GENERAL NOTES:

1. SEE DEVICE LEGEND FOR MODEL NUMBERS AND SPECIFICATIONS.

2. ALL MATERIALS AND EQUIPMENT SHALL BE UL LISTED FOR THE INTENDED USE AND SHALL BE INSTALLED IN FULL COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS.

3. MATERIALS AND INSTALLATION SHALL COMPLY WITH NFPA 72 (2013), STATE BUILDING CODE, LOCAL AUTHORITY HAVING JURISDICTION, AND INSURANCE UNDERWRITER'S REQUIREMENTS FOR FIRE ALARM SYSTEMS.

4. ALL FIRE ALARM SYSTEM CONDUCTORS SHALL BE RUN IN PLENUM RATED CABLE UNLESS NOTED OTHERWISE. PROVIDE ALL HANGERS, SUPPORTS, ETC. AS REQUIRED. JUNCTION BOX COVERS FOR ALL FIRE ALARM JUNCTION BOXES SHALL BE LABELED AND PAINTED RED. CIRCUITS CAN BE COMBINED IN CONDUIT AS NECESSARY.

5. PROVIDE VISIBLE NOTIFICATION SYNCHRONIZATION AS REQUIRED BY NFPA AND ADA.

6. A DECIBEL LEVEL OF 15 DBA ABOVE AVERAGE AMBIENT (ON NFPA 72, TABLE A.7.4.2) SHALL BE MAINTAINED IN ALL OCCUPIABLE AREAS MEASURED 5'0" ABOVE THE FLOOR USING THE A-WEIGHTED SCALE. A MINIMUM OF 90 DBA SHALL BE MAINTAINED IN ALL MECHANICAL EQUIPMENT ROOMS PER THE 2018 NORTH CAROLINA FIRE CODE, SECTION 907.5.2.11. THE TOTAL SOUND PRESSURE LEVEL PRODUCED BY COMBINING THE AMBIENT AND NOTIFICATION LEVELS SHALL NOT EXCEED 120 DBA ANYWHERE IN THE OCCUPIABLE AREA. DEVICES HAVE BEEN SHOWN TO PROVIDE GENERAL INFRASTRUCTURE TO ACHIEVE SUCH LEVELS.

7. FUNCTIONAL TESTING METHOD FOR PROPER OPERATION OF SMOKE DETECTORS AND DUCT DETECTORS SHALL BE DETERMINED BY THE AHJ.

8. PULL STATIONS ARE ONLY PROVIDED AT REQUIRED EXITS.

9. LOCATIONS OF DEVICES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD.

10. CONTRACTOR SHALL PROVIDE ALL TESTING AND DOCUMENTATION AS REQUIRED BY THE LOCAL FIRE MARSHAL AND STATE AND LOCAL CODES, INCLUDING BUT NOT

LIMITED TO: 1. ACCEPTANCE TESTING AS REQUIRED PER SECTION 907.7, 2018 NC FIRE CODE.

- 2. REQUIRED INSPECTIONS, TESTING, AND MAINTENANCE AS REQUIRED BY 2018 NC FIRE CODE.
- 3. INSTRUCTIONS PER 907.7.3 AND RECORD OF COMPLETION PER SECTION 907.7.2, 2018 NC FIRE CODE.

11. SYSTEM SHALL BE CONNECTED TO A U.L. APPROVED CENTRAL MONITORING STATION AS REQUIRED.

12. THE FIRE ALARM CONTRACTOR SHALL NOT BE RESPONSIBLE FOR ANY PRE-EXISTING CODE VIOLATIONS PERTAINING TO THE EXISTING FIRE ALARM SYSTEM.

FIRE ALARM SEQUENCE OF OPERATION:

UPON CHANGE IN STATUS OF ANY DEVICE ON THE SYSTEM, THE FIRE ALARM CONTROL PANEL SHALL ACTIVATE AUDIBLE AND VISIBLE CHANGE INDICATORS AND DISPLAY THE SYSTEM POINT NUMBER, POINT DESCRIPTION, AND MESSAGE ASSOCIATED WITH THE POINT.

