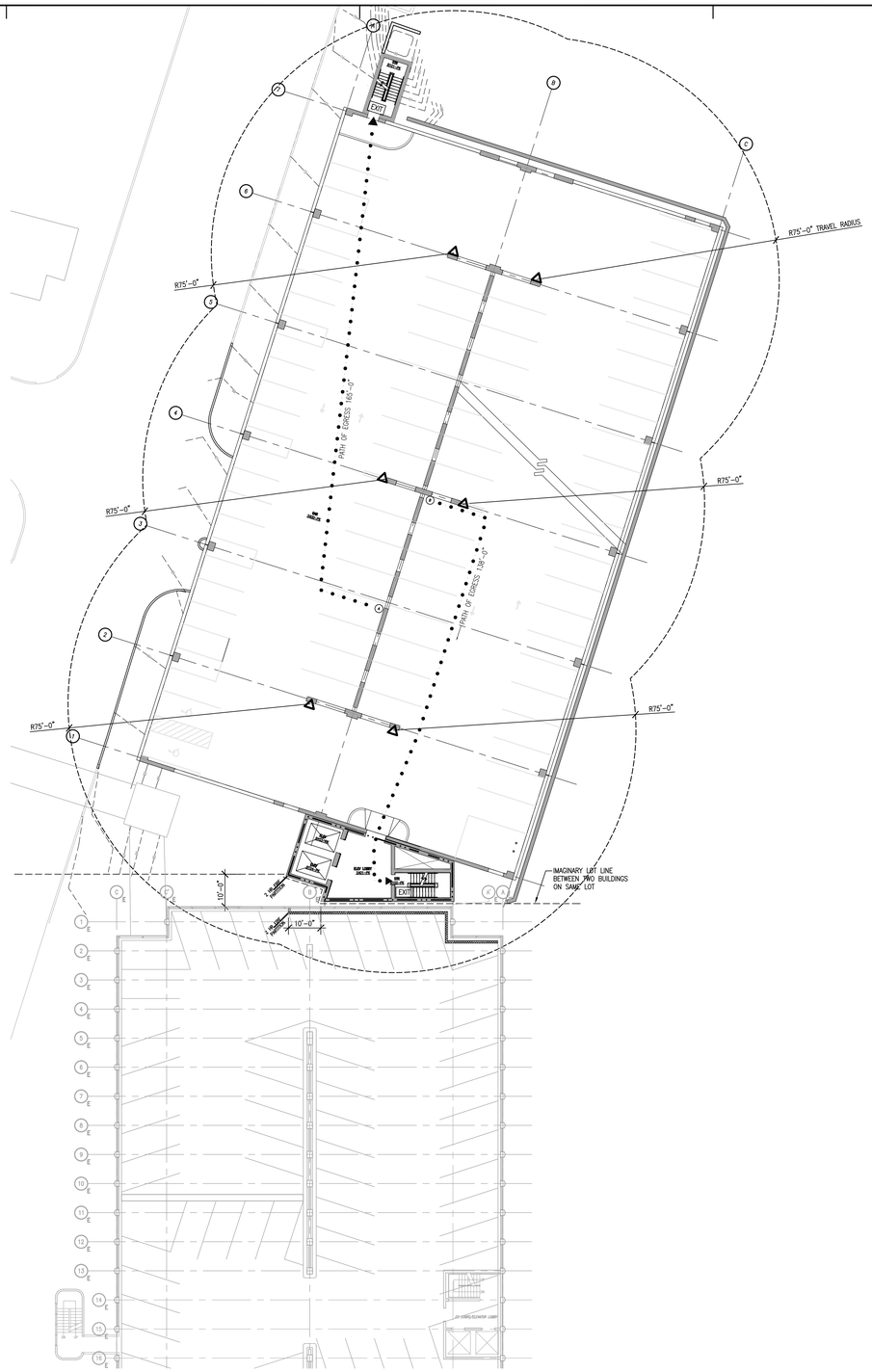
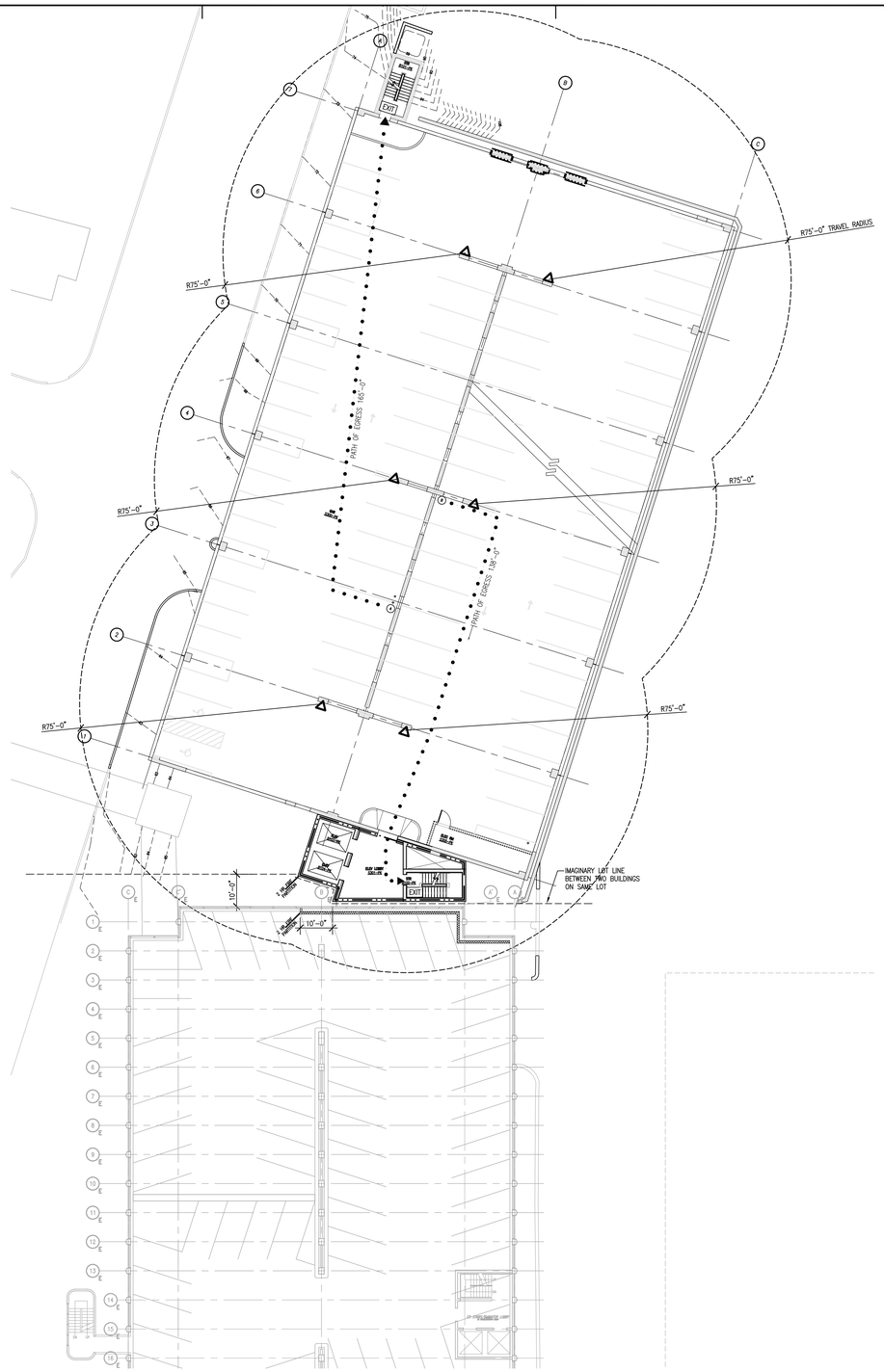
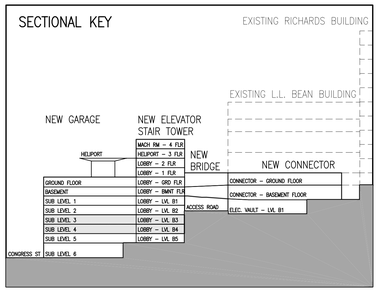


