

APPLICABLE CODES:

City of Portland, Maine Code of Ordinances	Maine Uniform Building and Energy Code (MUBEC)
1999 NFPA 70 - National Electrical Code	2009 International Residential Code (IRC)
2009 NFPA 101 - Life Safety Code	2009 International Building Code (IBC)
The Maine Surface Water Wastewater Disposal Rule	2009 International Energy Conservation Code (IECC)
The Maine State Plumbing Code	2009 Uniform Plumbing Code
2009 NFPA 1 Fire Code	2007 ASHRAE 62.1 - Ventilation for Acceptable Indoor Air Quality
	2007 ASHRAE 90.1 - Energy Standards for Buildings except Low Rise Residential Buildings

PROJECT DESCRIPTION:
 The proposed project is a new four-story two-family residence on Moody Street on the East End. The building residences will be elevated with the ground floor serving as an off-street parking for the residents.

PORTLAND ZONING ORDINANCE REVIEW:

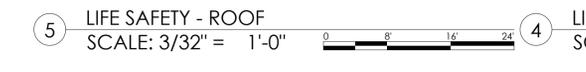
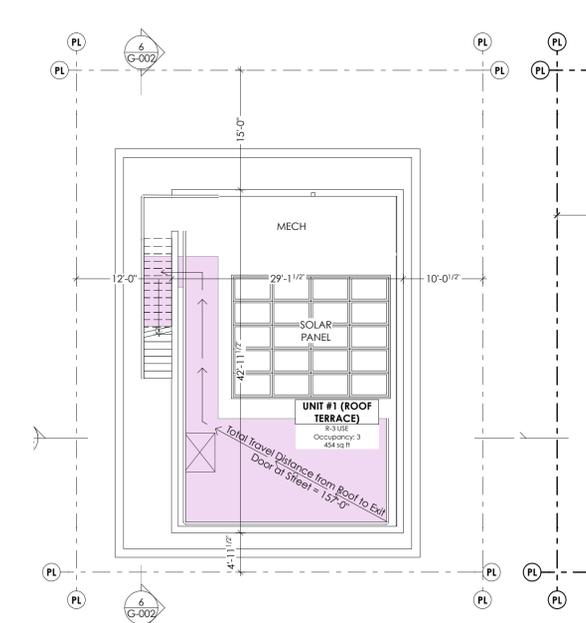
ITEM #	ITEM	CITY OF PORTLAND, MAINE CODE OF ORDINANCES (Chapter 14 Land Use Code)	PROPOSED COMPLIANCE
0.1 ZONING USE STANDARDS			
Zoning Map	14.135	R-4 Residential Zone	
Zoning Purpose		To set aside areas on the peninsula for housing characterized primarily by multifamily dwellings of a high density providing a wide range of housing for differing types of households; and to conserve the existing housing stock and residential character of neighborhoods by controlling the location and density of professional offices and other nonresidential uses.	
0.2 DIMENSIONAL REQUIREMENTS			
Proposed Zoning Use	14.136(a)	'Single and two-family dwellings'	Proposed use is allowed
Minimum Lot Size	14.139	2000sf	Existing lot size is 3,214sf
Minimum Lot Area/Dwelling Unit	14.139	725sf	
Minimum Street Frontage	14.139	20 Feet	
Minimum Front Yard Setback	14.139	Principal and Accessory Structures: 10', or the average depth of adjacent front yards. Accessory: 5'	Per discussions of Jim Moody with city officials (JO), the average front yard is set by the west neighbor 11 Moody street which is 2'-0" setback from property line. The east neighbor has 10' front yard on Eastern Promenade
Minimum Rear Yard Setback	14.139	Principal and Accessory Structures: 10'	
Minimum Side Yard Setback	14.139	5 ft, except that a side yard in the R-4 zone may be reduced to zero, provided that the cumulative side yard setbacks are not less than 10 ft. A permanent maintenance easement a minimum of 5 ft in width that is provided on the parcel adjacent to the lot line with the reduced side setback.	
Structure Setbacks	14.139	Portions of a structure above 35ft shall be no closer than 10 ft from the side property line and no closer than 15 feet from the rear property line when such property line is a residential zone.	
Maximum Lot Coverage	14.139	60%	Existing was 79% +/- per existing utilities survey plan provided by Northeast Civil Solutions. Conceptual floor plans decrease this to 60% to meet zoning ordinance. Confirm with the city if 26% is grandfathered and permissible or if green roofs are an acceptable alternative language of impervious/transparent surface. Means any surface which does not absorb and includes all buildings, roads, sidewalks, parking areas, and any area paved with bricks, concrete or asphalt
Maximum Building Height	14.139	45 Feet	
Maximum Garage Opening	14.139	Garage openings on front facades shall not exceed the greater of nine (9) feet or forty (40) percent of the front facade, and in no case shall a garage opening on a front facade exceed 20 feet	
0.3 OTHER NOTABLE REQUIREMENTS			
Off-Street Parking	14.322(B)	No parking shall be required for the first three units in the R-4 Residential Zone.	Refer to sheet G-002 for Complete R4 ZONE DESIGN STANDARDS REVIEW
Preservation and Replacement of Housing Units	14.483	Purpose: To limit the net loss of housing units in the city	Former 3 story, 2-family dwelling will be razed. The proposed structure will also be two-family. No net loss of housing units.

