

Code Review - NFPA 101 (Life Safety) 2009

Chapter 6 - Classification of Occupancy

Section 6.1.1.1 - This tenant space is classified as "B - Business" and shall meet requirements of Chapter 39 Existing Business Occupancy.
Section 6.1.1.4.1 - This occupancy shall be classified as a "Single Occupancy".
Table 6.1.1.4.1 - 2-Hour fire separation is required between Business (B) Occupancy and adjacent tenants on the first floor. This is reduced to a 1-Hour fire separation because the building is sprinklered.

Chapter 7 - Means of Egress

Section 7.1.3.2.1(1) - Exits connecting three stories or less shall be 1-hour fire rated.
Section 7.1.3.2.1(4) - All doors connecting to exit enclosures shall have automatic door closers.
Section 7.1.7 - Changes in level in means of egress over 21" shall fully meet new stair requirements. Existing change of level is 25".
Section 7.1.8 - Guards are not required at existing change of level because it is less than 30".
Section 7.1.10.2.1 - No furnishings or other objects shall obstruct exits or exit access.
Section 7.2.1 - Doors shall comply with this section (including self closing devices, section 7.2.1.8).
Section 7.2.2.2.1(a) - Minimum stair width is 3'-6" inches, max. riser is 7", min. riser height is 4", min. tread is 11 inches. New stair within egress access pathway shall meet these criteria.
Section 7.2.2.2.4.1.1 - New stairs shall have handrails on both sides.
Section 7.2.2.4.4 - New stairs shall meet all the criteria listed for handrail details.
Table 7.3.1.2 - Occupant Load: see Egress Plans.
 Assembly Spaces (Living Rooms and Conference Rooms): 1 person per 15 square feet
 Business Use (Open Office Spaces): 1 person per 100 square feet

Chapter 8 - Features of Fire Protection

Table 8.2.1.2 - Construction Type shall be Type III (200)
Section 8.2.2.3 - Fire and smoke barriers shall be continuous from outside wall to outside wall or from fire barrier to fire barrier, including continuity through all concealed spaces, such as those found above ceilings and other interstitial spaces.
Section 8.3.3.1 - Door openings to exit stairs shall be protected by approved, listed, labeled fire door assemblies and fire window assemblies and their accompanying hardware, including all frames, closing devices, anchorage, and sills in accordance with NFPA 80 Standard for Fire Doors and Fire Windows.
Section 8.3.4.2 - Fire door assemblies at elevator shaft shall be 90 minute.
Section 8.3.5.1 - Penetrations in fire rated partitions shall be fire-stopped according to ASTM E 814 Standard Test Method for Fire Tests of Through Penetration Fire Stops or UL 1479, Standard for Fire Tests of Through-Penetration Firestops.

Chapter 39 - Existing Business Occupancies

Section 39.1.6 - No specified Minimum Construction Requirements.
Section 39.1.7.1 - Occupant Load is set by Table 7.3.1.2 - Business Occupancy shall be 100 SF per occupant. Less Concentrated Assembly Use, without fixed seating shall be 15 net SF per occupant.
Section 39.2.2.4 - Exterior doors with key operated locks on the egress side complying with 7.2.1.5.4 are permitted. If used, a readily visible sign with 1" lettering shall be placed reading: "THIS DOOR TO REMAIN UNLOCKED WHEN THE BUILDING IS OCCUPIED". A key must be immediately available to any occupant inside the building when it is locked.
Section 39.2.2 - The clear width of any passageway serving an occupant load greater than 50 shall not be less than 44".
Section 39.2.4.1 - Two separate exits are required if occupant load is 100 or greater. O.L. is 189, and have three existing means.
Section 39.2.5.2 - Dead end corridors shall not exceed 50 ft.
Section 39.2.5.3 - Common path of travel shall not exceed 100 ft. in a sprinklered building.
Section 39.2.6.1 - Travel distance to an exit shall not exceed 300 ft. in buildings protected by and approved, supervised auto sprinkler system.
Section 39.2.8 - Means of Egress shall be illuminated in accordance with Section 7.8.
Section 39.2.9 - Emergency Lighting shall be provided in accordance with Section 7.9. Existing emergency lights are placed appropriately.
Section 39.2.10 - Means of egress signage shall be provided in accordance with Section 7.10. Existing illuminated exit signs are placed appropriately.
Section 39.3.5 - A portable fire extinguisher is required next to each exit door in accordance with 9.7.4.1. Two wall mounted fire extinguishers will need to be added.

Code Review - IEBC 2009

Chapter 3 - Prescriptive Compliance Method

Section 302.1 - Alterations must be no less conforming to IBC than existing. Occupancy will Business use.
Section 302.2 - Structural upgrades shall comply with requirements for new construction.
Section 303.6 - Means of egress does not need to meet Section 1005.1 of the IBC. The components of the means of egress shall be considered complying in any alteration, if in the opinion of the code official, they do not constitute a distinct hazard to life.
Section 308.6 - Alterations require compliance with Chapter 11 and IBC accessibility requirements where technically feasible.
Section 310.4 - Change of use may trigger accessibility upgrades. The small, two-story building does not have an elevator and the proposed scope of work is on the second floor.

