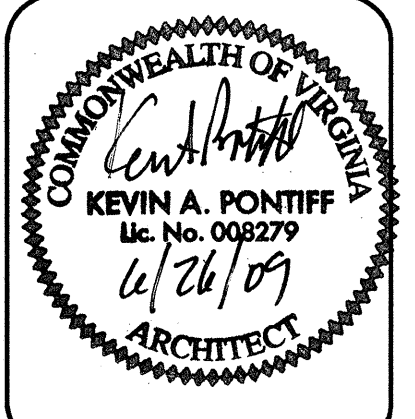


BASEMENT LIFE SAFETY PLAN
SCALE: 1/8"=1'-0"

GENERAL NOTES:

- GENERAL NOTES ARE FOR THE ENTIRE JOB.
- # SHOWN ON MEANS OF EGRESS PATH IS THE DISTANCE FROM STARTING POINT TO NODE SHOWN.



REV	DATE	DESCRIPTION

DESIGNED BY: KAP	CHECKED BY: KAP
DATE: 06/26/2009	DATE:
FILE NAME: 42515_N_0101.DWG	
DRAWN BY: BGC	
REVIEWED BY: JBH	
PLOT DATE: XX/XX/XXXX	
PLOT SCALE: AS NOTED	
SUBMITTED BY: KAP	

DEPARTMENT OF THE AIR FORCE
AIR COMBAT COMMAND
LANGLEY AFB VA
CIVIL ENGINEERING OFFICE

LEGEND:

- 2 HOUR RATED
- EGRESS 480 BOX WITH EGRESS CAPACITY OF DOORS OR STAIRS INDICATED
- # MEANS OF EGRESS PATH
- ⊙ OCCUPANCY LOAD
- FEC FIRE EXTINGUISHER CABINET
- FE FIRE EXTINGUISHER

APPLICABLE CODES

INTERNATIONAL BUILDING CODE 2006 WITH SUPPLEMENTS
LIFE SAFETY CODE - 2006 NFPA 101
ADAAG 2004

BUILDING USE GROUP CLASSIFICATION

B - BUSINESS (FLOORS 1, 2, AND 3)
CONSTRUCTION TYPE : IIIIB NONCOMBUSTIBLE PROTECTED
S 1- STORAGE, MODERATE (BASEMENT)
CONSTRUCTION TYPE : IIIIB NONCOMBUSTIBLE PROTECTED

AREA MODIFICATIONS

ACCESSIBILITY OF BUILDING PERIMETER
NON ACCESSIBLE PERIMETER
NONE

ACCESSIBLE PERIMETER

NORTH: 210'
EAST: 94'
SOUTH: 239'
WEST: 94'
TOTAL: 637'

PERCENT ACCESSIBLE

OPEN PERIMETER/TOTAL PERIMETER = % OF OPEN PERIMETER

$$637' / (0' + 637') = 637' / 637' = 1.0 \text{ OR } 100\%$$

100% + (% OF OPEN PERIMETER - 25% STREET FRONTAGE) X 2% INCREASE/100 = ADJUSTMENT FACTOR
100% + (100% - 25%) / 100 x 2 % = 1.125

ALLOWABLE SQUARE FOOTAGE/FLOOR = ADJUSTMENT FACTOR X TABULAR AREA
10,125 SF = 1.125 X 9,000 SF

% FRONTAGE INCREASE (606.2)

% FRONTAGE INCREASE (If) = 100(FRONTAGE/PERIMETER - 0.25) X MINIMUM WIDTH OF OPEN SPACE (W)/30

$$\text{If} = 100 (637' / 637' - 0.25) \quad A_o = A_t + \left[\frac{A_t \text{If}}{100} \right] + \left[\frac{A_{t1s}}{100} \right]$$

$$\text{If} = 1, \quad A_o = 19,000 + \left[\frac{9,000 \times 100}{100} \right] + \left[\frac{9,000 \times 200}{100} \right]$$

Is = 200 (506.3)
Ao = ALLOWABLE SF/FLOOR Ao = 28,180

OPEN STAIRS (707.2)

(STAIRS NOT REQUIRED FOR EGRESS AND CONNECTING LESS THAN FOUR FLOORS MAY BE OPEN IF PROTECTED BY A DRAFT CURTAIN AND CLOSELY SPACED SPRINKLERS IN ACCORDANCE WITH NFPA 13 AND IF THE OPEN AREA OF THE FLOOR DOES NOT EXCEED TWICE THE PROJECTED AREA OF THE STAIR ITSELF)

