PROJECT INFORMATION

NAME OF PROJECT:

1585 BUFFALO LAKE ROAD ADDRESS: SANFORD, NC 27332

PROPOSED USE: BUSINESS

FIRE ALARM VENDOR: VECTOR SECURITY (888) 832-8671 13555 WELLINGTON CENTER CIRCLE

> SUITE 123 GAINESVILLE, VA 20155

KRISTOPHER MILLER FIRE ALARM DESIGNER: (703) 468-6100 VECTOR SECURITY

2500 MAITLAND CENTER PARKWAY

UL# S2535

MAITLAND, FL 32751

FIRE ALARM MONITORED BY: VECTOR SECURITY 2000 ERICSSON DR. WARRENDALE, PA 15086

INSTALLING CONTRACTOR: TBD

NAME OF CONTRACTOR:

PHONE OF CONTRACTOR: LICENSE NUMBER:

OCCUPANCY INFORMATION

TOTAL SQUARE FT. 6,600 SPRINKLED

SCOPE OF WORK

THIS PROJECT INVOLVES THE INSTALLATION & TESTING OF A NEW FIRE ALARM SYSTEM WITHIN A NEW MAVIS STORE. THE SYSTEM SHALL BE MONITORED BY AN APPROVED LISTED MONITORING STATION. THE COMMUNICATION PATHS WILL SOLE PATH CELLULAR.

APPLICABLE BUILDING CODES

CODES BUILDING 2018 IBC FIRE 2018 IFC

ELECTRICAL 2014 NEC 2013 NFPA 72 NFPA 72 MECHANICAL 2018 IMC

OTHER OTHER

NOTES

- 1. A MICROPROCESSOR-BASED MULTIPLEX FIRE ALARM SYSTEM WITH INTELLIGENT, ADDRESSABLE INITIATION DEVICES WILL BE REQUIRED. THE RISER DIAGRAM IS BASED AROUND A MULTIPLEX ADDRESSABLE SYSTEM. THE FIRE ALARM SYSTEM SHALL BE MONITORED BY AN APPROVED CENTRAL STATION MONITORING SERVICE. INTERFACE EQUIPMENT WILL BE FULLY UL LISTED AND FM APPROVED FOR THIS
- 2. SIGNALING LINE CIRCUITS SHALL BE CLASS B, STYLE 4 MINIMUM. INITIATING DEVICE CIRCUITS SHALL BE CLASS B, STYLE B MINIMUM. NOTIFICATION APPLIANCE CIRCUITS SHALL BE CLASS B, STYLE Y MINIMUM.
- 3. OUTDOOR DEVICES (WHEN REQUIRED) SHALL BE MOUNTED ON CAST WEATHERPROOF OUTLET BOXES (2 GANG BELL BOX).
- 4. ALL FIRE ALARM CABLING SHALL BE ROUTED THROUGH CONDUIT FROM DEVICES TO BOTTOM OF THE BAR JOIST. AT THAT POINT CABLING SHALL BE RUN EXPOSED ALONG THE CEILING IF ACCEPTABLE BY THE AHJ.
- 5. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LINE VOLTAGE (120 V. MAX.) IN SEPARATE CONDUIT. SHALL BE INSTALLED PER NEC UNLESS OTHERWISE NOTED BY LOCAL AUTHORITIES.
- 6. ALL EXPOSED CABLE BELOW THE BOTTOM OF THE BAR JOIST, OTHER ROOF STRUCTURE OR OTHER LOCATIONS WHERE THE CABLE MAY BECOME EXPOSED AND/OR DAMAGED, MUST BE INSTALLED WITHIN A STEEL CONDUIT. ALL SPLICES SHALL BE TERMINATED IN A BOX MARKED AS SPLICE POINT. THE SPACE ABOVE THE DROP CEILING IS CONSIDERED PROTECTED AND DOES NOT REQUIRE CONDUIT FROM THE STRUCTURE TO THE DEVICE ON THE CEILING TILE.
- '. SYSTEM OPERATION, TESTING, TURN OVER, WARRANTY, COMPLIANCE, AND AFTER MARKET SERVICE SHALL BE PROVIDED BY THE FIRE ALARM CONTRACTOR.
- 8. VECTOR SECURITY SHALL NOT BE RESPONSIBLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY VECTOR SECURITY.
- 9. ALL CONDUIT, BOXES (UNLESS OTHERWISE INDICATED), FITTINGS, COUPLINGS, CONNECTORS, STRAPS, SUPPORTS, PULL-LINES, BUSHINGS, ETC. SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL WORK SHALL MEET OR EXCEED THE REQUIREMENTS OF NFPA 70.
- 10. ALL CONDUIT AND BACK BOX SIZES SHALL BE COORDINATED WITH THE FIRE ALARM CONTRACTOR.
- 11. ALL CONDUIT SHALL BE STUBBED UP TO BOTTOM OF BAR JOIST.
- 12.NO HORIZONTAL RUNS ON WALLS WILL BE ALLOWED BELOW THE BAR JOIST.
- 13.LOOSE WIRE SHALL BE INSTALLED AND SECURED TO THE UPPER LEVEL OF THE BAR JOIST AND SHALL RUN EITHER PARALLEL OR AT 90° TO THE JOIST. NO DIAGONAL WIRING WILL BE ALLOWED.
- 14. THE INSTALLATION CONTRACTOR SHALL COORDINATE ALL LOCATIONS WITH THE LATEST FIXTURE PLANS PRIOR TO INSTALLATION.
- 15. ALL NOTIFICATION APPLIANCES SHALL BE SYNCHRONIZED PER NFPA 72.
- 16. AUDIBLE EVACUATION SIGNAL SHALL BE TEMPORAL 3 PER NFPA 72.
- 17. A SYSTEM RECORD DOCUMENT BOX SHALL BE INSTALLED PER NFPA 72.
- 18. FIRE ALARM BREAKER SHALL BE LOCKED UP AND LABELED.
- 19.FIRE ALARM CONTROL PANEL OPERATING CONTROLS SHALL NOT BE MORE THAN 72"ABOVE THE FINISHED FLOOR LEVEL.

