CLARKE ELEMENTARY SCHOOL FIRE ALARM REPLACEMENT 100 Middlesex Ave. Swampscott, MA 01907







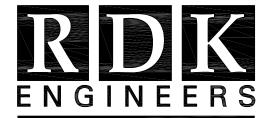


Sheet Number Sheet Title

COVER SHEET

ELECTRIC FA0.00 FAD1.0 FAD1.1 FAD1.2 FAD1.3 FA1.0 FA1.1 FA1.2 FA1.3 FA2.0

FA7.0



RDK Engineers 200 Brickstone Square Andover, MA 01810-148

T.978-296-6200 F.978-296-6201 W. www.rdkengineers.co

This CADD Document is an instrument rofessional service, and shall not be used, ir whole or in part, for any project other than for which it was created without the expressed ritten consent of the RDK Engineers. Any nauthorized use, reuse, modification or altera ncluding automated conversion of this document shall be at the user's sole risk without liability or legal exposure to the RDK Engineers.

REVISION DATE CHK DESCRIPTION

SEAL

DRAWING LIST -

COVER SHEET

- ELECTRICAL LEGEND NOTES AND ABBREVIATIONS FIRE ALARM CRAWLSPACE DEMOLITION PLAN
- FIRE ALARM FIRST FLOOR DEMOLITION PLAN
- FIRE ALARM SECOND FLOOR DEMOLITION PLAN
- FIRE ALARM ATTIC DEMOLITION PLAN FIRE ALARM CRAWLSPACE PLAN
- FIRE ALARM FIRST FLOOR PLAN
- FIRE ALARM SECOND FLOOR PLAN FIRE ALARM ATTIC PLAN FIRE ALARM PORTABLE DEMOLITION AND NEW WORK PLANS
- FIRE ALARM MATRIX AND RISER



NUMBER-20170327

DATE----6/30/17

TOWN OF SWAMPSCOTT CLARKE ELEMENTARY FIRE ALARM REPLACEMENT SWAMPSCOTT, MA

DRAWING

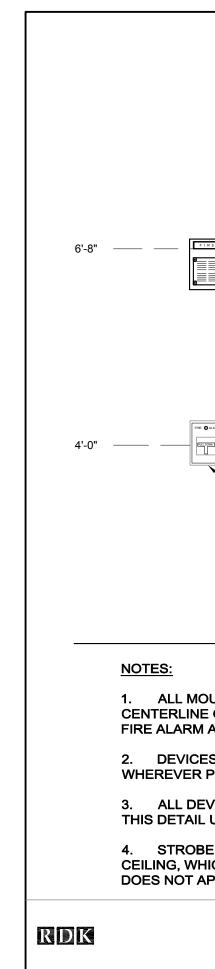
DRAWN BY DF

CHECKED BY M/M

SCALE-N/A

COVER SHEET

C0.00



			FIRE ALARM LEGEND
		FACP	FIRE ALARM CONTROL PANEL
		FAA	FIRE ALARM ANNUNCIATOR PANEL
		FATC	FIRE ALARM TERMINAL CABINET
		BATT	FIRE ALARM SYSTEM BATTERY PACK & BATTERY CHARGER
		仓	FIRE ALARM MASTER BOX
		合	FIRE ALARM COMMUNICATIONS ANTENNA/TRANSMITTER
(MOUNTING HEIGHT MINIMUM TO BOTTOM OF STROBE, SEE NOTE 4)		Ę	FIRE ALARM RED ROTATING BEACON, EXTERIOR MOUNTED, WEATHERPROOF
		L 15cd	FIRE ALARM VISUAL DEVICE
		(15cd	CEILING MOUNTED FIRE ALARM VISUAL DEVICE
		BO	FIRE ALARM BELL
		S S	FIRE ALARM SPEAKER
FIRE ALARM PULL STATION			FIRE ALARM HORN
		DH	MAGNETIC DOOR HOLDER
		К	KEY BOX
		Fsc	FIRE ALARM MANUAL PULL STATION "SC" INDICATES STOPPER COVER
		RAI	REMOTE ALARM INDICATOR
IOUNTING HEIGHTS SHALL BE MEASURED FROM FINISHED FLOOR TO NE OF DEVICE EXCEPT EXIT SIGNS, CLOCKS, EMERGENCY LIGHTING AND		RTS	REMOTE TEST STATION
		ACM	INDIVIDUAL ADDRESSABLE CONTROL MODULE
CES SHALL BE INSTALLED ON A COMMON VERTICAL CENTERLINE R POSSIBLE.		ZMM	ZONE MONITORING MODULE
EVICES SHALL BE INSTALLED AT MOUNTING HEIGHTS AS INDICATED ON IL UNLESS OTHERWISE NOTED.		FWG	FIRE ALARM AUDIBLE AND VISUAL DEVICE, NUMERAL INDICATES CANDELA VALUE "WG" INDICATES WIRE GUARD "WP" INDICATES WEATHERPROOF
BE HEIGHT ILLUSTRATED AT MINIMUM HEIGHT OF 80" AFF OR 6" BELOW /HICHEVER IS LOWER. IN ACCORDANCE WITH NFPA 72 CRITERIA. THIS APPLY TO CEILING MOUNTED STROBES.		(F) ^{15cd}	CEILING MOUNTED FIRE ALARM AUDIBLE AND VISUAL DEVICE, NUMERAL INDICATES CANDELA VALUE
TYPICAL DEVICE MOUNTING HEIGHTS DETAIL	E201A	Ser	FIRE ALARM SMOKE DETECTOR, PHOTO ELECTRIC UNLESS NOTED OTHERWISE "ER" INDICATES ELEVATOR RECALL "SC" INDICATES SELF-CONTAINED, SINGLE STATION TYPE "II" INDICATES IONIZATION TYPE DETECTOR "M" INDICATES MULTI-SENSOR "WG" INDICATES WIRE GUARD
		HRR	FIRE ALARM HEAT DETECTOR, 135° FIXED TEMPERATURE UNLESS NOTED OTHERWISE "RR" INDICATES RATE OF RISE "R/F" INDICATES RATE OF RISE AND FIXED TEMPERATURE "200" INDICATES 200° TEMPERATURE "WG" INDICATES WIRE GUARD

\mathbf{O}	CARBON MONOXIDE SENSOR	

EXISTING EQUIPMENT LEGEND

EXISTING EQUIPMENT TO REMAIN XM

Х

XR

NR

L____J

EXISTING EQUIPMENT TO BE REMOVED

EXISTING EQUIPMENT TO BE RELOCATED

NEW LOCATION OF EXISTING RELOCATED EQUIPMENT XN

EXISTING EQUIPMENT TO BE REMOVED AND NEW EQUIPMENT TO BE INSTALLED ON EXISTING BRANCH/FEEDER EXISTING EQUIPMENT FOR INFORMATION ONLY-

INDICATED BY SYMBOL WITH LIGHT AND OUT OF FUNCTION LINE TYPE

EXISTING EQUIPMENT TO BE REWORKED-INDICATED BY SYMBOL WITH DASHED AND IN FUNCTION LINE TYPE

ABBREVIATIONS

A/AMP	AMPERE	KWH	KILOWATT HOURS
AC	ALTERNATING CURRENT	LTG	LIGHTING
ADA	AMERICAN WITH DISABILITIES ACT	МСВ	MAIN CIRCUIT BREAKER
AF	AMPERE FRAME	MEC	MASSACHUSETTS ELECTRICA CODE
AFF	ABOVE FINISHED FLOOR	M/G	MOTOR/GENERATOR SET
AFG	ABOVE FINISHED GRADE	МН	MANHOLE
AIC	AMPERE INTERRUPTING CAPACITY	MLO	MAIN LUGS ONLY
AL	ALUMINUM	MTD	MOUNTED
AT	AMPERE TRIP	MTG	MOUNTING
ATS	AUTOMATIC TRANSFER SWITCH	NC	NORMALLY CLOSED CONTACT
AWG	AMERICAN WIRE GAUGE	NEC	NATIONAL ELECTRICAL CODE
В	BURIED	NO	NORMALLY OPEN CONTACT
С	CONDUIT	NTS	NOT TO SCALE
CA	CABLE	#	NUMBER
CATV	CABLE TELEVISION	OPD	OVER CURRENT PROTECTION DEVICE
ссти	CLOSED CIRCUIT TELEVISION SYSTEM	POS	PROVIDED UNDER OTHER SECTIONS
СВ	CIRCUIT BREAKER	PVC	POLYVINYL CHLORIDE
СКТ	CIRCUITS	PWR	POWER
CPU	CENTRAL PROCESSING UNIT	RGS	RIGID GALVANIZED STEEL
ፍ	CENTERLINE	RMS	ROOT MEAN SQUARE VALUE
dB	DECIBEL	RPM	REVOLUTIONS PER MINUTE
DC	DIRECT CURRENT	SN	SOLID NEUTRAL
DWG	DRAWING	SWBD	SWITCHBOARD
EC	ELECTRICAL CONTRACTOR	тв	TERMINAL BLOCK
EMT	ELECTRIC METALLIC TUBING	TEL	TELEPHONE
FDR	FEEDER	TERMN	TERMINAL
FLMT	FLEXIBLE LIQUID TIGHT METALLIC TUBING	TSP	TWISTED SHIELDED-PAIR
FREQ	FREQUENCY	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
GEC	GROUNDING ELECTRODE CONDUCTOR	TYP	TYPICAL
GFI	GROUND FAULT INTERRUPTING	UG	UNDERGROUND
GND	GROUND	UNO	UNLESS NOTED OTHERWISE
нн	HANDHOLE	UPS	UNINTERRUPTIBLE POWER SUPPLY
HP	HORSEPOWER	UTP	UNSHIELDED TWISTED-PAIR
HVAC	HEATING, VENTILATING AND AIR CONDITIONING	v	VOLTS
HZ	HERTZ	VA	VOLT-AMPERE
IG	ISOLATED GROUND	VSD	VARIABLE SPEED DRIVE
JB	JUNCTION BOX	W	WATTS
KVA	KILOVOLT-AMPERE	WP	WEATHERPROOF
KW	KILOWATT		



Andover, MA - Boston, MA - Amherst, MA Durham, NC - Charlotte, NC

RDK Engineers 200 Brickstone Square Andover, MA 01810-1488

T.978-296-6200 F.978-296-6201 W. www.rdkengineers.com

This CADD Document is an instrument of

legal exposure to the RDK Engineers.