ROOMS REQUIRING FIRE RATINGS:

STORAGE ROOMS > 100 SF (302.1.1)	0 HR
ELEV. MACHINE ROOMS (3006.4)	1 HR
MECHANICAL ROOMS (302.1.1)	0 HR
MAIN ELEC. ROOM	0 HR
TELECOMMUNICATIONS EQUIPMENT (903.2)	1 HR
TRASH & HOUSEKEEPING > 100 SF (302.1.1)	0 HR

PROPOSED AREA

BASEMENT FLOOR:	9,068 GSF	(NOT OCCUPIED)
FIRST FLOOR:	8,752 GSF	
SECOND FLOOR:	8,752 GSF	
THIRD FLOOR:	8,752 GSF	
TOTAL:	35,324 GSF	

FIRE RATING REQUIREMENTS

FIRE RESISTANT CONSTRUCTION (TYPE IIIIB, NONCOMBUSTIBLE, PROTECTED)

EXISTING EXTERIOR WALLS (TABLE 602)	2
EXISTING FIRE WALLS (705.4)	3
STRUCTURAL FRAME (TABLE 601)	0
FLOOR CONSTRUCTION (TABLE 601)	0
ROOF CONSTRUCTION (TABLE 601)	0
EXIT STAIR TOWERS (1019.1)	2
EXIT ACCESS CORRIDORS (TABLE 1016.1) (RATING NOT REQUIRED WITH SPRINKLER SYSTEM)	0
EXISTING ELEVATOR AND DUMBWATER SHAFTS (707.14)	2
EXISTING SHAFTS (707.4)	2

FIRE SUPPRESSION SYSTEMS (903.2 - GROUP B)

USE B: AN AUTOMATIC FIRE SUPPRESSION SYSTEM IS NOT REQUIRED BY CODE, HOWEVER IS BEING INSTALLED TO TAKE ADVANTAGE OF THE AREA INCREASES.

ALLOWABLE AREA AND HEIGHT

BUILDING AREA PER FLOOR (TABLE 503)
BUSINESS GROUP B; TYPE IIIIB CONSTRUCTION
19,800 GSF (SECT 506 AREA MODIFICATION FOR FIRE SUPPRESSION) = 39,600 GSF

BUILDING HEIGHT (TABLE 503)
BUSINESS GROUP B; TYPE IIIIB CONSTRUCTION
TABULAR HEIGHT = 4 STORY - 55'
INCREASE PER 504.2 = 1 STORY - 20'
TOTAL ALLOWABLE HEIGHT = 5 STORY - 75'

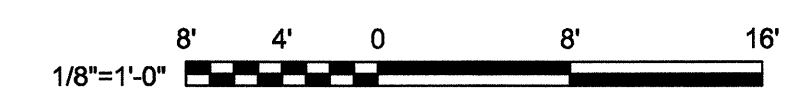
ALLOWABLE BUILDING AREA
19,800 GSF x 2 STORIES = 39,600 GSF
ADJUSTMENT FACTOR BUILDING AREA
24,570 GSF x 4 STORIES = 98,280 GSF

EGRESS REQUIREMENTS

EXIT ACCESS TRAVEL DISTANCE = 300' MAX (TABLE 1015.1)
COMMON PATH OF TRAVEL = 100' MAX (1013.3, EXCEPTION 1)
MAX. DEAD END = 50' (1016.3, EXCEPTION 2)
EXITS REQUIRED (TABLE 1005.2.1)

FLOOR 1:	84 OCCUPANTS	DOORS: 84 x .20 = 16.80"
FLOOR 2:	100 OCCUPANTS	DOORS: 100 x .20 = 20.00"
FLOOR 3:	106 OCCUPANTS	DOORS: 106 x .20 = 21.20"
		STAIRS: 106 x .30 = 31.80"

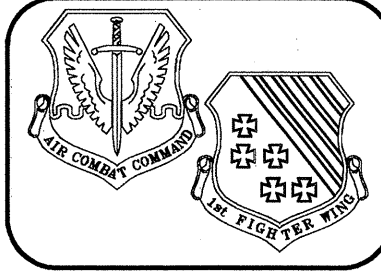
ACCESSIBILITY OF EGRESS COMPONENTS
AREAS OF REFUGE WILL BE PROVIDED AT EACH EXIT. STAIRWAY WIDTHS WILL BE AT LEAST 44" CLEAR BETWEEN HANDRAILS.