INDEX OF DRAWINGS

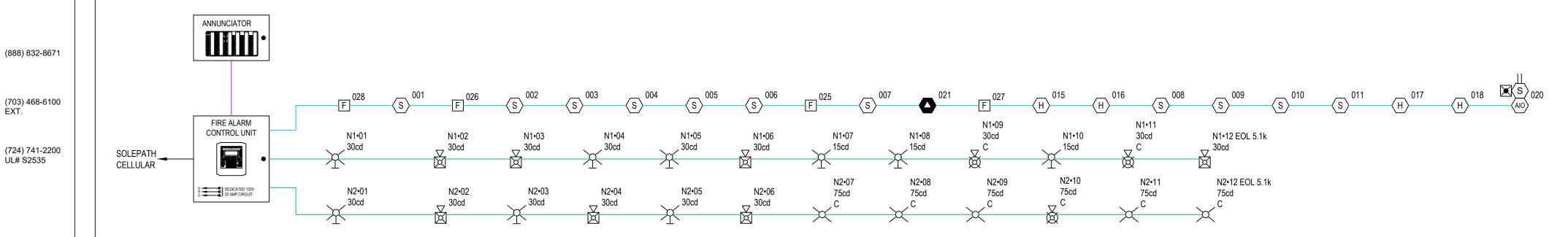
CONDUIT NOTES

TITLE SHEET, GENERAL NOTES, SYSTEM RISER DIAGRAM

FA-1 SYSTEM CALCULATIONS FIRE ALARM SYSTEM UPGRADE LAYOUT FA-2

FA-3 DETAILS

SYSTEM RISER DIAGRAM



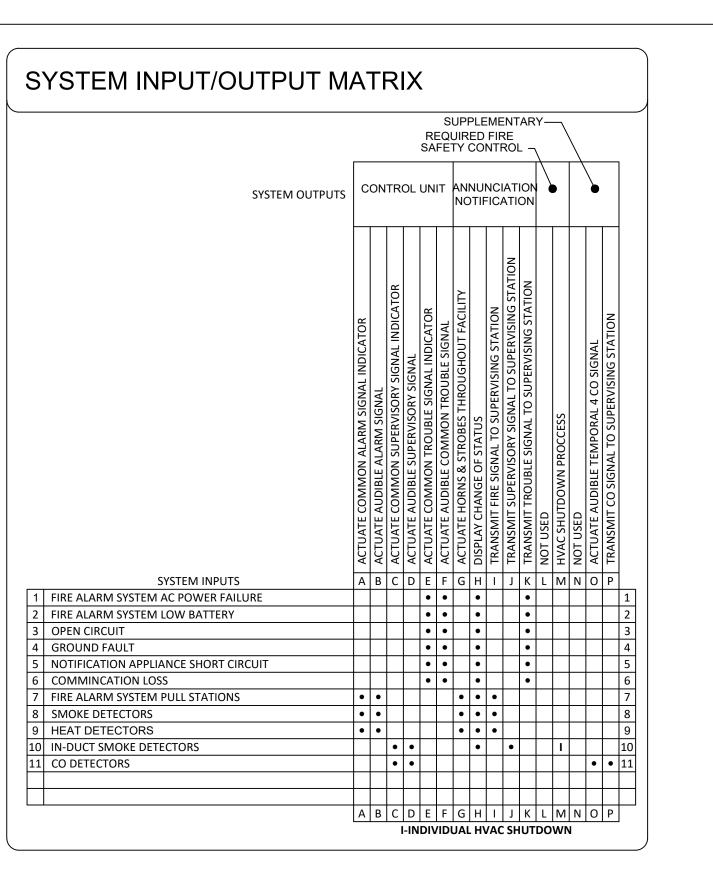
SYSTEM

ANNUNCIATION

POINT LIST MODULE ADDRESSES M##						
DEVICE LABEL	LOCATION					
D001	FACP SMOKE					
D002	MENS SMOKE					
D003	STAFF SMOKE					
D004	BREAK RM SMOKE					
D005	WOMENS SMOKE					
D006	SHOWROOM SMOKE 1					
D007	SHOWROOM SMOKE 2					
D008	TIRE STORAGE SMK 1					
D009	TIRE STORAGE SMK 2					
D010	TIRE STORAGE SMK 3					
D011	TIRE STORAGE SMK 4					
D012						
D013						
D014						
D015	SERVICE AREA HEAT 1					
D016	SERVICE AREA HEAT 2					
D017	SERVICE AREA HEAT 3					
D018	SERVICE AREA HEAT 4					
D019						
D020	DUCT SMK DETECTOR					
D021	CO DETECTOR					
D022						
D023						
D024						
D025	SHOW ROOM PULL					
D026	SERVICE AREA PULL 1					
D027	SERVICE AREA PULL 2					
D028 TIRE STORAGE PULL						
	ļ					

D029

D030



REVISIONS

THIS DRAWING AND DESIGNS SHALL NOT B DUPLICATED, USED, OF DISCLOSED TO OTHERS FOR PROCUREMENT OF OTHER PURPOSES, **EXCEPT AS OTHERWISI** AUTHORIZED BY CONTRACT, WITHOUT WRITTEN CONSENT OF VECTOR SECURITY, INC REPRODUCTIONS SHALL BEAR THIS NOTICE.

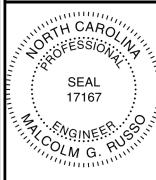


SYSTEM TIRE 2266
FALO LAKE ROAD
ORD, NC 27332

SUBMITTALS PREPARED BY:

VECTOR SECURITY NETWOR 2500 MAITLAND CTR PKWY MAITLAND, FL 32751 703-468-6100

ENGINEER OF RECORD Malcolm Russo 2500 MAITLAND CTR PKWY SUITE 105 703-468-6100 NADFireEngineering@ vectorsecurity.com



DRAWN BY: KRM DATE: 06/12/2025

SHEET: FA-0

SHEET NO.: 1

PANEL BATTERY CALCULATIONS AND VOLTAGE LOSS

				PANEL (AFC-50) BATTERY CALCULATION				
			(SEC	ONDARY POWER SOURCE REQUIREN				
					STANDBY (SECONDARY ALA	
		QTY	PART NO.	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)
		1	AFC-50	FIRE ALARM CONTROL PANEL	0	0	0	0
PANEL COM	PONENTS	1	AFC-50 MAIN BOARD	FIRE ALARM CONTROL PANEL	0.13	0.13	0.22	0.22
				MAIN BOARD UNIVERSAL DUAL PATH			+	
		1	B465	COMMUNICATOR	0.12	0.12	0.16	0.16
CIRCUIT	SYMBOL	QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)
5	<u> </u>			2201	()	- ()	()	- ()
	(AIO)	1	PAD100-OROI	ONE RELAY ONE INPUT MODULE	0.00024	0.00024	0.00024	0.00024
	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	'	1710 OKO	ONE NEEKT ONE IN OT MODULE	0.00024	0.00024	0.00024	0.00024
	F	4	PAD100-PSSA	ADDRESSABLE PULL STATION	0.0002	0.0008	0.0002	0.0008
		7	171001007	SINGLE ACTION	0.0002	0.0000	0.0002	0.0000
<u> </u>								
AFC-50•L1		1	PAD300-CD	CARBON-MONOXIDE DETECTOR	0.0003	0.0003	0.0003	0.0003
AFC-50°L1		'	1 AB300-0B	CARBON-MONOXIBE BETEGTOR	0.0003	0.0003	0.0000	0.0003
-							+	
		,	PAD300-HD	FIXED TEMPERATURE HEAT	0.0003	0.0012	0.0003	0.0012
	H	4	PAD300-HD	SENSOR	0.0003	0.0012	0.0003	0.0012
-								
	(s)	11	PAD300-PD	PHOTOELECTRIC SMOKE SENSOR	0.0003	0.0033	0.0003	0.0033
	∇							
	\boxtimes	4	P2RLED	2-WIRE, HORN STROBE, RED 30CD	0	0	0.038	0.152
	又		PC2RLED	2-WIRE, HORN STROBE, RED 30CD	_	0	0.038	0.076
	\bigotimes_{c}	2	PCZRLED	2-WIRE, HORN STROBE, RED 300D	0	0	0.036	0.076
AFC-50•N1								
711 0 00 111	\ /							
	X	3	SRLED	STROBE, RED 15CD	0	0	0.018	0.054
	, Т.							
<u> </u>								
	\searrow		CDLED	STROBE, RED 30CD	_	0	0.000	0.000
	X	3	SRLED	STROBE, RED 30CD	0	0	0.022	0.066
	∇							
	\boxtimes	3	P2RLED	2-WIRE, HORN STROBE, RED 30CD	0	0	0.038	0.114
AFC-50•N2 -	又	1	PC2RLED	2-WIRE, HORN STROBE, RED 75CD	0	0	0.087	0.087
	\bigotimes_{c}	'	FOZILLED	2-WIRE, HORRY OTROBE, RED 1000	U	U	0.007	0.007
	-							
	_/	_		077005 050 7500		_		
	\bowtie_{c}	5	SCRLED	STROBE, RED 75CD	0	0	0.07	0.35
	\ /							
	X	3	SRLED	STROBE, RED 30CD	0	0	0.022	0.066
	. Т.							
AFC-50•P-LINK	FAA	1	RA-6075	LCD ANNUNCIATOR	0.02	0.02	0.025	0.025
					TOTAL STANDBY (A)	0.27584	TOTAL ALARM (A)	1.38
					REQUIRED STANDI		24	
					REQUIRED ALARM	TIME (MINUTES)	5	
		ANDBY LOAD (A)		0.27584	24	ļ	6.62	2
		LARM LOAD (A)		1.38	0.08		0.11	
	STANDBY AND ALARM S)		3.00		6.73	
	DERATING	,	,				1.25	
	SECONDARY LOAD REQU		S)				8.42	
		,	•					
				PROVIDE (2) 12V 18AH BATTERIES				

