

# 735 WASHINGTON AVENUE FIRE ALARM SYSTEM

## SITE

WASHINGTON AVENUE APARTMENTS  
375 WASHINGTON AVENUE  
SOUTH PORTLAND, ME 05104

## INSTALLER

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Sheet List Table	
Sheet Number	Sheet Title
FA-001	COVER SHEET
FA-002	GENERAL INFORMATION
FA-101	DEVICE PLACEMENT PLAN
FA-201	RISER DIAGRAM
FA-601	CALCULATIONS AND SCHEDULES
FA-701	WIRING TYPICALS

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CWSI-735 WASHINGTON AVENUE

WASHINGTON AVENUE APARTMENTS  
375 WASHINGTON AVENUE  
SOUTH PORTLAND, ME 05104

ISSUE LOG	MARK	DATE	CAD	CHK	DESCRIPTION

DRAWN BY:	DZONA
CHECKED BY:	SKALAFARSKI
ISSUE DATE:	1/12/17
JOB #:	
PROJECT #:	147-147426986
SYSTEM:	SIMPLEXGRINNELL © 2017
SYSTEM:	FIRE ALARM SYSTEM
SHEET:	COVER SHEET
	FA-001

GENERAL NOTES

- 1. THESE DRAWINGS DEPICT GENERAL LOCATIONS OF LIFE SAFETY EQUIPMENT & FIELD DEVICES. EXACT ROUTING OF CONDUITS TO BE DETERMINED IN THE FIELD BY THE INSTALLING CONTRACTOR TO SUIT CONDITIONS. ALL CHANGES SHALL BE CLEARLY INDICATED ON THE RECORD DRAWINGS.

SYSTEM DESCRIPTION / SCOPE OF WORK

OCCUPANCY TYPE: R-2 RESIDENTIAL GROUP
SPRINKLER PROTECTION: BUILDING IS FULLY SPRINKLED
PROVIDE AND INSTALL A NEW AUTOMATIC AND MANUAL FIRE ALARM SYSTEM AS SHOWN ON DRAWINGS.

SYMBOL KEY

FIRE ALARM SYMBOLS LEGEND table with columns: SYMBOL, DESCRIPTION, MODEL#, COMMONLY USED BACKBOX, REFER TO DATA SHEET FOR OTHER OPTIONS

FIRE ALARM APPLICABLE CODES & STANDARDS

FIRE PREVENTION CODE (NFPA 1), 2006 EDITION
NATIONAL ELECTRIC CODE (NFPA 70), 2011 EDITION
ELEVATOR CODE ASME A.17.1, 2013

JURISDICTIONS WITHIN THE STATE MAY HAVE AMENDMENTS TO THE STATE ADOPTED CODE. CHECK WITH THE LOCAL JURISDICTION AUTHORITY FOR MORE DETAILS.

