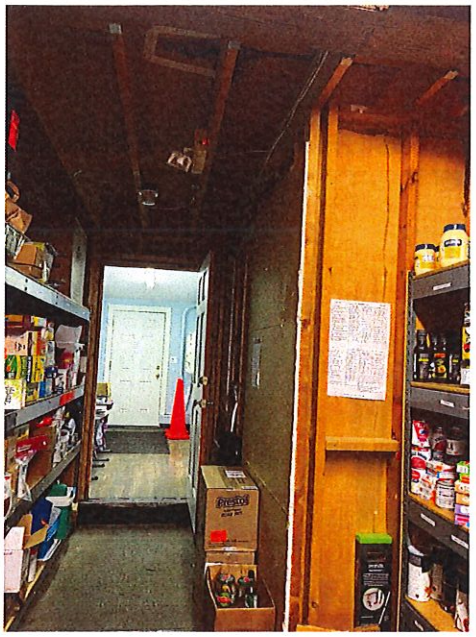
• Floor Finishes

The NRTA lobby has commercial grade carpeting tiles that are in fair condition with many stains and raised seams. The seams between tiles could be a maintenance concern.

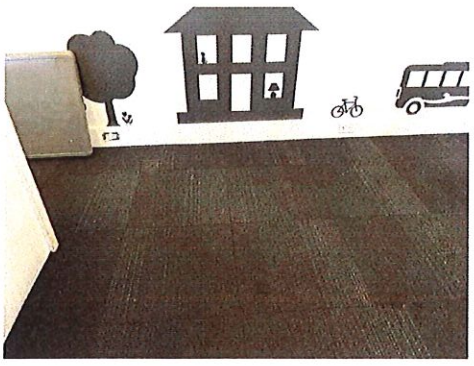
The NRTA bathrooms as well as most of the Food Pantry areas have 12x12 resilient tile as well as laminate wood. The condition is fair, with a few missing tiles. The resilient tile and adhesive mastic should be tested to determine if it has asbestos containing materials.



Interior Finishes – Lobby



Interior Finish – Storage (note floor level)



Interior Finishes – Lobby Carpet

• Wall Finishes

Where the walls are finished, they are typically painted with wood baseboards and wood trim around window/doors. The bathroom has plastic laminate protection, as required by code.

We recommend the paint be tested to determine if it has any traces of lead paint.

• Ceiling Finishes

Where the ceilings are finished, they are typically painted lath and plaster, that has a popcorn finish. The condition of the painted ceilings is good.

The three toilet rooms have 2x2 acoustic ceiling tile system, for access to infrastructure for the toilet rooms that is run above the ceiling. The condition of the ACT is fair.

• Interior Doors

Interior doors are wood raised panel type with wood frames. The door sizes vary, both in width and height.

Hardware for the interior doors appears to be residential grade. Additionally, the hardware is knob type (non-levered) that is not accessible.

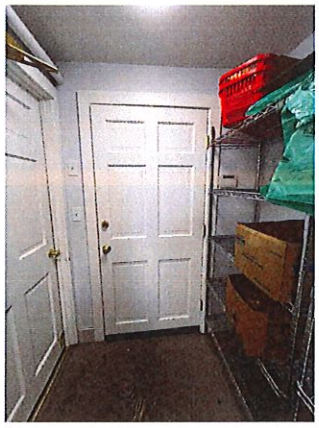
• Attic

There is an attic space throughout 10 Washington Street, which is access via a wood stair, located within the Food Pantry area. The stairs are missing code required handrails though.

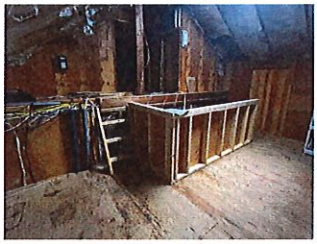
The attic space has some areas with plywood substrate (over the food pantry), and exposed ceiling framing over the NRTA space.

The HVAC system as well as a lot of the electrical cabling is run through the attic to the various rooms below.