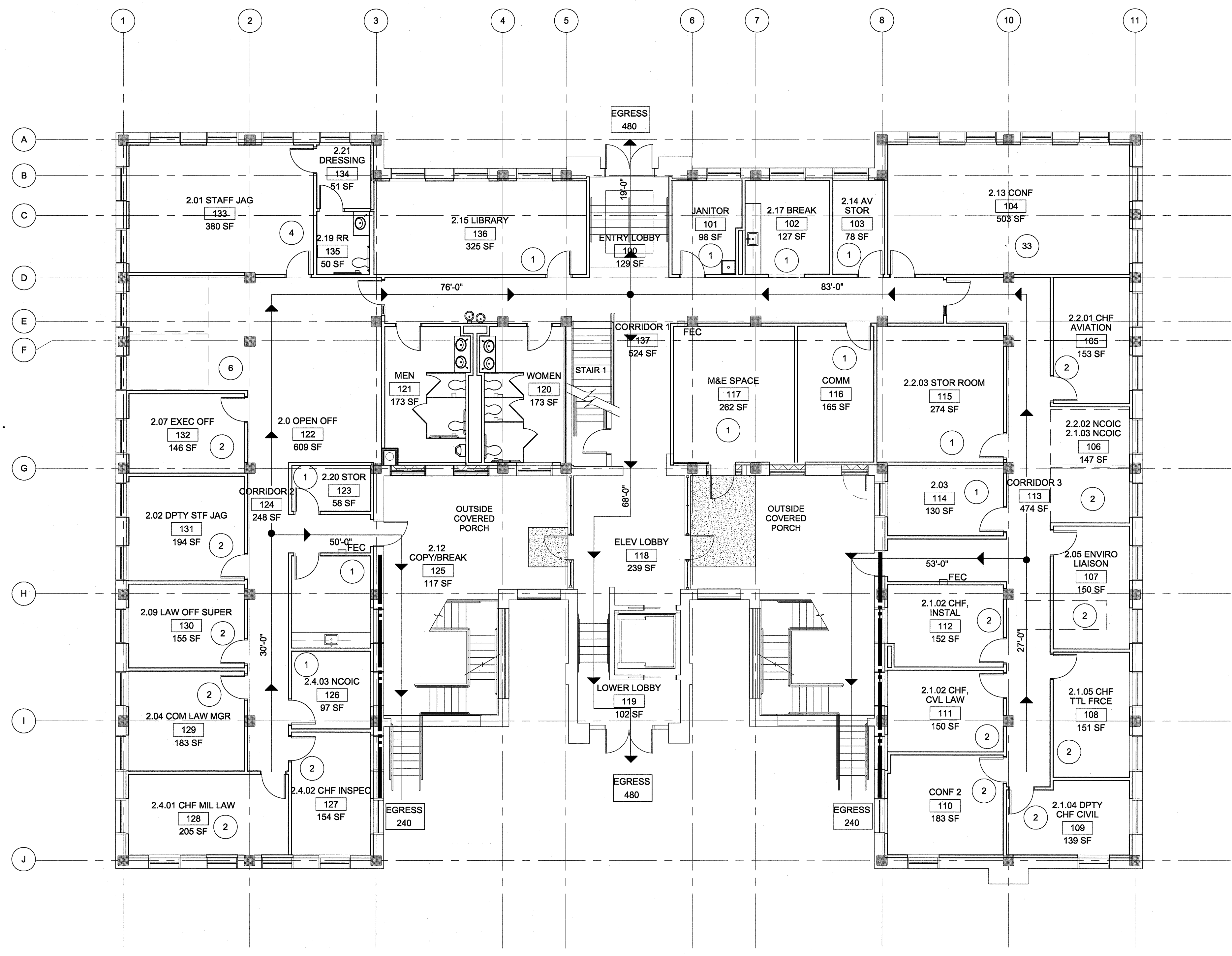
GRAPHIC SCALES

PROJECT NUMBER
MUHJ08-4112

HQ ACC/DSF RENOVATION OF BUILDING 669
BASEMENT LIFE SAFETY PLAN

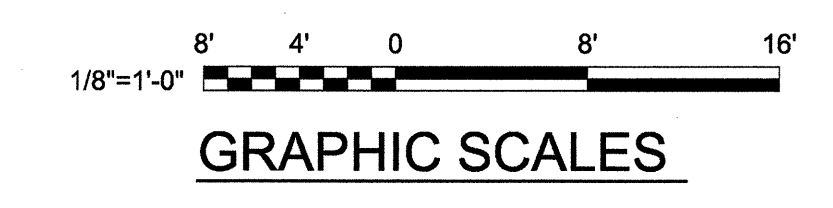


GENERAL NOTES:
 1. SEE SHEET LS101 FOR GENERAL NOTES.



