# THE TOWN OF COLEBROOK OFFICE OF THE SUPERINTENDENT

# CONTRACT DOCUMENTS FOR HVAC UPGRADES AT

# COLEBROOK CONSOLIDATED SCHOOL

452 SMITH HILL ROAD
COLEBROOK CONNECTICUT 06021

STATE PROJECT #CV 029-003 HVAC

JANUARY 24, 2024

SALAMONE

&
ASSOCIATES, P.C.

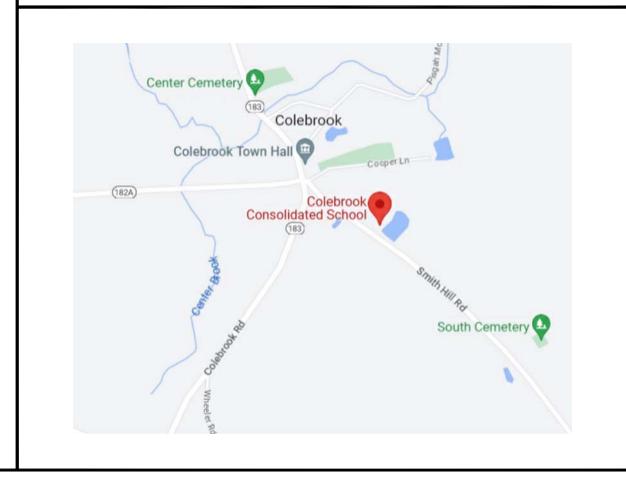
CONSULTING ENGINEERS

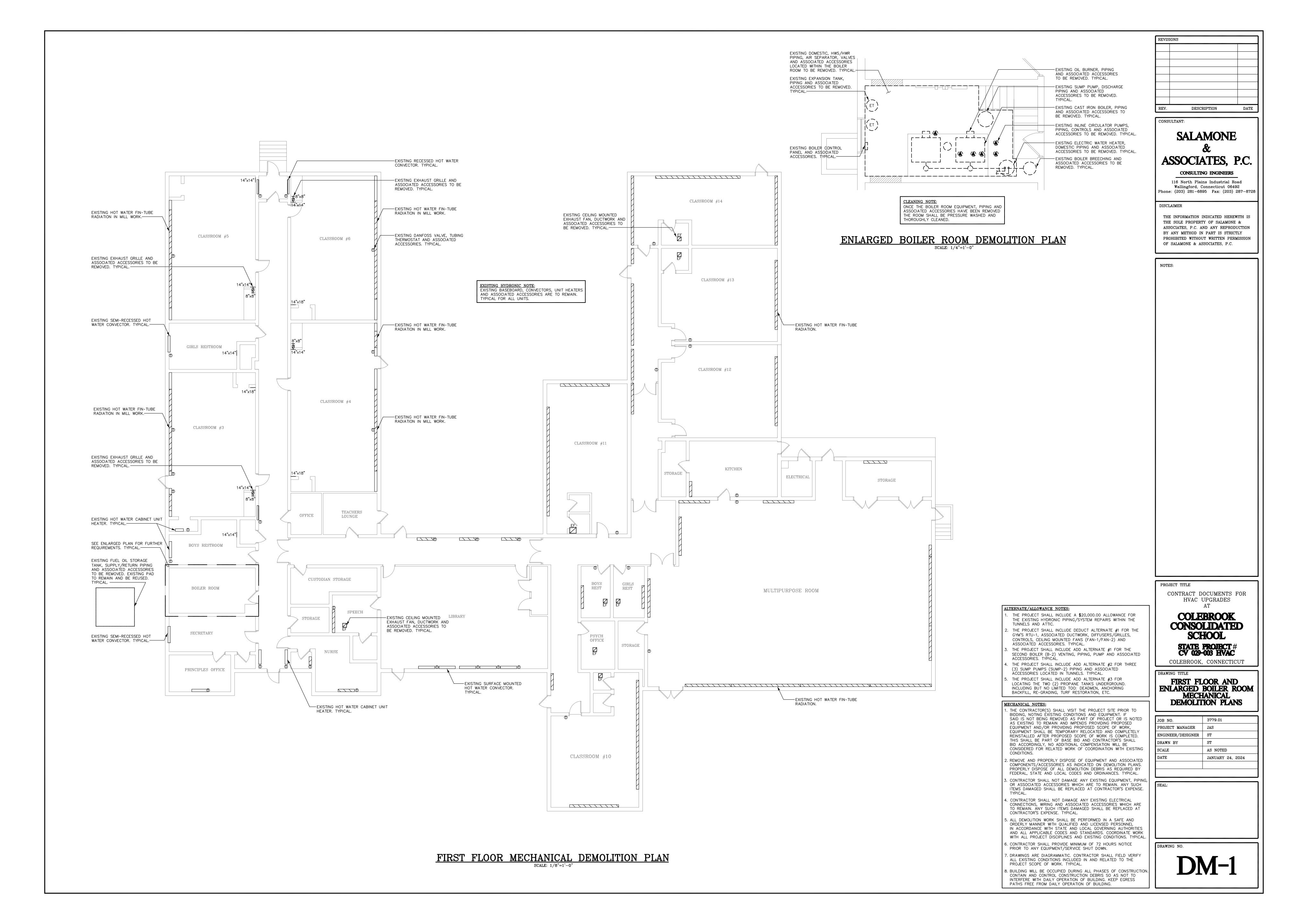
116 North Plains Industrial Road Wallingford, Connecticut 06492 Phone: (203) 281-6895 Fax: (203) 287-8728

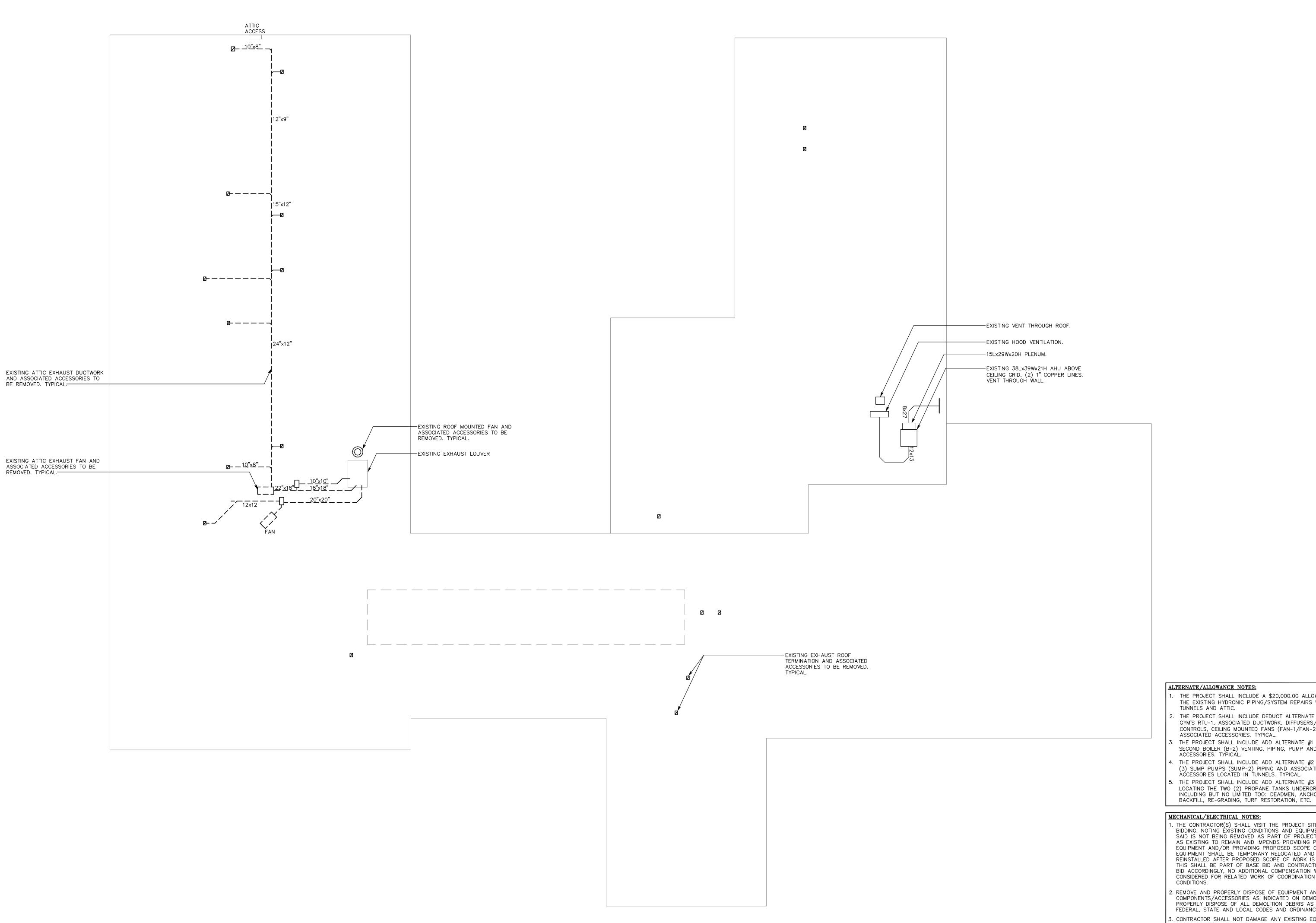
### DRAWING LIST

	DRAWING LIST
<u>DWG</u>	TITLE
COVER	
DM-1	FIRST FLOOR AND ENLARGED BOILER ROOM MECHANICAL DEMOLITION PLANS
DM-2	ATTIC MECHANICAL DEMOLITION PLAN
DE-1	FIRST FLOOR AND ENLARGED BOILER ROOM MECHANICAL DEMOLITION PLANS
DE-2	ATTIC ELECTRICAL DEMOLITION PLAN
L-1	TUNNEL AND ENLARGED BOILER ROOM LAYOUT PLANS
P-1	TUNNEL AND ENLARGED BOILER ROOM PLUMBING PLANS
P-2	FIRST FLOOR PLUMBING PLAN
P-3	PLUMBING SCHEDULES, DETAILS, NOTES, SYMBOLS AND ABBREVIATIONS
M-1	TUNNEL AND ENLARGED BOILER ROOM MECHANICAL PLANS
M-2	FIRST FLOOR MECHANICAL PLAN
M-3	ATTIC MECHANICAL PLAN
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M-5	MECHANICAL DETAILS
M-6	MECHANICAL DIAGRAMS
M-7	MECHANICAL SCHEDULES, NOTES, SYMBOLS AND ABBREVIATIONS
E-1	TUNNEL AND ENLARGED BOILER ROOM ELECTRICAL PLANS
E-2	FIRST FLOOR ELECTRICAL PLAN
E-3	ATTIC ELECTRICAL PLAN
E-4	ELECTRICAL PANELBOARD SCHEDULES
E-5	ELECTRICAL POWER RISER DIAGRAM
E-6	ELECTRICAL SYMBOLS, DETAILS, NOTES ANI ABBREVIATIONS

### LOCATION MAP







ATTIC MECHANICAL DEMOLITION PLAN

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

REVISIONS DESCRIPTION DATE

CONSULTANT:

# **SALAMONE**

CONSULTING ENGINEERS

116 North Plains Industrial Road Wallingford, Connecticut 06492 Phone: (203) 281-6895 Fax: (203) 287-8728

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ALTERNATE/ALLOWANCE NOTES: THE PROJECT SHALL INCLUDE A \$20,000.00 ALLOWANCE FOR THE EXISTING HYDRONIC PIPING/SYSTEM REPAIRS WITHIN THE TUNNELS AND ATTIC.

THE PROJECT SHALL INCLUDE DEDUCT ALTERNATE #1 FOR THE GYM'S RTU-1, ASSOCIATED DUCTWORK, DIFFUSERS/GRILLES, CONTROLS, CEILING MOUNTED FANS (FAN-1/FAN-2) AND ASSOCIATED ACCESSORIES. TYPICAL.

- THE PROJECT SHALL INCLUDE ADD ALTERNATE #1 FOR THE SECOND BOILER (B-2) VENTING, PIPING, PUMP AND ASSOCIATED ACCESSORIES. TYPICAL.
- THE PROJECT SHALL INCLUDE ADD ALTERNATE #2 FOR THREE (3) SUMP PUMPS (SUMP-2) PIPING AND ASSOCIATED
- ÀCCESSORIES LOCÀTED IN TUNNELS. TYPICAL. THE PROJECT SHALL INCLUDE ADD ALTERNATE #3 FOR LOCATING THE TWO (2) PROPANE TANKS UNDERGROUND. INCLUDING BUT NO LIMITED TOO: DEADMEN, ANCHORING

### MECHANICAL/ELECTRICAL NOTES:

- 1. THE CONTRACTOR(S) SHALL VISIT THE PROJECT SITE PRIOR TO BIDDING, NOTING EXISTING CONDITIONS AND EQUIPMENT. IF SAID IS NOT BEING REMOVED AS PART OF PROJECT OR IS NOTED AS EXISTING TO REMAIN AND IMPENDS PROVIDING PROPOSED EQUIPMENT AND/OR PROVIDING PROPOSED SCOPE OF WORK, EQUIPMENT SHALL BE TEMPORARY RELOCATED AND COMPLETELY REINSTALLED AFTER PROPOSED SCOPE OF WORK IS COMPLETED. THIS SHALL BE PART OF BASE BID AND CONTRACTOR'S SHALL BID ACCORDINGLY, NO ADDITIONAL COMPENSATION WILL BE CONSIDERED FOR RELATED WORK OF COORDINATION WITH EXISTING
- 2. REMOVE AND PROPERLY DISPOSE OF EQUIPMENT AND ASSOCIATED COMPONENTS/ACCESSORIES AS INDICATED ON DEMOLITION PLANS. PROPERLY DISPOSE OF ALL DEMOLITION DEBRIS AS REQUIRED BY FEDERAL, STATE AND LOCAL CODES AND ORDINANCES. TYPICAL.
- 3. CONTRACTOR SHALL NOT DAMAGE ANY EXISTING EQUIPMENT, PIPING, OR ASSOCIATED ACCESSORIES WHICH ARE TO REMAIN. ANY SUCH ITEMS DAMAGED SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
- 4. CONTRACTOR SHALL NOT DAMAGE ANY EXISTING ELECTRICAL CONNECTIONS, WIRING AND ASSOCIATED ACCESSORIES WHICH ARE TO REMAIN. ANY SUCH ITEMS DAMAGED SHALL BE REPLACED AT CONTRACTOR'S EXPENSE. TYPICAL.
- 5. ALL DEMOLITION WORK SHALL BE PERFORMED IN A SAFE AND ORDERLY MANNER WITH QUALIFIED AND LICENSED PERSONNEL
  IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES
  AND ALL APPLICABLE CODES AND STANDARDS. COORDINATE WORK
- WITH ALL PROJECT DISCIPLINES AND EXISTING CONDITIONS. TYPICAL. 6. CONTRACTOR SHALL PROVIDE MINIMUM OF 72 HOURS NOTICE PRIOR TO ANY EQUIPMENT/SERVICE SHUT DOWN.
- 7. DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS INCLUDED IN AND RELATED TO THE PROJECT SCOPE OF WORK. TYPICAL. 8. BUILDING WILL BE OCCUPIED DURING ALL PHASES OF CONSTRUCTION. CONTAIN AND CONTROL CONSTRUCTION DEBRIS SO AS NOT TO INTERFERE WITH DAILY OPERATION OF BUILDING. KEEP EGRESS PATHS FREE FROM DAILY OPERATION OF BUILDING.

PROJECT TITLE

DRAWING TITLE

CONTRACT DOCUMENTS FOR HVAC UPGRADES

**COLEBROOK** CONSOLIDATED **SCHOOL** 

AT

STATE PROJECT # CV 029-003 HVAC

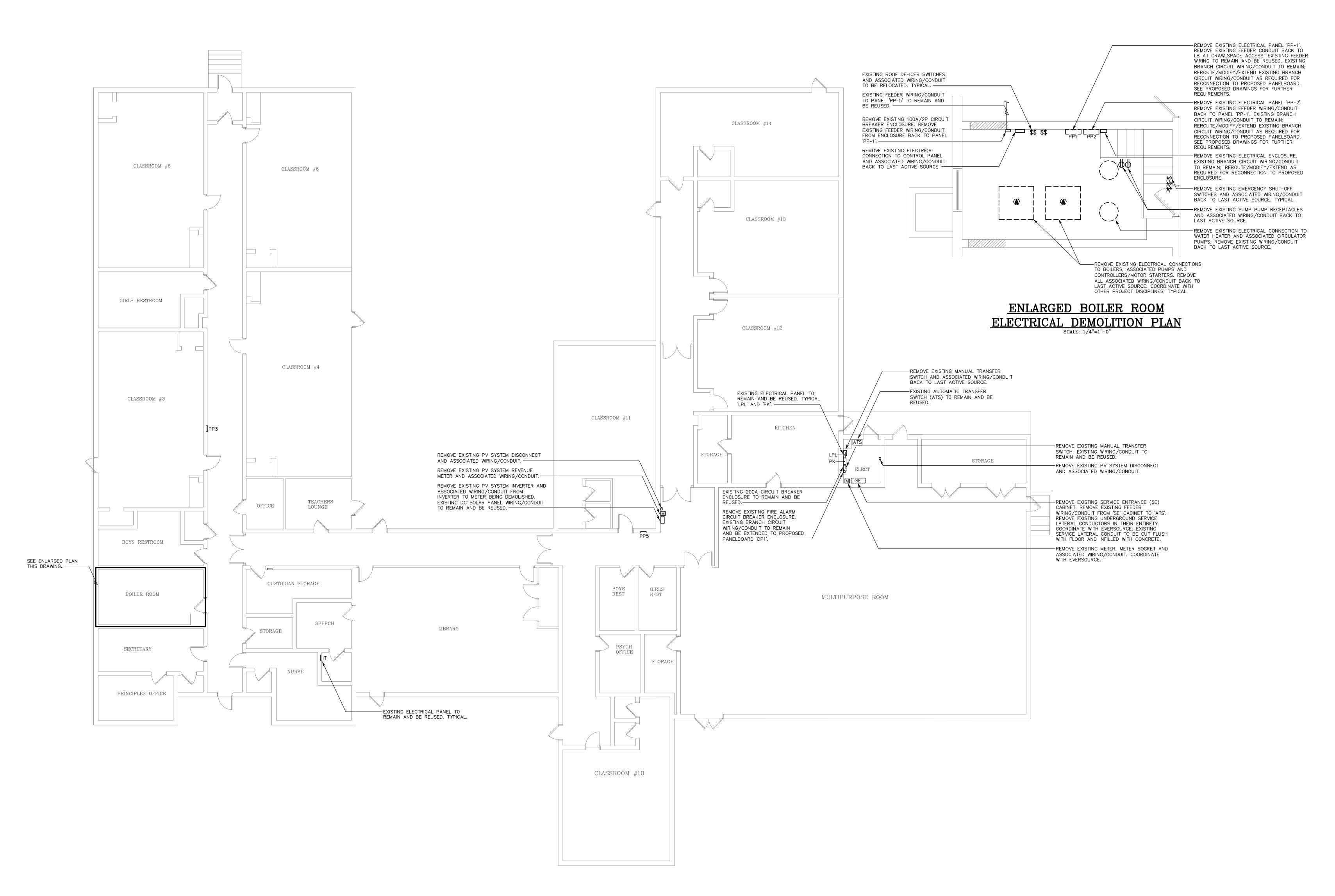
COLEBROOK, CONNECTICUT

ATTIC MECHANICAL **DEMOLITION PLAN** 

JOB NO.	3779.01
PROJECT MANAGER	JAS
ENGINEER/DESIGNER	ST
DRAWN BY	ST
SCALE	AS NOTED
DATE	JANUARY 24, 2024
	•

DRAWING NO.