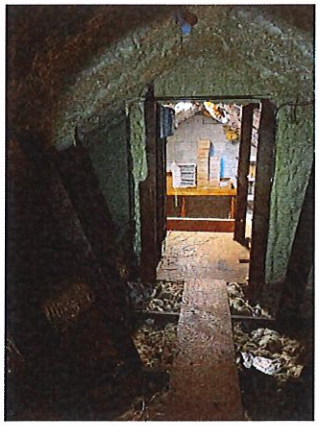
Interior Finishes – Toilet Room



Interior door - typical



Attic



Attic

2.5 Plumbing

• Domestic Water Service

The domestic water service enters the building on the south side of the building. The water meter and backflow preventer were not visible but are anticipated to be below grade on the exterior in the ground, accessible from the access covers that are visible.

The building has one electric domestic water heater. The water heater was not accessible, but the size of the enclosure suggests it isn't larger than a 30-gallon water heater. Recommend further review of the water heater to confirm age of equipment.

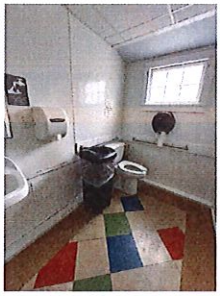
All visible water piping was copper with the exception of the pex water line for the irrigation system, located on the west elevation.

Domestic Water Service

• Plumbing Fixtures

The building's plumbing fixtures consist of three floor mounted tank type toiles, two wall hung lavatories, a shop sink, a single level drinking fountain with bottle filler, and one hose bib.

The plumbing fixtures were all in good condition at the time of the survey. They show typical and expected wear for the age of the plumbing fixtures, but useful life remains.



Plumbing Fixtures

• Sanitary Waste

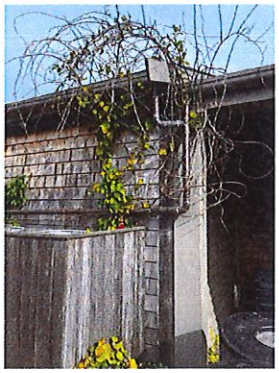
The sanitary waste system for the building is unconfirmed but likely goes out the west elevation towards Washington Street (**refer to Appendix B**) tied into the municipal sewer system.

Electric Water Heater (inaccessible)

• Roof Drainage Systems

The roof drainage system consists of perimeter roof gutters with downspouts to grade. On the west side of the building, the drains discharge to grade in a landscape bed. On the east elevation, the drains discharge to an underground system.

The gutters and downspouts were in average condition at the time of the survey, showing only expected wear for the system's age. Useful life remains. There were vines climbing up the downspouts on the west elevation and areas where vegetation is growing within the gutters, which should be cleaned and removed before they cause damage to the gutter and roofing system.



Gutters and Downspouts

• Propane Systems

The propane service enters the building on the west side of the building into the Food Panty Storage. The line then runs up to the attic, then to the HVAC system located above the NRTA space There are two 120-gallon propane tanks behind a fence enclosure.

The only equipment that uses propane is the HVAC system that is located in the attic. Propane piping within the building is black steel.

The propane system, piping and regulator are all in good condition at the time of the survey based on the visual inspection, showing only typical wear for the age of the system. No system deficiencies were observed.

Propane Tanks

2.6 Mechanical

• Mechanical Observations

The current space is mainly served by a single zone gas-fired and DX cooling ducted split system. The indoor unit is horizontally installed in the attic. The condensing unit is located on a wooden platform on the back roof. The indoor unit (gas furnace and cooling coil) is not in very good shape. The cooling coil was manufactured in 2007 (around 19 years old); and has a four (4) ton cooling capacity. The DX air conditioning system works on R-22 refrigerant that has been discontinued long time ago and will not be easy to maintain. The ducts for this system utilize flexible duct that are typically only used for small ducts lengths, typically no longer than five feet per industry standard recommendations. The unit is controlled from a single programable thermostat located in the NRTA space.

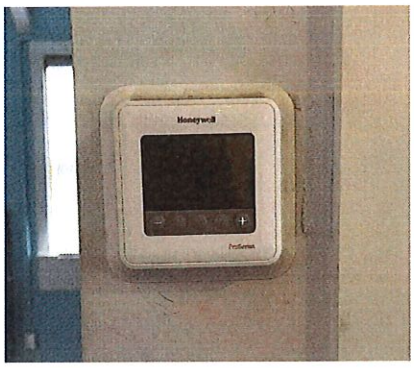
A condensate pump has been found next to the ducted unit but appears to not be connected to any condensate line.

