

## FIRESTONE

## 10348 CANE CREEK DRIVE HUNTERSVILLE, NC

	INDEX OF DRA	AWINGS		
SHEET	DESCRIPTION	REVISION	REVISION DATE	REVISION DESCRIPTION
FA0.0	INDEX, LEGENDS, NOTES, BILL OF MATERIALS			
FA1.1	FIRE ALARM SYSTEM - FLOOR PLAN			
FA2.1	RISER DIAGRAM AND BATTERY CALCULATIONS			
FA3.1	FACU WIRING DIAGRAM			
FA4.1	FIELD DEVICE WIRING DETAILS			

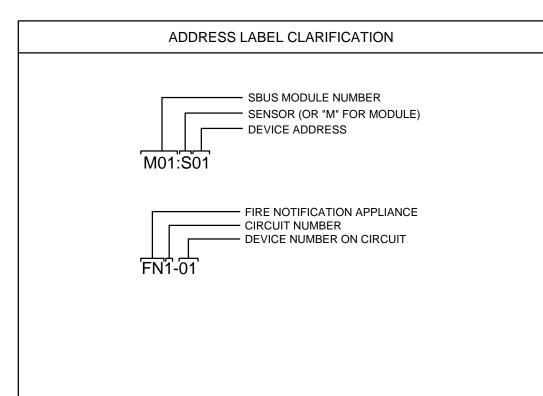
		FLOOR PLAN BILL O	FMATERIALS	
QTY	SYMBOL	DEVICE	PART NUMBER	MANUFACTURER
1	<b>②</b>	DUCT DETECTOR HOUSING/DETECTOR HEAD/SAMPLING TUBE	DNR/IDP-PHOTOR/DST	SILENT KNIGHT
S REQ'D.	_w-	END OF LINE RESISTOR	VARIES	VARIES
1	FAA	FIRE ALARM ANNUNCIATOR	SEE PANEL BILL OF MATERIALS	SILENT KNIGHT
1	FACU	FIRE ALARM CONTROL UNIT	SEE PANEL BILL OF MATERIALS	SILENT KNIGHT
7		HORN/STROBE-WALL MOUNT-RED	P2RL	SYSTEM SENSOR
S REQ'D.	JB	JUNCTION BOX	BY OTHERS	BY OTHERS
1	AIM	MONITOR MODULE-DUAL	IDP-MONITOR-2	SILENT KNIGHT
1	<b>(∑</b> ) <sup>P</sup>	PHOTOELECTRIC DETECTOR/BASE	IDP-PHOTO-W/B300-6	FARENHYT
1	(AOM) R	RELAY MODULE	IDP-RELAY	SILENT KNIGHT
1	RTS-K	REMOTE TEST STATION WITH KEY	RTS151KEY	SYSTEM SENSOR
4	X	STROBE-WALL MOUNT-RED	SRL	SYSTEM SENSOR
1	VS	TAMPER SWITCH	BY OTHERS	BY OTHERS
1	WF	WATERFLOW SWITCH	BY OTHERS	BY OTHERS

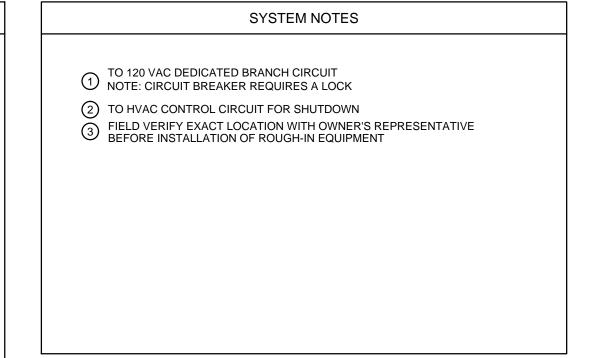
	PANEL EC	QUIPMENT LIST	
QTY	DESCRIPTION	PART NUMBER	MANUFACTURER
2	BATTERY; 12V; 7AH (BULK PACK OF 5)	BAT-1270-BP (SEE BATTERY QUANTITY NOTE)	SILENT KNIGHT
2	COMMUNICATOR/TRANSMITTER PHONE CORD	7860	HONEYWELL
1	INTELLIGENT ANALOG/ADDRESSABLE FIRE ALARM CONTROL UNIT	IFP-75	SILENT KNIGHT
1	REMOTE ANNUNCIATOR	RA-1000	SILENT KNIGHT

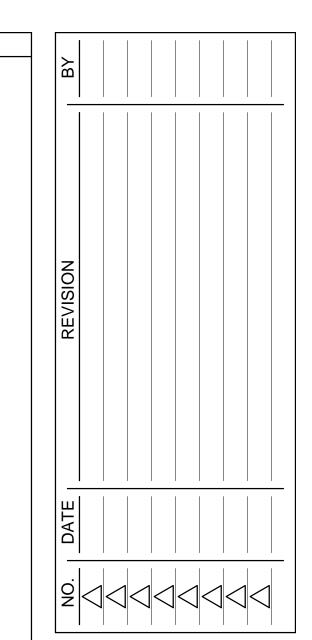
NOTE ON BATTERY QUANTITIES:
QUANTITIES OF BATTERIES SHOWN ARE FOR INDIVIDUAL BATTERIES. BATTERIES WITH PART NUMBERS ENDING IN -BP ARE SOLD IN BULK PACKS ONLY. REFER

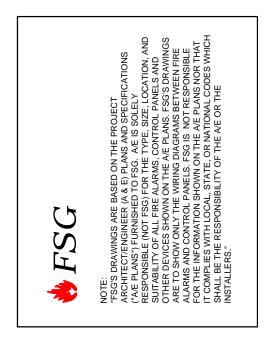
TO DESCRIPTION COLUMN FOR NUMBER OF BATTERIES PER BULK PACK.

