Enka High School- Proposed Sound Room in the Auditorium 475 Enka Lake Road, Candler, NC

PROJECT DESCRIPTION:

WORK

WORK CONSISTS OF THE ADDITION OF A SOUND ROOM AS SHOWN ON THE ATTACHED DRAWINGS. WORK TO INCLUDE SELECTIVE DEMOLITION OF CONCRETE SLAB AND CMU WALL AND CONSTRUCTION OF CONCRETE FLOOR SLAB INFILL, CONCRETE RAMP, METAL WALL FRAMING, STEEL HANDRAILS, GLAZING, WOOD DOORS AND HOLLOW METAL FRAMES, DOOR HARDWARE ACOUSTICAL CEILING TILE, ELECTRICAL AND MECHANICAL SYSTEM.

CONTRACTOR TO COORDINATE WITH SEATING AND CARPET INSTALLATION AND PAINTING OF THE CEILING WHICH WILL OCCUR SIMULTANEOUSLY WITH THIS PROJECT

THE PROJECT INVOLVES: GENERAL CONTRACTOR, MECHANICAL, AND ELECTRICAL WORK. THE LOCATION IS INTERNAL TO THE BUILDING AND DOES NOT INVOLVE AN ADDITION OR NEW BUILDING FOOTPRINT.

CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING ALL COSTS ASSOCIATED W/ BUNCOMBE COUNTY PERMITS AND FEES ASSOCIATED WITH THIS WORK.

GENERAL NOTES

- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES THAT WILL IMPACT THE DESIGN INTENT INDICATED IN THESE DOCUMENTS.
- ALL EQUIPMENT, FIXTURES, HARDWARE AND ACCESSORIES PROVIDED ARE TO COMPLY WITH 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN BY THE US DEPARTMENT OF JUSTICE AND ICC A117.1-2009 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES. ALL PRODUCTS IDENTIFIED INDICATE BASIS OF DESIGN, REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 3. ALL EXISTING MATERIALS TO REMAIN ARE TO BE PROTECTED AND CLEANED. REMOVE EXISTING DEBRIS WITHOUT DAMAGING FINISHES.
- 4. NEATLY SEAL NEW MATERIALS TO EXISTING MATERIAL AND SURFACES.

OWNER CONTACTS:

DESIGN AND TECHNICAL CONTACT:

ARCHITECT CAROL HENNE FAY ASST. FACILITIES DIRECTOR, BUNCOMBE CO. SCHOOLS PHONE: 828-255-5917 E-MAIL: CAROL.FAY@BCSEMAIL.ORG

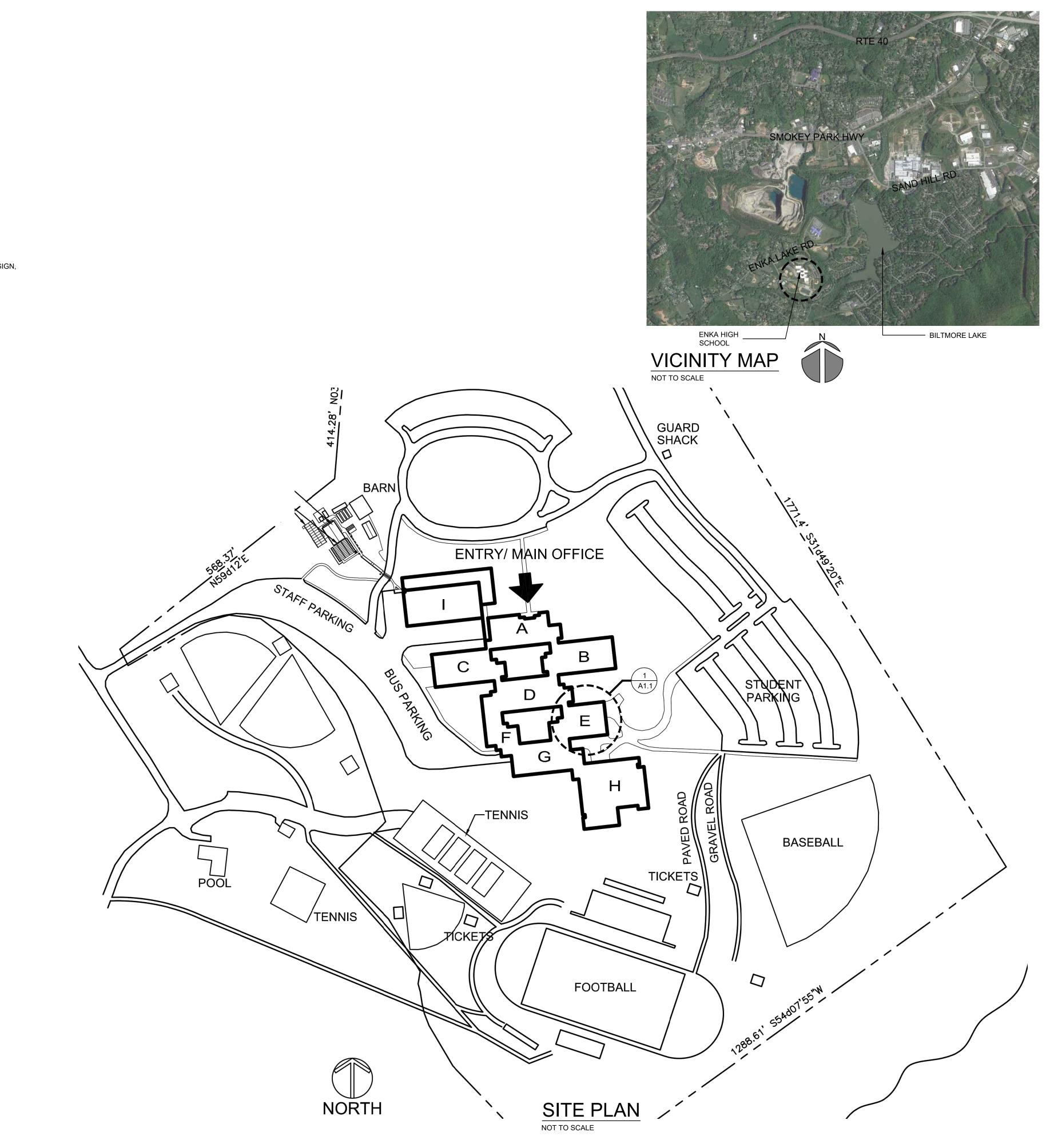
PME ENGINEER SUD ASSOCIATES, P.A. CONSULTING ENGINEERS PHONE- 828-255-4691

BIDDING & ADMINISTRATIVE CONTACT:

TIFFANY McCANTS PURCHASING OFFICER PHONE: 828-255-5891 FAX: 828-251-1730

SHEET INDEX:

COVER	
APX B	LIFE SAFETY PLAN AND BUILDING CODE SUMMARY
A1.1	PROPOSED AND DEMOLITION PLANS
A2.1	ENLARGED PLAN AND SECTIONS
A3.1	REFLECTED CEILING PLAN, FINISH & DOOR SCHEDULE,
	H/J/S DETAILS, MILLWORK DETAILS
M1.1	MECHANICAL PLAN, NOTES AND SCHEDULES
E0.1	ELECTRICAL DEMOLITION
E1.1	ELECTRICAL- POWER AND LIGHTING PLAN
E2.1	ELECTRICAL- LEGEND AND NOTES AND DETAILS





ELEVATING YOUNG MINDS

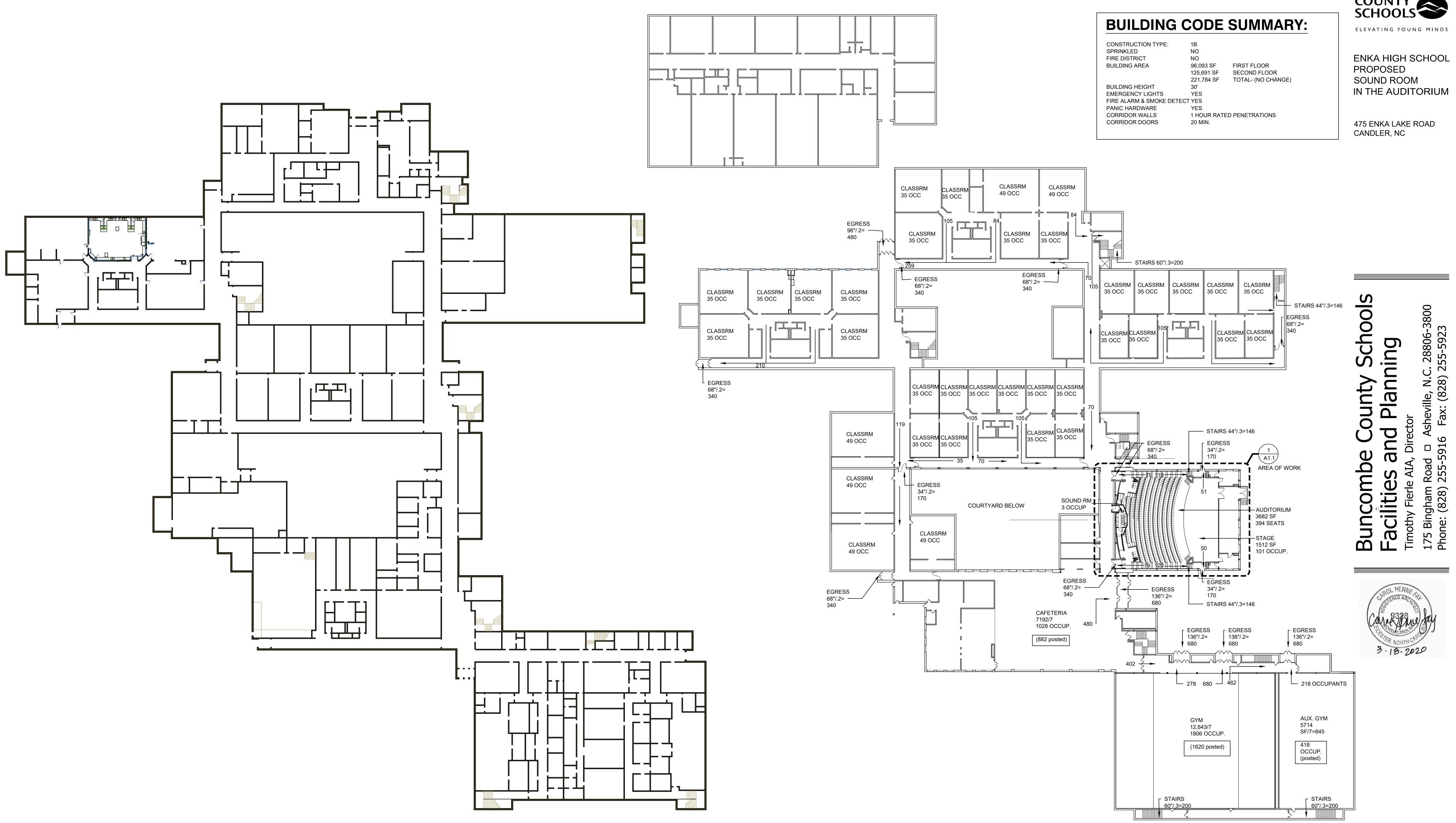
ENKA HIGH SCHOOL PROPOSED SOUND ROOM IN THE AUDITORIUM