A wall mounted mini-split has been installed in food pantry area as a supplement unit, with the condensing unit located at the back roof. The split systems exceed the recommended life span expectancy.

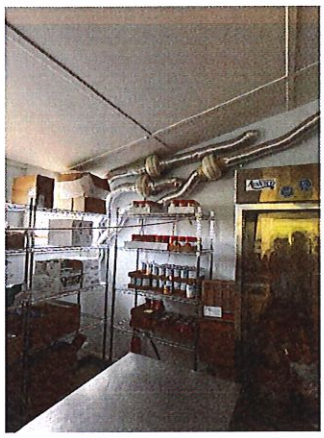
Three wall mounted inline exhaust fans have been found in the pantry. These fans serve public bathrooms. The status of these fans is not functional. These fans are vented to the exterior through a 4" wall vent. All ducting for these fans if flexible duct.

An electric baseboard has been installed in the employee bathroom that is located at the southeastern corner of the building.

HVAC System in Attic



Thermostat



Toilet Room Exhaust Fans

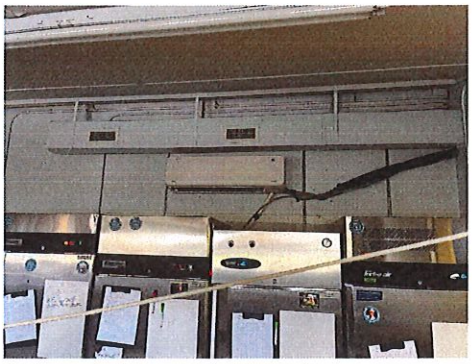
Toilet Room Exhaust Fan Louver

Mechanical Recommendations

1. A new HVAC system is recommended to replace the existing HVAC systems and meet new space configuration and requirements. A heat pump multi-zone system can be used to have multiple control points based on the layout and occupancy of future space. This new system would eliminate the propane system including tanks and piping.

2. The area of operable openings needs to be checked to check if it provides the required natural ventilation (4% of floor area). There were no other sources of fresh air observed.

3. Further investigate exhaust fans and restore code required exhaust for the toilet rooms.



Mini-split system / heat pump

Roof Mounted Condensors

2.7 Fire Protection

• Automatic Fire Sprinkler System

10 Washington is not protected by an automatic fire sprinkler system or standpipe system.

• Fire Standpipe System

10 Washington is not protected by a fire standpipe system. This system is not required by 780 CMR, The Massachusetts Building Code.

• Portable Fire Extinguishers

There are fire extinguishers located throughout the facility, two within the NRTA space and three within the food pantry area. They are not properly hung on the wall throughout.

• Automatic Fire Alarm System

A fire alarm, fire detection, and notification system is provided for 10 Washington Street. One Fire Alarm Control Panel (FACP), a Fire-Lite Model MP-12 likely installed in the 1990s, is located adjacent to the attic stairway. The electrical panel adjacent to the Fire Alarm panel has a 15-amp circuit breaker labeled 'fire alarm system' in circuit 17. FACP indicators show one of the two red LEDs lit, indicating an active alarm condition; the yellow LED lit, indicating a trouble condition; and the green LED lit, confirming system power is present.

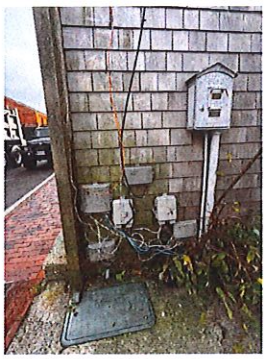
The fire alarm dialer, a Fire-Lite Model 411UD located down the hall from the FACP, shows no active LEDs, indicating it is not operational. A fire alarm master box is located on the rear exterior wall of 8 Washington Street; however, it is unknown whether the FACP is connected to this master box.

The original fire alarm system monitoring company was Intercity Alarms of South Yarmouth, Massachusetts, with operating instructions dated November 1, 1989, as evidenced by signage. Monitoring with Alarm New England was canceled in 2022, and if the system is currently unmonitored, this constitutes a fire code violation that could compromise the Certificate of Occupancy.

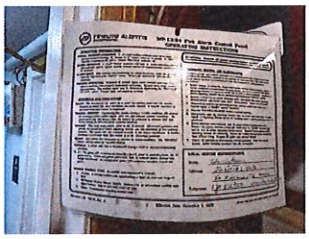
Observations of 8 Washington Street were not conducted; therefore, it is unknown whether that building is served by the same FACP.