- LEGEND:**
- 2 HOUR RATED
 - SMOKE PARTITION
 - BOX WITH EGRESS CAPACITY OF DOORS OR STAIRS INDICATED
 - MEANS OF EGRESS PATH
 - OCCUPANCY LOAD
 - FIRE EXTINGUISHER CABINET
 - FIRE EXTINGUISHER

FIRST FLOOR LIFE SAFETY PLAN
 SCALE: 1/8"=1'-0"
 PLAN NORTH

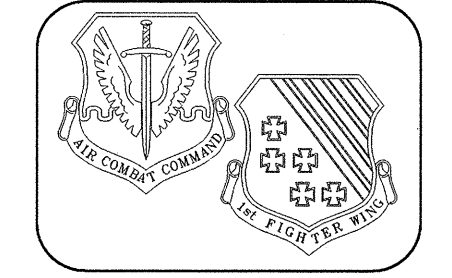


REV	DATE	APPROV	DESCRIPTION

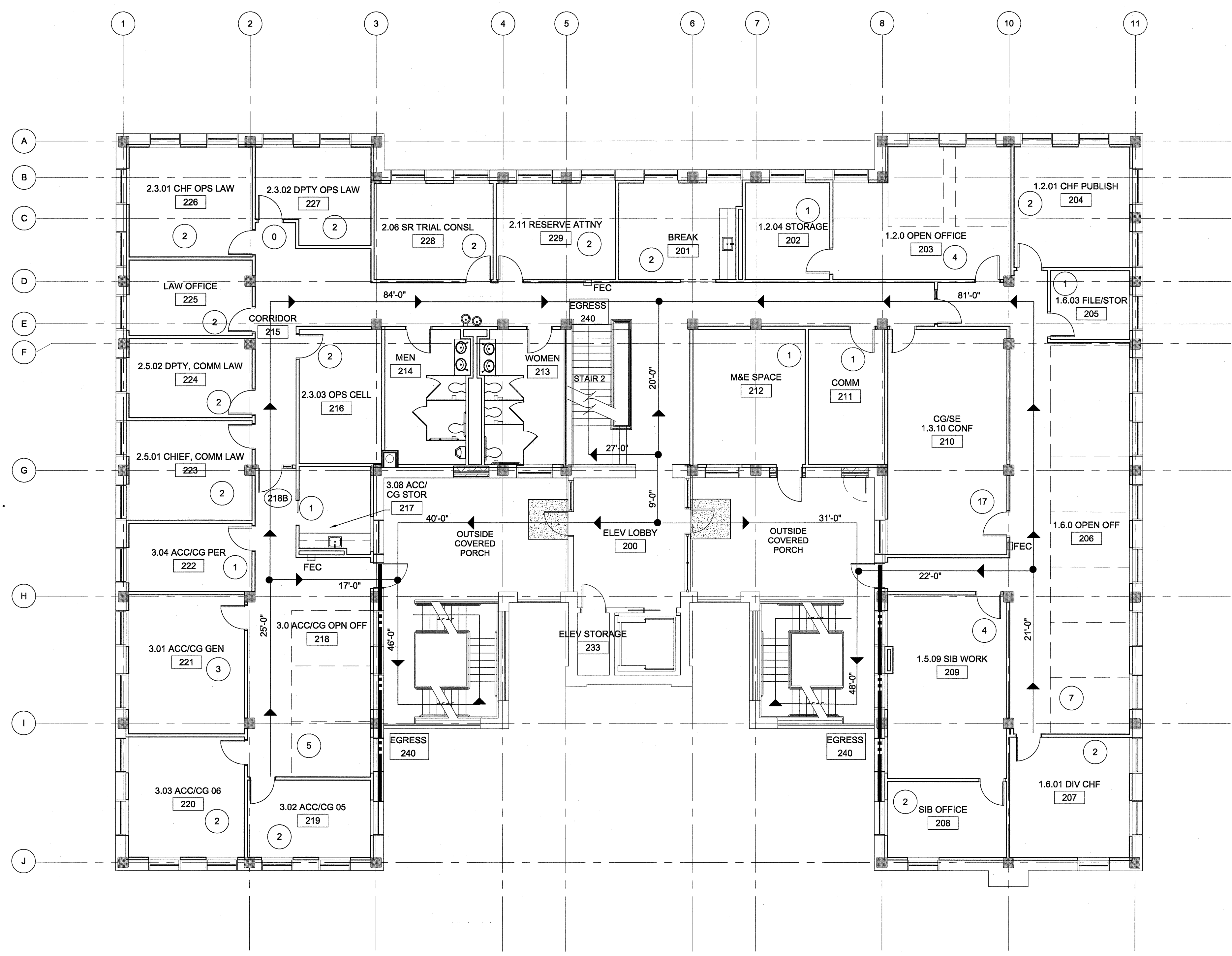
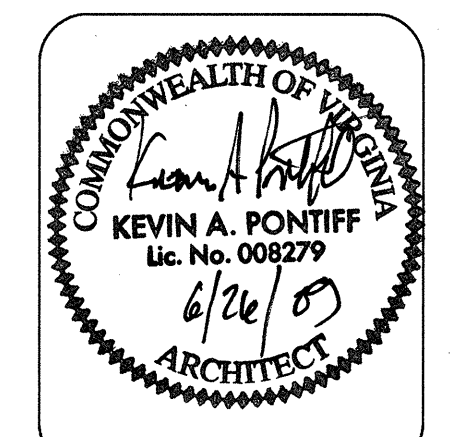
DESIGNED BY: KAP	CHECKED BY: KAP
DATE: 06/26/2009	DRAWN BY: BGC
FILE NAME: 22LS101_0101.DWG	REVIEWED BY: UBH
PLOT DATE: XX/XX/XXXX	SUBMITTED BY: KAP
PLOT SCALE: AS NOTED	
DEPARTMENT OF THE AIR FORCE	LANGLEY AFB VA
AIR COMBAT COMMAND	CIVIL ENGINEERING OFFICE