475 ENKA LAKE ROAD CANDLER, NC









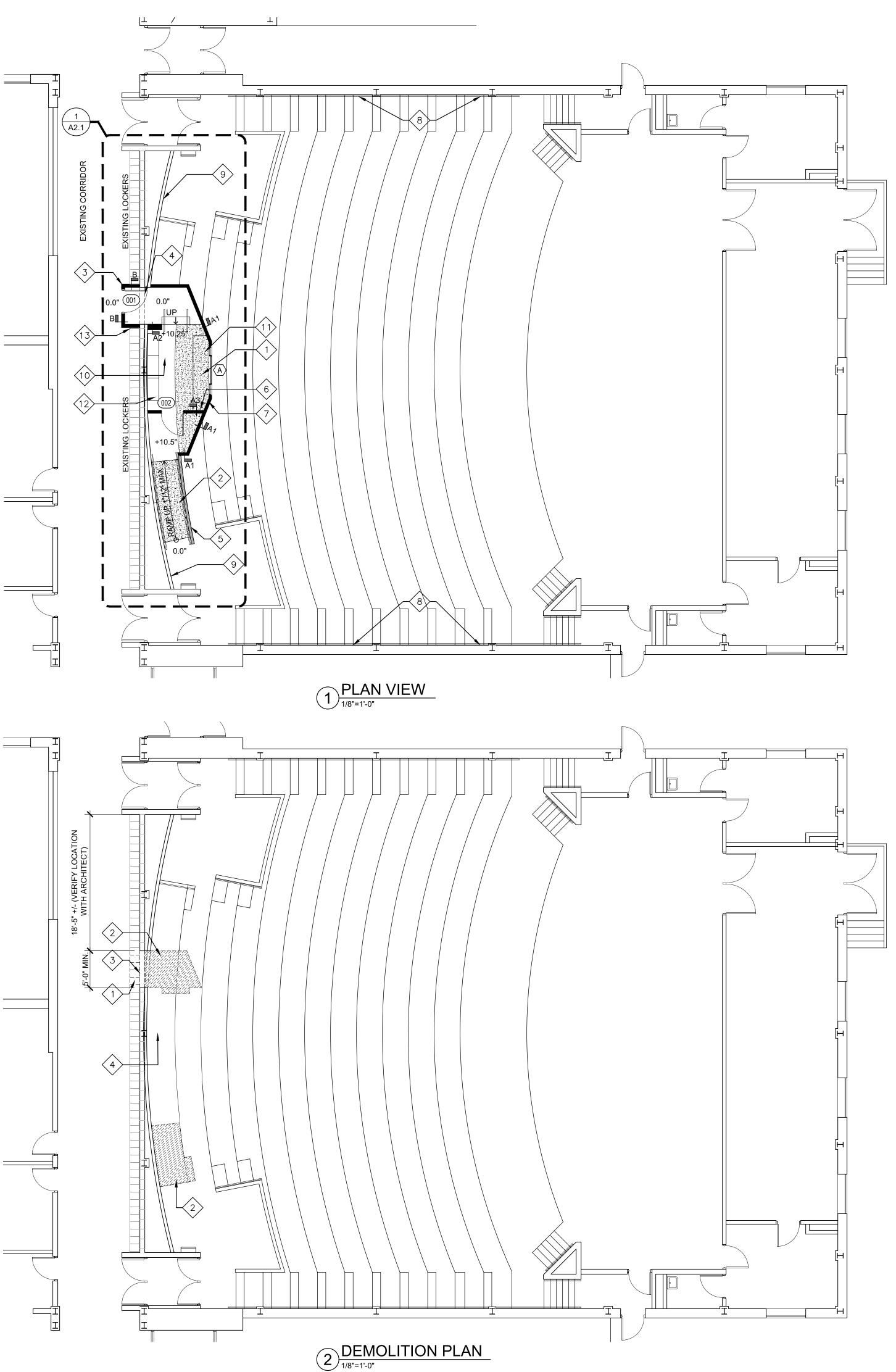
1 PLAN VIEW- LOWER LEVEL





1) PLAN VIEW- UPPER LEVEL

APX B DESIGNED BY: CHF DATE: 03.18.2020



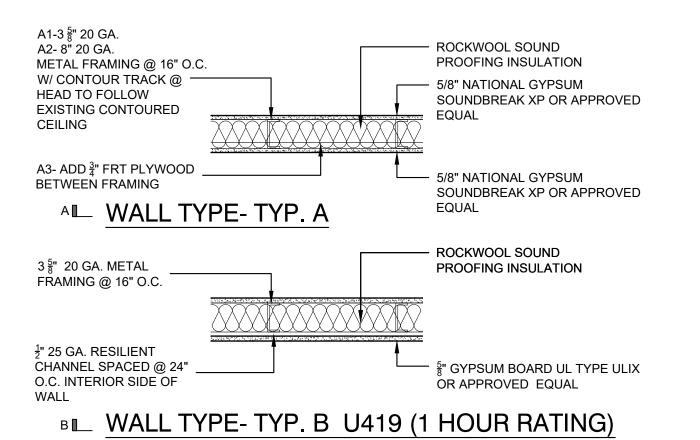


GENERAL NOTES

1) CONTRACTOR TO VERIFY ALL DIMENSIONS AND QUANTITIES IN FIELD.

KEYED NOTES- PROPOSED

CONCRETE INFILL OVER EXISTING SLAB. SEE A2.1 FOR ENLARGED PLAN AND SECTIONS. PROPOSED CONCRETE ADA ACCESSIBLE RAMP TO <2) SOUND ROOM. SEE A2.1 PROPOSED 1 HR RATED WALLS (WALL TYPE B), DOOR AND CEILING. SEE 3/A2.1. PROPOSED LINTEL @ NEW OPENING- SEE DETAIL $\langle 4 \rangle$ H4/A3.1 PROPOSED LOW WALL @ RAMP- SEE 2/A3.1 <5) PROVIDE $\frac{3}{4}$ " PLYWOOD BLOCKING- 24" WIDE X FULL HEIGHT OF WALL FOR RACK. SEE ELECTRICAL <6, DRAWINGS. PROPOSED FRAMED WALLS TO FOLLOW CONTOUR OF CEILING- SEE SECTION 2,3/A2.1 59 LF +/- (VERIFY IN FIELD) EA. SIDE ELEVATION-<8> CROWN MOLDING FOR CONDUIT SEE ELEVATION AND DETAIL 4,5/A3.1 CONDUIT ON BACK CURVED WALL TO BE EXPOSED. PAINT CONDUIT TO MATCH WALL BEHIND IT. PATCH AND REPAIR CEILING WHERE RECESSED LIGHT FIXTURES HAVE BEEN REMOVED. SEE $\langle 10 \rangle$ ELECTRICAL DRAWINGS FOR LOCATIONS. PROPOSED WORK SURFACE- SEE 1/A2.1 PROPOSED STORAGE CABINETS BY OWNER. REINSTALL ANY LOCKERS DISPLACED DURING DEMOLITION- EA. SIDE OF NEW DOOR.



GENERAL DEMOLITION NOTES

- REMOVE & DISPOSE OF CONCRETE SLAB, WALLS, FINISHES, FIXTURES & ALL ITEMS NECESSARY FOR UPFIT AS SHOWN IN DRAWINGS. PROTECT ADJACENT SPACES FROM DEMOLITION ACTIVITIES & DUST.
- 2. PATCH AND REPAIR WHERE DEMOLITION OCCURS TO MATCH EXISTING FINISHES. REPAINT WALL NEAREST CHANGE OF SURFACE.
- 3. DEMOLITION / DISTURBANCE OF LEAD CONTAINING MATERIALS TO BE IN COMPLIANCE WITH CURRENT CODES.

KEYED NOTES DEMOLITION

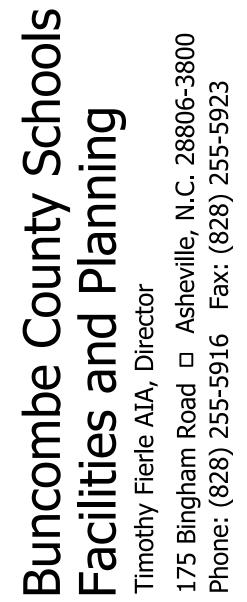
- REMOVE LOCKERS AS REQUIRED FOR CONSTRUCTION OF NEW OPENING. SAVE FOR REINSTALL
- REMOVE PORTION OF THE EXISTING CONCRETE PLATFORM FOR PROPOSED RAMP AND NEW STEPS- SEE ENLARGED FLOOR PLAN $\langle 2 \rangle$ FOR EXTENT.
- PROPOSED OPENING IN EXISTING BLOCK WALL AND INTERIOR CURVED ACOUSTICAL WALL. PROVIDE STRUCTURAL LINTEL AS SHOWN IN DETAIL H4/A3.1 < 3
- REMOVE EXISTING RECESSED LIGHT FIXTURES IN AREA OF PROPOSED SOUND ROOM. SEE ELECTRICAL DRAWINGS $\langle 4 \rangle$ FOR LOCATION.