ACTIVATION OF ANY MANUAL PULL STATION, KITCHEN HOOD EXTINGUISHING SYSTEM, WATERFLOW DEVICE, SMOKE DETECTOR, HEAT DETECTOR, SUPERVISORY DEVICE, OR OTHER INITIATING DEVICE WILL CAUSE THE FOLLOWING FUNCTIONS TO OCCUR:

MANUAL STATION OPERATION SHALL:

1. ACTIVATE AUDIBLE AND VISUAL STATUS CHANGE INDICATORS AND DISPLAY POINT NUMBER, POINT DESCRIPTION, AND MESSAGE ASSOCIATED WITH THE POINT ON THE PANEL. 2. TRANSMIT AN ALARM SIGNAL TO A U.L. LISTED CENTRAL STATION.

3. ACTIVATE THE AUDIBLE AND VISUAL NOTIFICATION APPLIANCES IN THE BUILDING.

4. RELEASE THE DOOR LOCKING SYSTEMS OF ACCESS-CONTROLLED EGRESS DOORS.

5. SHUT DOWN AIR HANDLERS.

WATERFLOW SWITCH OPERATION SHALL:

1. ACTIVATE AUDIBLE AND VISUAL STATUS CHANGE INDICATORS AND DISPLAY POINT NUMBER, POINT DESCRIPTION, AND MESSAGE ASSOCIATED WITH THE POINT ON THE PANEL.

- 2. TRANSMIT AN ALARM SIGNAL TO A U.L. LISTED CENTRAL STATION.
- 3. ACTIVATE THE AUDIBLE AND VISUAL NOTIFICATION APPLIANCES IN THE BUILDING. 4. RELEASE THE DOOR LOCKING SYSTEMS OF ACCESS-CONTROLLED EGRESS DOORS.

5. SHUT DOWN AIR HANDLERS.

SMOKE OR HEAT DETECTOR OPERATION SHALL:

1. ACTIVATE AUDIBLE AND VISUAL STATUS CHANGE INDICATORS AND DISPLAY POINT NUMBER, POINT DESCRIPTION, AND MESSAGE ASSOCIATED WITH THE POINT ON THE PANEL.

- 2. TRANSMIT AN ALARM SIGNAL TO A U.L. LISTED CENTRAL STATION. 3. ACTIVATE THE AUDIBLE AND VISUAL NOTIFICATION APPLIANCES IN THE BUILDING.
- 4. RELEASE THE DOOR LOCKING SYSTEMS OF ACCESS-CONTROLLED EGRESS DOORS.
- 5. SHUT DOWN AIR HANDLERS.

DUCT SMOKE DETECTOR OPERATION SHALL:

1. ACTIVATE AUDIBLE AND VISUAL STATUS CHANGE INDICATORS AND DISPLAY POINT NUMBER, POINT DESCRIPTION, AND MESSAGE ASSOCIATED WITH THE POINT ON THE PANEL.

