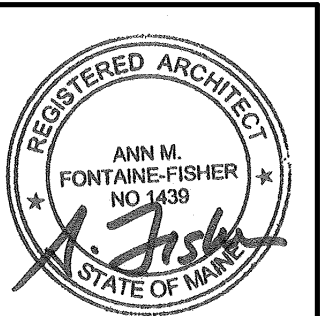


No.	Date	Description

Revision Schedule



JOB NO.
14054

DRWN, CHK
Checker

SCALE:
1/8" = 1'-0"

ISSUE
PERMIT SET
03/18/16

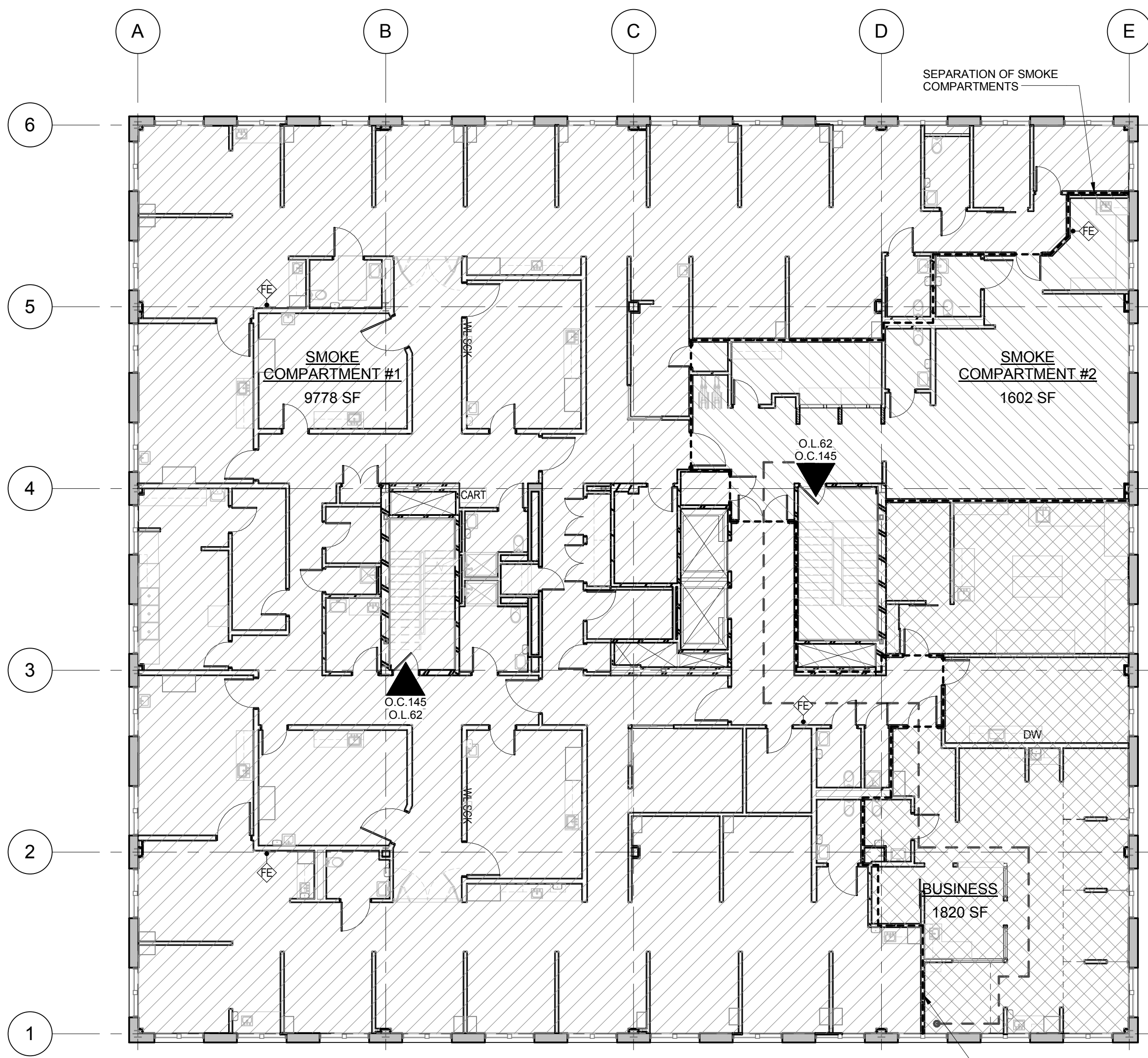
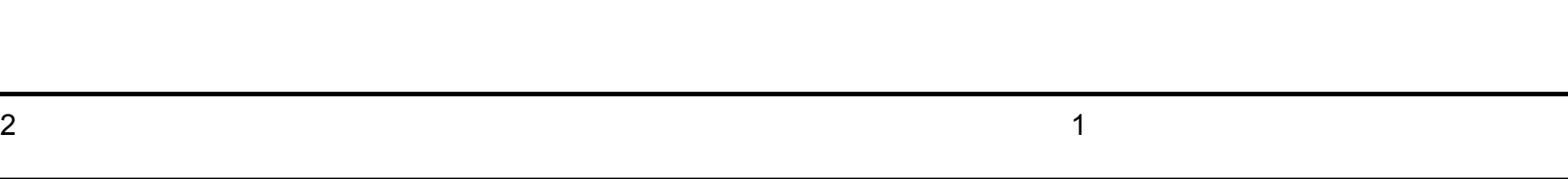
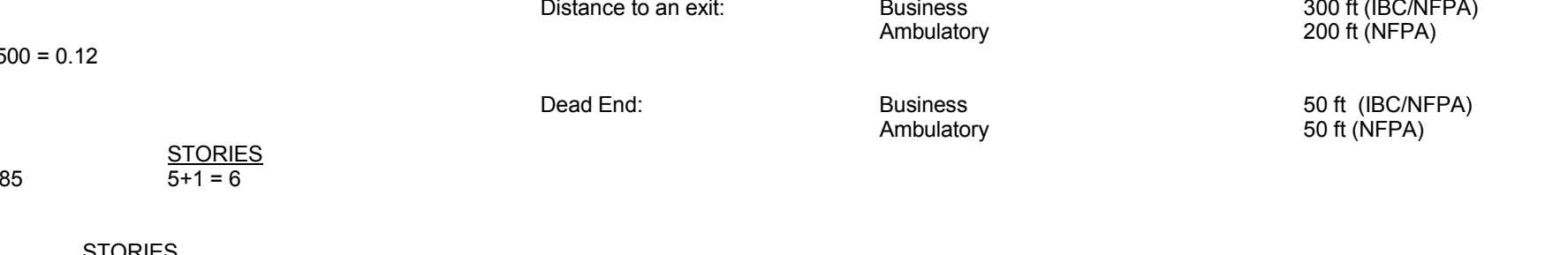
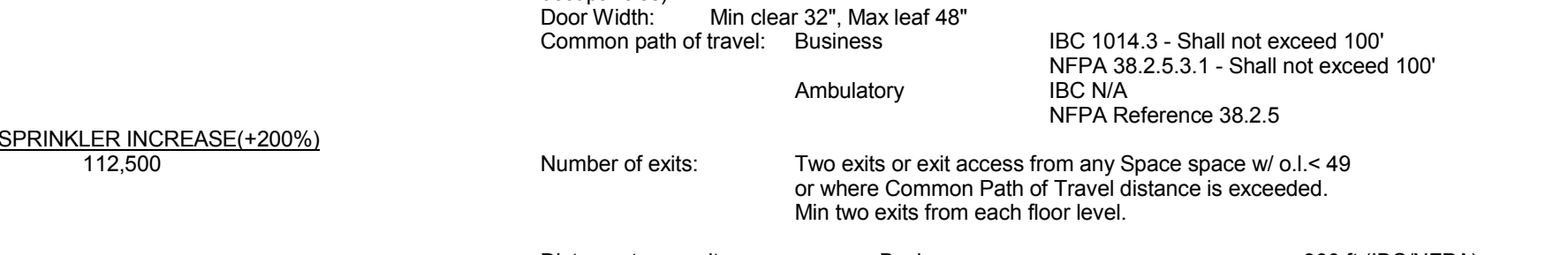
