



74 Pond



90 Pond

TOWN OF BRAINTREE - AFFORDABLE HOUSING STUDY 74/90 POND STREET

EXISTING CONDITIONS FINDINGS

APRIL 11, 2024



INTRODUCTION

Meeting Agenda

1. **PROJECT SCHEDULE**
2. **HOUSING NEEDS**
3. **EXISTING CONDITIONS DRAWINGS**
4. **SITE - CIVIL & LANDSCAPE**
5. **EXISTING CONDITIONS OBSERVATIONS REVIEW**
 - » **ARCHITECTURAL - EXTERIOR**
 - » **ARCHITECTURAL - INTERIOR**
 - » **MEPFP**
 - » **STRUCTURAL**
6. **CODE RESEARCH**
 - » **ACCESSIBILITY**
 - » **WORK AREA COMPLIANCE**
 - » **EGRESS**
 - » **VERTICAL OPENINGS**
 - » **STAIRS**
7. **NEXT STEPS**
 - » **DESIGN LAYOUTS**
 - » **PUBLIC MEETING**

Meeting Goals

- » **Determine what existing conditions repair/ replacements and code compliance scope should be included in the project's renovation.**

SCHEDULE

TOWN OF BRAINTREE AFFORDABLE HOUSING STUDY			JAN	FEB					MAR				APR					MAY				JUN			
PROPOSED SCHEDULE	DURATION	DATE RANGE	1/29	2/5	2/12	2/19	2/26	3/4	3/11	3/18	3/25	4/1	4/8	4/15	4/22	4/29	5/6	5/13	5/20	5/27	6/3	6/10	6/17	6/24	
PHASE 1: Information Gathering	11 wks	1/29/24 - 4/15/24																							
1 Project Kick-off: Understand Project Goals & Collect Relevant Documents																									
Meet with Mayor & Town Staff to understand study goals. (virtual meeting)																									
Identify key stakeholders and relevant ongoing Town initiatives. Confirm project schedule and deliverables.																									
Collect & review existing building, site & regulatory documents																									
2 Assessment: Visit Site & Summarize Conditions																									
Meet on site to perform visual exploration of the existing buildings & site. (in-person meeting)																									
Assess the findings to identify existing conditions which may impact housing feasibility and construction costs.																									
2A Assessment: Create Measured Drawings																									
Create measured base drawings for buildings and site.																									
3 Feasibility Analysis: Housing Opportunities & Market Conditions																									
Meet with the Town's affordable housing organizations/advocates to collect info on community's housing needs and resources. (virtual meeting)																									
Analyze Housing Opportunities for the building & site																									
Analyze market conditions & funding opportunities																									
4 Summary of Opportunities: Share Findings & Engage Public																									
Meet with Town project team (virtual meeting)																									
Public meeting to share initial findings & elicit feedback. (virtual meeting)																									
Online polls and options for additional public feedback.																									
PHASE 2: Conceptual Design &	11 wks	4/15/24 - 7/1/24																							
1 Initial Conceptual Design																									
Identify what housing options w/in existing buildings and/or new construction. Present initial funding options.																									
Meet with Town project team to review conceptual design report.(virtual meeting)																									
2 Final Conceptual Design																									
Identify what housing options w/in existing buildings and/or new construction. Present initial funding options.																									
Meet with Town project team to review conceptual design report.(virtual meeting)																									
3 Financial Feasibility of Design																									
Construction cost estimate for buildings & site																									
Proforma																									
4 Final Report																									
Meet with Town project team to review conceptual design report.(virtual meeting)																									
Compiled Study report with deliverables from each task above + executive summary																									
OVERALL PROPOSED SCHEDULE	22 wks	1/29/24 - 7/1/24																							

HOUSING NEEDS (MEETING 3/15)

KEY TAKEAWAYS

PROCESS & FUNDING

- » Multi-source funding stack: LIHTC, HIF, CEDAC, ARPA funding, private funding & more.

STATUS OF EXISTING REGIONAL HOUSING

- » Ongoing collaboration with TOB Planning Department.
- » Wide range of AMI throughout regional housing (from 30% AMI to 120% AMI) - but more is needed.
- » Desirable unit sizes: studio, 1 bed, 2 bed.
- » Wait lists for all existing housing (1-5 years).
- » Residents applying are younger than in previous years. (65-70 yrs).
- » Seniors are fastest growing shelter population, while the veteran needs seems to be dropping b/c of targeted development by the VA.
- » Ongoing maintenance is critical to consider.