Detection devices, including heat and smoke detectors are installed in miscellaneous locations, and notification appliances such as horn/strobes are also installed in miscellaneous locations. However, overall notification coverage is inadequate per NFPA 72, with only one strobe observed in the lobby and one strobe at the second-level attic. Manual pull stations are located at the two primary exits within the NRTA space but lacking at the two other exits. Carbon monoxide detectors were not identified in the building, though they are required where fuel-burning equipment is present.

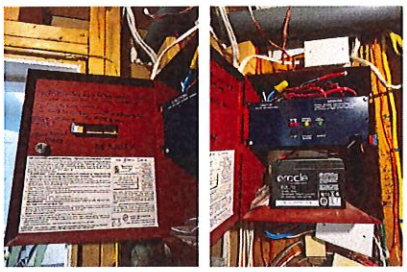
Fire Extinguisher



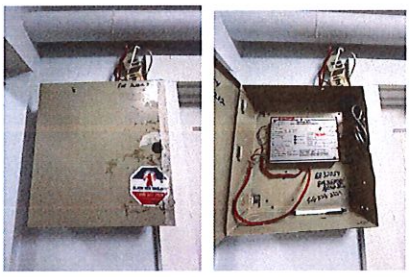
Fire Alarm Master Box



Fire Alarm Control Panel Instructions



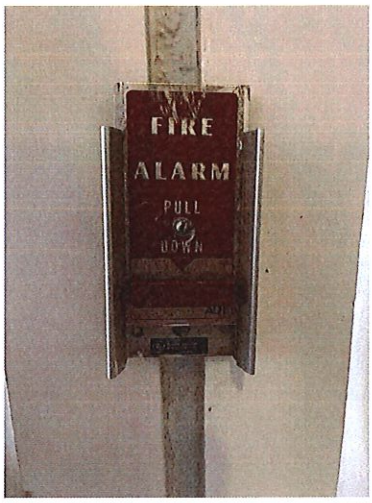
Fire Alarm Control Panel



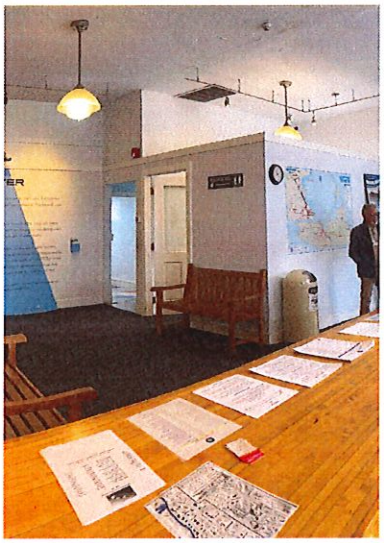
Fire Alarm Dialer

Fire Protection Recommendations

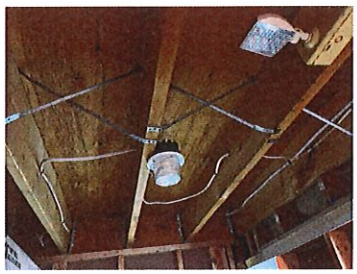
- Attain or perform full fire alarm system inspection and testing as required by code.
- Clear the alarm and trouble showing at the FACP.
- Confirm date and capacity of batteries, handwritten date of "8/17" was observed. Replace if expired.
- Restore monitoring service or confirm master box connection.
- Relocate / add notification devices per NFPA 72 spacing requirements.
- Add manual pull station devices per NFPA 72 requirements.
- Add carbon monoxide detectors where fuel-burning appliances exist.
- Two 120-gallon propane tanks are installed adjacent to combustible construction; per NFPA 58 and 527 CMR 1.00, the minimum required clearance is 10 feet for containers up to 500 gallons.



Fire Alarm Pull Switch



Fire Alarm Horn Strobe



Fire Alarm

2.8 Electrical

• General

A visual inspection was performed in order to assess the electrical systems within the area of the building that may be refit for a different use. Numerous electrical items that were observed require correction or replacement. Some of the items are minor in nature and some of the items will require more serious attention.