REVISIONS

_____ _____

SEAL

_____ _____ _____

professional service, and shall not be used, in

whole or in part, for any project other than for which it was created without the expressed, written consent of the RDK Engineers. Any

unauthorized use, reuse, modification or alteration,

including automated conversion of this document shall be at the user's sole risk without liability or

DATE CHK DESCRIPTION

PROJECT

NUMBER-20170327

DATE 6/30/17

TOWN OF SWAMPSCOTT CLARKE ELEMENTARY FIRE ALARM REPLACEMENT SWAMPSCOTT, MA

DRAWING

DRAWN BY DF

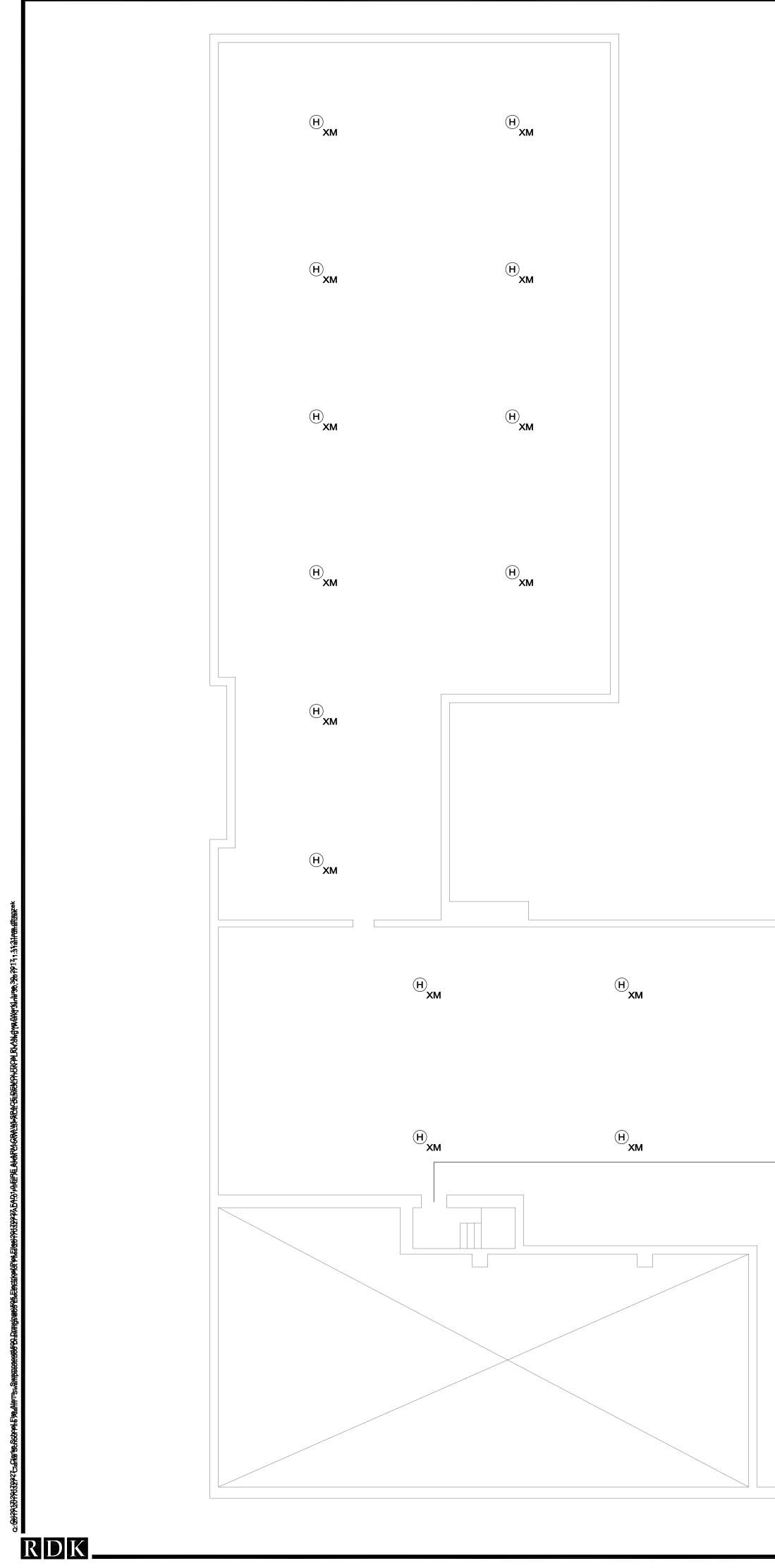
CHECKED BY-MW

90% PROGRESS

06-30-17

FIRE ALARM LEGEND, NOTES, ABBREVIATIONS & DETAILS

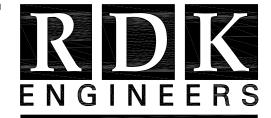
FA0.0



DEMOLITION NOTES:

- AND ARE NOT INTENDED TO SHOW ALL ITEMS TO BE REMOVED OR RETAINED.
- ACTUAL CONDITIONS AND EXTENT OF THE WORK.
- REPRESENTATIVE.
- HIDDEN CONDITIONS ENCOUNTERED DURING THE DEMOLITION.
- OWNER.
- MEASURES TO PREVENT WINDBLOWN DUST.
- INCLUDED IN THIS CONTRACT.
- 8. AFFECTED.
- DE-ENERGIZED AND LABELED SPARE.
- TESTED AND APPROVED BY THE AUTHORITY HAVING JURISDICTION.
- THE PROJECT.

(H) XM	(H) _{XM}		
	C EXISTING	(H) XM	(H) XM
 (H) XM	H	(H) XM	H
资×			
(H) XM	(H) _{XM}	(H) XM	(H) XM



Andover, MA - Boston, MA - Amherst, MA Durham, NC - Charlotte, NC

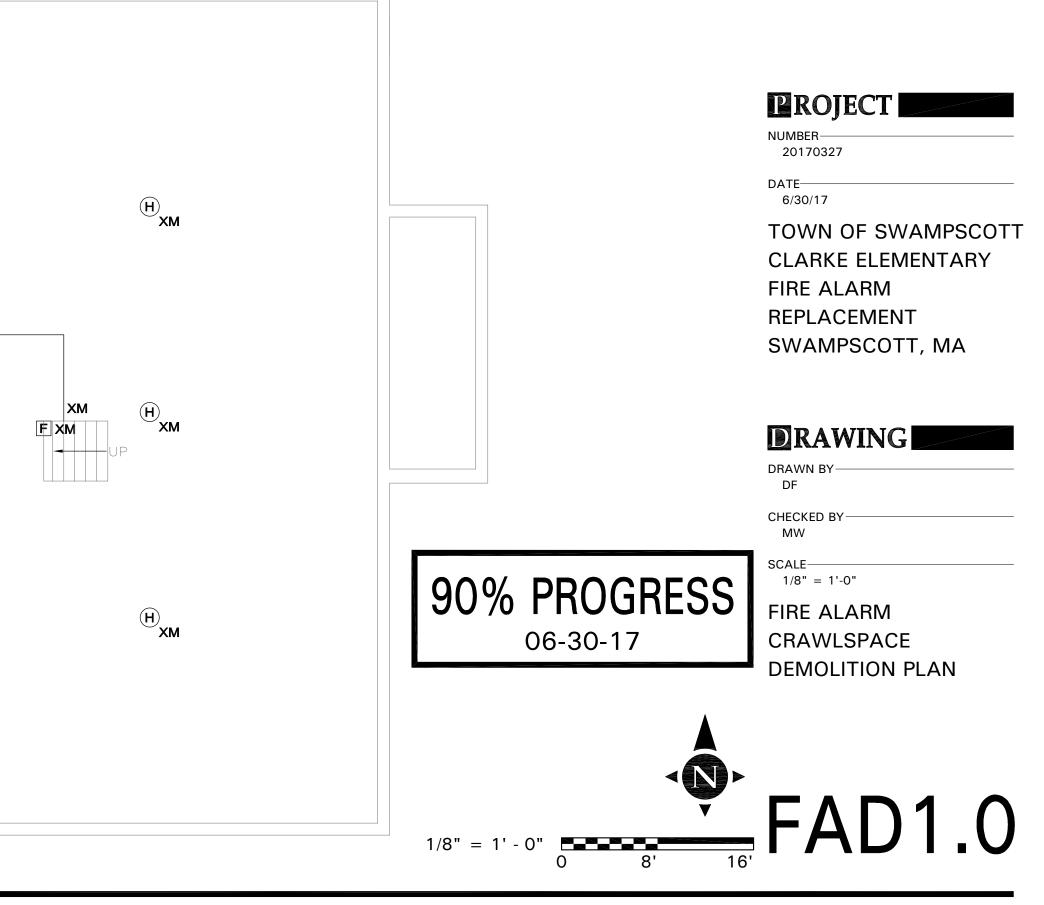
RDK Engineers 200 Brickstone Square Andover, MA 01810-1488

T.978-296-6200 F.978-296-6201 W. www.rdkengineers.com

This CADD Document is an instrument of professional service, and shall not be used, in whole or in part, for any project other than for which it was created without the expressed, written consent of the RDK Engineers. Any unauthorized use, reuse, modification or alteration, including automated conversion of this document shall be at the user's sole risk without liability or legal exposure to the RDK Engineers.



SEAL



1. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXTENT OF THE DEMOLITION SCOPE OF WORK AND AREA. THE DEMOLITION PLANS INDICATE THE GENERAL INTENT

2. VISIT THE SITE PRIOR TO SUBMISSION OF THE BIDS TO BECOME FAMILIAR WITH THE

3. TRACE AND LABEL ALL EXISTING SYSTEMS WITHIN THE DEMOLITION AREA AND BEYOND PRIOR TO DISCONNECTION AND REMOVAL TO ENSURE THAT NO AREA OUTSIDE THE DEMOLITION AREA IS AFFECTED. REVIEW IN DETAIL WITH THE GENERAL CONTRACTOR AND OWNER WHAT IS TO BE REMOVED AND REMAIN PRIOR TO WORK COMMENCING THE DEMOLITION. THERE SHALL BE NO INTERRUPTION OF SERVICES OUTSIDE THE DEMOLITION AREA WITHOUT APPROVAL FROM THE OWNER'S

4. NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY OF ANY UNANTICIPATED

5. ALL ITEMS REMOVED SHALL BE OFFERED TO THE OWNER FOR SALVAGE. IF THE OWNER DOES NOT TAKE POSSESSION, DISPOSE OF THE ITEMS IN A SAFE AND LEGAL MANNER. ALL ITEMS CLASSIFIED AS HAZARDOUS SHALL BE DISPOSED AS HAZARDOUS WASTES AND A UNIFORM HAZARDOUS WASTE MANIFEST SHALL BE PROVIDED TO THE

6. ENSURE THE SAFE PASSAGE OF PERSONS IN AND AROUND THE BUILDING DURING DEMOLITION. PREVENT INJURY TO PERSONS AND DAMAGE TO PROPERTY. PROVIDE ADEQUATE SHORING AND BRACING TO PREVENT COLLAPSE. IMMEDIATELY REPAIR DAMAGED PROPERTY TO THE CONDITION BEFORE BEING DAMAGED. TAKE EFFECTIVE