PROJECT NUMBER
 MUHJ08-4112

HQ ACC/DSF RENOVATION OF BUILDING 669
FIRST FLOOR LIFE SAFETY PLAN

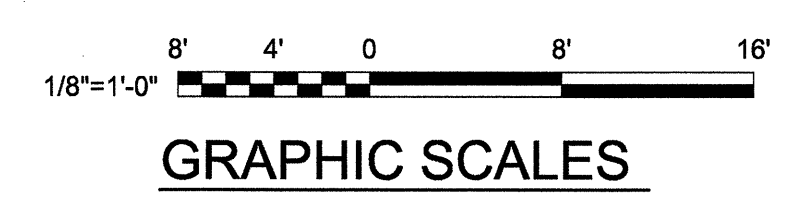


GENERAL NOTES:
 1. SEE SHEET LS101 FOR GENERAL NOTES.



- LEGEND:**
- 2 HOUR RATED
 - SMOKE PARTITION
 - BOX WITH EGRESS CAPACITY OF DOORS OR STAIRS INDICATED
 - MEANS OF EGRESS PATH
 - OCCUPANCY LOAD
 - FIRE EXTINGUISHER CABINET
 - FIRE EXTINGUISHER

SECOND FLOOR LIFE SAFETY PLAN
 SCALE: 1/8"=1'-0"
 PLAN NORTH



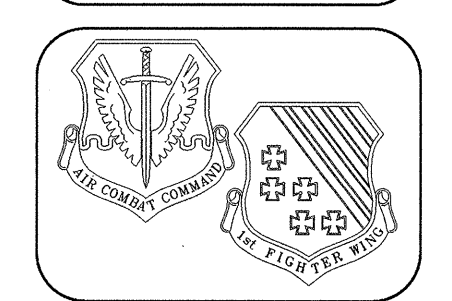
REV	DESCRIPTION	DATE	APPROV

DESIGNED BY: KAP	DRAWN BY: BGC	REVIEWED BY: JJB	SUBMITTED BY: KAP
DATE: 06/26/2009	FILE NAME: 22LS-1010.DWG	PLOT DATE: XX/XX/XXXX	PILOT SCALE: AS NOTED
DEPARTMENT OF THE AIR FORCE		LANGLEY AFB VA	
AIR COMBAT COMMAND		CIVIL ENGINEERING OFFICE	