• Electrical Service / Panel

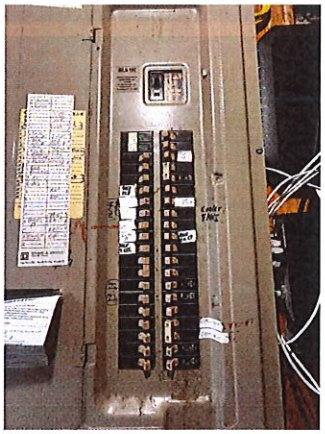
The building's electrical service is 200A, 120/240 single phase with a single 42 circuit panelboard located within the Food Pantry Area. The panel is past its useful life, recommended that it be replaced.

• Electrical Devices

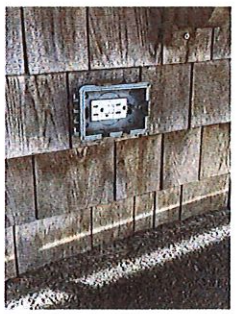
It appears that most of the receptacles installed at the facility are aged past their useful life and maybe in need of replacement. Outlets observed throughout the space are aged. There are GFCI type outlets observed in the toilet rooms and at the exterior. Some of the exterior covers are damaged and should be replaced.

Presently, toggle switches are utilized in most rooms within the facility. There are a few programable switches. Programmable switches are encouraged to conserve energy. No occupancy sensors were observed.

Electrical Service



Electrical Panel



Electrical Devices

• Exterior Light Fixtures

Exterior light fixtures are incandescent residential type fixtures, with a style that matches the architectural aesthetic. General condition of the fixtures is fair, but cleaning of the lenses is encouraged.

• Interior Light Fixtures

Interior light fixtures are fluorescent tube type, 2x2 LED, incandescent residential type fixtures, with a style that matches the architectural aesthetic. Based on our visual inspection, the general condition of the fixtures is good, but cleaning of the lenses is encouraged. Upgrading to LED fixtures is encouraged. There are several light fixtures that appear to not be working and will need to be replaced. In an effort to conserve energy, replacement of fluorescent and incandescent light fixtures should be considered.

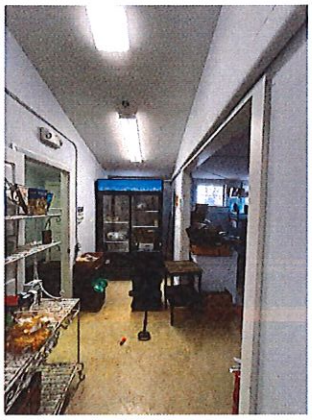
• Emergency Lighting

Emergency lighting is provided with dual head units with integral batteries. The fixture type varies throughout the building, as does the condition of the fixtures. The recommendation is to test all existing fixture batteries and replace all non-functional or damaged fixtures.

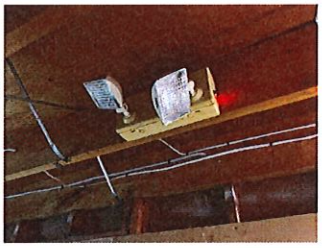
• Exit Signage

Exit signage was not present in any of the spaces and should be evaluated with the redesign, to ensure access to the required means of egress is immediately visible.