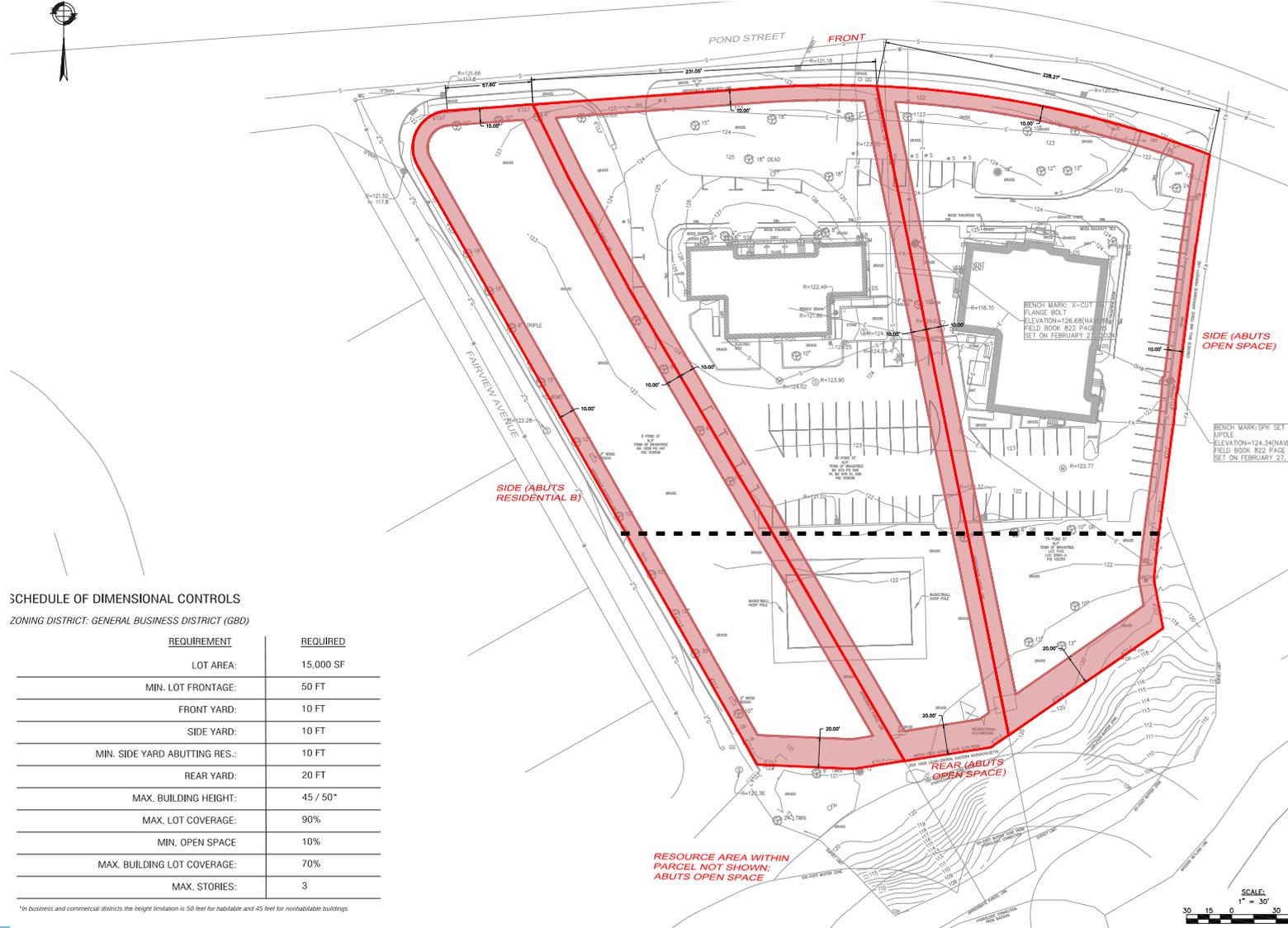
CONSIDERATIONS - BUILDING FOR SENIORS

- » Units designed for aging in place: no bathtubs, grab bars, fire suppression at cooktop, designated smoking area
- » Important to have social gathering space, social programming, spaces for outside agents to meet with residents.
- » Access to resident service coordinator.
- » Access to meals/meal program.
- » Accommodate outside assistants that may be visiting/serving residents.
- » Access to transportation, especially medical.
- » Residents want to stay in the community they know.

CONSIDERATIONS - BUILDING FOR VETS

- » Need supportive services to be successful.
- » Residents want to stay in the community they know.

ZONING SETBACKS DIAGRAM



SOIL SURVEY

- » Most of the site is classified as Urban Land and hydrologic soil group A based on the Natural Resources Conservation Service (NRCS).
- » The southern area is wetland, classified as silt loams and hydrologic soil groups B/D.

PERMITTING

- » Existing wetland resource area is at the southern part of the site. The site is not within the ACEC (areas of critical environmental concerns), Natural Heritage Priority Habitat or Endangered Species Areas, or Wellhead Protection Areas.
- » The southern part of the site is in the AE zone of FEMA floodplain.

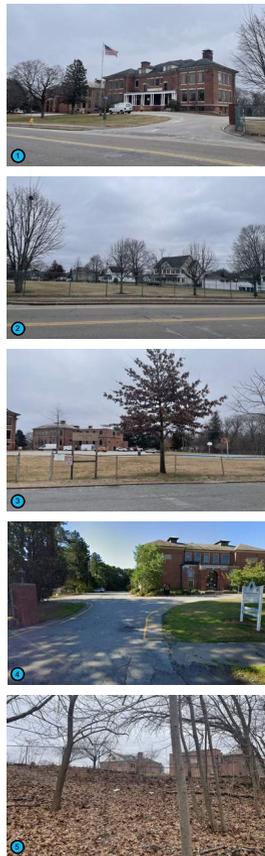
EXISTING UTILITIES DIAGRAM



UTILITY INFRASTRUCTURE

- » Three catch basin inlets are visible.
- » The sewer line enters the site from the north side from an existing sewer main that runs in Pond St. then it runs west.
- » Two manholes on site.
- » Existing sewer easement at the south lower grade of the site.
- » Existing 2" water line enters from Pond St. One fire hydrant between two buildings. The hydrant water connection is unsure.
- » No visible gas utility on-site.
- » Utility poles at east property line for Electric/telecom.

VIEWS INTO THE SITE DIAGRAM



VIEWS FROM THE SITE DIAGRAM



EXISTING CONDITIONS SITE PLAN

KEY	
- - - - -	PROPERTY LINE
■	ASPHALT
■	CONCRETE
■	GRAVEL
■	GRASS
■	WOODED
■	PLANTING BED
■	WETLAND
○	DECIDUOUS TREE
○	EVERGREEN TREE
● ● ● ●	SHRUB
- - - - -	CHAIN LINK FENCE



FRONT DRIVE

- » Adequate space for drop off and pick up.
- » Bus pull-off is functional with car pass-by space.
- » Fair condition of asphalt and granite curbs with a few missing ones.

PARKING LOTS

- » 85 parking spaces altogether on site.
- » The asphalt condition is fair with a few cracks to repair.



VEGETATION DIAGRAM

KEY

-  PROPERTY LINE
-  GRASS
-  WOODED
-  PLANTING BED
-  WETLAND
-  DECIDUOUS TREE
-  EVERGREEN TREE
-  SHRUB
-  CHAIN LINK FENCE



LAWN

- » One larger evergreen tree and small oaks, side lawns are open with small oaks.
- » Perimeter along Fairview Ave and Cemetery – chain link fence between the cemetery and the property.
- » **Consider the removal of the fence.**
- » The connection path between two buildings needs shade and screening.