**DM-2** 



FIRST FLOOR ELECTRICAL DEMOLITION PLAN

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

REVISIONS DESCRIPTION DATE

CONSULTANT:

**SALAMONE** 

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CONSULTING ENGINEERS

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PROJECT TITLE

CONTRACT DOCUMENTS FOR HVAC UPGRADES AT

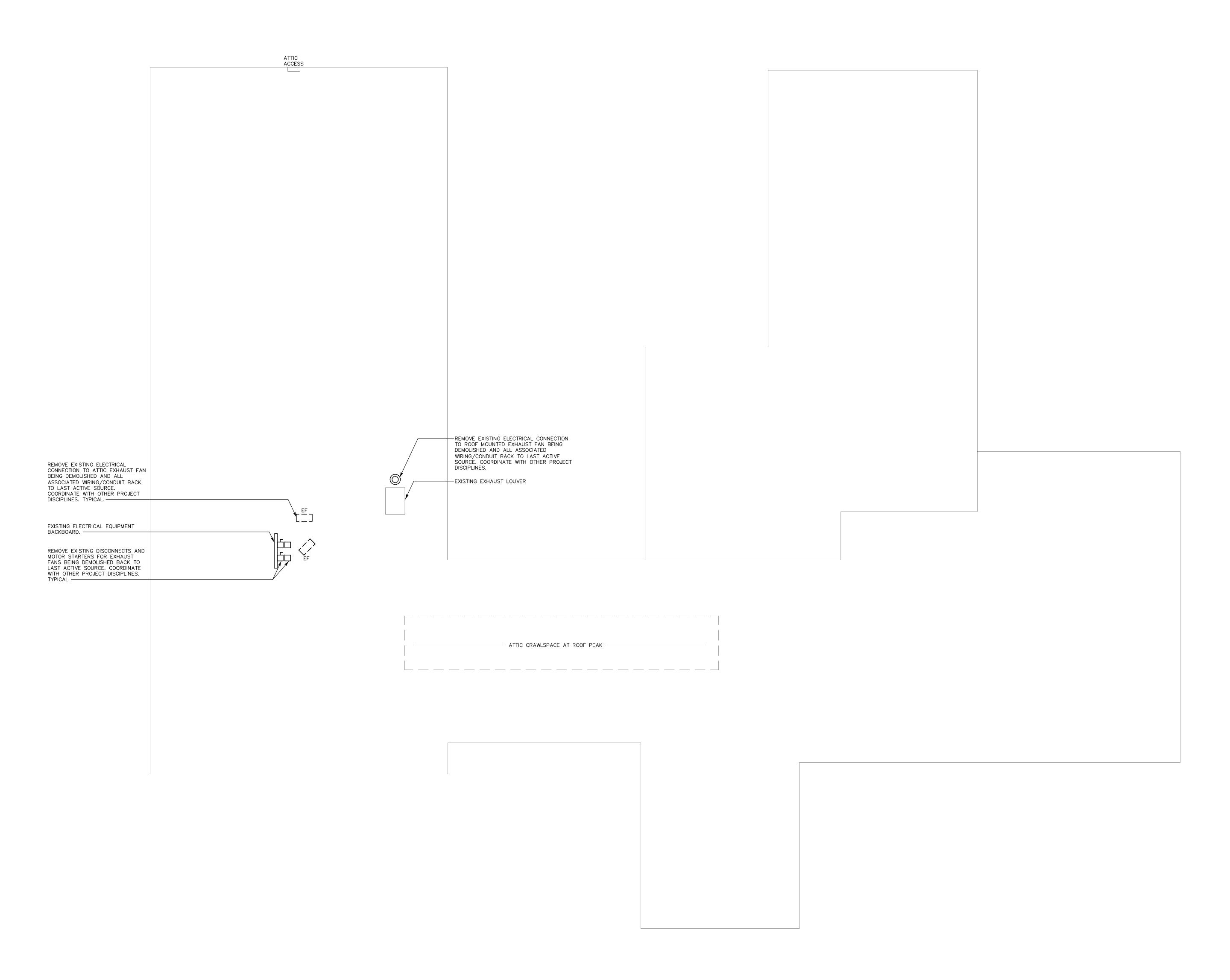
**COLEBROOK** CONSOLIDATED **SCHOOL** 

STATE PROJECT # CV 029-003 HVAC COLEBROOK, CONNECTICUT

**ELECTRICAL DEMOLITION PLANS** 

DRAWING TITLE FIRST FLOOR AND ENLARGED BOILER ROOM

3779.01 PROJECT MANAGER JAS ENGINEER/DESIGNER FB DRAWN BY CK AS NOTED JANUARY 24, 2024



ATTIC ELECTRICAL DEMOLITION PLAN
SCALE: 1/8"=1'-0"

REVISIONS	<b>;</b>	
REV.	DESCRIPTION	DATE

CONSULTA

# SALAMONE & ASSOCIATES, P.C.

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COLEBROOK CONSOLIDATED SCHOOL

STATE PROJECT # CV 029-003 HVAC COLEBROOK, CONNECTICUT

DRAWING TITLE

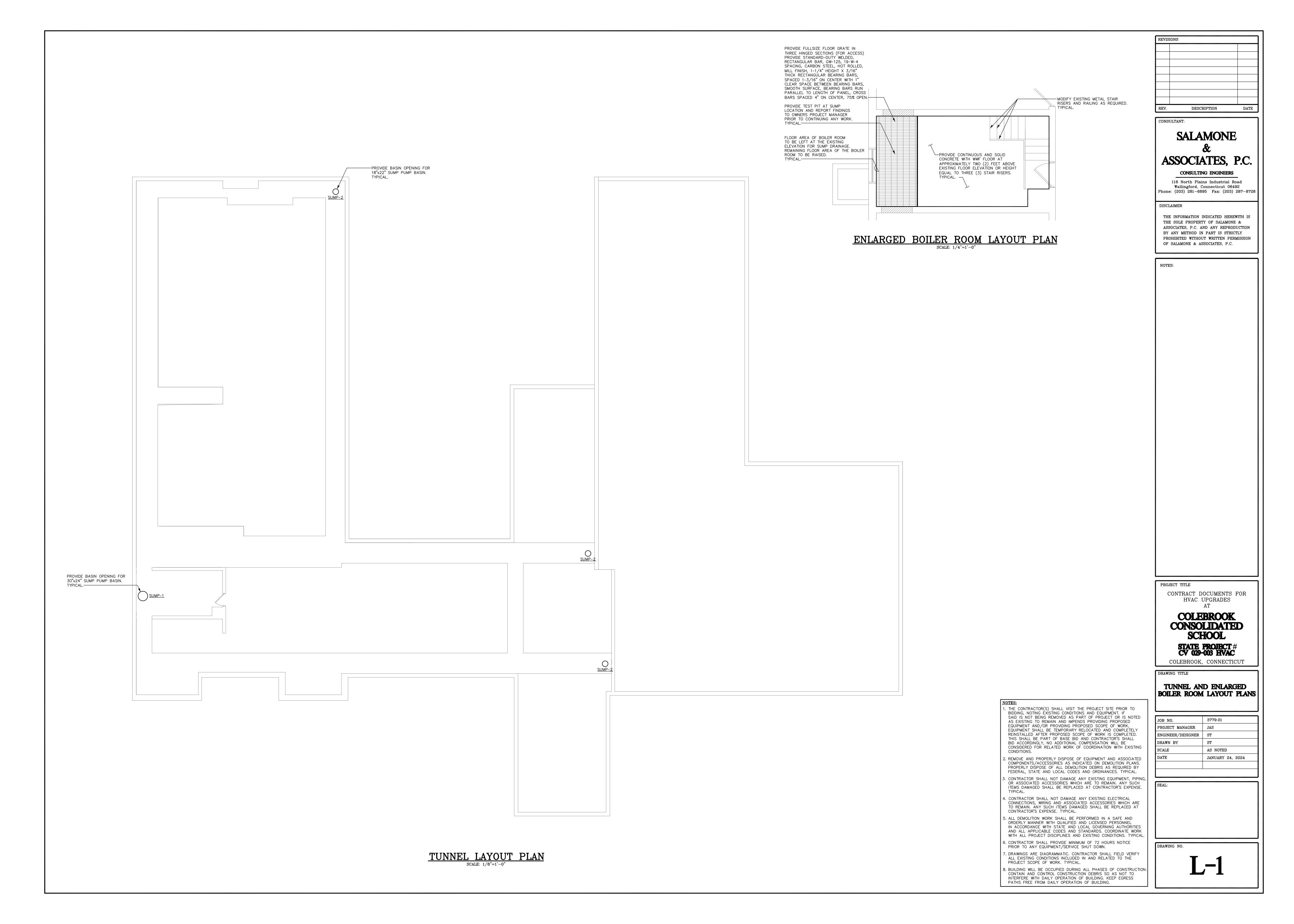
ATTIC ELECTRICAL DEMOLITION PLAN

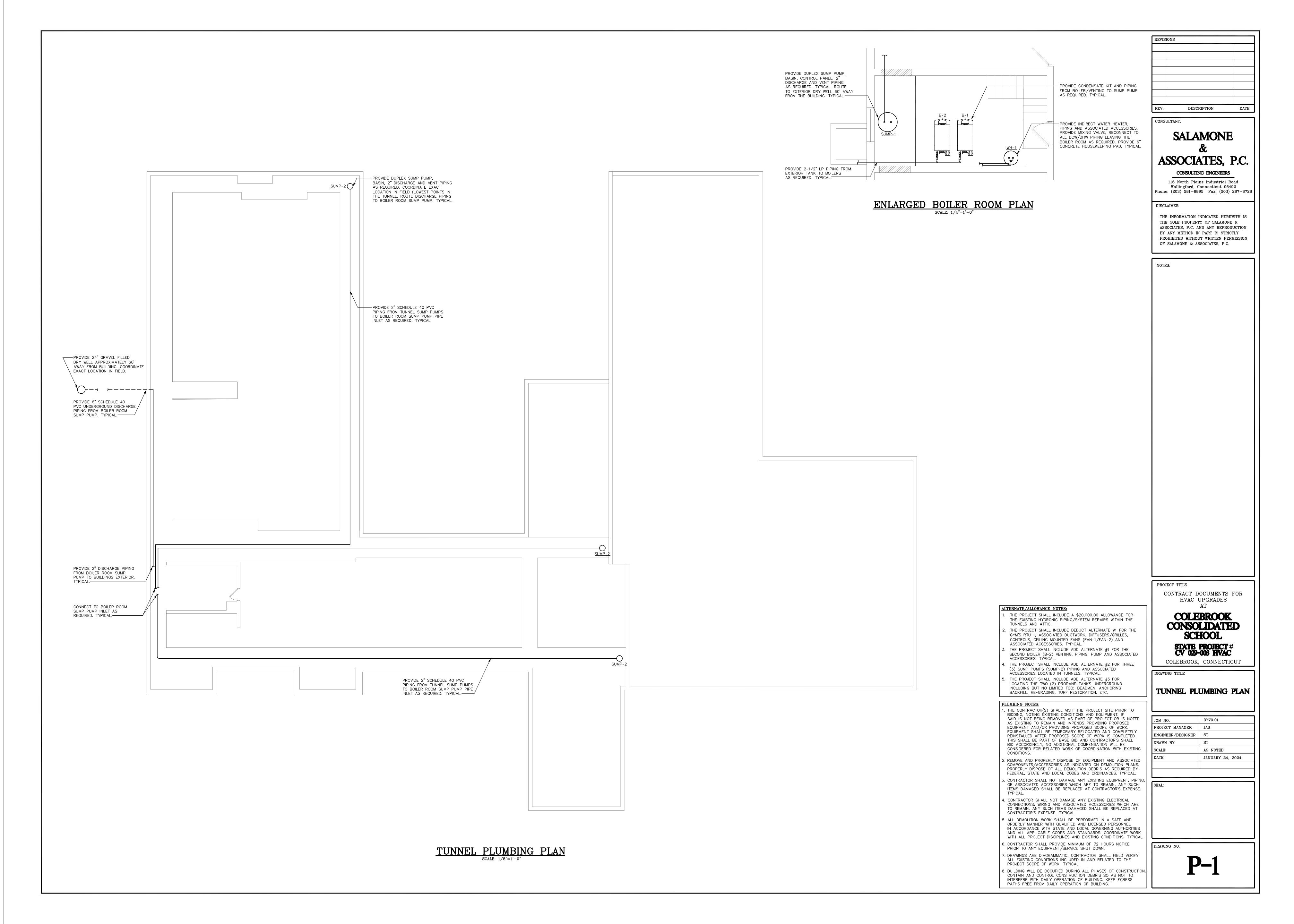
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ENGINEER/DESIGNER	FB
DRAWN BY	CK
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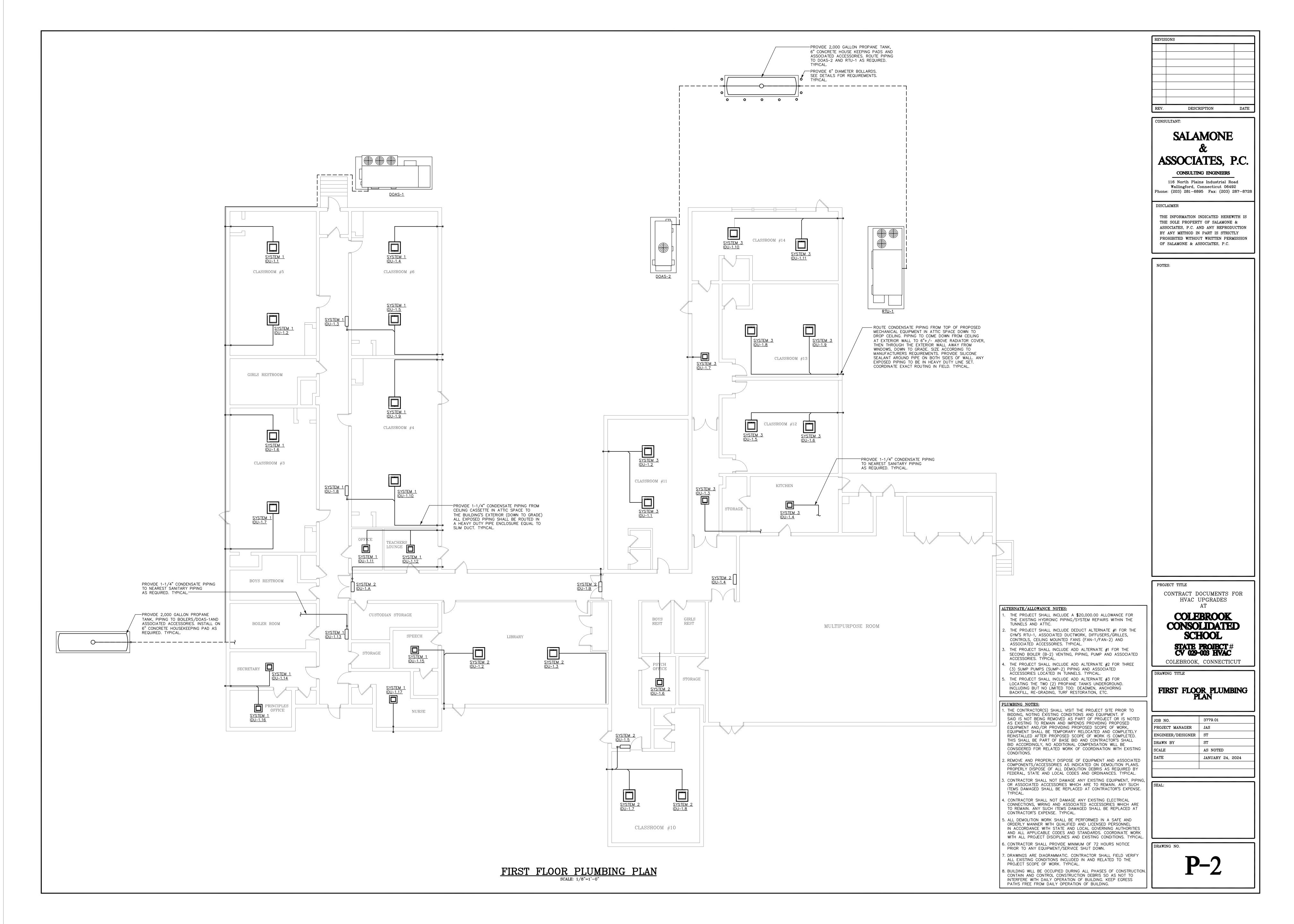
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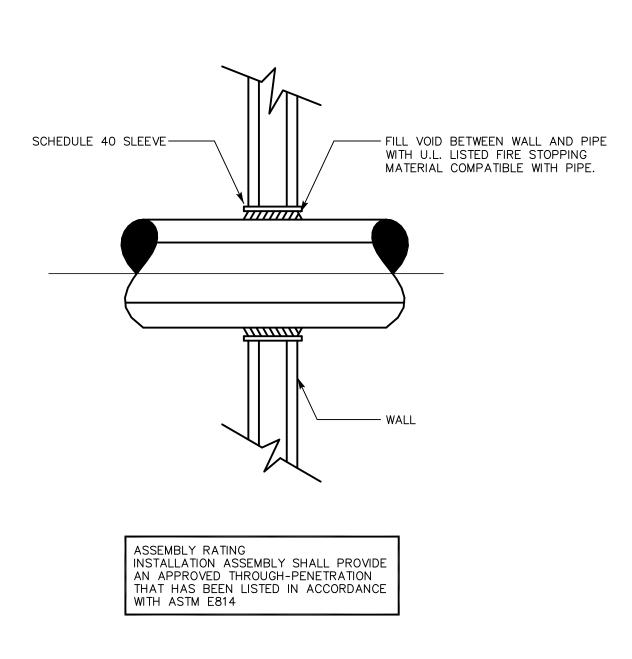
DRAWING

DE-2

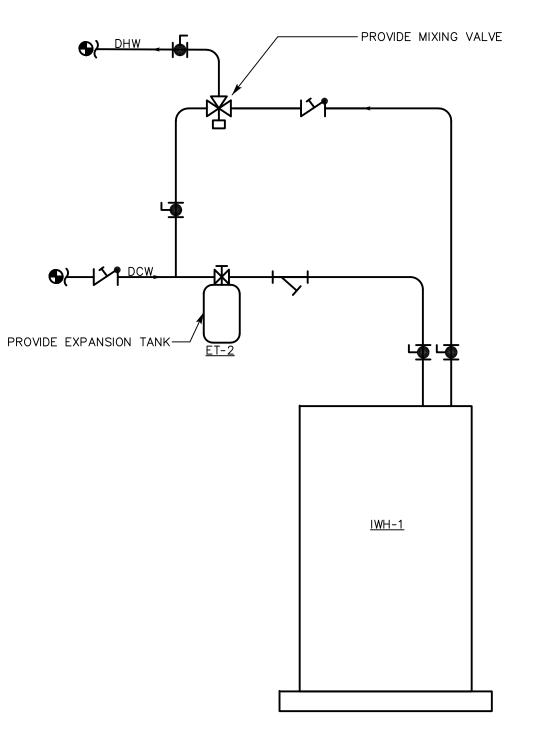






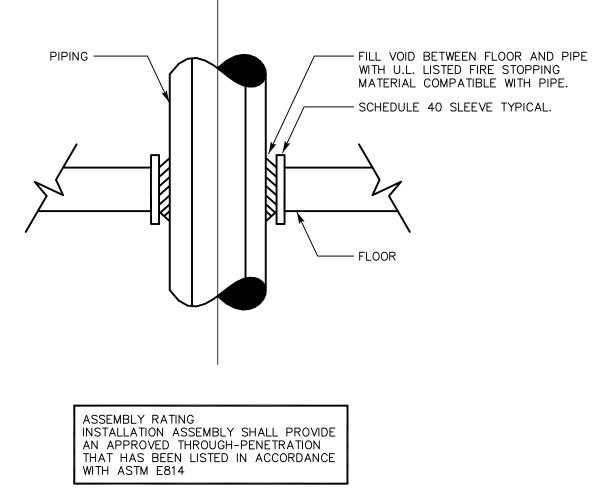


### TYPICAL WALL PIPE PENETRATION FIRE STOPPING DETAIL

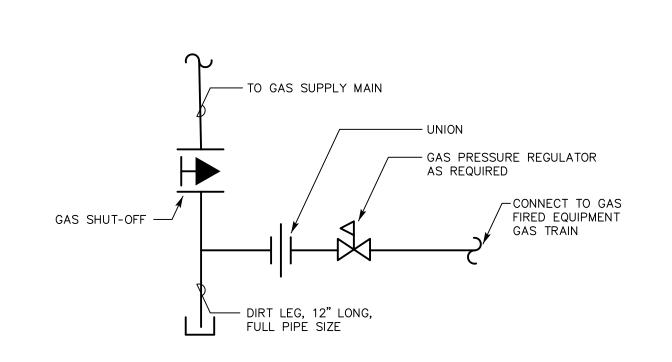


NOTES:	
1. THIS DRAWING IS MEANT TO SHOW SYST INSTALLER IS RESPONSIBLE FOR ALL EQ COMPLY WITH ALL APPLICABLE CODES.	
2. SEE FLOOR PLANS FOR LOCATIONS/EQUI	PMENT LAYOUT. TYPICAL.