ELEVATING YOUNG MINDS

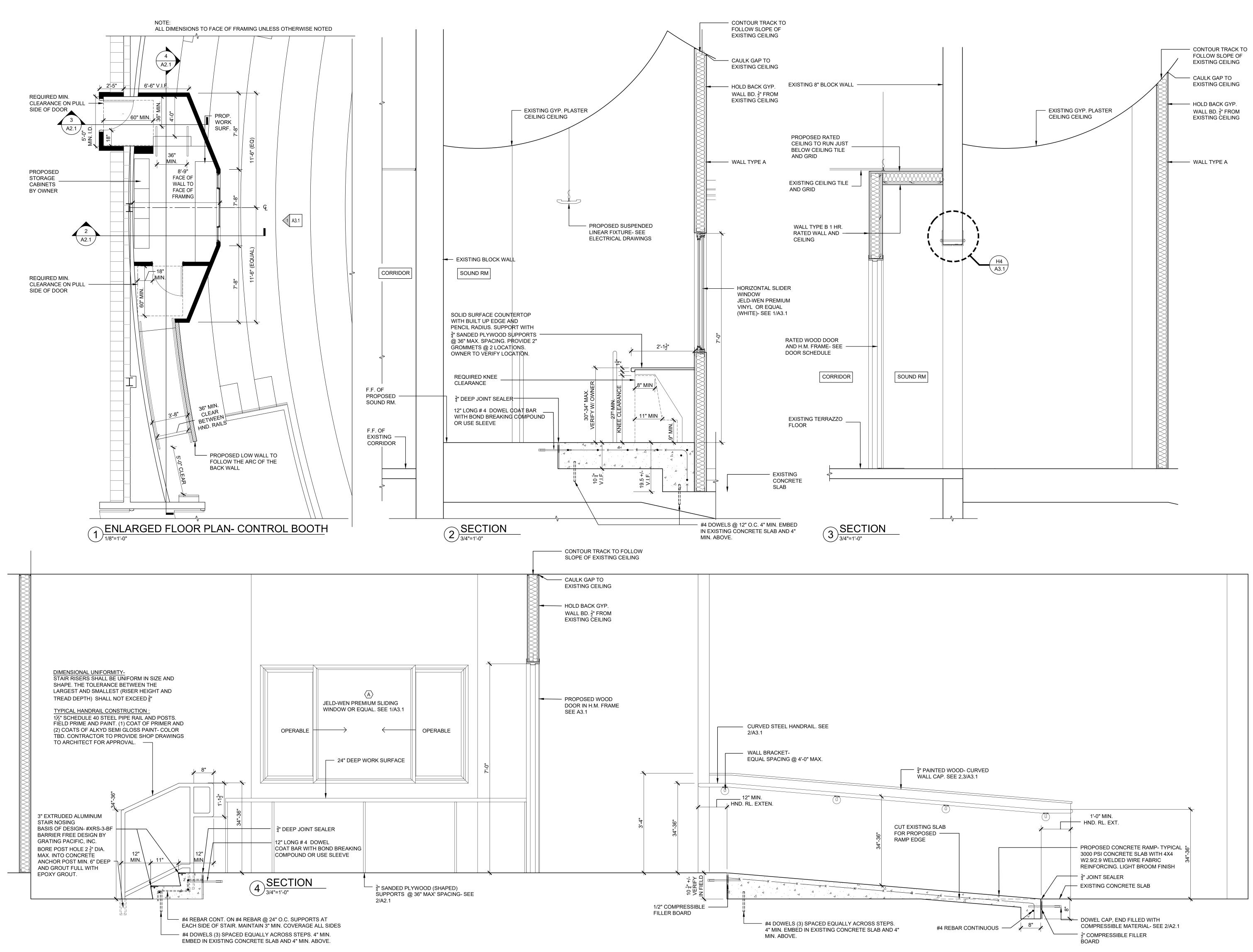
ENKA HIGH SCHOOL PROPOSED SOUND ROOM IN THE AUDITORIUM

475 ENKA LAKE ROAD CANDLER, NC











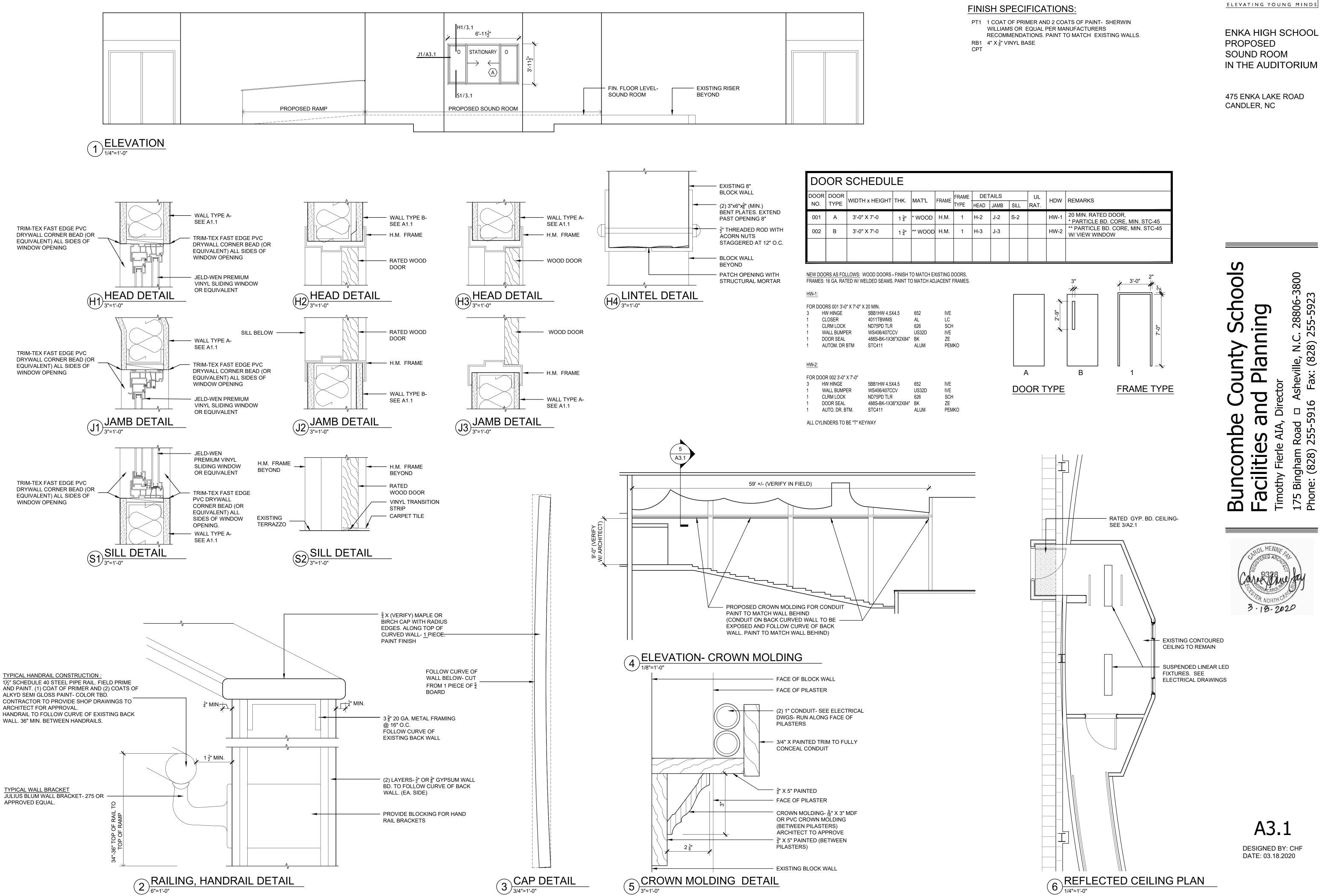
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475 ENKA LAKE ROAD CANDLER, NC