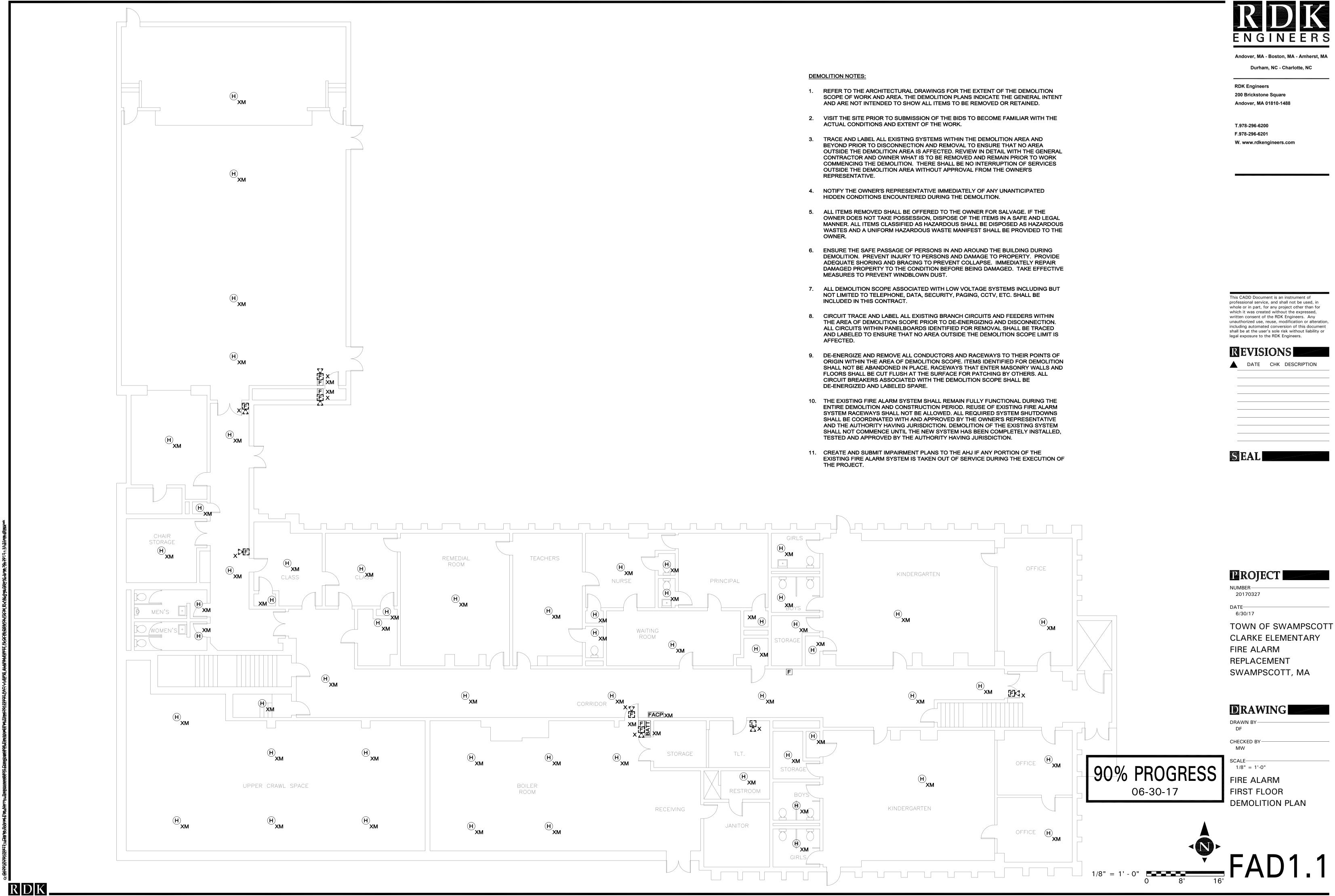
7. ALL DEMOLITION SCOPE ASSOCIATED WITH LOW VOLTAGE SYSTEMS INCLUDING BUT NOT LIMITED TO TELEPHONE, DATA, SECURITY, PAGING, CCTV, ETC. SHALL BE

CIRCUIT TRACE AND LABEL ALL EXISTING BRANCH CIRCUITS AND FEEDERS WITHIN THE AREA OF DEMOLITION SCOPE PRIOR TO DE-ENERGIZING AND DISCONNECTION. ALL CIRCUITS WITHIN PANELBOARDS IDENTIFIED FOR REMOVAL SHALL BE TRACED AND LABELED TO ENSURE THAT NO AREA OUTSIDE THE DEMOLITION SCOPE LIMIT IS

9. DE-ENERGIZE AND REMOVE ALL CONDUCTORS AND RACEWAYS TO THEIR POINTS OF ORIGIN WITHIN THE AREA OF DEMOLITION SCOPE. ITEMS IDENTIFIED FOR DEMOLITION SHALL NOT BE ABANDONED IN PLACE. RACEWAYS THAT ENTER MASONRY WALLS AND FLOORS SHALL BE CUT FLUSH AT THE SURFACE FOR PATCHING BY OTHERS. ALL CIRCUIT BREAKERS ASSOCIATED WITH THE DEMOLITION SCOPE SHALL BE

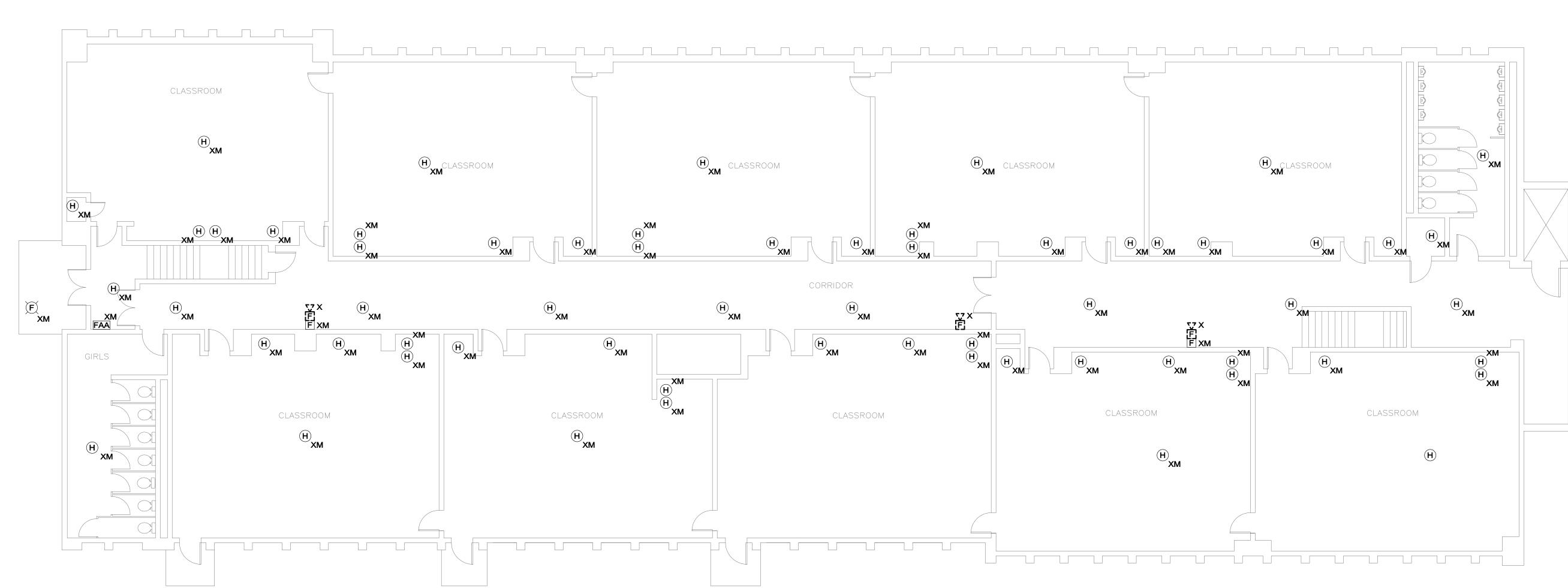
10. THE EXISTING FIRE ALARM SYSTEM SHALL REMAIN FULLY FUNCTIONAL DURING THE ENTIRE DEMOLITION AND CONSTRUCTION PERIOD. REUSE OF EXISTING FIRE ALARM SYSTEM RACEWAYS SHALL NOT BE ALLOWED. ALL REQUIRED SYSTEM SHUTDOWNS SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER'S REPRESENTATIVE AND THE AUTHORITY HAVING JURISDICTION. DEMOLITION OF THE EXISTING SYSTEM SHALL NOT COMMENCE UNTIL THE NEW SYSTEM HAS BEEN COMPLETELY INSTALLED,

11. CREATE AND SUBMIT IMPAIRMENT PLANS TO THE AHJ IF ANY PORTION OF THE EXISTING FIRE ALARM SYSTEM IS TAKEN OUT OF SERVICE DURING THE EXECUTION OF





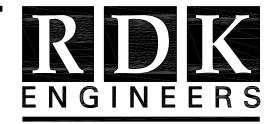




RDK

DEMOLITION NOTES:

- ACTUAL CONDITIONS AND EXTENT OF THE WORK.
- REPRESENTATIVE.
- HIDDEN CONDITIONS ENCOUNTERED DURING THE DEMOLITION.
- OWNER.
- MEASURES TO PREVENT WINDBLOWN DUST.
- INCLUDED IN THIS CONTRACT.
- AFFECTED.
- DE-ENERGIZED AND LABELED SPARE.
- 11. CREATE AND SUBMIT IMPAIRMENT PLANS TO THE AHJ IF ANY PORTION OF THE THE PROJECT.

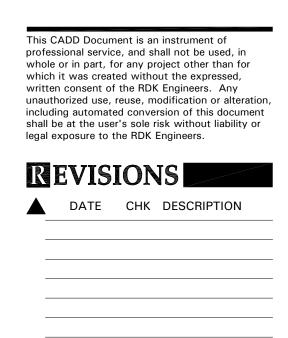


Andover, MA - Boston, MA - Amherst, MA Durham, NC - Charlotte, NC

RDK Engineers 200 Brickstone Square

Andover, MA 01810-1488

T.978-296-6200 F.978-296-6201 W. www.rdkengineers.com



SEAL

PROJECT

NUMBFR-20170327

DATE----6/30/17

TOWN OF SWAMPSCOTT CLARKE ELEMENTARY FIRE ALARM REPLACEMENT SWAMPSCOTT, MA

DRAWING

DRAWN BY DF

CHECKED BY MW

SCALE-1/8" = 1'-0"

FIRE ALARM SECOND FLOOR DEMOLITION PLAN

06-30-17

1. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXTENT OF THE DEMOLITION SCOPE OF WORK AND AREA. THE DEMOLITION PLANS INDICATE THE GENERAL INTENT AND ARE NOT INTENDED TO SHOW ALL ITEMS TO BE REMOVED OR RETAINED.

2. VISIT THE SITE PRIOR TO SUBMISSION OF THE BIDS TO BECOME FAMILIAR WITH THE

3. TRACE AND LABEL ALL EXISTING SYSTEMS WITHIN THE DEMOLITION AREA AND BEYOND PRIOR TO DISCONNECTION AND REMOVAL TO ENSURE THAT NO AREA OUTSIDE THE DEMOLITION AREA IS AFFECTED. REVIEW IN DETAIL WITH THE GENERAL CONTRACTOR AND OWNER WHAT IS TO BE REMOVED AND REMAIN PRIOR TO WORK COMMENCING THE DEMOLITION. THERE SHALL BE NO INTERRUPTION OF SERVICES OUTSIDE THE DEMOLITION AREA WITHOUT APPROVAL FROM THE OWNER'S

4. NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY OF ANY UNANTICIPATED

5. ALL ITEMS REMOVED SHALL BE OFFERED TO THE OWNER FOR SALVAGE. IF THE OWNER DOES NOT TAKE POSSESSION, DISPOSE OF THE ITEMS IN A SAFE AND LEGAL MANNER. ALL ITEMS CLASSIFIED AS HAZARDOUS SHALL BE DISPOSED AS HAZARDOUS WASTES AND A UNIFORM HAZARDOUS WASTE MANIFEST SHALL BE PROVIDED TO THE

6. ENSURE THE SAFE PASSAGE OF PERSONS IN AND AROUND THE BUILDING DURING DEMOLITION. PREVENT INJURY TO PERSONS AND DAMAGE TO PROPERTY. PROVIDE ADEQUATE SHORING AND BRACING TO PREVENT COLLAPSE. IMMEDIATELY REPAIR DAMAGED PROPERTY TO THE CONDITION BEFORE BEING DAMAGED. TAKE EFFECTIVE

7. ALL DEMOLITION SCOPE ASSOCIATED WITH LOW VOLTAGE SYSTEMS INCLUDING BUT NOT LIMITED TO TELEPHONE, DATA, SECURITY, PAGING, CCTV, ETC. SHALL BE