### INDIRECT WATER HEATER PIPING DIAGRAM



TYPICAL FLOOR PIPE PENETRATION
FIRE STOPPING DETAIL



TYPICAL CONNECTION TO GAS FIRED EQUIPMENT

INDIRECT	WA'	ΓER	HEATER	SCHEDULE
NUMBER		IWH-1		
LOCATION		BOILER	ROOM	
TYPE		INDIRE	CT	
CAPACITY GALLONS		50		
1ST HOUR RATING 255		255		
DESIGN BASED MODEL		SIT030		
DESIGN BASED MANUF.		LOCHIN	IVAR	
NOTES:  1. INSTALL PER MANUFACTURI	ERS INS	TALLATIO	ON INSTRUCTIONS	AND ALL APPLICABLE CODES

SUMP PUMP SCHEDULE		
PUMP NO.	SUMP-1	SUMP-1
LOCATION	BOILER ROOM	BOILER ROOM
FLOW RATE (GPM)	40	40
TOTAL DYNAMIC HEAD (FT)	5	10
DUPLEX MOTOR HP	1/2	1/3
MOTOR (V/PH/HZ)	115/1/60	115/1/60
DESIGN BASED MODEL	10S-DPLX NO. 14940699	SPK-6C1A NO. 506081
DESIGN BASED MANUF.	LITTLE GIANT	LITTLE GIANT
	ERS INSTALLATION INSTRUCTIONS AUDIO AND VISUAL ALARM FOR D O LITTLE GIANT.	

EXPANSION TANK SCHEDULE	
NUMBER	ET-1
LOCATION	BOILER ROOM
ASME	NO
ACCEPTANCE GALLONS	3.2
DESIGN BASED MODEL	PT-12
DESIGN BASED MANUFACTURER	BELL AND GOSSETT
NOTES:	
•	CIFICATIONS FOR FURTHER REQUIREMENTS.  FALLATION INSTRUCTIONS AND ALL APPLICABLE CODES,

### PLUMBING SYMBOL LIST BALL VALVE PIPE ELBOW, TURNED UP $\overline{\phantom{a}}$

<u> </u>	PIPE ELBOW, TURNED DOWN
	DOMESTIC COLD WATER SUPPLY PIPING
<del>//</del>	DOMESTIC HOT WATER SUPPLY PIPING
<del></del>	DOMESTIC HOT WATER RETURN PIPING
—— LP ———	LIQUID PROPANE PIPING

### PLUMBING ABBREVIATIONS

SANITARY VENT THROUGH ROOF

WATER CLOSET

CONNECT TO EXISTING

C.O.	CLEANOUT
DCW	DOMESTIC COLD WATER SUPPLY
DHW	DOMESTIC HOT WATER SUPPLY
DN	DOWN
DWH	DOMESTIC WATER HEATER
ET	EXPANSION TANK
F.C.O.	FLOOR CLEANOUT
FD	FLOOR DRAIN
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
JS	JANITOR'S SINK
LAV	LAVATORY
NFWH	NON-FREEZE WALL HYDRANT
LP	LIQUID PROPANE GAS
NTS	NOT TO SCALE
PRV	PRESSURE REDUCING VALVE
SAN	SANITARY
SK	SINK
ТМ	THERMOSTATIC MIXING VALVE
I	

VTR

### PLUMBING GENERAL NOTES

- NOTES BELOW ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES.
- . PROVIDE FIXTURE SHUT-OFF VALVES AND P-TRAPS FOR ALL FIXTURES PROVIDED. PROVIDE SANITARY, WASTE AND DOMESTIC WATER PIPING AS REQUIRED FOR ALL FIXTURES PROVIDED. . REFER TO AND CAREFULLY CHECK ARCHITECTURAL, ELECTRICAL AND
- MECHANICAL DRAWINGS AND DETAILS, NOTING LOCATIONS WHERE WALLS, PARTITIONS, CEILINGS AND OTHER SURFACES ARE FURRED, LOCATION OF PIPE SLEEVES, LOCATIONS OF PIPE SHAFTS AND CONFLICTS WITH WORK OF OTHER TRADES AND ARRANGE WORK ACCORDINGLY. FURNISH ALL OFFSETS, FITTINGS, VALVES, DRAINS, ETC. REQUIRED TO MEET SUCH
- 4. DUE TO SCALE OF DRAWINGS, ALL REQUIRED OFFSETS, FITTINGS, VALVES, DRAINS, ETC. MAY NOT BE INDICATED.
- 5. ALL PIPING PASSING THROUGH FIRE RATED WALLS SHALL BE PROVIDED WITH SCHEDULE 40 STEEL PIPE SLEEVES AND SPACE BETWEEN EXTERIOR OF PIPE AND INTERIOR OF PIPE SLEEVE PACKED WITH A FIRE RATED MATERIAL EQUAL TO THE RATING OF THE WALL.
- . UNLESS OTHERWISE INDICATED, PROVIDE A COMPLETE AND OPERATIONAL MECHANICAL SYSTEM INCLUDING ALL NECESSARY MATERIAL, LABOR AND
- CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS IN ACCORDANCE WITH STATE
- AND LOCAL GOVERNING CODES. B. THE TERM "PROVIDE" SHALL MEAN "TO FURNISH, INSTALL AND CONNECT

EQUIPMENT.

COMPLETELY."

- . WHERE THE CONTRACTOR PROPOSES TO USE AN ITEM OF EQUIPMENT OTHER THAN THAT SPECIFIED OR DETAILED ON THE DRAWINGS WHICH REQUIRES ANY REDESIGN OF THE STRUCTURE, PARTITIONS, FOUNDATIONS, PIPING, WIRING OR ANY OTHER PART OF THE MECHANICAL, ELECTRICAL OR ARCHITECTURAL LAYOUT, ALL SUCH REDESIGN AND ALL NEW DRAWINGS AND DETAILING REQUIRED THEREFORE, SHALL BE PREPARED AT THE CONTRACTOR'S EXPENSE AND ARE SUBJECT TO THE REVIEW AND APPROVAL OF THE OWNER OR HIS AUTHORIZED REPRESENTATIVE. OWNER RESERVES
- ANY REDESIGN WORK. 10. ALL WORK SHALL BE DONE WITH LICENSED WORKMEN IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES.
- . CONTRACTOR SHALL MAKE ADEQUATE PROVISIONS FOR PIPE SLOPE AND ANCHORAGE.

THE RIGHT TO HAVE THE ARCHITECT OR ENGINEER OF HIS CHOICE PREPARE

- 12. BEFORE CUTTING OR DRILLING INTO BUILDING ELEMENTS, INSPECT AND LAYOUT WORK TO AVOID DAMAGING STRUCTURAL ELEMENTS AND BUILDING UTILITIES.
- 13. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST ACCEPTED:
- A. INTERNATIONAL AND STATE BUILDING CODE B. CONNECTICUT SUPPLEMENT
- C. INTERNATIONAL AND STATE MECHANICAL CODE D. ASTM & ANSI STANDARDS. E. INTERNATIONAL AND STATE PLUMBING CODE
- F. FIRE SAFETY CODE
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR AND PAYMENT FOR ALL UTILITIES DAMAGED DURING CONSTRUCTION.
- 5. CONTRACTOR TO CONFIRM PIPE LOCATIONS, ELEVATIONS, AND SIZES BEFORE ANY WORK IS STARTED. IF ANY DISCREPANCIES ARE FOUND NOTIFY ENGINEER BEFORE PROCEEDING WITH WORK.
- 16. PROVIDE WATER SERVICE SHUT OFF VALVES ON WATER SUPPLY IMMEDIATELY ADJACENT TO PLUMBING FIXTURES.
- 17. PROVIDE SEISMIC BRACING OF ALL PLUMBING PIPES PER THE CONNECTICUT
- 18. PROVIDE WATER HAMMER ARRESTERS FOR ALL FLUSH VALVES. SIZE AND
- LOCATE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. 19. FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS FOR
- INSTALLATION OF PROVIDED EQUIPMENT.
- 20. ALL PIPES THAT PENETRATE WALLS, FLOORS AND CEILINGS IN FINISHED AREAS SHALL RECEIVE CHROME PLATED METAL ESCUTCHEONS.
- 21. ALL SHOP DRAWINGS OF INDIVIDUAL COMPONENTS ARE TO BE SUBMITTED AS A COMPLETE PACKAGE.
- 22. ALL SHOP DRAWINGS OF RELATED COMPONENTS SHALL BE SUBMITTED AS A COMPLETE PACKAGE. 23. ALL WORK IN INTERIOR FINISHED SPACES IS TO BE CONCEALED BEHIND
- WALLS, ABOVE CEILINGS, OR UNDER THE FLOOR. PROVIDE ALL NECESSARY CUTTING, PATCHING, REPAINTING AND/OR REPLACEMENT OF FINISHES AS REQUIRED TO PERFORM WORK.
- 24. WRITTEN REQUESTS FOR PLANNED SHUTDOWN OR INTERRUPTION OF BUILDING SERVICES, SYSTEMS OR EQUIPMENT SHALL BE MADE IN WRITING 72 HOURS PRIOR TO START OF THE REQUESTED SHUTDOWN PERIOD.
- 25. SUPPORT PIPING ABOVE SUSPENDED CEILING, FROM CONSTRUCTION ABOVE, AS CLOSE AS POSSIBLE TO BOTTOM OF SLABS, BEAMS, MAINTAINING MAXIMUM HEADROOM AT ALL TIMES.
- 26. PROVIDE CLEANOUTS PER PLUMBING CODE.
- 27. ISLE AND CORRIDOR WAYS THROUGH CONSTRUCTION AREAS WHICH ARE REQUIRED FOR EGRESS (NORMAL OR EMERGENCY) SHALL BE KEPT CLEAR OF MATERIAL, EQUIPMENT, & DEBRIS.
- 28. ALL WORK SHALL BE LICENSED WORKMAN IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES.

ALTERNATE/ALLOWANCE NOTES:

ASSOCIATED ACCESSORIES. TYPICAL.

TUNNELS AND ATTIC.

ACCESSORIES. TYPICÁL.

THE PROJECT SHALL INCLUDE A \$20,000.00 ALLOWANCE FOR THE EXISTING HYDRONIC PIPING/SYSTEM REPAIRS WITHIN THE

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THE PROJECT SHALL INCLUDE ADD ALTERNATE #1 FOR THE SECOND BOILER (B-2) VENTING, PIPING, PUMP AND ASSOCIATED

(3) SUMP PUMPS (SUMP-2) PIPING AND ASSOCIATED

. THE PROJECT SHALL INCLUDE ADD ALTERNATE #3 FOR LOCATING THE TWO (2) PROPANE TANKS UNDERGROUND. INCLUDING BUT NO LIMITED TOO: DEADMEN, ANCHORING

ÀCCESSORIES LOCÀTED IN TUNNELS. TYPICAL.

BACKFILL, RE-GRADING, TURF RESTORATION, ETC.

. THE PROJECT SHALL INCLUDE ADD ALTERNATE #2 FOR THREE

REVISIONS DESCRIPTION DATE

CONSULTANT:

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NOTES:

PROJECT TITLE CONTRACT DOCUMENTS FOR

> **COLEBROOK** CONSOLIDATED **SCHOOL**

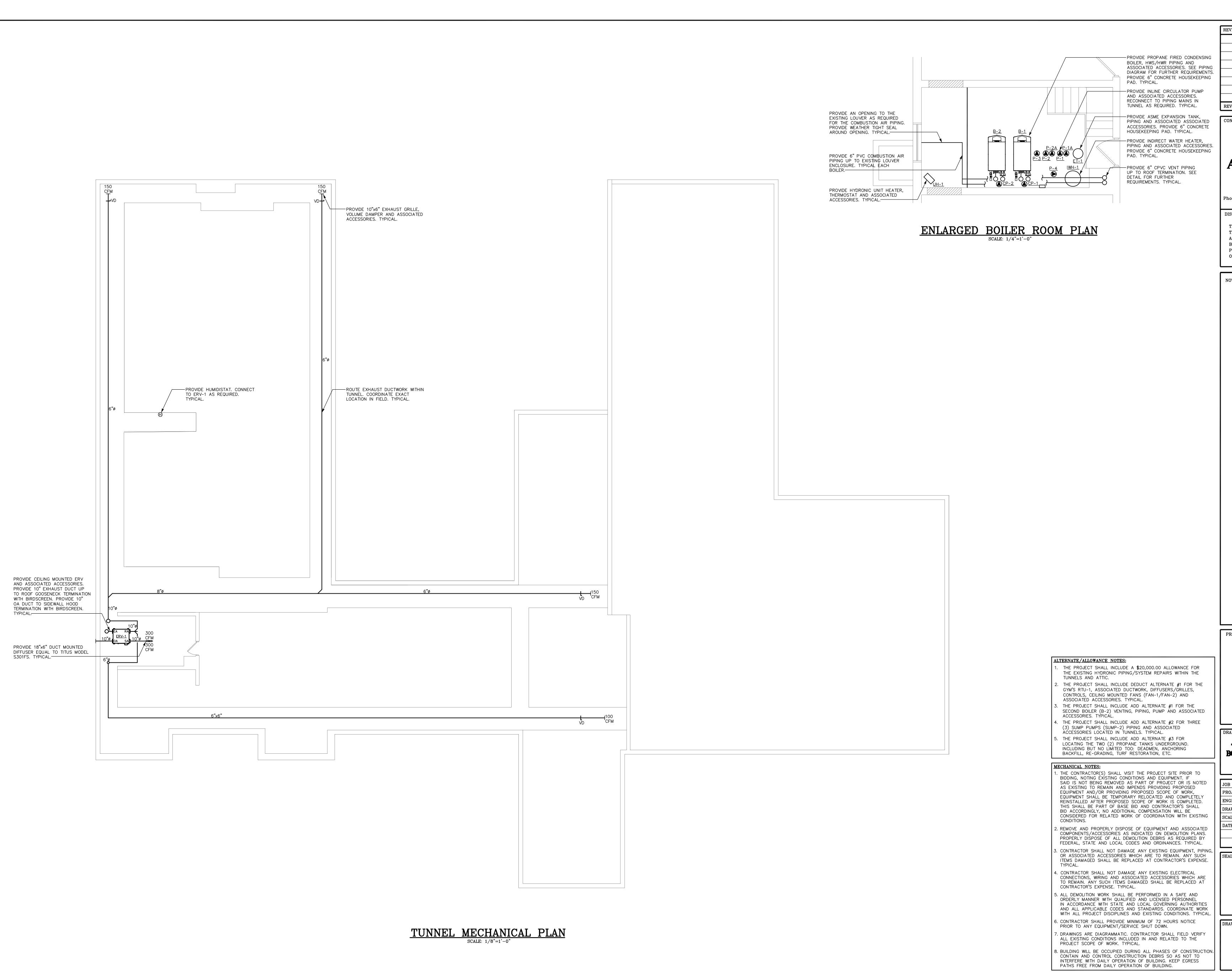
HVAC UPGRADES  $\operatorname{AT}$ 

STATE PROJECT # CV 029-003 HVAC

COLEBROOK, CONNECTICUT DRAWING TITLE

PLUMBING SCHEDULES, DETAILS, NOTES, SYMBOLS AND ABBREVIATIONS

JOB NO.	3779.01
PROJECT MANAGER	JAS
ENGINEER/DESIGNER	ST
DRAWN BY	СК
SCALE	AS NOTED
DATE	JANUARY 24, 2024



REVISIONS

REVISIONS

REV. DESCRIPTION DATE

CONSULTANT:

SALAMONE &

ASSOCIATES, P.C. CONSULTING ENGINEERS

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COLEBROOK CONSOLIDATED SCHOOL

AT

STATE PROJECT #CV 029-003 HVAC

COLEBROOK, CONNECTICUT

TUNNEL AND ENLARGE

TUNNEL AND ENLARGED BOILER ROOM MECHANICAL PLANS

JOB NO. 3779.01

JOB NO. 3779.01

PROJECT MANAGER JAS

ENGINEER/DESIGNER ST

DRAWN BY ST

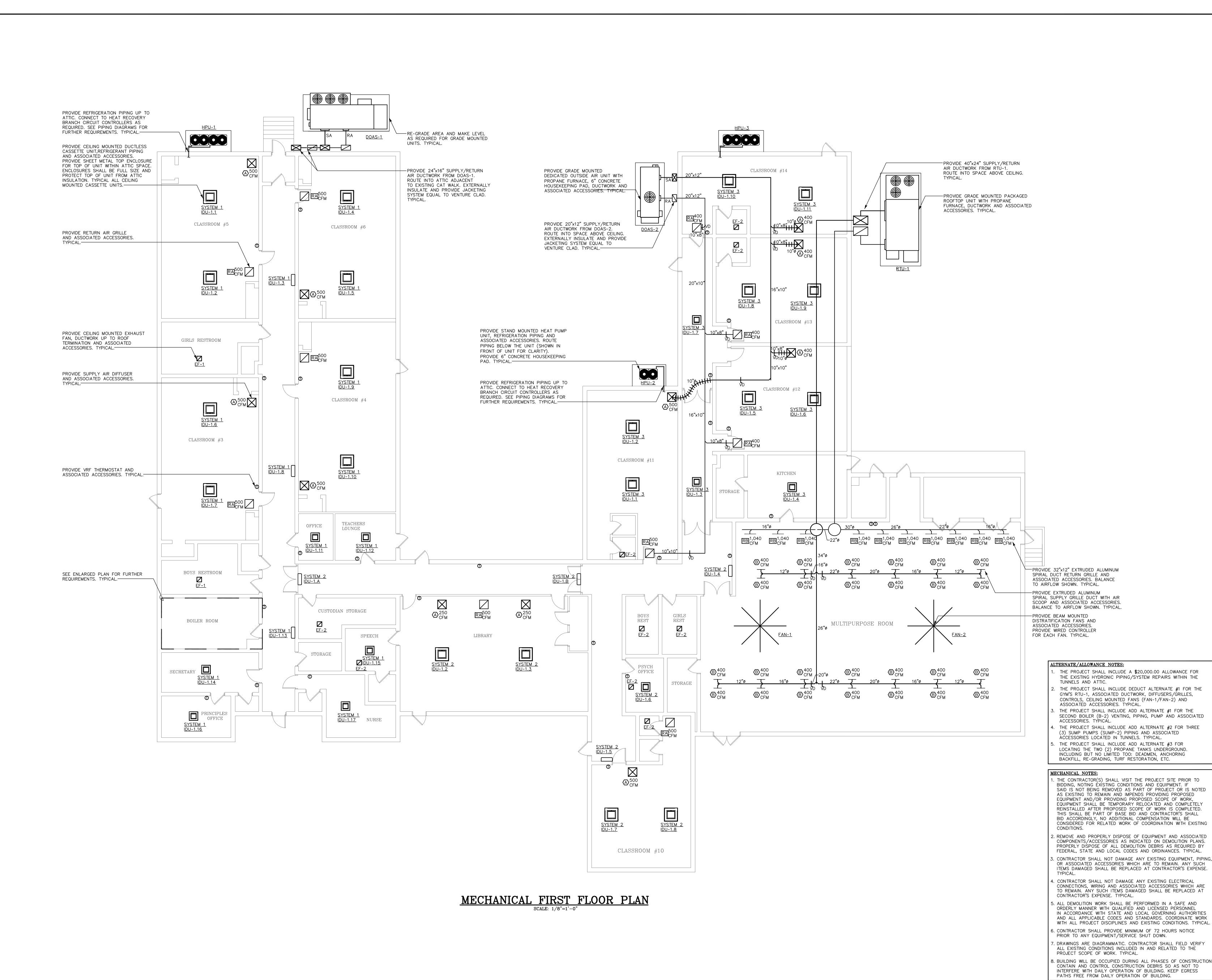
SCALE AS NOTED

DATE JANUARY 24, 2024

u:

DRAWING NO.

