Quincy Tower

5 Oak Street West
Boston, MA

Project Notification Form
October 17, 2016

Submitted to
Boston Planning and Development Agency

Ownership Entity
BC Quincy Tower LLC

Developer
Quincy Tower Developer LLC

Sponsor
Beacon Communities Development LLC

BEACON communities

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Quincy Tower
Project Notification Form
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1. Project Notification Form

Project Notification Form/Application for Small Project Review

Required Information for Document Preparation

For projects undergoing review and consideration under Article 80 of the Boston Zoning Code, applicants are requested to ensure that the following information is included in its Project Notification Form or Application for Small Project review, as the case may be:

Applicant/Project Proponent BC Quincy Tower LLC
Developer Quincy Tower Developer LLC
Contact Pamela Goodman
Mailing Address c/o Beacon Communities Development LLC, Two Center Plaza, Suite 700 Boston MA 02108
Phone No. 617-574-1142 Fax No. none Email pgoodman@beaconcommunitiesllc.com

Brief Project Description: Rehabilitation of a 162-unit elderly housing community in Chinatown. The proposed project includes accessibility improvements and improvements to the building envelope, common area, mechanical systems and replacement of kitchen and bathroom cabinets, fixtures and finishes. There will be no change to the building footprint or number of parking spaces. The applicant aims to structure a preservation transaction utilizing new financing, federal and state tax credits, DHCD and City of Boston soft debt, and other forms of assistance to maintain the community's affordability in perpetuity.

Anticipated Submission Date September 16, 2016
Anticipated Advertisement Date (if applicable) September 16, 2016

Proposed Project Name Quincy Tower
Project Address 5 Oak Street West, Boston MA 02116
Assessor Parcel I.D. 05550-000
Neighborhood Chinatown
Sub-Neighborhood (if applicable)
Zoning District Residential
Urban Renewal Area ("URA") Yes*

Does Project Require Modification to URA?(Y/N) No If modification to URA is required, please describe modifications to be requested:

Inst. Master Plan (Y/N) N Planned Development Area (Y/N) N 121A (Y/N) N*
Zoning Relief Required -- Zoning Board of Appeals (Y/N) Y** Boston Zoning Commission (Y/N) N

Development Program

Parcel Area (Sq. Ft.) 10,140 sq ft
Proposed Building Area (Sq. Ft.) N/A, existing buildings
Proposed Building Height (Feet) N/A, existing buildings Number of Floors 16
Ground Floor Use Lobby, offices, community space and kitchen Upper Floor Use Residential, some community space

*Please note that the property's 121A designation expired on November 27, 2014.
**Due to its location within a Groundwater Conservation Overlay District, we will seek a Conditional Use Permit under Article 32.

Retail Sq. Ft. N/A Office Sq. Ft. 1,924*** Hotel Sq. Ft. N/A

Industrial Sq. Ft. N/A Institutional Sq. Ft. N/A R&D Sq. Ft. N/A

Residential Sq. Ft. 102,816 GSF Total Units 162 Condo N/A Rental 162

Market Units N/A Affordable Units 161 Studios 0 1 bdrms 161 2bdrms 1****

3bdrms 0 Artist Live/Work N/A SRO N/A Elderly 161

Total Parking Spaces 6 Surface 6 Structured Below Grade

(If multiple buildings are proposed, please provide development program information for each building)

Total Development Cost (soft/hard costs) $71,046,069
Construction Cost (hard cost) $11,305,271

Public Benefits

Number of Permanent Jobs Created (full-time equivalent) 10
Number of Permanent Jobs Retained (full-time equivalent) 5
Number of Construction Jobs Created (full-time equivalent) 10

Estimated Development Impact Project Payments (if applicable)

Neighborhood Housing Trust N/A Neighborhood Jobs Trust N/A

Estimated Construction Start December 2016 Estimated Construction Completion February 2018

Disclosure of Beneficial Interest in the Project

Name	Address	Percentage Interest		
		Profits/losses /tax credits	Cash flow	Residuals
Quincy Tower MM LLC	c/o Beacon Communities LLC Two Center Plaza Boston MA, 02108	0.01%	.0049%	0.01%
Investor member- An affiliate of MHIC	70 Federal St # 601, Boston, MA 02110			99.97%
QTA Parent LLC	1280 Massachusetts Avenue Cambridge, MA 02138	0.01%	20.7564%	19.72%
Quincy Tower Partners LLC	c/o Bruce M. Johnson 13 Carter Dr. Framingham, MA 01701	0.005%	23.3387%	22.17%
Beacon Communities REI LLC and Beacon Communities Fund I Limited Partnership	c/o Beacon Communities LLC Two Center Plaza Boston MA, 02108	0.005%	4.9000%	4.65%
Boston Financial Affiliate	Boston Financial Technology Group, Inc. 135 Berkeley St. Newton, MA 02465	-----	-----	2.45%

*** This space is leased to the Greater Boston Chinese Golden Age Center, Inc., a local non-profit organization that provides meals and services to residents as an accessory use to this residential property. This is existing space and its use is not being changed.
****Maintenance Staff unit

2. Project Narrative

1.0 INTRODUCTION/PROJECT DESCRIPTION

1.1 Introduction

Quincy Tower is an existing 162-unit, affordable, age-restricted development owned by an affiliate of Beacon Communities LLC (Beacon, or the Proponent). Located at 5 Oak Street West, the single 16-story high-rise consists of 161 one-bedroom apartments serving low-income, elderly, largely Chinese population 55 years of age or older, and one two-bedroom management staff unit. The development dates back to 1977, when it was financed with a Section 236-assisted MassHousing loan, which is scheduled to mature in March of 2019. Ninety-eight units in the development are covered under a Rental Assistance Payments Contract (the RAP Contract), which expires in 2017.

The Proponent proposes to rehabilitate the existing building and preserve all affordable units. The Project includes accessibility improvements and improvements to the building envelope, common area, mechanical systems and replacement of kitchen and bathroom cabinets, fixtures and finishes. The building footprint, number of units, and parking spaces will remain the same.

With the significant amount of market rate development currently taking place in Chinatown, there is an immense need to maintain all existing affordable housing options in this unique and important neighborhood. Without the preservation of this development, 161 units of affordable housing are at risk of becoming market-rate housing to serve growing demand for small units in close proximity to Boston's core. The preservation of this development provides a critically important opportunity to maintain an affordable housing resource that would be very difficult and costly to replace today.

This Project Notification Form (PNF) is being submitted to the Boston Planning and Development Agency (BPDA) to initiate review of the Project under Article 80B, Large Project Review, of the Boston Zoning Code.

1.2 Development Team

Beacon Communities Development LLC

Beacon Communities Development LLC ("BCD") is a full service residential development company with expertise in all aspects of multi-family housing development. Since 1996, affiliates of Beacon have completed over 11,200 units of new construction, substantial rehabilitation and/or financial restructuring or acquisition, with some level of rehabilitation. BCD has the demonstrated capacity to undertake complex residential real estate transactions. BCD has designed, permitted, and built developments ranging from the adaptive reuse of historic urban buildings to garden-style suburban developments. All of our developments have some element of permitting, planning, or financing complexity -- most have all three.

BCD has extensive experience with complicated permitting, including use of special permits and comprehensive permits through Massachusetts General Laws Chapter 40B. BCD has successfully permitted many sites that posed significant environmental challenges, including wetlands, river crossings, rare species, toxic waste, mine subsidence problems, historic preservation restrictions, and noise attenuation difficulties. Our goal is always to confront such issues carefully and thoroughly, allowing us to respect and improve the natural and built environments, meet regulatory requirements, and achieve our developments' programmatic needs.

We pride ourselves on our ability to form and maintain relationships with a wide variety of joint venture partners, resident organizations, community groups, institutions, financing sources, and government agencies.

Almost every BCD development has involved some degree of financial complexity. BCD has extensive experience with private and public financing sources. The deals with the most complicated financial arrangements involve several different federal, state, and city funding sources, including low-income housing tax credits, historic preservation tax credits, public housing funding, and housing vouchers, as well as private debt.

Beacon Residential Management Limited Partnership – Management Company

Beacon Residential Management Limited Partnership ("BRM"), formed in 1969, has built an exemplary reputation and is nationally recognized as a true innovator and leader in the multi-family housing industry. BRM sets the standard for apartment living and manages more than 50 communities with over 12,800 residences, in New England, Pennsylvania, New York, Maryland and Virginia. BRM's communities vary in size from 44 to nearly 1,000 apartment homes. They range from suburban new construction to urban historic rehabilitation, to former public housing sites that have been converted into newly constructed mixed-income developments. BRM has a long history of successfully managing new developments, including renovations, new construction, resident relocation, lease-up, and stabilized operations management. BRM has a proven track record of creating and nurturing strong resident partnerships and converting old neighborhoods into thriving new communities in which residents choose to make their homes. BRM is known for tackling challenging developments and finding new and creative ways to address the demands of today's residential marketplace.

The Architectural Team – Architect

Founded in 1971, The Architectural Team ("TAT") is a 70-person architectural design firm that has successfully grown through its design excellence and commitment to responsive and collaborative client relationships. In its more than 42 years of experience, the firm has developed a portfolio that includes a broad range of building types and programs, earning them more than 90 awards for design excellence.

TAT's experience includes new, large urban mixed-used developments, residential, commercial, hospitality, recreational, and academic facilities, as well as numerous historic renovation designs that have established the firm's national reputation in the area of historic preservation and adaptive reuse. The majority of the firm's work is located in New England, but the team has also completed developments in New York, Washington, D.C., Louisiana, Maryland, Michigan, Illinois, Florida and Pennsylvania, and several other states.

Keith Construction Inc. - General Contractor

Keith Construction, Inc. is a construction company based in Canton, MA. The company specializes in the renovation and rehabilitation of existing occupied government and conventionally financed apartment complexes, and in completing historic renovations. Keith and Beacon have a long standing history of working together and completing complex residential communities. Keith Construction recently completed for Beacon Treehouse in Easthampton, The Cordovan at Haverhill Station and Haverhill Lofts in Haverhill, Ocean Shores in Marshfield, Ames Shovel Works in Easton and Cumberland Homes in Springfield on time and on budget.

Proposed Financial and Legal Structure

The owner of Quincy Tower will be BC Quincy Tower LLC, a newly created entity. The Managing Member of the Owner will be Quincy Tower MM LLC, which is owned by an affiliate of Beacon. The ownership entity will include a Class A, Class B and Class C Members. They are anticipated to be QTA Parent LLC, Quincy Tower Partners LLC and Beacon Communities REI LLC and Beacon Communities Fund I Limited Partnership, respectively. The investor member will be an affiliate of the Massachusetts Housing Investment Corporation.

Quincy Tower Developer LLC, a newly created entity, will serve as the Developer of Quincy Tower.

Beacon Communities Services LLC will serve as the Managing Member and be responsible for performing the services required of the Developer. The other members of the Developer will be the Class A, B and C Members listed above.

The property will continue to be managed by Beacon Residential Management Limited Partnership, a Beacon affiliate.

1.3 Project Description

1.3.1 Project Site

Quincy Tower is located at 5 Oak Street West in the Chinatown neighborhood of Boston, a rapidly up and coming neighborhood with a fair amount of newly developed multifamily

market-rate rental and ownership developments, which are achieving some of the highest rents and values in the Boston metro area. The building is bound by Oak Street West to the north, Washington Street to the east, and existing buildings to the south and west. Please see Exhibit 1 showing the site location.

1.3.2 Proposed Project

The Proponent proposes to rehabilitate the existing Quincy Tower building and preserve all units as affordable housing. Although the property has been well maintained, certain building systems and unit finishes are in need of replacement in order to ensure the building's continued safe and efficient long term operation over the foreseeable future.

The proposed scope includes:

- Building envelope improvements;
- Building mechanical system improvement;
  - Heating and domestic hot water boiler replacement
  - Emergency generator overhaul
  - Common area equipment replacement
- Replacement of kitchen and bathroom cabinets, fixtures and finishes;
- Accessibility upgrades;
- Elevator improvements;
- Security system enhancements; and
- Common area upgrades.