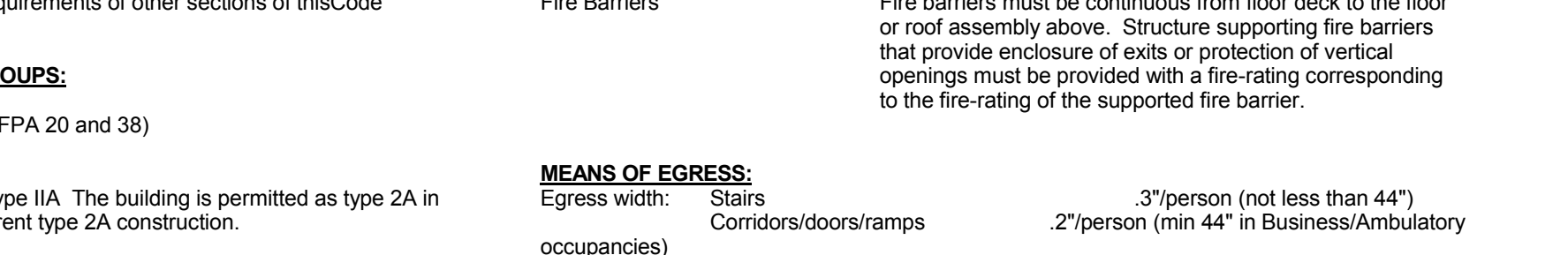
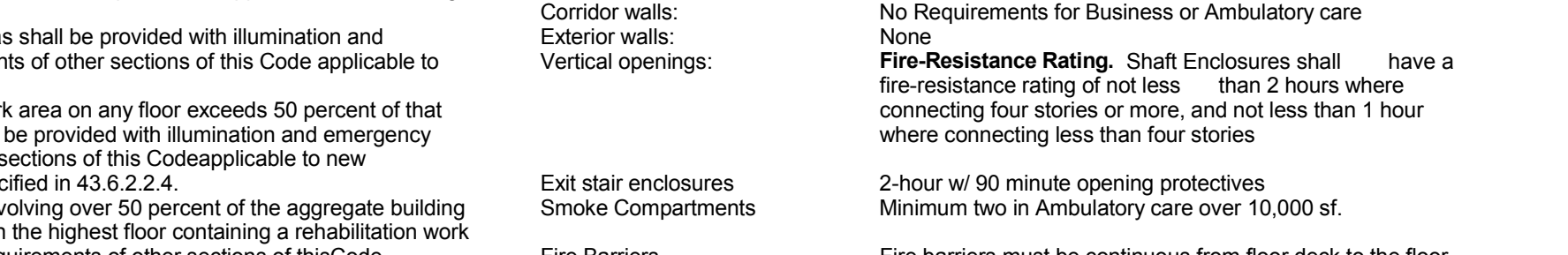
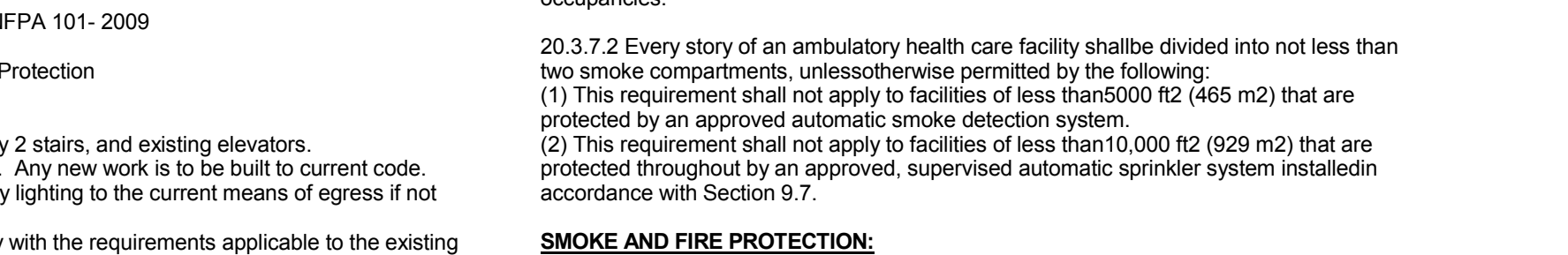
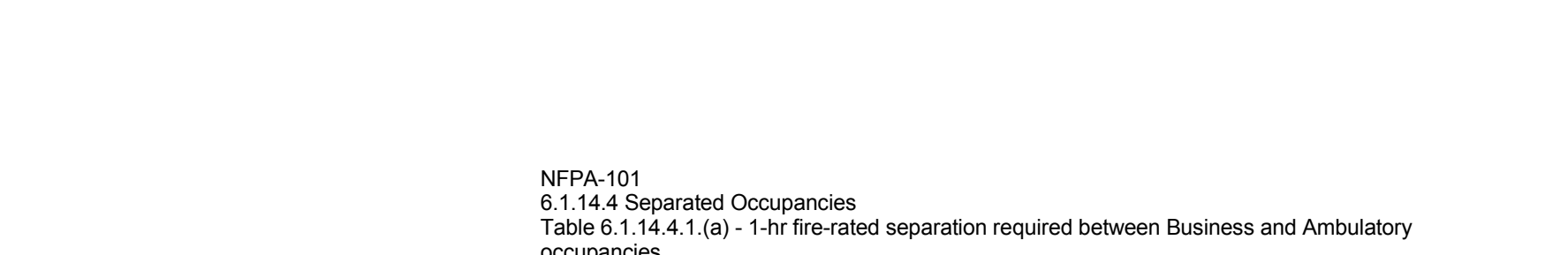