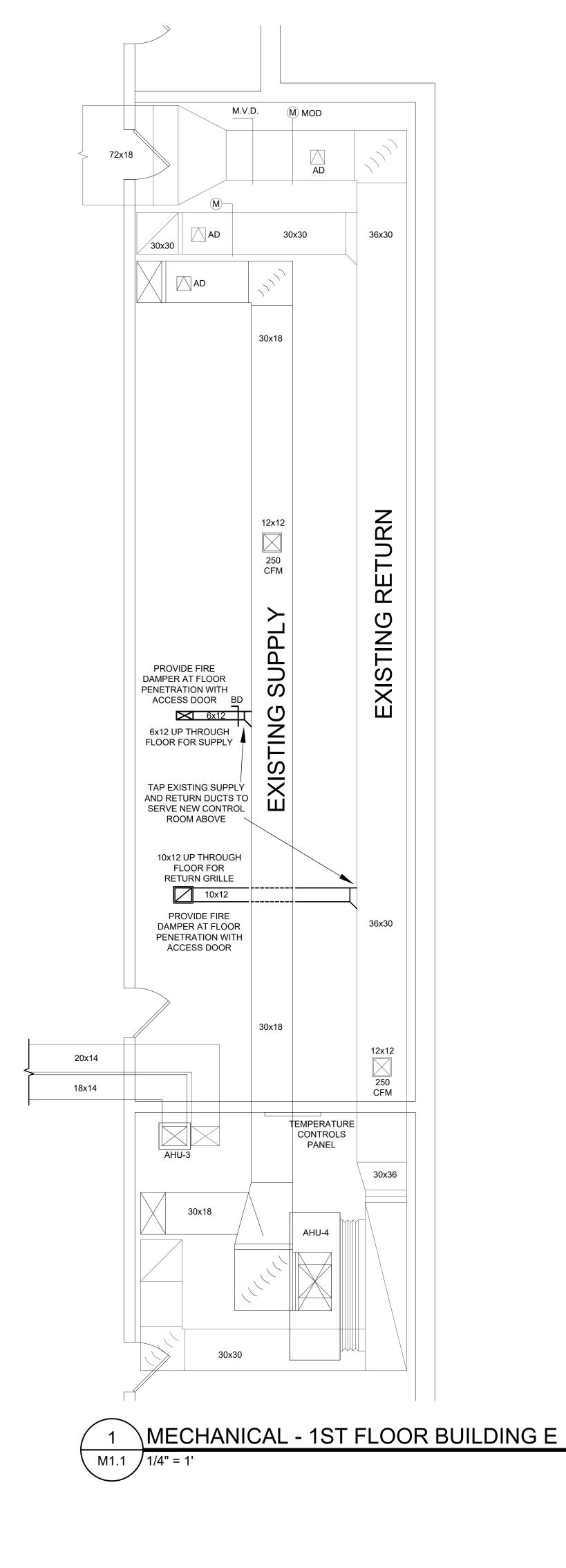


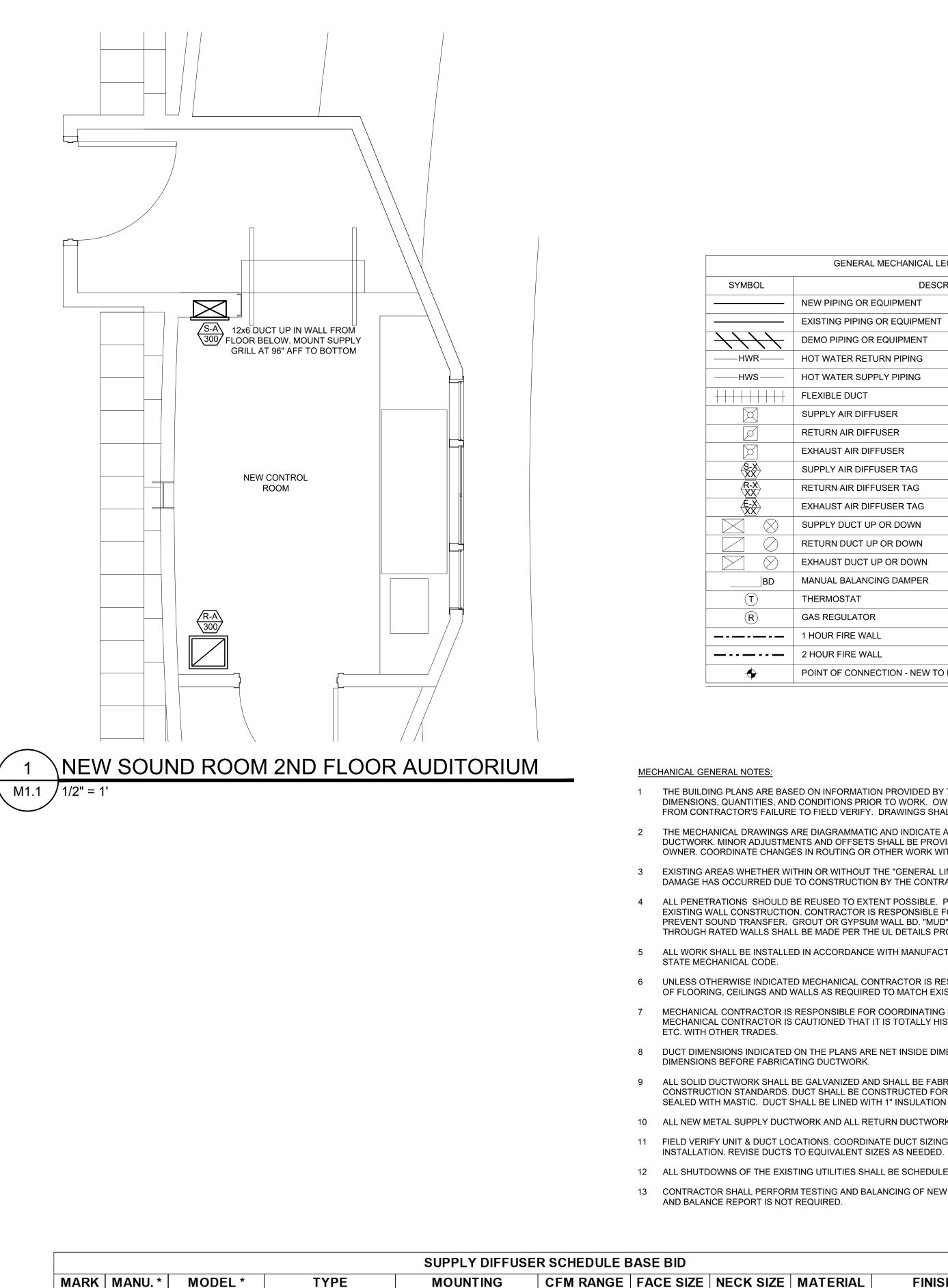












				SUPPLY DIFFUSE	R SCHEDULE E	BASE BID				
MARK	MANU. *	MODEL *	ТҮРЕ	MOUNTING	CFM RANGE	FACE SIZE	NECK SIZE	MATERIAL	FINISH	NOTES
S-A	PRICE	SERIES 620	DOUBLE DEFLECTION	SIDEWALL	300	14" X 8"	12" X 6"	ALUMINUM	WHITE	-
* BASIS O	F DESIGN									
				RETURN DIFFUSE	R SCHEDULE E	BASE BID				
MARK	MANU. *	MODEL *	ТҮРЕ	RETURN DIFFUSE MOUNTING	R SCHEDULE E	BASE BID FACE SIZE	NECK SIZE	MATERIAL	FINISH	NOTES
MARK R-A	MANU. * PRICE	MODEL * LBMH-CORE 15A					NECK SIZE 12" X 10"	MATERIAL ALUMINUM	FINISH ANODIZED ALUMINUM	
R-A				MOUNTING	CFM RANGE	FACE SIZE				
R-A	PRICE			MOUNTING	CFM RANGE	FACE SIZE				



ENKA HIGH SCHOOL PROPOSED SOUND ROOM IN THE AUDITORIUM

475 ENKA LAKE ROAD CANDLER, NC

GENERAL MECHANICAL LEGEND						
DESCRIPTION						
NEW PIPING OR EQUIPMENT						
EXISTING PIPING OR EQUIPMENT						
DEMO PIPING OR EQUIPMENT						
HOT WATER RETURN PIPING						
HOT WATER SUPPLY PIPING						
FLEXIBLE DUCT						
SUPPLY AIR DIFFUSER						
RETURN AIR DIFFUSER						
EXHAUST AIR DIFFUSER						
SUPPLY AIR DIFFUSER TAG						
RETURN AIR DIFFUSER TAG						
EXHAUST AIR DIFFUSER TAG						
SUPPLY DUCT UP OR DOWN						
RETURN DUCT UP OR DOWN						
EXHAUST DUCT UP OR DOWN						
MANUAL BALANCING DAMPER						
THERMOSTAT						
GAS REGULATOR						
1 HOUR FIRE WALL						
2 HOUR FIRE WALL						
POINT OF CONNECTION - NEW TO EXISTING						

THE BUILDING PLANS ARE BASED ON INFORMATION PROVIDED BY THE ARCHITECT. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, QUANTITIES, AND CONDITIONS PRIOR TO WORK. OWNER WILL NOT APPROVE ANY CHANGE ORDERS RESULTING FROM CONTRACTOR'S FAILURE TO FIELD VERIFY. DRAWINGS SHALL NOT BE SCALED TO DETERMINE ACTUAL DIMENSIONS.

2 THE MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND INDICATE APPROXIMATE LOCATION OF EQUIPMENT, PIPING AND DUCTWORK. MINOR ADJUSTMENTS AND OFFSETS SHALL BE PROVIDED WHERE REQUIRED AT NO ADDITIONAL COST TO THE OWNER. COORDINATE CHANGES IN ROUTING OR OTHER WORK WITH THE ENGINEER PRIOR TO PROCEEDING.

3 EXISTING AREAS WHETHER WITHIN OR WITHOUT THE "GENERAL LIMITS OF CONSTRUCTION", SHALL BE REPAIRED WHERE ANY DAMAGE HAS OCCURRED DUE TO CONSTRUCTION BY THE CONTRACTOR.

4 ALL PENETRATIONS SHOULD BE REUSED TO EXTENT POSSIBLE. PATCH NEW AND EXISTING PENETRATIONS TO MATCH EXISTING WALL CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR SEALING ALL PENETRATIONS THROUGH ALL WALLS TO PREVENT SOUND TRANSFER. GROUT OR GYPSUM WALL BD. "MUD" MAY BE USED FOR NON RATED WALLS. PENETRATIONS THROUGH RATED WALLS SHALL BE MADE PER THE UL DETAILS PROVIDED.

5 ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND THE NORTH CAROLINA

6 UNLESS OTHERWISE INDICATED MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING, CORE-DRILLING AND PATCHING OF FLOORING, CEILINGS AND WALLS AS REQUIRED TO MATCH EXISTING CONDITIONS.

7 MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING MECHANICAL RELATED WORK WITH OTHER TRADES. MECHANICAL CONTRACTOR IS CAUTIONED THAT IT IS TOTALLY HIS RESPONSIBILITY TO COORDINATE HANGERS AND SUPPORTS

8 DUCT DIMENSIONS INDICATED ON THE PLANS ARE NET INSIDE DIMENSIONS. FIELD VERIFY ALL MEASUREMENTS AND

9 ALL SOLID DUCTWORK SHALL BE GALVANIZED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE CURRENT SMACNA DUCT CONSTRUCTION STANDARDS. DUCT SHALL BE CONSTRUCTED FOR ANTICIPATED STATIC PRESSURES. ALL JOINTS SHALL BE SEALED WITH MASTIC. DUCT SHALL BE LINED WITH 1" INSULATION FOR SOUND ATTENUATION.