PEDESTRIAN CIRCULATION DIAGRAM

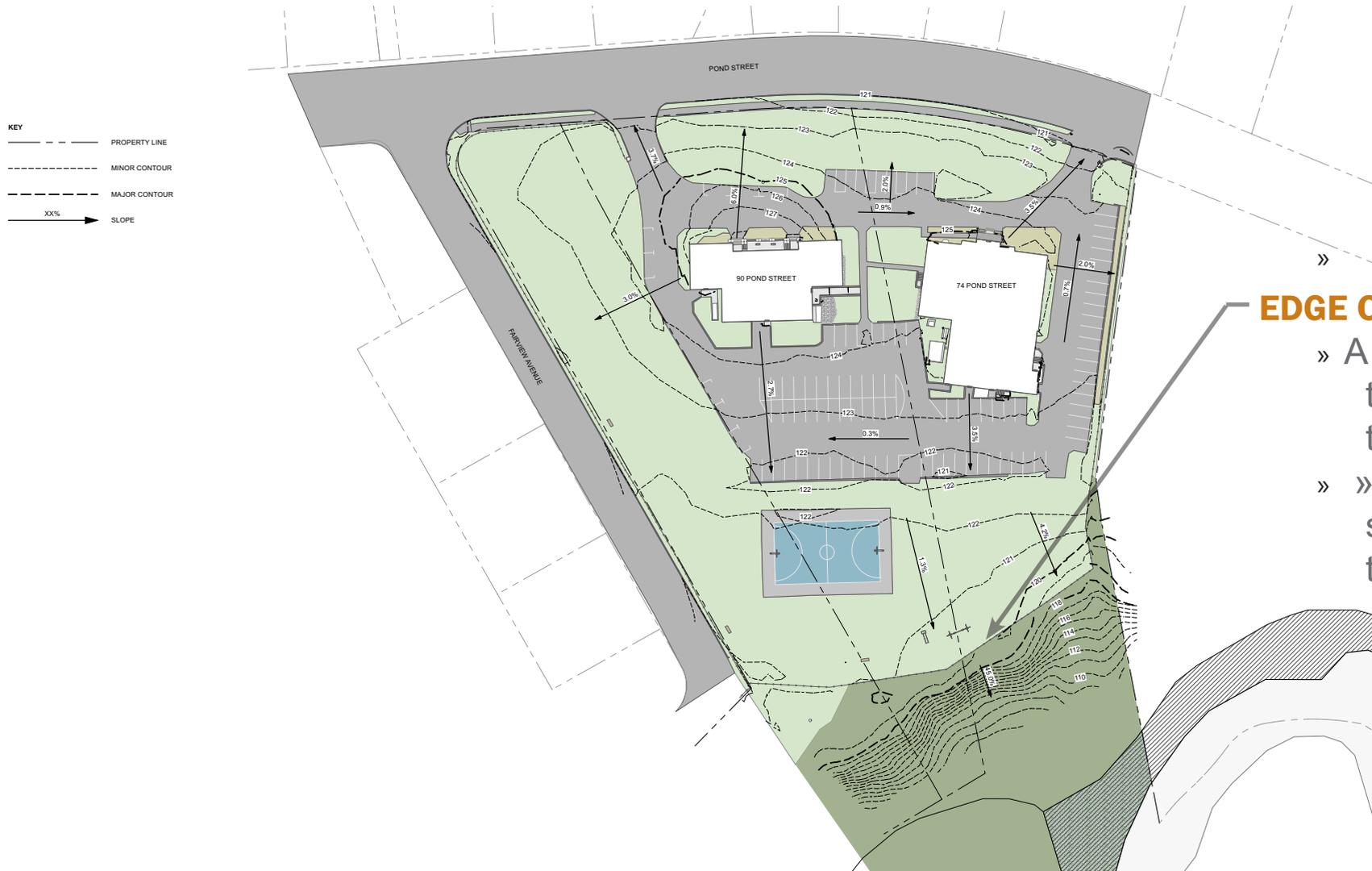


SPORTS/PLAY AREA

- » Located behind the back parking area, a basketball court, metal swing set, and metal slide.
- » Equipments are in poor condition with no accessible connection.



ELEVATION AND SLOPE DIAGRAM



EDGE CONDITIONS OF WOODS

- » A chain link fence about six feet tall separates the lawn from the woods.
- » » Directly behind the fence is a steep decline that slopes down towards the river.

ARCHITECTURAL - EXTERIOR

ROOFING - 74

- » Slate roofing on main structure in fair to good condition. Some wear and damage visible. Membrane flat roofing at auditorium & kitchen in fair to good condition. **Repair slate as required, assess membrane roofing for leaks and replace membrane roof. New flashing as required. Modify roof insulation as required to meet energy code.**
- » Both vent stacks appear plumb with standing seam metal roofing, unknown divot visible on NW stack. Access not available. **Review flashing for damage, repair as required.**
- » Metal gutter mostly in good shape, some damage visible. Existing gutters drain to perimeter drain. **Replace flashing around gutters as required, repair dented gutters.**
- » Painted wood eave has some peeling visible. **Repair and paint as required.**

ROOFING - 90

- » Asphalt roofing throughout in poor to fair condition. Access not available. **Replace asphalt shingle & roof flashing. Modify roof insulation as required to meet energy code.**
- » Chimneys appear plumb, some spalling visible. **Repoint both chimneys. Install new fitted caps.**
- » Some damage visible at metal gutter. Existing gutters drain to perimeter drain. **Replace flashing around gutters as required, repair dented gutters & disconnected downspouts.**
- » Painted wood eave trim peeling and visibly damaged. **Replace or repair as required.**



ARCHITECTURAL - EXTERIOR

WALLS - 74

- » Brick masonry exterior showing cracking and significant spalling, especially around window and door openings. **Rebuild and repoint masonry as required. Modify exterior wall insulation to meet energy code.**
- » No flashing at corbelled building base. **Recommend to add flashing over corbelling.**

WALLS - 90

- » Brick masonry on granite block foundations. Masonry in fair to good shape, some spalling visible. **Repoint masonry as required. Modify exterior wall insulation to meet energy code.**

DOORS & WINDOWS - 74

- » Exterior wood window trim is in poor shape. Windows are fixed glass units, some broken. Exterior doors have inappropriate hardware. **Replace exterior window trim and window units with operable units. Install new door hardware.**

Reflash & seal openings.