	WIR	E LEGEND	
DESIGNATION	CIRCUIT TYPE	WIRE TYPE	CIRCUIT CLASS
Α	SIGNALING LINE CIRCUIT (SLC LOOP)	2#16 TWISTED/UNSHIELDED - FPLR	CLASS B
С	HORN/STROBE CIRCUIT	2#12 AWG - FPL	CLASS B
E	INITIATING DEVICE CIRCUIT	2#16 AWG - FPL	CLASS B
S	SBUS	4#18 AWG - FPL	CLASS B
Т	REMOTE TEST STATION CONNECTIONS	4#18 AWG - THHN	



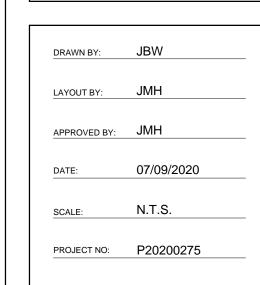






Fire & Data Systems, Inc. 104 Ginger Lane Hamlet, NC 28345





FIRE ALARM SYSTEM

COVER SHEET
INDEX OF DRAWINGS,
NOTES, LEGENDS,
BILL OF MATERIALS

SHEET

FA0.0

SYSTEM NOTES

ADDRESS LABEL CLARIFICATION

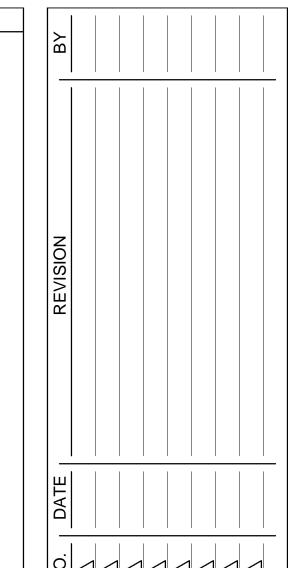
TO 120 VAC DEDICATED BRANCH CIRCUIT
NOTE: CIRCUIT BREAKER REQUIRES A LOCK
TO HVAC CONTROL CIRCUIT FOR SHUTDOWN
FIELD VERIFY EXACT LOCATION WITH OWNER'S REPRESENTATIVE
BEFORE INSTALLATION OF ROUGH-IN EQUIPMENT

FIRE NOTIFICATION APPLIANCE
CIRCUIT NUMBER
DEVICE NUMBER ON CIRCUIT

FIRE NOTIFICATION APPLIANCE
CIRCUIT NUMBER
DEVICE NUMBER ON CIRCUIT

	WIR	E LEGEND	_
DESIGNATION	CIRCUIT TYPE	WIRE TYPE	CIRCUIT CLASS
А	SIGNALING LINE CIRCUIT (SLC LOOP)	2#16 TWISTED/UNSHIELDED - FPLR	CLASS B
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T	REMOTE TEST STATION CONNECTIONS	4#18 AWG - THHN	

		DEVICE LEG	END	
QTY	SYMBOL	DEVICE	PART NUMBER	MANUFACTUR
1	<b>②</b> =	DUCT DETECTOR HOUSING/DETECTOR HEAD/SAMPLING TUBE	DNR/IDP-PHOTOR/DST	SILENT KNIGH
AS REQ'D.	w-	END OF LINE RESISTOR	VARIES	VARIES
1	FAA	FIRE ALARM ANNUNCIATOR	SEE WIRING DETAILS	SILENT KNIGH
1	FACU	FIRE ALARM CONTROL UNIT	SEE WIRING DETAILS	SILENT KNIGH
7		HORN/STROBE-WALL MOUNT-RED	P2RL	SYSTEM SENS
AS REQ'D.	JB	JUNCTION BOX	BY OTHERS	BY OTHERS
1	(AIM) DM	MONITOR MODULE-DUAL	IDP-MONITOR-2	SILENT KNIGH
1	(2) ₽	PHOTOELECTRIC DETECTOR/BASE	IDP-PHOTO-W/B300-6	FARENHYT
1	(AOM) R	RELAY MODULE	IDP-RELAY	SILENT KNIGH
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1	VS	TAMPER SWITCH	BY OTHERS	BY OTHERS
1	WF	WATERFLOW SWITCH	BY OTHERS	BY OTHERS