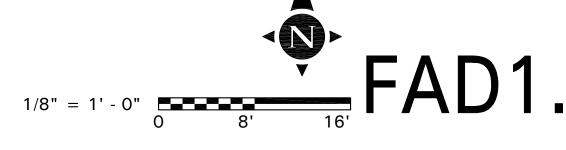
8. CIRCUIT TRACE AND LABEL ALL EXISTING BRANCH CIRCUITS AND FEEDERS WITHIN THE AREA OF DEMOLITION SCOPE PRIOR TO DE-ENERGIZING AND DISCONNECTION. ALL CIRCUITS WITHIN PANELBOARDS IDENTIFIED FOR REMOVAL SHALL BE TRACED AND LABELED TO ENSURE THAT NO AREA OUTSIDE THE DEMOLITION SCOPE LIMIT IS

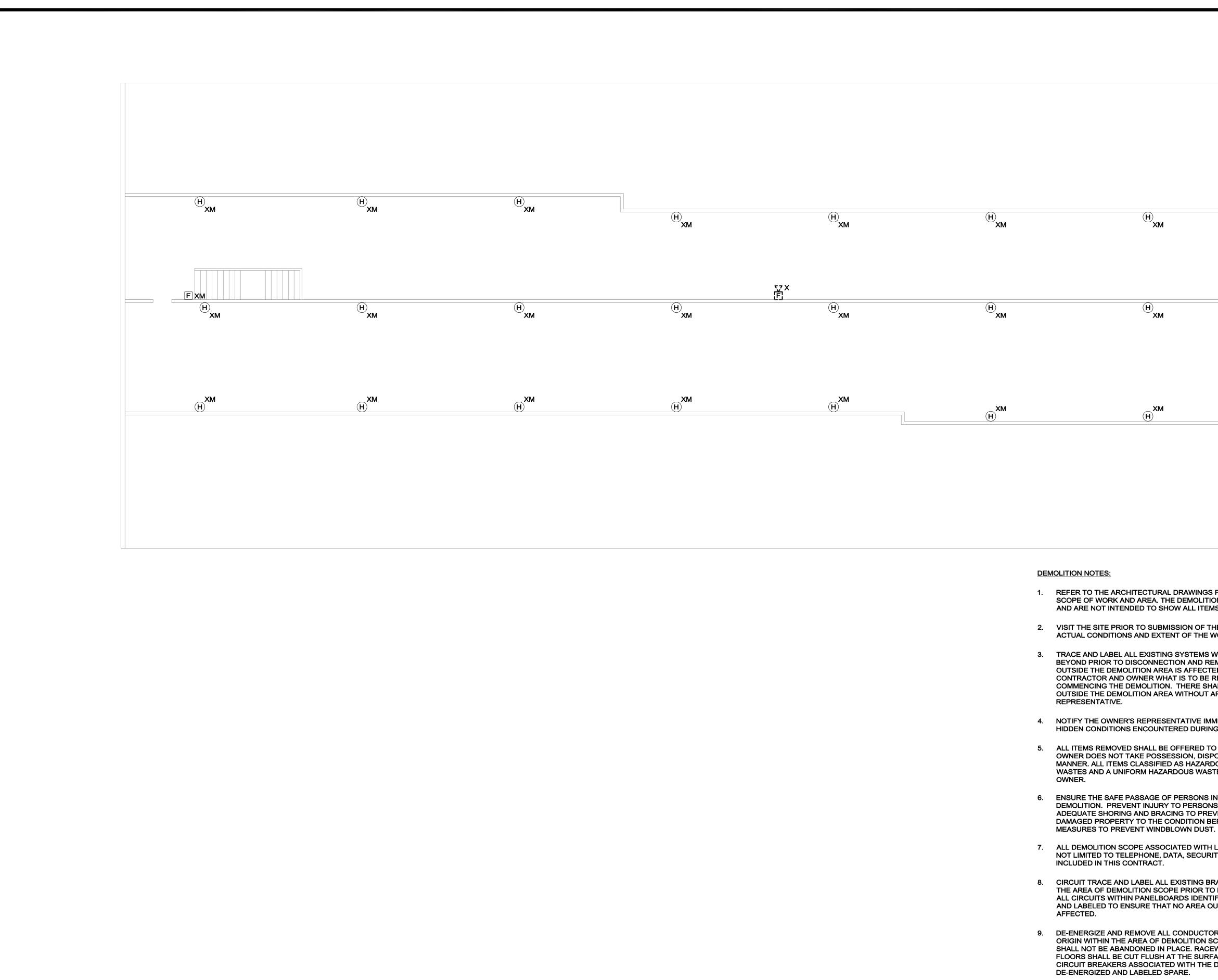
9. DE-ENERGIZE AND REMOVE ALL CONDUCTORS AND RACEWAYS TO THEIR POINTS OF ORIGIN WITHIN THE AREA OF DEMOLITION SCOPE. ITEMS IDENTIFIED FOR DEMOLITION SHALL NOT BE ABANDONED IN PLACE. RACEWAYS THAT ENTER MASONRY WALLS AND FLOORS SHALL BE CUT FLUSH AT THE SURFACE FOR PATCHING BY OTHERS. ALL CIRCUIT BREAKERS ASSOCIATED WITH THE DEMOLITION SCOPE SHALL BE

10. THE EXISTING FIRE ALARM SYSTEM SHALL REMAIN FULLY FUNCTIONAL DURING THE ENTIRE DEMOLITION AND CONSTRUCTION PERIOD. REUSE OF EXISTING FIRE ALARM SYSTEM RACEWAYS SHALL NOT BE ALLOWED. ALL REQUIRED SYSTEM SHUTDOWNS SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER'S REPRESENTATIVE AND THE AUTHORITY HAVING JURISDICTION. DEMOLITION OF THE EXISTING SYSTEM SHALL NOT COMMENCE UNTIL THE NEW SYSTEM HAS BEEN COMPLETELY INSTALLED, TESTED AND APPROVED BY THE AUTHORITY HAVING JURISDICTION.

EXISTING FIRE ALARM SYSTEM IS TAKEN OUT OF SERVICE DURING THE EXECUTION OF

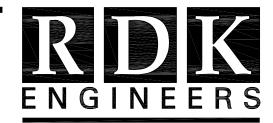
90% PROGRESS





- ACTUAL CONDITIONS AND EXTENT OF THE WORK.
- HIDDEN CONDITIONS ENCOUNTERED DURING THE DEMOLITION.

- DE-ENERGIZED AND LABELED SPARE.
- 11. CREATE AND SUBMIT IMPAIRMENT PLANS TO THE AHJ IF ANY PORTION OF THE THE PROJECT.



Andover, MA - Boston, MA - Amherst, MA Durham, NC - Charlotte, NC

RDK Engineers 200 Brickstone Square Andover, MA 01810-1488

T.978-296-6200 F.978-296-6201 W. www.rdkengineers.com

H H (H) XM

1. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXTENT OF THE DEMOLITION SCOPE OF WORK AND AREA. THE DEMOLITION PLANS INDICATE THE GENERAL INTENT AND ARE NOT INTENDED TO SHOW ALL ITEMS TO BE REMOVED OR RETAINED.

2. VISIT THE SITE PRIOR TO SUBMISSION OF THE BIDS TO BECOME FAMILIAR WITH THE

3. TRACE AND LABEL ALL EXISTING SYSTEMS WITHIN THE DEMOLITION AREA AND BEYOND PRIOR TO DISCONNECTION AND REMOVAL TO ENSURE THAT NO AREA OUTSIDE THE DEMOLITION AREA IS AFFECTED. REVIEW IN DETAIL WITH THE GENERAL CONTRACTOR AND OWNER WHAT IS TO BE REMOVED AND REMAIN PRIOR TO WORK COMMENCING THE DEMOLITION. THERE SHALL BE NO INTERRUPTION OF SERVICES OUTSIDE THE DEMOLITION AREA WITHOUT APPROVAL FROM THE OWNER'S

4. NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY OF ANY UNANTICIPATED

5. ALL ITEMS REMOVED SHALL BE OFFERED TO THE OWNER FOR SALVAGE. IF THE OWNER DOES NOT TAKE POSSESSION, DISPOSE OF THE ITEMS IN A SAFE AND LEGAL MANNER. ALL ITEMS CLASSIFIED AS HAZARDOUS SHALL BE DISPOSED AS HAZARDOUS WASTES AND A UNIFORM HAZARDOUS WASTE MANIFEST SHALL BE PROVIDED TO THE

6. ENSURE THE SAFE PASSAGE OF PERSONS IN AND AROUND THE BUILDING DURING DEMOLITION. PREVENT INJURY TO PERSONS AND DAMAGE TO PROPERTY. PROVIDE ADEQUATE SHORING AND BRACING TO PREVENT COLLAPSE. IMMEDIATELY REPAIR DAMAGED PROPERTY TO THE CONDITION BEFORE BEING DAMAGED. TAKE EFFECTIVE

7. ALL DEMOLITION SCOPE ASSOCIATED WITH LOW VOLTAGE SYSTEMS INCLUDING BUT NOT LIMITED TO TELEPHONE, DATA, SECURITY, PAGING, CCTV, ETC. SHALL BE

8. CIRCUIT TRACE AND LABEL ALL EXISTING BRANCH CIRCUITS AND FEEDERS WITHIN THE AREA OF DEMOLITION SCOPE PRIOR TO DE-ENERGIZING AND DISCONNECTION. ALL CIRCUITS WITHIN PANELBOARDS IDENTIFIED FOR REMOVAL SHALL BE TRACED AND LABELED TO ENSURE THAT NO AREA OUTSIDE THE DEMOLITION SCOPE LIMIT IS

9. DE-ENERGIZE AND REMOVE ALL CONDUCTORS AND RACEWAYS TO THEIR POINTS OF ORIGIN WITHIN THE AREA OF DEMOLITION SCOPE. ITEMS IDENTIFIED FOR DEMOLITION SHALL NOT BE ABANDONED IN PLACE. RACEWAYS THAT ENTER MASONRY WALLS AND FLOORS SHALL BE CUT FLUSH AT THE SURFACE FOR PATCHING BY OTHERS. ALL CIRCUIT BREAKERS ASSOCIATED WITH THE DEMOLITION SCOPE SHALL BE

10. THE EXISTING FIRE ALARM SYSTEM SHALL REMAIN FULLY FUNCTIONAL DURING THE ENTIRE DEMOLITION AND CONSTRUCTION PERIOD. REUSE OF EXISTING FIRE ALARM SYSTEM RACEWAYS SHALL NOT BE ALLOWED. ALL REQUIRED SYSTEM SHUTDOWNS SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER'S REPRESENTATIVE AND THE AUTHORITY HAVING JURISDICTION. DEMOLITION OF THE EXISTING SYSTEM SHALL NOT COMMENCE UNTIL THE NEW SYSTEM HAS BEEN COMPLETELY INSTALLED, TESTED AND APPROVED BY THE AUTHORITY HAVING JURISDICTION.