DOORS & WINDOWS - 90

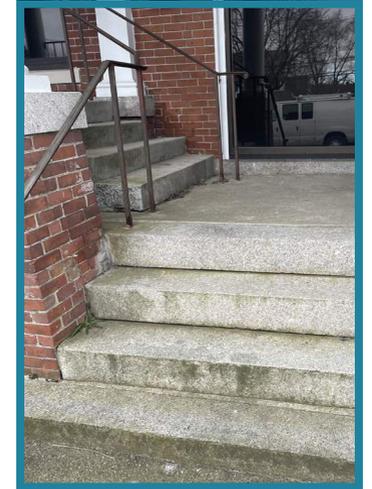
- » Exterior wood window trim is in poor shape, existing steel lintels at lower level are rusted and failing. Stone sills and headers are in decent shape, some cracking visible. Windows are fixed glass units, some broken. Exterior doors have inappropriate hardware. **Replace exterior window trim and window units with operable units. Replace steel lintels, cracked stone sills and headers. Install new door hardware. Reflash & seal openings.**



ARCHITECTURAL - EXTERIOR

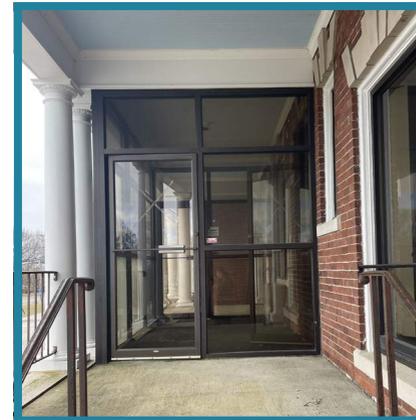
ENTRY VESTIBULE - 74

- » Brick and stone cap stairs and accessible sloped path lead to front entry vestibule. Railing at stair not to code. **Code: Replace railings with code compliant.**
- » Vestibule interior in good condition, some paint finishes peeling, front entry door not to code. **Repair and repaint wood trim. New compliant door with closing hardware.**



ENTRY VESTIBULE - 90

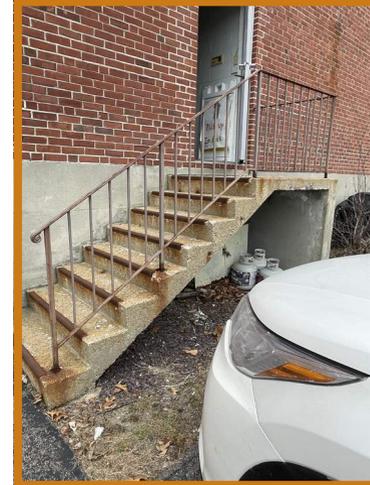
- » Granite stone steps and metal railing. Inaccessible entry from sidewalk. **Code: Provide accessible route to front door.**
- » Railings & guardrail not to code. **Code: Replace railings with code compliant.**
- » Peeling paint at wood finishes, brick spalling visible. **Repair and repaint wood trim. Replace missing column. Repoint brick as required.**



ARCHITECTURAL - EXTERIOR

ADDITIONAL POINTS OF ENTRY - 74

- » Existing entry points are not accessible. **Make accessibility upgrades as required if intended for public use.**
- » Railings at all stairs are damaged or not to code. **Replace with code compliant railing.**
- » Rear door not level with egress. **Adjust entry for flush entry.**



ADDITIONAL POINTS OF ENTRY - 90

- » Existing entry points are not accessible. **Make accessibility upgrades as required if intended for public use.**
- » Railing at rear ramp is damaged. **Replace with code compliant railing.**
- » Rear door not level with egress. **Adjust entry for flush entry.**



ASSESSMENT OBSERVATIONS & RECOMMENDATIONS

74 Pond

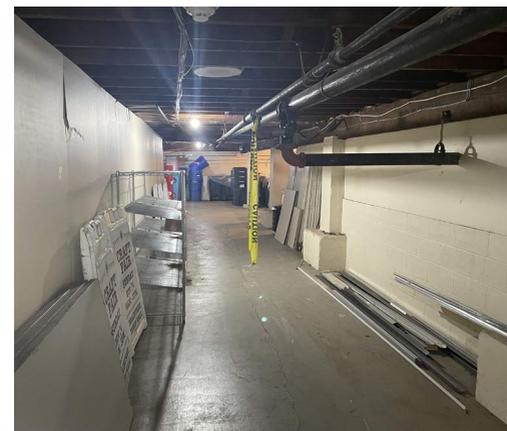
ARCHITECTURAL - INTERIOR

BASEMENT - 74 - OBSERVATIONS

- » Level change at center section of structure and auditorium stage, ramp without railing.
- » Existing brick masonry have visible spalling & deterioration.
- » Existing piping limits accessibility through southeast corner of basement level.

BASEMENT - 74 - RECOMMENDATIONS

- » Repoint masonry walls & chimney where required.
- » See MEP & Structural recommendations.



ASSESSMENT OBSERVATIONS & RECOMMENDATIONS

ARCHITECTURAL - INTERIOR

BASEMENT - 90 - OBSERVATIONS

- » Both sets of stairs & railings are not to code. Railing height, extensions noncompliant. Main stair width tight.
- » Interior finishes are damaged and outdated.
- » Cracked concrete slab on grade.
- » Obsolete mechanical equipment throughout.

BASEMENT - 90 - RECOMMENDATIONS

- » Code: Multiple issues with existing railings & stairs, extent of changes will be based on final scope of work.
- » Repoint masonry walls and new finishes as required.
- » See MEP & Structural recommendations.



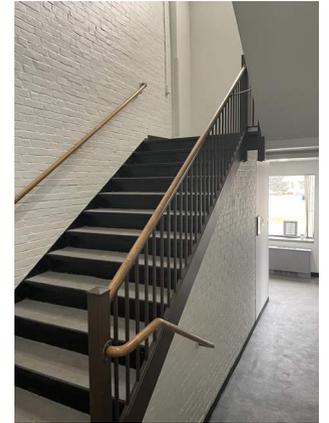
ARCHITECTURAL - INTERIOR

FIRST FLOOR - 74 - OBSERVATIONS

- » Ramp railings are not to code at both stairs and ramps.
- » Interior finishes throughout in fair to good condition.
- » Level changes at center section of structure and auditorium stage.
- » Kitchen finishes, equipment and fixtures in fair to good condition. See MEP recommendations.

