FIRE ALARM MATRIX

	ACTUATES ALARM CONDITION AT THE LANDLORD FIRE ALARM CONTROL PANEL	ANNUNCIATES ALARM CONDITION AT REMOTE FIRE ALARM ANNUNCIATOR KEYPAD	TRANSMITS ALARM SIGNAL TO THE OFF-SITE MONITORING STATION	ACTUATES SUPERVISORY CONDITION AT LANDLORD FIRE ALARM CONTROL PANEL	ANNUNCIATES SUPERVISORY CONDITION AT REMOTE FIRE ALARM ANNUNCIATOR KEYPAD	TRANSMITS SUPERVISORY SIGNAL TO THE OFF-SITE MONITORING STATION	ACTUATES TROUBLE CONDITION AT LANDLORD FIRE ALARM CONTROL PANEL	ANNUNCIATES TROUBLE CONDITION AT REMOTE FIRE ALARM ANNUNCIATOR KEYPAD	TRANSMITS TROUBLE SIGNAL TO THE OFF-SITE MONITORING STATION	ACTIVATES INTERIOR AUDIBLE/VISUAL NOTIFICATION APPLIANCE THROUGH OUT THE DOLLAR TREE SPACE		SHUTS DOWN ALL HVAC UNITS
FIRE SPRINKLER SYSTEM												
- CONTROL VALVE TAMPER SWITCHES				●	●	●						
MANUAL PULL STATIONS	●	●	●							●		
SMOKE DETECTION DEVICES												
- ABOVE APS	●	●	●							●		
- AIR HANDLING UNIT - SUPPLY SIDE				●	●	●						●
LOSS OF PRIMARY POWER AT THE APS							●	●	●			
ABNORMAL CIRCUIT (OPEN, GROUND FAULT, SHORT) OR DEVICE							●	●	●			

NOTE:

1. THIS MATRIX ONLY INCLUDES THE ITEMS WITHIN THIS SCOPE OF WORK.
2. ALL EXISTING INITIATION DEVICES SHALL REMAIN AS CURRENTLY CONFIGURED.
3. ALL EXISTING OUTPUT FUNCTIONS SHALL REMAIN AS CURRENTLY CONFIGURED. THE NEW OUTPUT FUNCTIONS DESCRIBED ABOVE IN THE FIRE ALARM MATRIX ARE FOR THE NEW FIRE ALARM EQUIPMENT LOCATED IN THE DOLLAR TREE SPACE.

BATTERY CALCULATIONS (FIRE-LITE FCPS-24FS8)

MODEL NUMBER	DESCRIPTION	QUANTITY	STANDBY POWER: NORMAL CURRENT EA. CIRCUIT (mA)	STANDBY POWER: NORMAL CURRENT TOTAL (mA)	ALARM POWER: MAXIMUM CURRENT EA. CIRCUIT (mA)	ALARM POWER: MAXIMUM CURRENT TOTAL (mA)	STANDBY BATTERIES (12-VOLT)	CURRENT (mA)
FIRE-LITE	AUX. POWER SUPPLY (APS)	1	65	65	145	145	STANDBY CURRENT	65
SYSTEM SENSOR	CIRCUIT AV01	1	0	0	693	693	HOURS	24
SYSTEM SENSOR	CIRCUIT AV02	1	0	0	1,035	1,035	STANDBY mAH	1,560
SYSTEM SENSOR	CIRCUIT AV03	1	0	0	0	0	ALARM CURRENT	1,873
SYSTEM SENSOR	CIRCUIT AV04	1	0	0	0	0	HOURS	0.083
							ALARM mAH	155
							TOTAL mAH	1,715
							TOTAL AH	1.7
							CONTINGENCY	20%
							BATTERY TOTAL (AH)	2.0
TOTAL				65		1,873	BATTERY PROVIDED (AH)	7.0

NOTES:

1. ALARM CURRENT FOR ADDRESSABLE DEVICES IS CALCULATED BASED ON THE MAXIMUM CURRENT REQUIRED FOR ALL DEVICES.
2. BATTERIES IN EXCESS OF 7AH SHALL BE INSTALLED IN BB-17F OR OTHER UL LISTED EXTERNAL BATTERY CABINET LISTED FOR THAT PURPOSE WITH A PROPERLY SIZED CHARGER.

