## TERMINAL FIRE ALARM SYSTEM REPLACEMENT PROJECT

### OWNER: MHT AIRPORT

One Airport Road, Manchester, NH, 03103

#### **ARCHITECT:**

Lavallee Brensinger Architects

155 Dow Street, Suite 400 Manchester, NH 03101 603.622.5450 www.LBPA.com

# MECHANICAL / ELECTRICAL / PLUMBING & FIRE PROTECT ENGINEER:

BR + A Consulting Engineers

10 Guest Street, 4th Floor Boston, MA 02135 617.254.0016 www.brplusa.com

### FOR ADDITIONAL INFORMATION, REFER TO PROJECT MANUAL.

COVER SHEET

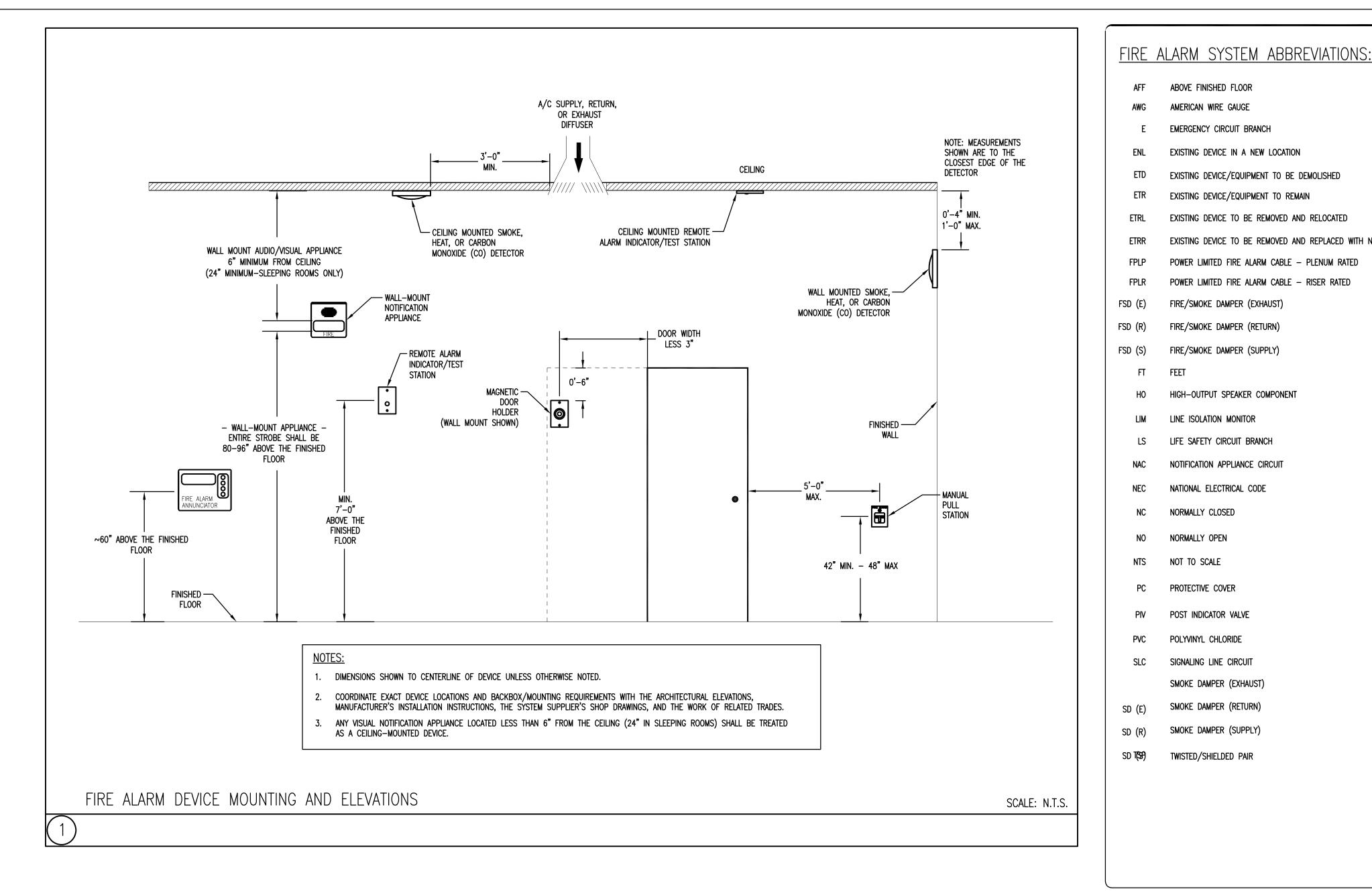
#### **FIRE ALARM**

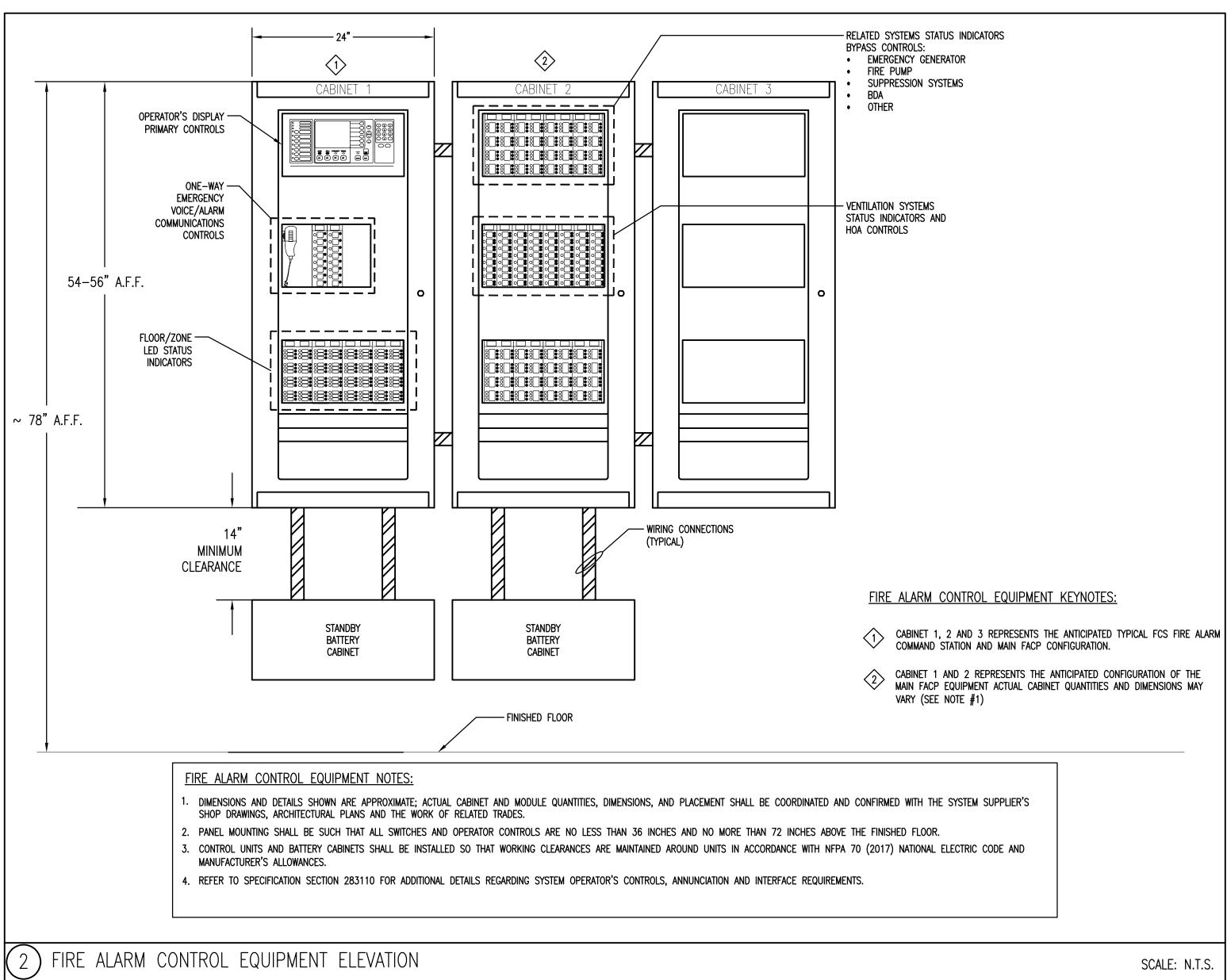
FIRE ALARM LEGEND AND DETAIL FIRE ALARM DETAIL SHEET FA-1.1A FIRE ALARM LEVEL 1 - AREA A FA1.2B FIRE ALARM LEVEL 1 - AREA B FA1.3C FIRE ALARM LEVEL 1 - AREA C FA1.4D FIRE ALARM LEVEL 1 - AREA D FA1.5E FIRE ALARM LEVEL 1 - AREA E FA1.6F FIRE ALARM LEVEL 1 - AREA F FA2.1A FIRE ALARM LEVEL 2 - AREA A FA2.2B FIRE ALARM LEVEL 2 - AREA B FA2-3C FIRE ALARM LEVEL 2 - AREA C FA2-4D FIRE ALARM LEVEL 2 - AREA D FA2-5E FIRE ALARM LEVEL 2 - AREA E FA2-6F FIRE ALARM LEVEL 2 - AREA F FA2-7G FIRE ALARM LEVEL 2 - AREA G FIRE ALARM LEVEL 3