10 ALL NEW METAL SUPPLY DUCTWORK AND ALL RETURN DUCTWORK SHALL INTERNALLY INSULATED WITH 1" DUCT LINING. 11 FIELD VERIFY UNIT & DUCT LOCATIONS. COORDINATE DUCT SIZING AND LAYOUT WITH BUILDING STRUCTURE PRIOR TO

12 ALL SHUTDOWNS OF THE EXISTING UTILITIES SHALL BE SCHEDULED IN ADVANCE WITH OWNER.

13 CONTRACTOR SHALL PERFORM TESTING AND BALANCING OF NEW SUPPLY AND RETURN SCHEDULED TOTALS. A CERTIFIED TEST



CONSULTANTS:

SUD ASSOCIATES, P.A. 🥔 CONSULTING ENGINEERS LICENSE NO. C-0315 **PROJECT #19242**

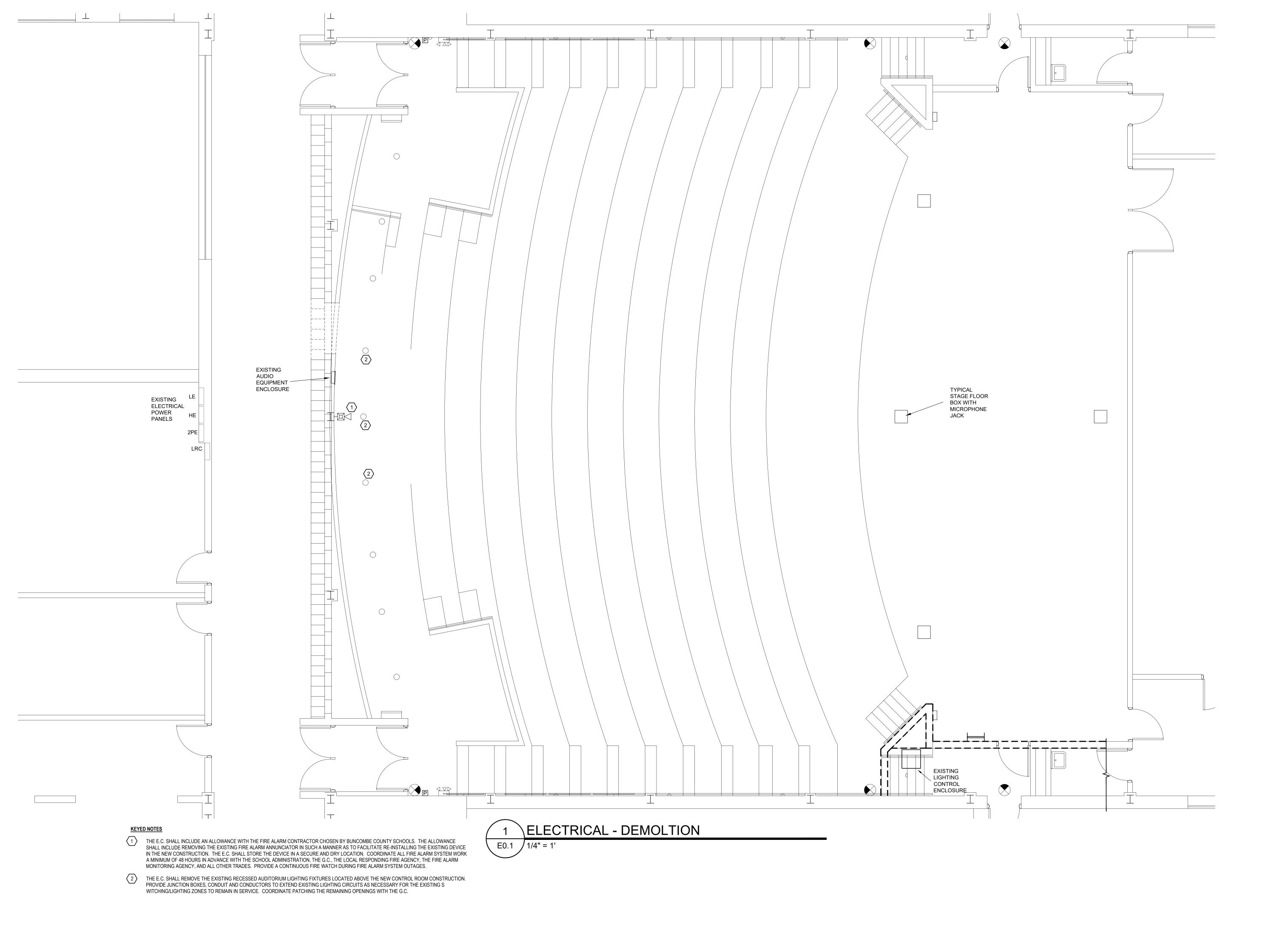
> 90 SOUTHSIDE AVE. SUITE 30 ASHEVILLE, NC 28801 (828) 255-4691

1813 CHAPEL HILL ROAD DURHAM, NC 27707 (919) 493-5277



MECHANICAL -CONSTRUCTION

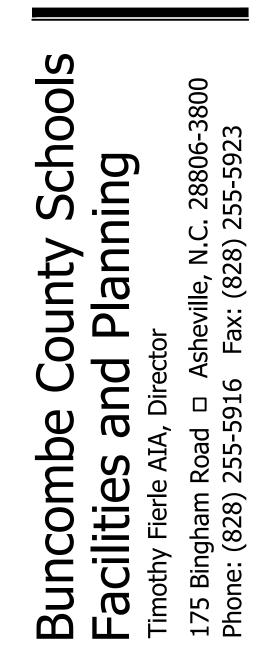
M1.' DRAWN BY: PSD DATE: 03.18.2020





ENKA HIGH SCHOOL PROPOSED SOUND ROOM IN THE AUDITORIUM

475 ENKA LAKE ROAD CANDLER, NC



CONSULTANTS:

SUD ASSOCIATES, P.A. CONSULTING ENGINEERS LICENSE NO. C-0315 PROJECT #19242

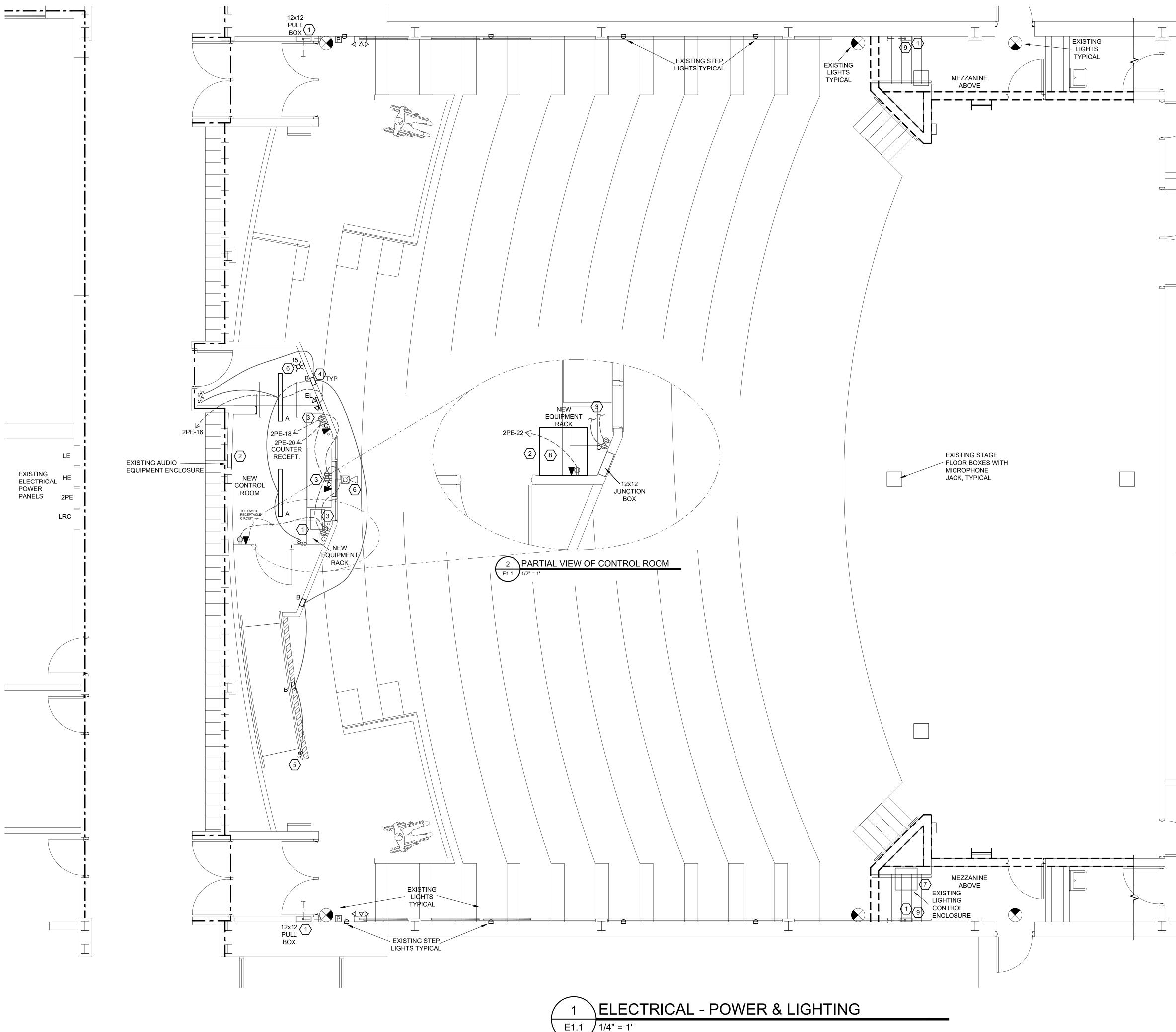
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ELECTRICAL -DEMOLITION