1.4 Public Benefits

Quincy Tower is located in Chinatown, a rapidly up and coming neighborhood with a fair amount of newly developed multifamily market-rate rental and ownership developments, which are achieving some of the highest rents and values in the Boston metro area. Bonz and Company conducted an analysis of the market, including an examination of local rents and the subject's market rent potential, expected capture rates and penetration rates, and the occupancy levels of existing Low Income Housing Tax Credit (LIHTC) properties. They have concluded that substantial demand exists for age-restricted, affordable units in Chinatown.

The current rents at Quincy Tower are $789, and 98 units are receiving subsidy as part of the RAP contract. Residents will pay 30% of their income to rents with income limits restricting most units to 60% AMI. The Bonz and Rent Reasonableness Study place market rents for a one bedroom at over $2,400. The Project will preserve these affordable units in a rapidly growing neighborhood. If the property were to convert to market, nearly all current residents would be protected from significant rent increases, but the building affordability would eventually be lost as the units turned over.

1.5 City of Boston Zoning

Multifamily residential uses are allowed as of right in the Residential Chinatown Sub-district under the current Zoning Code. The existing Quincy Tower building is a pre-existing non-conforming structure. No additions or enlargements to the building are planned. The property is located in a Groundwater Conservation Overlay District (GCOD), and as a result will require a Conditional Use Permit from the Board of Appeal.

1.6 Legal Information

1.6.1 Legal Judgments Adverse to the Proposed Project

There are no legal judgements adverse to the proposed project.

1.6.2 History of Tax Arrears on Property

There is no history of tax arrears on the property since its ownership by a BCD affiliate.

1.6.3 Site Control/ Public Easements

The Property is currently owned by Quincy Tower Associates Limited Partnership, a BCD affiliate.

Easements on the property are as follows:

1. Easement Area 1 – property abutting Quincy Tower to the northwest: The BRA grants to Quincy Tower a permanent easement for vehicular and pedestrian access to service and parking areas on Quincy Tower property. See Deed (Book 8786, Page 544) and Agreement Amending Deed (Book 9026, Page 496).

2. Easement Area 2 – property abutting Quincy Tower to the southwest: The BRA grants to Quincy Tower a permanent easement at grade for use as a parking area. See Deed (Book 8786, Page 544) and Agreement Amending Deed (Book 9026, Page 496).

3. Easement Area 3 – property abutting Quincy Tower to the northeast: The BRA grants to Quincy Tower a permanent easement for pedestrian access. See Deed (Book 8786, Page 544) and Agreement Amending Deed (Book 9026, Page 496).

4. Easement Area 4 – northeast corner of Quincy Tower property: Quincy Tower Associates grants to the Public Facilities Department of the City of Boston a permanent easement for pedestrian access to Parcel P-13 (the school) by those persons lawfully entitled to use Parcel P-13. In exchange, the New Quincy School grants to Quincy Tower Associates a permanent pedestrian easement over the playdeck as constructed on Parcel P-13 including the necessary access to the playdeck from Washington Street, Oak Street West and Shawmut Avenue, for the use of those persons lawfully entitled to use Parcel R-4 (Quincy Tower). See Land Disposition Agreement (LDA) (Book 8786, Page 505) and Plan recorded at Book 8769, Page 125.

5. Other cross-covenants and easements:

a. Prohibition regarding building any structure within 30' of the property line between parcels R-4 (Quincy Tower property) and P-13 (New Quincy School property) due to need to comply with Building Code issues (unless such structures are not for human habitation and are approved by the Public Facilities Department of the City of Boston, the Building Department of the City of Boston and the Boston Fire Department). See Deed (Book 8786, Page 544) and Agreement Amending Deed (Book 9026, Page 496); See Land Disposition Agreement (LDA) (Book 8786, Page 505).

b. Permanent 10-foot wide easement granted to Quincy Tower by Parcel P-13 (New Quincy School) for use by workmen and equipment during construction of the Quincy Tower Improvements and for the continued maintenance, repair, and cleaning of the Quincy Tower Improvements after completion, and for pedestrian access to Quincy Tower. (By way of explanation, Quincy Tower is located up against the Property Line, necessitating this permanent easement.) See Deed (Book 8786, Page 544) and Agreement Amending Deed (Book 9026, Page 496).

c. Quincy Tower grants to the Public Facilities Department a permanent easement to construct and maintain foundation footings for the New Quincy School not more than 18" into Parcel R-4 (Quincy Tower property), at such time as the Public Facilities Department requests such easement, provide the footings do not interfere with the foundations to be built on Parcel R-4 according to the approved Plans and Specifications for the Quincy Tower Improvements. See Land Disposition Agreement (LDA) (Book 8786, Page 505).

1.7 Anticipated Permits

Exhibit 2 presents a preliminary list of permits and approvals from governmental agencies that are expected to be required for the Project, based on currently available information. It is possible that only some of these permits or actions will be required, or that additional permits or actions will be required.

1.8 Public Participation

Beacon Communities has held several meeting to inform residents and community stakeholders of the proposed preservation of Quincy Tower, including meetings held on Tuesday, February 9, 2016 and Monday, April 4, 2016.

Meeting agendas focused on explaining the rental subsidies that would be sought for the property to ensure resident non-displacement and long-term affordability, updates on funding applications being submitted and descriptions of the rehabilitation work proposed at the site.

Residents have also received the notices required under MGL Chapter 40T, advising them of the sale of the property to a preservation buyer.

In the weeks to come, the Proponent will hold another meeting to provide an update on the transaction and to explain the certification process around the rental subsidy and the LIHTC programs that are part of the transaction.

The following local officials and neighborhood organizations have provided letters of support.

- City Council President Bill Linehan
- City Councilor At-Large Michelle Wu
- State Rep. Aaron Michlewitz
- The Golden Age Center
- The Chinatown Neighborhood Council
- The Chinese Consolidated Benevolent Association
- The Chinese Progressive Association
- Mass Pike Towers Tenants Association
- Asian Community Development Corporation
- Quincy Tower Tenants
- Castle Square Tenants Organization

The Project team will continue to meet with the community as the Project moves forward.

1.9 Schedule

It is anticipated that the rehabilitation work will begin in the last quarter of 2016 and last approximately 11 months.

2.0 TRANSPORTATION COMPONENT

2.1 Transportation Impacts

The proposed Project consists of the moderate rehabilitation of Quincy Tower, an occupied affordable elderly housing community which has existed in the community since 1977. The scope of work includes replacement and/or repair of existing building systems and finishes, and will not lead to any changes in the current use or occupancy of the building, nor will it create any staffing changes. As such, the Project will have not impact the area's current traffic patterns or volume.

To our knowledge, the residents at Quincy Tower do not own cars. The property is well-served by public transportation. It is located one block from the Tufts Medical Center orange line MBTA station and is also served by the Silver Line and the 11 and 15 bus lines.

2.2 Construction Traffic Impacts

All subcontractors have been notified that there is no available parking on site and that either the use of Park & Ride or one of the local Public/Pay Parking Lots/Garages will need to be implemented. Construction traffic impacts will be limited to the delivery of materials to the site. All deliveries will be scheduled 24 hours in advance and held to the specified truck route. It is anticipated that Oak Street West will need to be shut down on at least six occasions throughout the duration of the Project in order to set a crane for delivery of materials to and from the property roof.

3.0 ENVIRONMENTAL REVIEW COMPONENT

3.1 Wind, Shadow, Daylight and Solar Glare

The Project proposes limited exterior site work and interior renovation to an existing building. Because no changes are proposed to the building's height or massing, no new wind, shadow, daylight obstruction or solar glare impacts are anticipated in association with the Project.

3.2 Air Quality Analysis

The BPDA requires that project-induced impacts to ambient air quality be addressed. A microscale analysis is used to determine the effect on air quality of the increase in traffic generated by the Project. This microscale analysis may be required for a project at intersections where 1) project traffic would impact intersections or roadway links currently operating at Level of Service (LOS) D, E, or F or would cause LOS to decline to D, E, or F; 2) project traffic would increase traffic volumes on nearby roadways by 10% or more (unless the increase in traffic volume is less than 100 vehicles per hour); or, 3) the project will generate 3,000 or more new average daily trips (ADT) on roadways providing access to a single location.

The proposed Project does not generate new traffic trips. Therefore, no quantitative analysis is required.

3.3 Stormwater/Water Quality

Please refer to Section 7.

3.4 Flood Hazard Zones/ Wetlands

The existing Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the Project Site indicates that it is located outside of a designated special flood hazard area (FIRM, City of Boston, Community-Panel Numbers 25025C0077J, Effective Date March 16, 2016).

The site does not contain wetlands.

3.5 Geotechnical Impacts

The Project does not include excavation or changes below-grade, and therefore geotechnical impacts and impacts to groundwater and not anticipated.

3.6 Solid and Hazardous Waste

3.6.1 Hazardous Waste

McPhail Associates LLC performed a Phase I Environmental Site Assessment of the property dated 12/1/15, in conformance with the scope and limitations of ASTM Practice E 1527-13. This assessment identifies one Historical Recognized Environmental Condition (HREC). Specifically, the site is identified by RTN 3-27106, associated with petroleum contamination discovered during the removal of a 500-gallon diesel fuel UST, which was previously located along the western exterior wall of the existing building. The release was reported as a "72-hour" release condition due to a headspace reading in excess of 100 parts per million (ppm) of total volatile organic compounds (TVOCs). The TVOC reading, which was reported to the DEP on September 13, 2007, was detected during the removal of the UST. Immediate Response Action (IRA) activities conducted by McPhail in relation to the petroleum release included removal of the UST, remedial excavation, post-excavation limit sampling, off-site disposal of petroleum-impacted soil, two phases of subsurface explorations, and soil and groundwater sampling and analytical testing. An IRA Completion Report was submitted to the DEP in 2008 indicating that residual petroleum contamination (specifically Diesel Range Organics [DROs]) was limited to a relatively small and narrow portion of the subject site (about 400 square feet in area and 2 feet in thickness) along the western exterior wall of the residential building. Petroleum constituents were not detected above Reportable Concentrations in groundwater. Based on the results of a Method 3 Risk Characterization of the release site, a condition of No Significant Risk was determined to exist and a Permanent Solution was achieved in the form of a Class A-2 Response Action Outcome (RAO). Based on the DEP status achieved at the site, the release is considered an HREC.

McPhail Associates also conducted a Radon Gas Analysis Report of the property dated 12/10/15. Based on the levels of radon gas detected during the survey, no further action is required at this time.

Boston Environmental Corporation ("BEC") conducted a Preliminary "Path of Construction" Asbestos, Lead Based Paint and Urea Formaldehyde Foam Insulation Survey dated 12/23/15. BEC found no evidence of UFFI at the property and concluded that lead paint was not an issue. BEC tested for asbestos and found asbestos containing materials (ACMs) including black sink mastic; tile and tile grout, adhesive and mastic; stairwell door caulking and window glazing. BEC is developing a construction specification for the rehabilitation for the safe handling and remediation of identified ACMs during construction and will be undertake construction monitoring and testing.

3.6.2 Operation Solid and Hazardous Waste Generation

Quincy Tower generates solid waste typical of residential uses. Solid waste is expected to include wastepaper, cardboard, glass bottles and food. Recyclable materials will be

recycled through a program implemented by building management. As no new units are being created, the Project will not generate new solid waste.

With the exception of household hazardous wastes typical of residential developments (e.g., cleaning fluids and paint), the Project will not involve the generation, use, transportation, storage, release, or disposal of potentially hazardous materials.

3.6.3 Recycling

Recycling bins are located in the buildings' trash rooms on every floor. The recycling is collected by maintenance staff once or twice per week, depending upon volume, and transferred to large bins which are picked up by a recycling truck every Friday.

3.7 Noise Impacts

New noise associated with development projects are most commonly due to mechanical equipment required for the operation of the building. Minimal noise impacts are anticipated as the extent and general location of mechanical equipment will be similar to the existing mechanical equipment. Noise impacts may actually experience a reduction over current levels as any new equipment is likely to have a more efficient design resulting in lower noise levels.

Construction period noise impacts and mitigation are discussed below in Section 3.8.8.