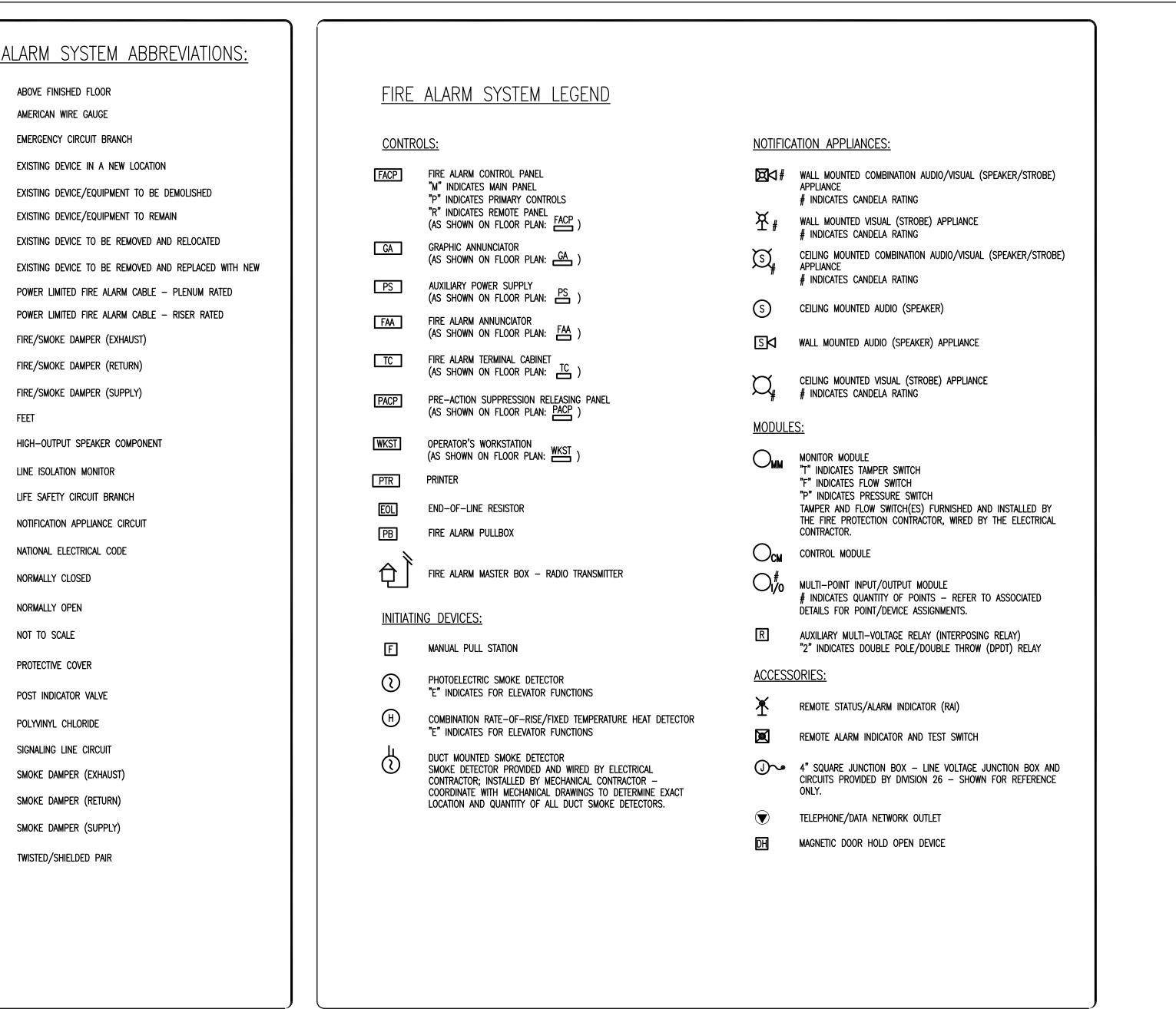
FA4.0 FIRE ALARM RISER DIAGRAM

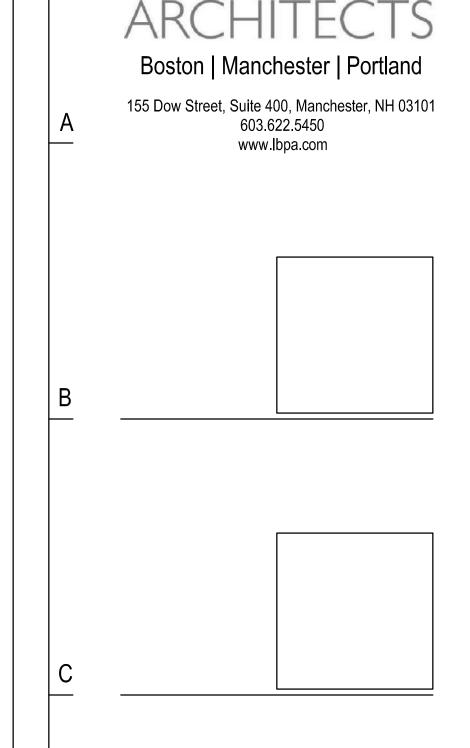
MHT AIRPORT

One Airport Road, Manchester, NH, 03103









LAVALLEE

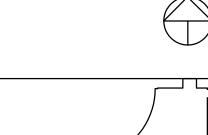
**BRENSINGER** 

BR+A CONSULTING ENGINEERS 10 Guest Street, 4th Floor Boston, MA 02135 617.254.0016 brplusa.com

MHT AIRPORT FIRE ALARM UPGRADE

One Airport Road, Manchester, NH,

DESCRIPTION \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ 3 CONSTRUCTION DOCUMENTS 06-28-19 2 DD PRICING SET 05-23-19 1 PROGRESS



	CONTENT:
DITIONAL INFORMATION, REFER TO PROJECT MANUAL	FIRE ALARM LEGEND AND DETAIL
אר ק	DRAWN BY:
בו בו	PROJECT NO: 17-003-00
שנו	DATE: 03/08/19
],     	REVISED:
	SCALE: N.T.S
AL INFORI	FA0.0
<u>Z</u>	Project Phase
= 	100% CONSTRUCTION DOCUMENTS

COPYRIGHT © 2019 BY LAVALLEE/BRENSINGER PROFESSIONAL ASSOCIATION. ALL RIGHTS RESERVED.
NO REPRODUCTION WITHOUT PERMISSION.

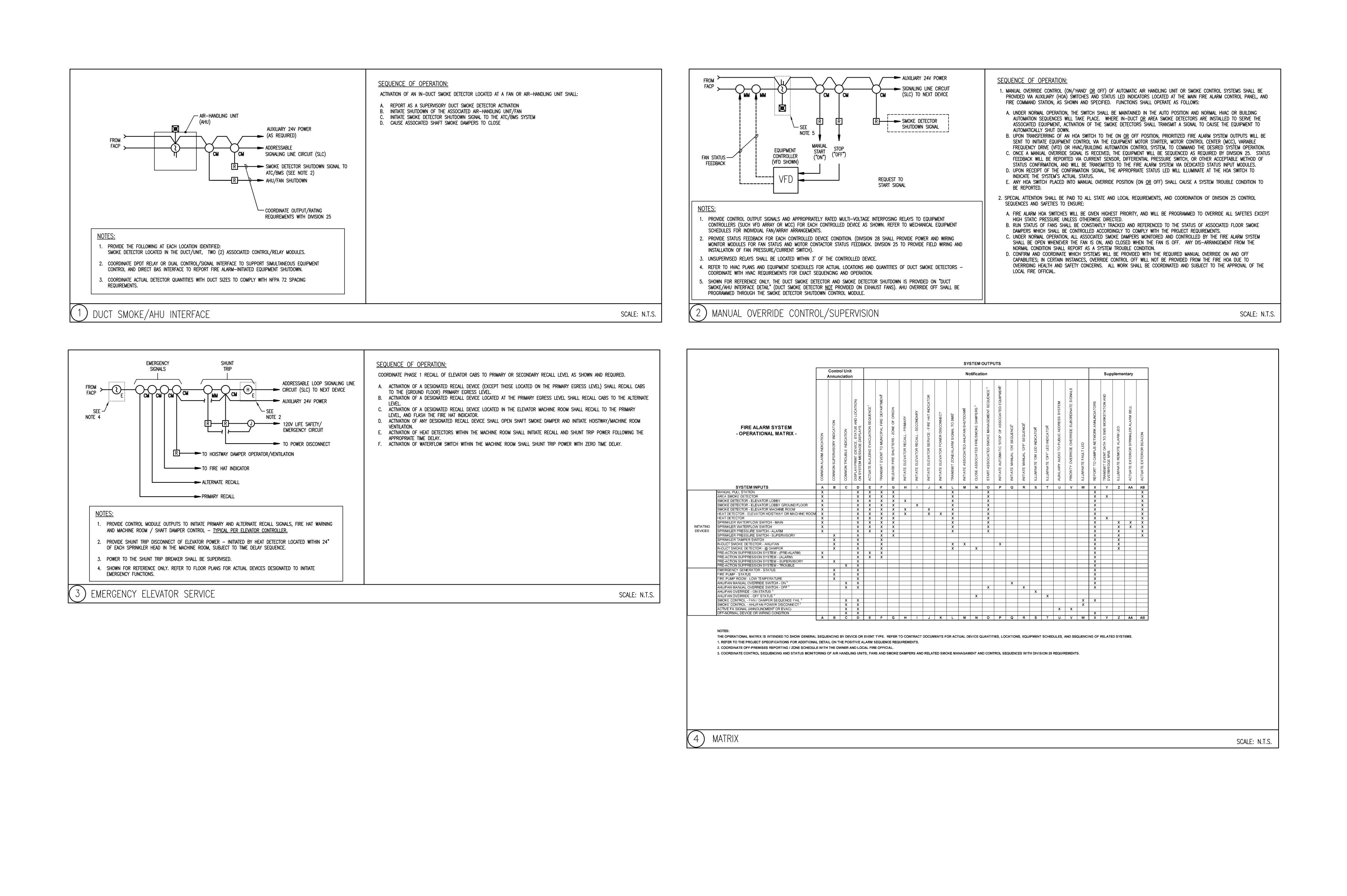
IV.\ IODO\ 1000700 AIV\ ELEO\ EIDE ALADIA\ EAO O EIDE ALADIA LEOEND AND DETAIL DINO OC 10 0010 17.10.10

EXISTING DEVICE/EQUIPMENT TO REMAIN

SMOKE DAMPER (EXHAUST)

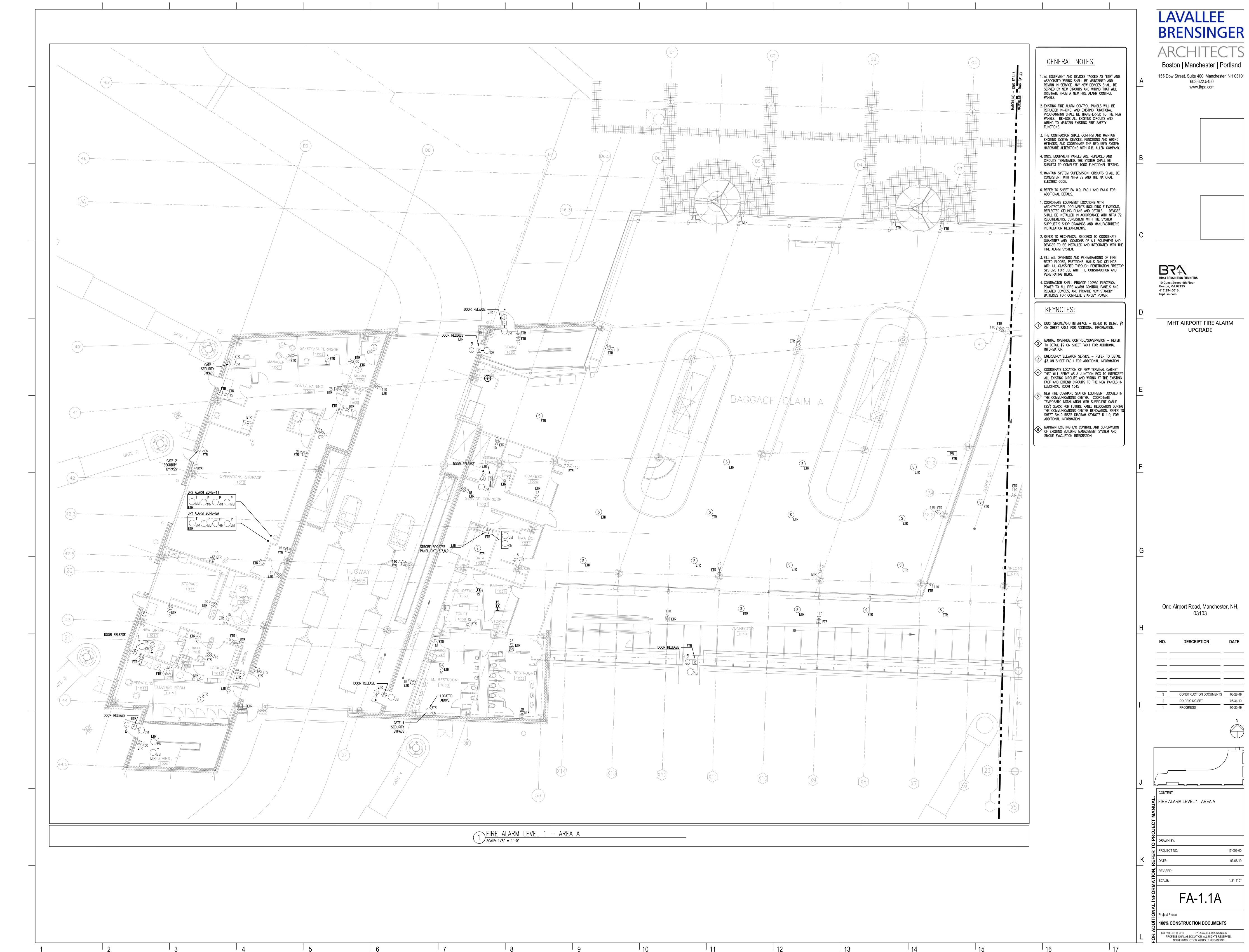
EXISTING DEVICE TO BE REMOVED AND RELOCATED