**M**-1



REVISIONS

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COLEBROOK, CONNECTICUT
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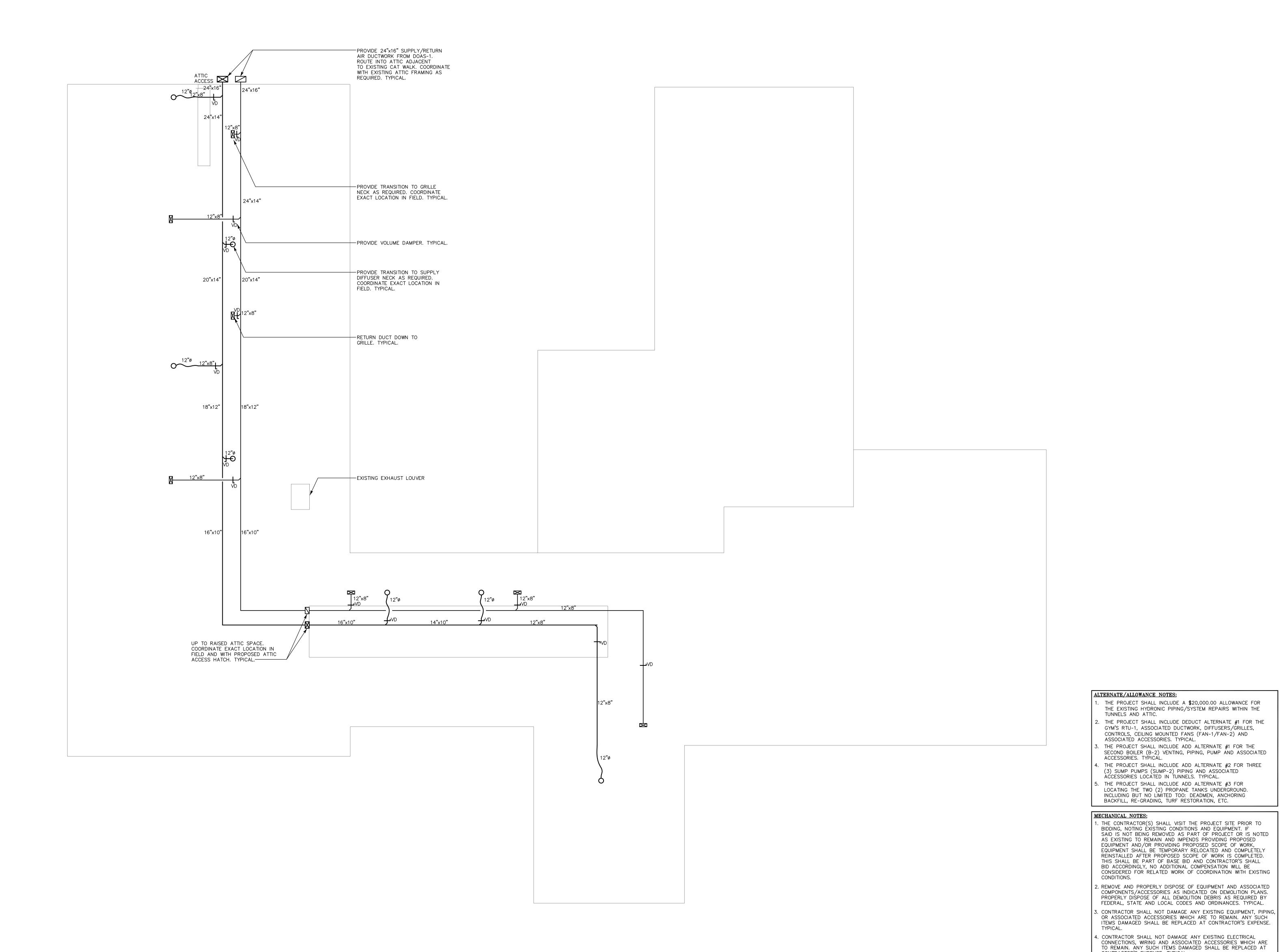
FIRST FLOOR MECHANICAL PLAN

3779.01
JAS
ST
ST
AS NOTED
JANUARY 24, 2024

DRAWING NO.

**M**-2

### ATTIC MECHANICAL PLAN SCALE: 1/8"=1'-0"



REVISIONS

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ATTIC MECHANICAL PLAN

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PROJECT MANAGER	JAS
ENGINEER/DESIGNER	ST
DRAWN BY	ST
SCALE	AS NOTED
DATE	JANUARY 24, 2024

L:

DRAWING NO.

CONTRACTOR'S EXPENSE. TYPICAL.

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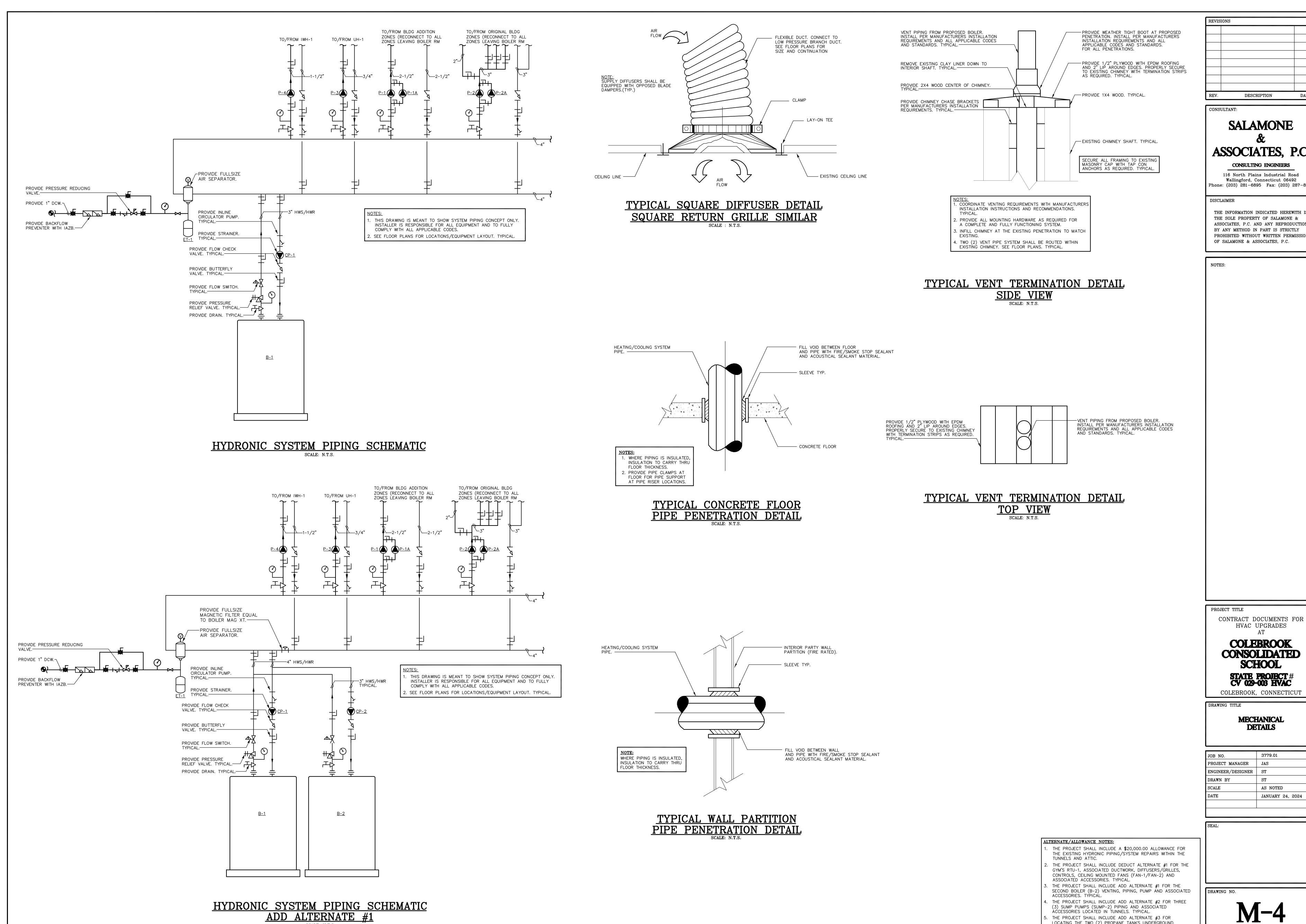
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IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES AND ALL APPLICABLE CODES AND STANDARDS. COORDINATE WORK WITH ALL PROJECT DISCIPLINES AND EXISTING CONDITIONS. TYPICAL.

M-3



DESCRIPTION DATE

**SALAMONE** 

ASSOCIATES, P.C.

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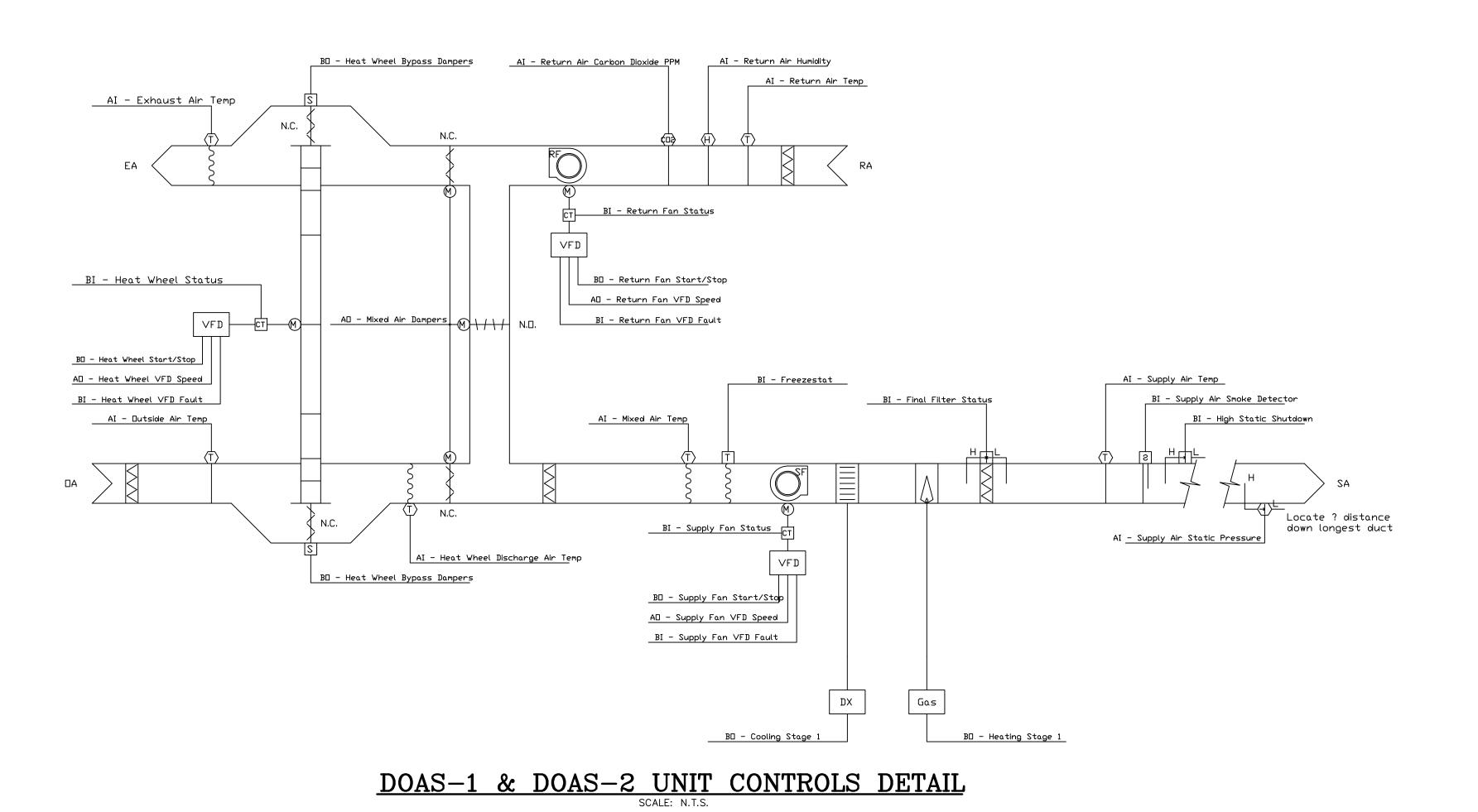
HVAC UPGRADES  $\operatorname{AT}$ **COLEBROOK** CONSOLIDATED

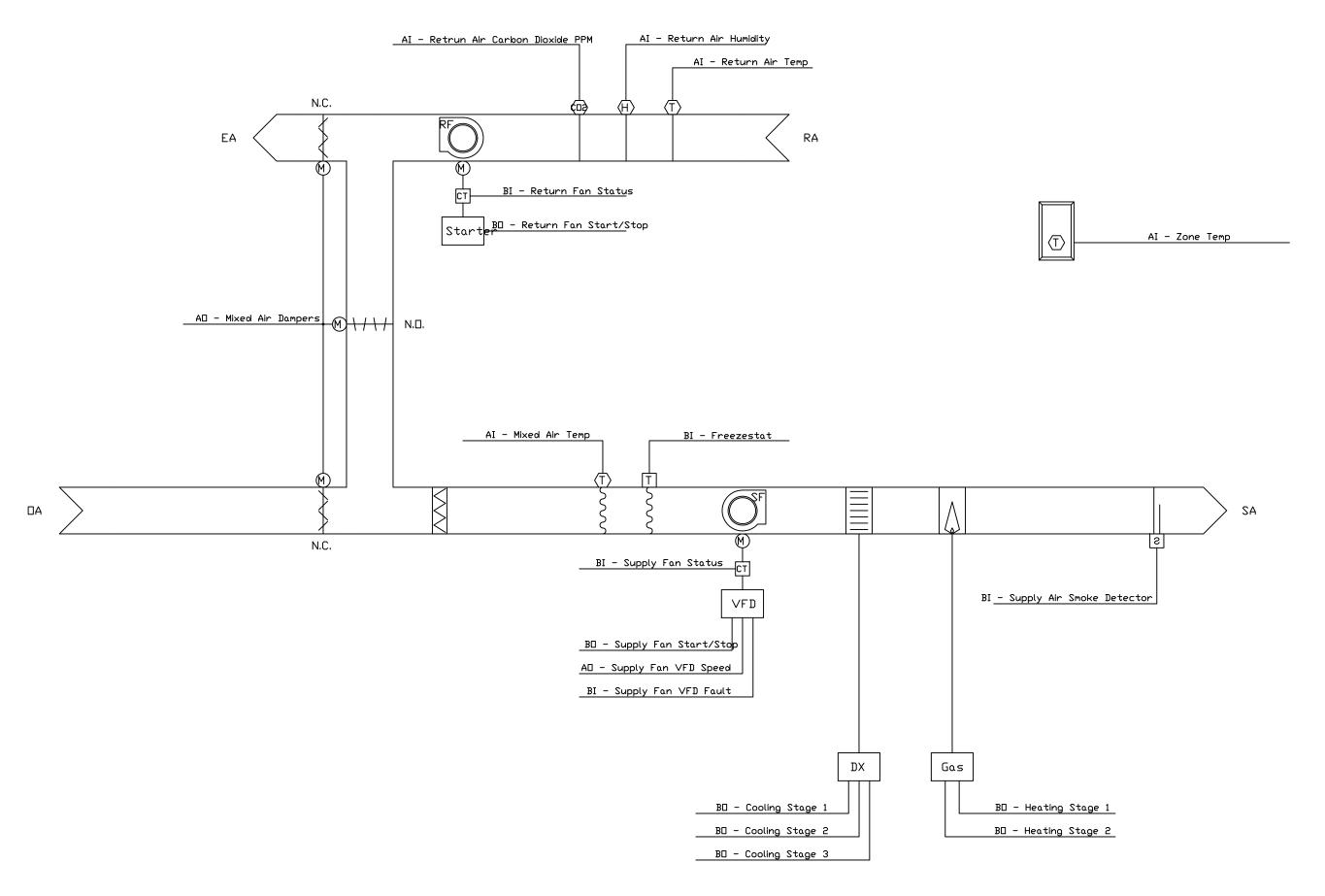
STATE PROJECT # CV 029-003 HVAC

**MECHANICAL DETAILS** 

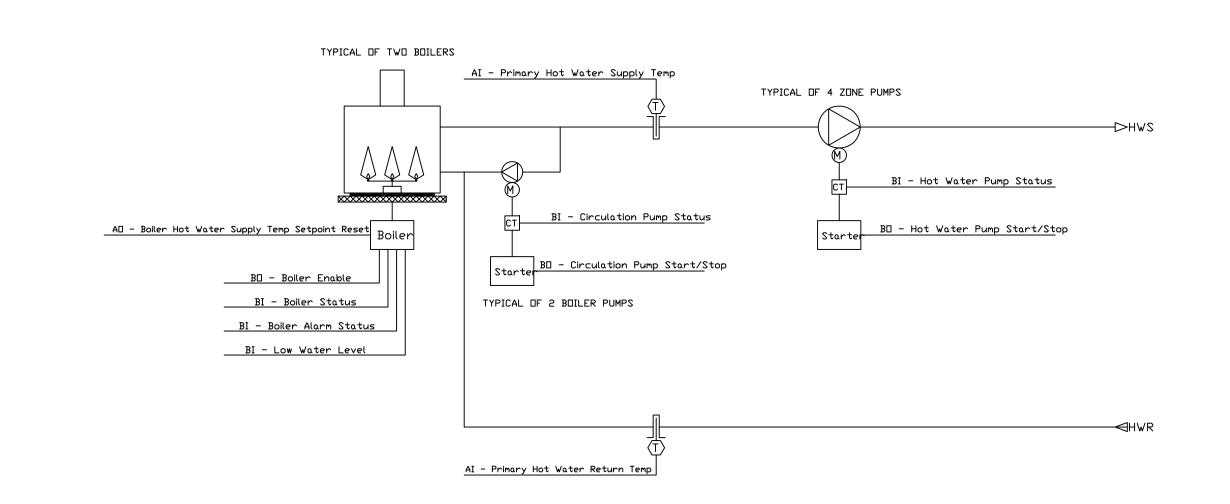
JOB NO.	3779.01
PROJECT MANAGER	JAS
ENGINEER/DESIGNER	ST
DRAWN BY	ST
SCALE	AS NOTED
DATE	JANUARY 24, 2024

LOCATING THE TWO (2) PROPANE TANKS UNDERGROUND. INCLUDING BUT NO LIMITED TOO: DEADMEN, ANCHORING BACKFILL, RE-GRADING, TURF RESTORATION, ETC.