3.8 Construction Impacts

3.8.1 Introduction

The Construction Management Plan (CMP) for the rehabilitation of Quincy Tower provides specific measures and plans to minimize impacts to abutters of the property and the surrounding neighborhood, located in the Chinatown area of Boston, with all deliveries and entry onto the property occurring at the rear entrance on Oak Street West.

3.8.2 Construction Activity

The construction period for this project is expected to be approximately 11 months in duration. The anticipated start of the project is December, 2016, and will run through October 2017. Typical construction hours will be 7 am to 4 pm, Monday thru Friday. All deliveries will be restricted to the hours of 9 am to 2 pm.

3.8.3 Neighborhood Interaction

The Josiah Quincy School is located at 885 Washington Street, and Keith Construction will make the school aware of construction activities and will restrict the hours for deliveries in coordination with the hours that school is in session so as to avoid interference with the day to day activities of the school as well as the Quincy Tower community.

3.8.4 Construction

The proposed staging plan is designed to isolate construction while maintaining normal day to day activities of the school and the Quincy Tower community. The scope of work is restricted entirely to the grounds of the Quincy Tower Apartments, which is a privately owned community. The scope of work consists of limited exterior (masonry repairs and new membrane roofing) and interior renovations including common area and dwelling unit finishes, with upgrades to MEP systems.

3.8.5 Perimeter and Public Safety

All work will be on Quincy Tower property and Keith Construction will have a Safety Manager on-site to oversee all safety issues, both public and private. All subcontractors will be notified that Oak Street West will be the only route for deliveries to the site. Exterior façade work is limited to masonry cleaning and pointing. This masonry restoration work will be conducted by use of rooftop mounted swing staging. It is anticipated that this work will be conducted during the summer recess when classes at the Josiah Quincy School are not in session. This work does not require the storage of any materials on the site.

3.8.6 Dust

The removal of existing mortar will be conducted using vacuum dust collection systems (VDCS). A VCDS requires the following: (a) a shroud appropriate for the grinder and wheel size; (b) a vacuum with enough suction to capture dust at the point of grinding and removing mortar; (c) a high-efficiency particulate air (HEPA) filter in the vacuum exhaust; and (d) a 1½- to 2-inch diameter vacuum exhaust hose or a hose size that is recommended by the tool manufacturer.

3.8.7 Construction Traffic Impacts

All subcontractors will be notified that there is no available parking on site and that either the use of Park & Ride or one of the local Public/Pay Parking Lots/Garages will need to be implemented. The only traffic impact to the neighborhood will involve delivery of materials to the site. All deliveries will also be scheduled 24 hours in advanced and held to the specific truck route. It is anticipated that Oak Street West will need to be shut down on at least 6 occasions throughout the duration of the project in order to set a crane for the delivery of materials to and from the property roof.

3.8.8 Construction Noise

All construction activities will take place within the private property of Quincy Tower Apartments and no activities with start before the allowed construction hours. All decibel levels will adhere to OSHA standards

3.8.9 Rodent Control

The project will adopt a site specific rodent control plan to adhere with Policy Number 87-4 City of Boston Requirements. All visits will be logged into a binder, numbered and dated.

3.8.10 Utilities

All utilities are located on the property. Work will be coordinated with all the utility companies and performed under State, City and Local jurisdiction. All utility shutdowns and planned interruptions will be coordinated accordingly.

3.8.11 Groundwater impact

This project is subject to the Groundwater Conservation Overlay District requirements. The owner is currently seeking a variance from the Zoning Board of Appeals and has submitted a plan for a groundwater recharge system to Boston Water & Sewer.

3.8.12 Emergency Contacts

A full list of phone numbers for 24-hour contacts will be provided prior to the start of the project and an emergency number posted at the Keith Construction site office.

3.8.13 Waste

Construction related waste will be properly disposed of into 30 yard dumpsters. These dumpsters will be located upon the property. In situation when it is not feasible to place a dumpster on the property, all generated waste will be removed on a daily basis by "live loaded" disposal vehicles. All waste generated from the property will be segregated at Waste Managements' facility in order to be recycled.

4.0 SUSTAINABLE DESIGN

Quincy Tower Apartments, at 5 Oak Street West in Boston, contains 161 units of elderly affordable housing. The Quincy Tower project will meet the Boston Planning and Development Agency's (BPDA) Article 37 zoning requirements as LEED "Certifiable" under LEED New Construction v2009. The project team has retained New Ecology, Inc. (NEI) as the green consultant to facilitate LEED NC certification. The project is pursuing enough credits to anticipate achieving the Certified level of 40 points.

This Green Building Report details the specific strategies by which the project will meet the LEED prerequisite and credit requirements. Credits that are not being pursued for this project are not included, while credits with some or all points currently classified as "maybe" are noted with an asterisk (*).

A total of the LEED NC Points as reflected in the checklist and detailed descriptions below:

43 'Yes' points exceeding the minimum for Certified Level

6 'Maybe' points, and 56 'No' points.

Sustainable Sites (SS)

- *SS p1 Construction Activity Pollution Prevention* – The project team will include a SWPPP (Storm Water Pollution Prevention Plan) per City of Boston requirements. This plan will outline strategies for sedimentation and erosion controls during sitework and construction. As necessary, strategies will include control of water velocity and path of run-off from site, protection of sewer inlets, and protection of onsite soil stockpiles.
- *SS c1 Site Selection* – The project is located above the 100-year floodplain as defined by FEMA, was previously developed prior to this project, is not built on habitat for threatened or endangered species, is not built within 100-feet of water or wetlands, is not built on land that was public parkland prior to acquisition, and is not built on land with soils that are prime, unique, or of state significance.
- *SS c2 Development Density and Community Connectivity* – The project is located within 1/2-mile of at least 10 community resources, and has pedestrian access between the building and the services.
- *SS c4.1 Alternative Transportation: Public Transportation Access* – The project is located within 1/4 mile of the Tufts Medical Center Station on the Orange line. It is also located within a 1/2 mile of the Chinatown Station on the Orange line, and the Boylston and Arlington Stations on the Green line. Bus routes within 1/2 mile include the number 11, 15, 39, 43, 55, 57, and 9.
- *SS c4.4 Alternative Transportation: Parking Capacity* – The project will add provide no new resident or non-resident parking spaces, and has no existing resident parking spaces. The project also has 7 Zip Car locations within 1/2 mile.
- *SS c6.1 Stormwater Design: Quantity Control* – The project site contains greater than 50% impervious area. Therefore, the implemented stormwater management plan will decrease stormwater runoff by 25% from the 2-*year 24-hour design storm.*

- *SS c6.2 Stormwater Design: Quality Control* – The project team will incorporate an underground system to capture and treat run-off from 80% of the average annual rainfall.
- *SSc 7.2 Heat Island Effect: Roof* – This project will be designed with high albedo roofing materials with an SRI >78.

Total SS Points: 17 yes, and 9 no.

Water Efficiency (WE)

- *WEp 1 Water Use Reduction* – The project will achieve water use levels at least 20% lower than the baseline calculated for the building. High-efficiency plumbing fixtures will be installed in bathrooms and kitchens. These fixtures will include 1.0 gpf toilets, 1.5gpm showerheads, 0.5 gpm lavatory faucets, and 1.5gpm kitchen faucets.
- *WEc 3 Water Use Reduction* – The project will achieve water use levels at least 40% lower than the baseline calculated for the building, with the possibility of achieving 47% savings overall.

Total WE Points: 4 yes, and 6 no.

Energy & Atmosphere (EA)

- *EAp 1 Fundamental Commissioning of Building Energy Systems* – The project will require third party commissioning of the following systems, per LEED EA p1 requirements: HVAC, lighting and controls, and domestic hot water. There are no renewable energy systems currently planned for this site.
- *EAp 2 Minimum Energy Performance* – The project has been modelled to achieve a 20% improvement over the baseline rating per ASHRAE 90.1-2007, Appendix G modeling.
- *EAp 3 Fundamental Refrigerant Management* – The project will include no CFC refrigerants in new mechanical systems. 45% of existing through wall air conditioning units have been replaced with non CFC models, and the remaining 55% are being replaced as the existing units fail.
- *EAc 1 Optimize Energy Performance* – The project has been modelled to achieve a 20% improvement over the baseline rating per ASHRAE 90.1-2007, Appendix G modeling.
- **EAc 6 Green Power* – The project team will consider implementation of a 2-year renewable energy contract to provide at least 35% of the building's electricity from renewable sources.

Total EA Points: 7 yes, 2 maybe, and 26 no.

Materials and Resources (MR)

- *MRp 1 Storage and Collection of Recyclables* – The existing building has designated floor level recycling locations in trash closets, a centralized point for collection, and a set schedule for pick-up already in place.
- *MR 1.1 Maintain Existing Walls, Floors, and Roofs- This project will maintain >95% of the existing building structure.*

- *MR 1.2 Maintain Interior Non-structural Elements* – The project will maintain existing non-structural elements in at least 50% (by area) of the completed building. *Interior wall and ceiling areas will be reused.*
- **MRc 2 Construction Waste Management* – The project team will require implementation of a construction waste management plan to ensure that a minimum of 50% of the non-hazardous site-generated waste will be diverted from landfills. The design team is reviewing whether 75% may be achievable.

Total MR Points: 5 yes, 1 maybe, and 8 no.

Indoor Environmental Quality (IEQ)

- *IEQp 1 Minimum Indoor Air Quality Performance* – The project team will ensure that all ventilation systems meet the minimum requirements of Sections 4 through 7 of the ASHRAE 62.1-2007 standard for Acceptable Indoor Air Quality.
- *IEQp 2 Environmental Tobacco Smoke (ETS) Control* – The project will prohibit smoking in all common areas, residential units, and within 25-feet of all entries, air-intakes, and windows; these prohibitions will be indicated in all leasing agreements and will be displayed via onsite signage.
- *IEQc 3.1 Construction Indoor Air Quality Management Plan: During Construction* – The project team will develop an IAQ management plan which will include adequately protecting new ductwork throughout the construction phase, protecting on-site and installed absorptive materials, and installing and replacing MERV 8 filters at all return air locations.
- *IEQc 4.1 Low-Emitting Materials: Adhesives and Sealants* – All sealants and adhesives will be low VOC.
- *IEQc 4.2 Low-Emitting Materials: Paints and Coatings* – All paints will be low VOC.
- *IEQc 4.3 Low-Emitting Materials: Flooring Systems* – All hard-surface flooring materials will be FloorScore certified. All carpeting will be Green Label Plus certified.
- **IEQc 4.4 Low-Emitting Materials: Composite Wood and Agrifiber Products* – The project will incorporate wood and agrifiber products that contain no added urea-formaldehyde resins.
- *IEQc 6.2 Controllability of Systems: Thermal Comfort* – The project will provide individual thermal controls for all residential units.
- **IEQc 7.1 Thermal Comfort: Design* – The project team is considering the design requirements needed to meet ASHRAE 55-2004.
- **IEQc 8.2 Daylight and Views: Views* – The project team is reviewing the apartment layouts to determine if adequate views can be provided to 90% of the regularly occupied interior spaces.

Total IEQ Points: 5 yes, 3 maybe, and 7 no.

Innovation & Design Process (ID)

- *SS c4.1 Alternative Transportation: Double Transit Ridership (Exemplary Performance)* – This project will qualify for exemplary performance with access to 2 subway lines, and frequency of service combined exceeding 200 transit rides per day.

- *IDc 2 LEED Accredited Professional* – Lauren Baumann of NEI holds a LEED AP credential and is an integrated member of the project team.

Total ID Points: 2 yes.

Regional Priority

- *RPc 1 Regional Priority* – The project design will include the following regional priority credits.
- SS c6.1 Stormwater Design-Quantity Control
- SS c7.2 Heat Island Effect: Roof
- MR c1.1 Building Reuse- Maintain Walls, Floors, and Roof.

(See Exhibit 3 for LEED and Resiliency Checklists)

Total RP Points: 3 yes

5.0 URBAN DESIGN

5.1 Existing Conditions:

Quincy Tower is located in the Chinatown neighborhood of Boston. It is a 16 story high rise building that was constructed in 1977. There are 162 units (161 are 1 bedroom) which are affordable and age-restricted. Fourteen units are fully accessible. Please see Exhibit 4 for the Accessibility Checklist and project Compliance Plan. The first floor contains common areas and offices while the second floor contains common areas used to provide adult day care services. Mechanical equipment, storage, maintenance shop and laundry room are located in the basement. Limited parking is provided on site with 6 existing parking spaces being used by staff.