Chapter 4 - Classification of Work

Section 401.3 - Occupancy and use as per IBC Chapter 3 shall be considered Group B, Business.
Section 404.1 - Alteration Level 2 - Reconfiguration of space and systems. Work area does not exceed 50% aggregate area of the building, therefore does not trigger Level 3. Level 2 needs to meet requirements of Chapters 6 and 7.

Chapter 6 - Alterations - Level 1

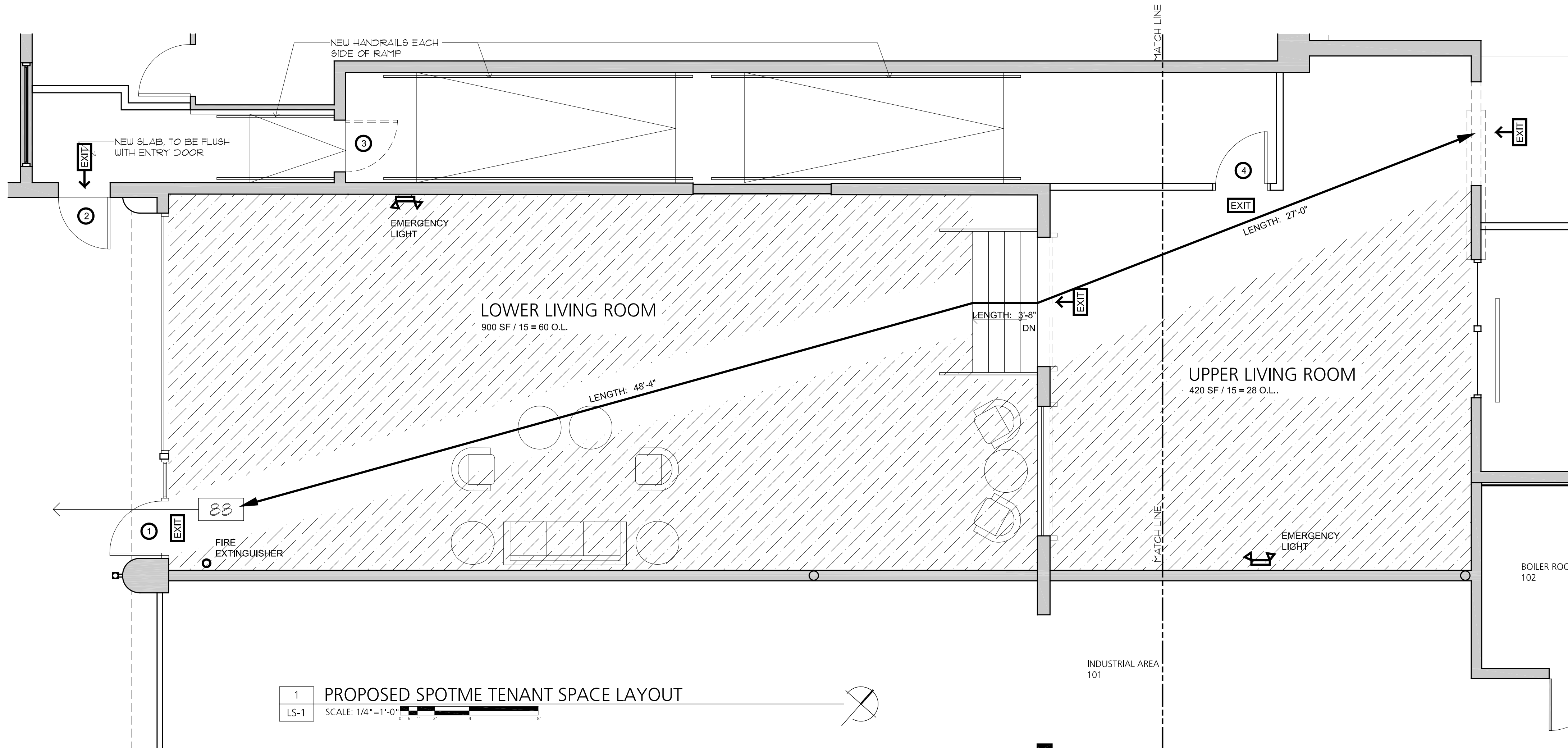
Section 603.1 - Fire Protection - Alterations shall be done in a manner that maintains the level of fire protection provided.
Section 604.1 - Means of Egress - Repairs shall be done in a manner that maintains the level of protection provided for the means of egress.
Section 605.1 - Accessibility - ADA upgrades shall be made where "technically feasible".
Section 605.1.9 - Accessible toilet rooms are required.
Section 605.1.10 - Uni-sex shower rooms are allowable.
Section 605.1.11 - Thresholds and building entries shall be ADA compliant interior thresholds are allowed to be 3/4" in height with bevelled edges.
Section 605.2.1 - Toilet rooms shall be on an accessible route from primary function if cost of providing the route is less than 20 percent of the cost of the alteration affecting the area of primary function (Business Occupancy).
Section 606.2 - Structural upgrades shall conform to the load requirements of the International Building Code.

