

RESERVED FOR CITY STAMP

REVISION	DESCRIPTION	DATE
0	ISSUED FOR REVIEW & APPROVAL	4/12/2017

CUNNINGHAM
Security Systems
 10 Princes Point Road, Yarmouth, Maine 04096
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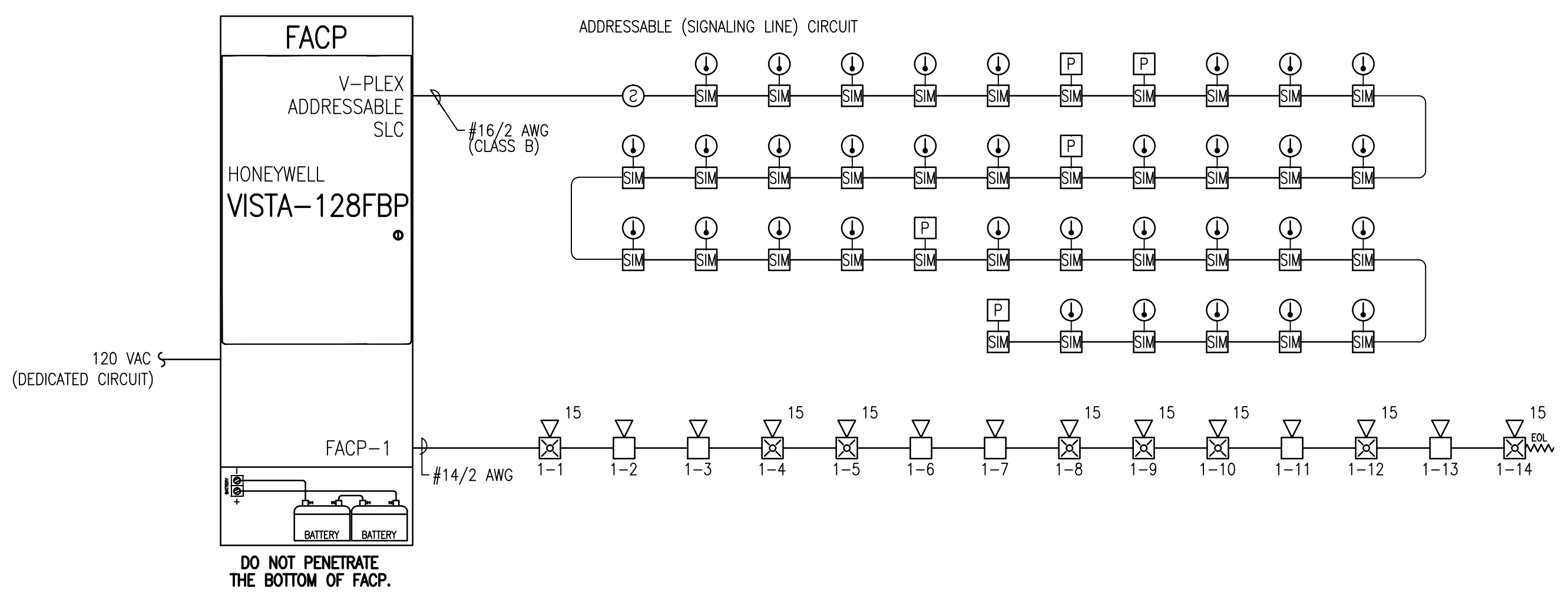
39 DEERING ST
39 DEERING ST
PORTLAND, MAINE
FIRE ALARM PLAN

DRAWN	CWS UNICAD JOB #17248
CHECKED	WAYNE B. HAWES NICET IV 90496
DATE	4/12/2017
REVISION	0
SCALE	1/8"=1'-0"

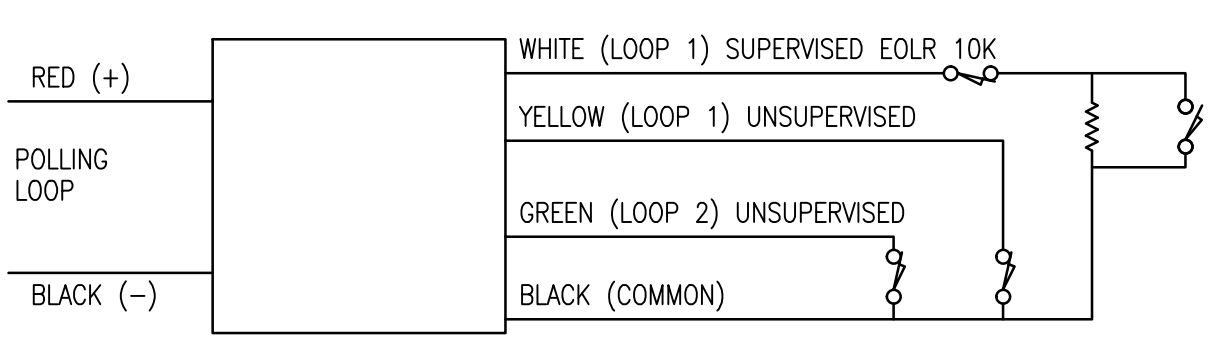
shop drawings
 created by
UNICAD Inc.
 5794 W. 4600 St.
 Hopedale, UT 84313
 Office: 801.985.0410
 www.unicad.net