2. TRANSMIT A SUPERVISORY SIGNAL TO A U.L. LISTED CENTRAL STATION. 3. SHUT DOWN AIR HANDLERS.

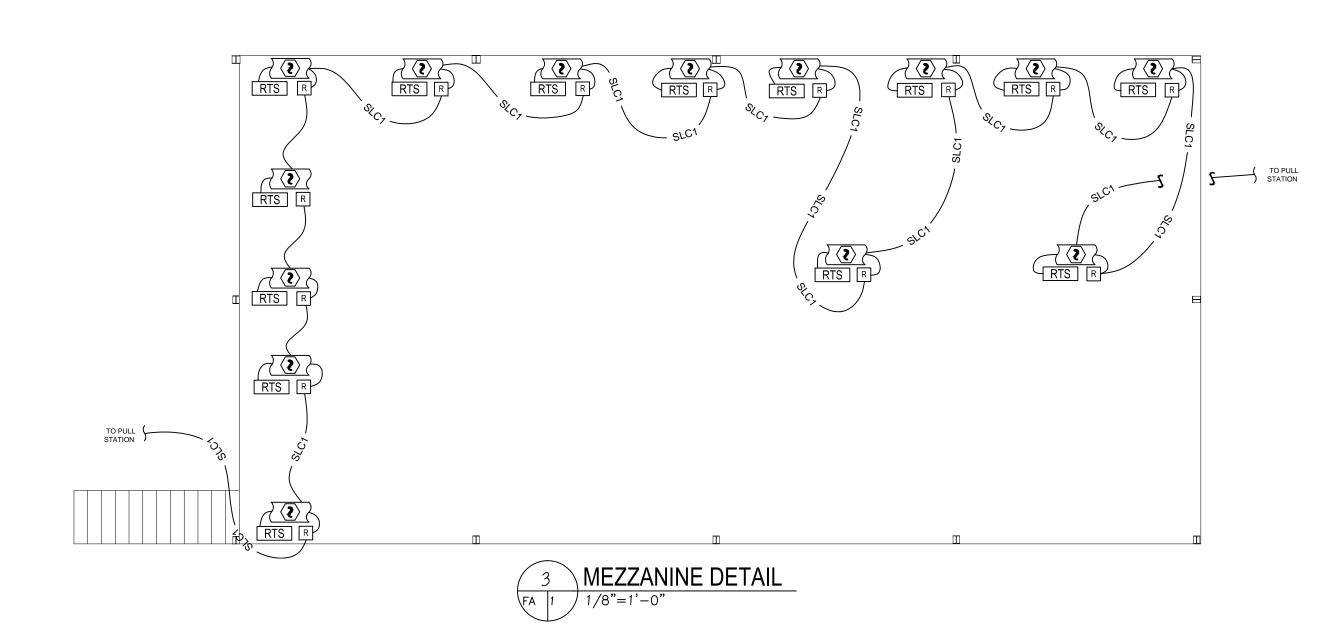
SUPERVISORY DEVICE ACTIVATION, INCLUDING VALVE SUPERVISORY DEVICES SHALL:

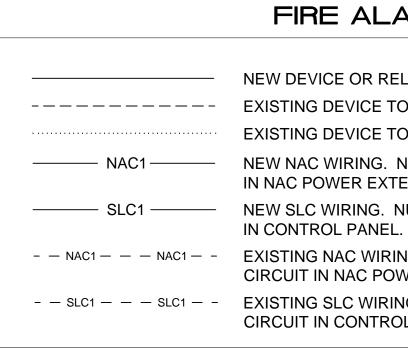
1. ACTIVATE AUDIBLE AND VISUAL STATUS CHANGE INDICATORS AND DISPLAY POINT NUMBER, POINT DESCRIPTION, AND MESSAGE ASSOCIATED WITH THE POINT ON THE PANEL. 2. TRANSMIT A SUPERVISORY SIGNAL TO A U.L. LISTED CENTRAL STATION. THIS SIGNAL SHALL BE DISTINCTLY DIFFERENT THAN A TROUBLE SIGNAL.

REMOVAL OF ANY DEVICE, WIRING DISARRANGEMENT, OR SYSTEM COMPONENT FAILURE SHALL DISPLAY ON THE OPERATOR TERMINAL, THE CHANGE OF STATUS, TIME, DATE, POINT DESCRIPTION ON A POINT BY POINT BASIS, AND THE MESSAGE ASSOCIATED WITH THE POINT AND TRANSMIT A TROUBLE SIGNAL TO A U.L. LISTED CENTRAL STATION.

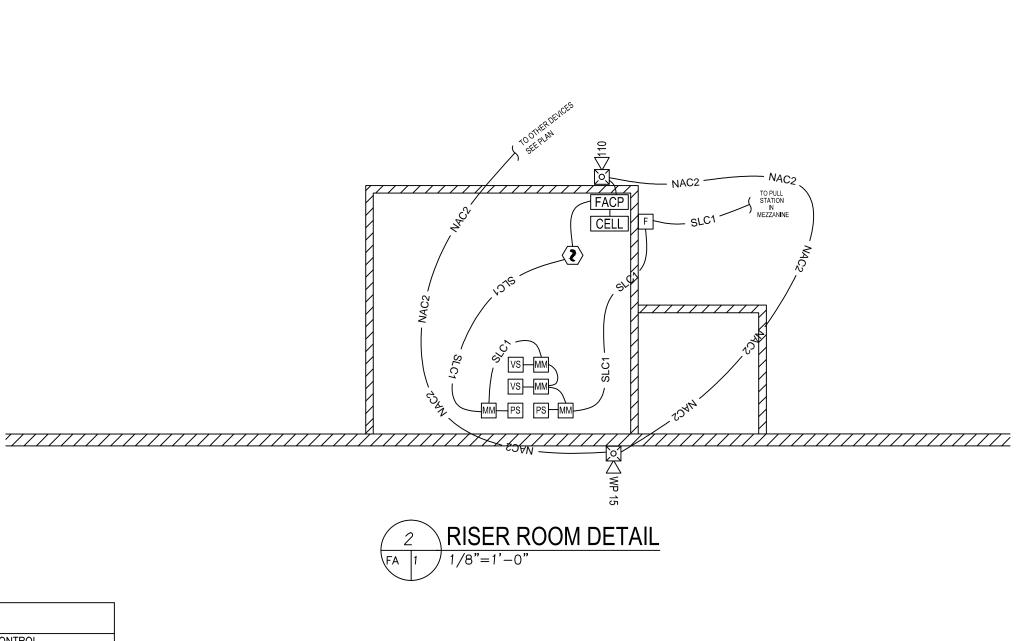
INDICATION EVACUATION TONE SHALL BE THREE BEAT TEMPORAL PATTERN, UNLESS HIGH RISE OR LARGE ASSEMBLY.