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ASED ON THE PROJECT

A & E) PLANS AND SPECIFICATIONS

OTO FSG. AEIS SOLELY

ALARMS, CONTROL PANELS AND

ON THE AÆ PLANS, FSG'S DRAWINGS

WIRING DIAGRAMS BETWEEN

SHEWELS, FSG IS NOT RESPONSIBLE
SHOWN ON THE AÆ PLANS NOR THAT

L, STATE, OR NATIONAL CODES WHICH

BILLITY OF THE AE OR THE

Fire & Data Systems, Inc. 104 Ginger Lane Hamlet, NC 28345 704-582-1616

FIRESTONE
10348 CANE CREEK DRIVE

DRAWN BY: XXX

LAYOUT BY: JMH

APPROVED BY: JMH

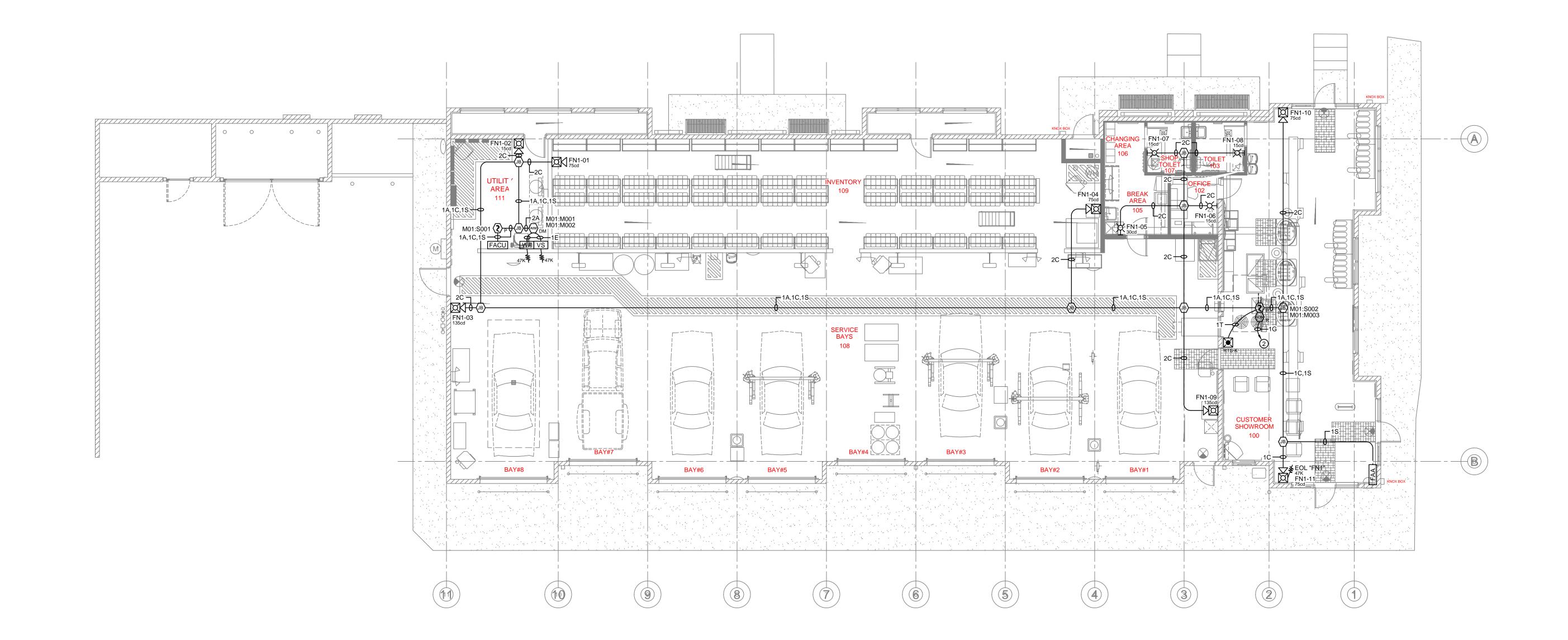
DATE: 07/09/2020

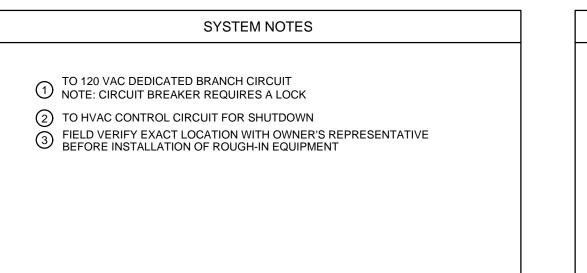
SCALE: 1/8" = 1'-0"

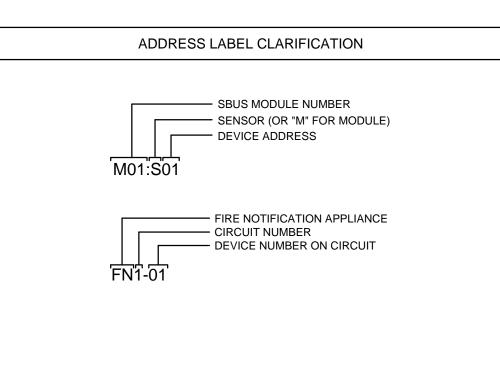
FIRE ALARM SYSTEM
FLOOR PLAN

SHEET

FA1.1







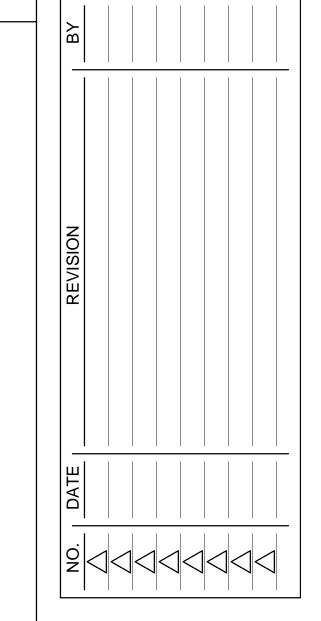
	WIDE	LECEND	
	WIRE	ELEGEND T	
DESIGNATION	CIRCUIT TYPE	WIRE TYPE	CIRCUIT CLASS
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	RISER I	DEVICE LEGEND	
SYMBOL	DEVICE	PART NUMBER	MANUFACTURE
<b>②</b> =	DUCT DETECTOR HOUSING/DETECTOR HEAD/SAMPLING TUBE	DNR/IDP-PHOTOR/DST	SILENT KNIGHT
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<b>(∑</b> ) <sub>P</sub>	PHOTOELECTRIC DETECTOR/BASE	IDP-PHOTO-W/B300-6	FARENHYT
(AOM) R	RELAY MODULE	IDP-RELAY	SILENT KNIGHT
RTS-K	REMOTE TEST STATION WITH KEY	RTS151KEY	SYSTEM SENSO
<u>X</u>	STROBE-WALL MOUNT-RED	SRL	SYSTEM SENSO
SS <sub>HV</sub>	SURGE SUPPRESSOR-HIGH VOLTAGE	DTK-120SRD	DITEK
VS	TAMPER SWITCH	BY OTHERS	BY OTHERS
WF	WATERFLOW SWITCH	BY OTHERS	BY OTHERS

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FN1" 75cd FN1-11 CUSTOMER SHOWROOM 100	FN1-10 CUSTOMER SHOWROOM 100	FN1-09 SERVICE BAYS 108	FN1-08 TOILET 103	FN1-07 SHOP TOILET 107	FN1-06 OFFICE 102	FN1-05 BREAK AREA 105	FN1-04 INVENTORY 109	FN1-03 SERVICE BAYS 108	FN1-02 UTILITY AREA 111	FN1-01 INVENTORY 109	1A	M01:S001 UTILITY AREA 111	47K	M01:S002 CUSTOMER SHOWROOM	M01:M003 CUSTOMER SHOWROOM
											TILITY AREA 111	CUSTOMER SHOWROOM 100			

IFP-75 Battery Calculation

Note 1: You are fully responsible for verifying these calculations.

Note 2: Use the dropdowns in the yellow cells to enter values.