EXISTING FIRE ALARM SYSTEM IS TAKEN OUT OF SERVICE DURING THE EXECUTION OF

90% PROGRESS 06-30-17

whole or in part, for any project other than for which it was created without the expressed, written consent of the RDK Engineers. Any unauthorized use, reuse, modification or alteration, including automated conversion of this document shall be at the user's sole risk without liability or legal exposure to the RDK Engineers. REVISIONS

This CADD Document is an instrument of

professional service, and shall not be used, in

DATE CHK DESCRIPTION

SEAL

PROJECT

NUMBFR-20170327

DATE----6/30/17

TOWN OF SWAMPSCOTT CLARKE ELEMENTARY FIRE ALARM REPLACEMENT SWAMPSCOTT, MA

DRAWING

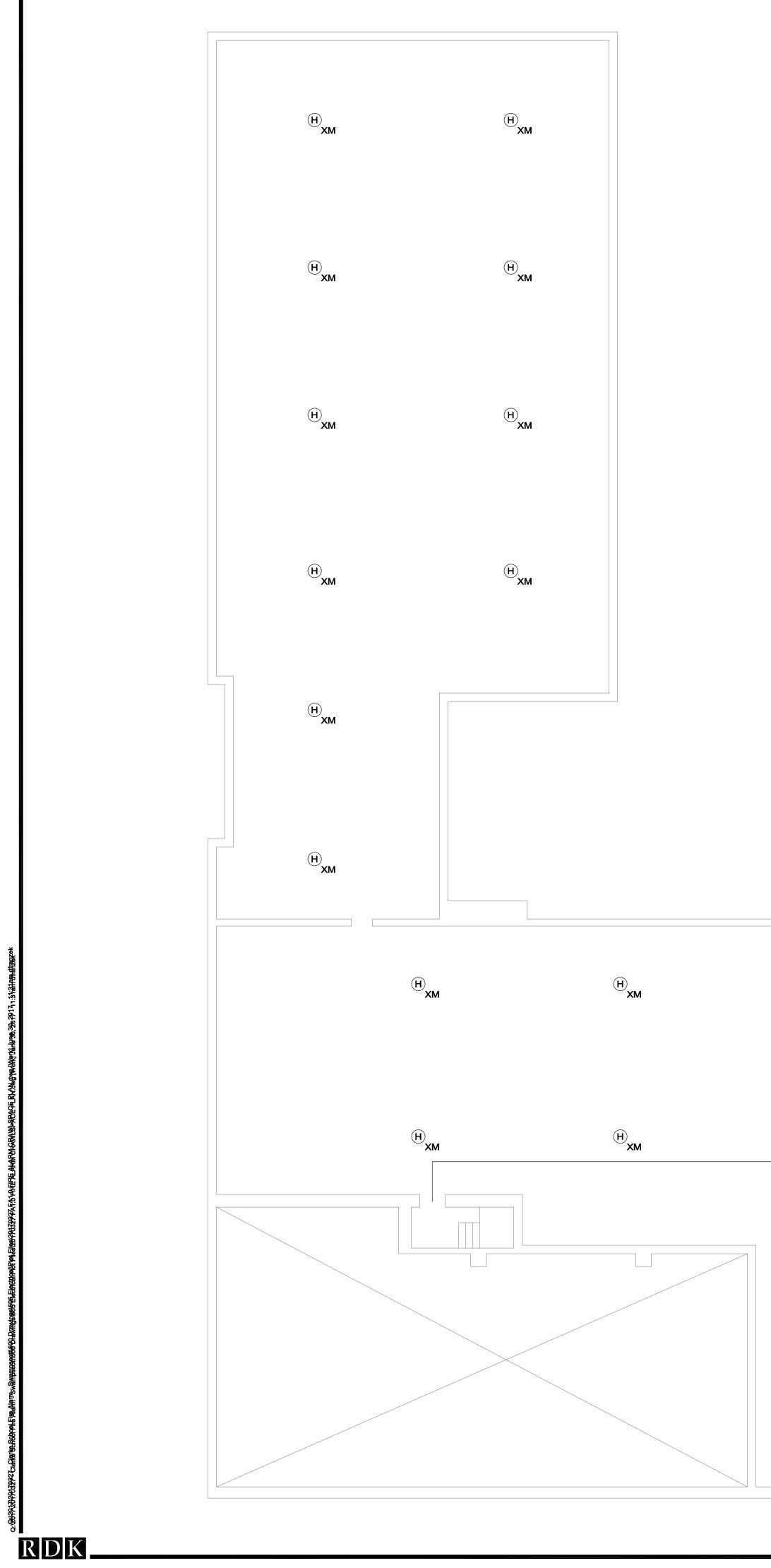
DRAWN BY DF

CHECKED BY MW

SCALE-1/8" = 1'-0"

FIRE ALARM ATTIC DEMOLITION PLAN

.3



FIRE ALARM NOTES:

1. REFER TO DRAWING E0.00 FOR LEGEND, SYMBOLS AND GENERAL NOTES.

2. REFER TO ARCHITECTURAL DRAWINGS FOR ASSOCIATED NOTES, MOUNTING DETAILS, HEIGHTS AND EXACT LOCATIONS OF ALL DEVICES.

3. FIRE ALARM BRANCH CIRCUITRY SHALL BE INSTALLED IN CONDUIT FROM THE PANEL TO THE FIRST DEVICE AND/OR WHERE EXPOSED. FIRE ALARM BRANCH CIRCUITRY MAY BE TYPE MC CABLE WHERE CONCEALED ABOVE SUSPENDED CEILINGS AND IN METAL STUD WALLS.

4. MC CABLE FOR FIRE ALARM SERVICE SHALL HAVE A RED IDENTIFIER ALONG ITS ENTIRE LENGTH. JUNCTION BOX COVERS AND CONDUIT COUPLINGS FOR ALL FIRE ALARM WIRING RACEWAYS SHALL BE PAINTED RED PRIOR TO INSTALLATION.

5. MAINTAIN CONTINUITY OF BRANCH CIRCUITRY ASSOCIATED WITH ALL EXISTING FIRE ALARM DEVICES TO REMAIN.

(H) XM	(H) XM			
		- EXISTING	H	H
(H) XM	H	PROTECTOWIRE	Э	H
S				
(H) XM	Эхм		Э	H _{XM}



Andover, MA - Boston, MA - Amherst, MA Durham, NC - Charlotte, NC

RDK Engineers 200 Brickstone Square Andover, MA 01810-1488

T.978-296-6200 F.978-296-6201 W. www.rdkengineers.com

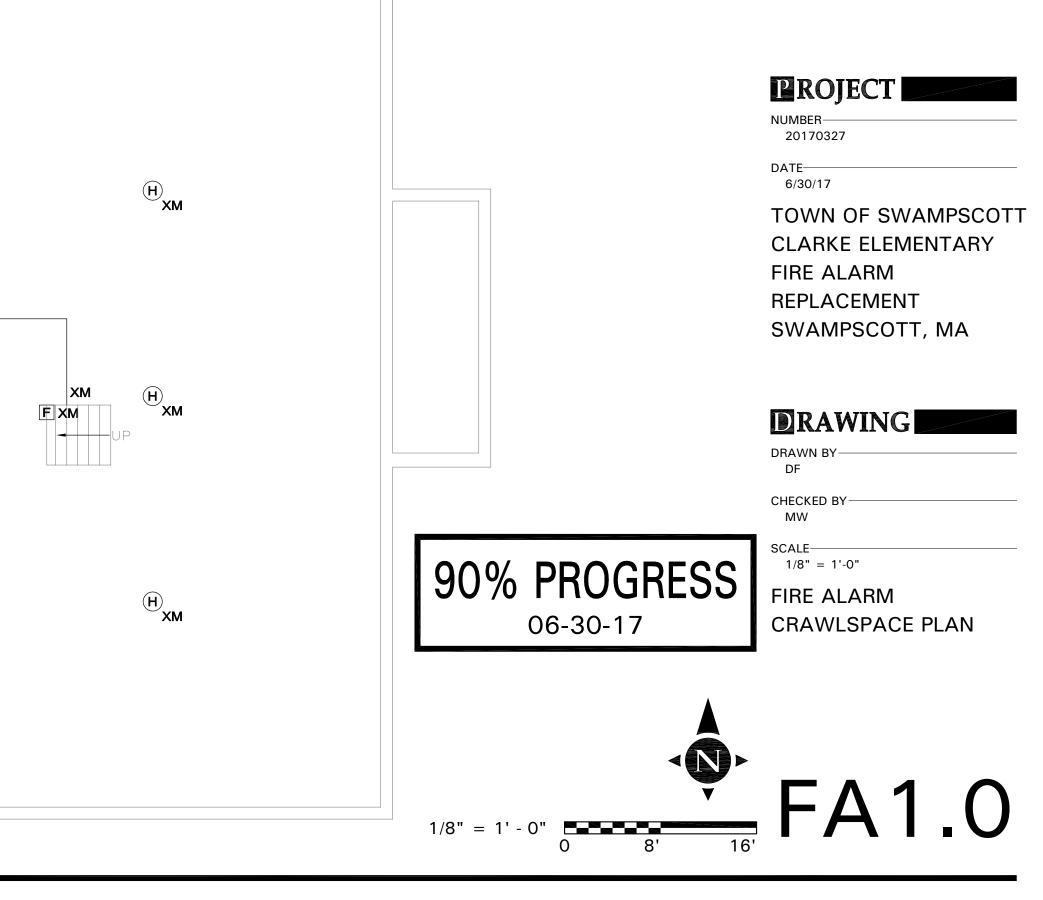
This CADD Document is an instrument of professional service, and shall not be used, in whole or in part, for any project other than for which it was created without the expressed, written consent of the RDK Engineers. Any unauthorized use, reuse, modification or alteration, including automated conversion of this document shall be at the user's sole risk without liability or legal exposure to the RDK Engineers.