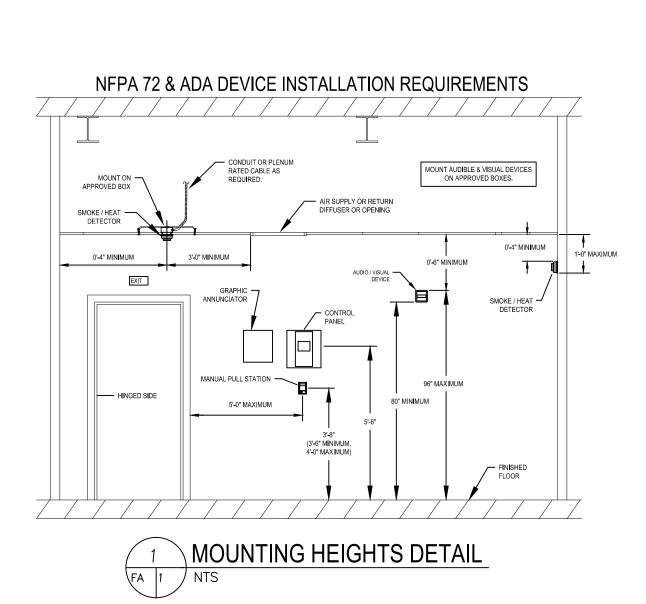
F	FIRE ALARM SYSTEM								SYSTEM OUTPUTS																	
	INPUT/OUTPUT MATRIX																									
				COM	A A A A A A A A A A A A A A A A A A A	APRIL DI LE	A CONTRACTOR	A CONTRACTOR OF A CONTRACTOR	AND		A A A A A A A A A A A A A A A A A A A		AL CONTRACTOR		AN CONTRACT	10000000000000000000000000000000000000		A CONTRACTOR	A CONTRACTOR	1 2 0 1 2 4 0 1 2 4 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 12 12 12 12 12 12 12 12 12 12 12 12 1					
						Š.	Ň	Ŷċ	S)	ÌÌ		5) 5 1		Ĭ	Ĭ,	S)	S) j			I'N	Ľ	Ĩ		¥	//	
	SYSTEM INPUTS	A	B		D	E	FC		HII	ŤJ	Ťк	Ϋ́́́́	M	N	0	P		R [s	τŢι	JΪν	/ W	τ Γ X	Ϋ́	ſ	
1	FIRE ALARM SYSTEM AC POWER FAILURE																								1	
2	FIRE ALARM SYSTEM LOW BATTERY					•	•																		2	
3	OPEN CIRCUIT					•																			3	
4	GROUND FAULT					-																			4	
5	NOTIFICATION APPLIANCE CIRCUIT SHORT					•																			5	
6	BUILDING MANUAL PULL STATIONS	•																							6	
7	CORRIDOR SMOKE DETECTORS													\bullet											7	
8	AREA SMOKE DETECTORS	•												\bullet											8	
9	HVAC AIR DUCT SMOKE DETECTORS			•																•					9	
10	AREA HEAT DETECTORS	-	•											\bullet				•							10	
11	HOOD OR ROOM FIRE SUPPRESSION SYSTEM ALARM	•												\bullet											11	
12	SPRINKLER TAMPER SWITCH				•																				12	
13	SPRINKLER WATER FLOW IN BUILDING	\bullet												\bullet											13	j.
14	SPRINKLER WATER FLOW IN ELEV EQUIP RM OR SHAFT		•											\bullet		•	•	•	•						14	
15	ELEV EQUIP RM AREA SMOKE DETECTOR	\bullet	•											\bullet		•			•						15	
16	ELEV SHAFT AND ELEV EQUIP RM HEAT DETECTORS	•	•											\bullet		•	•	•	●						16	<u>.</u>
17	ELEV LOBBY SMOKE DETECTORS - UPPER FLOORS	•	•											\bullet				-	•						17	<u>, </u>
18	ELEV LOBBY SMOKE DETECTOR - RECALL FLOOR	•	•												\bullet	•		•	•						18	<u>.</u>
19	ELEV CONTROLLER POWER SHUNT TRIP STATUS			_	•																				19	
20	FIRE PUMP POWER FAILURE/PHASE REVERSAL			•	•																				20	
21	FIRE PUMP RUNNING		•					_			_							•							21	
22	FIRE PUMP SYSTEM NOT IN AUTOMATIC			•																					22	
23	LEGALLY REQUIRED GENERATOR SYSTEM LOW FUEL			•			_					-													23	
24	LEGALLY REQUIRED GENERATOR NOT IN AUTOMATIC			•			_																		24	-
25	AREA OF REFUGE TWO-WAY COMMUNICATIONS STATUS			•	•																				25	
26	-																								26	
27	-		_		_	_										_		_							27	<u></u>
		Α	В	С	D	E	F (; I	нЦІ	J	ΙK	(L	M	Ν	0	Ρ	Q	R	S	τ ι	۱IV	/ W	/ V	W		





