



WHIPPLE-CALLENDER ARCHITECTS

12.20.17

City of Portland
Building Inspections & Permitting
386 Congress St.
Portland, Maine 04101

77 ROBERTS ST.- APARTMENT REHABILITATION- CODE REVIEW SUMMARY FOR ZONING, IEBC, NFPA & FIRE DEPARTMENT CHECKLIST

Project Description:

77 Roberts Street is a two and a half story structure with wood framed walls, floors and roof. The existing interior walls are plaster and lath. The building is 1,500 s.f. per floor where the first floor currently has two single bedroom apartments (one un-recognized) and the second and third floors are two apartments arranged duplex style. We propose combining the ground floor pair of singles to a larger three bedroom apartment. The final product will be an upgraded and zoning compliant three apartment building.

Site:

We are not considering site work as part of this interior renovation.

Portland Zoning- 2009- Relevant sections:

14-250 Dimensional Req.:

R5 zone- permitted use, existing apartment

Existing lot size- .56 ac.

Setback requirements – NO EXPANSION PLANNED

Street frontage Existing to remain

Front setback- Existing to remain

Side setback- Existing to remain

Rear yard- varies, existing to remain

Parking- Existing to remain.

Max. permitted impervious surface –NO ADDITIONAL PAVING PROPOSED

Max. permitted bldg. height - Existing two story height to remain

Paved Parking Area- Existing parking area to remain.

Lighting- Existing exterior lighting to remain.

Trash- Trash is handled municipally.

IEBC- 2009- Relevant sections:

SECTION 504- ALTERATIONS LEVEL 2

504.1 Scope. Level 2 alterations includes the reconfiguration of space, the addition or elimination of any door or window, the reconfiguration or extension of any system or the installation of any additional equipment. WE MEET THIS DEFINITION



WHIPPLE-CALLENDER ARCHITECTS

504.2 Application. Level 2 alterations shall comply with the provisions of Chapter 7 for Level 1 alterations as well as the provisions of Chapter 8. WE WILL COMPLY WITH SECTIONS 7 and 8.

CHAPTER 7- ALTERATIONS LEVEL 1

Section 701- General

701.2 Conformance. An existing building or portion thereof shall not be altered such that the building becomes less safe than its existing condition. WE WILL BE MAINTAINING THE EXISTING SAFETY LEVEL WITH THE CREATION OF DEDICATED EGRESS, AN IMPROVED FIRE ALARM SYSTEM & IMPROVED SEPARATIONS.

Section 702- Building Elements and Materials see Chapter 8

Section 703 -Fire Protection-

703.1 General- Alterations shall be done in a manner that maintains the level of fire protection provided. WE ARE IMPROVING THE EXISTING LEVEL OF FIRE PROTECTION.

Section 704 Means of Egress-

704.1 General- Alterations shall be done in a manner that maintains the level of egress provided. MAINTAINED WITH PRIMARY DEDICATED EGRESS FOR EACH APARTMENT AND COMPLIANT SECONDARY EGRESS WINDOWS AT ALL LIVING AND BEDROOM SPACES.

Section 705 Accessibility- WE ARE REHABBING AN EXISTING 3 UNIT APARTMENT AND DO NOT PLAN TO MEET ACCESSIBILITY STANDARDS.

Section 706 Re-roofing- WE DO NOT PLAN TO RE-ROOF.

Section 707 Structural- WE DO NOT PLAN ON INSTALLATION OR RENOVATION OF THE EXISTING STRUCTURAL ELEMENTS.

Section 708- Energy Conservation- NEW CONSTRUCTION IS NOT INVOLVED, SO EXISTING INSULATION WILL BE MAINTAINED. WE DO NOT HAVE TO MEET ENERGY REQUIREMENTS. EXISTING WALLS WILL BE VERIFIED AS INSULATED AND WE PLAN ON IMPROVING THE CRAWLSPACE AND ATTIC INSULATION APPLICATIONS WHERE POSSIBLE.

CHAPTER 8- ALTERATIONS LEVEL 2

Section 801-General.

801.3 Compliance. All new construction elements, components, systems, and spaces shall comply with the requirements of the IBC- RENOVATION OF EXISTING- NO NEW SPACES. EXCEPTIONS FOR WINDOWS, ELECTRICAL SYSTEMS, DEAD END CORRIDOR AND MIN. CEILING HEIGHT NOT USED.

Section 802 Special use and occupancy- N.A.

Section 803 Building elements and materials- WE HAVE NO UNPROTECTED VERTICAL OPENINGS.

