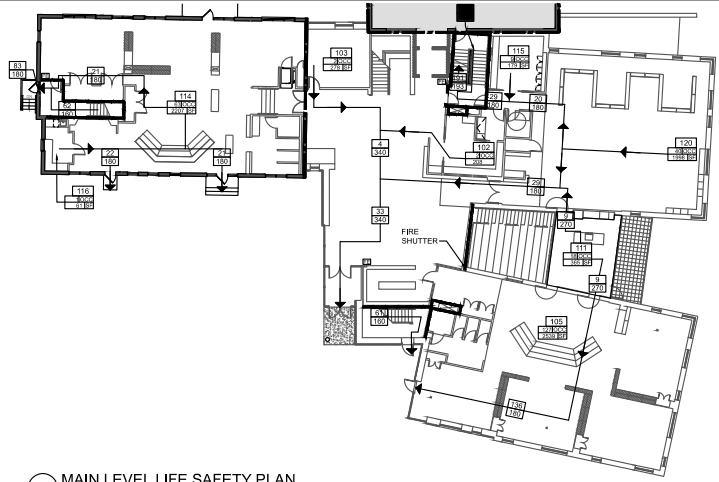


1 LOWER LEVEL LIFE SAFETY PLAN
SCALE: 1/16" = 1'-0"



2 MAIN LEVEL LIFE SAFETY PLAN
SCALE: 1/16" = 1'-0"

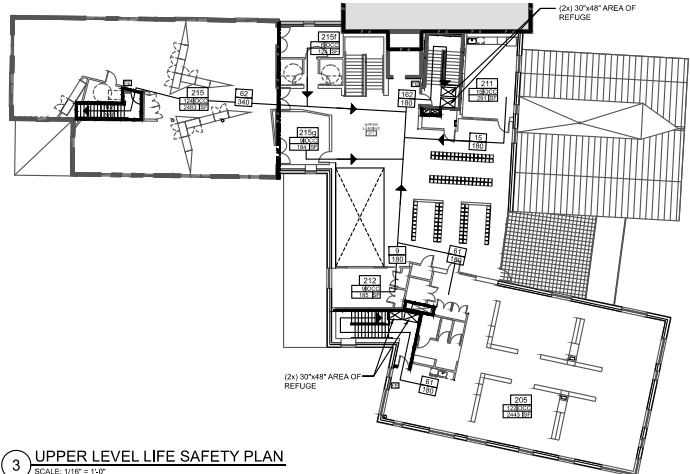
LIFE SAFETY PLAN LEGEND

SEE A101 FOR PARTITION TYPES

- ☐ FIRE EXTINGUISHER
- ☐ ROOM NUMBER
- ☐ OCCUPANTS
- ☐ ROOM AREA
- ☐ OCCUPANT EGRESS LOAD AT DOOR
- ☐ DOOR OCCUPANT CAPACITY
- ☐ DIRECTION OF EGRESS
- 1-HOUR FIRE RATED SEPARATION WITH 1 HOUR OPENINGS
- 2-HOUR RATING
- SMOKE SEPARATION WITH 20 MINUTE OPENINGS
- SMOKE SEPARATION WITH 20 MINUTE OPENINGS

0 4' 8' 12' 16' 20' 24' 28' 32' 36' 40' 44' 48'

1/16" = 1'-0"



3 UPPER LEVEL LIFE SAFETY PLAN
SCALE: 1/16" = 1'-0"

CODE SUMMARY

APPLICABLE CODES

Maine Uniform Building and Energy Code "MUBEC"
Consists of the following applicable codes:

- 2009 International Building Code (IBC)
- 2009 International Existing Building Code (IEBC)
- 2009 International Energy Conservation Code (IECC)
- 2007 ASHRAE 62.1 (Ventilation for Acceptable Indoor Air Quality)
- 2007 ASHRAE 90.1 (Energy Standard for Buildings except Low-Rise Residential Buildings) editions without addenda.
- E-1465-2006, Standard Practices for Radon Control Options for the Design and Construction of New Low-Rise Residential Buildings.
- Maine State Internal Plumbing Code based on the 2009 Uniform Plumbing Code
- State of Maine Subsurface Wastewater Disposal Rules Version dated Jan 18, 2011
- 2011 National Electrical Code (NEC)

Portland City Code, Chapter 10: Fire Prevention and Protection

Fire/ Life Safety

NFPA Life Safety Code as adopted by the State of Maine
Including but not limited to:

- 2008 NFPA 801: Fire Code
- 2009 NFPA 101: Life Safety Code
- 2007 NFPA 13: Installation of Sprinkler Systems, (2010 Edition through Equivalency)

State of Maine adopted 2010 edition NFPA 13

Accessibility

2010 ADA Standards for Accessible Design

NOTE: All Codes shall include changes/amendments by the State of Maine

OCCUPANCY CLASSIFICATION (IBC Sec 302, 303, 304) (NFPA 1)

Assembly A-3

AUTOMATIC SUPPRESSION SYSTEM (NFPA 13)