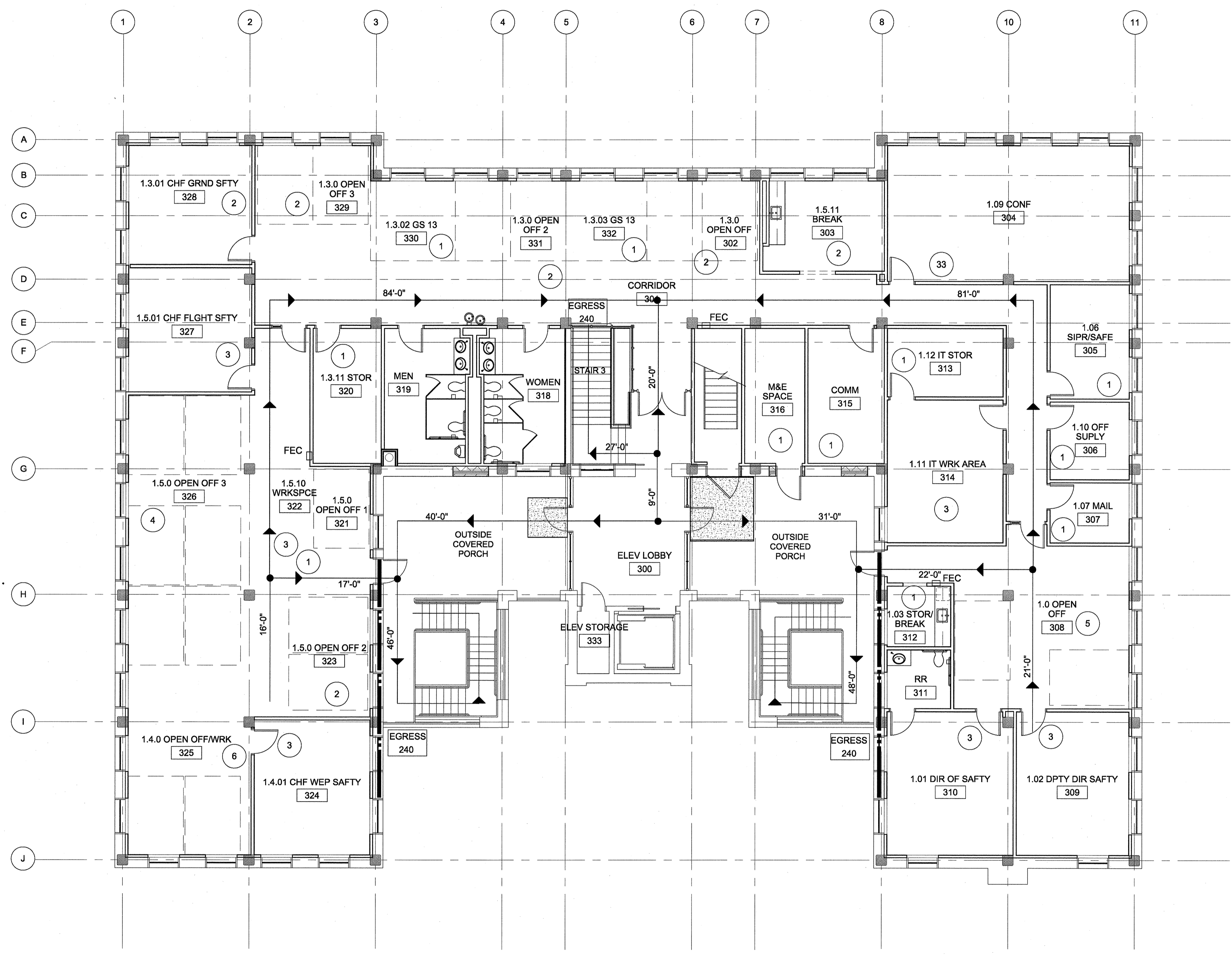
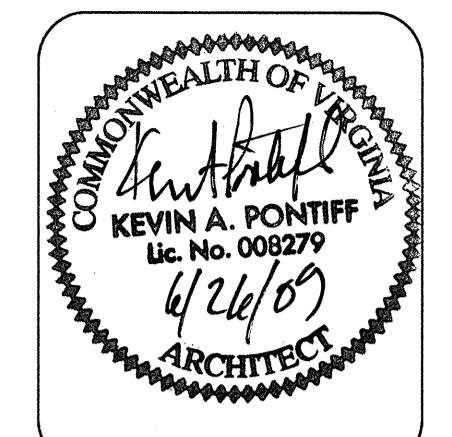
PROJECT NUMBER
 MUHJ08-4112

HQ ACC/DSF RENOVATION OF BUILDING 669

SECOND FLOOR LIFE SAFETY PLAN

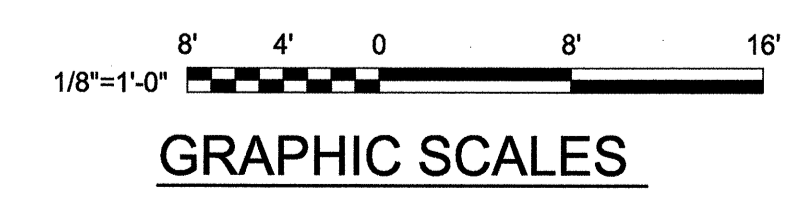


GENERAL NOTES:
 1. SEE SHEET LS101 FOR GENERAL NOTES.