B4 SUB-BASEMENT LEVEL4 LIFE SAFETY PLAN
SCALE 1/16" = 1'-0"



D4 SUB-BASEMENT LEVEL3 LIFE SAFETY PLAN
SCALE 1/16" = 1'-0"



GARAGE CODE ANALYSIS - LIFE SAFETY

NFPA 101 2003 - CONSTRUCTION: NA, OCCUPANCY: STORAGE

SECTION	SECTION DESCRIPTION	REQUIREMENT	COMMENTS
6.1.13	CLASSIFICATION OF OCCUPANCY	CHAPTER 42	STORAGE
42.1.5	CLASSIFICATION OF HAZARD CONTENTS	COMPLY WITH SECTION 6.2	ORDINARY HAZARD
42.1.6	MINIMUM CONSTRUCTION REQUIREMENTS	NONE	
42.1.7	OCCUPANT LOAD (137 PEOPLE PER LEVEL BASED ON BOCA '99)	THE OCCUPANT LOAD SHALL BE DETERMINED ON THE BASIS OF THE MAXIMUM PROBABLE POPULATION OF THE SPACE	REFER TO THE BUILDING CODE OCCUPANCY SECTION
42.2	MEANS OF EGRESS REQUIREMENTS	DOOR OPENINGS IN MEANS OF EGRESS SHALL NOT BE LESS THAN 32 CLEAR WIDTH	

TRAVEL DISTANCES

TRAVEL	ALLOWED MAX.	PROVIDED	COMMENTS
A TO EXIT	300' BOCA 400' NFPA	REFER. TO PLANS	BOCA 1999; EXIT ACCESS TRAVEL; TABLE 1006.5 REMOTE POINT TO NEAREST EXIT NFPA 101; 42.2.6 EXIT TRAVEL FROM ANY POINT TO EXIT
B TO EXIT	300' BOCA 400' NFPA	REFER. TO PLANS	BOCA; EXIT ACCESS TRAVEL; TABLE 1006.5 REMOTE POINT TO NEAREST EXIT NFPA 101; 42.2.6 EXIT TRAVEL FROM ANY POINT TO EXIT
REMOTENESS	> 1/3 MAX DIAG. OVERALL DIM.	REFER. TO PLANS	BOCA; 1006.4.1 REMOTENESS; EXITS OR EXIT ACCESS DOORS

GARAGE FIRE RATINGS - LIFE SAFETY

NFPA 101 2003 - ORDINARY HAZARD STORAGE *

ITEM DESCRIPTION	FIRE RATING	COMMENTS
EXTERIOR BEARING WALLS	1 HRS.	
INTERIOR BEARING WALLS	1 HRS.	
COLUMNS	1 HRS.	
BEAMS, GIRDERS, TRUSSES, AND ARCHES	1 HRS.	
FLOOR CONSTRUCTION	1 HRS.	
ROOF CONSTRUCTION	1 HRS.	
EXTERIOR NONBEARING WALLS	0 HRS.	

* INFORMATION TAKEN FROM 1999 NFPA 220 TABLE 3 -1 TYPE II(111) CONSTRUCTION

GARAGE FIRE RATINGS - BUILDING CODE

BOCA 1999 - TABLE 602 & 705.2 CONSTRUCTION TYPE 2B

ITEM DESCRIPTION	FIRE RATING	COMMENTS
EXTERIOR WALLS (FIRE SEPARATION 0-5')	2 HRS.	
EXTERIOR WALLS (FIRE SEPARATION GREATER THAN 10')	1 HRS.	
FIRE ENCLOSURE OF EXITS	2 HRS.	
SHAFTS (OTHER THAN EXITS AND ELEVATOR HOISTWAYS)	2 HRS.	
OTHER NONBEARING PARTITIONS	0 HRS.	
INTERIOR COLUMNS AND FRAMING	1 HRS.	
STRUCTURAL MEMBERS SUPPORTING WALL	1 HRS.	
FLOOR CONSTRUCTION INCLUDING BEAM	1 HRS.	
ROOF CONSTRUCTION INCLUDING BEAMS, TRUSSES AND FRAMING, ARCHES AND ROOF DECK		
15' OR LESS IN HEIGHT TO LOWEST MEMBER	1 HRS.	
GREATER THAN 15' TO LOWEST MEMBER	0 HRS.	