POWER LIMITED FIRE ALARM CABLE — RISER RATED

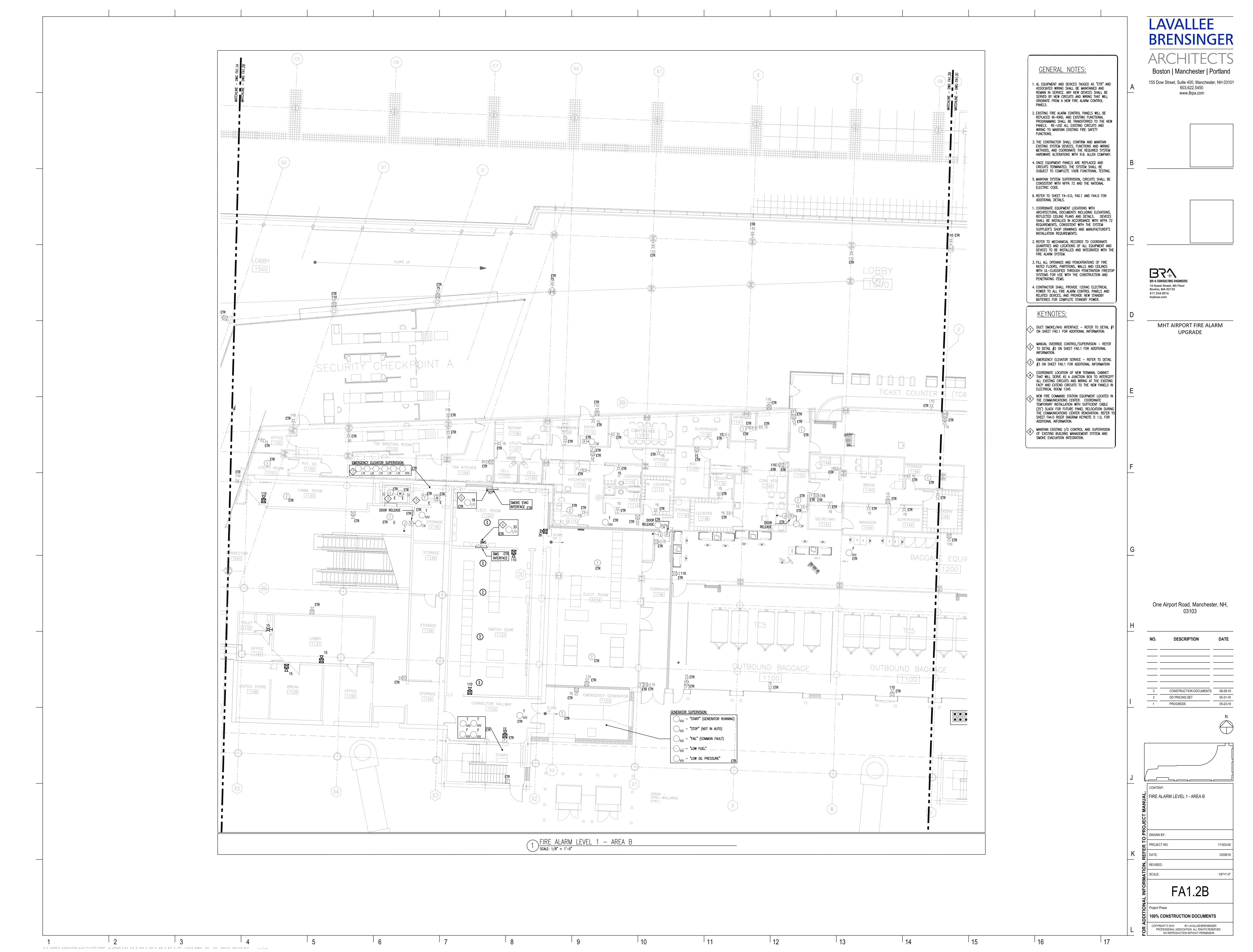


LAVALLEE **BRENSINGER** Boston | Manchester | Portland 155 Dow Street, Suite 400, Manchester, NH 03101 603.622.5450 www.lbpa.com BR+A CONSULTING ENGINEERS 10 Guest Street, 4th Floor Boston, MA 02135 617.254.0016 brplusa.com MHT AIRPORT FIRE ALARM UPGRADE One Airport Road, Manchester, NH, \_\_\_\_\_ \_\_\_\_\_ DD PRICING SET 05-23-19 1 PROGRESS FIRE ALARM DETAIL SHEET **DRAWN BY:** PROJECT NO: REVISED: SCALE: 5 | 100% CONSTRUCTION DOCUMENTS COPYRIGHT © 2019 BY LAVALLEE/BRENSINGER PROFESSIONAL ASSOCIATION. ALL RIGHTS RESERVED. NO REPRODUCTION WITHOUT PERMISSION.

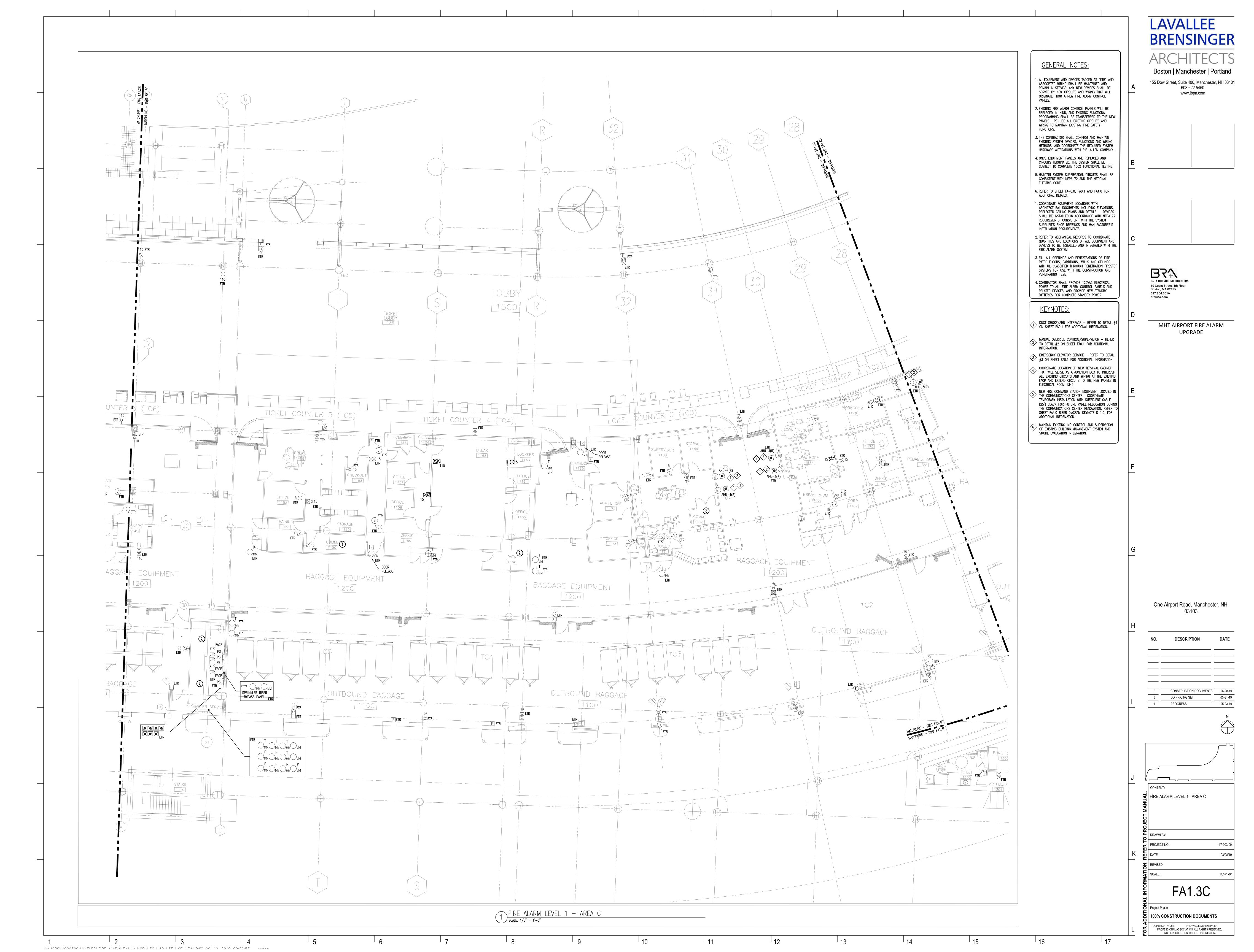
IV.\ IADA\ 1AAA7AA XIX\ ELEA\ EIDE XLXDXX\ EXA 1 - EIDE XLXDXX DETXIL CHEET DWA AA AAAA 10.00.10 --------