803.2.3 Supplemental stairway enclosure requirements- THE PAIR OF EXISTING EGRESS STAIRS ARE SEPARATED AND SMOKE -TIGHT WITH EXISTING PLASTER AND LATH CONSTRUCTION. ANY NEW PARTITIONS WILL UTILIZE 5/8" TYPE "X" GWB AS ITS FINISH.

Section 804- Fire protection-

804.4 Fire alarm and detection. An approved Fire Alarm system shall be installed in accordance with sections 804.4.1 thru 804.4.3. WE WILL INSTALL A PERMITTED SYSTEM WITH SMOKE DETECTORS IN LIVING



WHIPPLE-CALLENDER ARCHITECTS

ROOMS, BEDROOMS AND SUBDIVIDED BASEMENT STORAGE SPACES. CO2 DETECTORS WILL BE INSTALLED IN HALLWAYS OUTSIDE BEDROOMS IN EA. APARTMENT.

804.4.1.5 Group R-2. A fire alarm system shall be installed in use group R-2 occupancies as required by the International fire Code for existing R-2 occupancies. **WE ARE INSTALLING A NEW SMOKE DETECTOR AND CO2 ALARM SYSTEM**

Section 805 Means of egress- **MAINTAINED WITH PRIMARY DEDICATED EGRESS FOR EACH APARTMENT AND COMPLIANT SECONDARY EGRESS WINDOWS AT ALL LIVING AND BEDROOM SPACES.**

Section 806 Accessibility- **N.A.-EXISTING THREE UNIT APARTMENT**

Section 807 Structural- **WE DO NOT PLAN ON INSTALLATION OR RENOVATION OF THE EXISTING STRUCTURAL ELEMENTS, NOR REDUCE THE STRUCTURAL INTEGRITY OR CAPACITY.**

Section 808 Electrical- **WE DO NOT PLAN ON INSTALLATION OR RENOVATION OF THE EXISTING STRUCTURAL ELEMENTS, NOR REDUCE THEIR STRUCTURAL INTEGRITY OR CAPACITY.**

808.1 New installation. All newly installed electrical equipment and wiring related to work done in any work area shall comply with the requirements of NFPA 70. **WE WILL COMPLY IN WORK AREAS**

Section 809 Mechanical-

809.2 Altered existing systems. **N.A.**

Section 810 Plumbing-

810.1 Minimum fixtures. **N.A.**

Section 811- Energy Conservation- **NEW CONSTRUCTION IS NOT INVOLVED, SO EXISTING INSULATION WILL BE MAINTAINED. WE DO NOT HAVE TO MEET ENERGY REQUIREMENTS. EXISTING WALLS WILL BE VERIFIED AS INSULATED AND WE PLAN ON IMPROVING THE CRAWLSPACE AND ATTIC INSULATION APPLICATIONS WHERE POSSIBLE.**

Fire Department checklist- please refer to plan for travel distance, F.E. locations, notification, emergency lighting, exit signs, etc.

EXISTING KNOX BOX AT ENTRY SHALL REMAIN

1. Owner- **Mr Justin Rick**
2. Architect- **Whipple Callender Architects, PO Box 1276 Portland, Maine 04101 (775-2696)**
3. Proposed use- **Existing Apartment**
4. Square footage of structure- **4,900 gross (2 ½ stories)**
5. Elevation of all structures- **existing 9' floor to floor +/-**
6. Proposed fire protection of all structures- **existing finishes and proposed one hr. separation improvements**
7. Hydrant Locations- **Falmouth St.**
8. Water main sizes and locations- **not known**
9. Access to any Fire Department Connections-**NA**
10. Access to all structures (2 sides Min.)- **Clear access to 3 sides**
11. A code summary shall be included referencing NFPA and all fire department technical standards-



WHIPPLE-CALLENDER ARCHITECTS

NFPA 101-2009 – Chapter 31: Existing Apartment Buildings (In this case, two and a half stories, three total units).

31.1 General Requirements

31.1.1.1 The requirements of this chapter shall apply to existing buildings or portions thereof currently occupied as apartment occupancies. In addition, the building shall meet the requirements of one of the following options :

1. Option Two, Buildings provided with a complete approved automatic fire detection and notification system in accordance with 31.3.4.4. WE HAVE SELECTED OPTION #2

31.2 Means of Egress Components

31.2.1.2 Means of escape within a dwelling unit shall comply with the provisions of Section 24.2 for one and two family dwellings. PRIMARY DEDICATED EGRESS WITH SECONDARY EGRESS WINDOWS AT ALL APARTMENTS

31.2.2.2 Doors

31.2.2.2.1 No door in any means of egress shall be locked against egress when the building is occupied. EGRESS DOORS WILL ALWAYS BE OPERABLE FROM INSIDE THE APARTMENT.