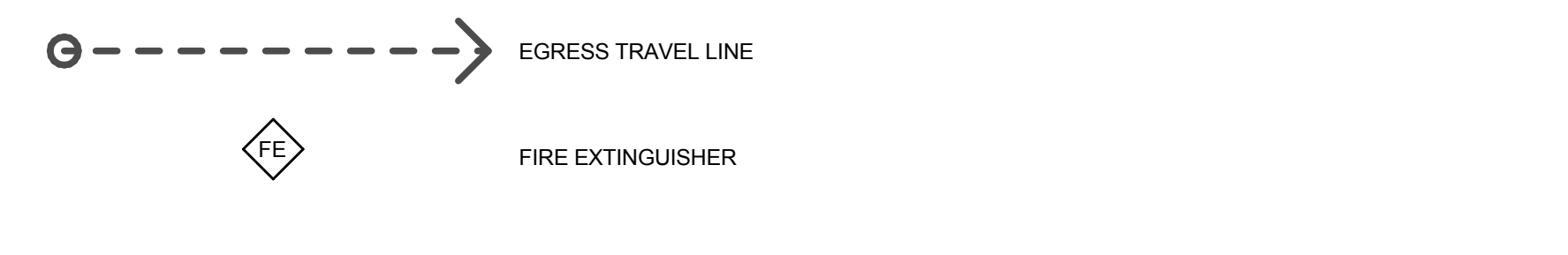
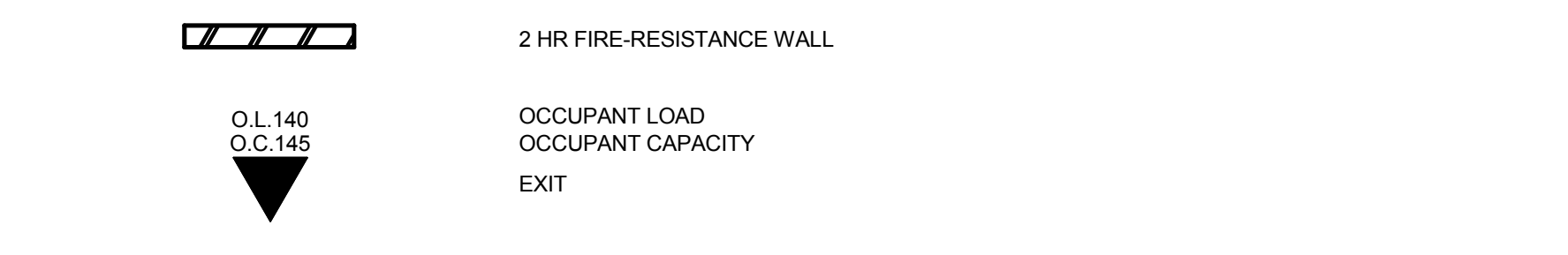
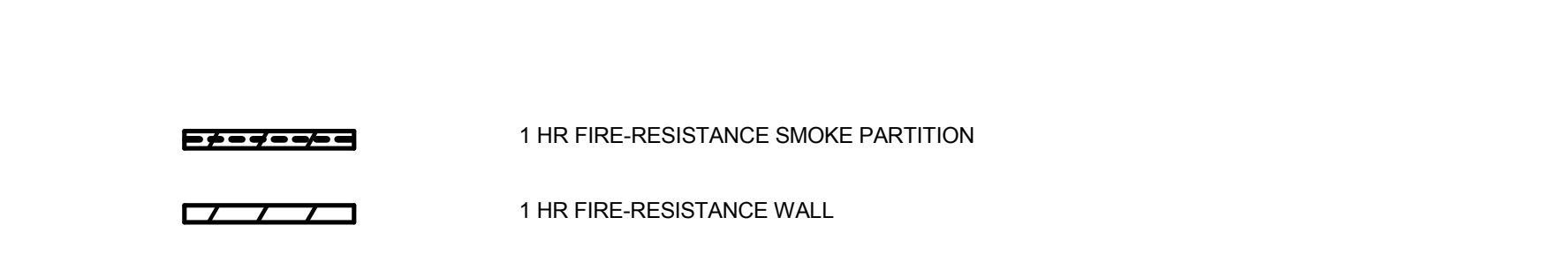
TITLE
LIFE SAFETY
PLANS