Automatic sprinkler system provide per NFPA 13 throughout

GENERAL BUILDING INFORMATION AND ALLOWABLE BUILDING HEIGHTS AND AREA (IBC Chapter 5, Table 503) (NFPA)

Building Height (To mid-height of the roof) = 2 Stories
Total Area 32,079
Perimeter 469'

Allowable Building Height
3' Maximum + 2' (Sprinkler Benefit) = 5'
2 Stories Maximum + 1 (Sprinkler Benefit) = 3 Stories

Allowable Building Area

	OCCUPANCY TYPE (PER IBC CHAPTER 3)	CONSTRUCTION TYPE (PER IBC CHAPTER 5)	ALLOWABLE AREA (IBC TABLE 502 MODIFIED PER IBC 506)	ACTUAL AREA NEW	ACTUAL AREA RENOVATED
LOWER LEVEL	A-3	IB	9,600 TABULAR	9,426 NEW	955 RENOV.
GROUND FLOOR LEVEL	A-3	IB	9,900 TABULAR	10,495 NEW	3,193 RENOV.
UPPER FLOOR	A-3	IB	28,000 ALLOWABLE	8,056 NEW	2,982 RENOV.

Building Area Modifications (IBC Sec 504.1, 506.2, 506.3)

Automatic Sprinkler Increase (IBC 506.3)

Taken; 250% Increase

REQUIRED OCCUPANCY SEPARATIONS (IBC Table 504.1) (NFPA)

A-3 = E (None)

TYPES OF CONSTRUCTION (IBC Table 601, Sec 602) (NFPA 220)

Type IB

FIRE RESISTIVE RATINGS (IBC Table 601) (NFPA Table A-5.2.1.2)

	TYPE I	# (0,0,0)
STRUCTURAL FRAME	0	0
BEARING WALLS, EXTERIOR AND INTERIOR	0	0
NON-BEARING WALLS AND PARTITIONS, EXTERIOR	0	0
NON-BEARING WALLS AND PARTITIONS, INTERIOR	0	0
FLOOR CONSTRUCTION AND SECONDARY MEMBERS	0	0
ROOF CONSTRUCTION AND SECONDARY MEMBERS	0	0

OCCUPANCY LOAD (IBC Table 1004.1.1) (NFPA)

- Business B 100 Gross Sqft per Occupant
- Assembly A-3
- Classroom 20 Net Sqft per Occupant
- Daycare 32 Net Sqft per Occupant
- Gym 7 Net Sqft per Occupant
- Exercise Rooms 52 Gross Sqft per Occupant
- Locker Rooms 50 Gross Sqft per Occupant
- Accessory Storage 300 Gross Sqft per Occupant
- Mechanical 300 Gross Sqft per Occupant
- Stage 15 Net Sqft per Occupant

MEANS OF EGRESS (IBC Chapter 10, NFPA 101 Chapter 7, 14.15)

EGRESS WIDTH PER OCCUPANT (IBC 1005.1) (IBC Table 1016.1.1(1))

- 0.3 inches per occupant for stairways
- 0.2 inches for other egress components

STAIRWAY WIDTH (IBC 1016.1(1))

0.3 inches per occupant NFPA 101 7.2.2.2.1, 8.44' min < 2000 people and over 50 people

EXIT ACCESS

Common path of egress travel (IBC 1014.2) (IBC 1014.4) (NFPA 101 7.2.2.1.2)

For Assembly A-3 NFPA 101 12.5.2.1.2, 20' common path limit
For Business A-3

Corridor Fire Resistance (IBC 1016.1)

1 hour

Corridor Width (IBC 1016.2)

Not less than 44"
Not less than 36" when less than 50 occupants
NFPA 101 14.2.3.3 Min. corridor width 8 feet new educational

Dead-End Corridor (IBC 1016.3)

Dead-end corridors in occupancy E 450'

Dead-end corridors in occupancy A-3 420'

Travel distance to exit: 250' NFPA 14.2.6.3 2007 travel distance new educational

PLUMBING FIXTURE COUNT (IBC Table 2906.1)



PROJECT NAME
WAYNFLETE LOWER SCHOOL
ADDITION & RENOVATIONS

WAYNFLETE SCHOOL
360 SPRING STREET
PORTLAND, MAINE 04102



THIS DRAWING IS THE PROPERTY OF SCOTT BRANKS ARCHITECTS, INC. AND IS NOT TO BE COPIED OR REPRODUCED IN PART OR WHOLE, WITHOUT THE WRITTEN PERMISSION OF SCOTT BRANKS ARCHITECTS, INC.

REVISION:

NO.	DATE
1	DATE
2	DATE
3	DATE
4	DATE
5	DATE
6	DATE

DATE OF ISSUE: 12 JANUARY 2017
PROJECT NUMBER: 00140050
STATUS: 100% CONSTRUCTION DOCUMENTS ISSUED FOR BID

LIFE SAFETY PLAN + CODE SUMMARY

G002