31.2.2.3 Stairs

31.2.2.3.1 Stairs complying with 7.2.2 shall be permitted. 7.2.2 permits existing stairs with width of 36" and an 8" riser with 9" min. tread. EXISTING EGRESS STAIRS COMPLY w/ REQ.- SEE DRAWINGS

31.2.4.1 Every dwelling unit shall have access to not less than 2 separate exits remotely located from each other as required in 7.5.1 DEDICATED EGRESS WITH SECONDARY EGRESS WILL BE PROVIDED

31.2.5 Arrangement of Means of Egress

31.2.5.1 Access to all required means of egress shall be in accordance with Section 7.5. WE COMPLY

7.3 Capacity of Means of Egress

7.3.4.2.1 In existing buildings, the width of exit access shall be permitted to be not less than 28" EXIT ACCESS WILL TYPICALLY BE IN EXCESS OF 28".

7.5 Arrangement of Means of Egress

7.5.1.3.2 Where 2 exits, exit accesses, or exit discharges are required, they shall be located at a distance from one another not less than ½ the length of the maximum overall diagonal dimension of the area to be served, measured in a straight line between the nearest edge of the exits, exit accesses or exit discharges unless otherwise provided in 7.5.1.2.2 through 7.5.1.3.5. N.A.- PRIMARY STAIR AND SECONDARY EGRESS WINDOW

31.2.5.3.1 No common path of travel shall exceed 35' in buildings not protected throughout by an approved, supervised automatic sprinkler system installed in accordance with 31.3.5. Travel within a dwelling unit shall not be included when calculating common path of travel. N.A. DEDICATED EGRESS

31.2.9 Emergency lights shall be provided in buildings 4 or more stories in height or with more than 12 dwelling units, unless each unit has a direct exit to the outside of the building at grade level- WE ARE NOT REQUIRED TO HAVE EMERGENCY LIGHTS AS WE ARE 2 STORIES, LESS THAN 12 DWELLING UNITS.



WHIPPLE-CALLENDER ARCHITECTS

31.3.2.1.1 Boiler rooms, Laundry and storage areas require 1 hr. rated separation.- WE WILL PROVIDE 1 HR. SEPARATION AT BOILER ROOM, LAUNDRY AND STORAGE AREAS.

31.3.4.1 Detection, Alarm and Communication Systems

31.3.4.1.2 A fire alarm system shall not be required where each dwelling unit is separated from other contiguous units by fire barriers having a minimum ½ hour fire resistance rating and where each dwelling unit has either its own independent exit or its own independent stairway or ramp discharging at the finished ground level.

31.3.4.4.2 Automatic smoke detection shall be installed as follows:

- 1. Smoke detectors shall be installed in all common areas and work spaces outside the living unit such as exit stairs, egress corridors, lobbies, storage rooms, equipment rooms, and other tenantless spaces in environments that are suitable for proper smoke detector operation.**
- 2. Heat detectors shall be located within each room of the living unit.
WE PLAN ON INSTALLING HARD WIRED SMOKE DETECTORS AND CO2 DETECTORS AS REQUIRED.**

31.3.4.5 Smoke Alarms

31.3.4.5.2 Smoke alarms shall be required outside every bedroom per 9.6.2.10 and 31.3.5.4 . SMOKE DETECTORS WILL BE LOCATED OUTSIDE BEDROOMS AND ALL LEVELS INCLUDING THE BASEMENT

31.3.2.1.1 Hazardous Area Protection

Boiler and fuel fired heating rooms serving more than a single dwelling unit, provide 1 hour separation or sprinklers. NEW BOILERS WILL BE LOCATED IN ONE HR. RATED BASEMENT SPACES.

NFPA 101-2009 – Chapter 43: Building Rehabilitation

43.1 General Requirements

43.10.4.8 One Hour Fire Rated Assemblies- Existing walls and ceilings shall be exempt from the minimum 1 hr. fire resistance-rated construction requirements of other sections of this code where the existing wall and ceiling are of wood lath and plaster construction in good condition. EXISTING PLASTER AND WOOD LATH TO REMAIN WHERE IN GOOD CONDITION. 5/8" TYPE "X" SHEETROCK WILL BE APPLIED AT NEW WORK & PATCHES. PENETRATIONS FOR UTILITIES AND SERVICES WILL BE COMPLETELY SEALED WITH 1 HR. RATED SEALANT TO MAINTAIN THE INTEGRITY OF THE BARRIERS INDICATED IN THE DRAWINGS.