FIRE ALARM NOTIFICATION APPLIANCE CIRCUIT VOLTAGE DROP CALCULATIONS

SIGNAL CIRCUIT DESCRIPTION	APS / CIRCUIT LOCATION	ACTUAL ALARM CURRENT (AMPS)	MAXIMUM DISTANCE TO LAST APPLIANCE: 12 AWG CABLING (FEET)	MAXIMUM DISTANCE TO LAST APPLIANCE: 14 AWG CABLING (FEET)	CALCULATED VOLTAGE DROP USING 14 AWG CABLING (BASED ON 20.4VDC SOURCE): APPROXIMATE CIRCUIT LENGTH (FEET)	VOLTAGE AT LAST APPLIANCE (VOLTS)	VOLTAGE DROP (VOLTS)
APS	STOCK ROOM						
AV01	STOCK ROOM / RESTROOMS	0.693	1,645	1,034	190	19.59	0.81
AV02	SALES FLOOR	1.035	1,101	692	375	18.02	2.38
AV03	SPARE						
AV04	SPARE						

NOTES:

1. NOTIFICATION APPLIANCE CIRCUITS (NAC) DESIGNED FOR A MAXIMUM 1.6 AMPS, MAXIMUM 4.4 VDC DROP, AND MINIMUM OPERATING VOLTAGE OF 16 VDC.
2. FIELD VERIFY ALL VOLTAGE DROP AND POWER REQUIREMENTS.
3. NOTIFICATION APPLIANCE CIRCUITS HAVE BEEN DESIGNED BASED UPON THE ABOVE CURRENT AND VOLTAGE CRITERIA USING SYSTEM SENSOR NOTIFICATION APPLIANCE CRITERIA.

CONTROL-BY-EVENT PROGRAMMING ZONE LIST

ZONE NUMBER	ACTUATED DEVICES AND MODULES	ALPHANUMERIC LABEL OF ZONE
Z01	FACP, L01M11	ALARM CONDITION AT FACP AND FAAN
Z02	FACP	SUPERVISORY CONDITION AT FACP AND FAAN
Z03	FACP	TROUBLE CONDITION AT FACP AND FAAN
Z04		
Z05		
Z06		
Z07	L01M11	INTERIOR NOTIFICATION APPLIANCE ACTIVATION
Z08		
Z09		
Z10	L01M15, L01M16, L01M17, L01M18	HVAC SHUTDOWN

CONTROL-BY-EVENT PROGRADDING DATRIX

ADDRESS	TYPE I.D.	ACTUATED ZONES	ALPHANUDERIC LABEL OF DEVICE
L01D01	SMOKE	Z01, Z07	ABOVE DT APS
L01D02			
L01D03			
L01D04			
L01D05	DUCT	Z02, Z10	DT #1 RETURN DUCT SMOKE DETECTOR
L01D06	DUCT	Z02, Z10	DT #2 RETURN DUCT SMOKE DETECTOR
L01D07	DUCT	Z02, Z10	DT #3 RETURN DUCT SMOKE DETECTOR
L01D08	DUCT	Z02, Z10	DT #4 RETURN DUCT SMOKE DETECTOR
L01D09			
L01D10			

CONTROL-BY-EVENT PROGRAMMING MATRIX

ADDRESS	TYPE I.D.	ACTUATED ZONES	ALPHANUMERIC LABEL OF DEVICE
L01M01	PULL	Z01, Z07	DT VESTIBULE
L01M02			
L01M03			
L01M04			
L01M05			
L01M06			
L01M07			
L01M08			
L01M09			
L01M10	MONITOR	Z03	APS TROUBLE CONDITION
L01M11	CONTROL		APS ACTIVATION
L01M12			
L01M13			
L01M14			
L01M15	RELAY		DT #1 SHUTDOWN
L01M16	RELAY		DT #2 SHUTDOWN
L01M17	RELAY		DT #3 SHUTDOWN
L01M18	RELAY		DT #4 SHUTDOWN
L01M19			
L01M20			
L01M21			
L01M22			
L01M23			
L01M24			
L01M25			