5.2 Project Scope of Work:

This project is a moderate rehabilitation. The scope of work includes accessibility improvements, building envelope improvements, common area finishes improvements and kitchen and bathroom replacement for those units that were not previously renovated. It also includes mechanical system improvements (heating and domestic hot water boiler replacement), emergency generator overhaul, new fire pump, common area HVAC equipment replacement, elevator control upgrades, and security system enhancements.

6.0 HISTORIC AND ARCHAEOLOGICAL RESOURCES

6.1 Historic Resources Within the Project Site

LEC Environmental Consultants, Inc., conducted an on-line search of the Massachusetts Cultural Resource Information System (MACRIS) for the Project site. According to this search, the property does not contain any State or federally listed historic or archaeologically significant resources, and is not located within a historic district.

6.2 Consistency with Historic Reviews

The Proponent submitted a Project Notification Form to the Massachusetts Historical Commission (MHC) on December 21, 2015. On January 13, 2016, MHC determined that the Project is unlikely to affect significant historic or archaeological resources.

7.0 INFRASTRUCTURE

7.1 Wastewater

7.1.1 Existing Sewer System

The Boston Water and Sewer Commission (BWSC) owns and maintains the sewer system that services the City of Boston. The BWSC sewer system connects to the Massachusetts Water Resources Authority (MWRA) interceptors for conveyance, treatment, and disposal through the MWRA Deer Island Wastewater Treatment Plant. The Project will not require new sewer services, and will continue to use existing connections.

7.1.2 Wastewater Generation

No new residential units are being proposed, therefor it is anticipated that sewage flows will not change. The Proponent reviewed the last three months of meter readings, and calculated an average water use of approximately 95,583 cubic feet per month.

7.2 Water System

Water for the Project will continue to be provided by BWSC through the existing connection.

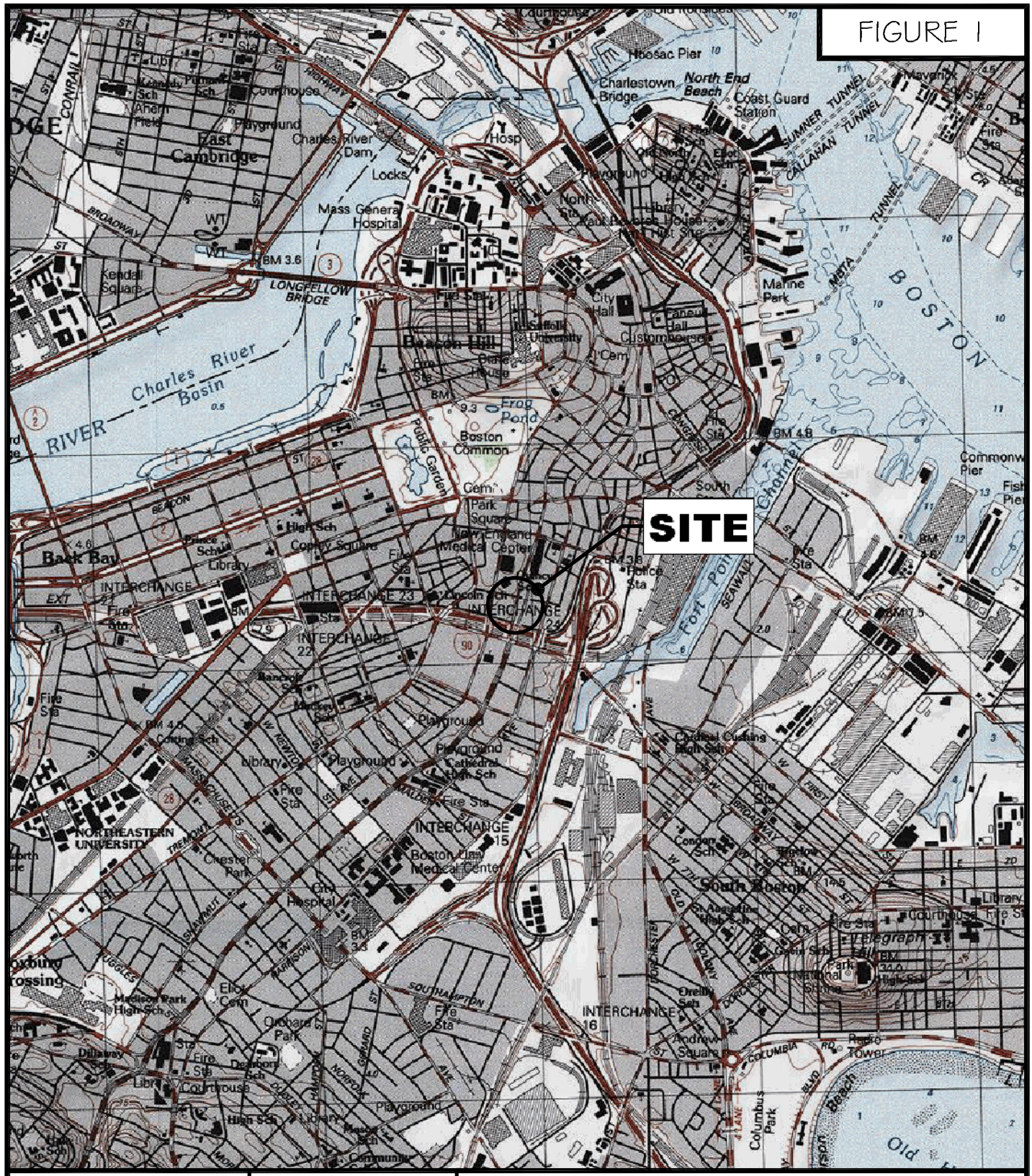
7.3 Stormwater System

The Project site consists of building roof and paved walkways, and is mostly impervious. However, the proposed rehabilitation will not change the footprint of the building, and stormwater runoff peak rates and volumes will remain the same.

The Project is within the Groundwater Conservation Overlay District, and will undergo review with the Boston Groundwater Trust. It is anticipated that this review will conclude with the issuance of a Conditional Use Permit by the Zoning Board of Appeal.

Exhibit 1 – Site Location Map

FIGURE 1



N

SCALE 1:25,000

PROJECT LOCATION PLAN

5 WEST OAK STREET

BOSTON MASSACHUSETTS

Exhibit 2 – List of Approvals and Permits

Exhibit 2

Quincy Tower Apartments

List of Anticipated Permits and Approvals

- Article 80B – Large Project Review. This review will conclude with the Boston Planning and Development Agency Board approval.
- Article 37 – Green Buildings Review. This review will conclude with the Boston Planning and Development Agency Board approval.
- Article 32 – Groundwater Conservation Overlay District Review. This review will conclude with the issuance of a Conditional Use Permit by the Zoning Board of Appeal.
- Building Permit. To be issued by the Inspectional Services Department.

Exhibit 3

LEED Checklist

Resiliency Checklist

LEED 2009 for New Construction and Major Renovations

Project Checklist

Quincy Tower: 5 Oak St W Boston

######

Sustainable Sites — Possible Points: 26

Y	?	N				
Y			Prereq 1	Construction Activity Pollution Prevention		
1			Credit 1	Site Selection	1	
5			Credit 2	Development Density and Community Connectivity	5	
		1	Credit 3	Brownfield Redevelopment	1	
6			Credit 4.1	Alternative Transportation—Public Transportation Access	6	
		1	Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1	
		3	Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3	
2			Credit 4.4	Alternative Transportation—Parking Capacity	2	
		1	Credit 5.1	Site Development—Protect or Restore Habitat	1	
		1	Credit 5.2	Site Development—Maximize Open Space	1	
1			Credit 6.1	Stormwater Design—Quantity Control	1	
1			Credit 6.2	Stormwater Design—Quality Control	1	
		1	Credit 7.1	Heat Island Effect—Non-roof	1	
1			Credit 7.2	Heat Island Effect—Roof	1	
		1	Credit 8	Light Pollution Reduction	1	

Water Efficiency — Possible Points: 10

Y	?	N			
Y			Prereq 1	Water Use Reduction—20% Reduction	
		4	Credit 1	Water Efficient Landscaping	2 to 4
		2	Credit 2	Innovative Wastewater Technologies	2
4			Credit 3	Water Use Reduction	2 to 4

Energy and Atmosphere — Possible Points: 35

Y	?	N			
Y			Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y			Prereq 2	Minimum Energy Performance	
Y			Prereq 3	Fundamental Refrigerant Management	
7		12	Credit 1	Optimize Energy Performance	1 to 19
		7	Credit 2	On-Site Renewable Energy	1 to 7
		2	Credit 3	Enhanced Commissioning	2
		2	Credit 4	Enhanced Refrigerant Management	2
		3	Credit 5	Measurement and Verification	3
	2		Credit 6	Green Power	2

Materials and Resources — Possible Points: 14

Y	?	N			
Y			Prereq 1	Storage and Collection of Recyclables	
3			Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3
1			Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements	1
1	1		Credit 2	Construction Waste Management	1 to 2
		2	Credit 3	Materials Reuse	1 to 2

Materials and Resources, Continued

Y	?	N			
		2	Credit 4	Recycled Content	1 to 2
		2	Credit 5	Regional Materials	1 to 2
		1	Credit 6	Rapidly Renewable Materials	1
		1	Credit 7	Certified Wood	1

Indoor Environmental Quality — Possible Points: 15

Y	?	N			
Y			Prereq 1	Minimum Indoor Air Quality Performance	
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	
		1	Credit 1	Outdoor Air Delivery Monitoring	1
		1	Credit 2	Increased Ventilation	1
1			Credit 3.1	Construction IAQ Management Plan—During Construction	1
		1	Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
1			Credit 4.1	Low-Emitting Materials—Adhesives and Sealants	1
1			Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
1			Credit 4.3	Low-Emitting Materials—Flooring Systems	1
	1		Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
		1	Credit 5	Indoor Chemical and Pollutant Source Control	1
		1	Credit 6.1	Controllability of Systems—Lighting	1
1			Credit 6.2	Controllability of Systems—Thermal Comfort	1
	1		Credit 7.1	Thermal Comfort—Design	1
		1	Credit 7.2	Thermal Comfort—Verification	1
		1	Credit 8.1	Daylight and Views—Daylight	1
	1		Credit 8.2	Daylight and Views—Views	1

Innovation and Design Process — Possible Points: 6

1			Credit 1.1	Double Transit Ridership	1
			Credit 1.2	Innovation in Design: Specific Title	1
			Credit 1.3	Innovation in Design: Specific Title	1
			Credit 1.4	Innovation in Design: Specific Title	1
			Credit 1.5	Innovation in Design: Specific Title	1
1			Credit 2	LEED Accredited Professional	1

Regional Priority Credits — Possible Points: 4

1			Credit 1.1	Building Reuse - maintain exisitng walls, floors, and roof	1
1			Credit 1.2	Stormwater Design - Quatity control	1
1			Credit 1.3	Heat Island Effect - Roof	1
			Credit 1.4	Regional Priority: Specific Credit	1

43	6	56	**Total**	Possible Points: **110**

Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

Climate Change Preparedness and Resiliency Checklist for New Construction

In November 2013, in conformance with the Mayor's 2011 Climate Action Leadership Committee's recommendations, the Boston Redevelopment Authority adopted policy for all development projects subject to Boston Zoning Article 80 Small and Large Project Review, including all Institutional Master Plan modifications and updates, are to complete the following checklist and provide any necessary responses regarding project resiliency, preparedness, and to mitigate any identified adverse impacts that might arise under future climate conditions.

For more information about the City of Boston's climate policies and practices, and the 2011 update of the climate action plan, *A Climate of Progress*, please see the City's climate action web pages at http://www.cityofboston.gov/climate

In advance we thank you for your time and assistance in advancing best practices in Boston.