SHEET

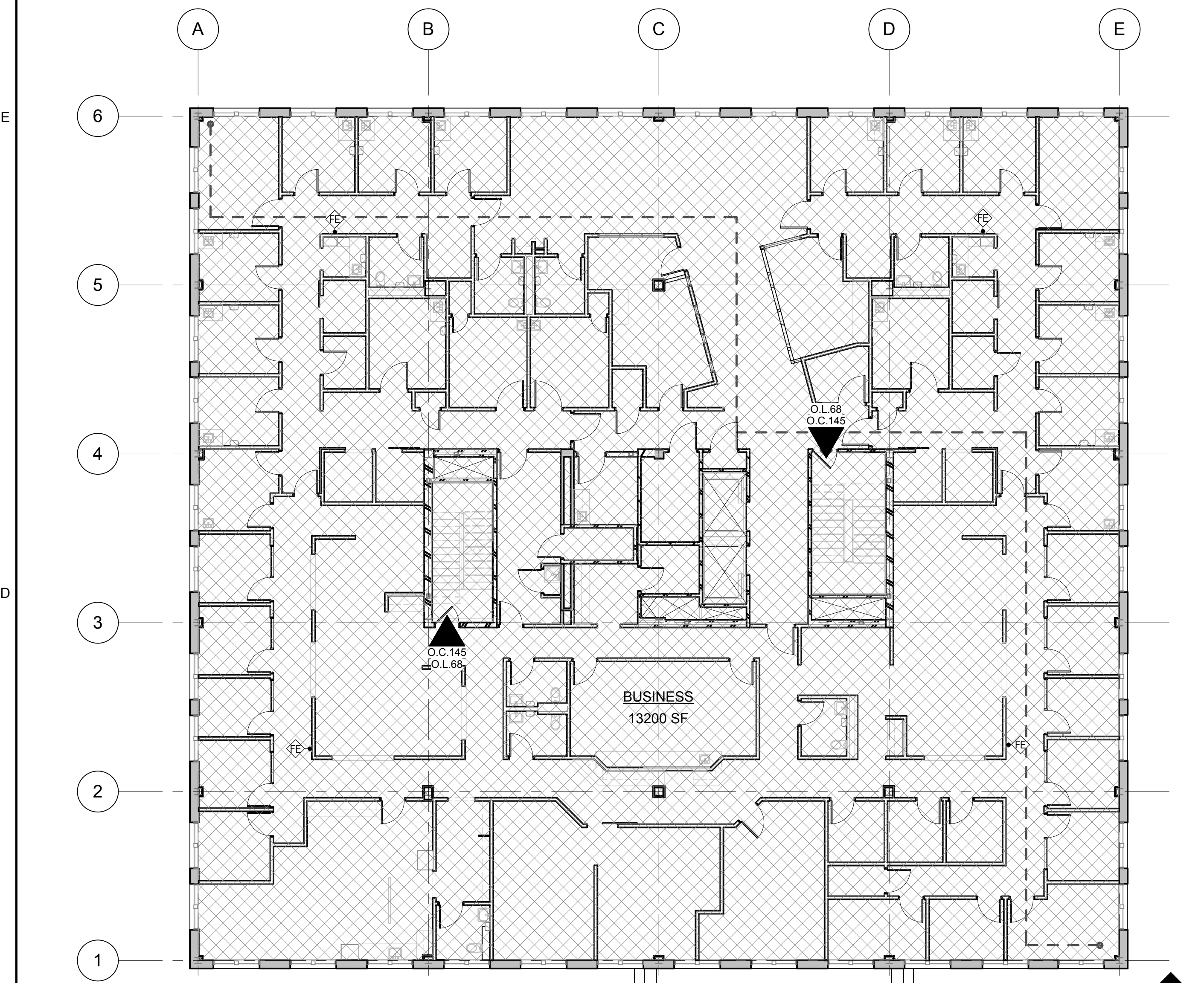
A002

OCCUPANT LOADS						
AREA OCCUPANCY	AREA	OCCUPANT LOAD	OCCUPANTS	EGRESS WIDTH REQUIRED FROM LEVEL	EGRESS PROVIDED FROM LEVEL	STAIR WIDTH REQUIRED FROM LEVEL
LEVEL 3 BUSINESS	13200 SF	100 SF	132	26.5	69	39.7
LEVEL 3.1 BUSINESS	13200 SF	100 SF	132	26.5	69	39.7
LEVEL 4 AMBULATORY CARE AREA 1	9778 SF	100 SF	98	19.7	69	29.5
LEVEL 4 AMBULATORY CARE AREA 2	1602 SF	100 SF	17	3.3	69	5.0
LEVEL 4 BUSINESS	1820 SF	100 SF	19	3.7	0	5.6
LEVEL 4.3 BUSINESS	13200 SF	100 SF	133	26.7	0	40.0

Egress-Travel Path Schedule	
Travel Path ID	Travel Distance
1	120' - 5' 15/16"
2	123' - 4' 1/32"
3	119' - 7' 3/32"



LEVEL 4 LIFE SAFETY PLAN



LEVEL 3 LIFE SAFETY PLAN



LEVEL 1 LIFE SAFETY PLAN - LEVEL OF EXIT DISCHARGE

CODES
 Maine Uniform Building Code - MUBC
 Maine Uniform Energy Code - MUEC
 International Building Code - IBC - 2009
 National Fire Protection Association - NFPA 1 and NFPA 101-2009
 Uniform Plumbing Code - UPC 2009
 Portland City Code, Chapter 10, Fire Prevention and Protection

NARRATIVE:
 The existing building consists of four stories served by 2 stairs, and existing elevators. The building is defined as a reconstruction per NFPA. Any new work is to be built to current code. We will be required to add illumination and emergency lighting to the current means of egress if not provided.

43.6.2.1. General. The means of egress shall comply with the requirements applicable to the existing occupancy as modified by 43.6.2.

43.6.2.2.1 Means of egress in rehabilitation work areas shall be provided with illumination and emergency lighting in accordance with the requirements of other sections of this Code applicable to new construction for the occupancy.

43.6.2.2.2 Where the reconstruction rehabilitation work area on any floor exceeds 50 percent of that floor area, means of egress throughout the floor shall be provided with illumination and emergency lighting in accordance with the requirements of other sections of this Code applicable to new construction for the occupancy, unless otherwise specified in 43.6.2.2.4.