Device Type	Qty	_	Standby Current Current Draw	(am	nps) Total	Qty	eco	ondary Alarm Co Current Draw	urre	nt (amps) Total
Control Panel		_	Current Diaw		Total	7		Ourient Diaw		Total
IFP-75 Control Panel	1	х	0.165000	=	0.165000	1	х	0.310000	=	0.31000
2. Addressable SLC Devices IDP-PHOTO (-T)		х	0.000300	T=T		ı	l۷	0.000300	I_I	
IDP-PHOTO-W (-T)	1	×	0.000300	<del> </del> =	0.000200	1	X X	0.000300	=	0.000450
IDP-HEAT(-HT) (-ROR)		x	0.000300	=	0.000200	<u> </u>	Х	0.000300	=	0.00010
IDP-HEAT-W(HT) (ROR)		х	0.000200	1=1	0.000200		х	0.000450	=	0.000450
IDP-BEAM		х	0.002000	=			х	0.002000	=	
IDP-BEAM-T		х	0.002000	=			х	0.002000	=	
IDP-DUCT	1	х	0.000300	=	0.000300	1	х	0.000300	=	0.00030
IDP-ACCLIMATE		х	0.000300	=			х	0.000300	=	
IDP-CONTROL		х	0.000375	=			Х	0.000375	=	
IDP-MONITOR IDP-MINIMON		X	0.000375	=			X	0.000375	=	
IDP-PULL-SA		x x	0.000375 0.000375	=			x x	0.000375 0.000375	=	
IDP-PULL-DA		x	0.000375	=			x	0.000375	=	
IDP-MONITOR-2	1	x	0.000750	=	0.000750	1	Х	0.000750	=	0.00075
IDP-MON-10		х	0.003500	=	0.003500		х	0.003500	=	0.00350
IDP-RELAY-6		х	0.001450	=			х	0.001450	=	
IDP-CONTROL-6		х	0.002250	=			х	0.002250	=	
IDP-RELAY	1	х	0.000255	=	0.000255	1	х	0.000255	=	0.00025
IDP-RELAYMON-2		х	0.001300	=			х	0.024000	=	
IDP-ZONE		х	0.000270	=		<b> </b>	X	0.000270	=	
IDP-ZONE-6		X	0.002000	=	0.000000		X	0.002000	=	0.00700
IDP-FIRE-CO 3. SLC Accessory Bases		Х	0.000300	=	0.000300	<u> </u>	Х	0.007200	=	0.00720
B200S		х	0.000300	<u> </u>		I	х	0.000300	[=]	
B200S-LF		×	0.000300	<del> </del> =		<del>                                     </del>	x	0.000300	=	
B200SR		x	0.000300	<del> </del> =		<b>†</b>	x	0.000300	=	
B200SR-LF		х	0.000300	ऻॗऻ		1	х	0.000300	=	
B224RB		х	0.000500	1=1			х	0.000500	=	
RTS151		х	0.000000	=			х	0.007500	=	
RTS151KEY	1	х	0.000000	=	0.000000	1	х	0.007500	=	0.00750
RA100Z		х	0.000000	=			х	0.010000	=	
SLC Isolator Devices								•	_	
IDP-ISO		х	0.000450	=			х	0.000450	=	
ISO-6 B224BI		x x	0.002700	=			X	0.102000	=	
5. Auxiliary Power Draw - SLC De	vices	^	0.000500	=		<u> </u>	х	0.000500	لتا	
SK-CONTROL (Aux. Power)		х	0.001700	=		I	х	0.007000	=	
SK-CONTROL-6 (Aux. Power)		х	0.008000	╘			х	0.020000	=	
SK-ZONE (Aux. Power)		х	0.012000	=			х	0.090000	=	
SK-ZONE-6 (Aux. Power)		х	0.050000	=			х	0.270000	=	
B200S (Aux. Power)		х	0.000500	=			х	0.035000	=	
B200S-LF (Aux. Power)		х	0.000550	ᅵᅴ			х	0.140000	=	
B200SR (Aux. Power)		х	0.000500	=			х		=	
B200SR-LF (Aux. Power)  6. Accessory Modules		Х	0.001000	=			Х	0.125000	=	
RA-1000	1	х	0.020000	1_1	0.020000	1	l v	0.025000	I_I	0.02500
5824		×	0.045000	=	0.020000	<u>'</u>	X X	0.025000 0.045000	=	0.02300
5496		×	0.010000	<del> </del> =			x	0.043000	=	
RPS-1000		×	0.010000	<del> </del> =		<del>                                     </del>	x	0.010000	=	
RA-100		x	0.020000	<del> </del> =			x	0.025000	=	
RA-2000		х	0.025000	╘		İ	х	0.050000	=	
5865-4		х	0.035000	Ξ			х	0.145000	Ξ	
5865-3		х	0.035000	Ξ			х	0.145000	Ξ	
5880		х	0.035000	Ξ			х	0.200000	=	
5883		х	0.000000	=		<u> </u>	х	0.220000	=	
SK-IP-2		х	0.093000	=		ļ	х	0.136000	=	
SK-IP-2UD		х	0.098000	=		<b> </b>	X	0.155000	=	
CELL CAR SK		X	0.055000	=		<del>                                     </del>	X	0.100000	=	
CELL-CAB-SK WSK-WGI Aux. Power		X	0.055000	=		<b> </b>	×	0.100000	=	
SLC Power		X X	0.040000	=		<del>                                     </del>	x x	0.040000 0.024000	=	
SK-NIC		x	0.021000	≡  ₌		<del>                                     </del>	X	0.024000	=	
SK-NIC-KIT		x	0.021000	▐		<b> </b>	x	0.021000	=	
SK-FSL		x	0.079000	Ĭ <u>Ŧ</u>		<b>i</b>	х		=	
SK-FML		х	0.053000	=			х		=	
SK-FFT		х	0.120000	=			х	0.230000	=	
7. Miscellaneous Devices				_					_	
Conventional Detectors		х	0.000000	=	·		Х		=	
Miscellaneous Device 1		х	0.000000	=		<u> </u>	х	0.000000	=	
Miscellaneous Device 2		х	0.000000	=		<b></b>	х	0.000000	=	
Miscellaneous Device 3		х	0.000000	=		<u> </u>	х	0.000000	=	
Miscellaneous Device 4		х	0.000000	┞		<b> </b>	х	0.000000	=	
Minage Harrison Deliter		х	0.000000	=		l	Х	0.000000	=	
Miscellaneous Device 5										
8. Notification Appliance Circuits	4		0.00000	_		4	Γ	1 122000		1 12200
	1	П	0.000000	=		1	L	1.122000	=	1.12200