E0.1 DRAWN BY: PSD DATE: 03.18.2020





ENKA HIGH SCHOOL PROPOSED SOUND ROOM IN THE AUDITORIUM

475 ENKA LAKE ROAD CANDLER, NC

KEYED NOTES

- $\langle 1 \rangle$ THE E.C. SHALL PROVIDE (4) 1" EMT CONDUITS WITH PULL STRINGS FOR FUTURE LOW VOLTAGE CONTROL CABLING. ROUTE THE NEW CONDUITS ALONG THE REAR SIDE WALLS PROVIDING 12X12 PULL BOXES AT EACH CORNER. PROVIDE A NEW 12X12 FLUSH MOUNT JUNCTION BOX AT THE CONTROL ROOM EQUIPMENT RACK LOCATION WITH A MIN. 2" GROMMET IN THE COVER. PROVIDE A 12X12X4 JUNCTION BOX LOCATED WITHIN 24" OF THE EXISTING LEHIGH DIMMER EQUIPMENT RACK AND THE CORRESPONDING HOUSE LEFT MEZZANINE LOCATION AT HOUSE LEFT. PROVIDE A PRECISELY LEVEL CONDUIT INSTALLATION AND PROVIDE SMOOTHLY BENT CONDUITS WHERE THE STRUCTURE IS CURVED.COORDINATE THE NEW CONDUIT, PULL BOX, AND JUNCTION BOX LOCATIONS PRECISELY WITH THE ARCHITECT, THE CROWN MOLDING INSTALLER, THE G.C. AND THE OWNER PRIOR TO ROUGH-IN.
- $\langle 2 \rangle$ THE E.C. SHALL INCLUDE AN ALLOWANCE WITH THE FIRE ALARM CONTRACTOR CHOSEN BY BUNCOMBE COUNTY SCHOOLS. THE ALLOWANCE SHALL INCLUDE INSTALLING A UL924 RATED RELAY DEVICE AND WIRING IN SUCH A MANNER THAT THE 120 VOLT AUDIO POWER IS DISCONNECTED UPON A FIRE ALARM CONDITION. COORDINATE ALL FIRE ALARM SYSTEM WORK A MINIMUM OF 48 HOURS IN ADVANCE WITH THE SCHOOL ADMINISTRATION, THE G.C., THE LOCAL RESPONDING FIRE AGENCY, THE FIRE ALARM MONITORING AGENCY, AND ALL OTHER TRADES. PROVIDE A CONTINUOUS FIRE WATCH DURING FIRE ALARM SYSTEM OUTAGES.
- $\langle 3 \rangle$ THE E.C. SHALL PROVIDE DUPLEX RECEPTACLES AT 2" ABOVE THE WORK COUNTER HEIGHT, AT 18" AFF (BELOW THE WORK COUNTER); AND AT 96" AFF (FOR THE EQUIPMENT RACK). PROVIDE A HORIZONTAL MOUNTING ORIENTATION IF REQUIRED FOR CLEARANCES ABOVE THE WORK COUNTER. COORDINATE THE PRECISE RECEPTACLE LOCATIONS WITH THE ARCHITECT AND THE OWNER PRIOR TO ROUGH-IN.
- $\langle 4 \rangle$ THE E.C. SHALL PROVIDE STEP LIGHT FIXTURES TYPE B AT 24" AFF WHERE SHOWN. COORDINATE THE PRECISE LOCATION OF STEP LIGHTS WITH THE ARCHITECT PRIOR TO ROUGH-IN.
- $\left< 5 \right>$ THE E.C. SHALL PROVIDE A THREE WAY SWITCH AT THE HANDICAP ACCESS RAMP FOR STEP LIGHTS AT OR NEAR THE HANDRAIL HEIGHT. COORDINATE THE PRECISE LOCATION OF THE SWITCH WITH THE ARCHITECT AND THE HANDRAIL INSTALLER PRIOR TO ROUGH-IN.
- 6 THE E.C. SHALL INCLUDE AN ALLOWANCE WITH THE FIRE ALARM CONTRACTOR CHOSEN BY BUNCOMBE COUNTY SCHOOLS. THE ALLOWANCE SHALL INCLUDE RELOCATING AND RE-INSTALLING THE EXISTING FIRE ALARM ANNUNCIATOR WHERE SHOWN. PROVIDE AND INSTALL NEW STROBE WHERE SHOWN IN NEW CONTROL ROOM. PROVIDE FIRE ALARM TESTS AND WRITTEN TEST REPORTS PER NFPA 72 FIRE ALARM TESTING GUIDELINES AND USING NFPA TEST FORMS. COORDINATE ALL FIRE ALARM SYSTEM WORK A MINIMUM OF 48 HOURS IN ADVANCE WITH THE SCHOOL ADMINISTRATION, THE G.C., THE LOCAL RESPONDING FIRE AGENCY, THE FIRE ALARM MONITORING AGENCY, AND ALL OTHER TRADES. PROVIDE A CONTINUOUS FIRE WATCH DURING FIRE ALARM SYSTEM OUTAGES.
- $\langle 7 \rangle$ THE E.C. SHALL INCLUDE AN ALLOWANCE WITH THE FIRE ALARM CONTRACTOR CHOSEN BY BUNCOMBE COUNTY SCHOOLS. THE ALLOWANCE SHALL INCLUDE INSTALLING A UL924 RATED RELAY DEVICE AND WIRING IN THE LIGHTING RELAY CONTROL ENCLOSURE IN SUCH A MANNER THAT THE AUDITORIUM HOUSE LIGHTS ENERGIZE UPON A FIRE ALARM CONDITION. COORDINATE ALL FIRE ALARM SYSTEM WORK A MINIMUM OF 48 HOURS IN ADVANCE WITH THE SCHOOL ADMINISTRATION, THE G.C., THE LOCAL RESPONDING FIRE AGENCY, THE FIRE ALARM MONITORING AGENCY, AND ALL OTHER TRADES. PROVIDE A CONTINUOUS FIRE WATCH DURING FIRE ALARM SYSTEM OUTAGES.
- $\langle 8 \rangle$ THE E.C. SHALL PROVIDE A NEW WALL MOUNTED EQUIPMENT RACK (MIDDLE ATLANTIC DWR-10-17PD OR EQUIV.) AT 96" AFF. COORDINATE THE NEW RACK LOCATION PRECISELY WITH THE 12X12 JUNCTION BOX, POWER AND DATA OUTLETS AND LOCATIONS WITH THE ARCHITECT, THE G.C. AND THE OWNER PRIOR TO ROUGH-IN.
- 9 THE E.C. SHALL PROVIDE ONE BELDEN 5000UP-12 SPEAKER WIRE FROM THE CONTROL ROOM JUNCTION BOX TO THE HOUSE LEFT AND HOUSE RIGHT JUNCTION BOX LOCATIONS WITH A MINIMUM 20' COILED PIGTAIL ON BOTH ENDS OF EACH RUN. COORDINATE THE SPEAKER WIRE INSTALLATION WITH THE ARCHITECT, THE G.C. AND THE OWNER PRIOR TO INSTALLATION.



CONSULTANTS:

SUD ASSOCIATES, P.A. 🚄 **CONSULTING ENGINEERS** LICENSE NO. C-0315 **PROJECT #19242**

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1813 CHAPEL HILL ROAD DURHAM, NC 27707 (919) 493-5277



ELECTRICAL -**POWER & LIGHTING**



ΤΥΡΕ	DESCRIPTION	OEM & MODEL #: BASIS OF DESIGN *	MOUNTING	VOLT	LAMPS	VA/ FIXT.	NOTES
A	4' CABLE SUSPENDED DIRECT/INDIRECT LINEAR (55% DOWNLIGHT), BLACK HOUSING, 3400 LUMENS, 0-10VOLT DIMMING, 3500° K, 24'' CABLE LENGTH 0- 90° SWIVEL CEILING MOUNT	LEDALITE 7806LBEQD047DEB,A3-24	CEILING MT. W/ OCTAGON BOX	120	28WLED	28.4	
В	RECESSED WALL LED STEP LIGHT, SHIELDED, 241 LUMENS, 3500° K,	BEGA #22372+K35	WALL MOUNT 24" AFF	120	11WLED	11	
EL	EMERGENCY EGRESS BATTERY LIGHT- TWO HEADS, 565 LUMENS, BLACK, STEEL HOUSING, LEAD-CALCIUM BATTERY, 12VOLTS, 36 WATTS	LIGHTALARMS #2M12G1SP/L6B-FM-ID	WALL MOUNT 9'AFF	120	6WLED	36	