- LEGEND:**
- 2 HOUR RATED
 - SMOKE PARTITION
 - BOX WITH EGRESS CAPACITY OF DOORS OR STAIRS INDICATED
 - MEANS OF EGRESS PATH
 - OCCUPANCY LOAD
 - FIRE EXTINGUISHER CABINET
 - FIRE EXTINGUISHER

THIRD FLOOR LIFE SAFETY PLAN
 SCALE: 1/8"=1'-0"
 PLAN NORTH

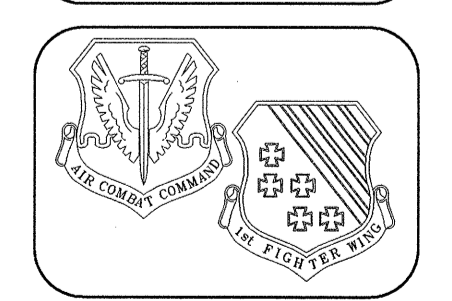


REV	DATE	APPROV	DESCRIPTION

DESIGNED BY: KAP	CHECKED BY: KAP
DATE: 06/26/2009	DATE: 06/26/2009
FILE NAME: 22253_3L_0104.DWG	PROJECT: 4112
PROJECT DATE: XX/XX/XXXX	PROJECT SCALE: AS NOTED
REVIEWED BY: JJB	SUBMITTED BY: KAP
PROJECT: DEPARTMENT OF THE AIR FORCE	PROJECT: AIR COMBAT COMMAND
PROJECT: LANGLEY AFB VA	PROJECT: CIVIL ENGINEERING OFFICE