			CURRENT SUM	MARY	POWER SUM	MARY
			MAX. CIRCUIT CURRENT (A):	2.50	STARTING CALC. VOLTAGE:	20.40
			TOTAL CIRCUIT CURRENT (A):	0.348	MAX. VOLTAGE DROP:	0.630
			SPARE CIRCUIT CURRENT (A):	2.15	VOLTAGE DROP %:	3.07 %
	AFC-50 N1 LUMI	D CHM DEDODT	SPARE CIRCUIT CURRENT (A).	2.15 86.08 %	MIN. OPERATIONAL VOLTAGE:	3.07 % 16
	AFC-50 N1 LUMI	P SUM REPORT				
		MAX. CARD CURRENT (A):	n/a	END OF LINE VOLTAGE:	19.77	
			TOTAL CARD CURRENT (A):	0.995840	WIRE RESISTANCE (Ω/KFT):	3.07
			SPARE CARD CURRENT (A):		TOTAL CIRCUIT LENGTH (FT):	293
			SPARE CARD CURRENT %:		TOTAL CIRCUIT RESISTANCE (Ω):	1.80
		CIRCUIT WIRING PRO	PERTIES: 'V' 14/2 FPLP/R (NAC) 60993B 14 AW	G, 2 COND. SOLID COPPE	R FPLP/R ANALOG UNSHIELDED	
		DISTANCE ME	ASURED USING DRAWN SEGMENT LENGTHS	WITH 10.00 % ADDITIONA	LENGTH CALCULATED	
SYMBOL	QUANTITY	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)	TOTAL CURRENT (A)
X	4	P2RLED	2-WIRE, HORN STROBE, RED	30CD	0.038	0.152
⊗c	2	PC2RLED	2-WIRE, HORN STROBE, RED	30CD	0.038	0.076
茶	3	SRLED	STROBE, RED	STROBE, RED 15CD 0.018		0.054
承	3	SRLED	STROBE, RED	30CD	0.022	0.066
CULATION M						
		SISTANCE (Ω /FT) X 2 X TOTAL C				
AL VOLTAGE	DROP = TOTAL RE	SISTANCE (Ω) X TOTAL CIRCUI	T CURRENT (A)			
			CURRENT SUM	MARY	POWER SUM	MARY
			MAX. CIRCUIT CURRENT (A):	2.50	STARTING CALC. VOLTAGE:	20.40
			TOTAL CIRCUIT CURRENT (A):	0.6170	MAX. VOLTAGE DROP:	0.860
			SPARE CIRCUIT CURRENT (A):	1.88	VOLTAGE DROP %:	4.21 %
	AFC-50 N2 LUMI	D SIIM DEDODT	SPARE CIRCUIT CURRENT %:	75.32 %	MIN. OPERATIONAL VOLTAGE:	16
	AITO-JU NZ LUWI	OUW REPURI	MAX. CARD CURRENT %:			
				n/a	END OF LINE VOLTAGE:	19.54
			TOTAL CARD CURRENT (A):	0.995840	WIRE RESISTANCE (Ω/KFT):	3.07
			` ,		` '	
			SPARE CARD CURRENT (A):		TOTAL CIRCUIT LENGTH (FT):	227
			SPARE CARD CURRENT (A): SPARE CARD CURRENT %:		TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω):	227 1.39
			SPARE CARD CURRENT (A): SPARE CARD CURRENT %: PERTIES: 'V' 14/2 FPLP/R (NAC) 60993B 14 AWG	·	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED	
			SPARE CARD CURRENT (A): SPARE CARD CURRENT %:	·	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED LENGTH CALCULATED	1.39
SYMBOL	QUANTITY		SPARE CARD CURRENT (A): SPARE CARD CURRENT %: PERTIES: 'V' 14/2 FPLP/R (NAC) 60993B 14 AWG	·	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED	1.39
SYMBOL	QUANTITY 3	DISTANCE ME	SPARE CARD CURRENT (A): SPARE CARD CURRENT %: PERTIES: 'V' 14/2 FPLP/R (NAC) 60993B 14 AWG ASURED USING DRAWN SEGMENT LENGTHS	WITH 10.00 % ADDITIONA	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED LENGTH CALCULATED	
SYMBOL		DISTANCE ME PART NO	SPARE CARD CURRENT (A): SPARE CARD CURRENT %: PERTIES: 'V' 14/2 FPLP/R (NAC) 60993B 14 AWG ASURED USING DRAWN SEGMENT LENGTHS DESCRIPTION	WITH 10.00 % ADDITIONA CANDELAS	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED LENGTH CALCULATED ALARM CURRENT (A)	1.39 TOTAL CURRENT (A)
⊠ ⊗ _c	3	DISTANCE ME PART NO P2RLED	SPARE CARD CURRENT (A): SPARE CARD CURRENT %: PERTIES: 'V' 14/2 FPLP/R (NAC) 60993B 14 AWG ASURED USING DRAWN SEGMENT LENGTHS DESCRIPTION 2-WIRE, HORN STROBE, RED	WITH 10.00 % ADDITIONA CANDELAS 30CD	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED LENGTH CALCULATED ALARM CURRENT (A) 0.038	1.39 TOTAL CURRENT (A) 0.114
⊠ &c	1	DISTANCE ME PART NO P2RLED PC2RLED	SPARE CARD CURRENT (A): SPARE CARD CURRENT %: PERTIES: 'V' 14/2 FPLP/R (NAC) 60993B 14 AWG ASURED USING DRAWN SEGMENT LENGTHS DESCRIPTION 2-WIRE, HORN STROBE, RED 2-WIRE, HORN STROBE, RED	WITH 10.00 % ADDITIONA CANDELAS 30CD 75CD	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED LENGTH CALCULATED ALARM CURRENT (A) 0.038	1.39 TOTAL CURRENT (A) 0.114 0.087
CULATION M	3 1 5 METHODS: NCE (Ω) = WIRE RES	PART NO P2RLED PC2RLED SCRLED	SPARE CARD CURRENT (A): SPARE CARD CURRENT %: PERTIES: 'V' 14/2 FPLP/R (NAC) 60993B 14 AWG ASURED USING DRAWN SEGMENT LENGTHS DESCRIPTION 2-WIRE, HORN STROBE, RED STROBE, RED STROBE, RED STROBE, RED STROBE, RED	WITH 10.00 % ADDITIONA CANDELAS 30CD 75CD 30CD	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED LENGTH CALCULATED ALARM CURRENT (A) 0.038 0.087 0.07	1.39 TOTAL CURRENT (A) 0.114 0.087 0.35 0.066
C C C C C C C C C C C C C C C C C C C	3 1 5 METHODS: NCE (Ω) = WIRE RES	DISTANCE ME PART NO P2RLED PC2RLED SCRLED SRLED SISTANCE (Ω/FT) X 2 X TOTAL C	SPARE CARD CURRENT (A): SPARE CARD CURRENT %: SPARE CARD CURRENT (A): CURRENT SUMI	WITH 10.00 % ADDITIONA CANDELAS 30CD 75CD 30CD	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED LENGTH CALCULATED ALARM CURRENT (A) 0.038 0.087 0.07	1.39 TOTAL CURRENT (A) 0.114 0.087 0.35 0.066