V.\ IODC\ 1000700 AIX\ FLEO\ FIDE ALADAN EA1 1A 1 0D 1 70 1 AD 1 EE 1 0E LEVI DWO 00 10 0010 00.00.E7

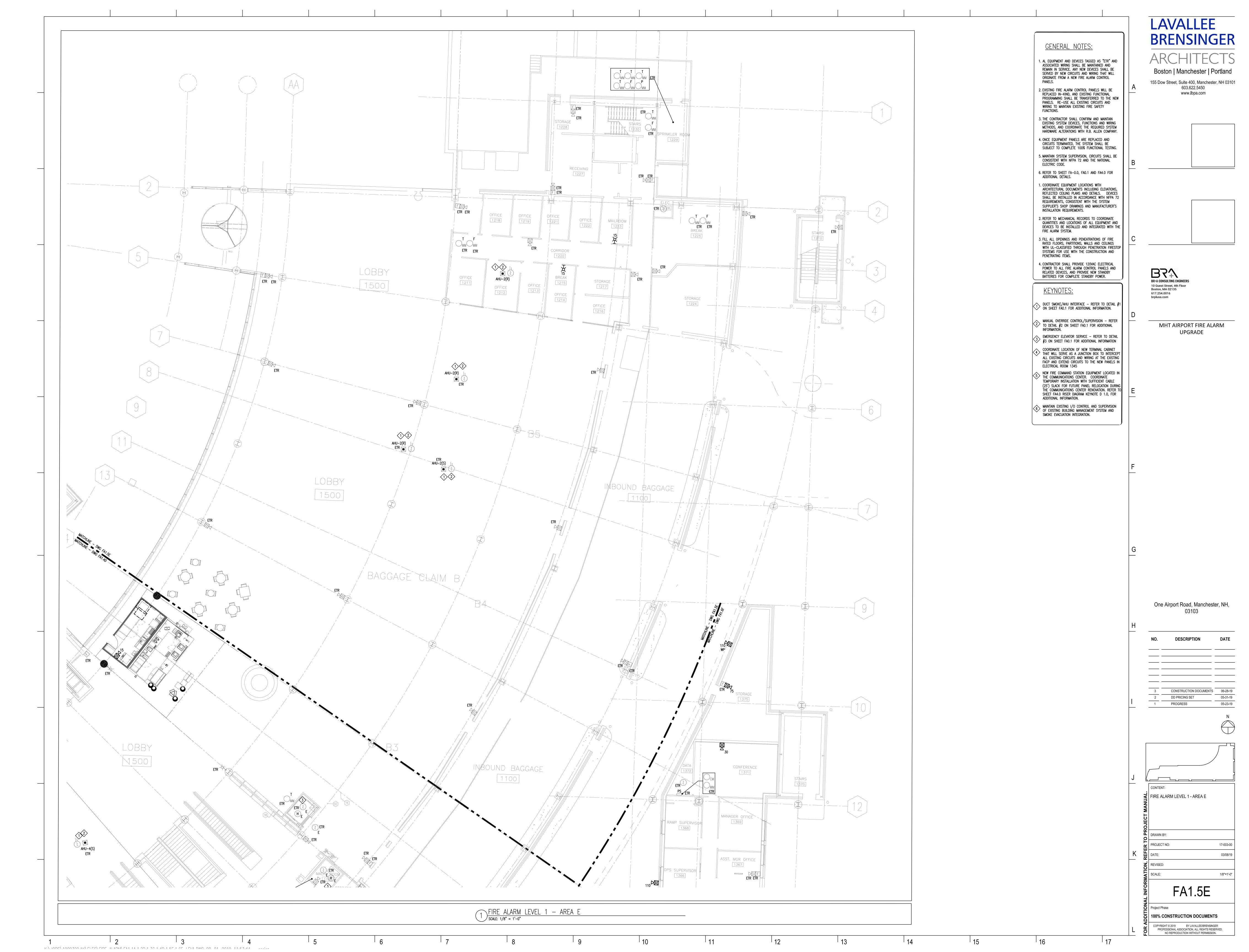


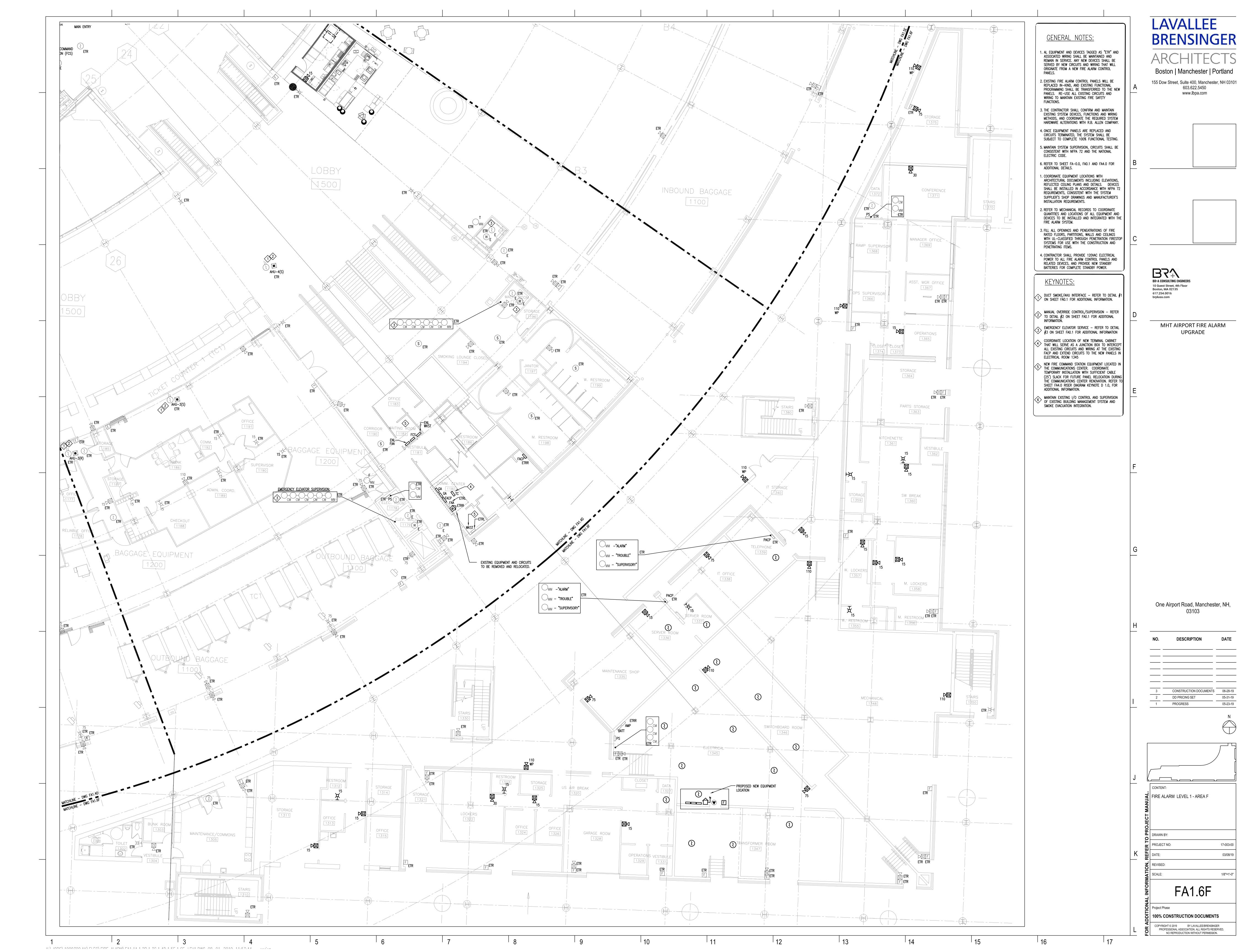
1:14:42 PM C:\\_Revit\MHT Comm Center\_C

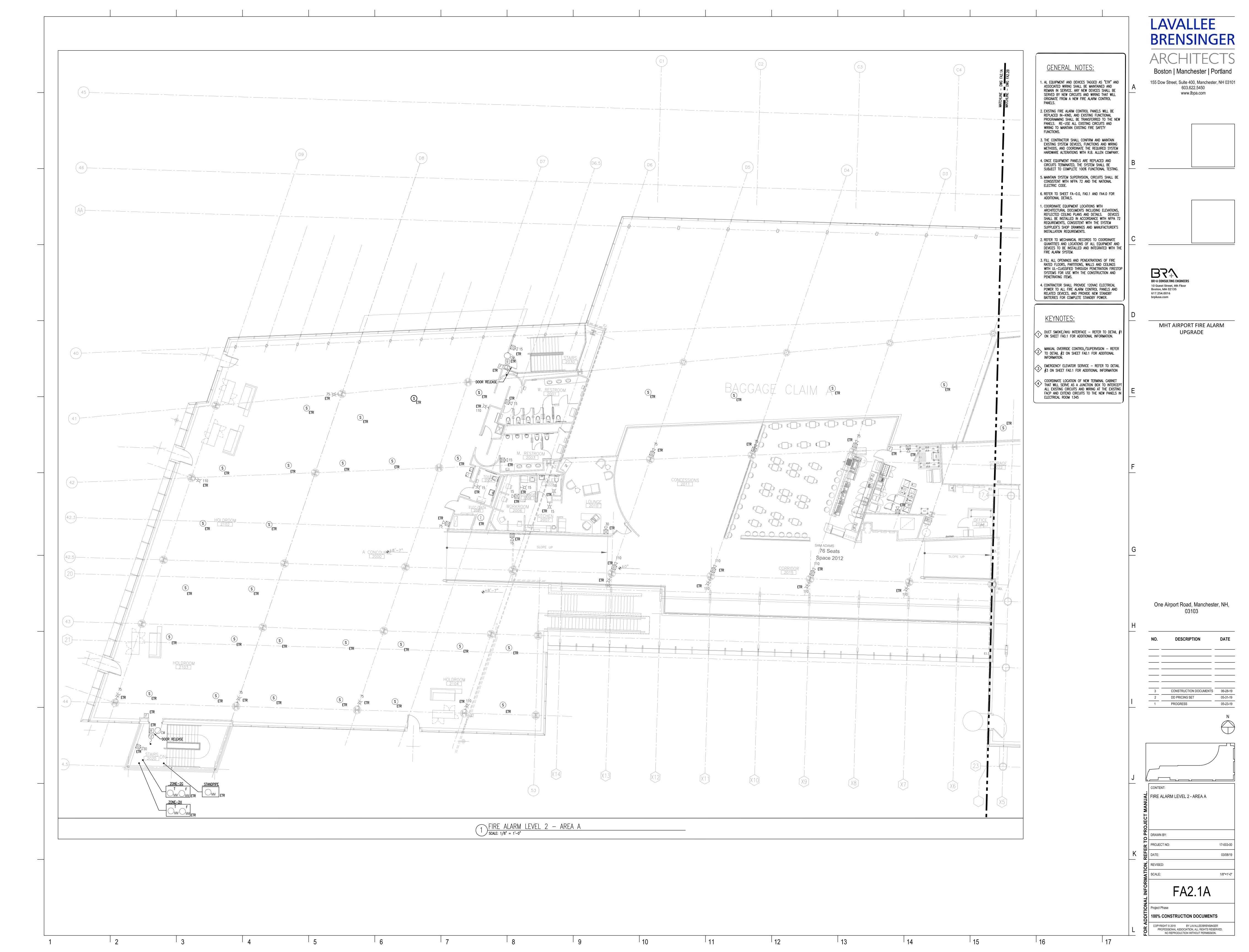


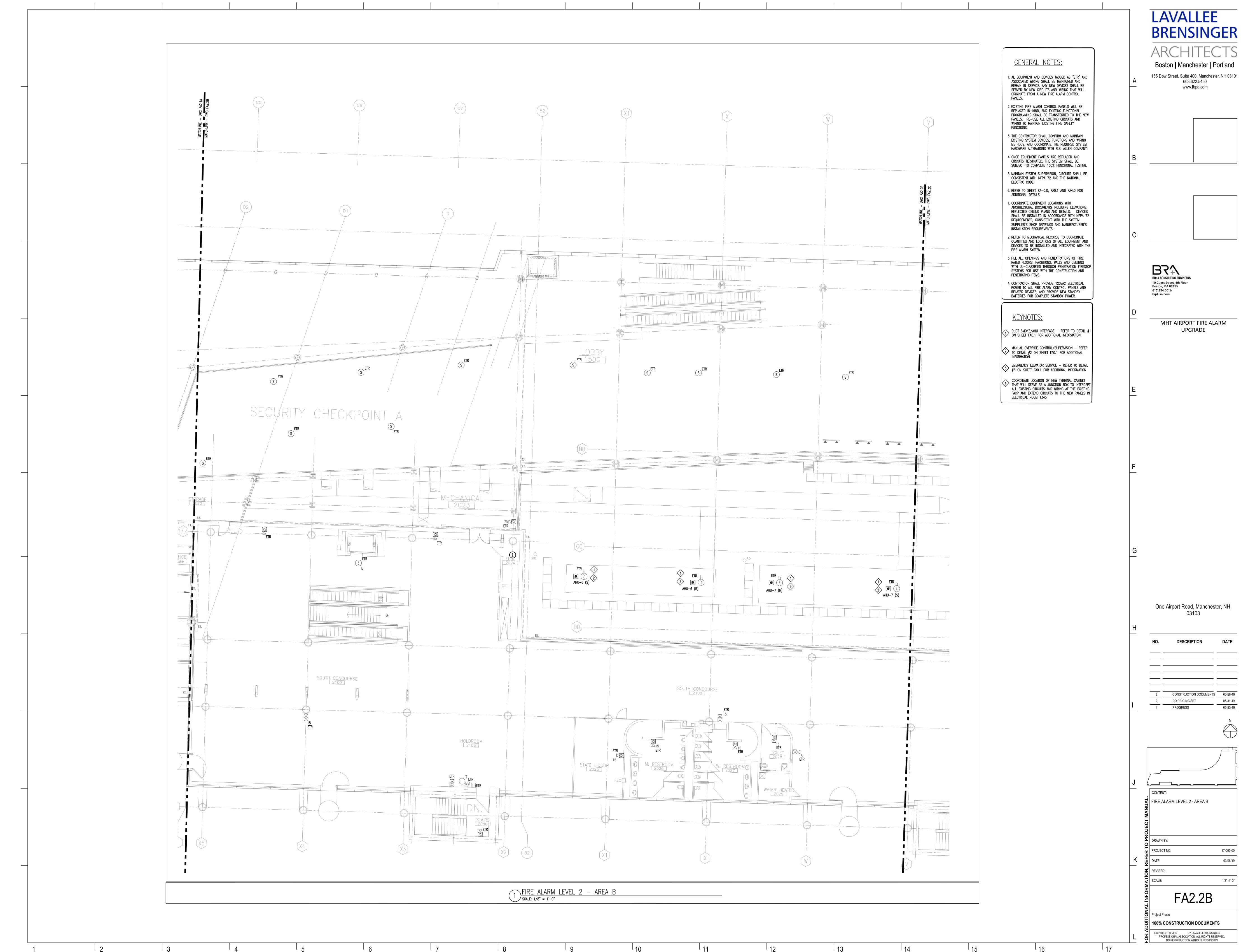
19 1:14:42 PM C:\\_Revit\MHT Comm Center\_CENTRAL\_2018\_dabsr710