FIRE ALARM DEVICE LEGEND								
SYMBOL	#	DESCRIPTION	MODEL NUMBER	NOTES				
FACP	1	FIRE ALARM CONTROL PANEL	GAMEWELL #S3 SERIES	ADDRESSABLE, 24VDC, 318 POINT SLC LOOP, 4 CLASS B NAC CIRCUITS OR 2 CLASS A NAC CIRCUITS				
CELL	1	CELLULAR COMMUNICATOR	STARLINK #SLE-LTEA-FIRE	STARLINK CELLULAR COMMUNICATOR. SEE CUT SHEET.				
ĭ∑XX	4	WALL MOUNTED FIRE ALARM HORN STROBE - WHITE	SYSTEM SENSOR L-SERIES #P2WL	MOUNT BOTTOM OF BOX AT 84" MINIMUM OR TOP OF BOX AT 96 MAXIMUM ABOVE FINISHED FLOOR. CONNECT AS REQUIRED. CANDELA STROBE AS INDICATED ON PLANS.				
	1	WALL MOUNTED FIRE ALARM HORN STROBE - WHITE - WEATHERPROOF	SYSTEM SENSOR #P2WK	MOUNT BOTTOM OF BOX AT 84" MINIMUM OR TOP OF BOX AT 96' MAXIMUM ABOVE FINISHED FLOOR. CONNECT AS REQUIRED. CANDELA STROBE AS INDICATED ON PLANS.				
() xx	2	CEILING MOUNTED FIRE ALARM STROBE - WHITE	SYSTEM SENSOR L-SERIES #SCWL	CENTER DEVICE IN CEILING TILE, DEVICE SHALL BE U.L. LISTED FOR USE IN CEILINGS. CONNECT AS REQUIRED. STROBE AS INDICATED ON PLANS.				
D⊙⊂XX	1	CEILING MOUNTED FIRE ALARM HORN STROBE - WHITE	SYSTEM SENSOR L-SERIES #PC2WL	CENTER DEVICE IN CEILING TILE, DEVICE SHALL BE U.L. LISTED FOR USE IN CEILINGS. CONNECT AS REQUIRED. STROBE AS INDICATED ON PLANS.				
$\langle \mathbf{S} \rangle$	1	SMOKE DETECTOR	GAMEWELL #ASD-PL3R	ADDRESSABLE				
$\langle \rangle \langle \rangle$	16	DUCT SMOKE DETECTOR	GAMEWELL #ASD-PL3R	ADDRESSABLE - CONNECT AS SHOWN ON PLANS. #DNR HOUSING W/ #ASD-PL3R DETECTOR HEAD - REMOTE TEST CAPABLE.				
RTS	16	REMOTE TEST STATION	SYSTEM SENSOR #RTS151KEY	MOUNT 5' - 7" ABOVE FINISHED FLOOR				
F	4	MANUAL PULL STATION	GAMEWELL #MS-7	ADDRESSABLE - MOUNT CENTER OF BOX AT 44" ABOVE FINISHED FLOOR.				
ММ	4	MONITOR MODULE	GAMEWELL #AMM-4F	CONNECT AS SHOWN ON PLANS				
R	16	RELAY MODULE	GAMEWELL #AOM-2RF	CONNECT AS SHOWN ON PLANS				
PS HP VS TS	-	SPRINKLER MONITORING SWITCHES	PROVIDED BY SPRINKLER CONTRACTOR	CONNECT AS SHOWN ON PLANS				