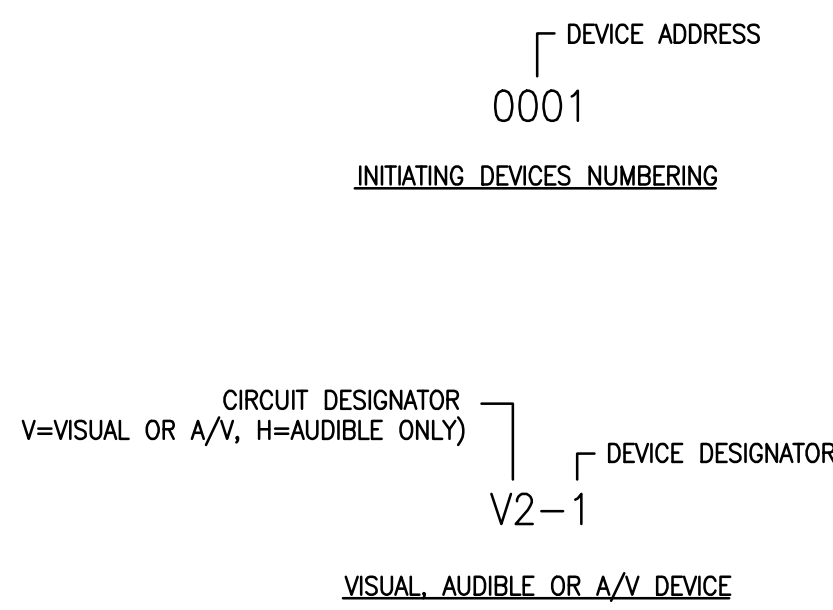
WIRE SCHEDULE

ABBREVIATIONS LEGEND

FIRE ALARM WIRE LIST table with columns: CIRCUIT DESCRIPTION, RISER RATED: FPLR, SINGLE CONDUCTOR (THHN, IFFN), PLENUM RATED: FPLP

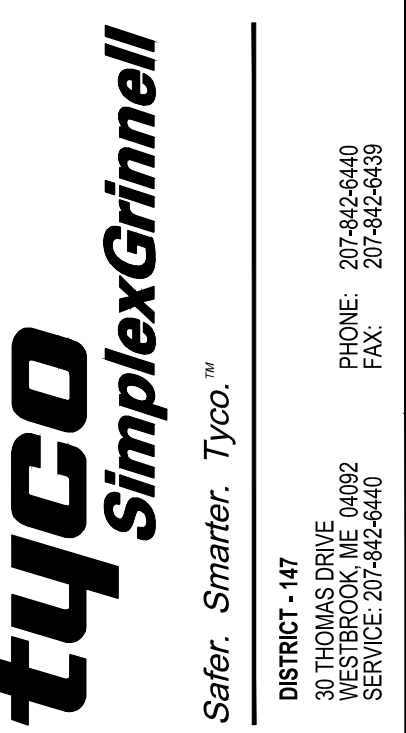
AC = ABOVE CEILING
C = CEILING MOUNTED
E = EXISTING TO REMAIN
RC = EXISTING TO REMOVE AND COVER
RD = EXISTING DEVICE TO BE RELOCATED
RL = RELOCATED DEVICE
RR = REMOVE EXISTING AND REPLACE W/NEW

DEVICE ADDRESSING LEGEND



SEQUENCE OF OPERATION

SEQUENCE OF OPERATION table with columns: SYSTEM INPUTS, SYSTEM OUTPUTS, NOTIFICATION, FIRE SAFETY CONTROL, REMARKS



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Table with columns: ISSUE DATE, MARK, DATE, CAD, CRK, DESCRIPTION