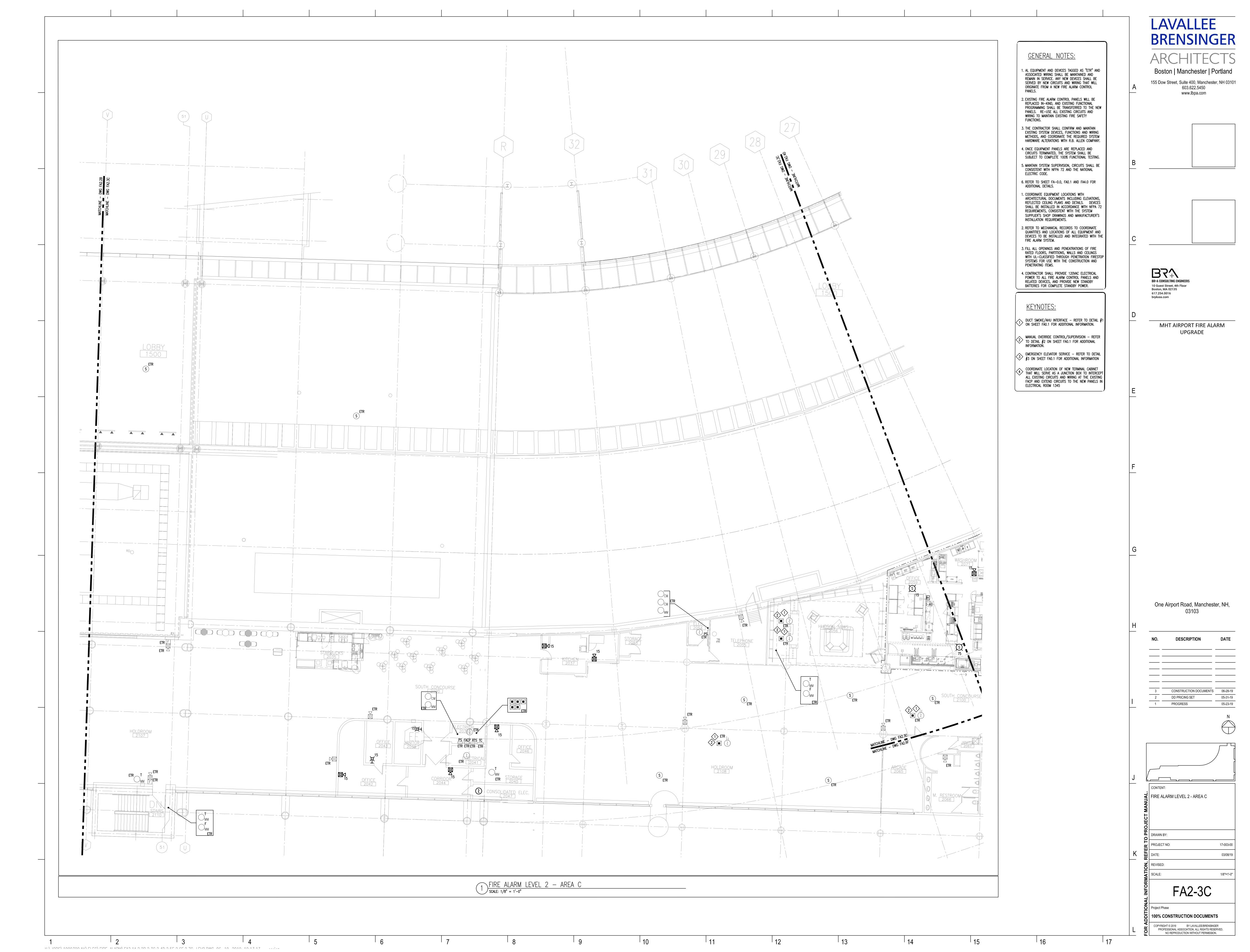


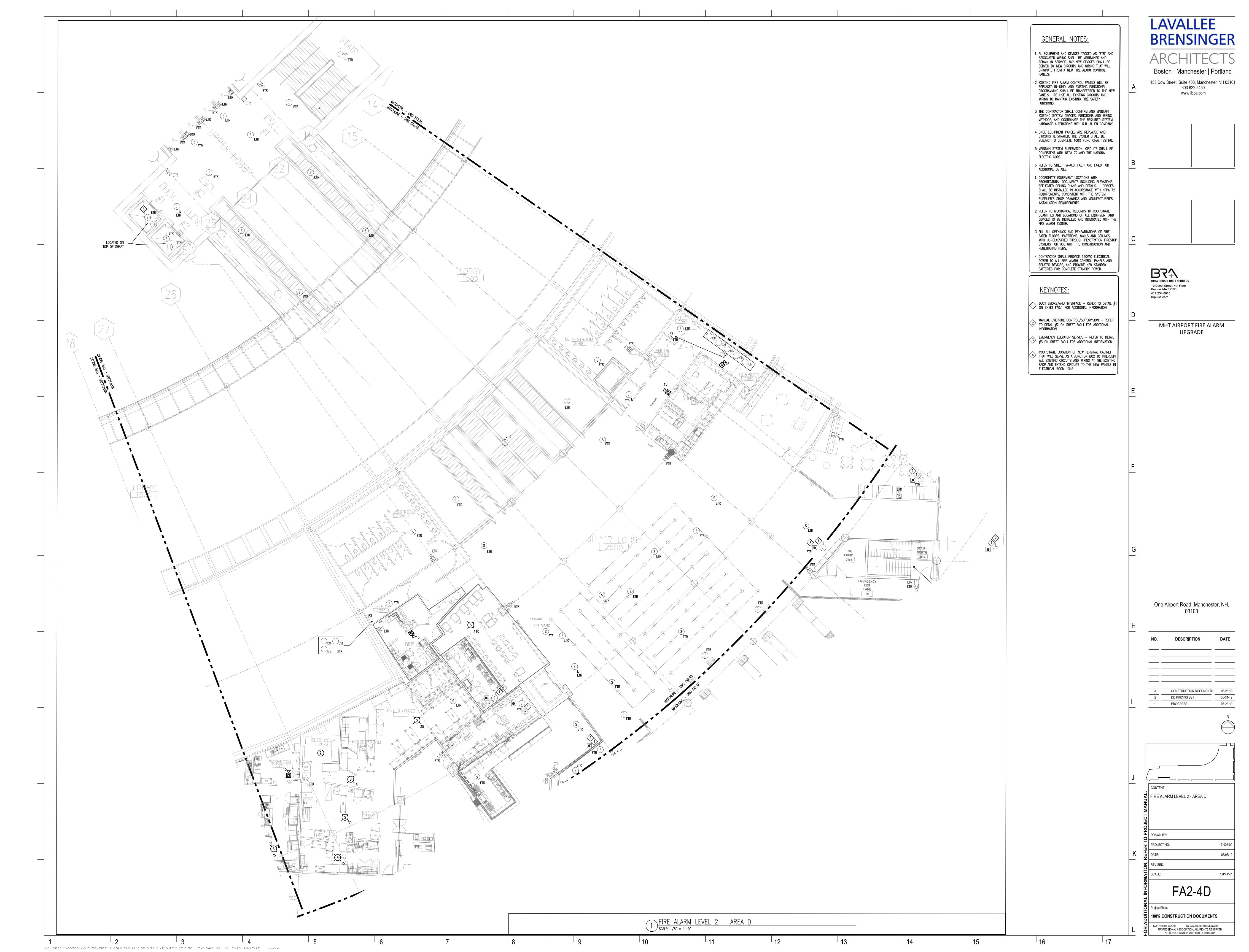


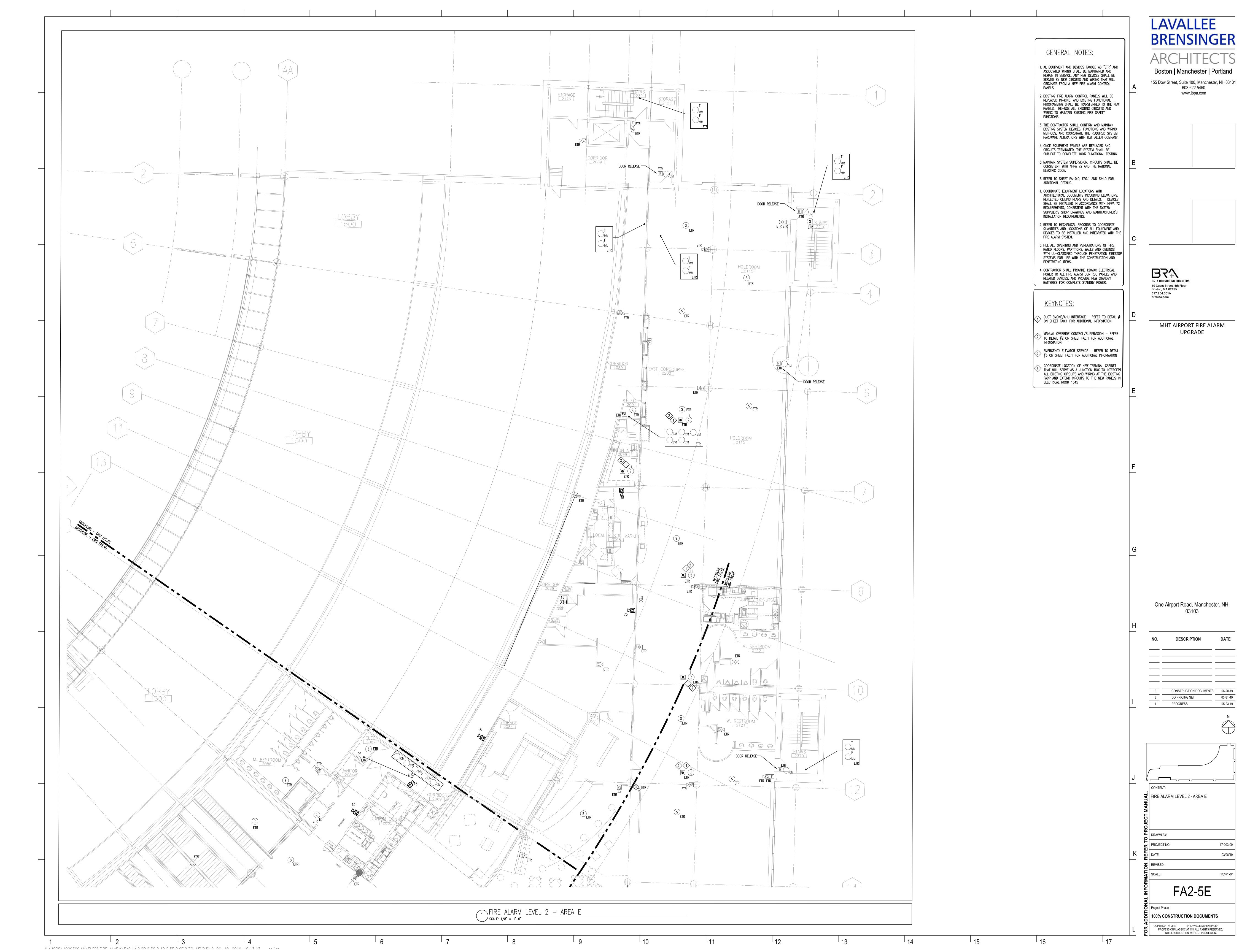