Jul 10, 2020 - 4:18pm

IFP-75 Battery Calculation

Standby Load Current		_	0.100	E4 /			_	24 Hour	_	
			0.190	51 F	Amps	x Re	auii	24 red Alarm Tin		4.572 AH n Minutes
							7	15 Minut		
Alarm Load Current (Amps)			1.477	41 A	mps	Х		0.25	= (	0.369 AH
						-	Tota	al Current Loa	ad 4	4.941 AH
			Multiply by th	ne D	erating Factor		1	.2	= 2	x 1.20
					То	tal Ampe	re l	Hours Require	ed !	5.93 AH
			Pocom	mon	ided Batteries:			T-1270 - 7AH		
2 " 0 1			Recom	IIIEI	ided Balleries.	l	ВΑ	1-1270 - 7AI	Ба	illeries
Battery Check The batteries can be charged	by the IF	P-	75 Charger.							
The batteries can be housed in										
Current Draw Check										
Circuit#1 current is within the I										
Circuit#2 current is within the I	IIIIIalion	15 0	i the circuit.							
The output current is within the	e panel's	s lin	nitations.							
<u>.                                    </u>	•									
				IF	P-75 Cir	cuit D	et	ail		
		_							_	
				VAC						
Device	Qty	Ļ,	Non-Alarm Draw	$\Box$	Total	Qty	Ļ	Alarm Draw	Д	Total
System Sensor L 15CD	3	х	0.000000	=	0.000000	3	х	0.043000	=	0.129000
System Sensor L 30CD	1	х	0.000000	=	0.000000	1	х	0.063000	=	0.063000
System Sensor P2L 15CD	1	х	0.000000	=	0.000000	1	х	0.054000	=	0.054000
System Sensor P2L 75CD	4	х	0.000000	=	0.000000	4	х	0.121000	ᄇ	0.484000
System Sensor P2L 135CD	2	х	0.000000	<u> =</u>	0.000000	2	х	0.196000		0.392000
		х	0.000000	=			х	0.000000		
		х	0.000000	=			х	0.000000	ĿĽ	
		х	0.000000	[=			х	0.000000	ĿΙ	
		х	0.000000	=			х	0.000000	LΞĪ	
		х	0.000000	Ţ≡Ì			х	0.000000		
		Ť	otal Standby Lo	oad	0.000000		To	otal Alarm Loa	ad	1.122000
				14.0	2					
Dovice	Qty	Г		NAC		Qty	Г	Alarm Draw	_	Total
Device	Qιy	x	Non-Alarm Draw 0.000000	1_	Total	Qιy	хI	0.000000	+	Total
		×	0.000000	=			x	0.000000	+	
		×	0.000000	╁			x	0.000000	╣	
		x	0.000000	=			x	0.000000	Ē	
		x	0.000000	1=1			x	0.000000	=	
		х	0.000000	=			х	0.000000	I	
		х	0.000000	=			х	0.000000	ĮΞŢ	
				=		<u> </u>	х	0.000000	╒╽	
		x	0.000000	—				0.000000	. 1	
		х	0.000000	Ξ			X	0.000000	H	
		x x	0.000000 0.000000	=	0.000000		х	0.000000	=	0.000000
		x x	0.000000	=	0.000000		х	0.000000 otal Alarm Loa	= = ad	0.000000
		x x	0.000000 0.000000	=	0.000000		х		= = ad	0.000000
		x x	0.000000 0.000000	=	0.000000		х		= ad	0.000000
		x x	0.000000 0.000000	= = oad	0.000000 FP-75 EC	DL Vo	Τα	otal Alarm Loa		0.000000
		x x	0.000000 0.000000	= = oad		DL Vo	Τα	otal Alarm Loa		0.000000
		x x	0.000000 0.000000	= = oad		DL Vo	Τα	otal Alarm Loa		0.000000
Starting Voltage		20	0.000000 0.000000 Total Standby Lo	= = oad		DL Vo	Τα	otal Alarm Loa		0.000000
Minimum Voltage @ EOL		20 10	0.000000 0.000000 otal Standby Lo	= = oad		DL Vo	Τα	otal Alarm Loa		0.000000
		20 10	0.000000 0.000000 Total Standby Lo	= = oad		DL Vo	Τα	otal Alarm Loa		0.000000
Minimum Voltage @ EOL	Curren	20 11	0.000000 0.000000 otal Standby Lo	= = oad		DL Vo	Τα	otal Alarm Los		0.000000
Minimum Voltage @ EOL	Currer	20 11 1	0.000000 0.000000 otal Standby Lo	= = oad		DL Vo	Ita	otal Alarm Loa		
Minimum Voltage @ EOL		20 11 1	0.000000 0.000000 Total Standby Lo	= = oad	FP-75 EC	Length	Ita	nge Drop		
Minimum Voltage @ EOL Voltage Drop Warning %		20 10	0.000000 0.000000 Total Standby Lo	= = oad	FP-75 EC		Ita	nge Drop		0.000000
Minimum Voltage @ EOL Voltage Drop Warning % Circuit Name	Amps 1.122	200 10 1	0.000000 0.000000 Otal Standby Lo  1.4 Volts 6 Volts 0.00%  Wire Type  AWG #12 Solid	= = oad	Resistance  Dhms/1000 ft.  1.93	Length Feet (One Wa 534	Ita	Actual Resistance Ohms 2.06		oltage @ EOL Volts 18.09
Minimum Voltage @ EOL Voltage Drop Warning %  Circuit Name	Draw Amps	200 10 1	0.000000 0.000000 Total Standby Lo	= = oad	FP-75 EC	Length Feet (One Wa	Ita	Actual Resistance		oltage @ EOL Volts
Minimum Voltage @ EOL Voltage Drop Warning %  Circuit Name NAC 1	Amps 1.122 0.000	200 10 1	0.000000 0.000000 Otal Standby Lo  1.4 Volts 6 Volts 0.00%  Wire Type  AWG #12 Solid	= = oad	Resistance  Dhms/1000 ft.  1.93	Length Feet (One Wa 534	Ita	Actual Resistance Ohms 2.06		oltage @ EOL Volts 18.09
Minimum Voltage @ EOL Voltage Drop Warning %  Circuit Name NAC 1 NAC 2  Resistance	Amps 1.122 0.000	200 10 1	0.000000 0.000000 Otal Standby Lo  1.4 Volts 6 Volts 0.00%  Wire Type  AWG #12 Solid #12 Solid	= = oad	Resistance  Dhms/1000 ft.  1.93	Length Feet (One Wa 534	Ita	Actual Resistance Ohms 2.06		oltage @ EOL Volts 18.09
Minimum Voltage @ EOL Voltage Drop Warning %  Circuit Name NAC 1 NAC 2  Resistance Wire Type	Amps 1.122 0.000	20 10 1	0.000000 0.000000 otal Standby Lo  A Volts Volts Volts 0.00%  Wire Type  AWG #12 Solid #12 Solid  Resitance	= = oad	Resistance  Dhms/1000 ft.  1.93	Length Feet (One Wa	Ita	Actual Resistance Ohms 2.06		oltage @ EOL Volts 18.09