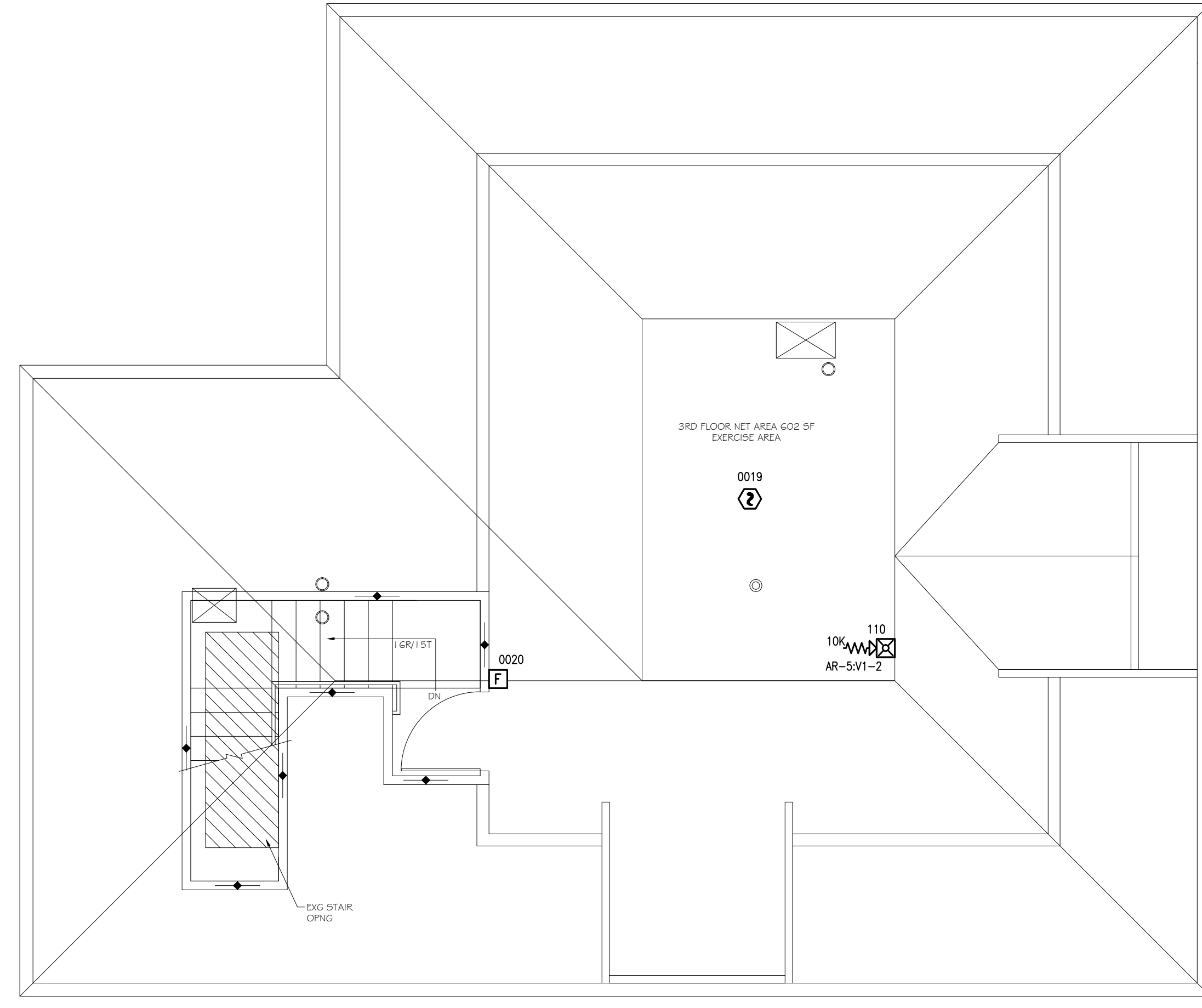
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SYSTEM: FIRE ALARM SYSTEM
SHEET:

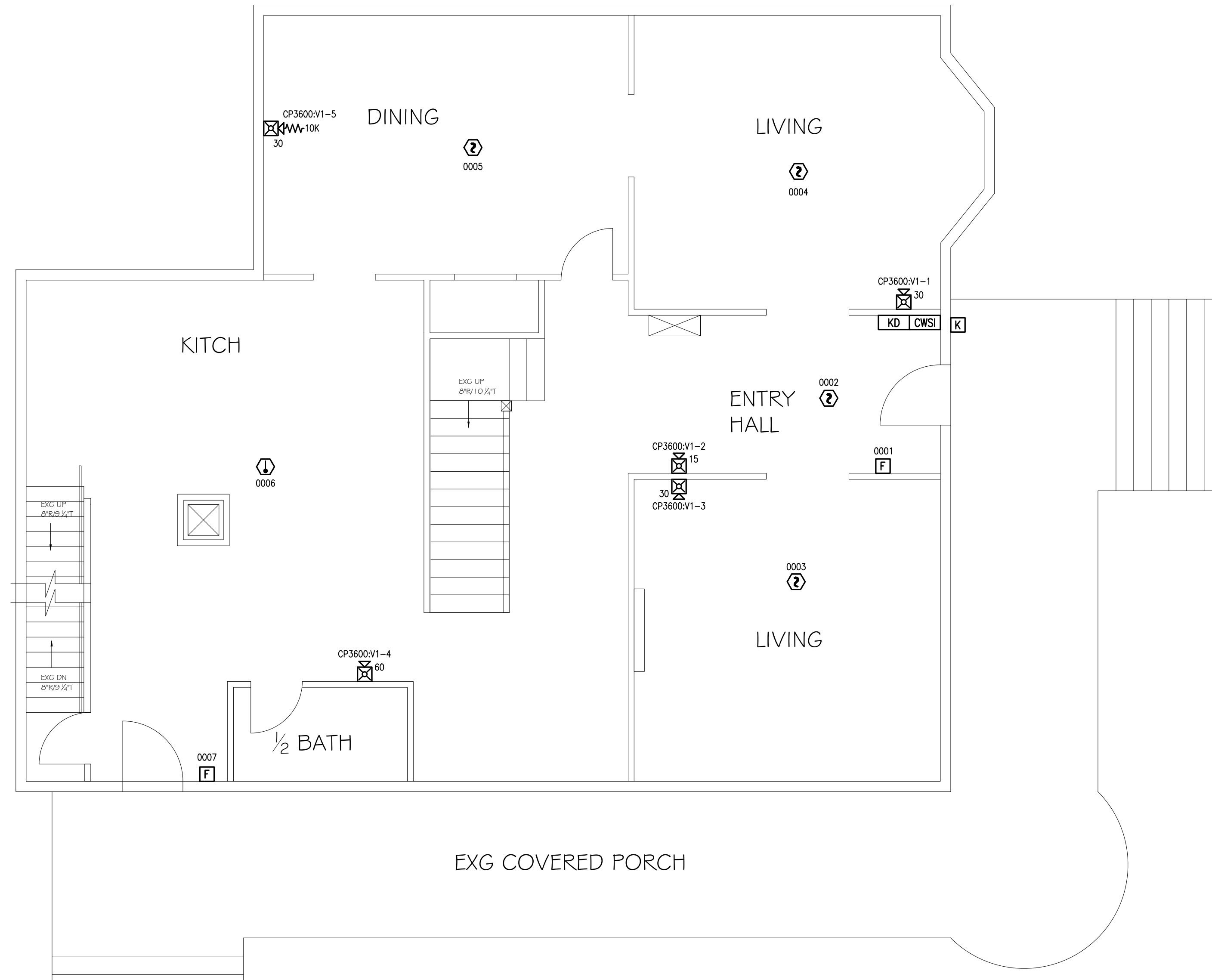
GENERAL INFORMATION
FA-002

GENERAL NOTES:  
 1. ALL CEILING ARE ASSUMED TO BE 10' A.F.F., SMOOTH CONSTRUCTION UNLESS NOTED OTHERWISE.  
 2. TYP ALL SPEAKERS AT 0.5W UNLESS NOTED OTHERWISE.  
 3. SET ALL SPEAKER VOLUME JUMPERS TO THE 70-75 SETTING.  
 4. ALL NOTIFICATION APPLIANCE CANDELA INTENSITY PLUS SHALL RETAIN THEIR FACTORY SETTING OF "TRAP" UNLESS OTHERWISE DIRECTED BY THE AUTHORITY HAVING JURISDICTION.