FIRE ALARM LINETYPE LEGEND

NEW DEVICE OR RELOCATED EXISTING DEVICE EXISTING DEVICE TO REMAIN

EXISTING DEVICE TO BE DEMO'D

NEW NAC WIRING. NUMBER INDICATES CIRCUIT

IN NAC POWER EXTENDER PANEL. NEW SLC WIRING. NUMBER INDICATES CIRCUIT

- - NAC1 - - NAC1 - - EXISTING NAC WIRING TO REMAIN. NUMBER INDICATES CIRCUIT IN NAC POWER EXTENDER PANEL.

- - SLC1 - - SLC1 - - EXISTING SLC WIRING TO REMAIN. NUMBER INDICATES CIRCUIT IN CONTROL PANEL.

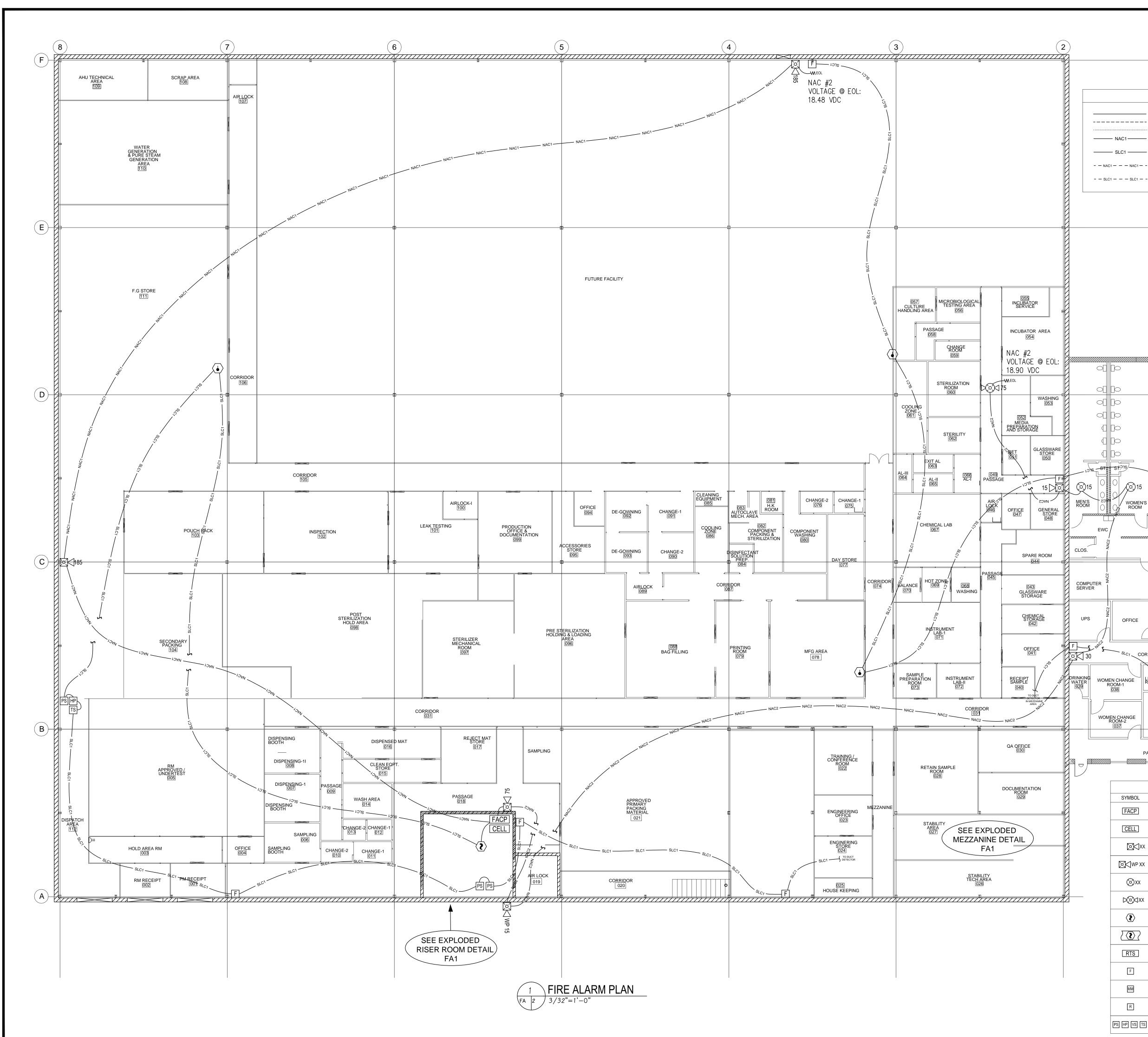
WIRE: SLC - 18/2 FPLP NAC - 16/2 FPLP **RTS - 18/2 FPLP** RISER - FPLR