GENERAL NOTES

1. CIRCUITS SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
   - INITIATION DEVICE CIRCUITS (IDC) - CLASS B
   - SIGNALING LINE CIRCUITS (SLC) - CLASS B
   - NOTIFICATION APPLIANCE CIRCUITS (NAC) - CLASS B
   - CIRCUITS FOR RELAY COIL OPERATION SHALL BE 24 VDC MAXIMUM WITH A SEPARATE OR INTEGRAL FIELD COLLAPSING DIODE.
2. THE EXISTING FIRE ALARM CONTROL PANEL (FACP) AND ASSOCIATED EQUIPMENT LOCATED IN THE COMMON MECHAINCAL ROOM SHALL REMAIN AS CURRENTLY CONFIGURED.
3. THE INSTALLING FIRE ALARM CONTRACTOR SHALL FIELD VERIFY EXISTING FIRE ALARM CONTROL PANEL (FACP) HAS SUFFICIENT STANDBY SECONDARY BATTERY CAPACITY TO ACCOMMODATE THE NEW FIRE ALARM EQUIPMENT. IF ADEQUATE SECONDARY BATTERY CAPACITY IS NOT PROVIDED, CONTRACTOR WILL PROVIDE LARGER BATTERIES WITHOUT EXCEEDING EXISTING FACP MANUFACTURERS CHARGING CAPABILITIES. BATTERY CABINET WILL BE PROVIDED AS NEEDED.
4. COORDINATE EXACT MOUNTING LOCATION OF THE AUXILIARY POWER SUPPLY CABINET WITH THE GENERAL CONTRACTOR AND ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION. THE APS CABINET SHALL HAVE A HINGED DOOR KEYED IN COMMON WITH ALL OTHER KEYED DEVICES THROUGHOUT THE SYSTEM.
5. COORDINATE CONNECTIONS TO DEDICATED 120 VAC POWER CIRCUITS FOR THE AUXILIARY POWER SUPPLY (APS) WITH THE ELECTRICAL CONTRACTOR. THE DEDICATED CIRCUIT DISCONNECT SHALL BE RED IN COLOR, LABELED "FIRE ALARM CIRCUIT", AND HAVE A LOCKABLE TAB. IDENTIFY THE LOCATION OF THE CIRCUIT DISCONNECT AT THE APS. ALL FIRE ALARM CIRCUIT BREAKERS SHALL BE CLEARLY MARKED AND MECHANICALLY SECURED TO PREVENT ANY UNAUTHORIZED TAMPERING. IDENTIFY THE LOCATION OF THE CIRCUIT DISCONNECT AT THE APS. DEDICATED 120 VAC CIRCUITS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
6. UPON LOSS OF BUILDING POWER, THE ENTIRE SYSTEM SHALL TRANSFER TO SECONDARY POWER WITHIN TEN (10) SECONDS, AND WITHOUT LOSS OF SIGNALS. THE SYSTEM SHALL OPERATE UNDER SECONDARY POWER IN NORMAL OR TROUBLE CONDITIONS FOR TWENTY-FOUR (24) HOURS AND HAVE SUFFICIENT POWER TO SUPPORT COMPLETE ALARM CONDITION OPERATION FOR A SUBSEQUENT FIVE (5) MINUTES AT MAXIMUM CONNECTED LOAD.