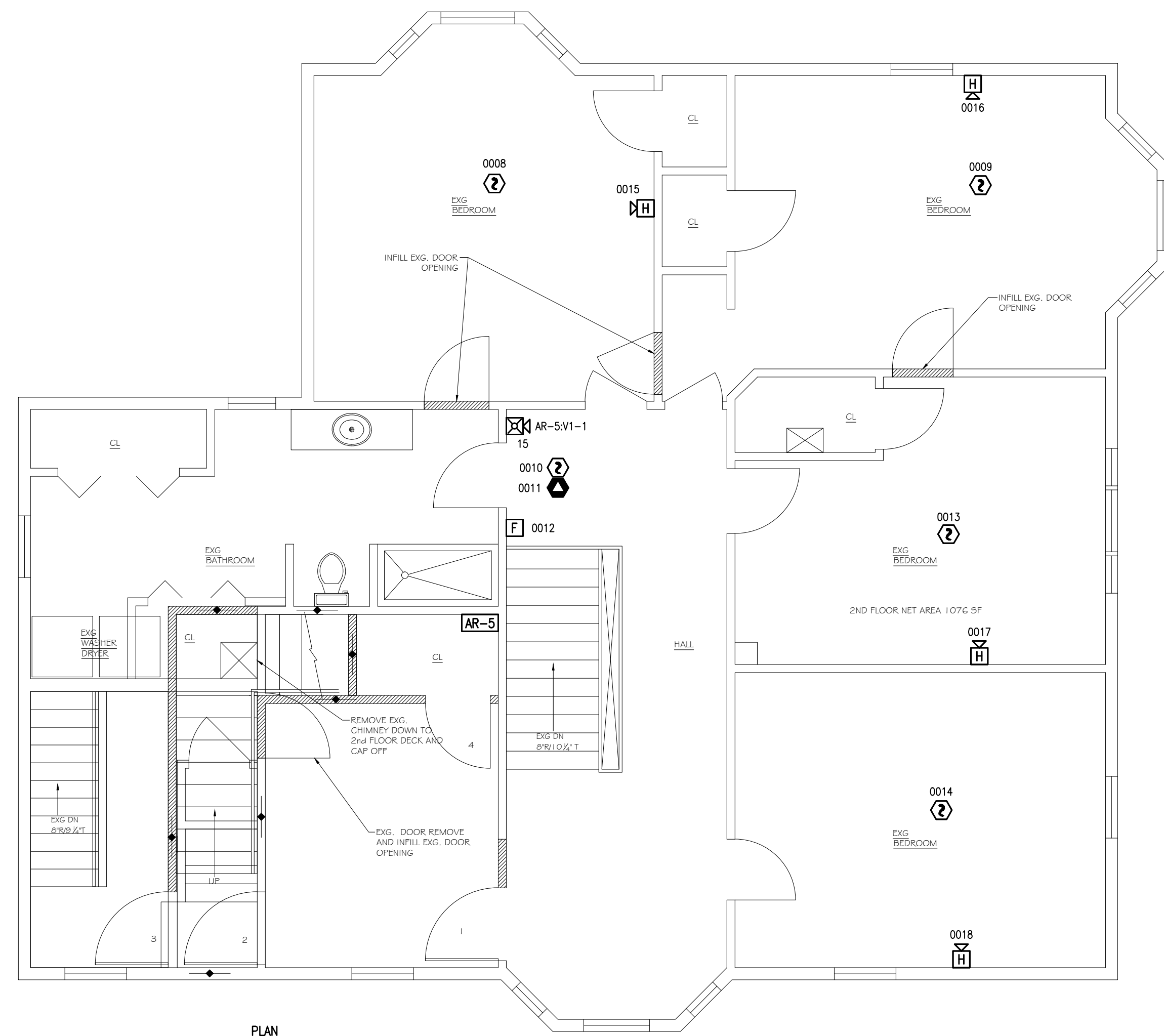
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PLAN NORTH  
 DEVICE PLACEMENT PLAN - THIRD FLOOR  
 SCALE: 1/4" = 1'-0"  
 (IN FEET)



PLAN NORTH  
 DEVICE PLACEMENT PLAN - FIRST FLOOR  
 SCALE: 1/4" = 1'-0"  
 (IN FEET)



PLAN NORTH  
 DEVICE PLACEMENT PLAN - SECOND FLOOR  
 SCALE: 1/4" = 1'-0"  
 (IN FEET)

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ISSUE LOG	MARK	DATE	CD	CHK	DESCRIPTION

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 JOB #: 147-147426986  
 PROJECT #: SIMPLEXGRINNELL © 2017  
 SYSTEM: FIRE ALARM SYSTEM  
 SHEET:  
 DEVICE PLACEMENT PLAN  
 FA-101