Bithod N.C License No. 33232 SP-FA/LV

DWG. NO: FA1

ILE NO:



FIRE ALARM LINETYPE LEGEND IMPORTANT: FIRE ALARM SYSTEMS CONSIST OF LECTRICAL COMPONENTS THAT SHOULD BE INSTALLED AND MODIFIED ONLY BY QUALIFIED INDIVIDUALS. CRAWFORD SPRINKLER COMPANY IS NOT LIABLE FOR ANY INJURY OR DAMAGE TO PROPERTY INCURRED FROM NEW DEVICE OR RELOCATED EXISTING DEVICE ____ ----- EXISTING DEVICE TO REMAIN WIRE: SLC - 18/2 FPLP TAMPERING BY UNQUALIFIED PERSONS. NAC - 16/2 FPLP EXISTING DEVICE TO BE DEMO'D RTS - 18/2 FPLP ------ NAC1 ------ NEW NAC WIRING. NUMBER INDICATES CIRCUIT THIS DRAWING AND THE INFORMATION HERON IS THE PROPERTY OF CRAWFORD SPRINKLER COMPANY OF RALEIGH AND MAY NOT BE REPRODUCED, ALTERED OR USED IN ANY FORM WITHOUT CONSENT FROM CRAWFORD SPRINKLER COMPANY OF RALEIGH (CSCO). RISER - FPLR IN NAC POWER EXTENDER PANEL. ------ SLC1 ------ NEW SLC WIRING. NUMBER INDICATES CIRCUIT IN CONTROL PANEL. - - NAC1 - - NAC1 - - EXISTING NAC WIRING TO REMAIN. NUMBER INDICATES HIS FIRE ALARM PLANNING AND DESIGN DRAWING HAS CIRCUIT IN NAC POWER EXTENDER PANEL. THIS FIRE ALARM PLANNING AND DESIGN DRAWING HAS BEEN PREPARED BY CSCO AS A LICENSED FIRE ALARM CONTRACTOR UNDER ARTICLE 2 OF CHAPTER 87 OF THE GENERAL STATUTES FOR CSCO'S EXCLUSIVE USE PURSUANT TO G.S. § 89C-25(8), AND CSCO MUST PERFORM ANY AND ALL INSTALLATION WORK AND OTHER WORK PERFORMED IN RELIANCE ON THIS DRAWING PURSUANT TO G.S. § 55B-(a)(2). INSTALLATION WORK OR ANY OTHER WORK PERFORMED BY ANY OTHER PERSON OR ENTITY IN RELIANCE ON THIS DRAWING OR ANY COPY THEREOF IS STRICTLY PROHIBITED. - - SLC1 - - SLC1 - - EXISTING SLC WIRING TO REMAIN. NUMBER INDICATES CIRCUIT IN CONTROL PANEL. ©2019 CRAWFORD SPRINKLER CO. OF RALEIGH, INC. CANTEEN \square CONF. TOILET STORAGE CONFERENCE ROOM \square WOMEN'S ROOM CLOS RTS STORAGE IJ R KRIGEN PHARMA FIRE ALARM SHOP DRAWING 800 EDWARDS BROTHERS DR LILLINGTON, NC 27546 OFFICE OFFICE OFFICE OFFICE WORK ROOM RECEPTIONIST CORRIDOR 034 035 MEN CHANGE ROOM-1 LOBBY VEST. LOUNDRY ROOM 036 UNDERWRITERS: MEN CHANG ROOM-2 033 INDEX NO. VISITOR 032 PASSAGE **REVISIONS:** FIRE ALARM DEVICE