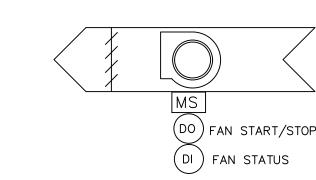




### RTU-1 CONTROLS DETAIL SCALE: N.T.S.



### BOILER SYSTEM CONTROLS DETAIL SCALE: N.T.S.



### EXHAUST FAN CONTROLS DETAIL SCALE: 1/8"=1'-0"

ALT	FERNATE/ALLOWANCE NOTES:
1.	THE PROJECT SHALL INCLUDE A \$20,000.00 ALLOWANCE FOR THE EXISTING HYDRONIC PIPING/SYSTEM REPAIRS WITHIN THE TUNNELS AND ATTIC.
2.	THE PROJECT SHALL INCLUDE DEDUCT ALTERNATE #1 FOR THE GYM'S RTU-1, ASSOCIATED DUCTWORK, DIFFUSERS/GRILLES,

CONTROLS, CEILING MOUNTED FANS (FAN-1/FAN-2) AND ASSOCIATED ACCESSORIES. TYPICAL.

3. THE PROJECT SHALL INCLUDE ADD ALTERNATE #1 FOR THE SECOND BOILER (B-2) VENTING, PIPING, PUMP AND ASSOCIATED ACCESSORIES. TYPICAL.

4. THE PROJECT SHALL INCLUDE ADD ALTERNATE #2 FOR THREE

(3) SUMP PUMPS (SUMP-2) PIPING AND ASSOCIATED ACCESSORIES LOCATED IN TUNNELS. TYPICAL.
5. THE PROJECT SHALL INCLUDE ADD ALTERNATE #3 FOR LOCATING THE TWO (2) PROPANE TANKS UNDERGROUND. INCLUDING BUT NO LIMITED TOO: DEADMEN, ANCHORING BACKFILL, RE-GRADING, TURF RESTORATION, ETC.

REVISIONS		
DEV	DEGGDIDMION	D.A.ME
REV.	DESCRIPTION	DATE

SALAMONE &

ASSOCIATES, P.C. CONSULTING ENGINEERS

116 North Plains Industrial Road Wallingford, Connecticut 06492 Phone: (203) 281-6895 Fax: (203) 287-8728

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NOTES.

PROJECT TITLE

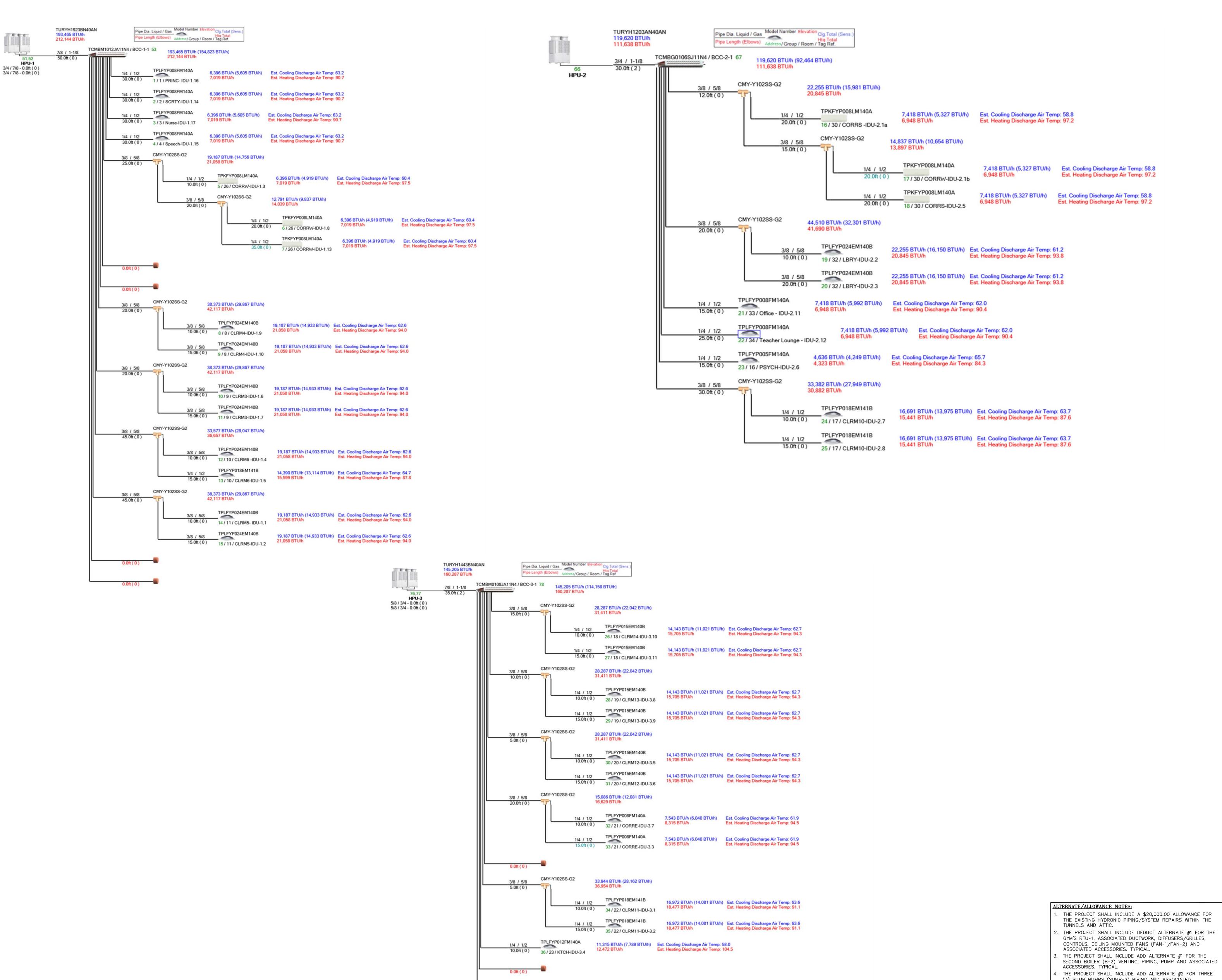
CONTRACT DOCUMENTS FOR HVAC UPGRADES AT

COLEBROOK CONSOLIDATED SCHOOL

STATE PROJECT # CV 029-003 HVAC COLEBROOK, CONNECTICUT

MECHANICAL DETAILS

JOB NO.	3779.01
PROJECT MANAGER	JAS
ENGINEER/DESIGNER	ST
DRAWN BY	ST
SCALE	AS NOTED
DATE	JANUARY 24, 2024



REVISIONS DESCRIPTION

CONSULTANT:

# **SALAMONE**

CONSULTING ENGINEERS

116 North Plains Industrial Road Wallingford, Connecticut 06492 Phone: (203) 281-6895 Fax: (203) 287-8728

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PROJECT TITLE

CONTRACT DOCUMENTS FOR HVAC UPGRADES  $\operatorname{AT}$ 

**COLEBROOK** CONSOLIDATED **SCHOOL** 

STATE PROJECT # CV 029-003 HVAC COLEBROOK, CONNECTICUT

**MECHANICAL DIAGRAMS** 

JOB NO.	3779.01
PROJECT MANAGER	JAS
ENGINEER/DESIGNER	ST
DRAWN BY	СК
SCALE	AS NOTED
DATE	JANUARY 24, 2024

THE PROJECT SHALL INCLUDE ADD ALTERNATE #1 FOR THE

(3) SUMP PUMPS (SUMP-2) PIPING AND ASSOCIATED ACCESSORIES LOCATED IN TUNNELS. TYPICAL. THE PROJECT SHALL INCLUDE ADD ALTERNATE #3 FOR LOCATING THE TWO (2) PROPANE TANKS UNDERGROUND. INCLUDING BUT NO LIMITED TOO: DEADMEN, ANCHORING

BACKFILL, RE-GRADING, TURF RESTORATION, ETC.

	REGIS'	TER, G	RILL	E AND D	IFFUSER	SCHEDULE
AIR INLET/ OUTLINE TYPE	NECK SIZE	TYPE	MAX. CFM	MANUFACTURER	MODEL	FINISH AND ACCESSORIES
lack	15"x15"	4-WAY	500	TITUS	TDC	SEE NOTES BELOW
₿	18"x10"	SPIRAL	400	TITUS	US300FL	SEE NOTES BELOW
RA	14"x14"	RETURN	500	TITUS	50F	SEE NOTES BELOW
RB	36"x12"	SPIRAL	1,100	TITUS	50F	SEE NOTES BELOW

1. COORDINATE FINISH WITH OWNER.

2. ALL AIR INLETS AND OUTLETS SHALL BE CONSTRUCTED OF EXTRUDED ALUMINUM. TYPICAL. 3. PROVIDE ALL MANUFACTURER ACCESSORIES FOR COMPLETE AND APPROPRIATE INSTALLATION. TYPICAL.

DEDICATED OUTSIDE AIR UNIT SCHEDULE		
UNIT NO.	DOAS-1	DOAS-2
SERVICE	SEE PLANS	SEE PLANS
LOCATION	GRADE	GRADE
SUPPLY AIR FLOW (CFM)	3,000	1,700
OUTSIDE AIR FLOW (CFM)	3,000	1,700
TOTAL STATIC PRESSURE	2.41	2.97
SUPPLY FAN MOTOR HP	2	1.5
EXHAUST AIR FLOW (CFM)	3,000	3,000
EXHAUST FAN MOTOR HP	1.5	.75
ENERGY RECOVERY SUMMER/WINTER (MBH)	80.59/189.99	49.06/115.83
COOLING DX COIL (TOTAL MBH)	162.3	81.5
EAT (DB/WB)	79.9/66.6	79.2/66.1
LAT (DB/WB)	47.3/47.3	49.7/49.2
HEATING OUTPUT (TOTAL MBH)	202.5	60
EAT	46.3	49.8
LAT	108.5	79.3
ELECTRICAL CHARA. (V/PH/HZ)	208/3/60	208/3/60
APPROXIMATE UNIT WEIGHT (LBS)	4,017	2,031
DESIGN BASED MODEL	OABE108D3	ASHPOAB/G REV 5
DESIGN BASED MANUFACTURER	TRANE	TRANE
NOTES:		

- 1. INSTALL PER MANUFACTURERS INSTALLATION INSTRUCTIONS AND ALL APPLICABLE CODES. TYPICAL. 2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS. TYPICAL.
- 2. ALL UNITS SHALL BE SUPPLIED WITH THE FOLLOWING FACTORY SUPPLIED ACCESSORIES. TYPICAL. A. FROST CONTROL-MODULATING WHEEL
- B. OA DAMPER LOW LEAKAGE C. MERV-8 AND MERV-13 FILTERS D. SPARE SET OF FILTERS
- E. CONDENSATE OVERFLOW SWITCH F. MOTOR SHAFT GROUNDING
- G. INTERFACE TO THE PROPOSED HVAC BMS. H. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS

I. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS

NUMBER	FAN-1	FAN-2
LOCATION	MULTIPURPOSE	MULTIPURPOSE
TYPE	CEILING MOUNTED	CEILING MOUNTED
DIAMETER	12'-0"	12'-0"
SPEED	76 RPM	76 RPM
MOTOR (V/PH/HZ)	120/1/60	120/1/60
DESIGN BASED MODEL	ESSANCE	ESSANCE
DESIGN BASED MANUF.	BIG ASS FANS	BIG ASS FANS

EXHAUST	FAN SCHED	ULE
EXHAUST FAN NO.	EF-1	EF-2
SERVICE	SEE PLANS	SEE PLANS
LOCATION	CEILING	CEILING
AIR FLOW (SCFM)	150	80
EXT. STATIC PRESS. (IWG)	.25	.25
DRIVE TYPE	DIRECT	DIRECT
MOTOR HP	47.9 WATTS	6.1 WATTS
ELECT. CHARAC. (V/PH/HZ)	120/1/60	120/1/60
LOCAL DISCONNECT	YES	YES
BACKDRAFT DAMPER	YES	YES
DESIGN BASED MODEL	SP-A190L	SP-80-VG
DESIGN BASED MANUFACTURER	GREENHECK	GREENHECK
NOTES:  1. SEE FLOOR PLANS/SPECIFICATIONS FOR FURTHER REQUIREMENTS.		

ERV	SCHEDULE
EXHAUST FAN NO.	ERV-1
SERVICE	TUNNELS
LOCATION	CEILING
AIR FLOW (SCFM)	600
EXT. STATIC PRESS. (IWG)	1.00
TEMPERATURE RECOVERY	67%
ELECT. CHARAC. (V/PH/HZ)	208/1/60
LOCAL DISCONNECT	YES
BACKDRAFT DAMPER	YES
DESIGN BASED MODEL	TLGHF0600RVX02A
DESIGN BASED MANUFACTURER	LOSSNAY
NOTES:  1. SEE FLOOR PLANS FOR FURTHER REQUIREMENTS.	

			PUM	MP SCHEDUL	Æ			
PUMP NUMBER	CP-1	CP-2	P-1	P-1A	P-2	P-2A	P-3	P-4
LOCATION	SEE FLOOR PLANS							
MIN. FLOW RATE (GPM)	64	64	55	55	80	80	2.0	14.0
PRESSURE DROP	15	15	30	30	30	30	3	5
HORSEPOWER	1/2	1/2	1	1	1	1	1/3	1/3
MOTOR (V/PH/HZ)	230/1/60	230/1/60	230/1/60	230/1/60	230/1/60	230/1/60	115/1/60	115/1/60
DESIGN BASED MODEL	ECOCIRC 20-140	ECOCIRC 20-140	ECOCIRC 40-200	ECOCIRC 40-200	ECOCIRC 40-200	ECOCIRC 40-200	PL-30	PL-30
DESIGN BASED MANUFACTURER	BELL AND GOSSETT							
NOTES:  1. INSTALL PER MANUFACTUR 2. SEE SPECIFICATIONS FOR			PPLICABLE CODES.					