LIFE SAFETY CODE REVIEW BY SECTION: IBC and NFPA 101

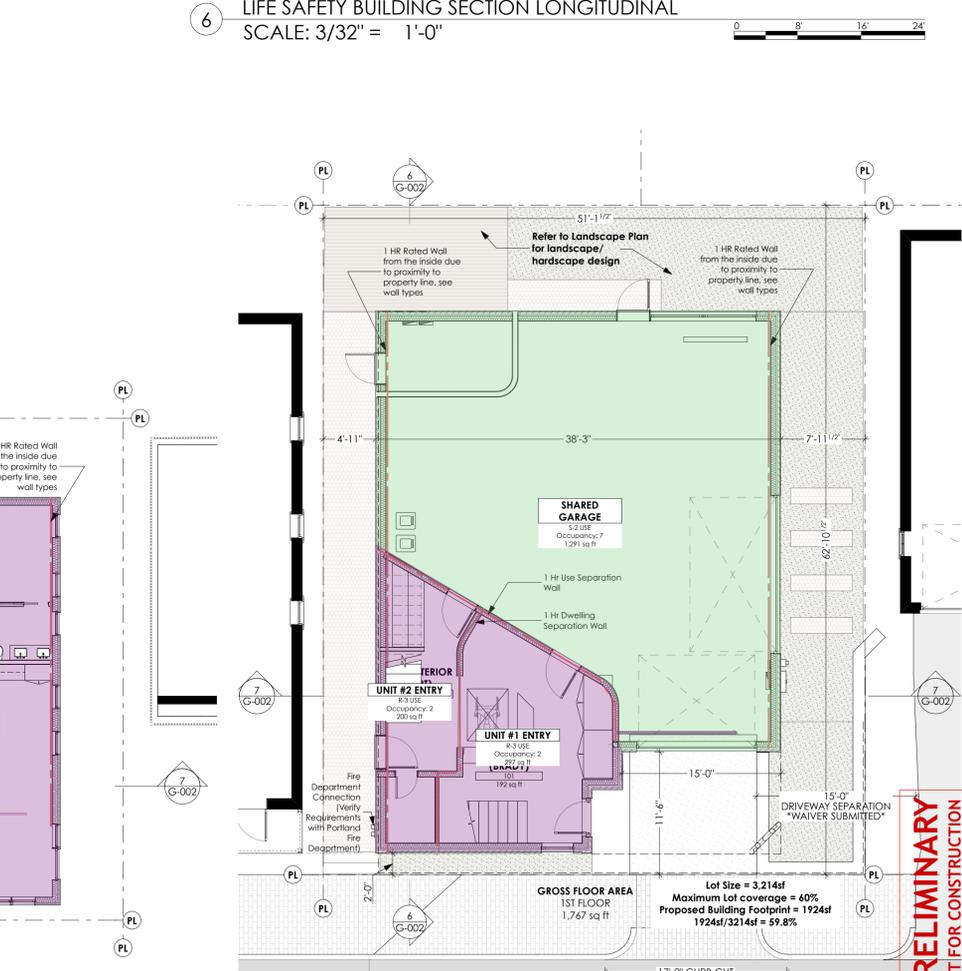
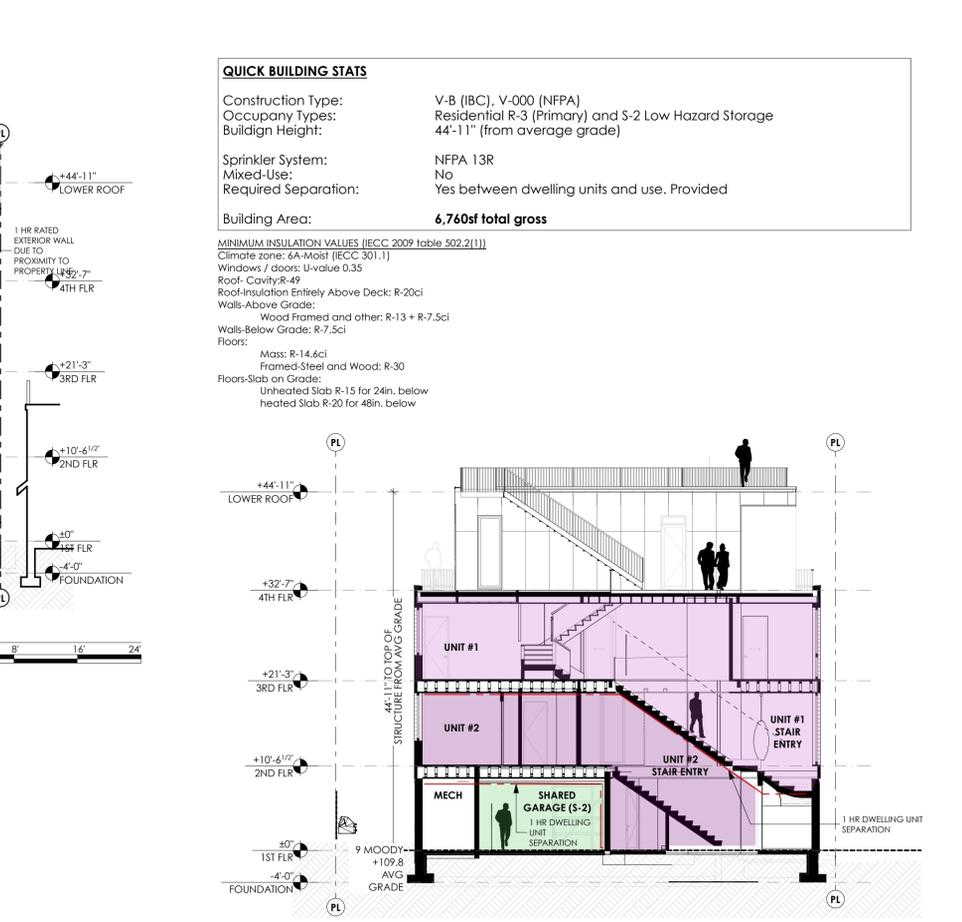
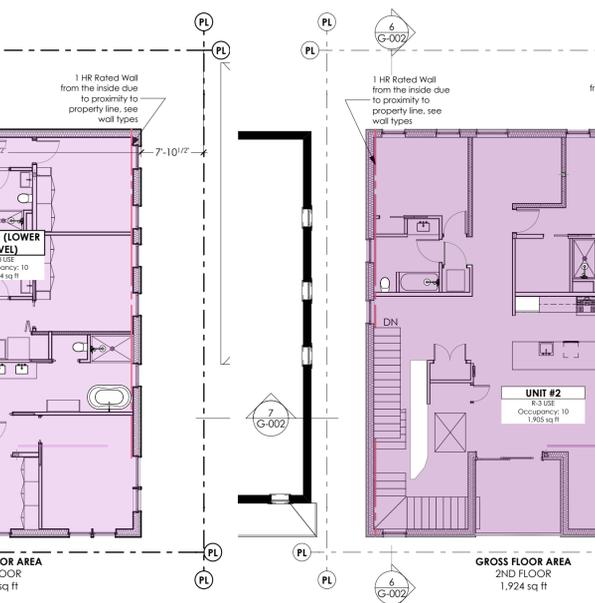
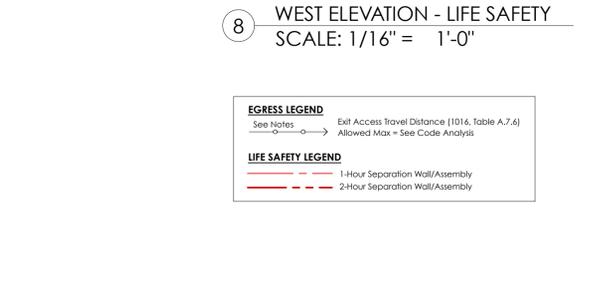
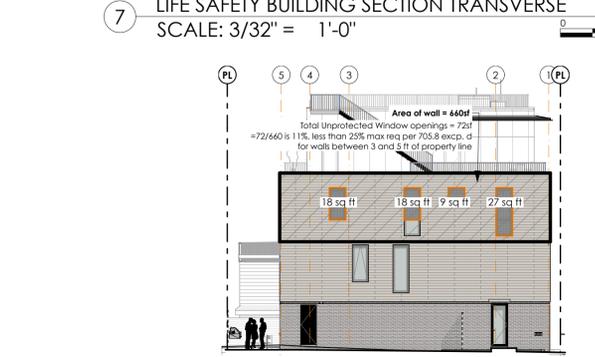
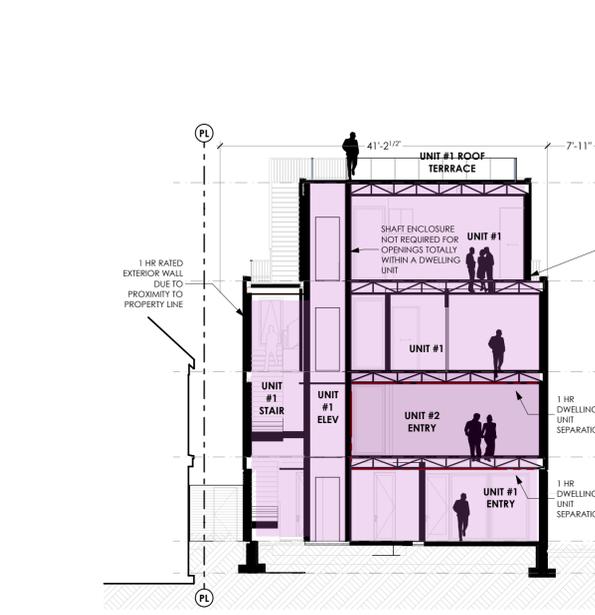
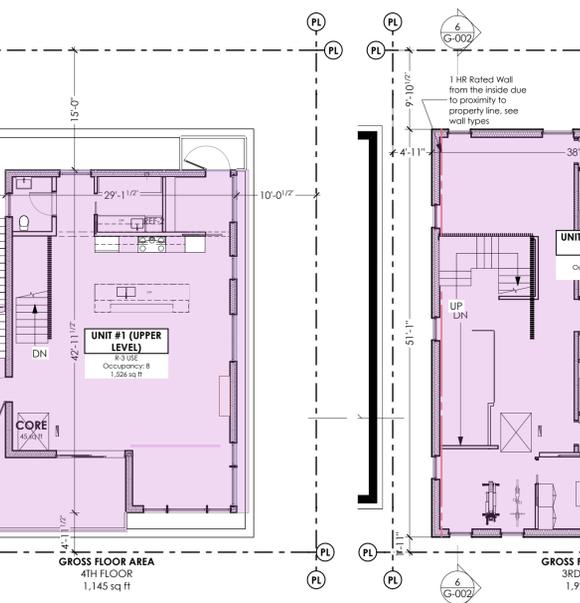
ITEM #	ITEM	MUBEC / 2009 IBC SECTION	2009 NFPA 101 Life Safety Code SECTION	REQUIREMENT/CONDITION	PROPOSED COMPLIANCE
1.0 USE AND OCCUPANCY					
Primary Residential (R-3)	310.1	Residential Two Family	24	One and Two Family Dwellings	
Secondary: S-2 Open Parking			Hazard Class	Ordinary Hazard	
2.0 CONSTRUCTION TYPE & GENERAL BUILDING HEIGHT AND AREA LIMITATIONS					
Construction Type	Table 503 and 504	Type VB	Table A.2.1.2	Type V-000	
Area Limitation	Table 503 and 504.3	R-3: Unlimited	NFPA 5000	NFPA 5000 Table not adopted by Maine State Fire Marshal Office	
Story Limitation	Table 503 and 504.3	R-3: 4 stories with sprinkler increase and 304.4	NFPA 5000	NFPA 5000 Table not adopted by Maine State Fire Marshal Office	
Height Limitation	Table 503 and 504.3	60 Feet with sprinkler increase and 504.4	NFPA 5000	NFPA 5000 Table not adopted by Maine State Fire Marshal Office	Building is under 60'
3.0 BUILDING SEPARATION & EXPOSURE PROTECTION					
Exterior Walls: Load Bearing & Non-load Bearing	602, Type VB		NFPA 220, Table 4.1.1	NFPA 220 Table not adopted by Maine State Fire Marshal Office	
Interior Walls					