CULATION M	3 1 5 METHODS: NCE (Ω) = WIRE RES	DISTANCE ME PART NO P2RLED PC2RLED SCRLED SRLED SISTANCE (Ω/FT) X 2 X TOTAL C	SPARE CARD CURRENT (A): SPARE CARD CURRENT %: SPARE CARD CURRENT %: PERTIES: 'V' 14/2 FPLP/R (NAC) 60993B 14 AWG ASURED USING DRAWN SEGMENT LENGTHS DESCRIPTION 2-WIRE, HORN STROBE, RED STROBE, RED STROBE, RED STROBE, RED CURRENT (A): CURRENT SUMI	WITH 10.00 % ADDITIONA CANDELAS 30CD 75CD 30CD WARY	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED LENGTH CALCULATED ALARM CURRENT (A) 0.038 0.087 0.07 0.022 POWER SUN STARTING CALC. VOLTAGE:	1.39 TOTAL CURRENT (A) 0.114 0.087 0.35 0.066
CULATION M	3 1 5 METHODS: NCE (Ω) = WIRE RES	DISTANCE ME PART NO P2RLED PC2RLED SCRLED SRLED SISTANCE (Ω/FT) X 2 X TOTAL C	SPARE CARD CURRENT (A): SPARE CARD CURRENT %: SPERTIES: 'V' 14/2 FPLP/R (NAC) 60993B 14 AWG ASURED USING DRAWN SEGMENT LENGTHS DESCRIPTION 2-WIRE, HORN STROBE, RED STROBE, RED STROBE, RED CIRCUIT LENGTH (FT) T CURRENT (A) MAX. CIRCUIT CURRENT (A): TOTAL CIRCUIT CURRENT (A):	75CD 75CD 30CD 30CD WARY 1 0.025	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED LENGTH CALCULATED ALARM CURRENT (A) 0.038 0.087 0.07 0.022 POWER SUN STARTING CALC. VOLTAGE: MAX. VOLTAGE DROP:	1.39 TOTAL CURRENT (A) 0.114 0.087 0.35 0.066
CULATION M	3 1 5 METHODS: NCE (Ω) = WIRE RES	DISTANCE ME PART NO P2RLED PC2RLED SCRLED SRLED SISTANCE (Ω/FT) X 2 X TOTAL C	SPARE CARD CURRENT (A): SPARE CARD CURRENT %: SPARE CARD CURRENT %: PERTIES: 'V' 14/2 FPLP/R (NAC) 60993B 14 AWG ASURED USING DRAWN SEGMENT LENGTHS DESCRIPTION 2-WIRE, HORN STROBE, RED STROBE, RED STROBE, RED STROBE, RED CURRENT (A): CURRENT SUMI	WITH 10.00 % ADDITIONA CANDELAS 30CD 75CD 30CD WARY	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED LENGTH CALCULATED ALARM CURRENT (A) 0.038 0.087 0.07 0.022 POWER SUN STARTING CALC. VOLTAGE:	1.39 TOTAL CURRENT (A) 0.114 0.087 0.35 0.066
CULATION M	3 1 5 METHODS: NCE (Ω) = WIRE RES	DISTANCE ME PART NO P2RLED PC2RLED SCRLED SRLED SISTANCE (Ω/FT) X 2 X TOTAL CIRCUI	SPARE CARD CURRENT (A): SPARE CARD CURRENT %: SPERTIES: 'V' 14/2 FPLP/R (NAC) 60993B 14 AWG ASURED USING DRAWN SEGMENT LENGTHS DESCRIPTION 2-WIRE, HORN STROBE, RED STROBE, RED STROBE, RED CIRCUIT LENGTH (FT) T CURRENT (A) MAX. CIRCUIT CURRENT (A): TOTAL CIRCUIT CURRENT (A):	75CD 75CD 30CD 30CD WARY 1 0.025	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED LENGTH CALCULATED ALARM CURRENT (A) 0.038 0.087 0.07 0.022 POWER SUN STARTING CALC. VOLTAGE: MAX. VOLTAGE DROP:	1.39 TOTAL CURRENT (A) 0.114 0.087 0.35 0.066
CULATION M	3 1 5 METHODS: NCE (Ω) = WIRE RESE DROP = TOTAL RE	DISTANCE ME PART NO P2RLED PC2RLED SCRLED SRLED SISTANCE (Ω/FT) X 2 X TOTAL CIRCUI	SPARE CARD CURRENT (A): SPARE CARD CURRENT %: SPERTIES: 'V' 14/2 FPLP/R (NAC) 60993B 14 AWG ASURED USING DRAWN SEGMENT LENGTHS DESCRIPTION 2-WIRE, HORN STROBE, RED STROBE, RED STROBE, RED STROBE, RED CURRENT (A): MAX. CIRCUIT CURRENT (A): TOTAL CIRCUIT CURRENT (A): SPARE CIRCUIT CURRENT (A):	75CD 75CD 30CD 30CD WARY 1 0.025 0.9750 97.50 %	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED LENGTH CALCULATED ALARM CURRENT (A) 0.038 0.087 0.07 0.022 POWER SUN STARTING CALC. VOLTAGE: MAX. VOLTAGE DROP: VOLTAGE DROP %: MIN. OPERATIONAL VOLTAGE:	1.39 TOTAL CURRENT (A) 0.114 0.087 0.35 0.066 MMARY 24 0.05 0.20 % 18
CULATION M	3 1 5 METHODS: NCE (Ω) = WIRE RESE DROP = TOTAL RE	DISTANCE ME PART NO P2RLED PC2RLED SCRLED SRLED SISTANCE (Ω/FT) X 2 X TOTAL CIRCUI	SPARE CARD CURRENT (A): SPARE CARD CURRENT %: DESCRIPTION 2-WIRE DESCRIPTION 2-WIRE, HORN STROBE, RED STROBE, RED STROBE, RED CURRENT (A): CURRENT (A): TOTAL CIRCUIT CURRENT (A): SPARE CIRCUIT CURRENT (A):	MARY 1 0.025 0.9750 97.50 % ADDITIONA CANDELAS	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED LENGTH CALCULATED ALARM CURRENT (A) 0.038 0.087 0.07 0.022 POWER SUN STARTING CALC. VOLTAGE: MAX. VOLTAGE DROP: VOLTAGE DROP %: MIN. OPERATIONAL VOLTAGE: END OF LINE VOLTAGE:	1.39 TOTAL CURRENT (A) 0.114 0.087 0.35 0.066 MMARY 24 0.05 0.20 % 18 23.95
CULATION M	3 1 5 METHODS: NCE (Ω) = WIRE RESE DROP = TOTAL RE	DISTANCE ME PART NO P2RLED PC2RLED SCRLED SRLED SISTANCE (Ω/FT) X 2 X TOTAL CIRCUI	SPARE CARD CURRENT (A): SPARE CARD CURRENT %: SPARE CARD CURRENT %: PERTIES: 'V' 14/2 FPLP/R (NAC) 60993B 14 AWG ASURED USING DRAWN SEGMENT LENGTHS DESCRIPTION 2-WIRE, HORN STROBE, RED STROBE, RED STROBE, RED STROBE, RED CURRENT SUMI MAX. CIRCUIT CURRENT (A): TOTAL CIRCUIT CURRENT (A): SPARE CIRCUIT CURRENT (A): TOTAL CARD CURRENT (A): TOTAL CARD CURRENT (A):	75CD 75CD 30CD 30CD WARY 1 0.025 0.9750 97.50 %	TOTAL CIRCUIT LENGTH (FT): TOTAL CIRCUIT RESISTANCE (Ω): R FPLP/R ANALOG UNSHIELDED LENGTH CALCULATED ALARM CURRENT (A) 0.038 0.087 0.07 0.022 POWER SUN STARTING CALC. VOLTAGE: MAX. VOLTAGE DROP: VOLTAGE DROP %: MIN. OPERATIONAL VOLTAGE: END OF LINE VOLTAGE: WIRE RESISTANCE (Ω/KFT):	1.39 TOTAL CURRENT (A) 0.114 0.087 0.35 0.066 //MARY 24 0.05 0.20 % 18 23.95 7.77
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DISTANCE MEASURED USING DRAWN SEGMENT LENGTHS WITH 10.00 % ADDITIONAL LENGTH CALCULATED