7. COORDINATE EXACT MOUNTING LOCATIONS OF AUXILIARY POWER SUPPLY WITH THE OWNER'S REPRESENTATIVE AND ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION.
8. COORDINATE INSTALLATION OF A GROUND ROD OR ACCEPTABLE BUILDING GROUND FOR PROPER GROUNDING OF THE FACP AND EACH APS WITH THE ELECTRICAL CONTRACTOR.
8. THE EXISTING FIRE SPRINKLER CONTROL VALVES TAMPER SWITCHES AND WATERFLOW SWITCH ARE CURRENTLY MONITORED SHALL REMAIN AS CURRENTLY CONFIGURED. PROVIDE MONITORING CONNECTIONS TO ANY NEW SPRINKLER WATERFLOW SWITCHES AND TAMPER SWITCHES (BY OTHERS). PROVIDE ALL CABLING TO SWITCHES, FINAL WIRING CONNECTIONS AT SWITCHES, AND SUPERVISION OF ALL WIRING CONNECTIONS. COORDINATE ALL CONNECTIONS WITH THE SPRINKLER CONTRACTOR.
9. PROVIDE A PRINTED LABEL FOR EACH INITIATING DEVICE INDICATING THE SPECIFIC ZONE NUMBER FOR THAT DEVICE. THE LABEL SHALL BE LOCATED ON THE BASE OF ALL DETECTORS AND THE COVER PLATES OF EACH DEVICE.
10. PROVIDE A PRINTED LABEL FOR EACH NOTIFICATION APPLIANCE INDICATING THE SPECIFIC CIRCUIT NUMBER FOR THAT APPLIANCE. THE LABEL SHALL INCLUDE END OF LINE RESISTOR LOCATION, CIRCUIT NUMBER AND APPLIANCE NUMBER. THE LABEL SHALL BE LOCATED ON THE BASE OF ALL NOTIFICATION APPLIANCES.
11. ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL BACKGROUND INFORMATION IS SHOWN FOR COORDINATION PURPOSES ONLY. REFER TO THE PROPER DRAWINGS FOR EXACT LOCATIONS, SIZES AND QUANTITIES OF OTHER TRADES' WORK.
12. MOUNT SMOKE DETECTORS AT THE CEILING/DECK, AND NOT ON THE BOTTOM OF BEAMS OR JOISTS. LOCATE ALL SMOKE DETECTORS A MINIMUM OF THREE (3) FEET FROM ANY MECHANICAL DIFFUSERS AS REQUIRED BY NFPA 72. THE SMOKE DETECTORS AND FIRE ALARM CABLING SHALL BE INSTALLED AND SUPPORTED A MINIMUM OF 1-1/2 INCHES FROM THE UNDERSURFACE OF THE ROOF DECKING IN ACCORDANCE WITH NATIONAL ELECTRIC CODE.
13. SMOKE DETECTOR HEADS SHALL NOT BE INSTALLED UNTIL AFTER THE CONSTRUCTION CLEAN-UP OF ALL TRADES IS COMPLETE AND FINAL.
14. ALL THROUGH-PENETRATIONS OF FIRE-RATED WALLS AND FLOORS SHALL BE FIRE-STOPPED.
15. ALL JUNCTION BOXES SHALL BE ACCESSIBLE FOR SERVICE. PROVIDE ANY REQUIRED ACCESS PANELS.