GARAGE CODE ANALYSIS - BUILDING CODE

BOCA 1999 - CONSTRUCTION: TYPE 2B, OCCUPANCY: S-2

SECTION	SECTION DESCRIPTION	REQUIREMENT	COMMENTS
302.1, 308.3	USE GROUP	S-2 STORAGE	ADDITION TO EXISTING PARKING FACILITY
SECTION 603/TABLE 602	CONSTRUCTION CLASSIFICATION	2B	EXISTING AND NEW ADDITION
SECTION 406.1	OPEN PARKING STRUCTURES; GENERAL		OPEN PARKING STRUCTURES ARE NOT REQUIRED TO CONFORM TO SECTION 408.0 FOR PUBLIC GARAGES
TABLE 406.4	HEIGHT AND AREA LIMITATION FOR OPEN PARKING STRUCTURES	10 STORIES – 100' HT. 50,000 SQ.FT. AREA	PARKING ADDITION IS TO MATCH THE EXISTING 2B CONSTRUCTION. HEIGHTS AND AREAS MENTIONED HERE ARE SUBJECT TO POTENTIAL INCREASES PURSUANT 504.0 AND 506.0
SECTION 506.2	STREET FRONTAGE INCREASE	WHERE A STRUCTURE HAS MORE THAN 25% OF THE BUILDING PERIMETER FRONTING A STREET AREA LIMITATIONS OF TABLE 503 SHALL BE INCREASED 2% PER EVERY 1% OF SUCH EXCESS FRONTAGE	EXISTING GARAGE PERIMETER EQUALS 1,579 LF. CRESCENT ST + CONGRESS STREET PERIMETER OF THE ADDITION = 850/1579 = 53.8%, –25% PER 506.2 = 28.8%. 28.8%X2% = 57.6%. .576X50,000 = A POSSIBLE PERIMETER INCREASE OF 28,800. 50,000+28,800= 78,800 OF ALLOWABLE SQUARE FOOTAGE. ACTUAL SQUARE FOOTAGE OF GARAGE AND LINK = 69,2035F
TABLE 1008.1.2	MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT	200 GROSS SQUARE FEET PER OCCUPANT	27,286 SF PER LEVEL. 27,286 DIVIDED BY 200=136.43 OR 137 PEOPLE PER FLOOR
TABLE 1010.2	MINIMUM NUMBER OF EXITS FOR OCCUPANT LOAD	2 EXITS FOR 500 OR LESS PEOPLE	137 PEOPLE PER FLOOR DIVIDED BY 2 EXITS = 68.5 OR 69 PEOPLE PER EXIT
TABLE 1009.4	EGRESS CONVERGENCE (OCCURS @ SUBLEVEL 2 CRESCENT ST. EXIT)	EGRESS CAPACITY SHALL NOT BE LESS THAN THE SUM OF THE TWO FLOORS	69 PEOPLE PER EXIT, PER LEVEL, X2 = 138 PEOPLE
TABLE 1009.2	EGRESS WIDTH PER OCCUPANT	UN-SPRINKLERED, USE GROUP S STAIRWAYS ARE ALLOWED .3" PER PERSON, DOORS .2" PER PERSON	STAIR: 138 X .3" = 41.4" REQ. 45.5" PROVIDED DOOR: 138 X .2" = 27.6" REQ. 41.25" PROVIDED
TABLE 1010.2	NUMBER OF EXITS REQUIRED PER LEVEL	REQUIRED: 2 PROVIDED: 2	
TABLE 1006.5	EXIT ACCESS TRAVEL REQUIRED MAX / PROVIDED MAX	300' FT. (MAX) 165' FT. (LONGEST)	SEE PLANS

General Notes:

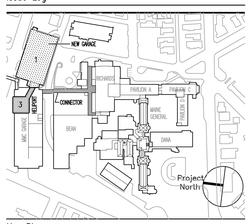
LIFE SAFETY LEGEND

1. RATED PARTITIONS ARE INDICATED AS FOLLOWS:

- 1HR FIRE RATED PARTITION
- 2HR FIRE RATED PARTITION
- NON-RATED SMOKE RESISTANT PARTITION
- 1HR SMOKE BARRIER
- 2HR RATED FIRE AND SMOKE BARRIER
- PATH OF EXIT TRAVEL
- EXIT — INDICATES EXIT LOCATION
- SUITE (UNRATED)
- CONNECTOR PROJECT SCOPE
- EXISTING EGRESS STAIR
- POINT OF EGRESS ACCESS
- PORTABLE FIRE EXTINGUISHER
- EXIT SIGN
- HOSE STATION

MARK	ISSUE DATE	DESCRIPTION
PERMIT	09/16/04	PERMIT SET
BID	08/26/04	BID SET

Issue Log



Key Plan

TRO
ARCHITECTU
PLANNING
ENGINEERIN
INTERIOR
The Ritchie Organizat
80 Bridge Stre
Newton, MA 02458-1
617-969-94

Maine Medical Center

Pkg F - Garage / Vault / Conn / Heliport
Portland, ME MMC Project No. 21845

Drawing Title
SUB BASEMENT LEVEL 4 & 3
GARAGE
LIFE SAFETY PLANS

0' 8' 16' 32' 64'

Commission No.	4678	Date Issued	08/26/04
Scale	1/16" = 1'-0"	Sheet Number	PKG-F
Drawn By	JJV/NB		G101.1
Approved By	BS		
Filename	4678G101.1.dwg		

Copyright © 2004 The Ritchie Organization