43.6.4.1 In a building with rehabilitation work areas involving over 50 percent of the aggregate building area, automatic sprinkler systems shall be provided on the highest floor containing a rehabilitation work area and on all floors below in accordance with the requirements of other sections of this Code applicable to new construction for the occupancy.

OCCUPANCY CLASSIFICATIONS/OCCUPANCY GROUPS:
 Level 3 - Business (IBC 304)
 Level 4 - Business and Ambulatory Care (IBC 304, NFPA 20 and 38)

CONSTRUCTION TYPE:
 Existing Construction - NFPA Type II (1.1.1), IBC Type IIA. The building is permitted as type 2A in accordance with BOCA 1996. This would exceed current type 2A construction.

FIRE PROTECTION SYSTEMS:
 Existing NFPA-13

ALLOWABLE AREA PER FLOOR - BUILDING 3:
 IBC 503
 TYPE OCCUPANCY ALLOWABLE AREA SPRINKLER (INCREASE+200%)
 IIA BUSINESS 37,500 112,500

ACTUAL OCCUPANCY AREAS - BUILDING 3:
 EACH LEVEL - BUSINESS: 13,500 SF

AREA RATIOS:
 BASED ON BUSINESS OCCUPANCY - 13,500/112,500 = 0.12

ALLOWABLE HEIGHT:
 IBC 503
 TYPE OCCUPANCY FEET STORIES
 IIA BUSINESS 65+20 = 85 5+1 = 6

NFPA-101
 II (111) AMBULATORY N/A
 II (111) BUSINESS N/A
 SEPARATION OF OCCUPANCIES:
 IBC 508.4, Table 508.4
 No separation required for Business Occupancy
 IBC 422
 Smoke barriers. Smoke Barriers shall be provided to subdivide every ambulatory care facility greater than 10,000 sf. into a minimum of 2 smoke compartments per story. The travel distance from any point in a smoke compartment to a smoke barrier door shall not exceed 200 feet. The smoke barriers shall be installed in accordance with 710

NFPA-101
 6.1.14.4 Separated Occupancies
 Table 6.1.14.4.1 (a) - 1-hr fire-rated separation required between Business and Ambulatory occupancies.

20.3.7.2 Every story of an ambulatory health care facility shall be divided into not less than two smoke compartments, unless otherwise permitted by the following:
 (1) This requirement shall not apply to facilities of less than 5000 ft² (465 m²) that are protected by an approved automatic smoke detection system.
 (2) This requirement shall not apply to facilities of less than 10,000 ft² (929 m²) that are protected throughout by an approved, supervised automatic sprinkler system installed in accordance with Section 8.7.

SMOKE AND FIRE PROTECTION:
 Corridor walls: None
 Exterior walls: Fire-Resistance Rating. Shaft Enclosures shall have a fire-resistance rating of not less than 2 hours where connecting four stories or more, and not less than 1 hour where connecting less than four stories.
 Vertical openings: 2-hour w/ 90 minute opening protectives.
 Exit stair enclosures: Minimum two in Ambulatory care over 10,000 sf.
 Smoke Compartments: Fire Barriers must be continuous from floor deck to the floor or roof assembly above. Structure supporting fire barriers that provide enclosure of exits or protection of vertical openings must be provided with a fire-rating corresponding to the fire-rating of the supported fire barrier.

MEANS OF EGRESS:
 Egress width: Stairs 3"/person (not less than 44")
 Corridors/doors/ramps 2"/person (min 44" in Business/Ambulatory occupancies)
 Door Width: Min clear 32" Max leaf 48"
 Common path of travel: Business IBC 1014.3 - Shall not exceed 100'
 IBC NA NFPA 38.2.5.3.1 - Shall not exceed 100'
 Ambulatory IBC NA NFPA Reference 38.2.5

Number of exits: Two exits or exit access from any Space space w/ o.l. < 49 or where Common Path of Travel distance is exceeded. Min two exits from each floor level.

Distance to an exit: Business 300 ft (IBC/NFPA)
 Ambulatory 200 ft (NFPA)

Dead End: Business 50 ft (IBC/NFPA)
 Ambulatory 50 ft (NFPA)