LEGEND SYMBOL # DESCRIPTION MODEL NUMBER NOTES GAMEWELL #S3 SERIES ADDRESSABLE, 24 YOU, 3101 OILT OF CIRCUITS OR 2 CLASS A NAC CIRCUITS ADDRESSABLE, 24VDC, 318 POINT SLC LOOP, 4 CLASS B NAC FACP FIRE ALARM CONTROL PANEL CELL CELLULAR COMMUNICATOR STARLINK #SLE-LTEA-FIRE STARLINK CELLULAR COMMUNICATOR. SEE CUT SHEET. SYSTEM SENSOR L-SERIES #00UNT BOTTOM OF BOX AT 84" MINIMUM OR TOP OF BOX AT 96" #29WI WALL MOUNTED FIRE ALARM ⊠⊲xx HORN STROBE - WHITE #P2WL CANDELA STROBE AS INDICATED ON PLANS. MOUNT BOTTOM OF BOX AT 84" MINIMUM OR TOP OF BOX AT 96" WALL MOUNTED FIRE ALARM SYSTEM SENSOR ∭ WP XX MAXIMUM ABOVE FINISHED FLOOR. CONNECT AS REQUIRED. HORN STROBE - WHITE - WEATHERPROOF **DESIGN CRITERIA** #P2WK CANDELA STROBE AS INDICATED ON PLANS. SYSTEM SENSOR L-SERIES #SCWL CENTER DEVICE IN CEILING TILE, DEVICE SHALL BE U.L. LISTED FOR USE IN CEILINGS. CONNECT AS REQUIRED. STROBE AS INDICATED ON PLANS. CEILING MOUNTED FIRE ALARM ⊚xx STROBE - WHITE SYSTEM TYPE ADDRESSABLE SYSTEM SENSOR L-SERIES CENTER DEVICE IN CEILING TILE, DEVICE SHALL BE U.L. LISTED FOR USE IN CEILINGS. CONNECT AS REQUIRED. STROBE AS D⊙dxx SYSTEM DESIGN CALCULATED CEILING MOUNTED FIRE ALARM HORN STROBE - WHITE #PC2WL INDICATED ON PLANS. NFPA 72 DESIGN CRITERIA $\langle \mathbf{z} \rangle$ SMOKE DETECTOR GAMEWELL #ASD-PL3R ADDRESSABLE SYSTEM SCOPE NOTIFICATION ADDRESSABLE - CONNECT AS SHOWN ON PLANS. #DNR GAMEWELL #ASD-PL3R HOUSING W/ #ASD-PL3R DETECTOR HEAD - REMOTE TEST SQUARE FOOTAGE 53,994 SQFT $\langle \mathbf{z} \rangle$ DUCT SMOKE DETECTOR CAPABLE. DATE: 2/4/21 RAWN BY: NWH SYSTEM SENSOR #RTS151KEY RTS MOUNT 5' - 7" ABOVE FINISHED FLOOR REMOTE TEST STATION CHECK BY: GEH DATE: SCALE: AS NOTED ADDRESSABLE - MOUNT CENTER OF BOX AT 44" ABOVE F MANUAL PULL STATION GAMEWELL #MS-7 FINISHED FLOOR.

CONNECT AS SHOWN ON PLANS

CONNECT AS SHOWN ON PLANS

GAMEWELL #AOM-2RF CONNECT AS SHOWN ON PLANS

GAMEWELL #AMM-4F

PROVIDED BY SPRINKLER

CONTRACTOR

MM

R

MONITOR MODULE

RELAY MODULE

SPRINKLER MONITORING SWITCHES

FILE NO:	

CONTRACT NO: F21 6005

DWG. NO: FA2

N.C License No. 33232 SP-FA/LV