16. NOTIFICATION APPLIANCE CIRCUITS (NAC) HAVE BEEN DESIGNED FOR A MAXIMUM 1.6 AMPS, MAXIMUM 4.4 VDC DROP, AND MINIMUM OPERATING VOLTAGE OF 16 VDC. SEE FIRE ALARM NAC VOLTAGE DROP CALCULATIONS ON THIS SHEET.
17. ALL AUDIBLE APPLIANCES SHALL BE SET TO THE HIGH DBA SETTING AND SHALL SOUND A THREE-PULSE TEMPORAL PATTERN EVACUATION SIGNAL.
18. PROVIDE SYNCHRONIZATION OF ALL AUDIBLE AND VISUAL NOTIFICATION APPLIANCE CIRCUITS THROUGHOUT THE DOLLAR TREE. PROVIDE ALL REQUIRED SYNCHRONIZATION MODULES. PROVIDE MULTI-SYNC MODE SLAVE CONNECTIONS TO ALL AUXILIARY POWER SUPPLIES.
19. THE AUDIBLE/VISUAL AND VISUAL NOTIFICATION APPLIANCES SHALL BE WHITE IN COLOR, AND LISTED FOR THE INTENDED APPLICATION.
20. NOTIFICATION APPLIANCE POLARITY SHALL BE OBSERVED.
21. WHERE POSSIBLE, PROVIDE FLUSH MOUNTING OF NOTIFICATION APPLIANCES. WHERE SURFACE-MOUNTED NOTIFICATION APPLIANCES ARE NECESSARY, PROVIDE DECORATIVE BACKBOX SKIRT COVERING THE APPLIANCE BACKBOX.
22. THE CEILING MOUNTED DEVICES AND APPLIANCES SHALL BE INSTALLED ALIGNED AESTHETICALLY WITH THE CEILING LIGHTING, SPRINKLERS, AND OTHER FIXTURES. ENSURE THE NOTIFICATION APPLIANCES ARE INSTALLED A MINIMUM OF ONE (1) FOOT FROM THE SURFACE MOUNTED STRIP LIGHTS TO AVOID OBSTRUCTION. COORDINATE INSTALLATION OF ALL CEILING MOUNTED FIRE ALARM DEVICES AND NOTIFICATION APPLIANCES WITH THE ARCHITECTURAL DRAWINGS AND ALL OTHER TRADES PRIOR TO INSTALLATION.
23. DEVICES AND APPLIANCE LOCATIONS AS SHOWN ON THE FIRE ALARM PLANS ARE NOT DIMENSIONED FOR EXACT INSTALLATION. COORDINATE EXACT PLACEMENT OF ALL DEVICES AND APPLIANCES WITH THE ARCHITECTURAL PLANS, APPLICABLE TRADES, AND OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
24. PROVIDE ANY REQUIRED SEISMIC BRACING FOR ALL FIRE ALARM SYSTEM DEVICES, CONDUIT AND BACKBOXES.
25. ALL SIGNALING LINE CIRCUITS, INITIATING DEVICE CIRCUITS, AND NOTIFICATION APPLIANCE CIRCUITS SHALL BE SUPERVISED IN ACCORDANCE WITH NFPA 72.
26. PROVIDE END OF LINE RESISTORS FOR ALL INITIATING DEVICE CIRCUITS AND NOTIFICATION APPLIANCE CIRCUITS PER MANUFACTURER SPECIFICATIONS.