X: FINISH/COLOR BY ARCHITECT XX: MOUNTING & ACCESSORIES BY EC

SCOPE OF WORK

PH.	PH.	PH. Ch	KT.	CIRCUIT		GND. WIRE	BRKR	CKT	EXISTING PANEL	CKT	BRKR	WIRE	GND		CKT	CIRCUIT	PH.	PH.	PH.
A A	B					AWGAWG			2PE							DESIGNATION/LOCATION	A	B	C
1.08	Ь			RECEPTS.RMS201&202	SIZE	AVIGAVIG	20	1		2	20	AVVG	AVG			RECEPTS. RMS 105 &106	0.90	D	
	0.72			RECEPTS.RMS203&205			20	3		4	20	-	-			RECEPTS. RMS 103 & 100 RECEPTS. RMS 107&108	0.90	0.90	
	0.72	0.95 RE		MEZZANINE LTS&RECEPTS			20	5		6	20	-	-			RECEPTS. RM 109		0.90	0.36
0.72		A		RECEPTS.RM 204			20	7		8	20	-	-		00 - 404 40	RECEPTS. RM 103	0.72		0.50
R.S. Storage and	0.54			RECEPTS.AUDITORM 207			20	9		10	20	-	-			RECEPTS. RM 103	0.72	0.54	
	0.54	0.54 RE		RECEPTS.AUDITORM 207			20	11		10	20	-	-			EXHAUST FAN 43		0.54	0.70
0.50								2.2									0.70		0.70
0.50	0.00			DIMMER CONTROLS			20	13		14	20	-	-	4/2		EXHAUST FAN 44	0.70	0.00	
	0.90			RECEPTS.AUDITORM 207			20	15		16	20	12	12			LIGHTS-CONTROL RM.		0.20	1
0.54				RECEPTS.AUDITORM 207			20	17		18	20	12	12			RECEPTS-CONTROL RM.	0.54		0.54
0.54				RECEPTS.RM 211			20	19		20	20	12	12			RECEPTS-COUNTER HT.	0.54		ļ
	0.72			RECEPTS.RM 211			20	21		22	20	12	12	1/2		RECEPTS-EQUIP. RACK		0.36	
				RECEPTS.RM 211			20	23		24	20	-	Ξ.			WATER HEATER			1.50
0.72				RECEPTS.RM 213			20	25		26	20	-	-			WATER HEATER	1.50		
	0.54			RECEPTS.RM 213			20	27		28	20	-	-			TROUGH T5		1.00	
		11. 19 Mar 19 19 19 19 19 19 19 19 19 19 19 19 19		RECEPTS. RM 213			20	29		30	20	-	-			1.5 KW HEATER			1.50
0.10		LT		LIGHTING CONTROL LRC			20	31		32	20	-	-			1.5 KW HEATER	1.50		
	1.10	LT		STEP LTS. AUDITORIUM			20	33		34	20	÷	Ξ			TROUGH T3 MOVIE SCRN		1.00	
		2.00 M	SC	DISCONNECT BEHIND			30	35		36	20	-	-			FOLLOW SPOT AUDITORM			0.18
2.00			SC	GUIDANCE OFFICE				37		38	20	-	-		REC	FOLLOW SPOT AUDITORM	0.18		
	0.20	M	SC	EXISTING AUDIO EQUIP.			20	39		40	- 30				HVAC	HEAT PUMP #3		0.00	
		0.20 RE	EC	MEZZANINE LTS&RECEPTS	4		20	41		42	50				HVAC	HEAT FOWF #3			0.00
•		•															Α	В	С
ODEC				DTES: BOLD FONT IS INTER			ATE									GROSS PHASE TOTALS	11.70	8.72	10.63
SPEC		EATURE	5/140	WORK	NDED	TO DESIGN	AIE								PHA	SE VOLTAGE (=120 OR 277)	120	120	120
				WORK									GF	ROSS	PHAS	E CONNECTED AMPERAGE	97.5	72.7	88.6
			Ī	EXISTING PANEL 2PE										(GROSS	CONNECTED TOTAL LOAD	31.1	KVA	
		CC	DDE	LOAD DESCRIPTION	CONN	NECTED KVA	DE	MANE)% DEMAND K	VA					MFG:	EXISTING SQ.D			•
		LT	S	LIGHTS		1.4	Х	125	%	1.8					TYPE:	BOLT-IN BREAKERS			
		H١	/AC	HVAC		4.4	Х	100	%	4.4				MOUN	TING:	FLUSH			
		A/		HVAC (A/C)		0.0	Х	0	%	0.0					TAGE:	208/120			
		HE		HVAC (HEAT)		0.0	Х	0	%	0.0					HASE:	3			
				LARGE MOTORS		0.0	X	0	%	0.0		BU	JSSES			225/225			
				VENTILATION		0.0	X	0	%	0.0					WIRE:	4			
				KITCHEN EQUIPMENT.		0.0	X	100	%	0.0			MI		TING:	225			
				RECEPTACLES		17.6	X	78	%	13.8				-	FEED:	BOTTOM			
				MISCELLANEOUOS		7.7	Х	100	%	7.7			4		TING:	22			

					1													
		CKT.			GND. WIRE			EXISTING PANEL		BRKR					CIRCUIT	PH.	PH.	PH.
В				SIZE	AWGAWG	SIZE	NO.	2PE	NO.		AWG	AWG			DESIGNATION/LOCATION	Α	В	С
			RECEPTS.RMS201&202			20	1		2	20	-	-			RECEPTS. RMS 105 & 106	0.90		
0.72			RECEPTS.RMS203&205			20	3		4	20	-	-			RECEPTS. RMS 107&108		0.90	
			MEZZANINE LTS&RECEPTS			20	5		6	20	-	-			RECEPTS. RM 109			0.36
			RECEPTS.RM 204			20	7		8	20	-	-			RECEPTS. RM 103	0.72		
0.54			RECEPTS.AUDITORM 207			20	9		10	20	-				RECEPTS. RM 102		0.54	
			RECEPTS.AUDITORM 207			20	11	а.	12	20	-	-			EXHAUST FAN 43			0.70
			DIMMER CONTROLS			20	13		14	20	H	н			EXHAUST FAN 44	0.70		
0.90			RECEPTS.AUDITORM 207			20	15		16	20	12	12			LIGHTS-CONTROL RM.		0.20	
	10.000.000.000		RECEPTS.AUDITORM 207			20	17		18	20	12	12			RECEPTS-CONTROL RM.			0.54
			RECEPTS.RM 211			20	19		20	20	12	12			RECEPTS-COUNTER HT.	0.54		
0.72			RECEPTS.RM 211			20	21		22	20	12	12			RECEPTS-EQUIP. RACK		0.36	
	0.90		RECEPTS.RM 211			20	23		24	20	-	-			WATER HEATER			1.50
			RECEPTS.RM 213			20	25	a la	26	20	-	-			WATER HEATER	1.50		
0.54			RECEPTS.RM 213			20	27	а.	28	20	-	-			TROUGH T5		1.00	
			RECEPTS. RM 213			20	29		30	20	-	-		So the state and the fact	1.5 KW HEATER			1.50
			LIGHTING CONTROL LRC			20	31		32	20	-	-			1.5 KW HEATER	1.50		
1.10			STEP LTS. AUDITORIUM			20	33		34	20	Ξ.	-			TROUGH T3 MOVIE SCRN		1.00	
		MISC	DISCONNECT BEHIND			30	35		36	20	H	-			FOLLOW SPOT AUDITORM			0.18
		MISC	GUIDANCE OFFICE				37	a	38	20	-	-			FOLLOW SPOT AUDITORM	0.18		
0.20			EXISTING AUDIO EQUIP.			20	39	0	40	30				HVAC	HEAT PUMP #3		0.00	
	0.20	REC	MEZZANINE LTS&RECEPTS			20	41		42					HVAC				0.00
															r	Α	В	С
		RES/NO	DTES: BOLD FONT IS INTEN	IDED	TO DESIGN		NEW								GROSS PHASE TOTALS	11.70	8.72	10.63
			WORK												SE VOLTAGE (=120 OR 277)	120	120	120
		1										GR			E CONNECTED AMPERAGE	97.5	72.7	<mark>88.6</mark>
			EXISTING PANEL 2PE												CONNECTED TOTAL LOAD	31.1	KVA	
		CODE		CONN	VECTED KVA		MANE							MFG:	EXISTING SQ.D			
			LIGHTS		1.4	Х	125	%	1.8					TYPE:	BOLT-IN BREAKERS			
		and the the set of the set	HVAC		4.4	Х	100	%	4.4			1		ITING:	FLUSH			
			HVAC (A/C)		0.0	Х	0	%	0.0					r <mark>age</mark> :	208/120			
		-	HVAC (HEAT)		0.0	Х	0	%	0.0					HASE:	3			
			LARGE MOTORS		0.0	Х	0	%	0.0		BU	SSES			225/225			
			VENTILATION		0.0	Х	0	%	0.0					WIRE:	4			
			KITCHEN EQUIPMENT.		0.0	Х	100	%	0.0			M.L.		TING:	225			
			RECEPTACLES		17.6	Х	78	%	13.8					EED:	BOTTOM			
			MISCELLANEOUOS		7.7	Х	100	%	7.7					TING:	22			
		FUT	FUTURE CAPACITY		0.0	Х	0	%	0.0		C			SSES	YES			
			TOTAL LOADS	31.1			TOTA	L DEMAND	27.6				FEE	DERS:	EXISTING			

PROVIDE TEMPORARY CONSTRUCTION PHASE POWER AND LIGHTING FOR ALL TRADES AS NEEDED.	1	THIS DRAWING IS
PROVIDE SUBMITTALS ON ALL POWER, LIGHTING, AND CONTROLS EQUIPMENT.		BE PROVIDED WI
PROVIDE ALL ELECTRICAL SHOWN ON DRAWINGS AND SPECIFICATIONS AND AS NEEDED TO PROVIDE A COMPLETELY FUNCTIONAL INSTALLATION AND IN COMPLIANCE WITH NC ELECTRICAL CODE NEC 2017 EDITION WITH NC AMENDMENTS	2	PROVIDE ALL WO WORKMANLIKE N
PROVIDE ALL LOW VOLTAGE AND DATA WIRING FOR SYSTEMS FURNISHED BY OWNER.	3	NMC (ROMEX AN
PROVIDE FIELD COORDINATION WITH OTHER TRADES AND PROVIDE RED-LINE MARKED UP DRAWINGS TO OWNER OF ALL FIELD CHANGES.		EXISTING WALLS SHALL BE INSTAI
TEST ALL MOTORS FOR CORRECT ROTATION. TEST ALL LIGHTING, SWITCHING, AND OCCUPANCY SENSORS FOR PROPER	4	RACEWAYS SHAI
FUNCTION.	5	ALL WALLS AND
TEST AND CERTIFY ALL EMERGENCY LIGHTING.	6	ALL WIRE SIZES
PROVIDE ALL REQUIRED ELECTRICALLY RELATED PERMITS AND INSPECTIONS.	7	RECEPTACLE AN
PROVIDE A ONE YEAR WARRANTY ON ALL PARTS AND LABOR FROM DATE OF PROJECT ACCEPTANCE	8	ALL SPARE BREA
	9	PROVIDE ALL CO
	10	GENERALLY FOC EGRESS PATCH.
	11	PRIOR TO LOCAT CASEWORK DRA MOUNTING LOCA
	12	THE ENGINEER H ELECTRICAL CON

GENERAL NOTES (ALL ELECTRICAL SHEETS)

G IS DIAGRAMMATIC AND INDICATES THE APPROXIMATE LOCATION OF DEVICES AND EQUIPMENT. THE SHALL FIELD VERIFY ALL EXISTING CONDITIONS ON SITE. MINOR ADJUSTMENTS AND OFFSETS SHALL WHERE REQUIRED AT NO ADDITIONAL COST TO THE OWNER.