				Nominal	Cooling	Heating			orrected Capa			VIT S	Estimated	Refrig Pipe			Max Fan ESP		Power	Power	
Tag Reference	Model	Туре	Nominal Cooling Capacity (BTU/h)	Heating Capacity (BTU/h)	Design Entering Temp DB/WB	Design Entering	Cooling Diversity Full/Partial	Cooling Tota Capacity (BTU/h)	Cooling Sensible Capacity	Heating Diversity Full/Partial	Heating Capacity (BTU/h)	Cooling Coil LAT (°F) / [LWT]	Heating Coil LAT (°F) / [LWT]	Dim Liquid/Suctio n (inch)	Fan Speed Setting	Airflow (cfm) / [Design gpm	Setting 208V/230V (IN WG)	Voltage / Phase	Cooling 208V/230V (kW)	Heating 208V/230V (kW)	Electrical MCA/MFS
RINC- IDU-	TPLFYP008F	Ceiling-Cassette (Four-					FULL			FULL								208/230V/1-			
.16 CRTY-IDU-	M140A TPLFYP008F	Way) Ceiling-Cassette (Four-	8,000	9,000	80.0/67.0	70	DEMAND FULL	6,395.6	5,604.9	DEMAND FULL	7,019.5	63.2	90.7	1/4 / 1/2	HIGH	315		phase 208/230V/1-	0.02	0.02	0.28/0.28/15
.14 lurse-IDU-	M140A	Way) Ceiling-Cassette (Four-	8,000	9,000	80.0/67.0	70	DEMAND FULL	6,395.6	5,604.9	DEMAND FULL	7,019.5	63.2	90.7	1/4 / 1/2	HIGH	315		phase 208/230V/1-	0.02	0.02	0.28/0.28/15
.17	M140A	Way)	8,000	9,000	80.0/67.0	70	DEMAND	6,395.6	5,604.9	DEMAND	7,019.5	63.2	90.7	1/4 / 1/2	HIGH	315		phase	0.02	0.02	0.28/0.28/15
.15	M140A	Ceiling-Cassette (Four- Way)	8,000	9,000	80.0/67.0	70	FULL DEMAND	6,395.6	5,604.9	FULL DEMAND	7,019.5	63.2	90.7	1/4 / 1/2	HIGH	315		208/230V/1- phase	0.02	0.02	0.28/0.28/15
ORRW-IDU-	TPKFYP008L M140A	Wall -Mounted	8.000	9.000	80.0/67.0	70	FULL DEMAND	6,395.6	4,918.7	FULL DEMAND	7.019.5	60.4	97.5	1/4 / 1/2	HIGH	237		208/230V/1- phase	0.03	0.02	0.24/0.24/15
ORRW-IDU-	TPKFYP008L M140A		8,000	9.000	eger tet Autoria	70	FULL DEMAND	6,395.6	4,918.7	FULL DEMAND	7,019.5		97.5	1/4 / 1/2	HIGH	237		208/230V/1- phase	0.03	0.02	0.24/0.24/15
	TPKFYP008L						FULL			FULL								208/230V/1-			
.13 LRM4-IDU-	M140A TPLFYP024E	Wall -Mounted Ceiling-Cassette (Four-	8,000	9,000	80.0/67.0	70	DEMAND FULL	6,395.6	4,918.7	DEMAND FULL	7,019.5	60.4	97.5	1/4 / 1/2	HIGH	237		phase 208/230V/1-	0.03	0.02	0.24/0.24/15
.9 LRM4-IDU-	M140B TPLEYP024E	Way) Ceiling-Cassette (Four-	24,000	27,000	80.0/67.0	70	DEMAND FULL	19,186.7	14,933.3	DEMAND	21,058.4	62.6	94.0	3/8 / 5/8	HIGH	812		phase 208/230V/1-	0.04	0.03	0.54/0.54/15
.10	M140B	Way)	24,000	27,000	80.0/67.0	70	DEMAND	19,186.7	14,933.3	DEMAND	21,058.4	62.6	94.0	3/8 / 5/8	HIGH	812		phase	0.04	0.03	0.54/0.54/15
.6	M140B		24,000	27,000	80.0/67.0	70	FULL DEMAND	19,186.7	14,933.3	FULL DEMAND	21,058.4	62.6	94.0	3/8 / 5/8	HIGH	812		208/230V/1- phase	0.04	0.03	0.54/0.54/15
LRM3-IDU- .7	TPLFYP024E M140B	Ceiling-Cassette (Four- Way)	24,000	27,000	80.0/67.0	70	FULL DEMAND	19,186.7	14,933.3	FULL	21,058.4	62.6	94.0	3/8 / 5/8	HIGH	812		208/230V/1- phase	0.04	0.03	0.54/0.54/15
LRM6 -IDU-	TPLFYP024E M140B	Ceiling-Cassette (Four-	24.000	27.000	80.0/67.0	70	FULL DEMAND	19,186.7	14,933.3	FULL DEMAND	21,058.4	62.6	94.0	3/8 / 5/8	HIGH	812		208/230V/1- phase	0.04	0.03	0.54/0.54/15
LRM6-IDU-	TPLFYP018E	Ceiling-Cassette (Four-	Paracteur C	50.0551	(COX 2 4205)		FULL	No contract	reservations and	FULL	A ST		annin .	entre man				208/230V/1-		2.02 W	877-780-78-2008-
LRM5- IDU-		Ceiling-Cassette (Four-	18,000	20,000	80.0/67.0	70	FULL FULL	14,390.0	13,114.1	FULL	15,598.8		87.8	1/4 / 1/2	HIGH	812		phase 208/230V/1-	0.04	0.04	0.54/0.43/15
.1 LRM5-IDU-	M140B TPLFYP024E	Way) Ceiling-Cassette (Four-	24,000	27,000	80.0/67.0	70	DEMAND FULL	19,186.7	14,933.3	DEMAND FULL	21,058.4	62.6	94.0	3/8 / 5/8	HIGH	812		phase 208/230V/1-	0.04	0.03	0.54/0.54/15
.2 ORRS -IDU-	M140B TPKFYP008L	Way)	24,000	27,000	80.0/67.0	70	DEMAND FULL	19,186.7	14,933.3	DEMAND FULL	21,058.4	62.6	94.0	3/8 / 5/8	HIGH	812		phase 208/230V/1-	0.04	0.03	0.54/0.54/15
.1a	M140A	Wall -Mounted	8,000	9,000	80.0/67.0	70	DEMAND	7,418.3	5,327.0	DEMAND	6,948.4	58.8	97.2	1/4 / 1/2	HIGH	237		phase	0.03	0.02	0.24/0.24/15
.1b	TPKFYP008L M140A	Wall -Mounted	8,000	9,000	80.0/67.0	70	FULL DEMAND	7,418.3	5,327.0	FULL DEMAND	6,948.4	58.8	97.2	1/4 / 1/2	HIGH	237		208/230V/1- phase	0.03	0.02	0.24/0.24/15
ORRS-IDU-	TPKFYP008L M140A	Wall -Mounted	8,000	9,000	80.0/67.0	70	FULL DEMAND	7,418.3	5,327.0	FULL DEMAND	6,948.4	58.8	97.2	1/4 / 1/2	HIGH	237		208/230V/1- phase	0.03	0.02	0.24/0.24/15
BRY-IDU-2.2	The state of the s	Ceiling-Cassette (Four- Way)	24.000	27.000	80.0/67.0	70	FULL DEMAND	22,254.9	16,150.4	FULL DEMAND	20,845.2	61.2	93.8	3/8 / 5/8	HIGH	812		208/230V/1- phase	0.04	0.03	0.54/0.54/15
BRY-IDU-2.3	TPLFYP024E	Ceiling-Cassette (Four-	24,000	27,000	9.0000001000	70	FULL DEMAND	22,254.9	16,150.4	FULL DEMAND	20,845.2	550034	93.8	3/8 / 5/8	HIGH	812		208/230V/1- phase	0.04	0.03	0.54/0.54/15
Office - IDU-	TPLFYP008F	Ceiling-Cassette (Four-					FULL			FULL								208/230V/1-			
.11 Teacher	M140A		8,000	9,000	80.0/67.0	70	DEMAND	7,418.3	5,992.3	DEMAND	6,948.4	62.0	90.4	1/4 / 1/2	HIGH	315		phase	0.02	0.02	0.28/0.28/15
ounge - IDU	TPLFYP008F M140A	Ceiling-Cassette (Four- Way)	8,000	9,000	80.0/67.0	70	FULL DEMAND	7,418.3	5,992.3	FULL	6,948.4	62.0	90.4	1/4 / 1/2	HIGH	315		208/230V/1- phase	0.02	0.02	0.28/0.28/15
	TPLFYP005F	Ceiling-Cassette (Four-	5,000	5,600	80.0/67.0	70	FULL DEMAND	4,636.4	4,248.6	FULL DEMAND	4,323.4	65.7	84.3	1/4 / 1/2	HIGH	280		208/230V/1- phase	0.02	0.02	0.24/0.24/15
LRM10-IDU-	TPLFYP018E	Ceiling-Cassette (Four-					FULL	A MATERIA POLICE		FULL	and an include that a r	pr. 30000000	Language T	a i de alle a de la contra del la contra de la contra del la contra del la contra del la contra de la contra del la contra de la contra de la contra del la contra		2-7250		208/230V/1-	0.000 [1]	The state of the s	
.7 CLRM10-IDU-	M141B TPLFYP018E	Ceiling-Cassette (Four-	18,000	20,000	September 1997	70	DEMAND FULL	16,691.2	13,974.5	DEMAND FULL	15,440.9	1000000		1/4 / 1/2	HIGH	812		phase 208/230V/1-	0.04	0.04	0.54/0.43/15
.8 LRM14-IDU-	M141B TPLFYP015E	Way) Ceiling-Cassette (Four-	18,000	20,000	80.0/67.0	70	DEMAND FULL	16,691.2	13,974.5	DEMAND FULL	15,440.9	63.7	87.6	1/4 / 1/2	HIGH	812		phase 208/230V/1-	0.04	0.04	0.54/0.43/15
.10	M140B		15,000	17,000	80.0/67.0	70	DEMAND FULL	14,143.3	11,021.2	DEMAND FULL	15,705.4	62.7	94.3	1/4 / 1/2	HIGH	600		phase 208/230V/1-	0.03	0.02	0.39/0.39/15
.11	M140B	Way)	15,000	17,000	80.0/67.0	70	DEMAND	14,143.3	11,021.2	DEMAND	15,705.4	62.7	94.3	1/4 / 1/2	HIGH	600		phase	0.03	0.02	0.39/0.39/15
LRM13-IDU- .8	M140B	Ceiling-Cassette (Four- Way)	15,000	17,000	80.0/67.0	70	FULL DEMAND	14,143.3	11,021.2	FULL DEMAND	15,705.4	62.7	94.3	1/4 / 1/2	HIGH	600		208/230V/1- phase	0.03	0.02	0.39/0.39/15
LRM13-IDU-		Ceiling-Cassette (Four- Way)	15,000	17,000	80.0/67.0	70	FULL DEMAND	14,143.3	11,021.2	FULL DEMAND	15,705.4	62.7	94.3	1/4 / 1/2	HIGH	600		208/230V/1- phase	0.03	0.02	0.39/0.39/15
LRM12-IDU-		Ceiling-Cassette (Four-	15,000	17,000	80.0/67.0	70	FULL DEMAND	14,143.3	11,021.2	FULL DEMAND	15,705.4			1/4 / 1/2	HIGH	600		208/230V/1- phase	0.03	0.02	0.39/0.39/15
	TPLFYP015E	Ceiling-Cassette (Four-	Avvenuer .				FULL			FULL	and an arrange				7504 500			208/230V/1-			
ORRE-IDU-	M140B TPLFYP008F	Way) Ceiling-Cassette (Four-	15,000	17,000	80.0/67.0	70	DEMAND FULL	14,143.3	11,021.2	DEMAND FULL	15,705.4	62.7	94.3	1/4 / 1/2	HIGH	600		phase 208/230V/1-	0.03	0.02	0.39/0.39/15
.7 ORRE-IDU-	M140A TPLFYP008F	Way) Ceiling-Cassette (Four-	8,000	9,000	80.0/67.0	70	DEMAND FULL	7,543.1	6,040.3	DEMAND	8,314.6	61.9	94.5	1/4 / 1/2	HIGH	315		phase 208/230V/1-	0.02	0.02	0.28/0.28/15
.3	M140A		8,000	9,000	80.0/67.0		DEMAND FULL	7,543.1	6,040.3	DEMAND FULL	8,314.6	61.9	94.5	1/4 / 1/2	HIGH	315		phase 208/230V/1-	0.02	0.02	0.28/0.28/15
.1	M141B	Way)	18,000	20,000	80.0/67.0	70	DEMAND	16,972.0	14,081.1	DEMAND	18,476.9	63.6	91.1	1/4 / 1/2	HIGH	812		phase	0.04	0.04	0.54/0.43/15
.2	M141B		18,000	20,000	80.0/67.0	70	FULL DEMAND	16,972.0	14,081.1	FULL DEMAND	18,476.9	63.6	91.1	1/4 / 1/2	HIGH	812		208/230V/1- phase	0.04	0.04	0.54/0.43/15
		Ceiling-Cassette (Four- Way)	12,000	13,500	80.0/67.0		FULL DEMAND	11,314.7	7,788.5	FULL DEMAND	12,471.9	58.0	104.5	1/4 / 1/2	HIGH	335		208/230V/1- phase	0.02	0.02	0.29/0.29/15

							HEAT	r PUM	IP UI	NIT SO	CHEDU	ULE							
				Nominal Cooling	Nominal Heating	Cooling Efficiency		Heating COP	Nom System Connected	Design Cooling	Heating Outdoor	Max Pipe Length from	Corrected Cooling Total	Corrected Heating	Preliminary Added Field		Electrical-P 208/230 o		
Tag	M-NET	Model Number	Madulas	Capacity	Capacity	(I)EER	EER2		Capacity (%	Outdoor	Temp WB	BC or 1st	Capacity	Capacity	Charge (See		MCA 208/230	DEC	МОСР
Reference	Address	TURYH1923BN4	Modules	(BTU/h)	(BTU/h)	[SEER]	[SEER2]	[HSPF]	of NOM)	Temp DB (°F)	(°F)	Joint (feet)	(BTU/h)	(BTU/h)	Note 5)	Phase 208/230V / 3-	or [460V]	RFS	MOCP
HPU-1	51, 52	CONTROL BUILD THE PROPERTY OF	P96, P96	192,000	215,000	22.25 / 12.7	0	3.740	126.0 %	91.0	-0.7	80.0	193,465.4	212,143.6		phase 3-wire		70/60, 70/60	70/60, 70/60
		TURYH1203AN4			111111111111111111111111111111111111111						Ī.,					208/230V / 3-			
HPU-2	66		P120	120,000	135,000	22.05 / 12.65	<u>)</u>	3.810	107.5 %	91.0	-0.7	47.0	119,620.3	111,637.6	27.5	phase 3-wire	47/44	70/60	70/60
		TURYH1443BN4			,											208/230V / 3-		1	
HPU-3	76, 77	0AN	P72, P72	144,000	160,000	22.1 / 11.55	<u>)</u>	3.635	106.9 %	91.0	-0.7	35.0	145,204.8	160,287.0	32.0	phase 3-wire	38/35, 38/35	60/50, 60/50	60/50, 60/50
NOTES:																			
1. INSTAL	_L PER MA	NUFACTURERS	S INSTALL!	ATION INST	RUCTIONS	AND ALL #	<b>APPLICABL</b>	E CODES. ~	ΓΥΡΙCAL.										
2. SEE S	PECIFICATI	ONS FOR FUR	⟨THER REQ'	UIREMENTS	خ. TYPICAL	•													
3 PROVII	DF 18" SU'	PFR STANDS I	FOLIAL TO	OUICKSLIN	JG MOUNT	TO CONCE	YETE HOUS	SING PAD /	AS REQUIR'	FD TYPICA	.1								Į.

CONDENSING BOILER SCHEDULE							
BOILER NUMBER	B-1	B-2					
LOCATION	BOILER ROOM	BOILER ROOM					
INPUT MODULATION BTU/HR	999,999	999,999					
GROSS OUTPUT BTU/HR	842,000	842,000					
FUEL	PROPANE	PROPANE					
FLUID TYPE	WATER	WATER					
ELECTRICAL CHARACTERISTIC	120/1/60	120/1/60					
DESIGN BASED MODEL	KBX1000N	KBX1000N					
DESIGN BASED MANUFACTURER	LOCHINVAR	LOCHINVAR					
NOTES:  1. SEE SCHEMATICS, FLOOR PLANS, D. 2. INSTALL PER MANUFACTURERS INS. 3. PROVIDE THE FOLLOWING ACCESSOF CUT OFF, SYSTEM SENSORS, CONDER BY PIETRO FIORENTINI.	FALLATION INSTRUCTIONS AND ALL						

NUMBER	ET-1
LOCATION	BOILER ROOM
ASME	YES
ACCEPTANCE GALLONS	13
DESIGN BASED MODEL	B-50
DESIGN BASED MANUFACTURER	BELL AND GOSSETT

UNIT HE	CATER SCHEDULE					
NUMBER	UH-1					
LOCATION	BOILER ROOM					
MOUNTING	CEILING					
HEATING CAPACITY (BTU/HR)	18,400					
GPM	1.9					
DESIGN BASED MODEL	HS-118A					
DESIGN BASED MANUFACTURER	STERLING					
· · · · · · · · · · · · · · · · · · ·	AILS AND SPECIFICATIONS FOR FURTHER REQUIREMENTS. LATION INSTRUCTIONS AND ALL APPLICABLE CODES, E VOLTAGE THERMOSTAT. TYPICAL.					

MECHA	NICAL ABBREVIATIONS
AD	ACCESS DOOR
AF	AIR FILTER
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AMP	AMPERE
BDD	BACK DRAFT DAMPER
BHP	BRAKE HORSE POWER
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT/HOUR
	CENTRIFUGAL
CENTRIF	
CFM	CUBIC FEET PER MINUTE
DB	DRY BULB
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
ESP	EXTERNAL STATIC PRESSURE
EXH	EXHAUST
FD	FIRE DAMPER
FFF	FROM FINISHED FLOOR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
HT	HEIGHT
ID	INSIDE DIAMETER
IN	INCHES
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LVR	LOUVER
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
мвн	THOUSAND BTU/HOUR
MIN	MINIMUM
NG	NATURAL GAS
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
PRV	PRESSURE RELIEF VALVE
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAUGE
RH	RELATIVE HUMIDITY
RPM	REVOLUTIONS PER MINUTE
SENS	SENSOR
SF	SUPPLY FAN
S	SMOKE DETECTOR
SP	STATIC PRESSURE
TEMP	TEMPERATURE
TONS	TONS OF REFRIGERATION

TONS	TONS OF REFRIGERATION
MECH	ANICAL SYMBOL LIST
or 🖊	NEGATIVE PRESSURE OR AIR INLET DUCTWORK
or 🛛	POSITIVE PRESSURE OR AIR OUTLET DUCTWORK
<del>                                     </del>	DUCT WORK, DIRECTION OF FLOW
	FLEXIBLE DUCT WORK
A	SUPPLY DIFFUSER GRILLE TYPE
RA	RETURN GRILLE TYPE
Ø	DIAMETER
<b></b>	PIPING
T S	THERMOSTAT/SENSOR
<del>- ] VD</del>	VOLUME DAMPER
0—	PIPE ELBOW, TURNED UP
<del>C  </del>	PIPE ELBOW, TURNED DOWN
<b>→</b>	PIPE TEE, OUTLET UP
•	CONNECT TO EXISTING

MECHANICAL GENERAL NOTES
1. REFER TO SPECIFICATIONS AND BID DOCUMENTS FOR ADDITIONAL CONTRACT REQUIREMENTS.
2. MECHANICAL DRAWINGS TO BE USED IN CONJUNCTION WITH ARCHITECTURAL, STRUCTURAL, FIRE PROTECTION, PLUMBING AND ELECTRICAL DRAWINGS.
3. NOTES BELOW ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO DRAWING NOTES.
4. MECHANICAL DRAWINGS DO NOT NECESSARILY SHOW ALL RELATED WORK CONTRACTOR TO USE ALL DRAWINGS IN CONTRACT DOCUMENTS FOR DIVISION 15 MECHANICAL WORK.
5. UNLESS OTHERWISE INDICATED, PROVIDE A COMPLETE AND OPERATIONAL MECHANICAL SYSTEM INCLUDING ALL NECESSARY MATERIAL, LABOR AND EQUIPMENT.
6. MECHANICAL PLANS, DETAILS AND ONE LINE DIAGRAMS SHOW THE GENERAL LOCATION AND ARRANGEMENT OF THE SYSTEM. THESE ARE DIAGRAMMATIC AND DO NOT SHOW ALL BENDS, COUPLINGS, OFFSETS, VALVES, DRAINS, FITTINGS, HANGERS, CLEANOUTS AND ACCESS DOORS WHICH THE CONTRACTOR MUST PROVIDE TO COMPLETE THE SYSTEM.
7. PLANS AND DETAILS DO NOT SHOW ALL INTERFERENCES AND CONDITIONS,

- SHOW THE GENERAL ARE DIAGRAMMATIC VALVES, DRAINS, HICH THE CONTRACTOR VISIBLE AND/OR HIDDEN, THAT MAY EXIST; THUS REQUIRING THE CONTRACTOR TO INSPECT AND SURVEY THE SPACE BEFORE PERFORMING THE WORK. 8. BEFORE SELECTING MATERIAL AND EQUIPMENT AND PROCEEDING WITH WORK, INSPECT AREAS WHERE MATERIAL AND EQUIPMENT ARE TO BE INSTALLED TO INSURE SUITABILITY, AND CHECK NEEDED SPACE FOR PLACEMENT AND CLEARANCES.
- 9. BEFORE CUTTING OR DRILLING INTO BUILDING ELEMENTS, INSPECT AND LAYOUT WORK TO AVOID DAMAGING STRUCTURAL ELEMENTS AND BUILDING UTILITIES. O. LOCATE ALL EQUIPMENT WHICH REQUIRES SERVICING IN FULLY ACCESSIBLE POSITIONS. IF REQUIRED FOR BETTER ACCESSIBILITY, FURNISH ACCESS DOORS FOR THAT PURPOSE. MINOR DEVIATIONS FROM DRAWINGS ALLOWED FOR BETTER ACCESSIBILITY. ANY CHANGE SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR APPROVAL.
- 12. ALL WORK IN INTERIOR FINISHED SPACES IS TO BE CONCEALED BEHIND WALLS, ABOVE CEILINGS OR HUNG CEILINGS, OR UNDER THE FLOOR. PROVIDE ALL NECESSARY CUTTING, PATCHING, REPAINTING AND/OR REPLACEMENT OF CEILING TILES AS REQUIRED TO PERFORM WORK. 13. ALL EQUIPMENT REQUIRED TO BE LISTED OR APPROVED BY A TESTING LABORATORY SHALL BEAR A LABEL OF SUCH LABORATORY.