CANDELAS

DESCRIPTION

LCD ANNUNCIATOR

PART NO

RA-6075

CALCULATION METHODS: TOTAL RESISTANCE (Ω /FT) X 2 X TOTAL CIRCUIT LENGTH (FT) TOTAL VOLTAGE DROP = TOTAL RESISTANCE (Ω) X TOTAL CIRCUIT CURRENT (A)

SYMBOL QUANTITY

TOTAL CURRENT (A)

0.025

ALARM CURRENT (A)

0.025

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FIRE ALARM SYSTEM

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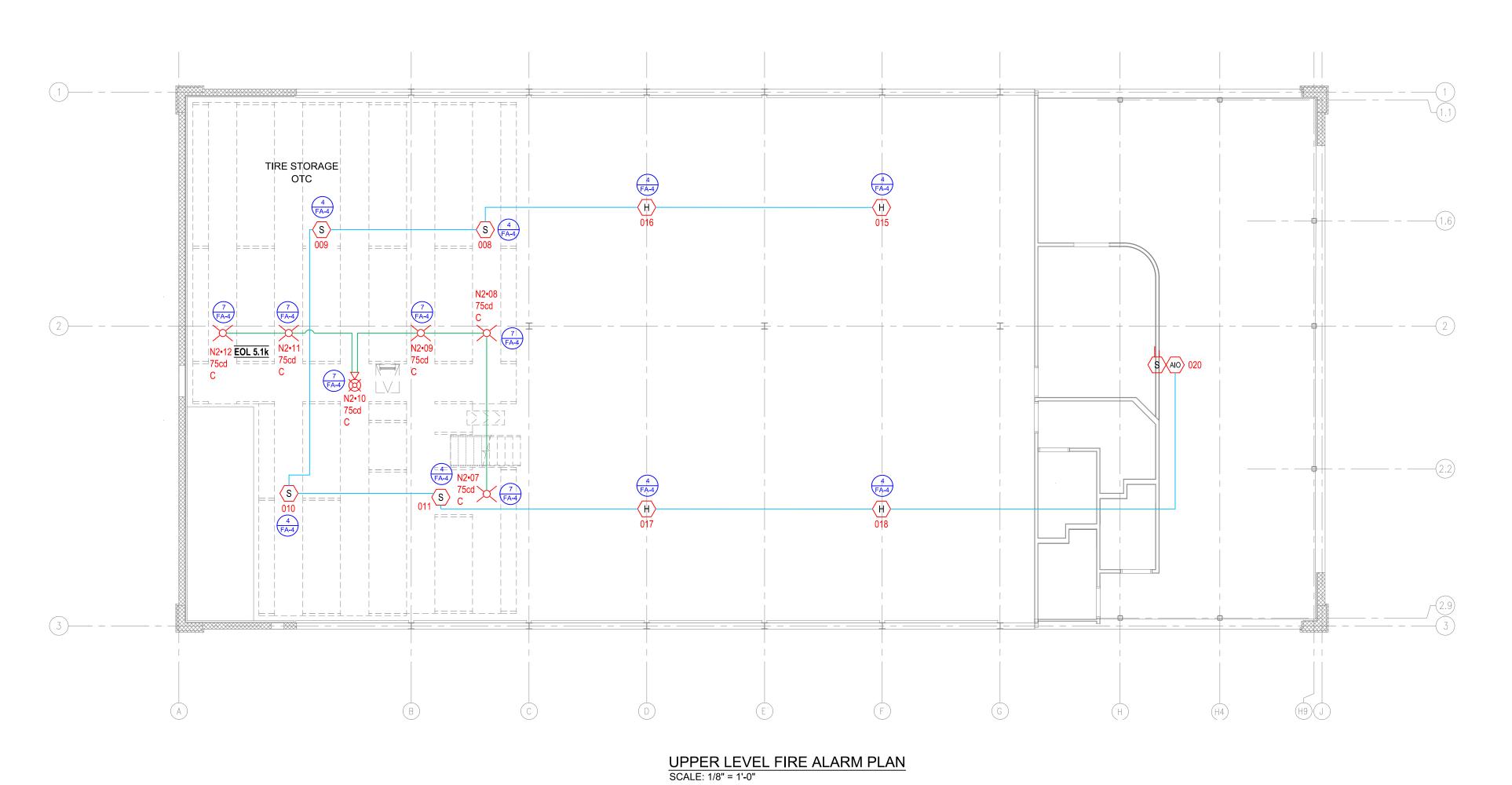
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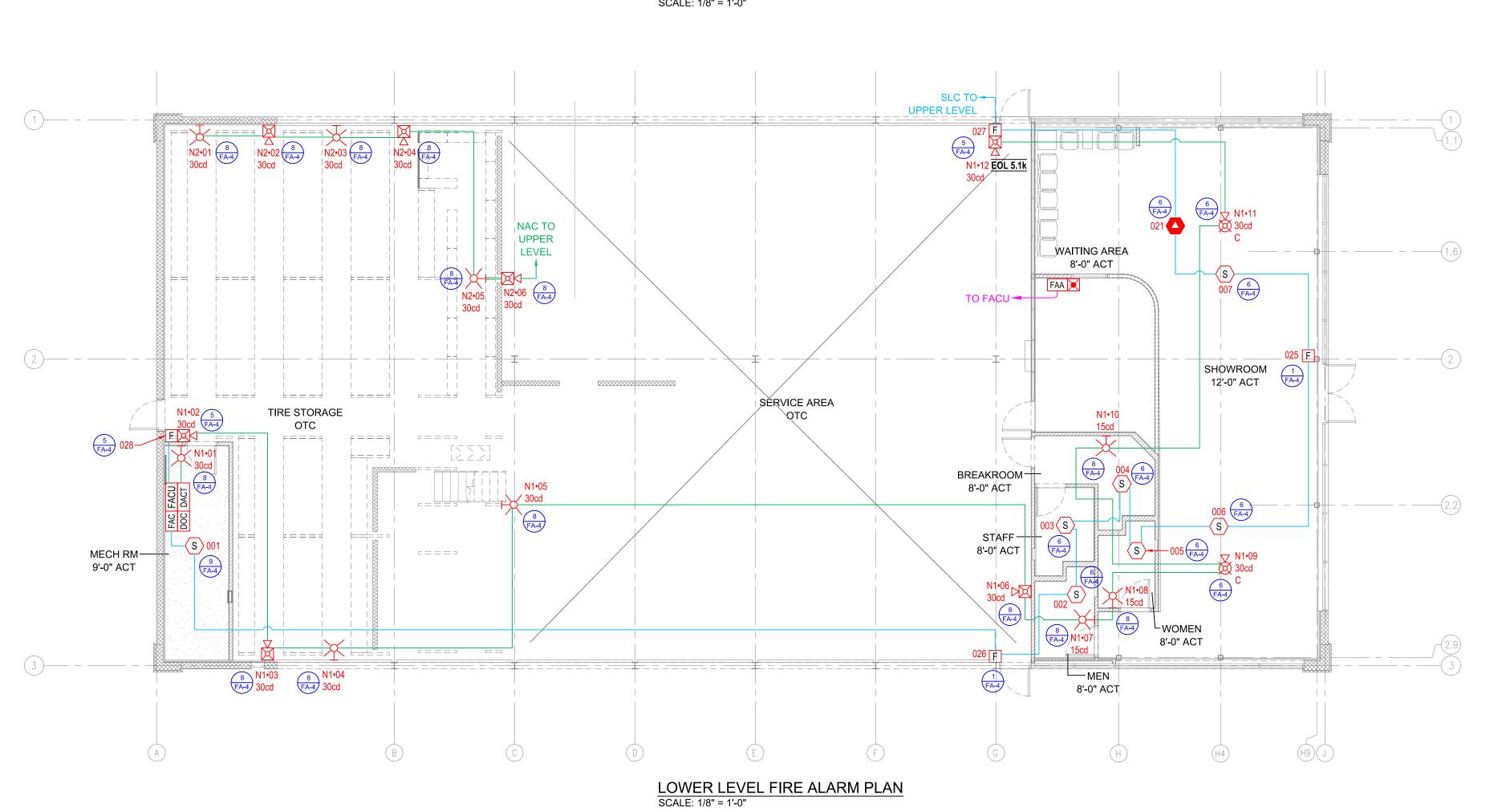
ENGINEER OF RECORD
Malcolm Russo
2500 MAITLAND CTR PKWY
SUITE 105
703-468-6100
NADFireEngineering@
vectorsecurity.com