ACCESSIBILITY CODE REVIEW BY SECTION: 2010 ADA Standards by the US Department of Justice (Code Standard Adopted by the State of Maine)

ITEM #	ITEM	2010 ADA Standards by the US Department of Justice (Code Standard Adopted by the State of Maine)	REQUIREMENT/CONDITION	PROPOSED COMPLIANCE
7.0 SPECIAL OCCUPANCY REQUIREMENTS				
8.0 STAIRWAYS				
Stairway Width	1009.1	44" Min (36" min. for <50 Occupants)	7.2.2.1.2	44" Min (36" min. for <50 Occupants)
Stair Dimensions	1009.4.2	max. 5'	7.2.2.4.1.1	max. 5'
Handrails	1009.12	34" min and 36" max above stair tread nosing	7.2.2.4.1.1	Handrails required on both sides
Handrail Height	1012.2	34" min and 36" max above stair tread nosing	7.2.2.4.1.1	34" min and 36" max above stair tread nosing
Handrail Graspability	1012.1.1	Must comply with Type 1 or Type 3	7.2.2.4.1.10	Must extend 12" beyond top riser and depth of 1" tread beyond bottom riser and also return to wall
Handrail Extensions	1012.2	Must extend 12" beyond top riser and depth of 1" tread beyond bottom riser and also return to wall		Required on landings > 30" high, guard height required to be min 34" high in group R-3 Occupancies
Guard Rails	1013.1	Required on landings > 30" high, guard height required to be min 34" high in group R-3 Occupancies		
9.0 INTERIOR ENVIRONMENT REQUIREMENTS				
Ventilation	1203.1	Required to follow International Mechanical Code (not adopted by the State of Maine) Refer to ASHRAE 62.1-2007		Project to comply with ASHRAE 62.1-2007
Minimum Ceiling Heights	1008.2	7'-0" in bathrooms, kitchens, storage rooms		At least minimum provided throughout
Sound Transmission	1207.2, 1207.3	Minimum STC separating dwelling units: 50 Minimum IC separating dwelling units: 50		
10.0 EMERGENCY SIGNAGE				
Exit Signs	1011.1	Exit signs not required in rooms with only one required means of egress		
Accessibility Compliance Summary	Table B	Not required with two-family dwellings		