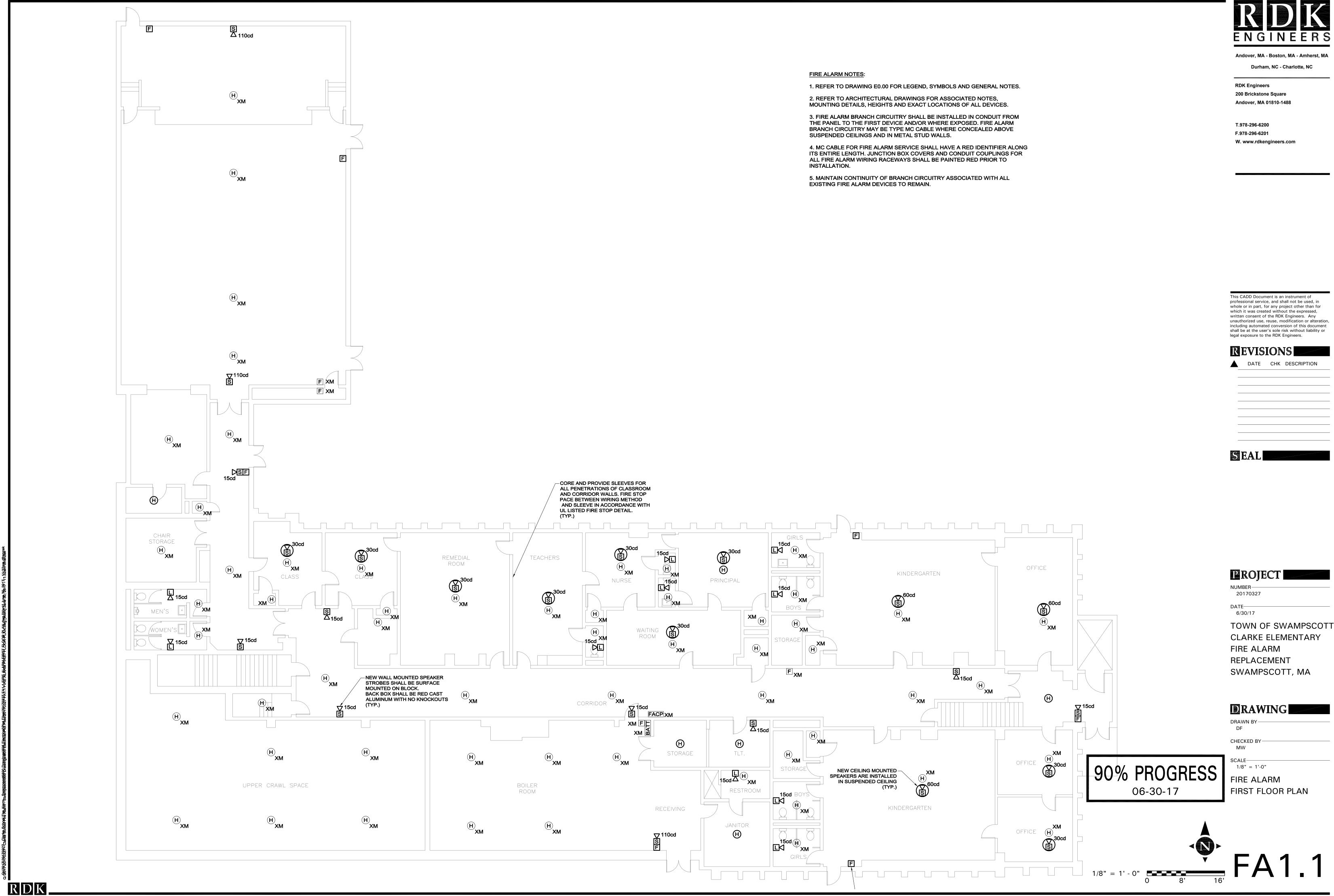
REVISIONS DATE CHK DESCRIPTION

> _____ _____

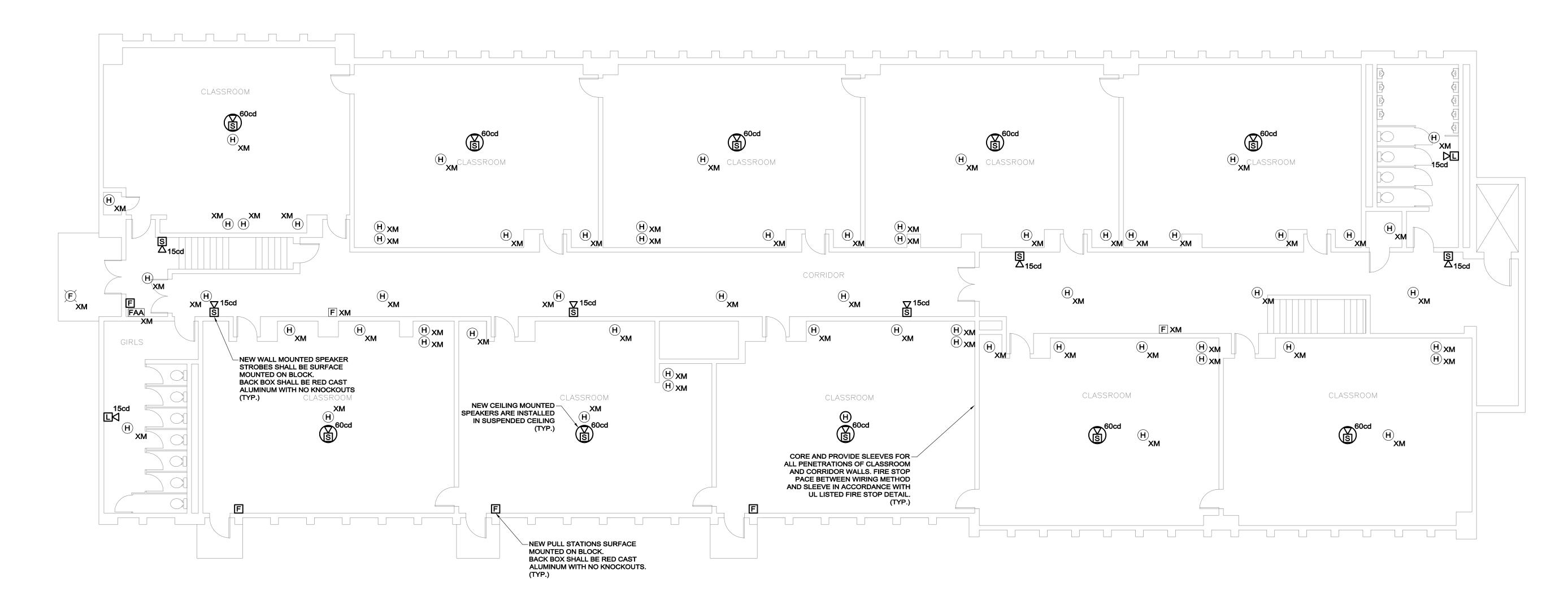
_____ _____ ------

SEAL











FIRE ALARM NOTES:

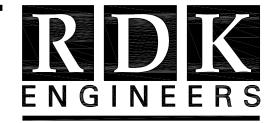
1. REFER TO DRAWING E0.00 FOR LEGEND, SYMBOLS AND GENERAL NOTES.

2. REFER TO ARCHITECTURAL DRAWINGS FOR ASSOCIATED NOTES, MOUNTING DETAILS, HEIGHTS AND EXACT LOCATIONS OF ALL DEVICES.

3. FIRE ALARM BRANCH CIRCUITRY SHALL BE INSTALLED IN CONDUIT FROM THE PANEL TO THE FIRST DEVICE AND/OR WHERE EXPOSED. FIRE ALARM BRANCH CIRCUITRY MAY BE TYPE MC CABLE WHERE CONCEALED ABOVE SUSPENDED CEILINGS AND IN METAL STUD WALLS.

4. MC CABLE FOR FIRE ALARM SERVICE SHALL HAVE A RED IDENTIFIER ALONG ITS ENTIRE LENGTH. JUNCTION BOX COVERS AND CONDUIT COUPLINGS FOR ALL FIRE ALARM WIRING RACEWAYS SHALL BE PAINTED RED PRIOR TO INSTALLATION.

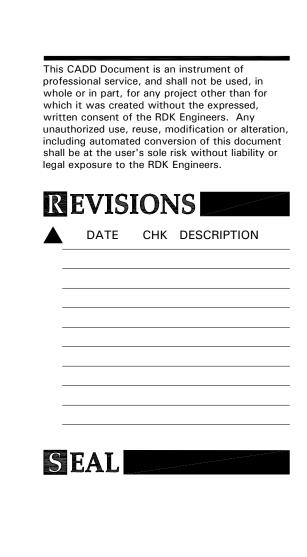
5. MAINTAIN CONTINUITY OF BRANCH CIRCUITRY ASSOCIATED WITH ALL EXISTING FIRE ALARM DEVICES TO REMAIN.



Andover, MA - Boston, MA - Amherst, MA Durham, NC - Charlotte, NC

RDK Engineers 200 Brickstone Square Andover, MA 01810-1488

T.978-296-6200 F.978-296-6201 W. www.rdkengineers.com



PROJECT

NUMBER-20170327

DATE 6/30/17

TOWN OF SWAMPSCOTT CLARKE ELEMENTARY FIRE ALARM REPLACEMENT SWAMPSCOTT, MA

DRAWING

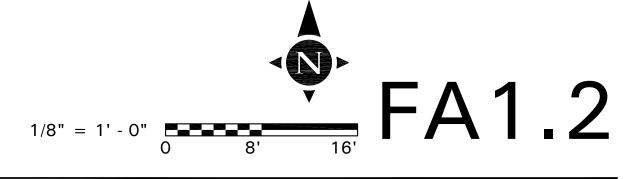
DRAWN BY DF

CHECKED BY MW

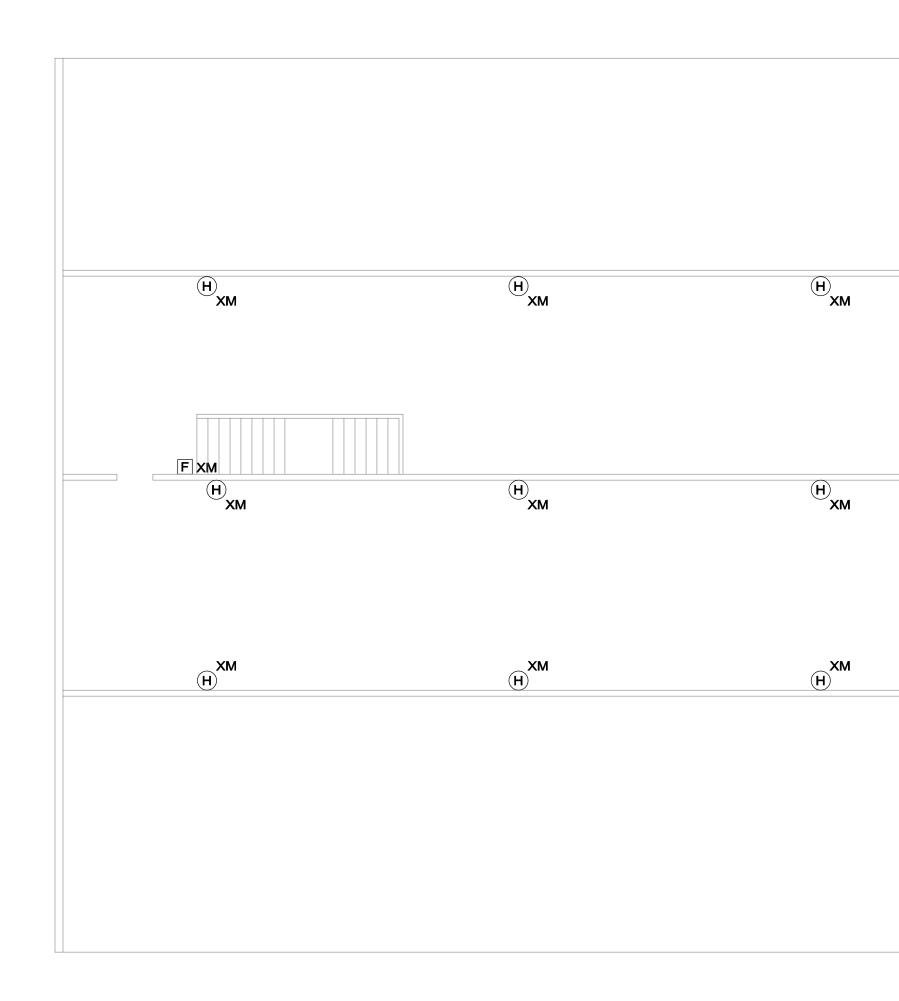
SCALE-----1/8" = 1'-0"