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DEVICE LEGEND

SYMBOL	QUANTITY	IS EXISTING	DEVICE LEGEND MANUFACTURER	PART NO	DESCRIPTION	
FAC	1		BOSCH	B465	UNIVERSAL DUAL PATH COMMUNICATOR	
FACU	1		POTTER	AFC-50	FIRE ALARM CONTROL PANEL	
(AIO)	1		POTTER	PAD100-OROI	ONE RELAY ONE INPUT MODULE	
F	4		POTTER	PAD100-PSSA	ADDRESSABLE PULL STATION SINGLE ACTION	
•	1		POTTER	PAD300-CD	CARBON-MONOXIDE DETECTOR	
$\langle H \rangle$	4		POTTER	PAD300-HD	FIXED TEMPERATURE HEAT SENSOR	
(S)	11		POTTER	PAD300-PD	PHOTOELECTRIC SMOKE SENSOR	
FAA	1		POTTER	RA-6075	LCD ANNUNCIATOR	
DACT	1		POTTER	UD-2000	PFC SERIES DIGITAL ALARM COMMUNICATOR TRANSMITTER	
DOC	1		SPACE AGE ELECTRONICS	SSU00672	FIRE ALARM DOCUMENT BOX, RED 12" X 1 TALL 2 1/4 DEEP	
$\langle s \rangle$	1		SUPPLIED BY OTHERS	SL-2000-P	4-WIRE PHOTOELECTRIC LOW-FLOW DUG SMOKE DETECTOR	
×	7		SYSTEM SENSOR	P2RLED	2-WIRE, HORN STROBE, RED	
⊗c	3		SYSTEM SENSOR	PC2RLED	2-WIRE, HORN STROBE, RED	
	1		SPACE AGE ELECTRONICS	MSR-50RKW	REMOTE TEST STATION W/ SWITCH, ALA & POWER LEDS, KEY RESET	
×c	5		SYSTEM SENSOR	SCRLED	STROBE, RED	
X	9		SYSTEM SENSOR	SRLED	STROBE, RED	

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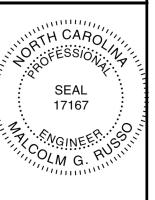


1585 BUFFALO LAKE ROAD
SANFORD, NC 27332
RE ALARM SYSTEM

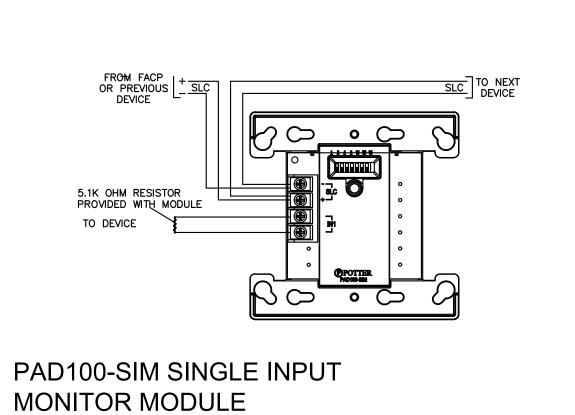
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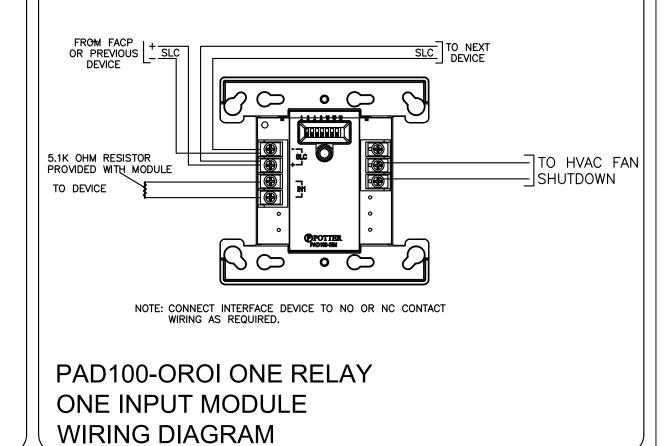
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Malcolm Russo
2500 MAITLAND CTR PKWY
SUITE 105
703-468-6100
NADFireEngineering@
vectorsecurity.com