Chapter 7 - Alterations - Level 2

Section 701.3 - New construction elements, components, systems and spaces shall comply with the requirements of the IBC with the exception of windows, electrical to meet Section 708, dead-end corridors to meet Section 705.6 and min. ceiling height shall be 7'-0".
Section 704.2.4 - NFPA 13 automatic sprinkler system is required in Group B because of occupant load greater than 30.
Section 704.4 - Fire alarm and detection systems shall be installed in accordance with NFPA 72.
Section 705.1 - Means of Egress requirements only required for work areas shared by more than one tenant.
Section 705.4.1.1 - Two means of egress are required because occupant load is greater than 50 and travel distance exceeds 75 ft.
Section 705.4.3 - Doors to exit stairs must be self-closing by listed closing devices.
Section 705.4.4 - Panic Hardware is not required at exit access because not Assembly occupancy.
Section 705.6.2 - Dead-end corridors shall not exceed 50 feet in Business Occupancies.
Section 705.8 - Exit signs are required within the work area as per the requirements of the IBC. Additional illuminated signs will need be needed.
Section 708.1 - Electrical equipment and wiring in newly installed partitions and ceilings shall comply with all applicable requirements of NFPA 70.
Section 709.1 - All reconfigured spaces within the work area and intended for occupancy shall be provided with natural or mechanical ventilation in accordance with the International Mechanical Code.
Section 709.1 - All reconfigured spaces within the work area and intended for occupancy shall be provided with natural or mechanical ventilation in accordance with the International Mechanical Code
Section 7.11.1 - Level 2 alterations to existing buildings are permitted without requiring the entire building comply with the International Energy Conservation Code. Those portions within the work area shall conform to the IECC as they relate to new construction.

GENERAL NOTES:

1. THIS PORTION OF THE BUILDING COMPLEX IS ONE STORY, SLAB ON GRADE.
2. PROPOSED WORK AREA IS SECOND FLOOR (NOT OWNER OCCUPIED BACK-OF-HOUSE SPACE)
3. EXISTING FLOOR PLATE GROSS SQUARE FOOTAGE IS ??? SF
4. TENANT SQUARE FOOTAGE IS 7,625 SF
5. EXISTING BUILDING HAS A SUPERVISED AUTOMATIC SPRINKLER SYSTEM - VERIFY THAT SYSTEM MEETS NFPA 13 STANDARD FOR INSTALLATION OF SPRINKLE
6. EXISTING BUILDING HAS A FIRE ALARM SYSTEM - VERIFY CONFORMANCE WITH NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE.
7. EXISTING BUILDING HAS A EMERGENCY LIGHTS - VERIFY CONFORMANCE WITH NFPA 110 STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS.



1 PROPOSED SPOTME TENANT SPACE LAYOUT
 LS-1 SCALE: 1/4"=1'-0"

NOTE:

IBC 2009
 NFPA 101 2009

DRAWING LEGEND

SYMBOL	DESCRIPTION
---	1-HOUR RATED SEPARATION
60	OPENING PROTECTIVE RATING IN MINUTES, TYPICAL
22	NUMBER OF OCCUPANT EGRESS PER OPENING
♿	BARRIER-FREE LOCATION, CLEAR FLOOR AREA SHOWN WITH DASHED LINE OR CIRCLE

OCCUPANCY LEGEND	LOCATION	OCCUPANT LOAD PER IBC 2009
[Hatched Box]	OFFICE	1 OCCUPANT / 100 SF

OCCUPANT LOAD BUILDING TOTAL

FLOOR	GROSS AREA	OCCUPANT LOAD
ENTRY LEVEL OCCUPANCY	1,650 SF	11 OCCUPANTS

BARBA+WHEELOCK
 ARCHITECTURE + SUSTAINABILITY PRESERVATION

500 CONGRESS STREET
 PORTLAND, MAINE 04101
 207.772.2722
 WWW.BARBAWHEELOCK.COM

SpotMe

935 W CHESTNUT STREET, SUITE 650
 CHICAGO, IL 60642

PARTIAL LIFE SAFETY PLAN

ISSUED FOR/REVISION:
 PERMITTING
 DRAWN BY:
 B+W
 Copyright © 2016 Barba + Wheelock

SHEET SIZE:
 22" x 34"
 DATE:
 08/26/2016

WASHINGTON STREET
 PORTLAND, MAINE

LS-1