FIRST FLOOR - 74 - RECOMMENDATIONS

- » **Code: Accessibility layout changes and upgrades to all public spaces.**
- » **Consider how to best mitigate level change with new design.**
- » **Consider: reusing existing kitchen layout and equipment, replace finishes as required.**
- » **See MEP & Structural Recommendations**



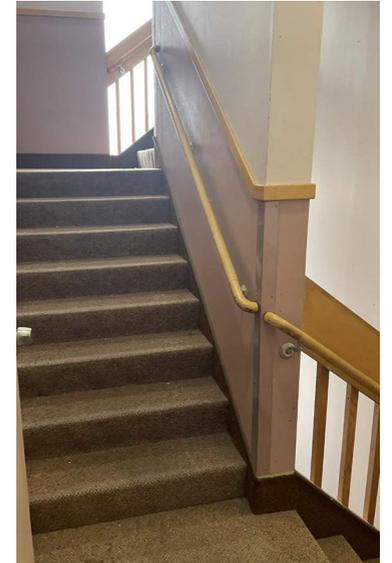
ARCHITECTURAL - INTERIOR

FIRST FLOOR - 90 - OBSERVATIONS

- » Both sets of stairs & railings are not to code. Railing height, extensions noncompliant. Main stair width tight.
- » ACT suspended system damaged.
- » Plumbing fixtures & interior finishes are damaged and outdated.

FIRST FLOOR - 90 - RECOMMENDATIONS

- » **Code:** Multiple issues with existing railings & stairs, extent of changes will be based on final scope of work.
- » Replace interior finishes throughout.



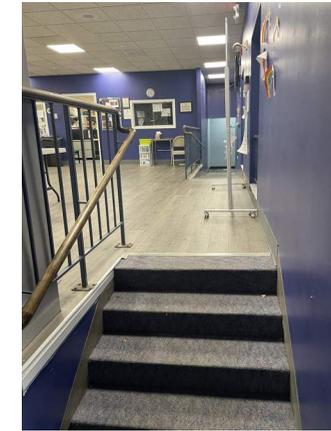
ARCHITECTURAL - INTERIOR

SECOND FLOOR - 74 - OBSERVATIONS

- » Ramp railings are not to code.
- » Bathroom finishes are outdated.
- » Level change above auditorium.

SECOND FLOOR - 74 - RECOMMENDATIONS

- » **Code:** Multiple issues with existing railings, extent of changes will be based on final scope of work.
- » Consider how to best mitigate level change with new design.
- » Replace interior finishes as required.



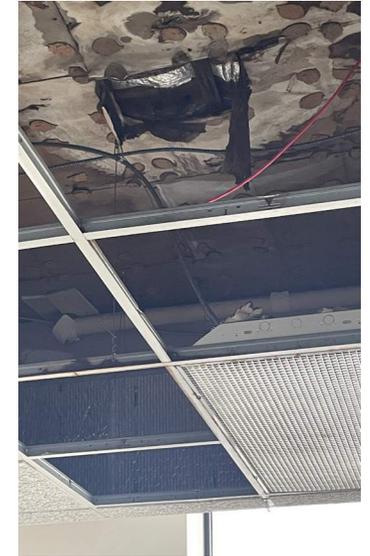
ARCHITECTURAL - INTERIOR

SECOND FLOOR - 90 - OBSERVATIONS

- » Both sets of stairs and railings are not to code. Railing height, extensions noncompliant. Main stair width tight.
- » Interior finishes are damaged and outdated.
- » Water infiltration from southwest roof valley leak has damaged finishes.
- » ACT suspended system damaged.

SECOND FLOOR - 90 - RECOMMENDATIONS

- » **Code: Multiple issues with existing railings & stairs, extent of changes will be based on final scope of work.**
- » **Replace interior finishes throughout.**



ARCHITECTURAL - INTERIOR

ATTIC - 74 - OBSERVATIONS

- » Entire attic unfinished. Cold attic does not include insulation visible at roof framing. Batt insulation at attic floor framing.
- » Only attic access requires use of fixed vertical ladder.
- » Both brick masonry ventilation stacks & top of exterior walls have visible spalling.
- » Ventilation and ductwork systems

ATTIC - 74 - RECOMMENDATIONS

- » Install insulation at roof structure per energy code.
- » See structural recommendations.
- » Repoint brick masonry and top of exterior wall.
- » Consider new stair and extension of elevator shaft, and addition of dormers to make livable space in attic.



ARCHITECTURAL - INTERIOR

ATTIC - 90 - OBSERVATIONS

- » Center structure finished interior attic space. Finishes damaged throughout. Ductwork and ventilation access through dormer windows.
- » Roof leak at southwest valley - damaged interior finishes.
- » Side wings of attic unfinished. Cold attic does not include insulation visible at roof framing.
- » Both chimneys have some visible spalling.

ATTIC - 90 - RECOMMENDATIONS

- » Replace interior finishes throughout.
- » Investigate roof penetrations for water infiltrations.
- » Install insulation at roof structure per energy code.
- » See structural recommendations.
- » Repoint chimneys and top of exterior wall.



STRUCTURAL

BASEMENT - MINIMAL SCOPE - REPAIRS

Foundation

- » 74 - The existing structure is supported on a shallow foundation in good condition. The slab on grade had visible cracking but no evidence of settling (good condition). Rusting visible at supporting steel columns and some spalling at the mechanical room. Sonotubes supporting first floor framing in great condition.
- » **Recommend: evaluate existing damaged structural members to determine required reinforcement or replacement if needed. Repair spalling in mechanical room.**
- » 90 - The existing structure construction appears to match 74 Pond. Existing foundation walls are brick on granite blocks with no signs of settlement from exterior (not visible from interior). Slab on grade has extensive cracking and is assumed from poor concrete mix or lack of welded wire mesh in the

slab. Other than cracks, slab is in good condition without any signs of settlement. Steel lintels at basement windows are rusted and in poor condition.