WORK IN COMPLIANCE WITH NC ELECTRICAL CODE AND IN AN INDUSTRY STANDARD E MANNER.

AND SE CABLE FOR FEEDERS) IS NOT ACCEPTABLE. MC CABLE IS ACCEPTABLE WHEN FISHED INSIDE LS AND FOR WHIPS. EMT CONDUIT WITH COMPRESSION TYPE FITTINGS AND COPPER CONDUCTORS TALLED IN ALL OTHER LOCATIONS. MINIMUM CONDUIT SIZE IS 3/4" TRADE SIZE.

HALL NOT BE RUN ON THE EXTERIOR OF BUILDING OR EXPOSED IN FINISHED USER/PUBLIC AREAS.

ID PENETRATIONS SHALL BE REPAIRED AND SEALED, SEE ARCHITECTURAL FOR WALL CONSTRUCTION.

ES SHOWN ARE FOR COPPER, UNLESS OTHERWISE NOTED. WIRES #10 OR LESS HALL BE SOLID.

AND SWITCH COVER PLATES SHALL BE BRUSHED STAINLESS STEEL, DEVICE COLOR SHALL BE GRAY.

EAKERS SHALL BE TURNED OFF AND LABELED "SPARE" ON DIRECTORY CARD.

CONDUIT AND WIRE TERMINATIONS TO EQUIPMENT.

OCUS EMERGENCY LIGHT HEADS AT 45° DOWN ANGLE AND +/- 15°-45° HORIZONTALLY TO COVER H. DO FINAL ADJUSTMENT OF HEADS WITH ENGINEER.

ATING ANY DEVICES AT CASEWORK, COUNTERTOPS, ETC REFER TO FINAL ARCHITECTURAL RAWINGS AND SHOP DRAWINGS TO VERIFY MOUNTING HEIGHTS AND LOCATIONS. COORDINATE ANY CATIONS PRIOR TO ROUGH IN.

R HAS MADE EVERY EFFORT TO PROVIDE A COMPLETE DESIGN, COMPLIANT WITH ALL CODES. THE CONTRACTOR SHALL MAKE ANY REQUIRED MINOR FIELD ADJUSTMENTS TO FULLY COMPLY WITH ALL LOCAL AND STATE CODES AND THE ORIGINAL DESIGN INTENT.

CASS IF	System No. V
c 🕑 us	ANSI/UL1479 (ASTM E814)
Classified by Underwriters Laboratories, Inc.	F Rating — 1 and2 Hr (See Items 1 and 3)
to UL 1479 and CAN/ULC-S115	T Rating — 0 Hr
	L Rating At Ambient — Less Than 1 CFM/sq
	L Rating At 400 F — Less Than 1 CFM/sq ft
1. Wall Assembly — Min 3-3/4 in	A 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
concrete for 1 and 2 h rated as is 32-1/4 in. (819 mm). See Concrete Blocks (CAZT) of 2. Through—Penetrants — One max 2-1/4 in. (57 mm). Pipe mi 45 degrees from perpendicular metallic pipes, conduits or tubin A. Steel Pipe — Nom 30 in. (7 C. Conduit — Nom 4 in. (102 D. Copper Tubing — Nom 6 E. Copper Tubing — Nom 6 in. 3. Fill, Void or Cavity Material* — point or continuous contact loc interface on both surfaces of w HILTI CONSTRUCTION CHEM	ssemblies, respectively. Wall may also be const category in the Fire Resistance Directory for na metallic pipe, conduit or tubing to be centered ay be installed with continuous point contact. F r. Pipe, conduit or tubing to be rigidly supported ng may be used: (762 mm) diam (or smaller) Schedule 10 (or he 762 mm) diam (or smaller) Schedule 10 (or he 762 mm) diam (or smaller) cast or ductile iron p 2 mm) diam (or smaller) steel electrical metallic in. (152 mm) diam (or smaller) Type L (or heave . (152 mm) diam (or smaller) Regular (or heave - Min 5/8 in. (16 mm) thickness of fill material a cations between pipe and wall, a min 1/2 in. (13

Hilti Firestop Systems	Reproduced by HILTI, I Underwriters Labor January 21, 2

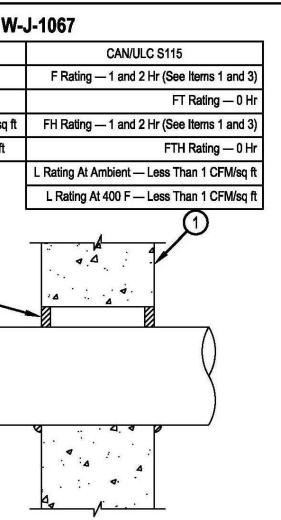
	GENERAL ELECTRICAL LEGEND
SYMBOL	DESCRIPTION
	NEW EQUIPMENT
	EXISTING EQUIPMENT
	1 HOUR FIRE RATED WALL
— · · · — · · · —	2 HOUR FIRE RATED WALL
	TYPICAL LIGHT FIXTURES LETTER INDICATES TYPE
$\overline{\mathbf{x}}$	TYPICAL EXIT SIGN - NUMBER OF FACES AND DIRECTIONAL ARROWS INDICATED, LETTER INDICATES TYPE
	EMERGENCY LIGHTING UNIT
e	ELECTRICAL POWER SUPPLY CONNECTION TO EQUIPMENT - EQUIPMENT TAG OR DESIGNATION INDICATED. COORDINATE LOCATION AND CONNECTION DETAILS WITH EQUIPMENT PROVIDER.
=	DUPLEX RECEPTACLE, NEMA CONFIGURATION 5-20R
= c	ABOVE COUNTER DUPLEX RECEPTACLE, MOUNT CENTER AT 44" AFF
S	20A, 120/277VAC SINGLE POLE SNAP SWITCH
s ₃	20A, 120/277VAC THREE WAY SNAP SWITCH
s _D	DIMMER LIGHT SWITCH
••	CONDUITS WITH PULL STRINGS WHERE SHOWN
	SWITCHED CIRCUIT
	UNSWITCHED CIRCUIT
<u> </u>	HOMERUN CIRCUIT TO PANEL - CIRCUIT INDICATED

BUNCOMBE COUNTY SCHOOLS

ELEVATING YOUNG MINDS

ENKA HIGH SCHOOL PROPOSED SOUND ROOM IN THE AUDITORIUM

475 ENKA LAKE ROAD CANDLER, NC



SECTION A-A

ightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) nstructed of any UL Classified Concrete Blocks*. Max diam of opening

names of manufacturers.

d within the firestop system. The annular space shall be min 0 in. to Pipe, conduit or tube may be installed at an an angle not greater than ed on both sides of wall assembly. The following types and sizes of

heavier) steel pipe. pipe.

lic tubing or 6 in. (152 mm) diam (or smaller) steel conduit.

avier) copper tubing. vier) copper pipe.

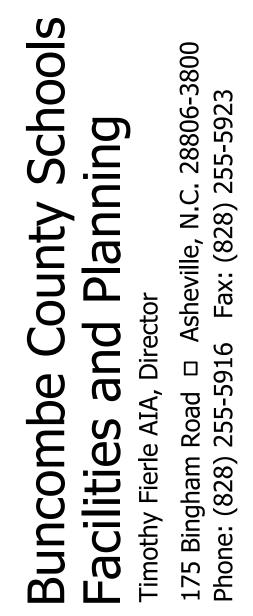
I applied within the annulus, flush with both surfaces of wall. At the 13 mm) diam bead of fill material shall be applied at the pipe-wall

ant or FS-ONE MAX Intumescent Sealant

dictions employing the UL or cUL Certification (such as Canada),

Inc. Courtesy of oratories, Inc. 1, 2015

	ABBREVIATIONS
А	AMP
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AL	ALUMINUM
BFG	BELOW FINISHED GRADE
С	CONDUIT (AND DEVICE COUNTER HEIGHT)
CU	COPPER OR CONDENSING UNIT
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
ER	REMTOE EMERGENCY LIGHT
EWH	ELECTRIC WALL HEATER
EX	EXIT SIGN
FMC	FLEXIBLE METAL CONDUIT
G	GROUND
GC	GENERAL CONTRACTOR
GFI	GROUND FAULT INTERRUPTER
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MDS	MAIN DISCONNECT SWITCH
MDP	MAIN DISTRIBUTION PANEL
Ν	NEUTRAL
NIC	NOT IN CONTRACT
OEM	ORIGINAL EQUIPMENT MANU.
PC	PLUMBING CONTRACTOR
PE	PHOTOCELL
PVC	POLYVINYL CHLORIDE PIPE
PNL	PANELBOARD
RSC	RIGID STEEL CONDUIT
RTU	ROOF TOP UNIT
SA	SURGE ARRESTER
UON	UNLESS OTHERWISE NOTED
VAC	VOLTAGE AC
W	WET LOCATION RATED
WIR	WIRE (SIZE/RATING)



CONSULTANTS:

SUD ASSOCIATES, P.A. 🥔 **CONSULTING ENGINEERS** LICENSE NO. C-0315 **PROJECT #19242**

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1813 CHAPEL HILL ROAD DURHAM, NC 27707 (919) 493-5277



ELECTRICAL -GENERAL