FA-2

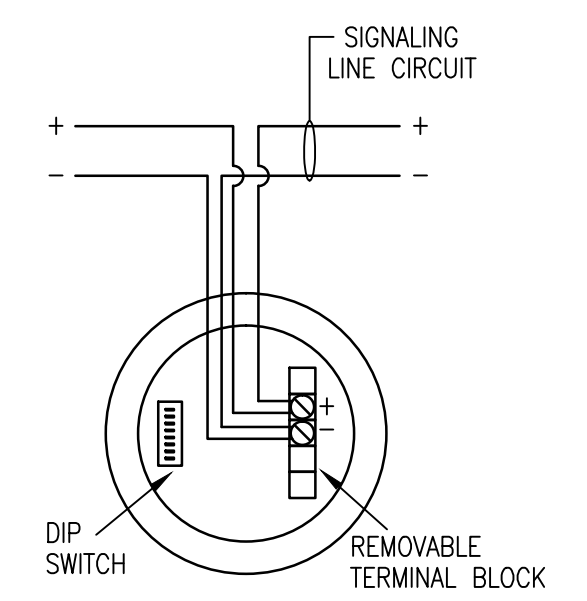
WIRE NOTE:
 VERIFY EXACT WIRE TYPE WITH FIRE ALARM
 CONTRACTOR BEFORE ORDERING.



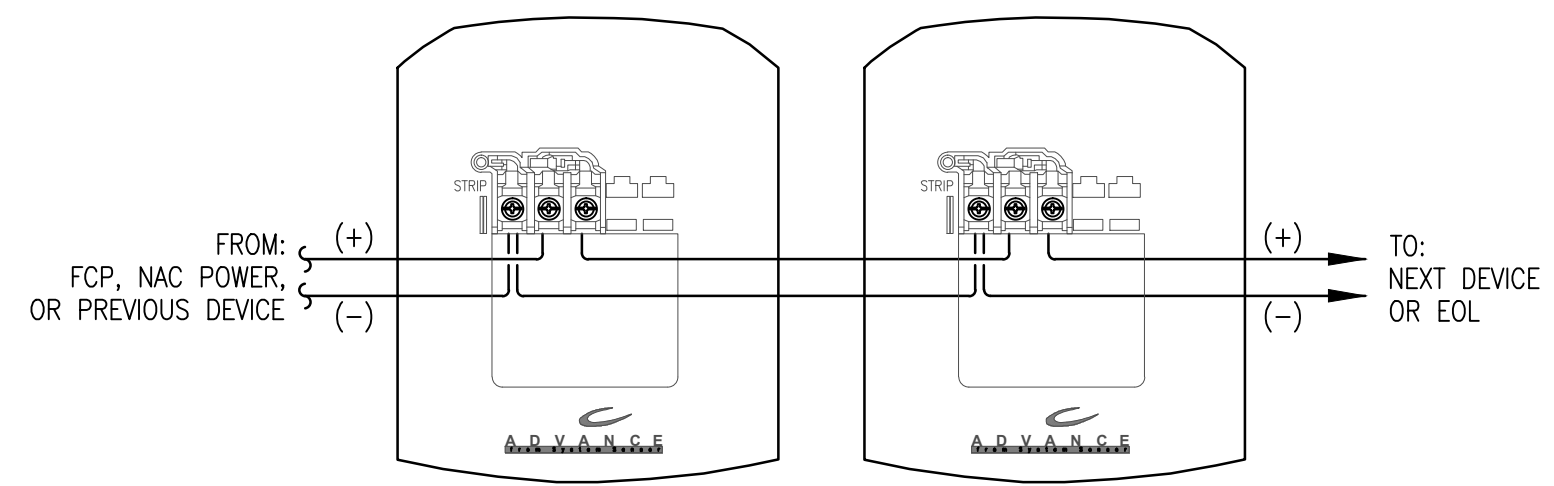
FIRE ALARM RISER DIAGRAM
 SCHEMATIC: NO SCALE