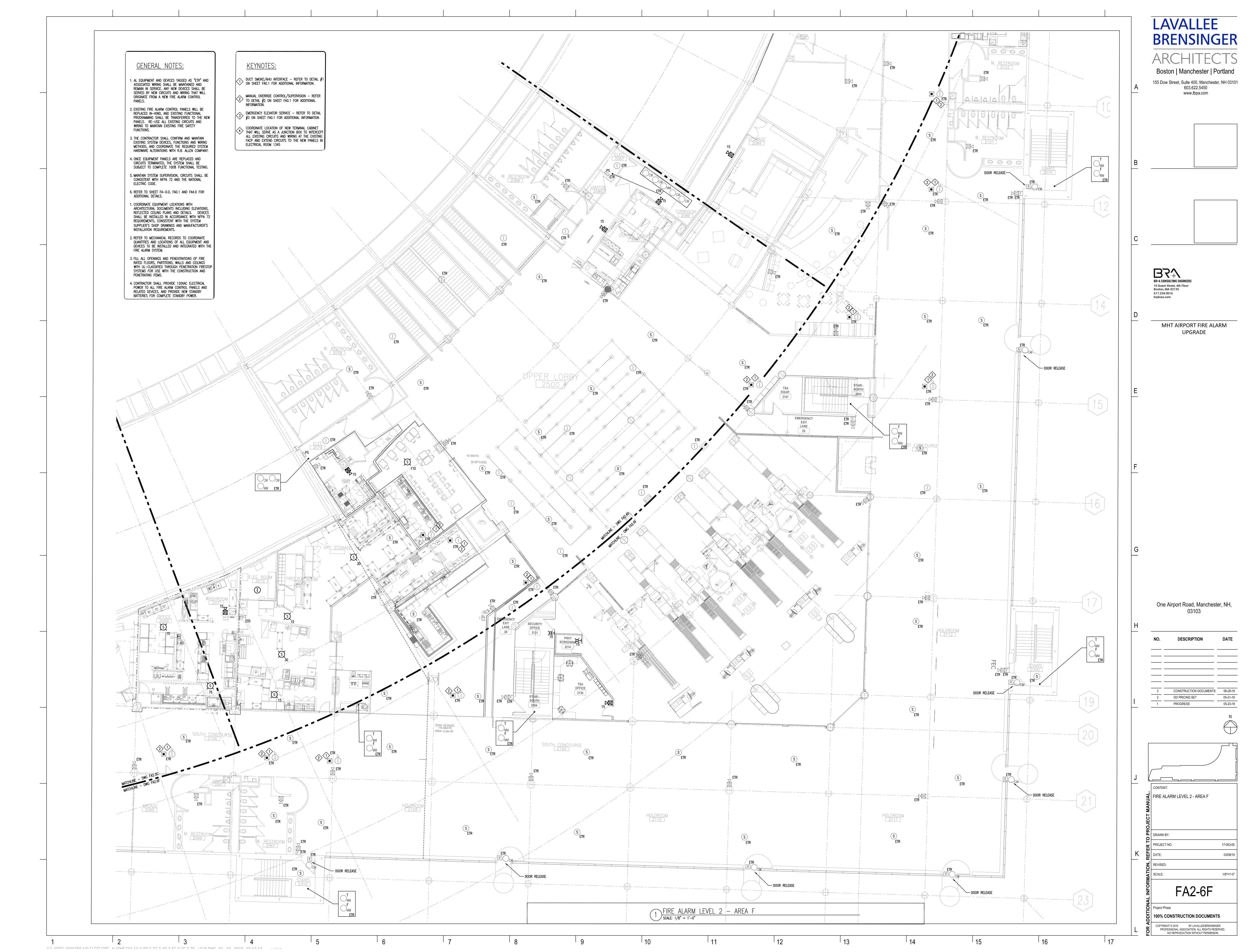


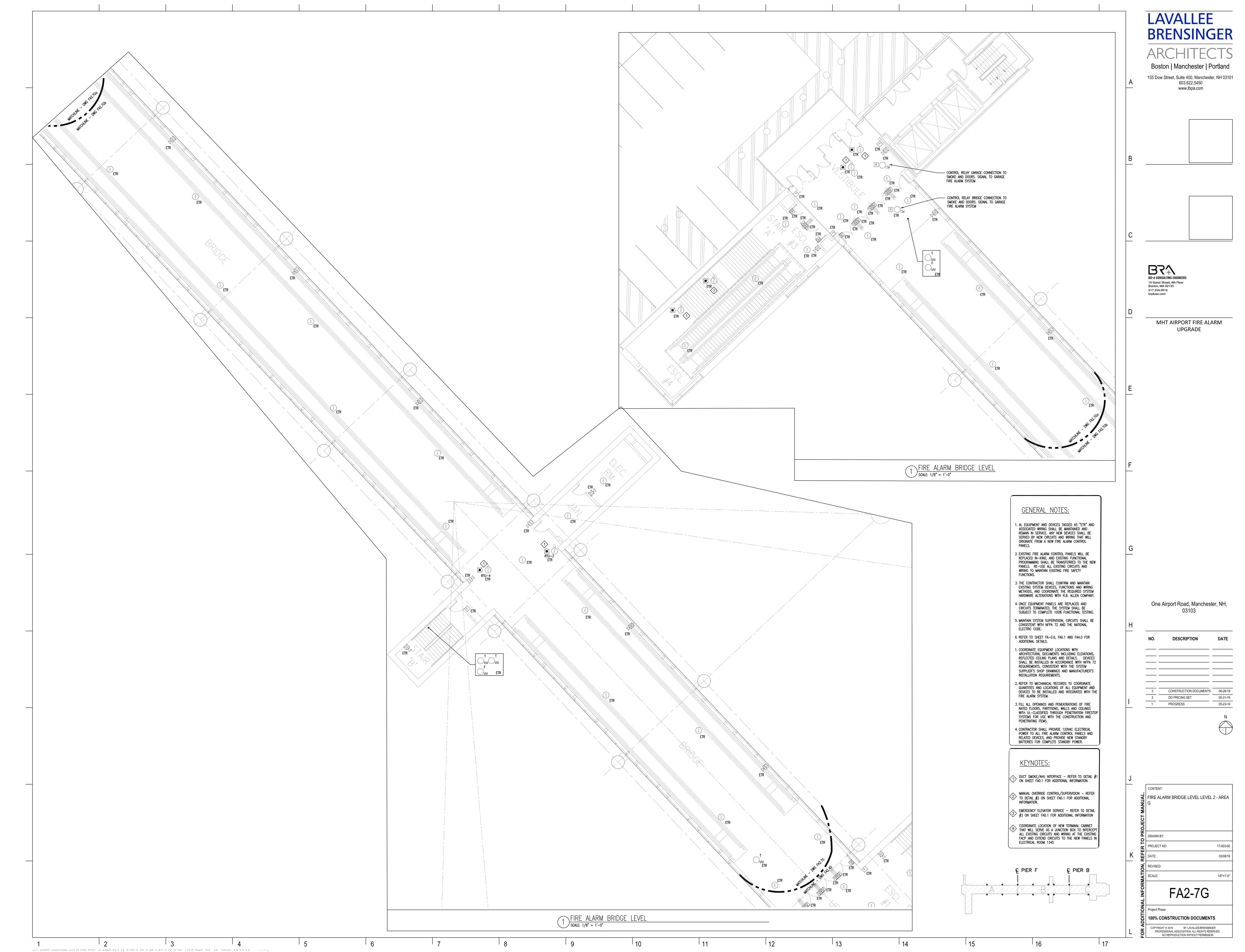
**BRENSINGER** Boston | Manchester | Portland