Climate Change Analysis and Information Sources:

1. Northeast Climate Impacts Assessment (www.climatechoices.org/ne/)
2. USGCRP 2009 (http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts/)
3. Army Corps of Engineers guidance on sea level rise (http://planning.usace.army.mil/toolbox/library/ECs/EC11652212Nov2011.pdf)
4. Proceeding of the National Academy of Science, "Global sea level rise linked to global temperature", Vermeer and Rahmstorf, 2009 (http://www.pnas.org/content/early/2009/12/04/0907765106.full.pdf)
5. "Hotspot of accelerated sea-level rise on the Atlantic coast of North America", Asbury H. Sallenger Jr*, Kara S. Doran and Peter A. Howd, 2012 (http://www.bostonredevelopmentauthority.org/planning/Hotspot of Accelerated Sea-level Rise 2012.pdf)
6. "Building Resilience in Boston": Best Practices for Climate Change Adaptation and Resilience for Existing Buildings, Linnean Solutions, The Built Environment Coalition, The Resilient Design Institute, 2103 (`

Checklist

Please respond to all of the checklist questions to the fullest extent possible. For projects that respond "Yes" to any of the D.1 – Sea-Level Rise and Storms, Location Description and Classification questions, please respond to all of the remaining Section D questions.

Checklist responses are due at the time of initial project filing or Notice of Project Change and final filings just prior seeking Final BRA Approval. A PDF of your response to the Checklist should be submitted to the Boston Redevelopment Authority via your project manager.

Please Note: When initiating a new project, please visit the BRA web site for the most current Climate Change Preparedness & Resiliency Checklist.

A.1 - Project Information

Project Name:	Quincy Tower
Project Address Primary:	5 Oak Street West, Boston MA 02116
Project Address Additional:	
Project Contact (name / Title / Company / email / phone):	Gina Martinez, Development Director, Beacon Properties gmartinez@beaconcommunitiesllc.com 617-574-1100 ext. 134

A.2 - Team Description

Owner / Developer:	BC Quincy Tower LLC, Quincy Tower Developer LLC
Architect:	The Architectural Team
Engineer (building systems):	Petersen Engineering
Sustainability / LEED:	New Ecology, The Architectural Team
Permitting:	
Construction Management:	Waypoint KLA
Climate Change Expert:	

A.3 - Project Permitting and Phase

At what phase is the project – most recent completed submission at the time of this response?

PNF / Expanded PNF Submission X	Draft / Final Project Impact Report Submission	BRA Board Approved	Notice of Project Change
Planned Development Area	BRA Final Design Approval	Under Construction	Construction just completed:

A.4 - Building Classification and Description

List the principal Building Uses:	Residential
List the First Floor Uses:	Residential

What is the principal Construction Type – select most appropriate type?

Wood Frame	Masonry	Steel Frame	Concrete X

Describe the building?

Site Area:	*10,142 SF*	Building Area:	*124,720 SF*
Building Height:	*Approx. 158 Ft.*	Number of Stories:	*16 Flrs.*
First Floor Elevation (reference Boston City Base):	*23.22'*	Are there below grade spaces/levels, if yes how many:	*Yes*

A.5 - Green Building

Which LEED Rating System(s) and version has or will your project use (by area for multiple rating systems)?

Select by Primary Use:	New Construction X	Core & Shell	Healthcare	Schools
	Retail	Homes Midrise	Homes	Other
Select LEED Outcome:	Certified X	Silver	Gold	Platinum

Will the project be USGBC Registered and / or USGBC Certified?

Registered:	No	Certified:	*No*

A.6 - Building Energy

What are the base and peak operating energy loads for the building?

Electric:	*157 (kW)*	Heating:	*1,746 (MBH)*
What is the planned building Energy Use Intensity:	*105 kBtu/SF*	Cooling:	*133 (Tons)*

What are the peak energy demands of your critical systems in the event of a service interruption?

Electric:	*20 (kW)*	Heating:	*0 (MMBtu/hr)*
		Cooling:	*0 (Tons/hr)*

What is nature and source of your back-up / emergency generators?

Electrical Generation:	*125 (kW)*		Fuel Source:	*Diesel*
System Type and Number of Units:	Combustion Engine X	Gas Turbine	Combine Heat and Power	*1 (Units)*

B - Extreme Weather and Heat Events

Climate change will result in more extreme weather events including higher year round average temperatures, higher peak temperatures, and more periods of extended peak temperatures. The section explores how a project responds to higher temperatures and heat waves.

B.1 - Analysis

What is the full expected life of the project?

Select most appropriate:	10 Years	25 Years	50 Years	75 Years

	X		

What is the full expected operational life of key building systems (e.g. heating, cooling, ventilation)?

Select most appropriate:	10 Years	25 Years X	50 Years	75 Years

What time span of future Climate Conditions was considered?

Select most appropriate:	10 Years	25 Years X	50 Years	75 Years

Analysis Conditions - What range of temperatures will be used for project planning – Low/High?

7.4 – 90.8 Deg.

What Extreme Heat Event characteristics will be used for project planning – Peak High, Duration, and Frequency?

90.8 Deg.	*5 Days*	*2 Events / yr.*

(Existing building and primarily an interior retrofit)
What Drought characteristics will be used for project planning – Duration and Frequency?

5 Days	*1 Events / yr.*

What Extreme Rain Event characteristics will be used for project planning – Seasonal Rain Fall, Peak Rain Fall, and Frequency of Events per year?

>48 Inches / yr.	*>2 Inches*	*2 Events / yr.*

What Extreme Wind Storm Event characteristics will be used for project planning – Peak Wind Speed, Duration of Storm Event, and Frequency of Events per year?

>45 mph Peak Wind	*2 Hours*	*2 Events / yr.*

B.2 - Mitigation Strategies

What will be the overall energy performance, based on use, of the project and how will performance be determined?

Building energy use below code:	*20%*
How is performance determined:	90.1 -2007 Energy Model dated 10/6/16

What specific measures will the project employ to reduce building energy consumption?

Select all appropriate:	High performance building envelope	High performance lighting & controls X	Building day lighting	EnergyStar equip. / appliances X
	High performance HVAC equipment X	Energy recovery ventilation X	No active cooling	No active heating
Describe any added measures:				

What are the insulation (R) values for building envelop elements?

Roof:	*R = 38*	Walls / Curtain Wall Assembly:	*R = Assumed 7*
Foundation:	*R = unknown*	Basement / Slab:	*R = unknown*
Windows:	*R = 2.5/ U=.40*	Doors:	*R = 4.0/ U.25*

What specific measures will the project employ to reduce building energy demands on the utilities and infrastructure?

On-site clean energy / CHP system(s)	Building-wide power dimming	Thermal energy storage systems	Ground source heat pump
On-site Solar PV	On-site Solar Thermal	Wind power	None X
Describe any added measures:	Condensing boilers and air source heat pumps		

Will the project employ Distributed Energy / Smart Grid Infrastructure and /or Systems?

Select all appropriate:	Connected to local distributed electrical	Building will be Smart Grid ready	Connected to distributed steam, hot, chilled water	Distributed thermal energy ready

Will the building remain operable without utility power for an extended period?

	Yes	If yes, for how long:	
If Yes, is building "Islandable?	No		
If Yes, describe strategies:	In the event of extended power outages, a generator is in place for emergency lighting, elevators, and exhaust ventilation systems. Sheltering in place will be allowed for tenants. Natural ventilation and operable windows will provide sufficient airflow. Thermal comfort will be monitored as it could impact the amount of time the building can remain operable.		

Describe any non-mechanical strategies that will support building functionality and use during an extended interruption(s) of utility services and infrastructure:

Select all appropriate:	Solar oriented – longer south walls	Prevailing winds oriented	External shading devices	Tuned glazing,
	Building cool zones	Operable windows X	Natural ventilation	Building shading
	Potable water for drinking / food preparation	Potable water for sinks / sanitary systems	Waste water storage capacity	High Performance Building Envelope
Describe any added measures:				

What measures will the project employ to reduce urban heat-island effect?

Select all appropriate:	High reflective paving materials	Shade trees & shrubs	High reflective roof materials X	Vegetated roofs
Describe other strategies:				

What measures will the project employ to accommodate rain events and more rain fall?

Select all appropriate:	On-site retention systems & ponds X	Infiltration galleries & areas	vegetated water capture systems	Vegetated roofs
Describe other strategies:	Subsurface drywells to infiltrate roof drainage			

What measures will the project employ to accommodate extreme storm events and high winds?

Select all appropriate:	Hardened building structure & elements	Buried utilities & hardened infrastructure	Hazard removal & protective landscapes	Soft & permeable surfaces (water infiltration)
Describe other strategies:				

C - Sea-Level Rise and Storms

Rising Sea-Levels and more frequent Extreme Storms increase the probability of coastal and river flooding and enlarging the extent of the 100 Year Flood Plain. This section explores if a project is or might be subject to Sea-Level Rise and Storm impacts.

C.1 - Location Description and Classification:

Do you believe the building to susceptible to flooding now or during the full expected life of the building?

No

Describe site conditions?

Site Elevation – Low/High Points:	Low 19'/High 23'
Building Proximity to Water:	2500'

Is the site or building located in any of the following?

Coastal Zone:	No	Velocity Zone:	*No*
Flood Zone:	No	Area Prone to Flooding:	*No*

Will the 2013 Preliminary FEMA Flood Insurance Rate Maps or future floodplain delineation updates due to Climate Change result in a change of the classification of the site or building location?

2013 FEMA Prelim. FIRMs:	*No*	Future floodplain delineation updates:	*No*

What is the project or building proximity to nearest Coastal, Velocity or Flood Zone or Area Prone to Flooding?

2500'

If you answered YES to any of the above Location Description and Classification questions, please complete the following questions. ***Otherwise you have completed the questionnaire; thank you!***

C - Sea-Level Rise and Storms

This section explores how a project responds to Sea-Level Rise and / or increase in storm frequency or severity.

C.2 - Analysis

How were impacts from higher sea levels and more frequent and extreme storm events analyzed:

Sea Level Rise:	*Ft.*	Frequency of storms:	*per year*

C.3 - Building Flood Proofing

Describe any strategies to limit storm and flood damage and to maintain functionality during an extended periods of disruption.

What will be the Building Flood Proof Elevation and First Floor Elevation:

Flood Proof Elevation:	*Boston City Base Elev.(Ft.)*	First Floor Elevation:	*Boston City Base Elev. (Ft.)*

Will the project employ temporary measures to prevent building flooding (e.g. barricades, flood gates):

	Yes / No	If Yes, to what elevation	*Boston City Base Elev. (Ft.)*
If Yes, describe:			

What measures will be taken to ensure the integrity of critical building systems during a flood or severe storm event:

Systems located above 1st Floor.	Water tight utility conduits	Waste water back flow prevention	Storm water back flow prevention

Were the differing effects of fresh water and salt water flooding considered:

Yes / No

Will the project site / building(s) be accessible during periods of inundation or limited access to transportation:

Yes / No	If yes, to what height above 100 Year Floodplain:	*Boston City Base Elev. (Ft.)*

Will the project employ hard and / or soft landscape elements as velocity barriers to reduce wind or wave impacts?

	Yes / No
If Yes, describe:	

Will the building remain occupiable without utility power during an extended period of inundation:

Yes / No	If Yes, for how long:	*days*

Describe any additional strategies to addressing sea level rise and or sever storm impacts:

C.4 - Building Resilience and Adaptability

Describe any strategies that would support rapid recovery after a weather event and accommodate future building changes that respond to climate change:

Will the building be able to withstand severe storm impacts and endure temporary inundation?

Select appropriate:	*Yes / No*	Hardened / Resilient Ground Floor Construction	Temporary shutters and or barricades	Resilient site design, materials and construction

Can the site and building be reasonably modified to increase Building Flood Proof Elevation?

Select appropriate:	*Yes / No*	Surrounding site elevation can be raised	Building ground floor can be raised	Construction been engineered
Describe additional strategies:				

Has the building been planned and designed to accommodate future resiliency enhancements?

Select appropriate:	*Yes / No*	Solar PV	Solar Thermal	Clean Energy / CHP System(s)
		Potable water storage	Wastewater storage	Back up energy systems & fuel
Describe any specific or additional strategies:				

Thank you for completing the Boston Climate Change Resilience and Preparedness Checklist!