Minimum Voltage @ EOL Voltage Drop Warning %  Circuit Name NAC 1 NAC 2  Resistance Wire Type AWG	Amps 1.122 0.000	20 10 1	0.000000 0.000000 Total Standby Lo  1.4 Volts 6 Volts 0.00%  Wire Type  AWG #12 Solid #12 Solid #12 Solid  Resitance Ohms/1000 ft.	= = oad	Resistance  Dhms/1000 ft.  1.93	Length Feet (One Wa	Ita	Actual Resistance Ohms 2.06		oltage @ EOL Volts 18.09
Minimum Voltage @ EOL Voltage Drop Warning %  Circuit Name NAC 1 NAC 2  Resistance Wire Type AWG	Amps 1.122 0.000	20 10 1	0.000000 0.000000 Total Standby Lo  1.4 Volts 6 Volts 0.00%  Wire Type  AWG #12 Solid #12 Solid  Resitance Ohms/1000 ft. 1.21	= = oad	Resistance  Dhms/1000 ft.  1.93	Length Feet (One Wa	Ita	Actual Resistance Ohms 2.06		oltage @ EOL Volts 18.09
Minimum Voltage @ EOL Voltage Drop Warning %  Circuit Name NAC 1 NAC 2  Resistance Wire Type AWG  #10 Solid #10 Stranded	Amps 1.122 0.000	20 10 1	0.000000 0.000000 0.000000 Total Standby Lo  1.4 Volts 6 Volts 0.00%  Wire Type  AWG #12 Solid #12 Solid #12 Solid  Resitance Ohms/1000 ft. 1.21 1.24	= = oad	Resistance  Dhms/1000 ft.  1.93	Length Feet (One Wa	Ita	Actual Resistance Ohms 2.06		oltage @ EOL Volts 18.09
Minimum Voltage @ EOL Voltage Drop Warning %  Circuit Name NAC 1 NAC 2  Resistance Wire Type AWG #10 Solid #10 Stranded #12 Solid	Amps 1.122 0.000	20 10 1	0.000000 0.000000 0.000000 Total Standby Lo  1.4 Volts 6 Volts 0.00%  Wire Type  AWG #12 Solid #12 Solid  Resitance Ohms/1000 ft. 1.21 1.24 1.93	= = oad	Resistance  Dhms/1000 ft.  1.93	Length Feet (One Wa	Ita	Actual Resistance Ohms 2.06		oltage @ EOL Volts 18.09
Minimum Voltage @ EOL Voltage Drop Warning %  Circuit Name NAC 1 NAC 2  Resistance Wire Type AWG #10 Solid #10 Stranded #12 Solid #12 Stranded	Amps 1.122 0.000	20 10 1	0.000000 0.000000 0.000000 Total Standby Lo  1.4 Volts 6 Volts 0.00%  Wire Type  AWG #12 Solid #12 Solid  Resitance Ohms/1000 ft. 1.21 1.24 1.93 1.98	= = oad	Resistance  Dhms/1000 ft.  1.93	Length Feet (One Wa	Ita	Actual Resistance Ohms 2.06		oltage @ EOL Volts 18.09
Minimum Voltage @ EOL Voltage Drop Warning %  Circuit Name NAC 1 NAC 2  Resistance Wire Type AWG #10 Solid #10 Stranded #12 Solid #12 Stranded #14 Solid	Amps 1.122 0.000	20 10 1	0.000000 0.000000 0.000000 Total Standby Lo  1.4 Volts 6 Volts 0.00%  Wire Type  AWG #12 Solid #12 Solid  Resitance Ohms/1000 ft. 1.21 1.24 1.93 1.98 3.07	= = oad	Resistance  Dhms/1000 ft.  1.93	Length Feet (One Wa	Ita	Actual Resistance Ohms 2.06		oltage @ EOL Volts 18.09
Minimum Voltage @ EOL Voltage Drop Warning %  Circuit Name NAC 1 NAC 2  Resistance Wire Type AWG #10 Solid #10 Stranded #12 Solid #12 Stranded #14 Solid #14 Solid #14 Solid	Amps 1.122 0.000	20 10 1	0.000000 0.000000 0.000000 Total Standby Lo  I.4 Volts 6 Volts 0.00%  Wire Type  AWG #12 Solid #12 Solid #12 Solid  Resitance Ohms/1000 ft. 1.21 1.24 1.93 1.98 3.07 3.14	= = oad	Resistance  Dhms/1000 ft.  1.93	Length Feet (One Wa	Ita	Actual Resistance Ohms 2.06		oltage @ EOL Volts 18.09
Minimum Voltage @ EOL Voltage Drop Warning %  Circuit Name NAC 1 NAC 2  Resistance Wire Type AWG  #10 Solid #10 Stranded #12 Solid #12 Stranded #14 Solid #14 Stranded #14 Stranded #16 Solid	Amps 1.122 0.000	20 10 1	0.000000 0.000000 0.000000 Total Standby Lo  I.4 Volts 6 Volts 0.00%  Wire Type  AWG #12 Solid #12 Solid #12 Solid  Resitance Ohms/1000 ft. 1.21 1.24 1.93 1.98 3.07 3.14 4.89	= = oad	Resistance  Dhms/1000 ft.  1.93	Length Feet (One Wa	Ita	Actual Resistance Ohms 2.06		oltage @ EOL Volts 18.09
Minimum Voltage @ EOL Voltage Drop Warning %  Circuit Name NAC 1 NAC 2  Resistance Wire Type AWG  #10 Solid #10 Stranded #12 Solid #12 Stranded #14 Solid #14 Stranded #15 Solid #16 Solid #16 Stranded	Amps 1.122 0.000	20 10 1	0.000000 0.000000 0.000000 Total Standby Lo  I.4 Volts 6 Volts 0.00%  Wire Type  AWG #12 Solid #12 Solid #12 Solid  Resitance Ohms/1000 ft. 1.21 1.24 1.93 1.98 3.07 3.14 4.89 4.99	= = oad	Resistance  Dhms/1000 ft.  1.93	Length Feet (One Wa	Ita	Actual Resistance Ohms 2.06		oltage @ EOL Volts 18.09
Minimum Voltage @ EOL Voltage Drop Warning %  Circuit Name NAC 1 NAC 2  Resistance Wire Type AWG  #10 Solid #10 Stranded #12 Solid #12 Stranded #14 Solid #14 Stranded #14 Stranded #16 Solid	Amps 1.122 0.000	20 10 1	0.000000 0.000000 0.000000 Total Standby Lo  I.4 Volts 6 Volts 0.00%  Wire Type  AWG #12 Solid #12 Solid #12 Solid  Resitance Ohms/1000 ft. 1.21 1.24 1.93 1.98 3.07 3.14 4.89	= = oad	Resistance  Dhms/1000 ft.  1.93	Length Feet (One Wa	Ita	Actual Resistance Ohms 2.06		oltage @ EOL Volts 18.09