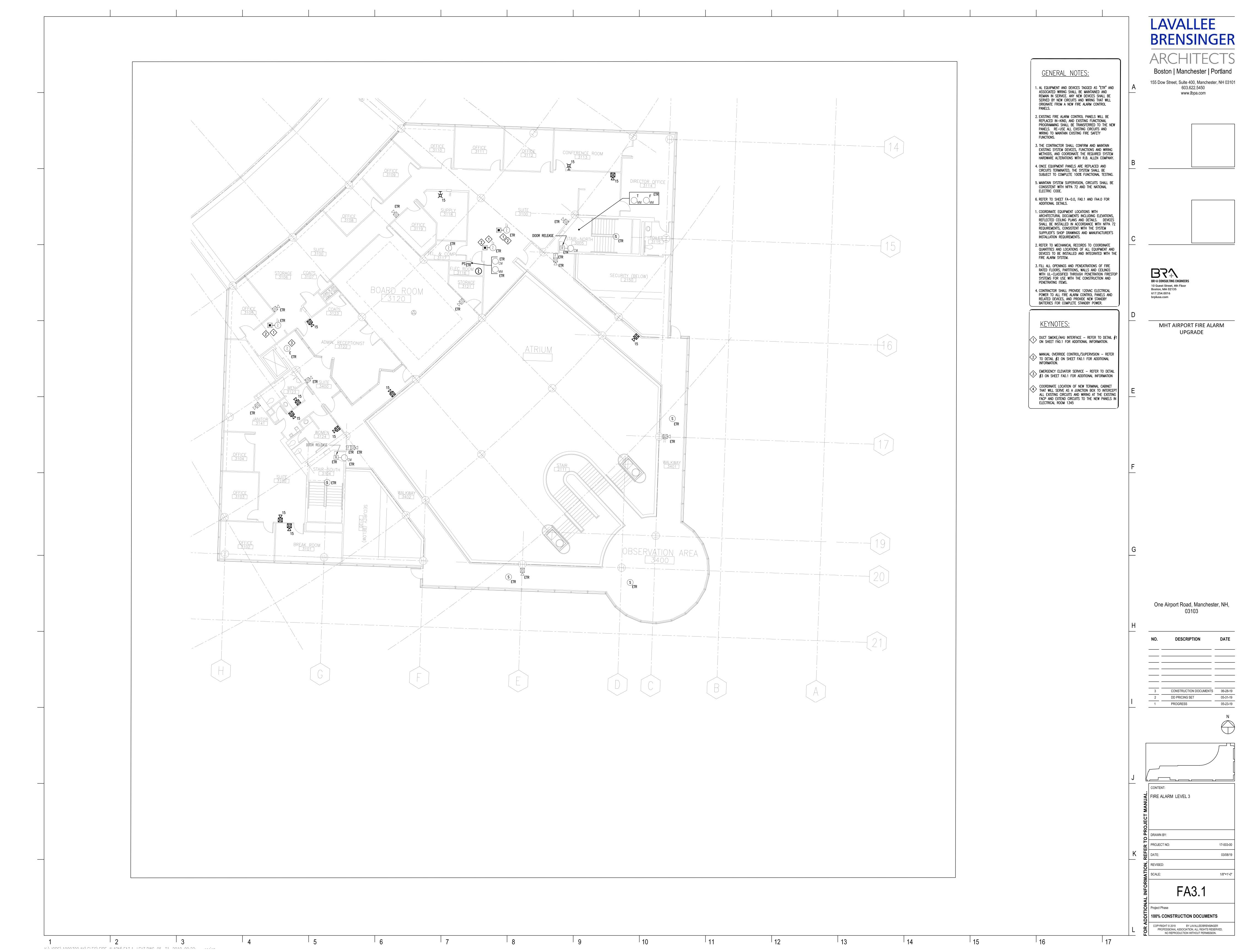


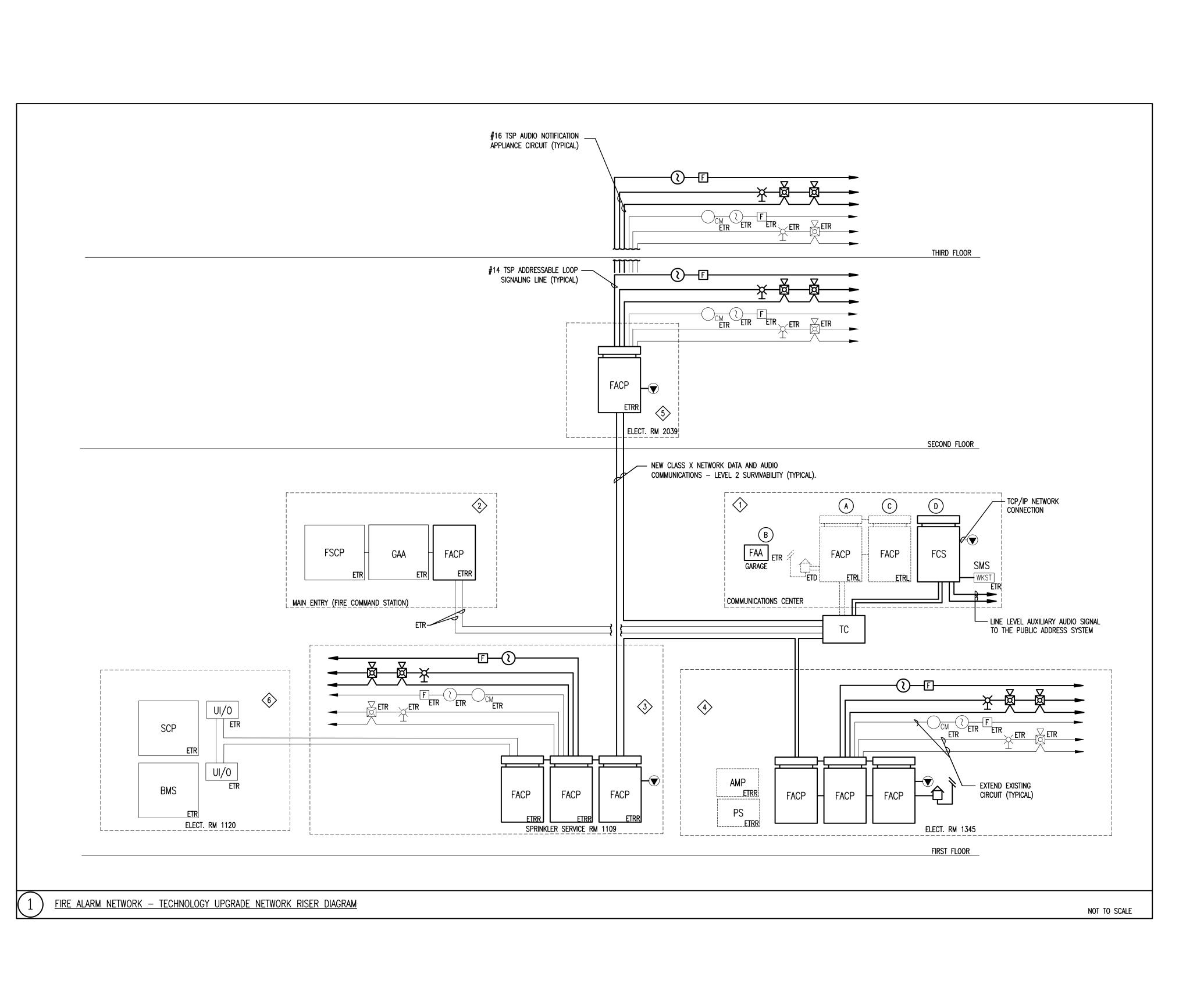












RISER DIAGRAM KEY NOTES: · COMMUNICATIONS CENTER — EQUIPMENT RELOCATION AND REPLACEMENT. ALL EQUIPMENT CURRENTLY LOCATED WITHIN THE COMMUNICATIONS CENTER SHALL BE REMOVED AND REPLACED WITH NEW EQUIPMENT, OR BE RELOCATED AS FOLLOWS: A. EXISTING MAIN FACP AND ASSOCIATED PANELS INCLUDING THE EST IRC-3 PANEL, GRAPHIC ANNUNCIATOR PANELS AND KING-FISHER MASTER BOX TRANSMITTER LOCATED IN COMMUNICATIONS CENTER ROOM 1180 SHALL BE REMOVED AND REPLACED WITH NEW (EST-3) EQUIPMENT THAT WILL BE LOCATED IN THE MAIN ELECTRIC ROOM1345. ALL EXISTING CIRCUITS SERVED BY THE PANELS SHALL BE TAGGED AND VERIFIED, INTERCEPTED AND TERMINATED IN A FIELD WIRING TERMINAL CABINET, AND EXTENDED TO THE NEW EQUIPMENT LOCATION. CIRCUITS AND EQUIPMENT SHALL a. ONE (1) CLASS A (DUAL PATHWAY) NETWORK COMMUNICATIONS b. TWO (2) ZAS-1 ADDRESSABLE LOOP SIGNALING LINE CIRCUITS (SLC) c. SIXTEEN (16) AUDIO SPEAKER CIRCUITS. d. ONE (1) VISUAL NOTIFICATION APPLIANCE CIRCUITS (VNAC) CONTROL CIRCUIT. e. ONE (1) AUDIO RISER CIRCUIT f. TWELVE (12) SMOKE EVAC CONTROL SIGNAL CIRCUITS g. TWELVE (12) MASTERBOX DRIVER OUTPUTS h. AUDIO CONTROL / PRE-AMPLIFIER i. SYSTEM POWER SUPPLIES j. CENTRAL PROCESSING UNIT AND NETWORK INTERFACE k. ANNUNCIATOR DRIVER HARDWARE AND SWITCHES I. PRIMARY AND SECONDARY POWER SOURCES. B. EXISTING GARAGE SYSTEM REMOTE ANNUNCIATOR PANEL SHALL REMAIN AND BE RELOCATED TO A NEW LOCATION WITHIN THE COMMUNICATIONS CENTER. C. EXISTING EST IRC-3 SUB-PANEL LOCATED IN CLOSET / BREAK ROOM 1188 SHALL BE REMOVED AND REPLACED BY THE NEW EQUIPMENT LOCATED IN MAIN ELECTRIC ROOM 1345. ALL EXISTING CIRCUITS SERVED BY THE PANEL SHALL BE TAGGED AND VERIFIED, INTERCEPTED AND TERMINATED IN A FIELD WIRING TERMINAL CABINET, AND EXTENDED TO THE NEW EQUIPMENT LOCATION. CIRCUITS AND HARDWARE SHALL INCLUDE: a. ONE (1) CLASS A (DUAL PATHWAY) NETWORK COMMUNICATIONS b. ONE (1) PRE-AMP AUDIO SPEAKER CIRCUIT c. FIVE (5) VISIBLE APPLIANCE NOTIFICATION CIRCUITS d. ONE (1) ZAS-2 ADDRESSABLE LOOP SLC e. 50 WATT AUDIO AMPLIFIER f. CENTRAL PROCESSING UNIT g. MULTI-MESSAGE AUDIO CONTROL MODULES. D. PROVIDE NEW EST-3 FIRE COMMAND STATION PANEL IN THE COMMUNICATIONS CENTER. THE PANEL WILL BE INSTALLED IN A TEMPORARY LOCATION UNTIL THE PERMANENT LOCATION IS DETERMINED UNDER THIS PLANNED COMMUNICATIONS CENTER RENOVATIONS. PROVIDE AN ADDITIONAL 50' OF CABLE LENGTH TO ACCOMMODATE FUTURE PANEL RELOCATION. a. PROVIDE ALL NECESSARY HARDWARE UPGRADE AND CAD GRAPHICS PROGRAMMING OF THE EST "FIREWORKS" OPERATORS WORKSTATIONS. b. Provide two (2) RS-232 data communications circuit to the fireworks workstation and client SOFTWARE INTEGRATION WITH THE SECURITY MANAGEMENT SYSTEM (SMS). c. Provide TCP/IP Integration capabilities for future integration with MHT Tel/Data Network. d. LINE LEVEL AUXILIARY AUDIO SIGNAL WITH PRIORITY OVERRIDE OUTPUT CONTACT TO THE BUILDING P.A./MASS ALERT SYSTEMS S FIRE COMMAND STATION — EQUIPMENT REPLACEMENT. COORDINATE THE REPLACEMENT OF THE EXISTING FIRE ALARM CONTROL PANEL LOCATED AT THE PRIMARY FIRE DEPARTMENT RESPONSE LOCATION (MAIN ENTRY / LOBBY) WITH NEW (EST-3) EQUIPMENT AND CIRCUITS AS FOLLOWS: a. REPLACE THE EXISTING IRC-3 PANEL AND HARDWARE WITH A NEW EST-3 PANEL INCLUDING OPERATOR'S DISPLAY, AUDIO CONTROL/MICROPHONE, AND AUXILIARY CONTROL SWITCHES FOR H-O-A AND SELECTIVE AUDIO CONTROL. b. CENTRAL PROCESSING UNIT AND NETWORK INTERFACE c. AUDIO SOURCE UNIT FOR ONE-WAY EVAC PAGING WITH 50 WATT AUDIO AMPLIFIER d. SYSTEM POWER SUPPLIES e. ANNUNCIATOR DRIVER MODULES AND INTEGRATION WITH THE EXISTING ADJACENT GRAPHIC ANNUNCIATOR AND SMOKE CONTROL PANELS THAT ARE INTENDED TO REMAIN. f. PRIMARY AND SECONDARY POWER SOURCES. g. FIELD WIRING TERMINATIONS: h. ONE (1) CLASS A (DUAL PATHWAY) NETWORK COMMUNICATIONS i. ONE (1) AUDIO RISER CIRCUIT j. ONE (1) MICROPHONE P-T-T CIRCUIT. k. ONE (1) ZAS- ADDRESSABLE LOOP SLC I. FIVE (5) VISIBLE NOTIFICATION APPLIANCE CIRCUITS m.ONE (1) VNAC CONTROL CIRCUIT n. PRIMARY AND SECONDARY POWER SOURCES o. ANNUNCIATOR DRIVER CIRCUITS AND WIRING (64 POINTS) SPRINKLER SERVICE ROOM — EQUIPMENT REPLACEMENT. THE EQUIPMENT CURRENTLY LOCATED WITHIN SPRINKLER SERVICE  $\sim$  ROOM 1109 SHALL BE REMOVED AND REPLACED WITH NEW EQUIPMENT AS FOLLOWS. THREE (3) EXISTING EST IRC-3PANELS SHALL BE REMOVED AND REPLACED WITH NEW (EST-3) PANELS. ALL EXISTING CIRCUITS SERVED BY THE PANELS SHALL BE TAGGED AND VERIFIED, INTERCEPTED AND EXTENDED TO THE NEW EQUIPMENT PANELS. CIRCUITS AND EQUIPMENT SHALL INCLUDE: a. CLASS A (DUAL PATHWAY) NETWORK COMMUNICATIONS b. THREE (3) ZAS-2 ADDRESSABLE LOOP (SLCS) c. SEVENTEEN (17) AUDIO SPEAKER CIRCUITS. d. SIX (6) VISIBLE APPLIANCE NOTIFICATION CIRCUITS e. ONE (1) VISUAL NOTIFICATION APPLIANCE CIRCUITS CONTROL CIRCUIT. f. ONE (1) AUDIO RISER CIRCUIT g. FOUR (4) 50 WATT AUDIO AMPLIFIERS h. SIX (6) APS8 SYSTEM POWER SUPPLIES i. Four (4) external booster power supplies (existing to remain/re-use) j. UI/O MODULES (14 POINTS — EXISTING TO REMAIN/RE-USE) k. CENTRAL PROCESSING UNIT AND NETWORK INTERFACE I. PRIMARY AND SECONDARY POWER SOURCES. m.REMOTE TEST STATIONS (EXISTING TO REMAIN/RE-USE) n. SPRINKLER SUPERVISORY MODULES (EXISTING TO REMAIN/RE-USE) acksim main electric room 1345 — equipment replacement. The equipment currently located within the main electric  $\checkmark$  room shall be removed and replaced with New Equipment as follows: a. CENTRALLY—BANKED BULK AUDIO AMPLIFIERS SHALL BE REMOVED AND REPLACED WITH NEW (EST—3) PANELS IN THE NEW LOCATION SHOWN. ALL EXISTING CIRCUITS SERVED SHALL BE TAGGED AND VERIFIED, INTERCEPTED AND TERMINATED IN A FIELD WIRING TERMINAL CABINET, AND EXTENDED TO THE NEW EQUIPMENT PANELS. b. EXISTING CIRCUITS TO BE RE-USED, AND EQUIPMENT TO BE REPLACED SHALL INCLUDE: c. CLASS A (DUAL PATHWAY) NETWORK COMMUNICATIONS d. 500 WATTS OF 25V AUDIO AMPLIFICATION e. ONE (1) EXTERNAL BOOSTER POWER SUPPLY f. ONE (1) AUDIO RISER CIRCUIT g. CENTRAL PROCESSING UNIT AND NETWORK INTERFACE h. New 16-zone radio masterbox transmitter with associated inputs, antenna, hardware and programming. i. PRIMARY AND SECONDARY POWER SOURCES. EXISTING EST IRC-3 SUB-PANEL LOCATED IN ELECTRIC ROOM 2039 SHALL BE REMOVED AND REPLACED BY NEW EST-3 EQUIPMENT. ALL EXISTING CIRCUITS SERVED BY THE PANEL SHALL BE TAGGED AND VERIFIED, INTERCEPTED AND TERMINATED IN A FIELD WIRING TERMINAL CABINET, AND EXTENDED TO THE NEW EQUIPMENT LOCATION. CIRCUITS AND HARDWARE SHALL INCLUDE: a. CENTRAL PROCESSING UNIT / OPERATOR'S DISPLAY b. ONE (1) CLASS A (DUAL PATHWAY) NETWORK COMMUNICATIONS c. ONE (1) ZAS-2 ADDRESSABLE LOOP SLC d. ONE (1) PRE—AMP AUDIO RISER e. FOUR (4) AUDIO SPEAKER CIRCUIT f. FIVE (5) VISIBLE APPLIANCE NOTIFICATION CIRCUITS g. ONE (1) 50 WATT AUDIO AMPLIFIER

h. TWO (2) EXTERNAL BOOSTER POWER SUPPLIES (EXISTING TO REMAIN/RE-USE)

MAINTAIN AND RE-USE ALL EXISTING DEVICES AND WIRING, AND INTERCONNECTION WITH THE BUILDING MANAGEMENT

i. ONE (1) VISUAL NOTIFICATION APPLIANCE CIRCUITS CONTROL CIRCUIT.