For questions or comments about this checklist or Climate Change Resiliency and Preparedness best practices, please contact: John.Dalzell.BRA@cityofboston.gov

Exhibit 4

Accessibility Checklist

Accessibility Compliance Plan

Accessibility Checklist

(to be added to the BRA Development Review Guidelines)

In 2009, a nine-member Advisory Board was appointed to the Commission for Persons with Disabilities in an effort to reduce architectural, procedural, attitudinal, and communication barriers affecting persons with disabilities in the City of Boston. These efforts were instituted to work toward creating universal access in the built environment.

In line with these priorities, the Accessibility Checklist aims to support the inclusion of people with disabilities. In order to complete the Checklist, you must provide specific detail, including descriptions, diagrams and data, of the universal access elements that will ensure all individuals have an equal experience that includes full participation in the built environment throughout the proposed buildings and open space.

In conformance with this directive, all development projects subject to Boston Zoning Article 80 Small and Large Project Review, including all Institutional Master Plan modifications and updates, are to complete the following checklist and provide any necessary responses regarding the following:

- improvements for pedestrian and vehicular circulation and access;
- encourage new buildings and public spaces to be designed to enhance and preserve Boston's system of parks, squares, walkways, and active shopping streets;
- ensure that persons with disabilities have full access to buildings open to the public;
- afford such persons the educational, employment, and recreational opportunities available to all citizens; and
- preserve and increase the supply of living space accessible to persons with disabilities.

We would like to thank you in advance for your time and effort in advancing best practices and progressive approaches to expand accessibility throughout Boston's built environment.

Accessibility Analysis Information Sources:

1. Americans with Disabilities Act – 2010 ADA Standards for Accessible Design
    a. http://www.ada.gov/2010ADAstandards_index.htm
2. Massachusetts Architectural Access Board 521 CMR
    a. http://www.mass.gov/eopss/consumer-prot-and-bus-lic/license-type/aab/aab-rules-and-regulations-pdf.html
3. Boston Complete Street Guidelines
    a. http://bostoncompletestreets.org/
4. City of Boston Mayors Commission for Persons with Disabilities Advisory Board
    a. http://www.cityofboston.gov/Disability
5. City of Boston – Public Works Sidewalk Reconstruction Policy
    a. http://www.cityofboston.gov/images_documents/sidewalk%20policy%200114_tcm3-41668.pdf
6. Massachusetts Office On Disability Accessible Parking Requirements
    a. www.mass.gov/anf/docs/mod/hp-parking-regulations-mod.doc
7. MBTA Fixed Route Accessible Transit Stations
    a. http://www.mbta.com/about_the_mbta/accessibility/

Article 80 | ACCESSIBILTY CHECKLIST

Project Information

Project Name:	Quincy Tower Apartments
Project Address Primary:	5 Oak Street West, Boston, MA 02116
Project Address Additional:	
Project Contact (name / Title / Company / email / phone):	Gina Martinez, Development Director, Beacon Communities gmartinez@beaconcommunitiesllc.com, 617-574-1100 ext 134

Team Description

Owner / Developer:	BC Quincy Tower LLC, Quincy Tower Developer LLC
Architect:	The Architectural Team, Inc.
Engineer (building systems):	Petersen Engineering
Sustainability / LEED:	New Ecology, Inc.
Permitting:	Quincy Tower Developer LLC
Construction Management:	Waypoint KLA

Project Permitting and Phase

At what phase is the project – at time of this questionnaire?

PNF / Expanded PNF Submitted	Draft / Final Project Impact Report Submitted	BRA Board Approved
BRA Design Approved	Under Construction	Construction just completed:

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Building Classification and Description

What are the principal Building Uses - select all appropriate uses?

Residential – One to Three Unit	Residential - Multi-unit, Four +	Institutional	Education
Commercial	Office	Retail	Assembly
Laboratory / Medical	Manufacturing / Industrial	Mercantile	Storage, Utility and Other

First Floor Uses (List)

What is the Construction Type – select most appropriate type?

Wood Frame	Masonry	Steel Frame	Concrete

Describe the building?

Site Area:	10,140 *SF*	Building Area:	124,720 *SF*
Building Height:	Approx. 158 *Ft.*	Number of Stories:	16 *Flrs.*
First Floor Elevation:	23.22' *Elev.*	Are there below grade spaces:	*Yes / No*

Assessment of Existing Infrastructure for Accessibility:

This section explores the proximity to accessible transit lines and proximate institutions such as, but not limited to hospitals, elderly and disabled housing, and general neighborhood information. The proponent should identify how the area surrounding the development is accessible for people with mobility impairments and should analyze the existing condition of the accessible routes through sidewalk and pedestrian ramp reports.

Provide a description of the development neighborhood and identifying characteristics.	Quincy Tower is located at 5 Oak Street West in the Chinatown neighborhood of Boston. The surrounding community has a mix of residential, commercial and institutional uses. The building is bound by Oak Street West to the north, Washington Street to the east, and existing buildings to the south and west.
List the surrounding ADA compliant MBTA transit lines and the proximity to the development site: Commuter rail, subway, bus, etc.	Quincy Tower is approx. 0.1 mile from the Tufts Medical Center orange line T station, which has access for the disabled. It is also located within a 1/2 mile of the Chinatown Station on the Orange line, and the Boylston and Arlington Stations on the Green line. Bus routes within 1/2 mile include the number 11, 15, 39, 43, 55, 57, and 9.
List the surrounding institutions: hospitals, public housing and	~~It is immediately abutted by the Josiah Quincy School and Community Center.~~ The Quincy Upper School is on Washington and Pine Streets. Tufts Medical Center and Floating Hospital for Children is on Washington Street., the Wang YMCA of Chinatown

elderly and disabled housing developments, educational facilities, etc.	is on Oak St. West, and Boston Chinatown Neighborhood Center is on Oak St. Eliot Norton Park is one block away, across Tremont Street; Pinet Street Part is accros the street on Pine Street. The Chinese Progressive Association is on Ash Street. There are no other senior communities in the area.
Is the proposed development on a priority accessible route to a key public use facility? List the surrounding: government buildings, libraries, community centers and recreational facilities and other related facilities.	The Project site is not located on a priority accessible route.

Surrounding Site Conditions – Existing:

This section identifies the current condition of the sidewalks and pedestrian ramps around the development site.

Are there sidewalks and pedestrian ramps existing at the development site?	Yes.
If yes above, list the existing sidewalk and pedestrian ramp materials and physical condition at the development site.	Concrete.
Are the sidewalks and pedestrian ramps existing-to-remain? **If yes,** have the sidewalks and pedestrian ramps been verified as compliant? **If yes,** please provide surveyors report.	Yes.
Is the development site within a historic district? **If yes,** please identify.	No.

Surrounding Site Conditions – Proposed

This section identifies the proposed condition of the walkways and pedestrian ramps in and around the development site. The width of the sidewalk contributes to the degree of comfort and enjoyment of walking along a street. Narrow sidewalks do not support lively pedestrian activity, and may create dangerous conditions that force people to walk in the street. Typically, a five foot wide Pedestrian Zone supports two people walking side by side or two wheelchairs passing each other. An eight foot wide Pedestrian Zone allows two pairs of

people to comfortable pass each other, and a ten foot or wider Pedestrian Zone can support high volumes of pedestrians.

Are the proposed sidewalks consistent with the Boston Complete Street Guidelines? See: www.bostoncompletestreets.org	Yes.
If yes above, choose which Street Type was applied: Downtown Commercial, Downtown Mixed-use, Neighborhood Main, Connector, Residential, Industrial, Shared Street, Parkway, Boulevard.	Neighborhood Main.
What is the total width of the proposed sidewalk? List the widths of the proposed zones: Frontage, Pedestrian and Furnishing Zone.	N/A
List the proposed materials for each Zone. Will the proposed materials be on private property or will the proposed materials be on the City of Boston pedestrian right-of-way?	N/A
If the pedestrian right-of-way is on private property, will the proponent seek a pedestrian easement with the City of Boston Public Improvement Commission?	N/A
Will sidewalk cafes or other furnishings be programmed for the pedestrian right-of-way?	NO
If yes above, what are the proposed dimensions of the sidewalk café or furnishings and what will the right-of-way clearance be?	N/A

Proposed Accessible Parking:

See Massachusetts Architectural Access Board Rules and Regulations 521 CMR Section 23.00 regarding accessible parking requirement counts and the Massachusetts Office of Disability Handicap Parking Regulations.

What is the total number of parking spaces provided at the development site parking lot or garage?	Zero
What is the total number of accessible spaces provided at the development site?	Zero
Will any on street accessible parking spaces be required? If yes, has the proponent contacted the Commission for Persons with Disabilities and City of Boston Transportation Department regarding this need?	No.
Where is accessible visitor parking located?	N/A
Has a drop-off area been identified? If yes, will it be accessible?	No.
Include a diagram of the accessible routes to and from the accessible parking lot/garage and drop-off areas to the development entry locations. Please include route distances.	N/A

Circulation and Accessible Routes:

The primary objective in designing smooth and continuous paths of travel is to accommodate persons of all abilities that allow for universal access to entryways, common spaces and the visit-ability* of neighbors.

**Visit-ability – Neighbors ability to access and visit with neighbors without architectural barrier limitations*

Provide a diagram of the accessible route connections through the site.	N/A
Describe accessibility at each entryway: Flush Condition, Stairs, Ramp Elevator.	One accessible flush condition provided at main entrance.
Are the accessible entrance and the standard entrance integrated?	Reference Item #21 in Compliance Plan Report.
If no above, what is the reason?	
Will there be a roof deck or outdoor courtyard space? If yes, include diagram of the accessible route.	Reference Item #1 in Compliance Plan Report.
Has an accessible routes way-finding and signage package been developed? If yes, please describe.	No.

Accessible Units: (If applicable)

In order to facilitate access to housing opportunities this section addresses the number of accessible units that are proposed for the development site that remove barriers to housing choice.

What is the total number of proposed units for the development?	161 units to be rehabilitated
How many units are for sale; how many are for rent? What is the market value vs. affordable breakdown?	All 161 rental units will be affordable.
How many accessible units are being proposed?	Reference Item #25 in Compliance Plan Report.

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Please provide plan and diagram of the accessible units.	Reference Item #27-132
How many accessible units will also be affordable? If none, please describe reason.	
Do standard units have architectural barriers that would prevent entry or use of common space for persons with mobility impairments? Example: stairs at entry or step to balcony. **If yes,** please provide reason.	Reference Item #1,6,7,8, 18 & 24 in Compliance Plan Report.
Has the proponent reviewed or presented the proposed plan to the City of Boston Mayor's Commission for Persons with Disabilities Advisory Board?	No.
Did the Advisory Board vote to support this project? **If no,** what recommendations did the Advisory Board give to make this project more accessible?	N/A

Thank you for completing the Accessibility Checklist!