Fire & Data Systems, Inc. 104 Ginger Lane Hamlet, NC 28345 704-582-1616

FIRESTONE
10348 CANE CREEK DRIVE

DRAWN BY:	JBW
LAYOUT BY:	JMH
APPROVED BY:	JMH
DATE:	07/09/2020
SCALE:	N.T.S.
PROJECT NO:	P20200275

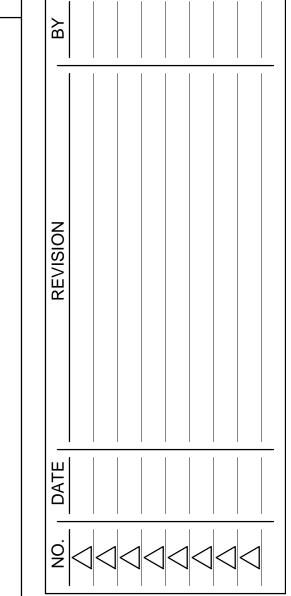
FIRE ALARM SYSTEM
RISER DIAGRAM,
VOLTAGE DROP
AND BATTERY
CALCULATIONS

SHEET

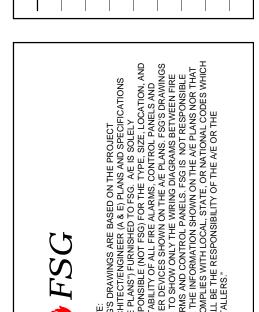
FA2.1

PANEL EQUIPMENT LIST			
QTY	DESCRIPTION	PART NUMBER	MANUFACTURE
2	BATTERY; 12V; 7AH (BULK PACK OF 5)	BAT-1270-BP (SEE BATTERY QUANTITY NOTE)	SILENT KNIGHT
2	COMMUNICATOR/TRANSMITTER PHONE CORD	7860	HONEYWELL
1	INTELLIGENT ANALOG/ADDRESSABLE FIRE ALARM CONTROL UNIT	IFP-75	SILENT KNIGHT
1	REMOTE ANNUNCIATOR	RA-1000	SILENT KNIGHT

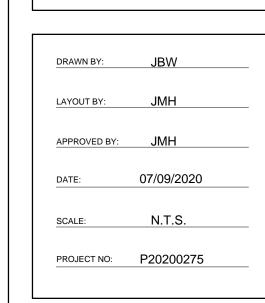
NOTE ON BATTERY QUANTITIES: QUANTITIES OF BATTERIES SHOWN ARE FOR INDIVIDUAL BATTERIES. BATTERIES WITH PART NUMBERS ENDING IN -BP ARE SOLD IN BULK PACKS ONLY. REFER TO DESCRIPTION COLUMN FOR NUMBER OF BATTERIES PER BULK PACK.