FILE PATH: P:\2017\47\CWSI\735 Washington Ave\CAD\FA-101.dwg  
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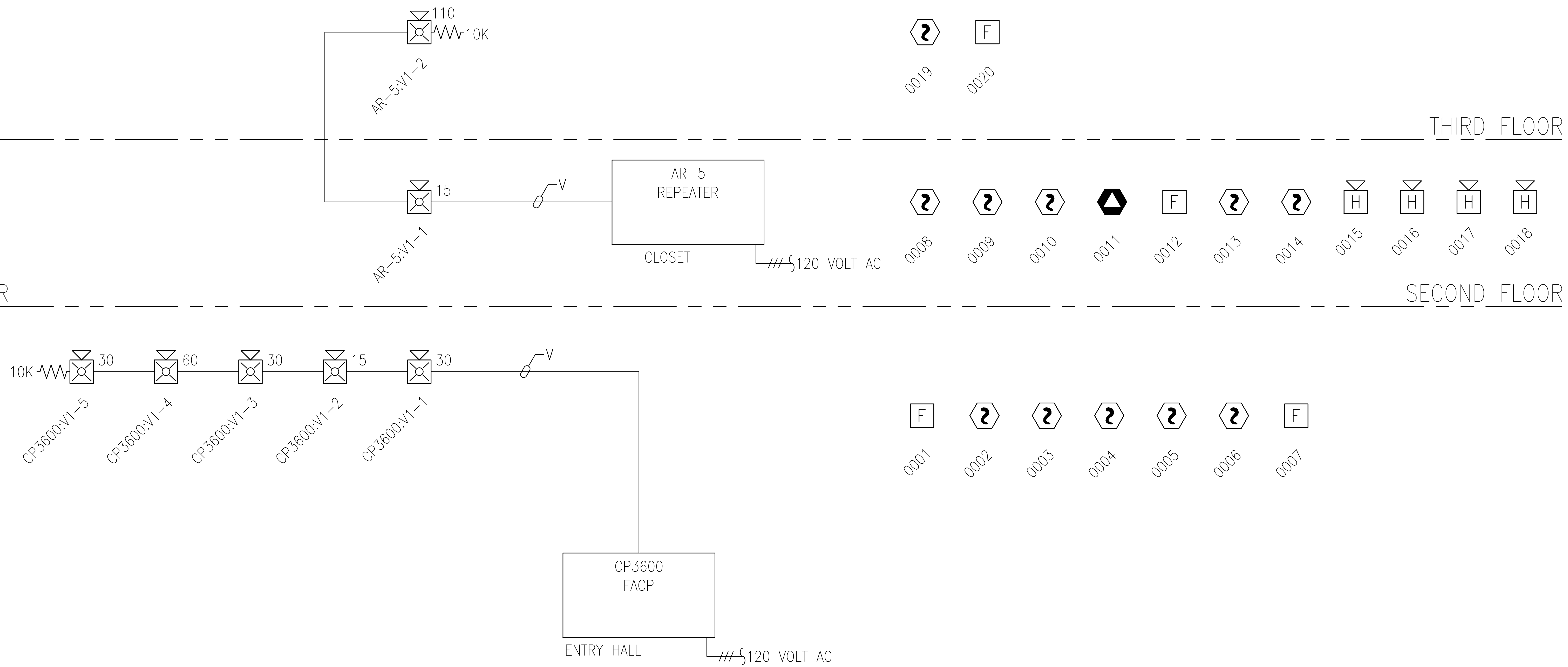
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FIRST FLOOR

SECOND FLOOR

THIRD FLOOR



ISSUE LOG	MARK	DATE	CAD	CHK	DESCRIPTION

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PROJECT #: 147-147426998
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SYSTEM: FIRE ALARM SYSTEM
SHEET: RISER DIAGRAM

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CWS1 CP-3600 NAC VOLTAGE DROPS											PID Setting									
WIRE RESISTANCE BASED ON TABLE 8 FROM NATIONAL ELECTRICAL CODE (UNCOATED SOLID COPPER WIRE) @ 75 Celsius											GEC3-24WR		GEC3-24WR							
											15cd		110cd							
											MC A/V		MC A/V							
											0.0000		0.0000							
											0.0770		0.2560							
											0.0770		0.2560							
NOTIFICATION CIRCUIT DESCRIPTION											Plan Ckt.	Dist. (Ft.)	Wire Gauge	Wire Res. / Ft. (R)	Total Alarm (A)	V. Drop (A <sup>2</sup> D <sup>2</sup> /B)	Volt @ End	% Volt Drop	Min Device Voltage	Max Distance
SECOND & THIRD FLOOR CKT											AR-5 V1-1	40	14ga	0.0031	0.333	0.107	19.393	19.19%	16vdc	1710 Ft.
SPARE											AR-5 V1-2		14ga	0.0031	0.000	0.000	19.500	18.75%	16vdc	0 Ft.