SYSTEM AND SMOKE CONTROL FUNCTIONS, WHICH ARE INTENDED TO REMAIN.

**GENERAL NOTES:** 

- 1. CONSULT THE PROJECT SPECIFICATIONS AND PROJECT NARRATIVE FOR ADDITIONAL INFORMATION REGARDING SYSTEM DESIGN, INTENDED PERFORMANCE, PRODUCTS AND INSTALLATION.
- 2. DISCREPANCIES BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF BR+A CONSULTING ENGINEERS, LLC.
- 3. ALL EQUIPMENT, FIELD DEVICES AND WIRING ARE INTENDED TO REMAIN AND BE RE-USED EXCEPT AS OTHERWISE NOTED. THE CONTRACTOR SHALL COORDINATE THE REQUIRED CUT-OVER TO NEW EQUIPMENT PANELS, AND MAINTAIN ALL EXISTING CIRCUITS, DEVICES AND SYSTEM PROGRAMMING DURING SYSTEM CHANGE-OVER. COORDINATE THE SUPERVISION OF RELATED SYSTEMS, AND ANY SYSTEM IMPAIRMENTS OR
- 4. RISER DIAGRAM IS PARTIAL AND DOES NOT SHOW THE ENTIRE SYSTEM. REFER TO FLOOR PLANS FOR

AND THE OWNER AND LONDONDERYY FIRE DEPARTMENT.

FOUR (4) 24V VISUAL NACS

TEMPORARY PROTECTION AND OFF-PREMISES REPORTING CONSISTENT WITH THE PROJECT NFPA 241 PLAN

- LOCATIONS AND QUANTITIES OF ALL EQUIPMENT AND DEVICES. 5. THIS DRAWING DEPICTS SCHEMATIC INTERCONNECTIONS OF WIRING. EXACT ROUTING OF CONDUITS AND WIRING SHALL BE DETERMINED IN THE FIELD BY THE INSTALLING CONTRACTOR TO SUIT FIELD CONDITIONS AND AS SUBMITTED IN THE SHOP DRAWINGS. ALL CHANGES SHALL BE CLEARLY INDICATED ON THE
- RECORD DRAWINGS. 6. THE MAIN FIRE ALARM CONTROL PANEL WILL PROVIDE THE PRIMARY OPERATOR'S INTERFACE WITH LCD
- DISPLAY, AUDIO CONTROL/MICROPHONE AND A MATRIX OF LEDS AND SWITCHES FOR COMPLETE SYSTEM ANNUNCIATION AND CONTROL IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- . DISTRIBUTED FIRE ALARM CONTROL PANELS SHALL INCLUDE AMPLIFIERS, POWER SUPPLIES AND ADDRESSABLE LOOP INTERFACE CARDS SIZED TO SERVE THE AREAS SHOWN. EACH CONTROL UNIT SHALL OPERATE ON A STANDALONE BASIS IN THE EVENT OF A COMMUNICATIONS FAILURE.
- 8. PROVIDE THE FOLLOWING MINIMUM NEW (ADDITIONAL) CIRCUIT ALLOWANCES PER PANEL: ONE (1) NEW SIGNALING LINE CIRCUIT (SLC) TWO (2) AUDIO NOTIFICATION APPLIANCE (SPEAKER) CIRCUITS (NAC)
- 9. ALL ADDRESSABLE LOOP AND NOTIFICATION APPLIANCE CIRCUIT WIRING SHALL BE WIRED AS CLASS 'A' CIRCUITS WITH PATHWAY SURVIVABILITY TO MATCH EXISTING UNLESS OTHERWISE NOTED.
- 10. ALL NETWORK WIRING INCLUDING DATA COMMUNICATIONS AND AUDIO COMMUNICATIONS SHALL BE WIRED CLASS X (CLASS A, STYLE 7) WITH SEPARATE OUTGOING AND RETURN LOOPS, AND A MINIMUM
- LEVEL 2 PATHWAY SURVIVABILITY EXCEPT AS OTHERWISE SHOWN. 11. FIRE ALARM CONTROL PANELS AND TERMINAL CABINETS SHALL BE CONFIGURED TO SERVE THE FLOOR
- AREAS SHOWN. EQUIPMENT CABINET SIZES, QUANTITY, AND LOCATIONS MAY VARY DEPENDING UPON ACTUAL SITE CONDITIONS AND BE COORDINATED WITH THE SYSTEM SUPPLIER'S SHOP DRAWINGS.

12. ALL INSTALLATION WORK SHALL CONFORM WITH THE REQUIREMENTS OF NFPA 72 NATIONAL FIRE ALARM

AND SIGNALING CODE (2013 EDITION) AND NFPA 70 THE NATIONAL ELECTRICAL CODE (2017 EDITION).

- 13. CONTROL UNITS SHALL BE INSTALLED SO THAT WORKING CLEARANCES ARE MAINTAINED AROUND THE UNITS IN ACCORDANCE WITH NFPA 70 THE NATIONAL ELECTRICAL CODE. PANEL MOUNTING SHALL BE SUCH THAT ALL SWITCHES AND OPERATOR CONTROLS ARE NO LESS THAN 36 INCHES AND NO MORE THAN 72 INCHES ABOVE THE FINISHED FLOOR.
- 14. WIRING SHALL BE INSTALLED SO THAT EQUIPMENT CAN BE SERVICED OR REMOVED WITHOUT DISCONNECTING OR MOVING UNRELATED CIRCUITS. ALL WIRING WITHIN CONTROL UNITS, JUNCTION BOXES, AND TERMINAL CABINETS SHALL BE NEATLY TRIMMED, DRESSED, LABELED, AND INSTALLED IN GUTTERS OR CHANNELS.
- 15. SEE SPECIFICATIONS FOR MAXIMUM ALLOWABLE CIRCUIT LOADING AND WIRE SIZE REQUIREMENTS. COORDINATE FINAL CIRCUIT QUANTITIES AND CABLE TYPES WITH THE SYSTEM SUPPLIER'S SHOP DRAWINGS.
- 16. THE COVERS OF ALL JUNCTION BOXES SHALL BE PAINTED RED. SEE SPECIFICATIONS AND DETAILS FOR ADDITIONAL DEVICE AND CIRCUIT LABELING REQUIREMENTS. . PENETRATIONS MADE OR USED (IF ALREADY EXISTING) IN ANY FIRE RATED BARRIER SHALL BE FILLED AND
- PATCHED WITH A MATERIAL THAT PROVIDES A FIRE RATING EQUAL TO OR GREATER THAN THE PENETRATED ASSEMBLY. PROPRIETARY FILLER MATERIALS MUST BE APPROVED OR LISTED AS FIRE—RATED FILLER MATERIALS. PRIOR TO USING SUCH MATERIALS, SUBMIT COMPLETE MANUFACTURER'S INFORMATION FOR APPROVAL IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- 18. VERIFY FIELD CONDITIONS FOR EXACT LOCATIONS OF FLOW, TAMPER, RELATED DEVICES, AND FIRE SUPPRESSION SYSTEMS TO BE INTERCONNECTED WITH THE FIRE ALARM SYSTEM.
- 19. VERIFY FIELD CONDITIONS FOR EXACT QUANTITIES AND LOCATIONS OF ALL MECHANICAL EQUIPMENT TO BE INTERCONNECTED WITH THE FIRE ALARM SYSTEM. REFER TO RECORD DOCUMENTATION AND SPECIFICATIONS FOR HVAC, SMOKE CONTROL AND MANAGEMENT SEQUENCES AND RELATED INTERFACE REQUIREMENTS. 20. THE INSTALLING CONTRACTOR IS RESPONSIBLE FOR OBTAINING APPROVAL FOR, AND MAKING ALL
- NECESSARY ADJUSTMENTS IN CIRCUITING AS REQUIRED TO ACCOMMODATE THE RELOCATION OF EQUIPMENT AND/OR DEVICES WHICH ARE EFFECTED BY AN AUTHORIZED CHANGE OR FIELD INSTALLATION
- . ALL FIRE ALARM WIRING DESIGNATED TO HAVE LEVEL 1 SURVIVABILITY SHALL BE IN CONDUIT. CONTRACTOR/SUPPLIER SHALL COORDINATE EXISTING ADDRESSABLE POINTS LISTING AND DEVICE PROGRAMMING DATABASE TO ENSURE ALL EXISTING POINTS ARE ASSOCIATED AND ACCOUNTED FOR BY THE NEW SYSTEM PROGRAM.
- 22. ALL FIRE ALARM WIRING DESIGNATED TO HAVE LEVEL 1 SURVIVABILITY SHALL BE IN CONDUIT.
- 23. WIRING DESIGNATED TO HAVE LEVEL O SURVIVABILITY WIRING SHALL BE PLENUM-RATED, POWER-LIMITED FIRE ALARM CABLE (TYPE FPLR) OR METAL CLAD (TYPE MC).
- 24. ELECTRICAL CONTRACTOR TO PROVIDE 120 VAC EMERGENCY ELECTRICAL POWER TO ALL FIRE ALARM CONTROL PANELS AND RELATED EQUIPMENT; COORDINATE WITH RELATED ELECTRICAL PANEL SCHEDULES.

FIRE ALARM SYSTEM ABBREVIATIONS:

- ENL EXISTING DEVICE IN A NEW LOCATION
- ETD EXISTING DEVICE/EQUIPMENT TO BE DEMOLISHED ETR EXISTING DEVICE/EQUIPMENT TO REMAIN
  - ETRL EXISTING DEVICE TO BE REMOVED AND RELOCATED (SEE NOTES)
- ETRR EXISTING DEVICE TO BE REMOVED AND REPLACED WITH NEW
- ---- EXISTING ---- NEW

One Airport Road, Manchester, NH,

LAVALLEE

**BRENSINGER** 

Boston | Manchester | Portland

155 Dow Street, Suite 400, Manchester, NH 03101

603.622.5450

www.lbpa.com

BR+A CONSULTING ENGINEERS

10 Guest Street, 4th Floor

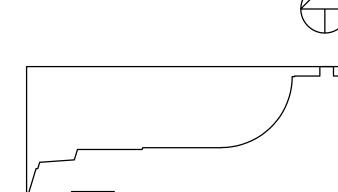
MHT AIRPORT FIRE ALARM

Boston, MA 02135

617.254.0016

brplusa.com

NO.	DESCRIPTION	DATE
3	CONSTRUCTION DOCUMENTS	06-28-19
	DD PRICING SET	05-31-19
2	DD I MOING OLI	



<u> </u>	ADDITIONAL INFORMATION, REFER TO PROJECT MANUAL.	CONTENT: FIRE ALARM RISER DIAGRAM	
	O PR	DRAWN BY:	
	ER T	PROJECT NO:	17-003-00
<b>\</b>	REFI	DATE:	03/08/19
	ON,	REVISED:	
	MATI	SCALE:	N.T.S
	IAL INFOR	FA4.0	
	DDITION	Project Phase  100% CONSTRUCTION DOCUMENTS	
	7		

COPYRIGHT © 2019 BY LAVALLEE/BRENSINGER PROFESSIONAL ASSOCIATION, ALL RIGHTS RESERVED, NO REPRODUCTION WITHOUT PERMISSION.

IV.\ IODO\ 1000700 XIV\ ELEO\ EIDE XI XDXX\ EXX O DICED DIXIO OC 10 0010 10.00.00