SECTION	REQUIREMENT/DESCRIPTION	PROPOSED COMPLIANCE
4.0 FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS		
Primary Structural Frames	Table 601.0	5 hr
Interior Bearing Wall	Table 601.0	0 hr
Interior Bearing Wall	Table 601.0	0 hr
Non-bearing Interior Wall	Table 601.0	0 hr
Floor Construction and Secondary Members	Table 601.0	0 hr
Roof Construction and Secondary Members	Table 601.0	0 hr
5.0 FIRE AND SMOKE PROTECTION FEATURES		
Automatic Sprinkler Systems	903 / 903.3	Required in R use, may be NFPA 13R for R use up to and including 4 stories
Exit Enclosure	1022.1 exp	Not required when within a single residential dwelling unit
Interior Wall and Ceiling	Table 803.9	Exit Enclosures: C
Non-bearing Interior Wall	Table 802.0	Exit Enclosures: C
Fire Alarm Detection System	907.2.4	Fire Alarm Detection System not required in building with R-3 occupancy type
6.0 MEANS OF EGRESS		
Occupant Load	Table 1004.1	7.3.1.2
Exit Width per Occupant	1004.1	7.3.3.1
Exit Width per Occupant	1004.1	7.3.3.1
Minimum Door Widths	1008.1.1	7.2.1.2.3
Considered Stair Width	1018.2	7.2.2.3.8
Common Path of Travel	1014.3.7, 1028.8	Table A.7.6
Travel Distance	Table 1014.1, 1028.7	Table A.7.6
Dead End Corridors	1018.4	Table A.7.6
Minimum Number of Exits per Occupancy Type	1021.2	Table A.7.6
Exit Discharge	1027.1	7.5.1.3.2
Emergency Escape and Rescue	1029.1	
7.0 SPECIAL OCCUPANCY REQUIREMENTS		
8.0 STAIRWAYS		
Stairway Width	1009.1	7.2.2.1.2
Stair Dimensions	1009.4.2	7.2.2.4.1.1
Handrails	1009.12	7.2.2.4.1.1
Handrail Height	1012.2	7.2.2.4.1.1
Handrail Graspability	1012.1.1	7.2.2.4.1.10
Handrail Extensions	1012.2	7.2.2.4.1.10
Guard Rails	1013.1	
9.0 INTERIOR ENVIRONMENT REQUIREMENTS		
Ventilation	1203.1	
Minimum Ceiling Heights	1008.2	
Sound Transmission	1207.2, 1207.3	
10.0 EMERGENCY SIGNAGE		
Exit Signs	1011.1	



QUICK BUILDING STATS

Construction Type: V-B (IBC), V-000 (NFPA)
 Occupancy Types: Residential R-3 (Primary) and S-2 Low Hazard Storage
 Building Height: 44'-11" (from average grade)

Sprinkler System: NFPA 13R
 Mixed-Use: No
 Required Separation: Yes between dwelling units and use. Provided

Building Area: **6,760sf total gross**

MINIMUM INSULATION VALUES (IECC 2009 table 502.2.1.1)
 Climate zone: 6A-Moist (IECC 301.1)
 Windows / doors: U-value 0.35
 Roof: Cavity R-49
 Roof-Insulation Entirely Above Deck: R-20ci
 Walls-Above Grade: Wood Framed and other: R-13 + R-7.5ci
 Walls-Below Grade: R-7.5ci
 Floors: Mass: R-14.6ci
 Framed-Steel and Wood: R-30
 Floors-Slab on Grade: Unheated Slab R-15 for 24in. below heated Slab R-20 for 48in. below