CWS1 CP-3600 NAC VOLTAGE DROPS											PID Setting									
WIRE RESISTANCE BASED ON TABLE 8 FROM NATIONAL ELECTRICAL CODE (UNCOATED SOLID COPPER WIRE) @ 75 Celsius											GEC3-24WR		GEC3-24WR		GEC3-24WR					
											15cd		30cd		60cd					
											MC A/V		MC A/V		MC A/V					
											0.0000		0.0000		0.0000					
											0.0770		0.1020		0.1610					
											0.0770		0.1020		0.1610					
NOTIFICATION CIRCUIT DESCRIPTION											Plan Ckt.	Dist. (Ft.)	Wire Gauge	Wire Res. / Ft. (R)	Total Alarm (A)	V. Drop (A <sup>2</sup> D <sup>2</sup> /B)	Volt @ End	% Volt Drop	Min Device Voltage	Max Distance
FIRST FLOOR CKT											CP3600 V1-1	100	14ga	0.0031	0.544	0.397	19.103	20.40%	16vdc	1046 Ft.
SPARE											CP3600 V1-2		14ga	0.0031	0.000	0.000	19.500	18.75%	16vdc	0 Ft.

AR-5 REPEATER BATTERY CALC						
Module	Qty	Description	Standby Current	Total Standby	Alarm Current	Total Alarm
Panel Equipment						
AR-5	1	CWSI WIRELESS REPEATER	0.030000	0.030000	0.180	0.180000
Total Panel Stby			0.030000			0.180000
Multi-Candela Strobes (Select Candella Rating)						
GEC3-24WR	1	GENTEX HORN STROBE	15cd	0.000000	0.000000	0.077
GEC3-24WR	1	GENTEX HORN STROBE	110cd	0.000000	0.000000	0.256
Total Periph Stby			0.000			0.333
Total Standby Amps			0.030			0.513
Total Alarm Amps						0.513

\* Additional Current Draw Included Below With Device Addresses Used  
 1. 2-wire detector alarm current is included in the alarm current of the initiating device circuit.

Battery Calculations		Standby Current	Alarm Current
Control Panel Card Power		0.030	0.180
Power For External Peripheral Devices		0.000000	0.333000
Additional Battery Capacity Required		0%	0.000
Standby Time =	24 Hrs	0.720	Standby Ah
Alarm Time =	5 Mins	0.043	Alarm Ah
Minimum Battery Required BA-12V-40VS		0.763	
		0.915	20% Safety Margin

CP-3600 BATTERY CALC						
Module	Qty	Description	Standby Current	Total Standby	Alarm Current	Total Alarm
Panel Equipment						
CP-3600	1	CWSI WIRELESS CONTROL FACP	0.100000	0.100000	0.250	0.250000
Total Panel Stby			0.100000			0.250000
Multi-Candela Strobes (Select Candella Rating)						
GEC3-24WR	1	GENTEX HORN STROBE	15cd	0.000000	0.000000	0.077
GEC3-24WR	3	GENTEX HORN STROBE	30cd	0.000000	0.000000	0.102
GEC3-24WR	1	GENTEX HORN STROBE	60cd	0.000000	0.000000	0.161
Total Periph Stby			0.000			0.340
Total Standby Amps			0.100			0.794
Total Alarm Amps						0.794

\* Additional Current Draw Included Below With Device Addresses Used  
 1. 2-wire detector alarm current is included in the alarm current of the initiating device circuit.

Battery Calculations		Standby Current	Alarm Current
Control Panel Card Power		0.100	0.250
Power For External Peripheral Devices		0.000000	0.544000
Additional Battery Capacity Required		0%	0.000
Standby Time =	24 Hrs	2.400	Standby Ah
Alarm Time =	5 Mins	0.066	Alarm Ah
Minimum Battery Required BA-12V-7AHS		2.466	
		2.959	20% Safety Margin

ISSUE LOG	MARK	DATE	CHK	DESCRIPTION

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JOB #:	
PROJECT #:	147-147426986
SYSTEM:	SIMPLEXGRINNELL © 2017
SYSTEM:	FIRE ALARM SYSTEM

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