INSTALLATION NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH NFPA STANDARDS AND ALL LOCAL ADOPTED CODES.
2. FIRE ALARM CABLING SHALL BE ACCEPTABLE TO THE FIRE ALARM EQUIPMENT MANUFACTURER FOR THE INTENDED PURPOSE. SHOULD MANUFACTURER OF FIRE ALARM EQUIPMENT REQUIRE DIFFERENT TYPE OR SIZE OF CABLE THAN HEREIN SPECIFIED, THE LARGER OR MORE STRINGENT TYPE OF CABLE SHALL BE USED.
3. ALL FIRE ALARM CABLING SHALL BE PLENUM RATED TYPE FPLP. SEE WIRING LEGEND FOR CABLE TYPES AND SIZES
4. PROVIDE ALL REQUIRED CONDUIT, BACKBOXES, AND FITTINGS FOR THE FIRE ALARM SYSTEM CABLING.
5. FIRE ALARM CABLING SHALL BE RED IN COLOR.
6. FIRE ALARM CABLING SHALL NOT BE PAINTED.
7. CABLE ROUTING SHOWN ON DRAWINGS IS FOR INTENT. EXACT ROUTING SHALL BE COORDINATED WITH OTHER TRADES IN THE FIELD. SEE DRAWING NOTES AND DETAILS FOR ACCEPTABLE INSTALLATION METHODS.
8. ALL CABLE RUNS SHALL BE NEATLY BUNDLED, WRAPPED TIGHT AND PROPERLY SECURED. ANY CABLING NOT INSTALLED IN A NEAT AND PROFESSIONAL MANNER SHALL BE PULLED OUT AND RE-RUN BY INSTALLER AT NO ADDITIONAL COST TO OWNER.
9. CONTRACTOR RUNNING CABLING MUST MARK BOTH ENDS OF CABLING, PROVIDE A WIRE LEGEND FOR ALL LOCATIONS, AND PROVIDE A CONTINUITY TEST LOG FOR EACH CABLE.
10. EXPOSED CABLING SHALL BE RUN PARALLEL AND PERPENDICULAR TO BUILDING STRUCTURE. EXPOSED CABLING SHALL NOT BE RUN IN A "SPAN" FASHION BETWEEN BAR JOISTS OR BEAMS (I.E.: CABLING SHALL BE ROUTED ALONG PATH OF JOISTS AND BEAMS). ALL CABLING SHALL BE SECURED TO THE STRUCTURAL CEILING BETWEEN JOISTS OR BEAMS.
11. ALL CABLING SHALL BE SUPPORTED FROM BUILDING STRUCTURE AND NOT FROM GRID, TILES, OR SUPPORT WIRES. EXPOSED CABLING SHALL BE SUPPORTED BY BUILDING STRUCTURE AT NO MORE THAN FIVE (5) FOOT INTERVALS.
12. ALL FIRE ALARM CABLING BELOW THE STRUCTURE, IN ELECTRICAL AND MECHANICAL ROOMS (SUBJECT TO PHYSICAL DAMAGE), CONCEALED ABOVE CEILINGS OR IN PARTITIONS (SUBJECT TO PHYSICAL DAMAGE) SHALL BE INSTALLED IN METALLIC CONDUIT.
13. ALL POWER LIMITED FIRE ALARM CABLING ABOVE THE STRUCTURE, ABOVE LAY-IN CEILINGS, OR CONCEALED ABOVE CEILINGS OR IN PARTITIONS (NOT SUBJECT TO PHYSICAL DAMAGE) ARE NOT REQUIRED TO BE INSTALLED IN CONDUIT.
14. ALL NON-POWER LIMITED FIRE ALARM CABLING FOR THE FIRE ALARM SYSTEM SHALL BE INSTALLED IN CONDUIT.
15. ALL CONDUIT SHALL BE TERMINATED AT THE BAR JOIST LEVEL WITH SOME FORM OF GROMMET OR BOX CONNECTOR.
16. ALL CONDUIT EXPOSED IN DRYWALL SHALL BE TERMINATED NO LESS THAN SIX (6) INCHES ABOVE THE CEILING TILE.
17. FOR DRYWALL APPLICATIONS, ALL CONDUIT AND BACKBOXES SHALL BE RECESSED INSIDE THE WALL.
18. ALL FIRE ALARM CABLING IN FINISHED AREAS SHALL BE CONCEALED.
19. COORDINATE DRILLING OF ANY HOLES (I.E. COLUMN PENETRATIONS) WITH THE OWNER'S REPRESENTATIVE AND ALL OTHER TRADES PRIOR TO INSTALLATION.
20. ALL FIRE ALARM DEVICES SHALL BE INSTALLED IN OR ON A PROPER BACKBOX. NO DEVICES SHALL BE INSTALLED WITHOUT A BACKBOX.
21. ALL CABLING, CONDUIT, AND BACKBOXES SHALL BE PROPERLY SUPPORTED AND SEISMICALLY BRACED, AS REQUIRED BY ALL APPLICABLE CODES AND THE LOCAL JURISDICTION.
22. CONDUIT AND CABLING SHALL ENTER INTO THE FACP AND EACH APS ONLY AS APPROVED BY THE EQUIPMENT MANUFACTURER.
23. CONDUIT FILL SHALL NOT EXCEED 40%.
24. ALL FIRE ALARM JUNCTION BOXES SHALL BE RED IN COLOR.