Exterior Light Fixtures



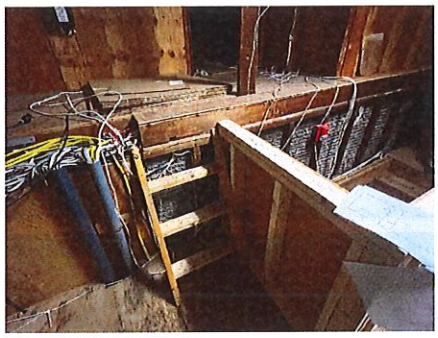
Interior Light Fixtures



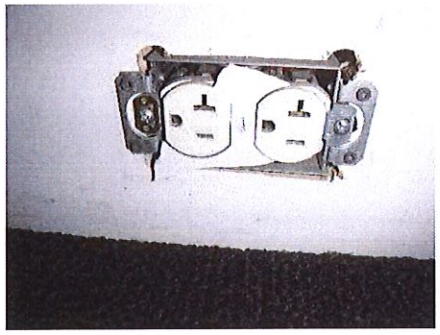
Electrical Observations

1. The electrical service should be replaced in its entirety due to age and condition.
2. Above the existing 200 amp panelboard, there are numerous romex cables installed in two large PVC conduits. The National Electrical Code does not allow for Romex cables to be installed in conduits. Also conduits by code are only allowed to have a 40% fill and based on the number of cables presently installed, the fill % appears to considerably past the 40% limit.
3. At several locations inside the facility, there are PVC conduits installed. PVC when burned gives off poisonous gas and is not recommended to be installed indoors.
4. There are numerous locations within the facility where Romex cables are improperly installed. One example is an installation in the attic where the Romex cable is secured by wrapping it around pipes. This cable also has a splice that is not contained by a required splice box.
5. Some of the Romex that exists in the building is old and the insulation jacket appears to be deteriorating due to age.
6. There is a fluorescent light fixture in the attic that is attached to the bottom side of the roof rafters, and it appears to be installed about 2 feet from the floor.
7. There are several receptacles with missing or broken receptacle plates. Some receptacles are aged and appear to exceed their useful life expectancy.
8. In the attic, there is a splice in Romex cable that is not in a code required electrical box and is almost entirely covered by insulation foam. Many surface areas within the facility are covered by insulation foam and it is not possible to see a good part of the existing wiring to determine condition.
9. There are several light fixtures that appear to not be working and will need to be replaced.
10. At the northeast corner of 8 Washington Street, where the Fire Alarm Master Box is, there is a rain leader discharging above a pull box. Unconfirmed what that pull box is for, but if it's for any electrical distribution, the drain should be re-routed.
11. At 8 Washington Street, several feet from the utility electrical meter for 10 Washington Street, there is an exterior floodlight fixture that has detached itself from the building and it is hanging several feet from the soffit where it was originally installed. The lamp is missing (which could cause serious shock, or death should someone put their finger in socket) and the Romex wire that feeds the fixture is exposed and hanging several feet in the air.

Electrical Panel



PVC Conduit / Un-supported Cabling



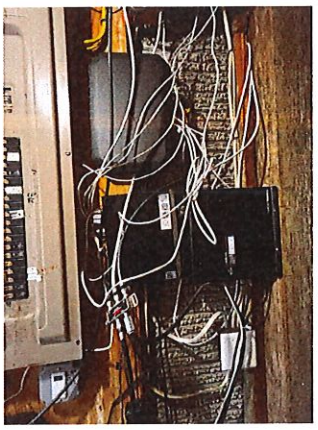
Damaged Outlet

Rain Leader over Pull Box

2.9 Technology

The building has multiple cable and telephone services, with some appearing abandoned. Recommend demoing all abandoned services, in their entirety where possible, and repair finishes.

Telephone / Cable / Internet Service

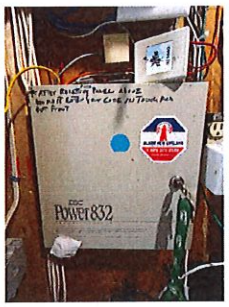


Telephone / Cable / Internet Service

2.10 Security Systems

The building has an antiquated security system that appears non-functional. A new wireless camera system has been provided by NRTA. Recommend demoing any abandoned security system, in its entirety where possible, and repair finishes impacted.

The exterior entrance to the employee bathroom has an electronic lock with keypad.



Existing Security System

Existing Wireless Security System

3. Code

3.1 Code Observations

Refer to Appendix C for markup of Code Observations, noted in red.

As the renovation scope is confirmed, a code approach shall be developed to ensure compliance with Tenth Edition of 780 CMR, Massachusetts State Building Code which was first effective on October 11, 2024. There are two conditions that we want to get ahead of though, based on the 2018 Code Analysis that was done.

1. The occupancy for the NRTA portion of the facility is stated as 49 occupants. Having 49 occupants or less is a threshold in 780 CMR that allows egress doors to not swing in the direction of egress. All of the exterior doors swing into the space, not out to the exterior. Any increase in occupancy will likely require the doors to be changed to swing out.

2. The plumbing fixture analysis shows that two women's toilet and one men's toilet is required. Currently there are two unisex public toilets and one dedicated employee. The plumbing fixture counts will need to be reviewed with the Authority Having Jurisdiction to confirm whether the fixtures have been assigned is acceptable or not.