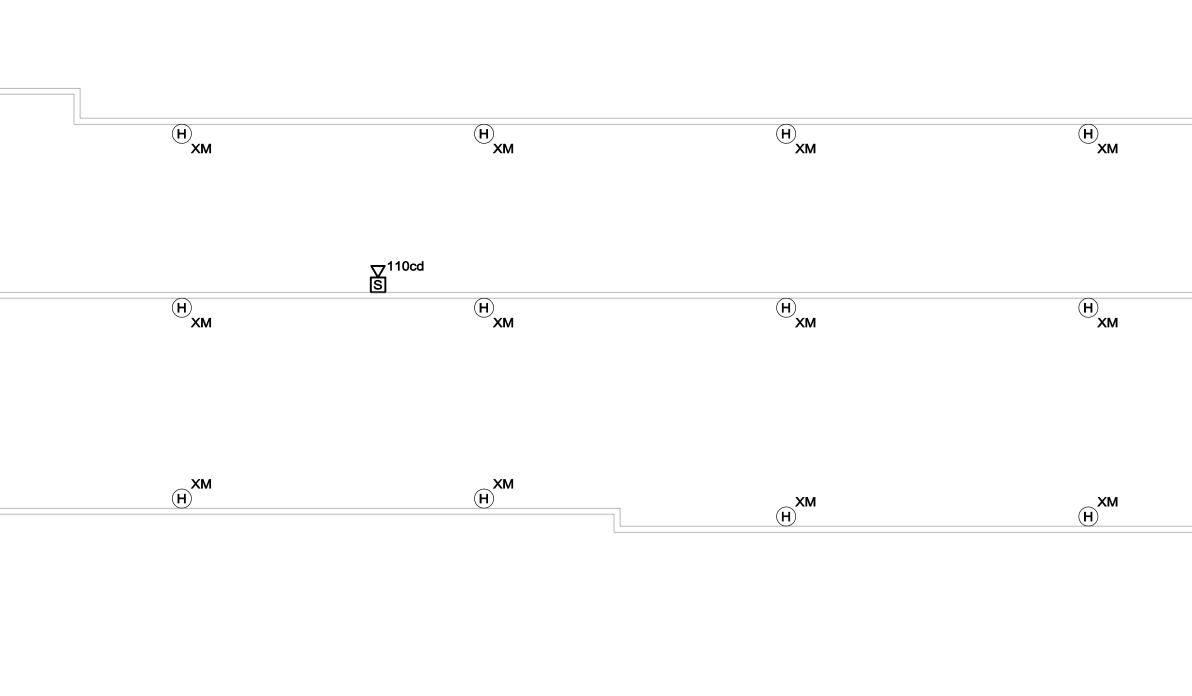
FIRE ALARM SECOND FLOOR PLAN

90% PROGRESS 06-30-17









FIRE ALARM NOTES:

1. REFER TO DRAWING E0.00 FOR LEGEND, SYMBOLS AND GENERAL NOTES.

2. REFER TO ARCHITECTURAL DRAWINGS FOR ASSOCIATED NOTES, MOUNTING DETAILS, HEIGHTS AND EXACT LOCATIONS OF ALL DEVICES.

3. FIRE ALARM BRANCH CIRCUITRY SHALL BE INSTALLED IN CONDUIT FROM THE PANEL TO THE FIRST DEVICE AND/OR WHERE EXPOSED. FIRE ALARM BRANCH CIRCUITRY MAY BE TYPE MC CABLE WHERE CONCEALED ABOVE SUSPENDED CEILINGS AND IN METAL STUD WALLS.

4. MC CABLE FOR FIRE ALARM SERVICE SHALL HAVE A RED IDENTIFIER ALONG ITS ENTIRE LENGTH. JUNCTION BOX COVERS AND CONDUIT COUPLINGS FOR ALL FIRE ALARM WIRING RACEWAYS SHALL BE PAINTED RED PRIOR TO INSTALLATION.

5. MAINTAIN CONTINUITY OF BRANCH CIRCUITRY ASSOCIATED WITH ALL EXISTING FIRE ALARM DEVICES TO REMAIN.



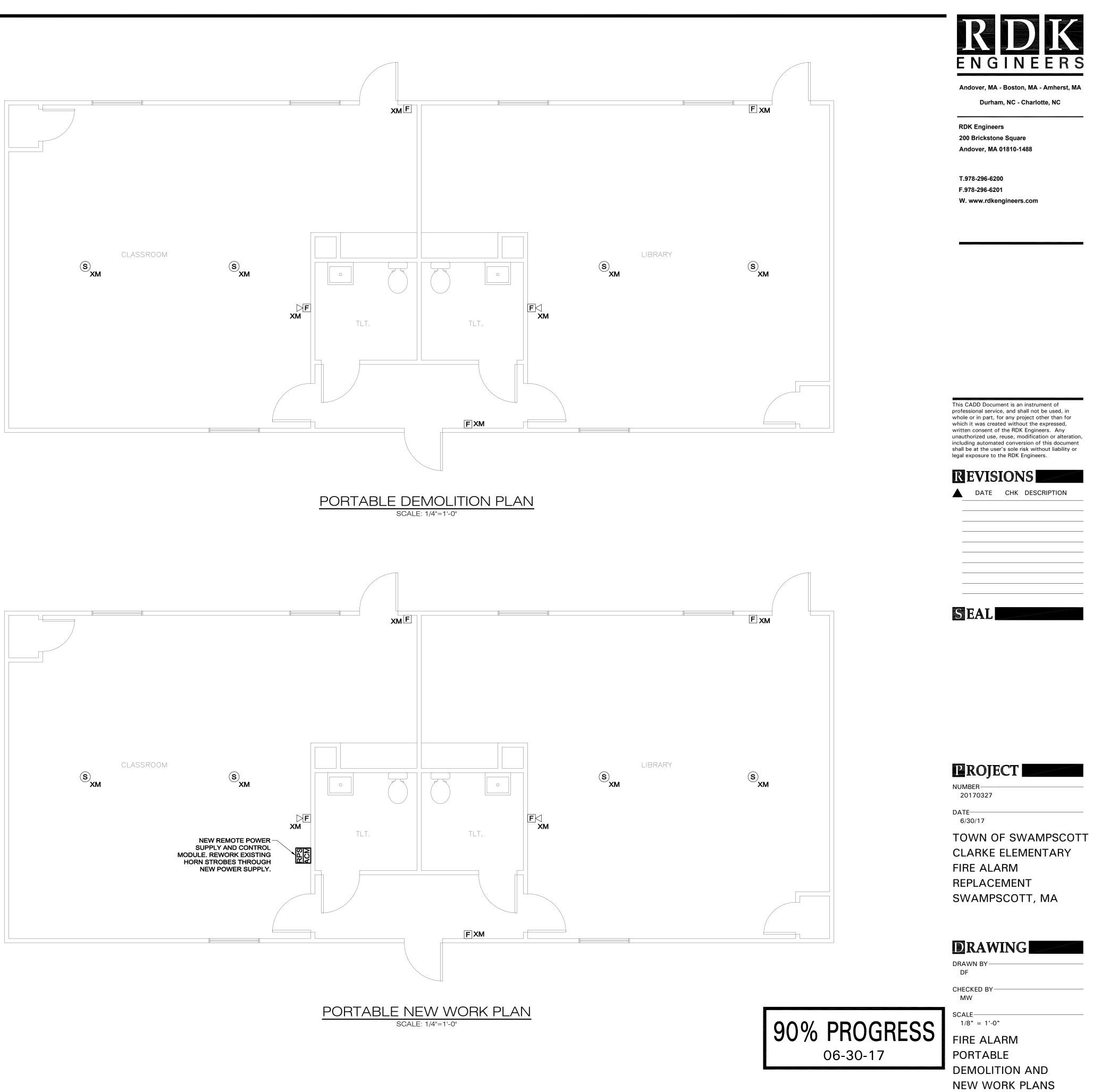
Andover, MA - Boston, MA - Amherst, MA Durham, NC - Charlotte, NC

RDK Engineers 200 Brickstone Square Andover, MA 01810-1488

T.978-296-6200 F.978-296-6201 W. www.rdkengineers.com



RDK.



1/4" = 1' - 0" ______ H' ____ FA2.0

																				S	YST	ΈМ	0
													Γ					IA1		T		NO	
					D TO	THUR DULL I	T TUMO T TOW	T 2 CV TY ON TO CO TO CO TO	AF CO BY C C C C C C C C C C C C C C C C C C	AT STATE OF SO ST OF	12 30 20 00 00 00 00 00 00 00 00 00 00 00 00			2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	A A A A A A A A A A A A A A A A A A A	12 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	A COLOCE AND COLOCE	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	0, 10, 00, 00, 00, 00, 00, 00, 00, 00, 0	1 X	S CONCERCINA CONCERCIN	A STORES
	SYSTEM INPUTS									У I К		<u></u>					2 2 2 3	Т Т	U U	V M		<u></u>	s' SJ
			\ L				10		• •			N A	- IN -									$\mathbf{Y} \perp \mathbf{Z}$	Γ
1	MANUAL FIRE ALARM BOXES - CRAWLSPACE) 0				•			0	L	M	N					•	0		/ X	Y Z	:
1 2	MANUAL FIRE ALARM BOXES - CRAWLSPACE MANUAL FIRE ALARM BOXES - 1ST FLOOR		•)				•				-		•				•				Y Z	
_		•) 0	•						0		-		•		•		•				<u>Y</u> Z	
3	MANUAL FIRE ALARM BOXES - 1ST FLOOR	• •) 0)))				•		• • •		•	• • •	•		• • •		•				Y Z	
1 2 3 4 5	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR	0 0 0)))				•	•	• • •		•	• • •			• • •		• • •					
3 4 5	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR MANUAL FIRE ALARM BOXES - ATTIC	0 0 0 0))))				•	>	• • • •		•	• • •			• • • •		• • •				<u>Y</u> Z	
3 4 5 6 7	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR MANUAL FIRE ALARM BOXES - ATTIC SMOKE DETECTORS - 1ST FLOOR SMOKE DETECTORS - 2ND FLOOR HEAT DETECTOR - CRAWLSPACE	0 0 0 0 0)				•	>	• • • • •		•	• • • • • • • • • • • • • • • • • • • •			0 0 0 0		• • • •					
3 4 5 6 7 8	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR MANUAL FIRE ALARM BOXES - ATTIC SMOKE DETECTORS - 1ST FLOOR SMOKE DETECTORS - 2ND FLOOR HEAT DETECTOR - CRAWLSPACE HEAT DETECTOR - 1ST FLOOR)))))))))			•		>			•	• • • • •			0 0 0 0		• •					
3 4 5 6 7 8 9	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR MANUAL FIRE ALARM BOXES - ATTIC SMOKE DETECTORS - 1ST FLOOR SMOKE DETECTORS - 2ND FLOOR HEAT DETECTOR - CRAWLSPACE HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 2ND FLOOR			>			•											• •				Y Z	
3 4 5 6 7 8 9 0	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR MANUAL FIRE ALARM BOXES - ATTIC SMOKE DETECTORS - 1ST FLOOR SMOKE DETECTORS - 2ND FLOOR HEAT DETECTOR - CRAWLSPACE HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 2ND FLOOR HEAT DETECTOR - ATTIC			>			•		>			•						• •					
3 4 5 6 7 8 9 0 1	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR MANUAL FIRE ALARM BOXES - ATTIC SMOKE DETECTORS - 1ST FLOOR SMOKE DETECTORS - 2ND FLOOR HEAT DETECTOR - CRAWLSPACE HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 2ND FLOOR HEAT DETECTOR - ATTIC FIRE ALARM AC POWER FAILURE			>			•											• •					
3 4 5 6 7 8 9 10 11	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR MANUAL FIRE ALARM BOXES - ATTIC SMOKE DETECTORS - 1ST FLOOR SMOKE DETECTORS - 2ND FLOOR HEAT DETECTOR - CRAWLSPACE HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 2ND FLOOR HEAT DETECTOR - ATTIC FIRE ALARM AC POWER FAILURE FIRE ALARM SYSTEM LOW BATTERY			>			•											• •					
3 4 5 6 7 8 9 10 11 12 13	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR MANUAL FIRE ALARM BOXES - ATTIC SMOKE DETECTORS - 1ST FLOOR SMOKE DETECTORS - 2ND FLOOR HEAT DETECTOR - CRAWLSPACE HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 2ND FLOOR HEAT DETECTOR - ATTIC FIRE ALARM AC POWER FAILURE FIRE ALARM SYSTEM LOW BATTERY OPEN CIRCUIT			>			•											• •					
3 4 5 6 7 8 9 10 11 2 3 4	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR MANUAL FIRE ALARM BOXES - ATTIC SMOKE DETECTORS - 1ST FLOOR SMOKE DETECTORS - 2ND FLOOR HEAT DETECTOR - CRAWLSPACE HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 2ND FLOOR HEAT DETECTOR - ATTIC FIRE ALARM AC POWER FAILURE FIRE ALARM SYSTEM LOW BATTERY OPEN CIRCUIT GROUND FAULT			>			•											• •					
3 4 5 6 7 8 9 10 11 12 13 14 15	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR MANUAL FIRE ALARM BOXES - ATTIC SMOKE DETECTORS - 1ST FLOOR SMOKE DETECTORS - 2ND FLOOR HEAT DETECTOR - CRAWLSPACE HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 2ND FLOOR HEAT DETECTOR - ATTIC FIRE ALARM AC POWER FAILURE FIRE ALARM SYSTEM LOW BATTERY OPEN CIRCUIT			>			•											• •					
3 4 5 6 7 8 9 10 11 12 13 14 15 16	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR MANUAL FIRE ALARM BOXES - ATTIC SMOKE DETECTORS - 1ST FLOOR SMOKE DETECTORS - 2ND FLOOR HEAT DETECTOR - CRAWLSPACE HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 2ND FLOOR HEAT DETECTOR - ATTIC FIRE ALARM AC POWER FAILURE FIRE ALARM SYSTEM LOW BATTERY OPEN CIRCUIT GROUND FAULT			>			•											• •					
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR MANUAL FIRE ALARM BOXES - ATTIC SMOKE DETECTORS - 1ST FLOOR SMOKE DETECTORS - 2ND FLOOR HEAT DETECTOR - CRAWLSPACE HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 2ND FLOOR HEAT DETECTOR - ATTIC FIRE ALARM AC POWER FAILURE FIRE ALARM SYSTEM LOW BATTERY OPEN CIRCUIT GROUND FAULT NOTIFICATION APPLIANCE CIRCUIT SHORT			>			•											• •					
3 4 5 6 7 8 9 9 10 11 12 13 14 15 16 17	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR MANUAL FIRE ALARM BOXES - ATTIC SMOKE DETECTORS - 1ST FLOOR SMOKE DETECTORS - 2ND FLOOR HEAT DETECTOR - CRAWLSPACE HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 2ND FLOOR HEAT DETECTOR - ATTIC FIRE ALARM AC POWER FAILURE FIRE ALARM SYSTEM LOW BATTERY OPEN CIRCUIT GROUND FAULT			>			•											• •					
3 4 5 6 7 8 9 10 11 12 13 14 15 16	MANUAL FIRE ALARM BOXES - 1ST FLOOR MANUAL FIRE ALARM BOXES - 2ND FLOOR MANUAL FIRE ALARM BOXES - ATTIC SMOKE DETECTORS - 1ST FLOOR SMOKE DETECTORS - 2ND FLOOR HEAT DETECTOR - CRAWLSPACE HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 1ST FLOOR HEAT DETECTOR - 2ND FLOOR HEAT DETECTOR - 2ND FLOOR HEAT DETECTOR - ATTIC FIRE ALARM AC POWER FAILURE FIRE ALARM SYSTEM LOW BATTERY OPEN CIRCUIT GROUND FAULT NOTIFICATION APPLIANCE CIRCUIT SHORT SUPERVISORY			>			•											• •					