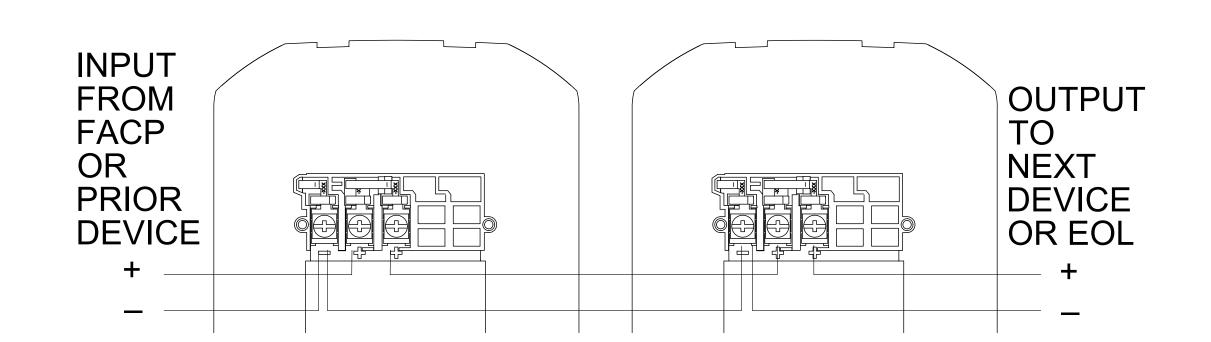


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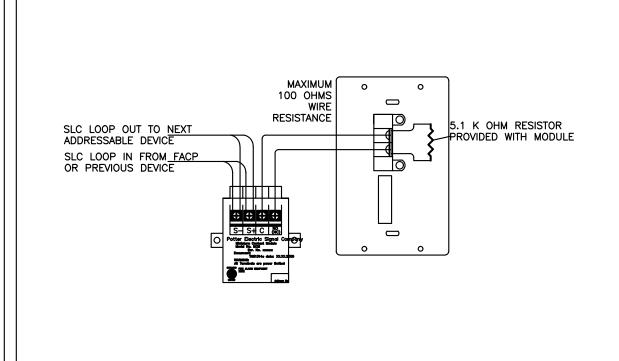


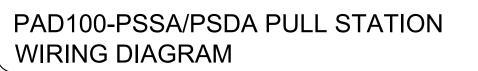
WIRING DIAGRAM

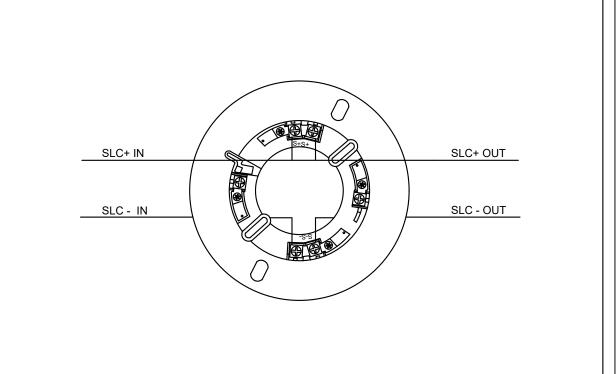




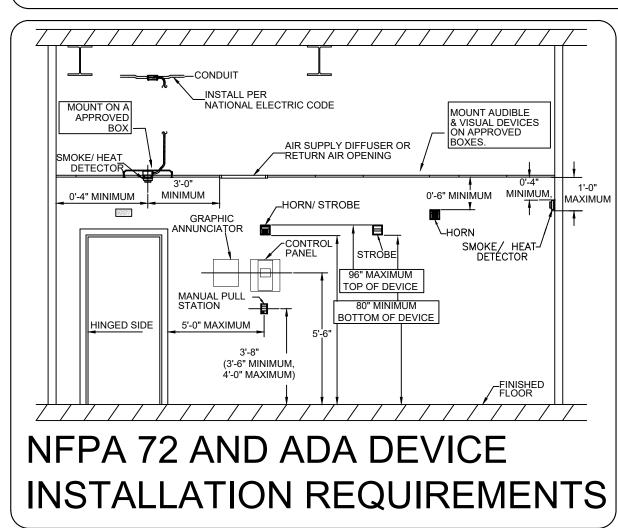








PAD100-6B DETECTOR BASE WIRING DIAGRAM





MAVIS TIRE 2266
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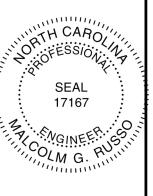
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MAITLAND, FL 32751

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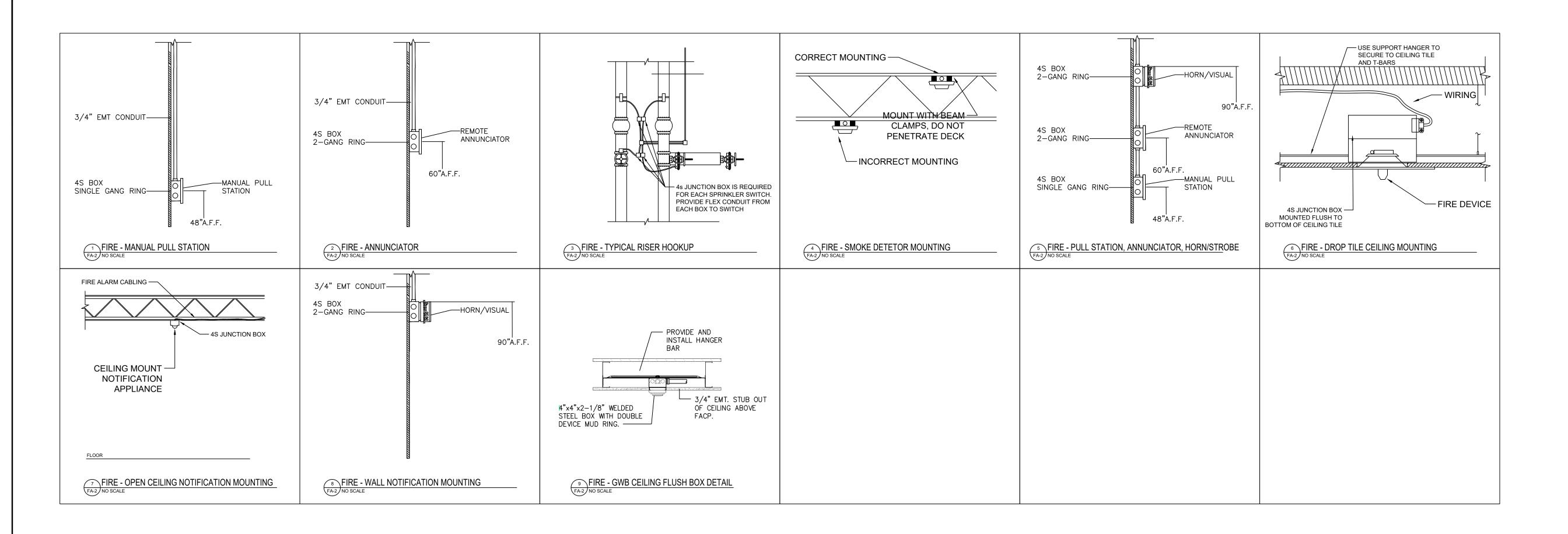
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Malcolm Russo
2500 MAITLAND CTR PKWY
SUITE 105
703-468-6100