PROJECT NUMBER
 MUHJ08-4112

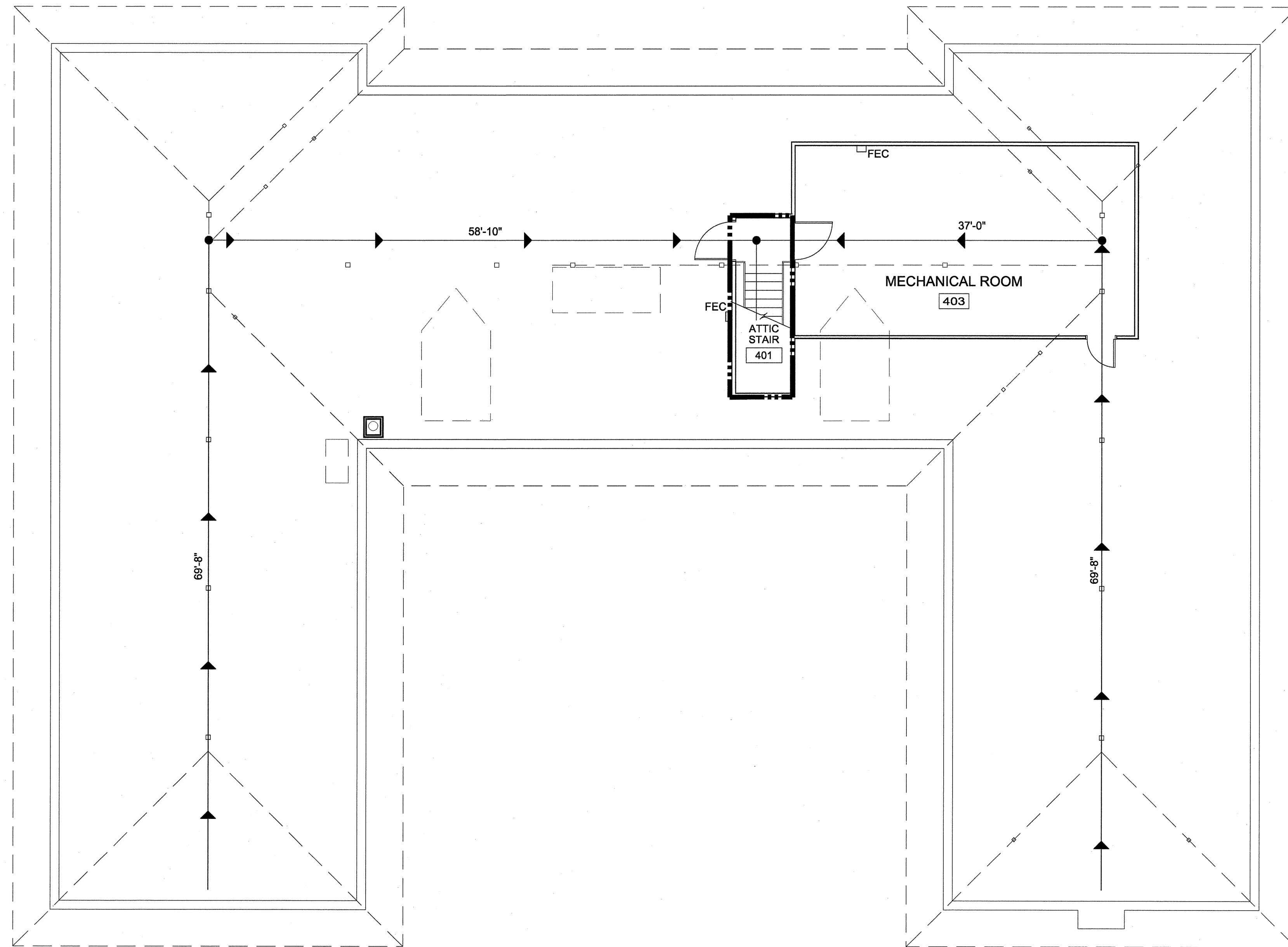
HQ ACC/DSF RENOVATION
 OF BUILDING 669
 THIRD FLOOR
 LIFE SAFETY PLAN



LS104
 SHEET 11 OF 174

GENERAL NOTES:

1. SEE SHEET LS101 FOR GENERAL NOTES.



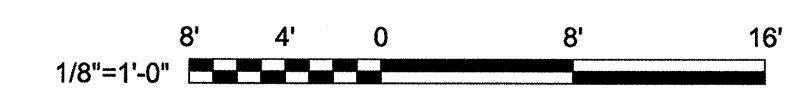
- LEGEND:**
- 1 HOUR RATED
 - EGRESS BOX WITH EGRESS CAPACITY OF DOORS OR STAIRS INDICATED
 - # MEANS OF EGRESS PATH
 - # OCCUPANCY LOAD
 - FEC FIRE EXTINGUISHER CABINET
 - FE FIRE EXTINGUISHER



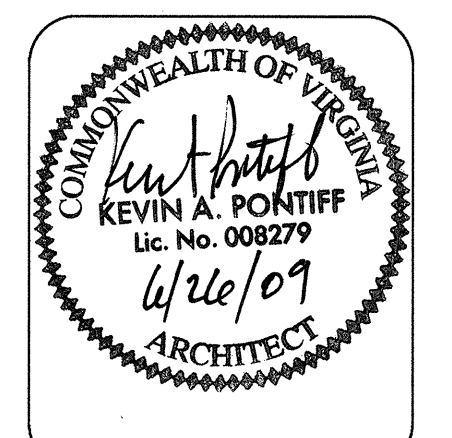
PLAN NORTH

ATTIC LIFE SAFETY PLAN

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



GRAPHIC SCALES



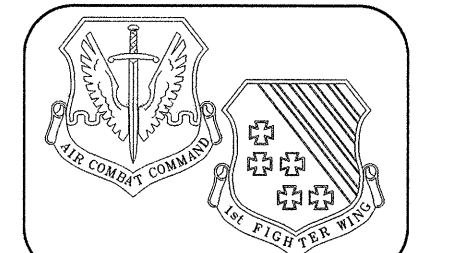
REV	DESCRIPTION	DATE	APPROV

DESIGNED BY: KAP	CHECKED BY: KAP
DATE: 06/26/2009	DRAWN BY: BCC
FILE NAME: 22345_LB_01105.DWG	REVIEWED BY: JBH
PLOT DATE: XX/XX/XXXX	SUBMITTED BY: KAP
PLOT SCALE: AS NOTED	

DEPARTMENT OF THE AIR FORCE
AIR COMBAT COMMAND
LANGLEY AFB VA
CIVIL ENGINEERING OFFICE

PROJECT NUMBER
MUHJ08-4112

HQ ACC/DSF RENOVATION OF BUILDING 669
ATTIC LIFE SAFETY PLAN



LS105
SHEET 12 OF 174