FIRE ALARM SEQUENCE OF OPERATION MATRIX - STANDARD

<u>NOTE:</u> 1. CONTRACTOR SHALL DEVELOP SPECIFIC MATRIX FOR EACH DEVICE AND CROSS REFERENCE TO DEVICE ADDRESS NUMBER FOR ENGINEER'S APPROVAL.

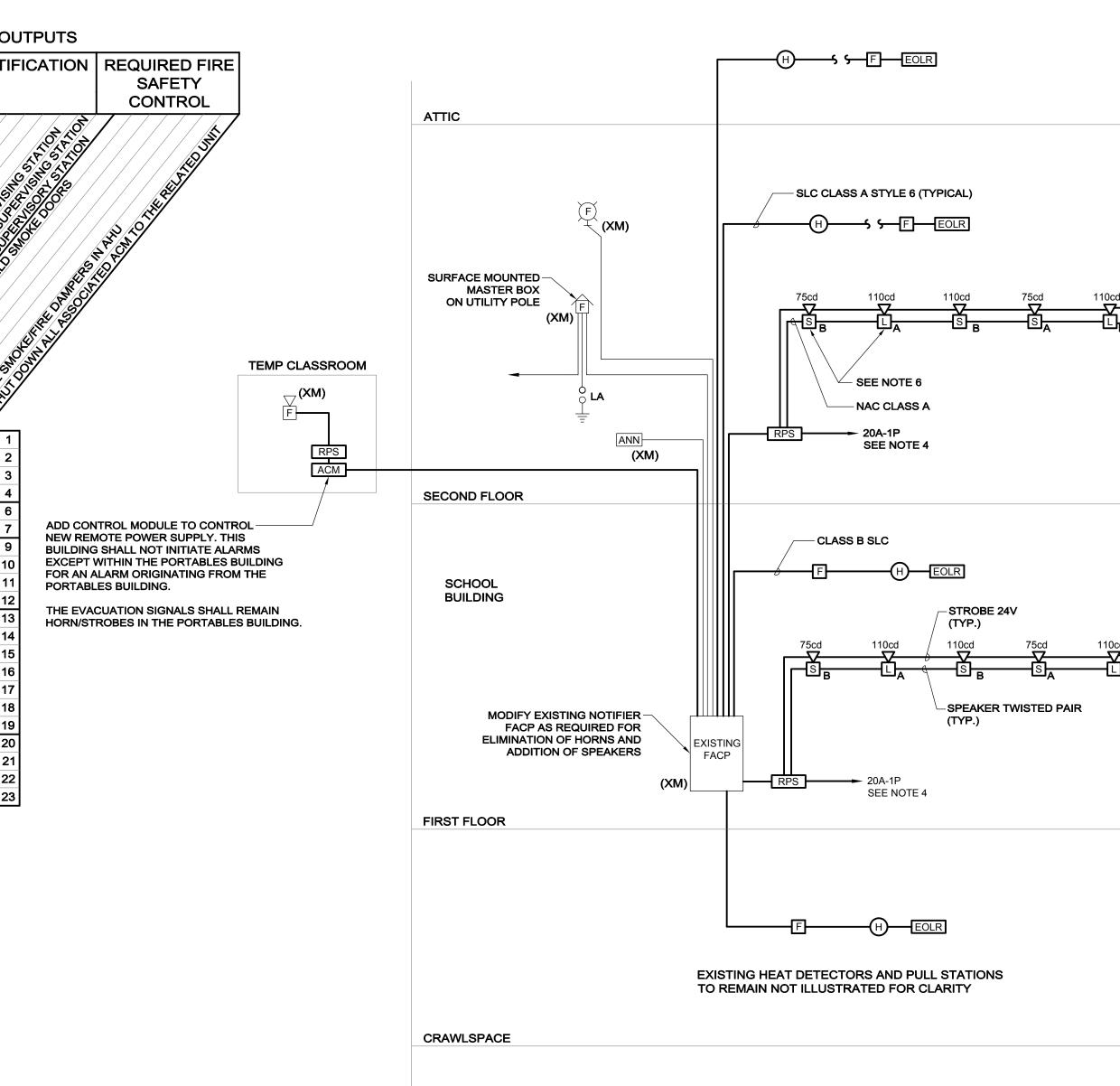
2. CONTRACTOR'S SHOP DRAWINGS SHALL INCLUDE FLOOR PLANS WITH DEVICE LAYOUT. EACH DEVICE SHALL HAVE ITS ASSOCIATED ADDRESS ILLUSTRATED AND CROSS REFERENCED TO THE SEQUENCE OF OPERATIONS MATRIX.

3. VISUAL APPLIANCES SHALL CONTINUE TO FLASH WHEN SILENCE FUNCTION SELECTED AT FIRE ALARM CONTROL PANEL.

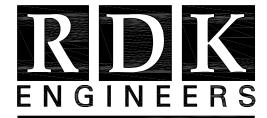
4. EXISTING SEQUENCE SHALL REMAIN.

5. SPEAKERS SHALL BROADCAST A TEMPORAL THREE TONE ON ALARM CONDITION.





TYPICAL LOW RISE FIRE ALARM RISER



Andover, MA - Boston, MA - Amherst, MA

Durham, NC - Charlotte, NC

NOTES:

1. THIS DRAWING IS INTENDED TO ILLUSTRATE MAJOR EQUIPMENT AND THE INTENDED INTERCONNECTIONS. REFER TO THE FLOOR PLANS FOR EXACT LOCATIONS AND QUANTITIES OF DEVICES. REFER TO THE MANUFACTURER'S WIRING DIAGRAMS FOR INTERCONNECTION REQUIREMENTS. INTERCONNECTION DETAILS SHALL BE INCLUDED IN THE SHOP DRAWINGS WITH COMPONENT CUT SHEETS FOR REVIEW AND APPROVAL. THE SHOP DRAWING SUBMISSION SHALL INCLUDE DEVICE PLACEMENT LAYOUT DRAWINGS WITH ADDRESSES, RACEWAY AND WIRING INTERCONNECTION DETAILS ILLUSTRATED PHYSICALLY.

2. FIRE ALARM SYSTEM INSTALLATION SHALL BE IN CONFORMANCE WITH THE LATEST FIRE DEPARTMENT RULES, REGULATIONS, ALL APPLICABLE CODES, STANDARDS AND THE MANUFACTURES INSTALLATION INSTRUCTIONS.

3. PROVIDE SPEAKER/VISUAL POWER SUPPLIES SIZED TO ACCOMMODATE NOTIFICATION APPLIANCE QUANTITIES ILLUSTRATED WITH 40% ADDITIONAL SPARE CAPACITY. DISTRIBUTED AMPLIFICATION SHALL NOT EXCEED THAT WHICH IS ILLUSTRATED ON THE ONE-LINE.

4. PROVIDE UL LISTED LOCKING DEVICE FOR POWER SOURCE CIRCUIT BREAKER AND LABEL AS "FIRE ALARM CONTROL CIRCUIT" IN THE PANELBOARD DIRECTORY.

5. VISUAL APPLIANCES WITHIN SAME ROOM OF FIELD OF VIEW SHALL BE SYNCHRONIZED.

6. PROVIDE A MINIMUM OF (2) NAC TO EACH EVACUATION ZONE. ALTERNATE CONNECTION OF CIRCUITS TO EVERY OTHER DEVICE SUCH THAT APPROXIMATELY 50% OF THE NOTIFICATION APPLIANCES IN EACH AREA ARE SERVICED VIA EACH CIRCUIT. WIRING SHALL ACCOMMODATE CONTINUED STROBE OPERATION WHEN AUDIBLE DEVICES SILENCED. RDK Engineers 200 Brickstone Square Andover, MA 01810-1488

T.978-296-6200 F.978-296-6201 W. www.rdkengineers.com

This CADD Document is an instrument of professional service, and shall not be used, in whole or in part, for any project other than for which it was created without the expressed, written consent of the RDK Engineers. Any unauthorized use, reuse, modification or alteration, including automated conversion of this document shall be at the user's sole risk without liability or legal exposure to the RDK Engineers.

REVISIONS DATE CHK DESCRIPTION

SEAL

PROJECT

DATE 6/30/17

TOWN OF SWAMPSCOTT CLARKE ELEMENTARY FIRE ALARM REPLACEMENT SWAMPSCOTT, MA

DRAWING

DRAWN BY DF

CHECKED BY MW

SCALE-NTS

FIRE ALARM MATRIX AND RISER

90% PROGRESS

FA7.0