. COORDINATE WORK WITH OTHER DIVISIONS AND SPECIFICATIONS ON THIS

- 14. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES. 15. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT RECOGNIZED:
- A. CONNECTICUT BASIC BUILDING CODE AND SUPPLEMENTS B. INTERNATIONAL ENERGY CONSERVATION CODE C. INTERNATIONAL PLUMBING CODE D. INTERNATIONAL MECHANICAL CODE E. NATIONAL ELECTRIC CODE
- 16. IF A MANUFACTURER OF EQUIPMENT REQUIRES LARGER CAPACITY CIRCUITRY AND/OR EQUIPMENT; THE CONTRACTOR SHALL PROVIDE SUCH CAPACITY AND/OR EQUIPMENT UNDER HIS CONTRACT AT NO COST TO THE OWNER. 17. IF A MANUFACTURER OF PROVIDED EQUIPMENT RECOMMENDS ACCESSORY(S)
  OR OPTION(S) FOR THE SUPPLIED EQUIPMENT; THE CONTRACTOR SHALL PROVIDE
  ACCESSORY(S) OR OPTION(S) UNDER HIS CONTRACT AT NO COST TO THE
- 18. THE TERM "INDICATED" SHALL MEAN "AS SHOWN ON CONTRACT DOCUMENTS (SPECIFICATIONS, DRAWINGS AND RELATED ATTACHMENTS)". 19. THE TERM "PROVIDE" SHALL MEAN "TO FURNISH, INSTALL AND CONNECT
- O. ISLE AND CORRIDOR WAYS THROUGH CONSTRUCTION AREAS WHICH ARE REQUIRED FOR EGRESS (NORMAL OR EMERGENCY) SHALL BE KEPT CLEAR OF MATERIAL, EQUIPMENT AND DEBRIS. 1. COORDINATE ALL WORK WITH THE OWNER'S REPRESENTATIVE. 22. PROVIDE ALL CRANES, RIGGING AND STREET STAGING, AND TRAFFIC CONTROL
- NEEDED TO INSTALL EQUIPMENT PROVIDED. 23. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR THE LOCATION OF MECHANICAL AND ELECTRICAL ITEMS TO BE INSTALLED IN THE CEILING. 24. UNLESS OTHERWISE INDICATED, PROVIDE CONTROL WIRING FOR ALL MECHANICAL SYSTEM EQUIPMENT.
- 25. CONTRACTOR SHALL COORDINATE ELECTRICAL REQUIREMENTS OF MECHANICAL EQUIPMENT WITH DIVISION 26. 26. UNLESS OTHERWISE INDICATED, SUPPORT PIPES WITH HANGER SPACING IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE. 27. CONTRACTOR SHALL MAKE ADEQUATE PROVISIONS FOR PIPE EXPANSION, CONTRACTION, SLOPE AND ANCHORAGE.
- 28. UNLESS OTHERWISE INDICATED, CONTRACTOR SHALL INSULATE ALL HVAC SYSTEM PIPING SYSTEMS AND HVAC SYSTEM SUPPLY AND RETURN DUCTWORK. 29. UNLESS OTHERWISE INDICATED, ALL DUCTWORK, PIPING AND WIRING SHALL BE CONCEALED ABOVE CEILINGS AND/OR IN WALLS. 30. PLANS DO NOT SHOW ALL EQUIPMENT, VALVES, FITTINGS AND CONNECTIONS.
  SEE PIPING RISER DIAGRAMS, DETAILS, SCHEDULES AND SPECIFICATIONS FOR
- ADDITIONAL REQUIREMENTS. ADDITIONAL REQUIREMENTS.

  31. SUBMIT FOR REVIEW DETAILED SHOP DRAWINGS FOR ALL EQUIPMENT AND MATERIAL REQUIRED TO COMPLETE THE WORK. NO MATERIAL OR EQUIPMENT MAY BE DELIVERED TO THE JOB SITE OR INSTALLED UNTIL ACCEPTED SHOP DRAWINGS FOR THE PARTICULAR MATERIAL OR EQUIPMENT HAS BEEN APPROVED BY THE OWNER OR HIS AUTHORIZED REPRESENTATIVE WHERE THE CONTRACTOR PROPOSES TO USE AN ITEM OF EQUIPMENT OTHER THAN SPECIFIED OR DETAILED ON THE DRAWINGS, WHICH REQUIRES ANY REDESIGN OF THE STRUCTURE, PARTITIONS, FOUNDATIONS, PIPING, WIRING OR ANY OTHER PART OF THE MECHANICAL, ELECTRICAL OR ARCHITECTURAL LAYOUT ALL SUCH REDESIGN AND ALL NEW DRAWINGS AND DETAILING REQUIRED THEREFORE, SHALL BE PREPARED AT THE CONTRACTOR'S EXPENSE AND IS SUBJECT TO THE REVIEW AND APPROVAL OF THE OWNER OR HIS AUTHORIZED REPRESENTATIVE. OWNER RESERVES THE RIGHT TO HAVE THE ARCHITECT OR ENGINEER OF HIS CHOICE PREPARE ANY REDESIGN WORK.
- OR ENGINEER OF HIS CHOICE PREPARE ANY REDESIGN WORK. 32. TURN OVER TO THE OWNER ALL MANUFACTURER'S WARRANTIES FOR EQUIPMENT AND MATERIAL PROVIDED. 33. THE CONTRACTOR MAY SUBSTITUTE EQUIPMENT OF ANOTHER MANUFACTURER IF IT IS OF EQUAL QUALITY AND RATING, SUBJECT TO OWNER'S AND ENGINEER'S REVIEW AND ACCEPTANCE. WHERE CONTRACTOR SUBSTITUTES
- EQUIPMENT REQUIRING DIFFERENT SYSTEM CONFIGURATION, HE SHALL BE RESPONSIBLE FOR PROVIDING INSTALLATION SHOP DRAWINGS AND ALL RELATED ACCESSORY EQUIPMENT FOR A COMPLETE SYSTEM INSTALLATION.
- 34. ASCERTAIN FROM EXAMINATION OF THE DRAWINGS, ANY SPECIAL TEMPORARY OPENINGS AND STRUCTURAL LOADING IN THE BUILDING REQUIRED FOR THE ADMISSION OF APPARATUS PROVIDED UNDER THIS DIVISION. NOTIFY THE OWNER ACCORDINGLY. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASSEMBLY AND DISASSEMBLY OR EQUIPMENT AS REQUIRED TO PLACE FOLIPMENT IN ITS FINAL LOCATIONS. EQUIPMENT IN ITS FINAL LOCATIONS.
- 35. UNLESS OTHERWISE INDICATED, PROVIDE 14 GAUGE GALVANIZED PIPE SLEEVES TWO (2) SIZES LARGER THAN THE PIPE OR INSULATION WHERE SUCH ASSEMBLIES PENETRATE WALLS, PARTITIONS, FLOORS OR STRUCTURAL MEMBERS. 36. ALL VOIDS BETWEEN PIPES SHALL BE FILLED WITH A FIRE TESTED AND APPROVED ELASTOMERIC CAULKING MATERIAL.
- 37. ALL WORK SHALL BE DONE WITH LICENSED WORKMEN IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES.

REVISIONS DESCRIPTION DATE

CONSULTANT: **SALAMONE** 

ASSOCIATES, P.C.

CONSULTING ENGINEERS 116 North Plains Industrial Road Wallingford, Connecticut 06492 Phone: (203) 281-6895 Fax: (203) 287-8728

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OTES:	

PROJECT TITLE CONTRACT DOCUMENTS FOR HVAC UPGRADES

> **COLEBROOK** CONSOLIDATED STATE PROJECT # CV 029-003 HVAC

AT

COLEBROOK, CONNECTICUT

DRAWING TITLE MECHANICAL SCHEDULES, NOTES, SYMBOLS AND **ABBREVIATIONS** 

3779.01
JAS
ST
CK
AS NOTED
JANUARY 24, 2024

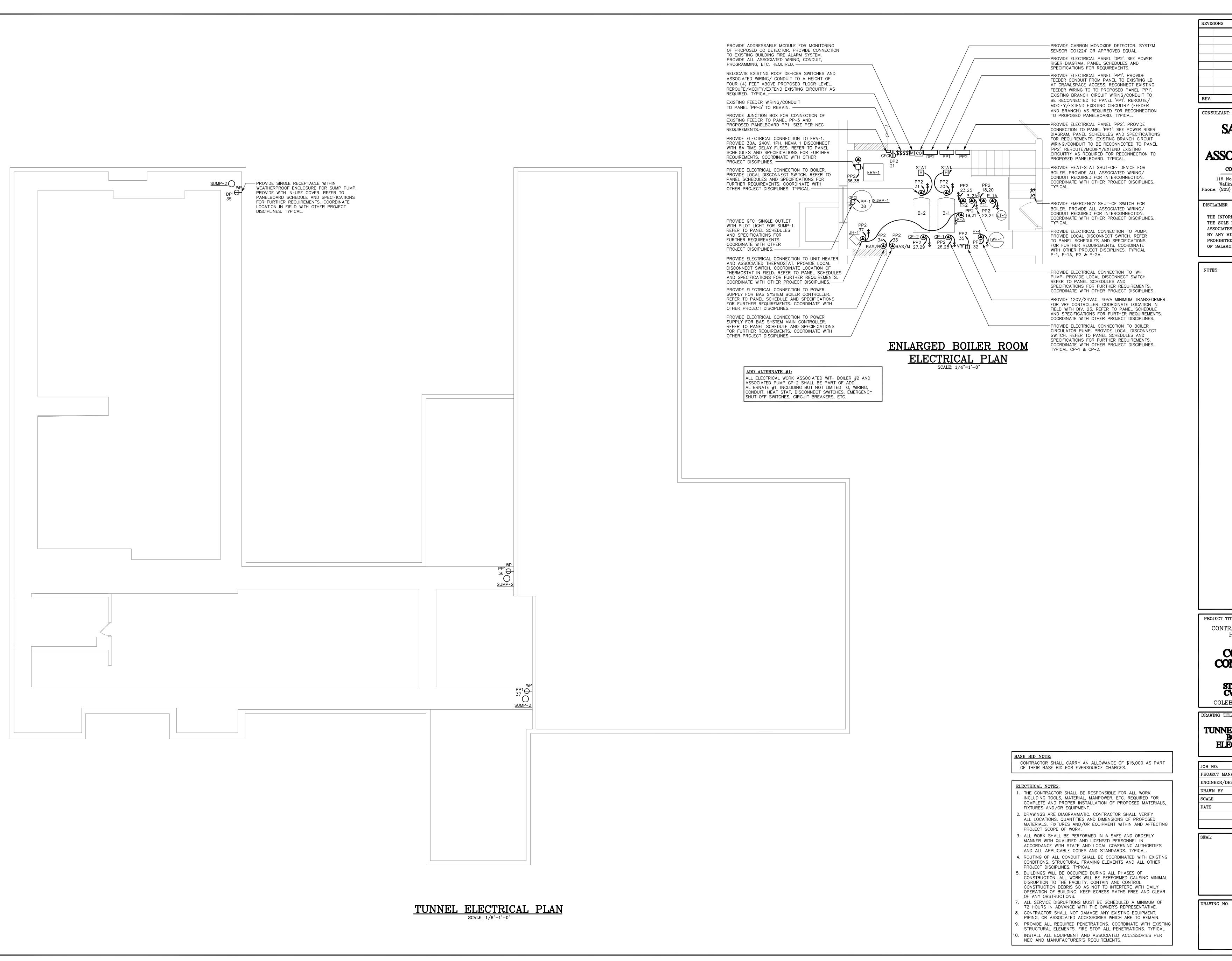
ALTERNATE/ALLOWANCE NOTES: THE PROJECT SHALL INCLUDE A \$20,000.00 ALLOWANCE FOR THE EXISTING HYDRONIC PIPING/SYSTEM REPAIRS WITHIN THE

TUNNELS AND ATTIC. THE PROJECT SHALL INCLUDE DEDUCT ALTERNATE #1 FOR THE GYM'S RTU-1, ASSOCIATED DUCTWORK, DIFFUSERS/GRILLES, CONTROLS, CEILING MOUNTED FANS (FAN-1/FAN-2) AND

ASSOCIATED ACCESSORIES. TYPICAL. . THE PROJECT SHALL INCLUDE ADD ALTERNATE #1 FOR THE SECOND BOILER (B-2) VENTING, PIPING, PUMP AND ASSOCIATED

ACCESSORIES. TYPICÁL. THE PROJECT SHALL INCLUDE ADD ALTERNATE #2 FOR THREE

(3) SUMP PUMPS (SUMP-2) PIPING AND ASSOCIATED ACCESSORIES LOCATED IN TUNNELS. TYPICAL. THE PROJECT SHALL INCLUDE ADD ALTERNATE #3 FOR LOCATING THE TWO (2) PROPANE TANKS UNDERGROUND. INCLUDING BUT NO LIMITED TOO: DEADMEN, ANCHORING BACKFILL, RE-GRADING, TURF RESTORATION, ETC.



DESCRIPTION DATE

CONSULTANT:

**SALAMONE** 

ASSOCIATES, P.C.

CONSULTING ENGINEERS

116 North Plains Industrial Road Wallingford, Connecticut 06492 Phone: (203) 281-6895 Fax: (203) 287-8728

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PROJECT TITLE

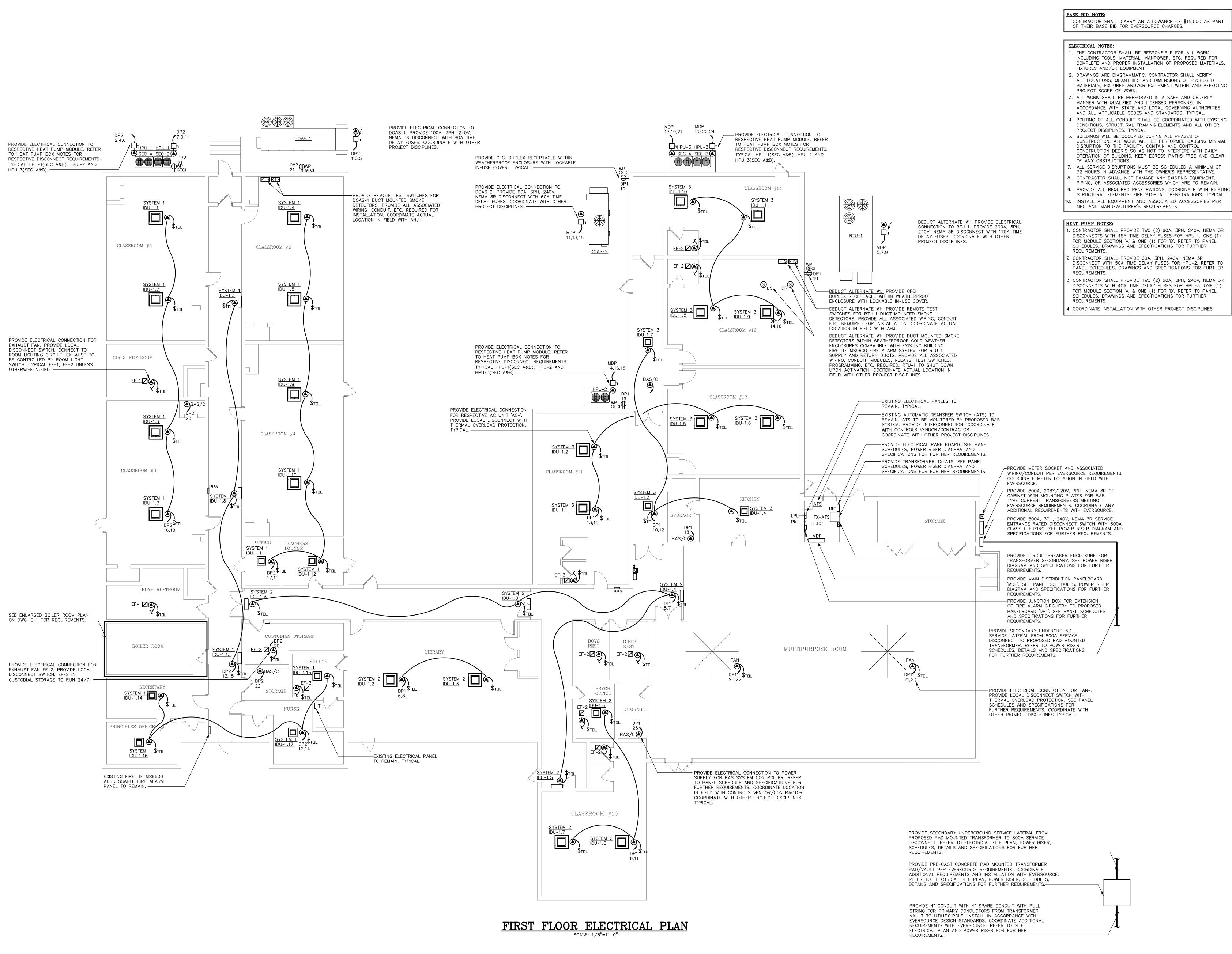
CONTRACT DOCUMENTS FOR HVAC UPGRADES

**COLEBROOK** CONSOLIDATED **SCHOOL** 

STATE PROJECT # CV 029-003 HVAC COLEBROOK, CONNECTICUT

TUNNEL AND ENLARGED BOILER ROOM **ELECTRICAL PLANS** 

JOB NO.	3779.01
PROJECT MANAGER	JAS
ENGINEER/DESIGNER	ST
DRAWN BY	ST
SCALE	AS NOTED
DATE	JANUARY 24, 2024



CONTRACTOR SHALL CARRY AN ALLOWANCE OF \$15,000 AS PART

COMPLETE AND PROPER INSTALLATION OF PROPOSED MATERIALS,

MATERIALS, FIXTURES AND/OR EQUIPMENT WITHIN AND AFFECTING

ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES 4. ROUTING OF ALL CONDUIT SHALL BE COORDINATED WITH EXISTING CONDITIONS, STRUCTURAL FRAMING ELEMENTS AND ALL OTHER

CONSTRUCTION. ALL WORK WILL BE PERFORMED CAUSING MINIMAL OPERATION OF BUILDING. KEEP EGRESS PATHS FREE AND CLEAR

REVISIONS DESCRIPTION DATE

CONSULTANT:

# **SALAMONE**

CONSULTING ENGINEERS 116 North Plains Industrial Road

Wallingford, Connecticut 06492 Phone: (203) 281-6895 Fax: (203) 287-8728

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NOTES:

PROJECT TITLE

CONTRACT DOCUMENTS FOR HVAC UPGRADES

**COLEBROOK** CONSOLIDATED SCHOOL

STATE PROJECT # CV 029-003 HVAC COLEBROOK, CONNECTICUT

FIRST FLOOR ELECTRICAL PLAN

PROJECT MANAGER  ENGINEER/DESIGNER  DRAWN BY  CK  SCALE  AS NOTED  DATE  JANUARY 24, 2024	JAS
DRAWN BY CK SCALE AS NOTED	
SCALE AS NOTED	FB
	CK
DATE JANUARY 24, 2024	AS NOTED
	JANUARY 24, 2024
I I	



REVISIONS DESCRIPTION DATE

CONSULTANT:

### **SALAMONE**

CONSULTING ENGINEERS

116 North Plains Industrial Road Wallingford, Connecticut 06492 Phone: (203) 281-6895 Fax: (203) 287-8728

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PROJECT TITLE

CONTRACT DOCUMENTS FOR HVAC UPGRADES AT

COLEBROOK CONSOLIDATED SCHOOL

STATE PROJECT # CV 029-003 HVAC COLEBROOK, CONNECTICUT

DRAWING TITLE

### ATTIC ELECTRICAL **PLAN**

JOB NO.	3779.01
PROJECT MANAGER	JAS
ENGINEER/DESIGNER	FB
DRAWN BY	CK
SCALE	AS NOTED
DATE	JANUARY 24, 2024
	•

DRAWING NO.