- » **Recommend replacing rusted steel window lintels. Repair / seal cracks in basement as required.**



STRUCTURAL

1ST, 2ND, & 3RD FLOORS - MINIMAL SCOPE - REPAIRS

- » 74 - First Floor framing visible in basement in good condition. Framing below auditorium and front lobby not accessible, but no significant signs of deflection or distressed. Second floor framing was not visible. Gypsum covering framing shows no signs of cracking or deflection. Floor finishes and walls above in good condition indicating decent condition.
- » **Recommend:** Majority of the structural framing members visible in good condition and can remain in place. Current framing will be able to carry live load of 40 PSF (living spaces). Reinforce / replace any notched or damaged structure.
- » 90 - Majority of first floor framing not visible from basement. Dropped 9" wood beams visible, supported on steel or cast-iron posts. Some locations where finishes removed indicate framing is in good condition. Same visibilities on 2nd &

3rd floor framing. Significant water infiltration observed in northeast corner below southwest roof valley.

- » **Recommend:** Majority of the structural framing members visible in good condition and can remain in place. Remove all finishes around water infiltration area to determine condition of wood framing. Current framing will be able to carry live load of 40 PSF (living spaces). Reinforce / replace any notched or damaged structure.

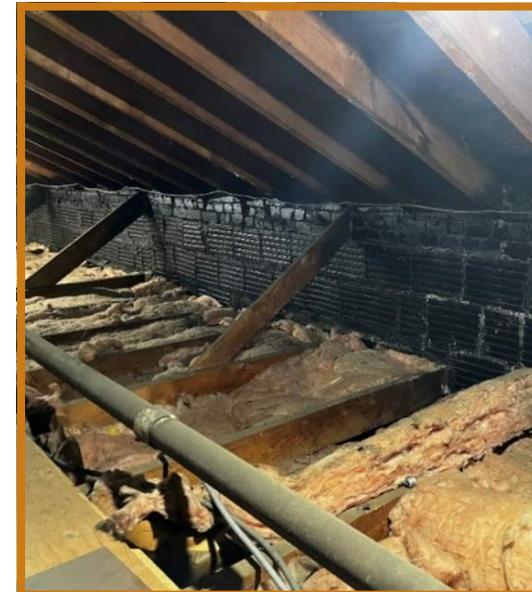
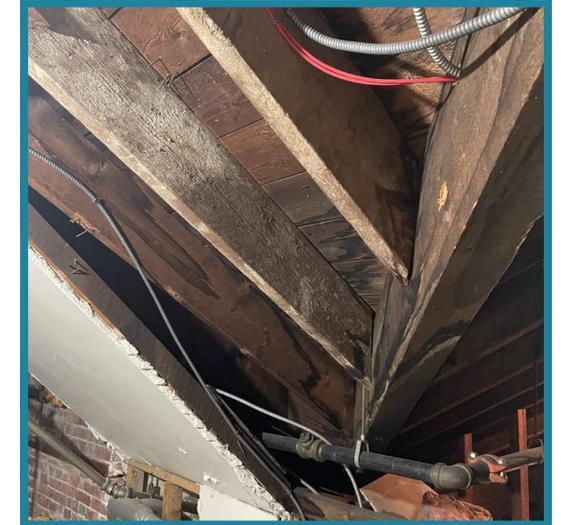


STRUCTURAL

ATTIC - MINIMAL SCOPE - REPAIRS

- » 74 - The roof at the kitchen area includes steel beams supporting tectum roof panels. The original building includes hip and gable roof framing visible from the attic space, found to be in good condition. The roof above the auditorium was not visible but there was no visible signs of deflection.
- » **Recommend: any existing structural members found to be damaged will need to be evaluated for reinforcement or replacement, but otherwise good condition.**
- » 90 - Roof framing at center of building was mostly covered with finishes and not visible. Finishes show no sign of significant cracks. Framing includes 2x8 wood rafters framing to a 2x10 valley beam. Framing visible at both building ends in good condition. Rafters and beam in good condition with no sign of deflection or distress.

- » **Recommend: any existing structural members found to be damaged will need to be evaluated for reinforcement or replacement, but otherwise good condition.**



MEPFP

PLUMBING - MINIMAL SCOPE - REPAIRS

Sanitary Drainage

- » 74 - Piping is cast iron and includes original and subsequent renovation installations. Original piping in fair condition, first reno in good condition; second reno in excellent condition. Sump pump in boiler room appears to be used for basement, groundwater, foundation drainage but condition not verified.
- » 90 - Piping was mostly concealed, but assumed cast iron and likely to be in good condition for re-use.

Interceptor

- » 74 - Basement interceptor in fair condition, grease interceptor use assumed from kitchen floor drain.
- » **Recommend: Replace interceptor if required to remain per final design.**

Natural Gas

- » 74 & 90 - Gas entrance for both buildings located at NE corner of 90 Pond St.

- » **Recommend: If separate entrances are required, a new gas entrance would need to be established at 90 Pond St. Should we assume all-electric?**

Water heater

- » 74 - Electric resistance tank type water heater in excellent condition. Recirculation pump appears to be in fair condition.
- » **Recommend: Replace existing recirculation pump. Provide water heaters for each residential unit; existing to remain for shared amenity spaces.**
- » 90 - Electric resistance tank type water heater in fair condition, but 20 years old and beyond it's life. Water heating plant includes recirculation pump in poor to fair condition.
- » **Recommend: Replace existing recirculation pump and water heater for amenity spaces. Provide water heaters for each residential unit.**



Plumbing Fixtures

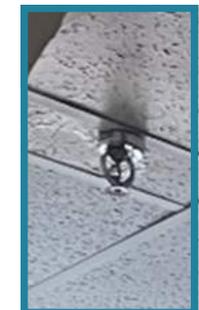
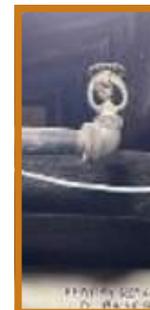
- » 74 - Bathroom fixtures generally appear to be in good to excellent condition. Janitor's closet sinks in fair to poor condition. Kitchen fixtures are in fair to good condition and include a dedicated grease trap for the triple pot sink.
- » **Recommend: Fixtures in good condition to remain can serve shared spaces. New distribution and plumbing fixtures for new residential layout.**
- » 90 - Bathroom fixtures generally appear to be in fair condition, several have been demolished or damaged beyond repair.
- » **Recommend: All new distribution and plumbing fixtures for new residential layout.**