12







FIRE ALARM SYSTEM FACU
WIRING DETAILS
AND CALCULATION

SHEET

CABINET EXTERIOR **KEY PLAN** 

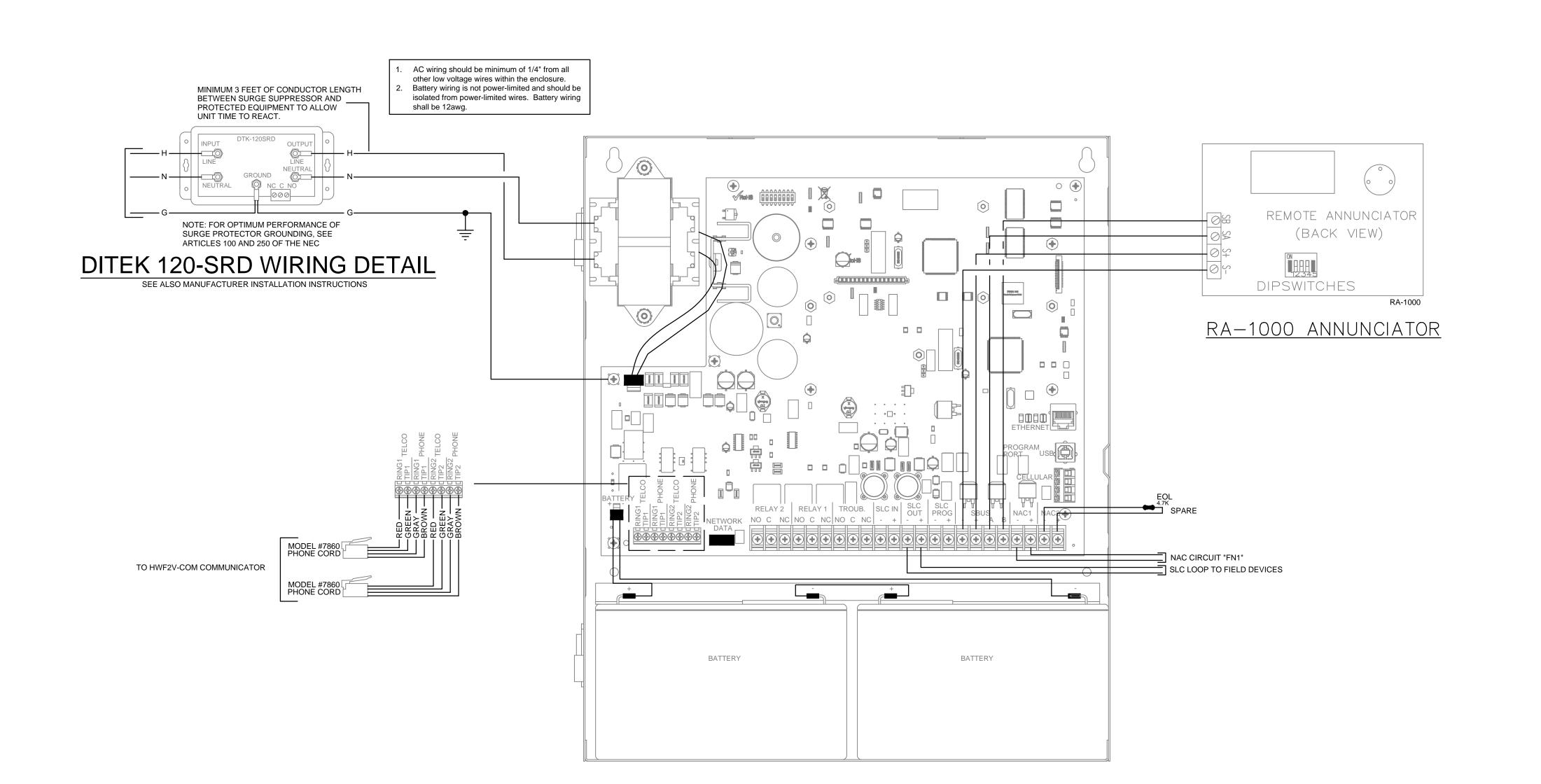
Foreign balo

Fo

INTERIOR DOOR

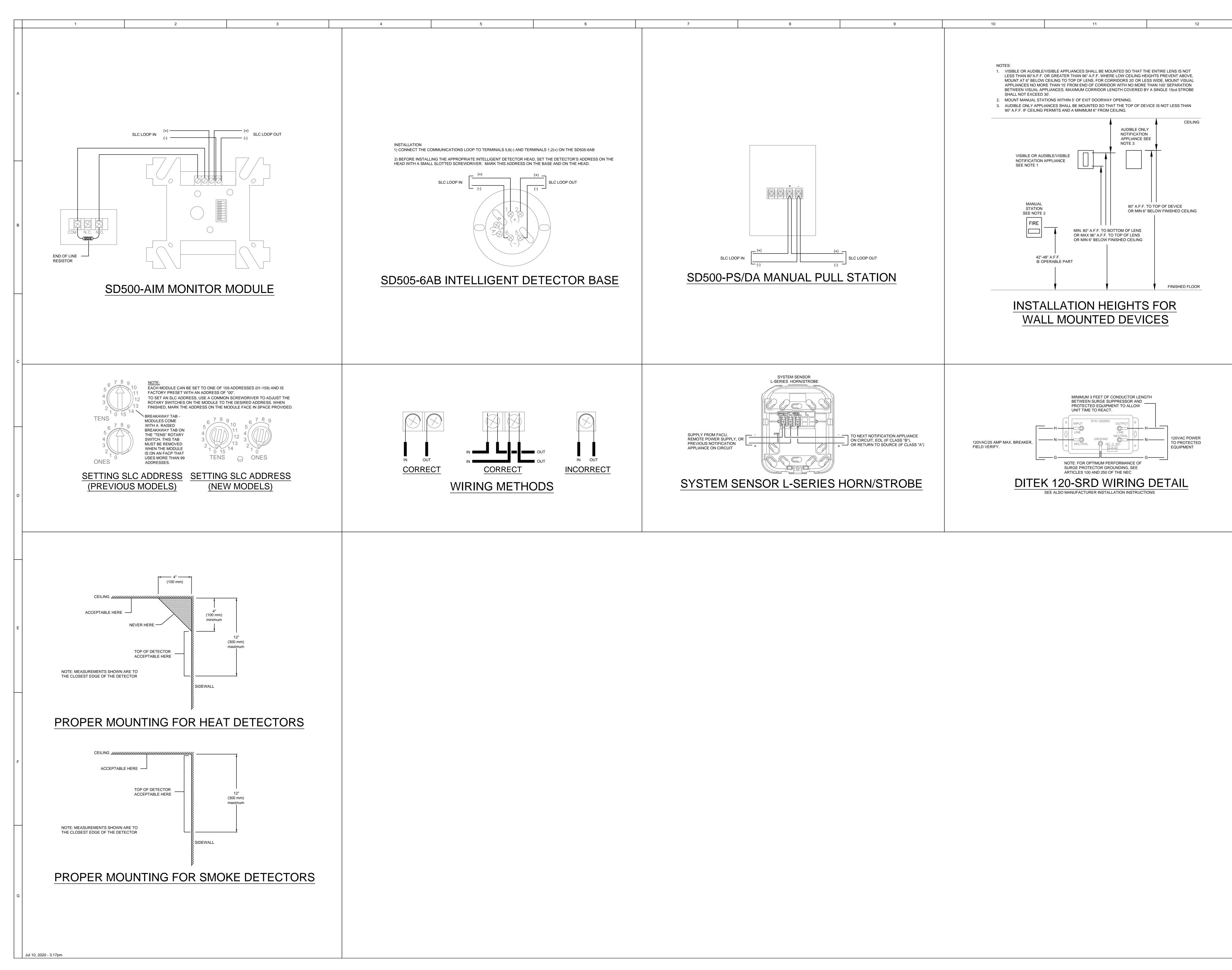
7860 PHONE CORD 7860 PHONE CORD 7AH BATTERY 7AH BATTERY

FA3.1



IFP-75 FACU

Jul 10, 2020 - 3:17pm



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NOTE:
"FSG'S DRAWINGS ARE BASED ON THE PROJECT
ARCHTECTENGINEER (A. &. F.) PLANS AND SPECIFICATIONS
("AAE PLANS") FURNISHED TO FSG. AE IS SOLELY
RESPONSIBLE (NOT FSG) FOR THE TYPE, SIZE, LOCATION, AND
SUITABILITY OF ALL FIRE ALARMS, CONTROL PANELS AND
OTHER DEVICES SHOWN ON THE AE PLANS. FSG'S DRAWINGS
ARE TO SHOW ONLY THE WIRING DIAGRAMS BETWEEN FIRE
ALARMS AND CONTROL PANELS. FSG IS NOT RESPONSIBLE
FOR THE INFORMATION SHOWN ON THE AF PLANS RESPONSIBLE
FOR THE INFORMATION SHOWN ON THE AF PLANS NOR THAT
IT COMPLIES WITH LOCAL, STATE, OR NATIONAL CODES WHICH
SHALL BE THE RESPONSIBILITY OF THE AE OR THE

Fire & Data Systems, Inc. 104 Ginger Lane Hamlet, NC 28345 704-582-1616

FIRESTONE
10348 CANE CREEK DRIVE
HUNTERSVILLE, NC

 DRAWN BY:
 JBW

 LAYOUT BY:
 JMH

 APPROVED BY:
 JMH

 DATE:
 07/09/2020

 SCALE:
 N.T.S.

 PROJECT NO:
 P20200275

FIRE ALARM SYSTEM
FIELD DEVICE
WIRING DETAILS

FA4.1