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FIRE ALARM PLAN NOTES

- THIS SYSTEM WILL BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 72 AND ALL WIRING WILL CONFORM TO NFPA 70 ARTICLE 760
- ALL FIRE ALARM CABLING SHALL BE ROUTED THROUGH CONDUIT FROM DEVICES TO BOTTOM OF THE BAR JOIST. AT THAT POINT
- CABLING SHALL BE RUN EXPOSED ALONG THE CEILING IF ACCEPTABLE BY THE AHJ. MOUNT FIRE ALARM CONTROL PANEL 70" AFF TO TOP.
- MOUNT KEYPAD / ANNUNCIATOR 4'-6" AFF TO CENTER. REFER TO DETAIL 3/E-100 FOR LOCATION.
- MOUNT MANUAL PULL STATIONS AT 48" AFF TO TOP OF BOX.
- MOUNT ELECTRONIC HORNS / STROBES AT 80" AFF TO THE BOTTOM.
- MOUNT CONTROL RELAYS WITHIN 3'-0" OF THE CONTROLLER.
- ALL INITIATION AND NOTIFICATION CIRCUITS SHALL BE SUPERVISED. OBSERVE ALL DEVICE POLARITIES.
- THE PANEL SHALL NOT BE USED TO POWER ANY UNAUTHORIZED EXTERNAL DEVICE.
- VERIFY ALL DEVICE LOCATIONS PRIOR TO ROUGH-IN.
- 12. THE ELECTRICAL CONTRACTOR WILL COORDINATE DEVICE BOX SIZES AND CONDUIT LOCATIONS PRIOR TO ROUGH IN.
- 13. THE ELECTRICAL CONTRACTOR WILL SUPPLY AND INSTALL ALL BOXES AND CONDUITS FROM THE OUTLET BOX TO ABOVE FINISH CEILING, WITH PULL STRING AND ANTI-SHORT BUSHING, FOR THE FIRE ALARM SYSTEM.
- PROVIDE WIRE GUARDS FOR ANY DETECTORS INSTALLED UNDER THE RACKING SYSTEM
- SUBSTITUTION OF THE FIRE ALARM CONTROL PANEL AND/OR COMMUNICATOR IS NOT PERMITTED.
- 16. FOR SURFACE MOUNTED HORN/STROBES, PROVIDE SURFACE MOUNT BACK BOX, SBBRL
- 17. FOR SURFACE MOUNTED PULL STATIONS, PROVIDE SURFACE MOUNTED BACK BOX, 5140MPS-BB.
- 18. DO NOT SURFACE MOUNT CONDUIT TO STRUCTURAL COLUMN(S) IN SHOWROOM. DRILL COLUMN AT PULL STATION LOCATION AND
- ABOVE FINISHED CEILING. ROUTE CABLE THROUGH STRUCTURAL COLUMN.
- 19. THE INSTALLING CONTRACTOR WILL BE REQUIRED TO REGISTER AND ACTIVATE BOTH THE CELLULAR CONNECTION AND THE THE INSTALLING CONTRACTOR WILL BE REQUIRED TO REGISTER AND ACTIVATE BOTH THE CELLULAR CONNECTION AND THE ALARM SYSTEM ITSELF. FE MORAN SECURITY SOLUTIONS LLC DOES NOT COME ON SITE BUT WILL PROVIDE SUPPORT. THE INSTALLING CONTRACTOR MUST TEST AND CONFIRM ALL DEVICES HAVE BEEN RECEIVED AT THE MONITORING STATION TO COMPLETE THE ACTIVATION PROCESS.
- 20. NOTIFICATION DEVICES SHALL NOT BE INSTALLED ON THE WALL IN THE WAITING ROOM WHERE GRAPHICS ARE DISPLAYED. NOTIFICATION DEVICES SHALL NOT BE INSTALLED ON THE WALL IN THE WAITING ROOM WHERE GRAPHICS ARE DISPLAYED. ONLY CEILING DEVICES SHALL BE USED.

ELECTRICAL CONTRACTOR NOTES

- MAVIS TIRE HAS A NATIONAL CONTRACT FOR THE DESIGN, INSTALLATION, AND MONITORING OF THE FIRE ALARM SYSTEMS. THE CONTRACTOR SHALL
- COORDINATE ALL POWER AND CONDUIT REQUIREMENTS WITH VECTOR SECURITY INC.
- VECTOR SECURITY INC. GAINESVILLE, VA 20150: 703-468-6100
- ELECTRICAL CONTRACTOR SHALL COORDINATE/VERIFY WITH THE FIRE ALARM CONTRACTOR AND SUPPLY THE CONNECTION OF ALL HARD WIRED POWER
- SUPPLIES AND CONTROLS. TYPICALLY THERE IS ONE (1) FIRE ALARM CONTROL PANEL AND ONE (1) POWER SUPPLY.
- 4. INSTALL 4X4X2 BOX WITH SINGLE GANG RING AT 48"AFF TO CENTER WITH 3/4" EMT STUB UP TO BAR JOIST OR ABOVE DROP TILE CEILING FOR MANUAL PULL STATIONS. REFER TO DETAIL 23
- INSTALL 4X4X2 BOX 60"AFF TO CENTER WITH 3/4" EMT STUB UP TO BAR JOIST OR ABOVE DROP TILE CEILING FOR ANNUNCIATOR. REFER TO DETAIL 24
- INSTALL 4X4X2 BOX 90"AFF TO TOP OF BOX WITH 3/4" EMT STUB UP TO BAR JOIST OR ABOVE DROP TILE CEILING FOR NOTIFICATION APPLIANCES. REFER TO DETAIL 30
- THE ELECTRICAL CONTRACTOR WILL SUPPLY AND INSTALL ALL BOXES AND CONDUITS FROM THE OUTLET BOX TO ABOVE FINISH CEILING, WITH PULL STRING AND ANTI-SHORT BUSHING, FOR THE FIRE ALARM SYSTEM.
- INSTALL 4X4X2 BOX WITH T-BAR SUPPORT FOR ALL SUSPENDED CEILING FIRE ALARM DEVICES. BOX SHALL BE CENTERED IN TILE. REFER TO DETAIL 28.
- MECHANICAL CONTRACTOR IS TO WIRE THE FAN SHUT DOWN AND PROVIDE WIRING FROM SMOKE DETECTOR TO RTU CONTROL BOARD ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.

INSPECTION NOTES

- HAVE CURRENT NFPA 72 CERTIFICATION OF COMPLETION FORM TO FILL OUT DURING INSPECTION.
- HAVE EQUIPMENT TO TEST SMOKE, HEAT, AND CARBON MONOXIDE DETECTORS.
- TEST EACH DEVICE REQUIRED BY THE INSPECTOR BY THE APPROPRIATE METHOD AS DESCRIBED IN NFPA 72 CHAPTER 14.
- DOCUMENT BOX MUST CONTAIN LATEST SET OF AS-BUILT PLANS/RECORD DRAWINGS.
- COORDINATE TIME OF INSPECTION WITH OTHER REQUIRED TRADES LIKE HVAC AND SPRINKLER.
- ENSURE FIRE ALARM SYSTEM IS ON TEST WITH THE MONITORING COMPANY. COMPLETE NFPA 72 CERTIFICATION OF COMPLETION FORM AND LEAVE A COPY IN THE DOCUMENT BOX ON SITE

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VECTOR SECURITY NETWO

2500 MAITLAND CTR PKWY MAITLAND, FL 32751 703-468-6100 ENGINEER OF RECORD

Malcolm Russo 2500 MAITLAND CTR PKW SUITE 105 703-468-6100 NADFireEngineering@ vectorsecurity.com



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