FIRE PROTECTION

Sprinklers

- » 74 - Wet type sprinkler system with sprinklers in basement & attic only. 4" fire protection service is visible and in fair condition. Sprinkler piping is steel and sprinklers are exposed upright type - both in good condition.
- » **Code: sprinkler system required on all floors.**
- » 90 - Combination of wet and dry type sprinkler systems. Wet standpipes in stairwells and dry sprinklers serving the top floor and attic spaces. Fire protection service was not accessible for review. Sprinklers on the top floor and attic spaces are in fair to good condition.
- » **Code: sprinkler system required on all floors.**



MEPFP

MECHANICAL

Heating, Cooling and Ventilation

- » 74 & 90 - Primary heat source is natural gas fired boiler connected to heat pumps located at 74 and serving both buildings.
- » 74 - Air conditioning via 5 multi-zone heat pumps with one outdoor compressor serving several indoor fan coil units. Units are in good to excellent condition.
- » 74 - Ventilation via air handling unit in attic. System does not include heat recovery.
- » 90 - Air conditioning system abandoned and in poor condition.
- » 90 - Ventilation via two air handling systems in attic. System in fair to poor condition.
- » **74 Option 1: Reuse existing boilers and heat pumps, modify baseboard heaters for shared community spaces and new residential layout. Reuse existing air conditioning system and modify distribution**

ductwork for new residential layout. Replace air handling units to include ERV for ventilation; will require new ductwork.

- » **90 Option 1: Reuse existing boilers, heat pumps and baseboard heaters for shared common spaces. New electric mini-split for heating and cooling in each space. New ERV and modified ductwork for ventilation.**
- » **74 & 90 Option 2: New all-electric heating & cooling, with ERV ventilation to eliminate fossil fuels.**



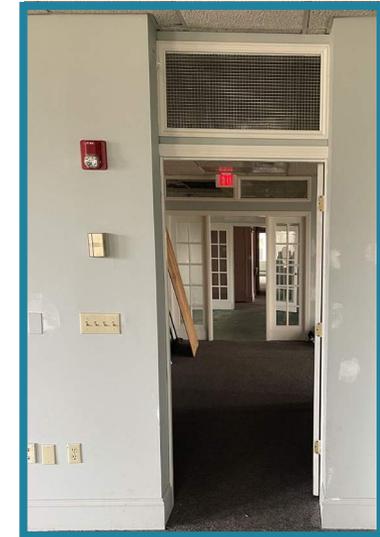
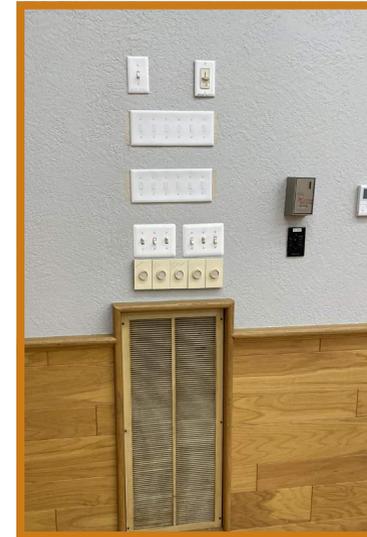
Kitchen Ventilation

- » 74 - Kitchen ventilation provided by Type 1 grease hood in fair condition with dry chemical type fire suppression system. Exhaust fan in fair to poor condition located on the flat roof above, likely not listed for grease exhaust. Make up air provided by an air handling unit in the basement pulling air from basement.
- » **Recommend: Replace kitchen exhaust fan and grease hood.**



Controls

- » 74 & 90 - Controls for heating, cooling and ventilation systems are independent of each other and without building automation or monitoring systems in place. This results in a less-than efficient system where heating and cooling may be occurring simultaneously.
- » **74 & 90 Recommend: New integrated controls and monitoring for shared spaces. Individual controls for residential spaces.**



MEPFP

ELECTRICAL

Electrical Service

- » 74 & 90 - Layout changes will require demolishing all the devices and rewiring all new residential spaces. Some of the common space devices and wiring may be able to remain.

Backup Power System

- » 74 - Generator on site not in service or connected to the building power system.
- » **Recommend: Reconnect generator for life-safety requirements.**

Fire Alarm

- » 74 - Fire alarm panel is an addressable Honeywell Model 5820XL fire system control panel, recently installed in excellent condition. Ceiling-mounted detectors located throughout the building in good condition. Alarm devices both old (fair to good condition) and new (excellent condition) found throughout.

- » 90 - Fire alarm system connected to 74 Pond with a remote annunciator installed at 90 Pond. Ceiling-mounted detectors in good condition throughout the building. Alarm devices both old (fair to good condition) and new (excellent condition) found throughout.
- » 74 & 90: Reuse existing fire alarm panel, ceiling-mounted detectors, and good / new alarm devices. System will need to be modified for new layout and residential spaces. Carbon Monoxide detection will need to be added.

Pole
Transformer
Generator



Emergency Lighting

- » 74 & 90 - Existing fixtures include wall-mounted battery powered emergency and combination exit and emergency fixtures.
- » **Recommend: Emergency lights & LED exit signs to be installed throughout. Exterior emergency lights provided at all points of entry.**

Interior Lighting

- » 74 - Majority of fixtures consists of 2'x2' fixtures in suspended lay-in ceilings, auditorium includes 1'x4' fixtures, all controlled by manual wall-mounted switches.
- » **Recommend: Install new LED lighting throughout building, include energy saving lighting controls to meet energy code.**
- » 90 - Majority fixtures consists of 2'x2' and 2'x4' fixtures in suspended lay-in ceilings on the lower floors. Top floor includes surface mounted and recessed can type fixtures. All fixtures controlled by manual wall-mounted switches.

- » **Recommend: Install new LED lighting throughout building, include energy saving lighting controls to meet energy code.**



CODE OBSERVATIONS

EXISTING BUILDING CODE SCOPING REQUIREMENTS

- » New work to existing buildings is required to be performed in accordance with 780 CMR for new construction unless otherwise specified by the MEBC.