For questions or comments about this checklist or accessibility practices, please contact:

kathryn.quigley@boston.gov | Mayors Commission for Persons with Disabilities

Compliance Plan - Accessibility
Quincy Tower Apartments
5 Oak Street, Boston
Inspection Date- 11-23-15
Revision Date 9-15-16

Item #	Unit	Location	Issue	Recommendation	Applicable Citation UFAS
1	Rooftop Garden		Roof top garden has not been provided with accessible route	Provide these same activities at a location with accessible route. To be provided as an equivalent facilitation in the first floor Community Room with potting station and plant shelf.	
	2nd Floor Adult Care				
2		Resident Toilet Room Left Side	Mirror measures 41 ¾ inches AFF, requires 40 inches maximum AFF to bottom of reflecting surface	Lower mirror so bottom of reflective surface is 40 inches maximum AFF.	4.19.6
3			Trash can obstructs door pull side clearance	Relocate trash can outside of door maneuvering clearance.	4.13.6
4		Resident Toilet Room Right Side	Water closet measures 18 ¾ inches to center line, requires 16 to 18 inches to centerline	Install offset flange to provide centerline of water closet 16 to 18 inches from parallel (side) wall.	4.17.3 2010 ADA- 604.2
5			Mirror measures 45 ¾ inches AFF, requires 40 inches maximum AFF to bottom of reflecting surface	Lower mirror so bottom of reflective surface is 40 inches maximum AFF.	4.19.6
6		Main Entry Door	42 inch wide door maneuvering clearance provided at pull side, requires 54 inches at door with closer	No remediation required at this time as room is only used when staffed and door provided in open positon during hours of operation	4.13.6
7			Door hardware requires pinching and twisting to operate	No remediation required at this time as room is only used when staffed and door provided in open positon during hours of operation	4.13.9
	1st Floor				

Item #	Unit	Location	Issue	Recommendation	Applicable Citation UFAS
8		Unisex Bathroom- Left Side	Entry door pull side clearance measures 7 ½ inches, requires 18 inches minimum	Unisex left bathroom does not provide enough space to make accessible. Provide signage directing an individual with a disability to nearest accessible toilet room.	2010 ADA- 213.2
9			Turning space cannot be achieved within toilet room as measures only 57 ½ inches wide	See above recommendation	2010 ADA- 213.2
10			Flush valve has not been provided on water closet clear floor space open side	See above recommendation	2010 ADA- 213.2
11			Mirror measures 40 ½ inches AFF, requires 40 inches maximum AFF to bottom of reflecting surface	See above recommendation	2010 ADA- 213.2
12			Lavatory pipe insulation has not been provided	See above recommendation	2010 ADA- 213.2
13			Coat hook measures 69 inches AFF, requires 48 inches maximum AFF	See above recommendation	2010 ADA- 213.2
14			Toilet room signage has been installed on door surface, requires location on latch side wall	See above recommendation	2010 ADA- 213.2
15		Unisex Bathroom Right Side	Lavatory pipe insulation has not been provided	Provide pipe insulation around exposed piping.	4.19.4
16			Lavatory measures 12 inches to centerline from side wall, requires 15 inch minimum with forward approach clear floor space	Move lavatory to provide 15 inches minimum for forward approach centered on fixture.	4.19.3
17			Mirror measures 40 ½ inches AFF, requires 40 inches maximum AFF to bottom of reflecting surface	Lower mirror so bottom of reflective surface is 40 inches maximum AFF.	4.19.6
18			Entry door pull side measures 15 ½ inches, requires 18 inches minimum	Relocate door as far to the hinge side as possible to achieve 18 inches of pull side clearance.	4.13.6
19			36 inch rear wall grab bar measures 6 ½ inches from side wall, requires 6 inches	Relocate 36 inch rear wall grab bar 6 inches from side wall.	4.16.4
20			Toilet room signage has been installed on door surface, requires location on latch side wall	Relocate signage to latch side of door 48 to 60 inches AFF.	2010 ADA- 216.8
	Main Entry				
21		Door Maneuvering Clearance	Door pull side landing slope measures 4.6%, requires 2% slope maximum	Rebuild section of concrete door maneuvering clearances to have slope and cross slope < 2%.	4.13.6
22		Mail Boxes	Top mail box keys measure 65 ¼ inches AFF to center, ensure all accessible unit mail box keys provided at 48 inches maximum to center of key	Ensure accessible units have centerline to key hole at 48 inches maximum AFF. All accessible unit mail boxes are located within reach ranges and no work proposed at mail boxes.	4.2.5, 4.2.6

Item #	Unit	Location	Issue	Recommendation	Applicable Citation UFAS
	Basement Laundry				
23		Change Machine	Change machine operable parts have not been provided with 30x48 inches clear floor space	Relocate change machine to provide 30 x 48 inch clear floor space on operable part.	4.2.5, 4.2.6, 4.2.4.1
	Trash Room				
24		Maneuvering Clearances	Trash rooms have not been provided with required maneuvering clearance.	Provide building trash valet. Allowable space within the existing building does not allow for the additional space needed to meet clearance requirements and as such technically infeasible.	
	Units				
25		Unit Totals	14 accessible units have been identified on site with issues and remediation listed below. Compliance with 504 requires 5% UFAS accessible units to be provided, with 161 total units provided in the building 9 units minimum are required to be compliant	It is understood that budget restriction may limit the number of accessible units to be brought into compliance. The minimum number of units required to be brought into compliance shall be 9 as required to meet the 5% need for 504 compliance	
26		Door Maneuvering Clearance	14 Unit entry doors have not been provided with 18 inches pull side clearance. Actual dimension varies by unit.	Provide automatic door opener at all (14) accessible units.	4.34.2 (6)
27	Unit 1611	Kitchen Outlets	Kitchen outlets measure 46 ¼ inches to center of highest operable part, requires 46 inches maximum	No recommendation. Within construction tolerances.	4.34.2 (9), 4.2.6
28		Sink	Garbage disposal adjacent to knee clearance has not been provided with insulation	Provide pipe insulation around exposed garbage disposal and piping.	4.34.6.5 (8)
29		Bathroom	Lavatory piping has not been provided with pipe insulation	Provide pipe insulation around exposed lavatory under sink piping.	4.34.5.3 (1)
30			Mirror measures 43 ½ inches AFF, requires 40 inches maximum AFF to bottom of reflecting surface	Lower mirror so bottom of reflective surface is 40 inches maximum AFF.	4.34.5.3 (1)
31			Medicine cabinet bottom shelf measures > 44 inches AFF	Lower medicine cabinet so bottom of shelf is 44 inches AFF maximum.	4.34.5.3 (3)
32			Bathtub controls have not been installed in the offset location, provided at bathtub centerline	Provide bathtub controls in the offset position	4.34.5.4 (4)
33			Compliant grab bars have not been provided in bathtub	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface and one at 8 to 10 inches above top of bathtub rim.	4.34.5.4 (3)
34	Unit 1511	Kitchen Outlets	Kitchen outlets measure 48 inches to center of highest operable part, requires 46 inches maximum	Lower highest operable part centerline to 46 inches AFF maximum.	4.34.2 (9), 4.2.6

Item #	Unit	Location	Issue	Recommendation	Applicable Citation UFAS
35		Wall Oven	Floor of wall oven measures 32 inches AFF, requires 30 inches AFF. Oven operable parts measure 55 ½ inches AFF, requires 54 inches maximum	Lower wall oven to provide operable parts within reach range of 48 inches maximum AFF and floor of oven 30 inches maximum AFF.	521 CMR- 45.6.1
36		Sink	Garbage disposal adjacent to knee clearance has not been provided with insulation	Provide pipe insulation around exposed garbage disposal and piping.	4.34.6.5 (8)
37		Water Closet Grab Bar	Water closet has not been provided with rear or side wall grab bar	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface.	4.34.5.2 (3)
38			Bathtub controls have not been installed in the offset location, provided at bathtub centerline	Provide bathtub controls in the offset position	4.34.5.4 (4)
39			Compliant grab bars have not been provided in bathtub	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface and one at 8 to 10 inches above top of bathtub rim.	4.34.5.4 (3)
40	Unit 1411	Kitchen Outlets	Kitchen outlets measure 47 inches to center of highest operable part, requires 46 inches maximum	Lower highest operable part centerline to 46 inches AFF maximum.	521 CMR- 45.11
41		Wall Oven	Floor of wall oven measures 32 inches AFF, requires 30 inches AFF. Oven operable parts measure 55 inches AFF, requires 54 inches maximum	Lower wall oven to provide operable parts within reach range of 48 inches maximum AFF and floor of oven 30 inches maximum AFF.	521 CMR- 45.6.1
42		Sink	Garbage disposal adjacent to knee clearance has not been provided with insulation	Provide pipe insulation around exposed garbage disposal and piping.	4.34.6.5 (8)
43		Water Closet Grab Bar	Water closet has not been provided with rear or side wall grab bar	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface.	4.34.5.2 (3)
44			Bathtub controls have not been installed in the offset location, provided at bathtub centerline	Provide bathtub controls in the offset position	4.34.5.4 (4)
45			Compliant grab bars have not been provided in bathtub	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface and one at 8 to 10 inches above top of bathtub rim.	4.34.5.4 (3)
46	Unit 1311	Kitchen Outlets	Kitchen outlets measure 47 inches to center of highest operable part, requires 46 inches maximum	Lower highest operable part centerline to 46 inches AFF maximum.	521 CMR- 45.11
47		Wall Oven	Floor of wall oven measures 32 inches AFF, requires 30 inches AFF. Oven operable parts measure 55 inches AFF, requires 54 inches maximum	Lower wall oven to provide operable parts within reach range of 48 inches maximum AFF and floor of oven 30 inches maximum AFF.	521 CMR- 45.6.1
48		Sink	Garbage disposal adjacent to knee clearance has not been provided with insulation	Provide pipe insulation around exposed garbage disposal and piping.	4.34.6.5 (8)

Item #	Unit	Location	Issue	Recommendation	Applicable Citation UFAS
49		Water Closet Grab Bar	Water closet has not been provided with rear or side wall grab bar	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface.	4.34.5.2 (3)
50			Water closet measures 18 ¾ inches to center line, requires 16 to 18 inches to centerline	Install offset flange to provide centerline of water closet 16 to 18 inches from parallel (side) wall.	4.34.5.2 (1)
51			Bathtub controls have not been installed in the offset location, provided at bathtub centerline	Provide bathtub controls in the offset position	4.34.5.4 (4)
52			Compliant grab bars have not been provided in bathtub	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface and one at 8 to 10 inches above top of bathtub rim.	4.34.5.3 (3)
53		Bathroom	Lavatory piping has not been provided with pipe insulation	Provide pipe insulation around exposed piping.	4.34.5.3 (1)
54	Unit 1211	Kitchen Outlets	Kitchen outlets measure 47 ¾ inches to center of highest operable part, requires 46 inches maximum	Lower highest operable part centerline to 46 inches AFF maximum.	521 CMR- 45.11
55		Wall Oven	Floor of wall oven measures 32 inches AFF, requires 30 inches AFF. Oven operable parts measure 55 inches AFF, requires 54 inches maximum	Lower wall oven to provide operable parts within reach range of 48 inches maximum AFF and floor of oven 30 inches maximum AFF.	521 CMR- 45.6.1
56		Sink	Garbage disposal adjacent to knee clearance has not been provided with insulation	Provide pipe insulation around exposed garbage disposal and piping.	4.34.6.5 (8)
57		Water Closet Grab Bar	Water closet has not been provided with rear or side wall grab bar	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface.	4.34.5.2 (3)
58			Bathtub controls have not been installed in the offset location, provided at bathtub centerline	Provide bathtub controls in the offset position	4.34.5.4 (4)
59			Compliant grab bars have not been provided in bathtub	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface and one at 8 to 10 inches above top of bathtub rim.	4.34.5.4 (3)
60		Bathroom	Lavatory piping has not been provided with pipe insulation	Provide pipe insulation around exposed piping.	4.34.5.3 (1)
61	Unit 1111	Kitchen Outlets	Kitchen outlets measure 47 inches to center of highest operable part, requires 46 inches maximum	Lower highest operable part centerline to 46 inches AFF maximum.	521 CMR- 45.11
62		Wall Oven	Floor of wall oven measures 32 inches AFF, requires 30 inches AFF. Oven operable parts measure 57 inches AFF, requires 54 inches maximum	Lower wall oven to provide operable parts within reach range of 48 inches maximum AFF and floor of oven 30 inches maximum AFF.	521 CMR- 45.6.1
63		Sink	Garbage disposal adjacent to knee clearance has not been provided with insulation	Provide pipe insulation around exposed garbage disposal and piping.	4.34.6.5 (8)