4193SN TWO ZONE SIM WIRING DETAIL
 SCHEMATIC: NO SCALE



5193SD SMOKE DETECTOR WIRING DETAIL
 SCHEMATIC: NO SCALE



TYPICAL 2 WIRE STROBE WIRING DETAIL
 SCHEMATIC: NO SCALE

Facility Information		Standby and Alarm Times		Battery Contingency Factor						
Location:	39 DEERING ST	Battery Standby (hours):	24	Battery Contingency Factor:	10%					
Account #:	Vista-128FBP	Alarm Duration (minutes):	5							
Model:	Vista-128FBP	Recommended Battery (AH):	11.8							
Engineer:										
Date:	4/12/2017									
Recommended Battery Capacity OK for 48-Hr Recharge										
SELECTED PANEL MAXIMUM OUTPUT RATINGS										
PANEL:	Polling V Loop (mA)	Standby Auxiliary Power (mA)	Alarm Auxiliary Power (mA)	Panel Standby Alarm (mA)	Panel Alarm (mA)	Bell #1 Output (mA)	Bell #2 Output (mA)	Maximum Panel Standby Output	Maximum Panel Alarm Output	Max. Battery Supported By Panel
Vista-128FBP	128	1000	1700	300	470	1700	1700	1300	2800	34.4
Calculated Current Draw	25.8	0	0	Calculated Bell Draw	0	0	0	Total Standby	11.6	3.5
Power Budget	102.2	1000.0	1700.0	Bell Power Budget	1700.0	1700.0	1700.0	Standby Budget	11.6	244.2
	Current OK	Current OK	Current OK	Current OK	Current OK	Current OK	Current OK	Current OK	Current OK	Current OK
			External Bell Power Req'd (mA):	0.0				Ext. UL Power Req'd (mA):	0.0	

POLLING LOOP DEVICES	Enter Quantity	How many powered externally?	Standby (mA per pair)	Alarm Current (Amps)	Polling Loop	Total Polling Loop	Total Standby Current	Total Alarm Current	Total External Current Required
4193SN TWO ZONE SIM	38	0			1.5	57			
5192SD SMOKE DETECTOR	1	0			2.8	2.8			

12V NOTIFICATION DEVICES ON VIBELL OUTPUT #1	Enter Quantity	How many powered externally?	Standby (mA per pair)	Alarm Current (Amps)	Polling Loop	Total Polling Loop	Total Standby Current	Total Sounder Current from Panel Bell #1	Total External Current (external)
MINI HORN	6			0.017				0.102	
HORN / STROBE 15CD	8			0.079				0.632	

Point to Point NAC Voltage Drop Calculation				4/12/2017	
Project Name	39 DEERING ST		Wire	Resistance	
Circuit Number	FACP-1		Gauge	Per 1000	
Nominal System Voltage	20.4	volts	14	3.07	
Minimum Device Voltage	16.0	volts	14	3.07	
Distance from source to 1st device		feet			
Wire Gauge for balance of circuit					
Max Output Current	1.70	amps			
Total Circuit Current	0.734	amps			
End of Line Voltage	19.58	volts			
Circuit is within limits					
Device	Current	Distance previous device	Voltage at Device	Drop from source	Percent Drop
Device 1	0.079	0	20.40	0.000	0.00%
Device 2	0.017	20	20.32	0.080	0.39%
Device 3	0.017	35	20.18	0.218	1.07%
Device 4	0.079	20	20.11	0.294	1.44%
Device 5	0.079	45	19.96	0.444	2.17%
Device 6	0.017	25	19.89	0.515	2.52%
Device 7	0.017	10	19.86	0.542	2.66%
Device 8	0.079	30	19.78	0.621	3.04%
Device 9	0.079	30	19.71	0.686	3.36%
Device 10	0.079	30	19.66	0.735	3.60%
Device 11	0.017	25	19.64	0.765	3.75%
Device 12	0.079	30	19.60	0.797	3.91%
Device 13	0.017	25	19.59	0.812	3.98%
Device 14	0.079	20	19.58	0.822	4.03%
Totals	0.734	345			
Notes: Wire resistance is doubled in the calculations for two wires (Positive and Negative). The voltage calculated to the last device must not be lower than the manufactures listed minimum operating voltage (IE: rated operating voltage 16-33 VDC (24 VDC nominal)).					