MEBC ANALYSIS

- » Classification of Work: Amount of work expected will fall into MEBC Level 3 Alteration & Change of Occupancy.

HISTORICAL BUILDING ANALYSIS

- » The buildings are listed by MHC as eligible to be on the state historic register and are therefore considered historic for the MEBC analysis. MEBC allows some provisions where historical buildings do not need to comply with all new construction codes.

USE AND OCCUPANCIES:

- » Primary occupancy of new construction will be Group R-2.

CONSTRUCTION CLASSIFICATIONS

- » Both Buildings are constructed with masonry exterior wall and interior wood framing which is Type IIIB construction.
- » The fire-resistance ratings of any new or altered structure are required to meet new construction requirements.
- » Building Height and area of both buildings comply with building height and area requirements of occupancy change in an existing building.
- » If a third building is added, maximum footprint and aggregate area are to be considered per building to comply with the MEBC.

CODE OBSERVATIONS

VERTICAL OPENINGS

- » As the building will undergo change of occupancy to a higher hazard category for egress, interior stairs & other vertical shafts are required to be enclosed.

AUTOMATIC SPRINKLER SYSTEM

- » Sprinkler coverage is only in the Basement and Attic of the 74 pond St. And Third floor of the 90 pond st.
- » Group R buildings are required to have an automatic sprinkler system throughout.

ALTERNATE SUPPRESSION SYSTEM

- » The 90 Pond St. Building has a Halon system serving multiple defunct computer server room.
- » New occupancy group does not require this and can be removed after consulting with the Braintree Fire Department.

STANDPIPE SYSTEM

- » 74 Pond street does not contain a standpipe system. 90 Pond st. has a hose connection within one exit stair.
- » Class 1 standpipe system piping is required in the building in certain locations including stair landings, remote floor locations and more per 780 CMR 905.4.

FIRE ALARM AND DETECTION SYSTEM

- » Both buildings are provided with fire alarm systems consisting of audible/visual notification devices, manual pull stations, smoke detectors and sprinkler monitoring devices.
- » All new fire alarm devices and modifications to the existing fire alarm system are required to meet new construction requirements of NFPA.
- » The buildings are required to be provided with carbon monoxide detection per CMR.

CODE OBSERVATIONS

MEANS OF EGRESS

- » The available egress capacity in the two buildings is sufficient with the occupancy group change to R-2.
- » The number of exits provided in the existing buildings are sufficient for the planned occupant load of the buildings.
- » Both buildings' existing exit stairs configuration is compliant.
- » **74 Pond St's exit door is recommended to make them self-closing and operational during emergencies.**

ELEVATOR

- » Both buildings are provided with one elevator.
- » If either elevator cab and shaft is replaced, it will be required to meet the requirements of new construction.

- » **Having an elevator audit performed on each of the elevators was recommended by the code consultants.**

ACCESSIBILITY

- » Both Buildings are generally not accessible.
- » 74 Pond St has abrupt stair nosing and non-continuous handrails.
- » 74 Pond St Accessible ramps in the interior are too steep and have non continuous handrails. Exterior ramp slope is compliant but does not have handrails.
- » 74 Pond St The elevator cab is acceptable in existing condition.
- » 90 Pond St's exterior ramp to basement handrail is non compliant.
- » 90 Pond St's Elevator Cab and Shaft was not measured.

CODE OBSERVATIONS

521 CMR APPLICATION

- » Study assumption is that the renovation costs for both buildings will exceed 30% of the assessed value of the building and will therefore require full accessibility throughout.
- » 74 Pond Street:
- » The assessed building value is \$1,902,000, as shown on the Town of Braintree Assessor's website.
- » The Massachusetts Department of Revenue has assigned Braintree an assessment ratio of 0.99. The 30% threshold is therefore: $\$1,902,000 / 0.99 \times 30\% = \$576,363.63$.

- » 90 Pond Street:
- » The assessed building value is \$1,517,000, as shown on the Town of Braintree Assessor's website.
- » The Massachusetts Department of Revenue has assigned Braintree an assessment ratio of 0.99. The 30% threshold is therefore: $\$1,517,000 / 0.99 \times 30\% = \$459,696.97$.

ADA APPLICATION

- » ADA only applies to the common areas of the building and does not apply to the residential units.

FAIR HOUSING ACT

- » FHA accessibility requirements will also apply to both buildings.

NEXT STEPS

- » Incorporate existing conditions assessment feedback into full report for review.
- » Develop proposed designs. Develop 3 options for Review by Town of Braintree. Options to include renovations to existing buildings, addition to one or both buildings with possible connector, new stand-alone building on site.
- » Meet to Review design options.
- » Public Meeting.
- » Prepare SD Documents for pricing.

TOWN OF BRAINTREE AFFORDABLE HOUSING STUDY			JAN		FEB					MAR				APR					MAY				JUN			
PROPOSED SCHEDULE	DURATION	DATE RANGE	1/29	2/5	2/12	2/19	2/26	3/4	3/11	3/18	3/25	4/1	4/8	4/15	4/22	4/29	5/6	5/13	5/20	5/27	6/3	6/10	6/17	6/24		
PHASE 1: Information Gathering	11 wks	1/29/24 - 4/15/24																								
4 Summary of Opportunities: Share Findings & Engage Public																										
Meet with Town project team (virtual meeting)																										
Public meeting to share initial findings & elicit feedback. (virtual meeting)																										
Online polls and options for additional public feedback.																										
PHASE 2: Conceptual Design &	11 wks	4/15/24 - 7/1/24																								
1 Initial Conceptual Design																										
Identify what housing options w/in existing buildings and/or new construction. Present initial funding options.																										
Meet with Town project team to review conceptual design report.(virtual meeting)																										
2 Final Conceptual Design																										
Identify what housing options w/in existing buildings and/or new construction. Present initial funding options.																										
Meet with Town project team to review conceptual design report.(virtual meeting)																										
3 Financial Feasibility of Design																										
Construction cost estimate for buildings & site																										
Proforma																										
4 Final Report																										
Meet with Town project team to review conceptual design report.(virtual meeting)																										
Compiled Study report with deliverables from each task above + executive summary																										
OVERALL PROPOSED SCHEDULE	22 wks	1/29/24 - 7/1/24																								