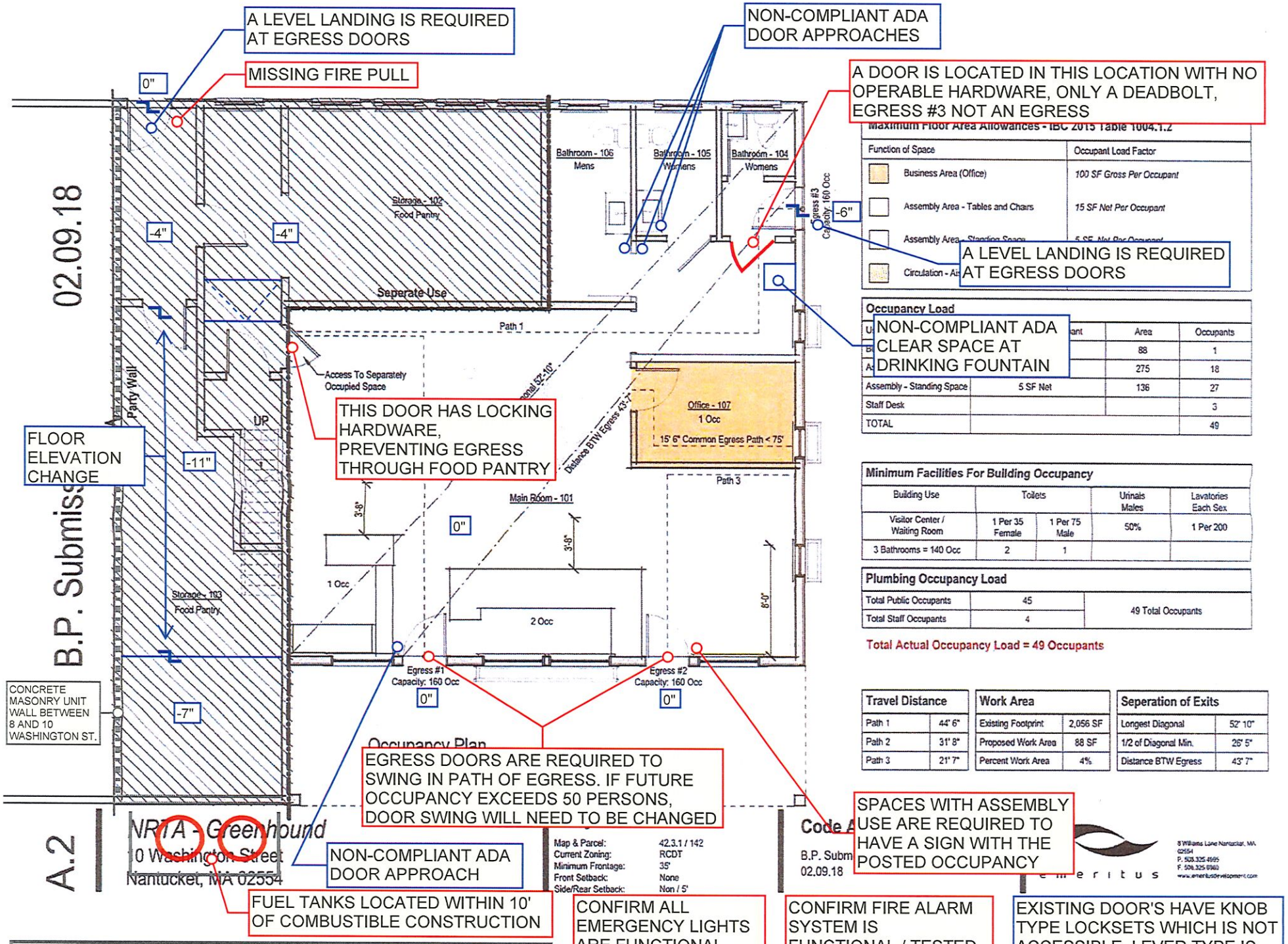
4. Accessibility

4.1 Accessibility Observations

Refer to Appendix C for markup of Code Observations, noted in blue.

As the renovation scope is confirmed, a review of 521 CMR – 2006 Edition, Architectural Access Board, specifically section 3.3 EXISTING BUILDINGS to ensure compliance with the standard.

Appendix C



Appendix C - Code and Accessibility Observations
AECOM - December 2025