Item #	Unit	Location	Issue	Recommendation	Applicable Citation UFAS
64		Water Closet Grab Bar	Water closet has not been provided with rear or side wall grab bar	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface.	4.34.5.2 (3)
65			Bathtub controls have not been installed in the offset location, provided at bathtub centerline	Provide bathtub controls in the offset position	4.34.5.4 (4)
66			Compliant grab bars have not been provided in bathtub	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface and one at 8 to 10 inches above top of bathtub rim.	4.34.5.4 (3)
67		Bathroom	Lavatory piping has not been provided with pipe insulation	Provide pipe insulation around exposed piping.	4.34.5.3 (1)
68	Unit 1011	Kitchen Outlets	Kitchen outlets measure 47 inches to center of highest operable part, requires 46 inches maximum	Lower highest operable part centerline to 46 inches AFF maximum.	521 CMR- 45.11
69		Wall Oven	Floor of wall oven measures 32 inches AFF, requires 30 inches AFF. Oven operable parts measure 55 inches AFF, requires 54 inches maximum	Lower wall oven to provide operable parts within reach range of 48 inches maximum AFF and floor of oven 30 inches maximum AFF.	521 CMR- 45.6.1
70		Sink	Garbage disposal adjacent to knee clearance has not been provided with insulation	Provide pipe insulation around exposed garbage disposal and piping.	4.34.6.5 (8)
71		Water Closet Grab Bar	Water closet has not been provided with rear or side wall grab bar	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface.	4.34.5.2 (3)
72			Bathtub controls have not been installed in the offset location, provided at bathtub centerline	Provide bathtub controls in the offset position	4.34.5.4 (4)
73			Compliant grab bars have not been provided in bathtub	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface and one at 8 to 10 inches above top of bathtub rim.	4.34.5.4 (3)
74		Lavatory	Lavatory piping has not been provided with pipe insulation	Provide pipe insulation around exposed piping.	4.34.5.3 (1)
75		Mirror	Mirror measures > 40 inches AFF, requires 40 inches maximum AFF to bottom of reflecting surface	Lower mirror so bottom of reflective surface is 40 inches maximum AFF.	4.34.5.3(1)
76	Unit 911	Kitchen Outlets	Kitchen outlets measure 47 inches to center of highest operable part, requires 46 inches maximum	Lower highest operable part centerline to 46 inches AFF maximum.	521 CMR- 45.11
77		Wall Oven	Floor of wall oven measures 32 inches AFF, requires 30 inches AFF. Oven operable parts measure 554 ¾ inches AFF, requires 54 inches maximum	Lower wall oven to provide operable parts within reach range of 48 inches maximum AFF and floor of oven 30 inches maximum AFF.	521 CMR- 45.6.1

Item #	Unit	Location	Issue	Recommendation	Applicable Citation UFAS
78		Sink	Garbage disposal adjacent to knee clearance has not been provided with insulation	Provide pipe insulation around exposed garbage disposal and piping.	4.34.6.5 (8)
79		Water Closet Grab Bar	Water closet has not been provided with rear or side wall grab bar	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface.	4.34.5.2 (3)
80			Water closet measures 18 ¾ inches to center line, requires 16 to 18 inches to centerline	Install offset flange to provide centerline of water closet 16 to 18 inches from parallel (side) wall.	4.34.5.2 (1)
81			Bathtub controls have not been installed in the offset location, provided at bathtub centerline	Provide bathtub controls in the offset position	4.34.5.4 (4)
82			Compliant grab bars have not been provided in bathtub	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface and one at 8 to 10 inches above top of bathtub rim.	4.34.5.4 (3)
83		Lavatory	Lavatory piping has not been provided with pipe insulation	Provide pipe insulation around exposed piping.	4.34.5.3 (1)
84	Unit 811	Kitchen Outlets	Kitchen outlets measure 47 inches to center of highest operable part, requires 46 inches maximum	Lower highest operable part centerline to 46 inches AFF maximum.	521 CMR- 45.11
85		Wall Oven	Floor of wall oven measures 32 ½ inches AFF, requires 30 inches AFF. Oven operable parts measure 55 inches AFF, requires 54 inches maximum	Lower wall oven to provide operable parts within reach range of 48 inches maximum AFF and floor of oven 30 inches maximum AFF.	521 CMR- 45.6.1
86		Sink	Garbage disposal adjacent to knee clearance has not been provided with insulation	Provide pipe insulation around exposed garbage disposal and piping.	4.34.6.5 (8)
87		Water Closet Grab Bar	Water closet has not been provided with rear or side wall grab bar	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface.	4.34.5.2 (3)
88			Bathtub controls have not been installed in the offset location, provided at bathtub centerline	Provide bathtub controls in the offset position	4.34.5.4 (4)
89			Compliant grab bars have not been provided in bathtub	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface and one at 8 to 10 inches above top of bathtub rim.	4.34.5.4 (3)
90		Lavatory	Lavatory piping has not been provided with pipe insulation	Provide pipe insulation around exposed piping.	4.34.5.3 (1)
91		Mirror	Mirror measures > 40 inches AFF, requires 40 inches maximum AFF to bottom of reflecting surface	Lower mirror so bottom of reflective surface is 40 inches maximum AFF.	4.34.5.3(1)
92	Unit 711	Kitchen Outlets	Kitchen outlets measure 47 inches to center of highest operable part, requires 46 inches maximum	Lower highest operable part centerline to 46 inches AFF maximum.	521 CMR- 45.11

Item #	Unit	Location	Issue	Recommendation	Applicable Citation UFAS
93		Wall Oven	Floor of wall oven measures 32 ½ inches AFF, requires 30 inches AFF. Oven operable parts measure 55 inches AFF, requires 54 inches maximum	Lower wall oven to provide operable parts within reach range of 48 inches maximum AFF and floor of oven 30 inches maximum AFF.	521 CMR- 45.6.1
94		Sink	Garbage disposal adjacent to knee clearance has not been provided with insulation	Provide pipe insulation around exposed garbage disposal and piping.	4.34.6.5 (8)
95		Water Closet Grab Bar	Water closet has not been provided with rear or side wall grab bar	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface.	4.34.5.2 (3)
96			Bathtub controls have not been installed in the offset location, provided at bathtub centerline	Provide bathtub controls in the offset position	4.34.5.4 (4)
97			Compliant grab bars have not been provided in bathtub	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface and one at 8 to 10 inches above top of bathtub rim.	4.34.5.4 (3)
98		Lavatory	Lavatory piping has not been provided with pipe insulation	Provide pipe insulation around exposed piping.	4.34.5.3 (1)
99		Mirror	Mirror measures > 40 inches AFF, requires 40 inches maximum AFF to bottom of reflecting surface	Lower mirror so bottom of reflective surface is 40 inches maximum AFF.	4.34.5.3(1)
100	Unit 611	Kitchen Outlets	Kitchen outlets measure 47 inches to center of highest operable part, requires 46 inches maximum	Lower highest operable part centerline to 46 inches AFF maximum.	521 CMR- 45.11
101		Wall Oven	Floor of wall oven measures 32 ½ inches AFF, requires 30 inches AFF. Oven operable parts measure 57 inches AFF, requires 54 inches maximum	Lower wall oven to provide operable parts within reach range of 48 inches maximum AFF and floor of oven 30 inches maximum AFF.	521 CMR- 45.6.1
102		Sink	Garbage disposal adjacent to knee clearance has not been provided with insulation	Provide pipe insulation around exposed garbage disposal and piping.	4.34.6.5 (8)
103		Water Closet Grab Bar	Water closet has not been provided with rear wall grab bar	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface.	4.34.5.2 (3)
104			Bathtub controls have not been installed in the offset location, provided at bathtub centerline	Provide bathtub controls in the offset position	4.34.5.4 (4)
105		Lavatory	Lavatory piping has not been provided with pipe insulation	Provide pipe insulation around exposed piping.	4.34.5.3 (1)
106		Mirror	Mirror measures > 40 inches AFF, requires 40 inches maximum AFF to bottom of reflecting surface	Lower mirror so bottom of reflective surface is 40 inches maximum AFF.	4.34.5.3(1)
107			Medicine cabinet bottom shelf measures 45 ½ inches AFF, requires 44 inches AFF maximum	Lower medicine cabinet so bottom of shelf is 44 inches AFF maximum.	4.34.5.3(3)

Item #	Unit	Location	Issue	Recommendation	Applicable Citation UFAS
108	Unit 511	Kitchen Outlets	Kitchen outlets measure 47 inches to center of highest operable part, requires 46 inches maximum	Lower highest operable part centerline to 46 inches AFF maximum.	521 CMR- 45.11
109		Wall Oven	Floor of wall oven measures 32 ½ inches AFF, requires 30 inches AFF. Oven operable parts measure 57 inches AFF, requires 54 inches maximum	Lower wall oven to provide operable parts within reach range of 48 inches maximum AFF and floor of oven 30 inches maximum AFF.	521 CMR- 45.6.1
110		Sink	Garbage disposal adjacent to knee clearance has not been provided with insulation	Provide pipe insulation around exposed garbage disposal and piping.	4.34.6.5 (8)
111		Water Closet Grab Bar	Water closet has not been provided with rear wall grab bar	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface.	4.34.5.2 (3)
112			Bathtub controls have not been installed in the offset location, provided at bathtub centerline	Provide bathtub controls in the offset position	4.34.5.4 (4)
113			Water closet measures 19 inches to center line, requires 16 to 18 inches to centerline	Install offset flange to provide centerline of water closet 16 to 18 inches from parallel (side) wall.	4.34.5.3 (1)
114		Lavatory	Lavatory piping has not been provided with pipe insulation	Provide pipe insulation around exposed piping.	4.34.5.3 (1)
115		Mirror	Mirror measures > 40 inches AFF, requires 40 inches maximum AFF to bottom of reflecting surface	Lower mirror so bottom of reflective surface is 40 inches maximum AFF.	4.34.5.3(1)
116			Medicine cabinet bottom shelf measures 45 ½ inches AFF, requires 44 inches AFF maximum	Lower medicine cabinet so bottom of shelf is 44 inches AFF maximum.	4.34.5.3(3)
117	Unit 411	Kitchen Outlets	Kitchen outlets measure 47 inches to center of highest operable part, requires 46 inches maximum	Lower highest operable part centerline to 46 inches AFF maximum.	521 CMR- 45.11
118		Wall Oven	Floor of wall oven measures 32 ½ inches AFF, requires 30 inches AFF. Oven operable parts measure 55 inches AFF, requires 54 inches maximum	Lower wall oven to provide operable parts within reach range of 48 inches maximum AFF and floor of oven 30 inches maximum AFF.	521 CMR- 45.6.1
119		Sink	Garbage disposal adjacent to knee clearance has not been provided with insulation	Provide pipe insulation around exposed garbage disposal and piping.	4.34.6.5 (8)
120		Water Closet Grab Bar	Water closet has not been provided with rear or side wall grab bar	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface.	4.34.5.2 (3)
121			Bathtub controls have not been installed in the offset location, provided at bathtub centerline	Provide bathtub controls in the offset position	4.34.5.4 (4)
122			Compliant grab bars have not been provided in bathtub	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface and one at 8 to 10 inches above top of bathtub rim.	4.34.5.4 (4)

Item #	Unit	Location	Issue	Recommendation	Applicable Citation UFAS
123		Lavatory	Lavatory piping has not been provided with pipe insulation	Provide pipe insulation around exposed piping.	4.34.5.3 (1)
124		Mirror	Mirror measures > 40 inches AFF, requires 40 inches maximum AFF to bottom of reflecting surface	Lower mirror so bottom of reflective surface is 40 inches maximum AFF.	4.34.5.3(1)
125			Medicine cabinet bottom shelf measures > 44 inches AFF maximum	Lower medicine cabinet so bottom of shelf is 44 inches AFF maximum.	4.34.5.3(3)
126	Unit 311	Kitchen Outlets	Kitchen outlets measure 47 inches to center of highest operable part, requires 46 inches maximum	Lower highest operable part centerline to 46 inches AFF maximum.	521 CMR- 45.11
127		Wall Oven	Floor of wall oven measures 32 ½ inches AFF, requires 30 inches AFF. Oven operable parts measure 55 inches AFF, requires 54 inches maximum	Lower wall oven to provide operable parts within reach range of 48 inches maximum AFF and floor of oven 30 inches maximum AFF.	521 CMR- 45.6.1
128		Sink	Garbage disposal adjacent to knee clearance has not been provided with insulation	Provide pipe insulation around exposed garbage disposal and piping.	4.34.6.5 (8)
129		Water Closet Grab Bar	Water closet has not been provided with rear or side wall grab bar	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface.	4.34.5.2 (3)
130			Bathtub controls have not been installed in the offset location, provided at bathtub centerline	Provide bathtub controls in the offset position	4.34.5.4 (4)
131			Compliant grab bars have not been provided in bathtub	Provide compliant grab bars 33 to 36 inches AFF maximum to top of grasping surface and one at 8 to 10 inches above top of bathtub rim.	4.34.5.4 (4)
132		Lavatory	Lavatory piping has not been provided with pipe insulation	Provide pipe insulation around exposed piping.	4.34.5.3 (1)

End Compliance Plan