FIRESTOP NOTES

1. ALL THROUGH-PENETRATIONS OF FIRE-RATED WALLS AND FLOORS SHALL BE FIRE-STOPPED.
2. FIRE-RATED GYPSUM BOARD WALLS CONSTRUCTED AS DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGNS IN THE U.L. FIRE RESISTANCE DIRECTORY (GENERALLY DOUBLE THICKNESS WALLBOARD) SHALL BE FIRE-STOPPED WITH U.L. SYSTEMS.
3. ALL REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOORS OR WALLS, AND ALL U.L. CLASSIFIED CONCRETE BLOCK WALLS SHALL BE FIRE-STOPPED WITH U.L. SYSTEMS.

SPRINKLER NOTE

1. THE DOLLAR TREE SPACE WILL BE FULLY SPRINKLERED. THE SPRINKLER SYSTEM WILL BE INSTALLED IN ACCORDANCE WITH NFPA 13.

FIRE ALARM SYMBOL KEY

SYMBOL	DESCRIPTION	QTY.
FACP	EXISTING FIRE ALARM CONTROL PANEL TO REMAIN (FIRE-LITE MS-9200UDLS)	
FAAN	EXISTING EXTERIOR FIRE ALARM ANNUNCIATOR TO REMAIN	
APS	EXISTING AUXILIARY POWER SUPPLY TO REMAIN	
S	EXISTING SMOKE DETECTOR TO REMAIN	
AIM	EXISTING ADDRESSABLE INPUT MODULE TO REMAIN	
FS	EXISTING WATERFLOW SWITCH TO REMAIN	
TS	EXISTING TAMPER SWITCH TO BE DISCONNECTED AND REMOVED (BY OTHERS)	
F	EXISTING MANUAL PULL STATION TO REMAIN	
AV	EXISTING CEILING MOUNTED AUDIBLE/VISUAL TO BE RELOCATED	
V	EXISTING WALL MOUNTED VISUAL TO REMAIN	
AV	EXISTING WALL MOUNTED AUDIBLE/VISUAL TO REMAIN	
B WP	EXISTING WEATHERPROOF WALL MOUNTED BELL TO REMAIN	
EX	EXISTING EXTERIOR AUDIBLE/VISUAL TO REMAIN	
AV	EXISTING WALL MOUNTED AUDIBLE/VISUAL TO BE DISCONNECTED AND REMOVED	
V	EXISTING WALL MOUNTED VISUAL TO BE DISCONNECTED AND REMOVED	
FAAN	NEW FIRE ALARM ANNUNICATOR (FIRE-LITE LCD-80F)	1
APS	NEW AUXILIARY POWER SUPPLY (FIRE-LITE FCPS-24F S8)	1
S XX	NEW ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR (FIRE-LITE SD355) (XX = POINT ADDRESS)	1
S D XX	ADDRESSABLE DUCT-TYPE PHOTOELECTRIC SMOKE DETECTOR (FIRE-LITE D355PL) (S = SUPPLY) (XX = POINT ADDRESS)	4
RT	REMOTE TEST STATION / ANNUNCIATOR (SYSTEM SENSOR RTS1KEY)	4
F XX	NEW ADDRESSABLE MANUAL PULL STATION (FIRE-LITE BG-12LX) (XX = POINT ADDRESS)	1
AIM XX	NEW ADDRESSABLE INPUT MODULE (FIRE-LITE MMF-300) (XX = POINT ADDRESS)	1
ACM XX	NEW ADDRESSABLE CONTROL MODULE (FIRE-LITE CMF-300) (XX = POINT ADDRESS)	1
ARM XX	ADDRESSABLE RELAY MODULE (FIRE-LITE CRF-300) (XX = POINT ADDRESS)	4
AV XX	NEW CEILING MOUNTED WHITE AUDIBLE/VISUAL APPLIANCE (XX = CANDELA RATING) (SYSTEM SENSOR PC2WL)	4
V XX	NEW CEILING MOUNTED WHITE VISUAL APPLIANCE (XX = CANDELA RATING) (SYSTEM SENSOR SCWL)	6
—	FIRE ALARM PLENUM RATED CONDUCTORS (RED IN COLOR)	
J	JUNCTION BOX	
-ww-	END OF LINE RESISTOR	
(hatched box)	OUT OF SCOPE	

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FORMER HARVEY'S
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