3. CONTRACTOR SHALL NOT DAMAGE ANY EXISTING EQUIPMENT, PIPING, OR ASSOCIATED ACCESSORIES WHICH ARE TO REMAIN.

PROVIDE ALL REQUIRED PENETRATIONS. COORDINATE WITH EXISTING STRUCTURAL ELEMENTS. FIRE STOP ALL PENETRATIONS. TYPICAL

). INSTALL ALL EQUIPMENT AND ASSOCIATED ACCESSORIES PER NEC AND MANUFACTURER'S REQUIREMENTS.

ATTIC ELECTRICAL PLAN

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

PA	MDP	Class: Type:					Short Circuit Rating (Min.): Remark:	. 42 KAIC				
	SERVICE	208Y/120 Volts	3 Pha	3 Phase 4 Wire S/E Label: YES								
PA CON	NELBOARD NFIGURATION	MAIN BUS	(COPPE	₹)		Entrance: TOP/BOTTOM Equipment Ground Bus: YE	:S					
CONFIGURATION Trim: SURFACE  Type: 800/3P MC  Wire Size: SEE F				B Enclosure: NEMA 1								
ı	BRANCH CIRCUITS	Branch Protecti	ve Devices	s: (MOLD	ED CASE	CIRCUIT	BREAKERS)					
Circ No	Circuit	Designation	KVA Load	Pole	Trip Amps	Frame Amps	Wire (min.)	See Remark				
1	50 KVA XMFR	(ATS)	47.83	2	300	400	SEE POWER RISER DIAGRAM					
2	PANEL DP-2		65.02	3	225	225	SEE POWER RISER DIAGRAM					
3			-	-	_	-						
4			-	-	-	-						
5	RTU-1		55.78	3	175	225	2"C, 3-#2/0 AWG + #6 GND	'C'				
6			-	-	-	-						
7 8	PANEL DP1		7.48	3	- 125	- 125	SEE POWER RISER DIAGRAM					
9			7.40	-	123	-						
10			_	_	<del> </del>	<del> </del>						
11	DOAS-2		19.25	3	80	100	1"C, 3-#6 AWG + #8 GND					
12			-	-	-	-						
13			-	-	-	-						
14	HPU-2		16.91	3	70	100	3/4"C, 3-# 8 AWG + #8 GND					
15			-	-	-	-						
16			-	-	_	-						
17	HPU-3 (MODU	LE SEC A)	13.67	3	60	100	3/4"C, 3-# 8 AWG + #10 GND					
18			-	-	-	-						
19		1.E. CEO. D.)	17.07	-	-	100	7 /4"0 7 # 0 AWO + #40 OND					
20	HPU-3 (MODU	TE SEC B)	13.67	3	60	100	3/4°C, 3-# 8 AWG + #10 GND					
22					<del>-</del> -							
23	PREPARED SP	ACF	_	3	_	100						
24		7.02	_	-	-	-						
25			-	_	-	-						
26	PREPARED SP	ACE	-	3	-	100						
27			-	-	-	-						
28			-	-	-	-						
29	PREPARED SP	ACE	-	3	-	100						
30			-	-	-	-						
31			-	_	-	-						
32	PREPARED SP	ACE	-	3	-	100						
33 34			-	-	<del>  -</del>	-						
3 <del>4</del> 35	PREPARED SP	ACE	-	1	-	100						
36		ACL	_		_	-						
37	PREPARED SP	ACE	-	1	-	100						
38	PV SYSTEM		-	3	-	100	WIRING/CONDUIT PER NEC	'E'				
39	PREPARED SP	ACE	-	1	-	100						
40			-	-	-	-						
41	PREPARED SP	ACE	-	1	-	100						
42			-	-	-	-						
		TOTAL KVA:										
	AL SURGE PROT IED PER NEC	ECTION DEVICE (SPE	))		,C, -	DEDUCT	ALTERNATE #1: WIRING, CONDUIT AND ( E PART OF DEDUCT ALTERNATE #1. SP	CIRCUIT BREAKER				

panelboard DP1	Class: Type:	Short Circuit Rating (Min.): 22 KAIC Remark:				
SERVICE	208Y/120 Volts 3 Phase 4 Wire	S/E Label: NO				
PANELBOARD CONFIGURATION	125 AMPERE MAIN BUS (COPPER) Trim: SURFACE	Entrance: TOP/BOTTOM Equipment Ground Bus: YES				
MAIN	Type: MLO Wire Size: SEE RISER DIAGRAM	Enclosure: NEMA 1				
BRANCH CIRCUITS	Branch Protective Devices: (MOLDED CASE CIRCUIT BREAKERS)					

	ANELBOARD NFIGURATION	125 AMPERE MA	AIN BUS	(COPPE	₹)		Entrance: TOP/BOTTOM Equipment Ground Bus: YES					
	MAIN	Enclosure: NEMA 1 RISER DIAGRAM										
	RPANCH			Devices: (MOLDED CASE CIRCUIT BREAKERS)								
Circ No	Circuit	Designation	KVA Load	Pole	Trip Amps	Frame Amps	Wire (min.)	See Remark				
1	HPU-2 BRANC	CH BOX	0.15	2	15	100	3/4"C, 2-#12 AWG + #12 GND					
2	HPU-3 BRANC	CH BOX	0.21	2	15	100	3/4"C, 2-#12 AWG + #12 GND					
3			-	-	-	-						
4			-	-	-	-						
5	IDU'S - CORRI	DORS	0.20	2	15	100	3/4"C, 2-#12 AWG + #12 GND					
6	IDU'S - LIBRA	RY	0.22	2	15	100	3/4"C, 2-#12 AWG + #12 GND					
7			-	-	-	-						
8			-	-	-	-						
9	IDU'S - PYSCH	H OFF/CLASSRM #10	0.27	2	15	100	3/4"C, 2-#12 AWG + #12 GND					
10	IDU'S - CORRI	DORS/KITCHEN	0.18	2	15	100	3/4"C, 2-#12 AWG + #12 GND					
11			1	-	-	-						
12					-	-						
13	IDU'S - CLASS	0.39	2	15	100	3/4"C, 2-#12 AWG + #12 GND						
14	IDU'S - CLASS	0.32	2	15	100	3/4"C, 2-#12 AWG + #12 GND						
15			-	-	-	-						
16			-	-	-	-						
17												
18	BAS PANEL -	KITCHEN STORAGE	0.10	1	20	100	3/4"C, 2-#12 AWG + #12 GND					
19	EXT GFCI HPU	'S, RTU-1, DOAS-2	0.54	1	20	100	3/4"C, 2-#10 AWG + #10 GND					
20	FAN - CAFE		2.10	2	20	100	3/4"C, 2-#10 AWG + #10 GND					
21	FAN - CAFE		2.10	2	20	100	3/4"C, 2-#10 AWG + #10 GND					
22			-	-	-	-						
23			-	-	-	-						
24	FIRE ALARM		0.60	1	20	100	3/4"C, 2-#12 AWG + #12 GND	'B'				
25		ULTI-PURP STORAGE	0.10	1	20	100	3/4"C, 2-#12 AWG + #12 GND					
26	PREPARED SP		-	1	-	100						
27	PREPARED SP		-	1	-	100						
28	PREPARED SP		-	1	-	100		_				
29	PREPARED SP		_	1	-	100		_				
30		PREPARED SPACE		1	-	100						
31		PREPARED SPACE		1	-	100		_				
32		PREPARED SPACE		1	-	100		_				
33		PREPARED SPACE		1	-	100		_				
34	PREPARED SP		-	1	-	100						
35	PREPARED SP		-	1	-	100						
36	PREPARED SP		-	1	-	100						
37	PREPARED SP		-	1	-	100						
38	PREPARED SP		-	1	-	100		_				
39	PREPARED SP		-	1	-	100						
40	PREPARED SP	ACE	-	1		100						

100 - - -

40 PREPARED SPACE 41 PREPARED SPACE 42 PREPARED SPACE

'B' - PROVIDE LOCK-OUT

TOTAL KVA: 7.48

PANELBOARD DP2	Class: Type:					Short Circuit Rating (Min.): 22 KAIC Remark:	
SERVICE	208Y/120 Volts	3 Phase	e 4\	Wire		S/E Label: NO	
PANELBOARD CONFIGURATION	225 AMPERE MAI Trim: SURFACE	N BUS (	COPPER	Entrance: TOP/BOTTOM Equipment Ground Bus: YES			
MAIN	Type: MLO Wire Size: SEE RI	ISER DIAG	GRAM	Enclosure: NEMA 1			
BRANCH CIRCUITS	Branch Protective	BREAKERS)					
Circ Circuit	Designation	KVA	Pole	Trip	Frame	Wire (min.) See	Remark

BRANCH CIRCUITS Branch Protectiv			e Devices	: (MOLD	ED CASE	CIRCUIT	BREAKERS)	
Circ No	Circuit	Designation	KVA Load	Pole	Trip Amps	Frame Amps	Wire (min.)	See Remark
1	DOAS-1		27.92	3	100	100	1"C, 3-#4 AWG + #8 GND	
2	HPU-1 (MODULE SEC A)		15.83	3	70	100	3/4"C, 3-# 8 AWG + #8 GND	
3			-	ļ	_	-		
4			-	ı	-	-		
5			-	ļ	-	-		
6			-	ı	-	-		
7	HPU-1 (MODUL	LE SEC B)	15.83	3	70	100	3/4"C, 3-# 8 AWG + #8 GND	
8	HPU-1 BRANC	н вох	0.29	2	15	100	3/4"C, 2-#12 AWG + #12 GND	
9			-	ļ	-	-		
10			-	-	_	-		
11			-	ı	-	-		
12	IDU'S - PRIN/SEC/NURSE/SPEECH		0.23	2	15	100	3/4"C, 2-#12 AWG + #12 GND	
13	IDU'S - CORRIDOR		0.15	2	15	100	3/4"C, 2-#12 AWG + #12 GND	
14			_	_	-	_		
15			_	I	-	-		
16	IDU'S - CLASS	ROOMS #3 & #5	0.45	2	15	100	3/4"C, 2-#12 AWG + #12 GND	
17	IDU'S-CLASSRMS #4/#6/LNGE/OFF		0.57	2	15	100	3/4"C, 2-#12 AWG + #12 GND	
18			-	-	-	-		
19			-	ı	-	-		
20	EF-2 CUSTODIAL STORAGE		0.01	1	15	100	3/4"C, 2-#12 AWG + #12 GND	
21	EXT GFCI DOAS-/BOILER ROOM		0.54	1	20	100	3/4"C, 2-#12 AWG + #12 GND	
22	BAS PANEL-S	BAS PANEL-STORAGE ADJ. NURSE		1	20	100	3/4"C, 2-#12 AWG + #12 GND	
23	BAS PANEL-CI	_ASS RM #3 CLST	0.10	1	20	100	3/4"C, 2-#12 AWG + #12 GND	
24	PREPARED SP.	ACE	-	1	-	100		
25	PREPARED SP.	ACE	-	1	-	100		
26	PREPARED SP.	ACE	-	1	_	100		
27	PREPARED SP.	ACE	-	1	_	100		
28	PREPARED SP.	ACE	-	1	-	100		
29	PREPARED SP.	ACE	-	1	-	100		
30	PREPARED SP.	ACE	-	1	-	100		
31	PREPARED SP.	ACE	-	1		100		
32	PREPARED SP.	ACE	-	1		100		
33	PREPARED SP.	ACE	_	1	-	100		
34	PREPARED SP.	ACE	-	1	-	100		
35	PREPARED SP.	ACE	-	1	-	100		
36	PREPARED SP.	ACE	-	1	-	100		
37	PREPARED SP.	ACE	-	1	-	100		
38	PREPARED SP.	ACE	-	1	-	100		
39	PREPARED SP.	ACE	-	1	-	100		
40	PREPARED SP.	ACE	-	1	-	100		
41	PREPARED SP.	ACE	-	1	-	100		
42	PREPARED SP.	ACE	-	1	-	100		
		TOTAL KVA:	65.02					

PΑ	NELBOARD PP1	Class: Type:					Short Circuit Rating (Min.): Remark:	22 KAIC				
SERVICE 120/240 Volts				se 3	Wire	S/E Label: NO						
PANELBOARD 225 AMPERE MACCONFIGURATION Trim: SURFACE				(COPPE	R)		Entrance: TOP/BOTTOM Equipment Ground Bus: YES					
MAIN Type: MLO Wire Size: SEE I			RISER DI	Enclosure: NEMA 1 RISER DIAGRAM FEED THRU LUGS								
BRANCH CIRCUITS		Branch Protective Devices: (MOLDED CASE CIRCUIT BREAKERS)										
Circ No	Circuit	Designation	KVA Load	Pole	Trip Amps	Frame Amps	Wire (min.)	See Remark				
1	EXISTING PAN	EL PP-3	-	2	100	100	REROUTE/MODIFY/EXTEND EXISTING					
2	EXISTING PAN	EL PP-5	-	2	100	100	SEE POWER RISER DIAGRAM					
3			-	-	<del> </del>	-						
4			-	-	<del> </del> -	-						
5	EXISTING		-	2	15	100	REROUTE/MODIFY/EXTEND EXISTING					
6	EXISTING IT P.	ANEL IN LIBRARY	-	2	60	100	REROUTE/MODIFY/EXTEND EXISTING					
7			-	_	-	-						
8			-	_	<del> </del>	_						
9	EXISTING		-	2	15	100	REROUTE/MODIFY/EXTEND EXISTING					
10	EXISTING		+ -	2	20	100	REROUTE/MODIFY/EXTEND EXISTING					
11			<del> </del>	_	-	_						
12			<del> </del>	_	<del> </del>	<del> </del>						
13	EXISTING		<del> </del>	2	30	100	REROUTE/MODIFY/EXTEND EXISTING					
14	EXISTING		<del> </del> -	2	40	100	REROUTE/MODIFY/EXTEND EXISTING					
15			<del> </del>	_	-	_						
16			<del> </del>	_	<del> </del>	_						
17	EXISTING		<del> </del>	1	20	100	REROUTE/MODIFY/EXTEND EXISTING					
18	EXISTING		+ -	2	60	100	REROUTE/MODIFY/EXTEND EXISTING					
19	EXISTING		<del> </del>	1	20	100	REROUTE/MODIFY/EXTEND EXISTING					
20			+ -	_	-	-						
21	EXISTING		+ -	1	20	100	REROUTE/MODIFY/EXTEND EXISTING					
22	EXISTING		+ -	2	60	100	REROUTE/MODIFY/EXTEND EXISTING					
23	EXISTING		+ -	1	20	100	REROUTE/MODIFY/EXTEND EXISTING					
24			_	<u> </u>	-	-						
25	EXISTING		_	1	20	100	REROUTE/MODIFY/EXTEND EXISTING					
26	EXISTING		_	1	20	100	REROUTE/MODIFY/EXTEND EXISTING	_				
27	EXISTING		-	1	20	100	REROUTE/MODIFY/EXTEND EXISTING	1				
28	EXISTING		-	1	20	100	REROUTE/MODIFY/EXTEND EXISTING	1				
29	EXISTING		-	1	20	100	REROUTE/MODIFY/EXTEND EXISTING	1				
30	EXISTING		-	1	20	100	REROUTE/MODIFY/EXTEND EXISTING	1				
31	EXISTING		_	2	20	100	REROUTE/MODIFY/EXTEND EXISTING					
32	EXISTING		_	1	20	100	REROUTE/MODIFY/EXTEND EXISTING					
33			_	_	<del>  _</del> -	-						
34	EXISTING		_	1	20	100	REROUTE/MODIFY/EXTEND EXISTING					
35	SUMP PUMP -	- TIINNFI	1.04	1	20	100	3/4"C, 2-#10 AWG + #10 GND	'F'				
35	SUMP PUMP -		1.04	<u> </u>	20	100	3/4°C, 2-#10 AWG + #10 GND	,-,				

36 SUMP PUMP - TUNNEL

37 SUMP PUMP - TUNNEL

39 PREPARED SPACE
40 PREPARED SPACE
41 PREPARED SPACE
42 PREPARED SPACE

38 SUMP PUMP - BOILER ROOM

'F' - GFCI CIRCUIT BREAKER

20 100 3/4"C, 2-#10 AWG + #10 GND

1 20 100 3/4"C, 2-#10 AWG + #10 GND

1 20 100 3/4"C, 2-#12 AWG + #12 GND

1 - 100 - - -

PP2         Type:         Remark:           SERVICE         120/240 Volts         1 Phase         3 Wire         S/E Label: NO											
	SERVICE	120/240 Volts 1 Phase 3 Wire S/E Label: NO									
PANELBOARD CONFIGURATION 225 AMPERE MAIN BUS (COPPER) Entrance: TOP/BOTTOM Equipment Ground Bus: YES											
	MAIN	Type: MLO Wire Size: SEE I	RISER DIA	AGRAM			Enclosure: NEMA 1				
	irc Circuit Designation		Devices	Devices: (MOLDED CASE CIRCUIT BREAKERS)							
irc No	Circuit	Designation	KVA Load	Pole	Trip Amps	Frame Amps	Wire (min.)	See Remark			
1	EXISTING		1	2	15	100	REROUTE/MODIFY/EXTEND EXISTING				
2	EXISTING		-	1	15	100	REROUTE/MODIFY/EXTEND EXISTING				
3			-	-	_	-		1			
4	EXISTING		-	1	15	100	REROUTE/MODIFY/EXTEND EXISTING				
5	EXISTING		-	1	20	100	REROUTE/MODIFY/EXTEND EXISTING	1			
6	EXISTING		-	2	20	100	REROUTE/MODIFY/EXTEND EXISTING				
7	EXISTING		-	1	20	100	REROUTE/MODIFY/EXTEND EXISTING				
8			_	-	-	-					
9	EXISTING		_	1	15	100	REROUTE/MODIFY/EXTEND EXISTING				
10	EXISTING		-	1	15	100	REROUTE/MODIFY/EXTEND EXISTING	1			
11	EXISTING		-	1	15	100	REROUTE/MODIFY/EXTEND EXISTING				
12	EXISTING		-	1	15	100	REROUTE/MODIFY/EXTEND EXISTING				
13	EXISTING		-	1	15	100	REROUTE/MODIFY/EXTEND EXISTING				
14	EXISTING		-	1	15	100	REROUTE/MODIFY/EXTEND EXISTING				
15	EXISTING		-	2	15	100	REROUTE/MODIFY/EXTEND EXISTING				
16	EXISTING		-	1	15	100	REROUTE/MODIFY/EXTEND EXISTING				
17			-	-	-	-					
18	CIRC PUMP P		1.01	2	15	100	3/4"C, 2-#12 AWG + #12 GND	'A'			
19	CIRC PUMP P	-2	1.01	2	15	100	3/4"C, 2-#12 AWG + #12 GND	'A'			
20			_	-	-	-					
21				-	-	-		<u> </u>			
22	CIRC PUMP P		1.01	2	15	100	3/4"C, 2-#12 AWG + #12 GND	'A'			
23	CIRC PUMP P	-2A	1.01	2	15	100	3/4"C, 2-#12 AWG + #12 GND	'A'			
24			-	-	-	-					
25			-	-	-	-	 				
26	BOILER #1 CIF		0.58	2	15	100	3/4"C, 2-#12 AWG + #12 GND	<u> </u>			
27	BOILER #2 CIF	RC CP-2	0.58	2	15	100	3/4"C, 2-#12 AWG + #12 GND	'D'			
28			-	-	<u> </u>	-		1			
29			-	-	-	-	7 /4"0 0 1/40 ANNO 1 1/40 OND	1			
30 71	BOILER #1		0.80	1	20	100	3/4"C, 2-#12 AWG + #12 GND	,,,			
31	BOILER #2	J. 1.	0.80	1	20	100	3/4"C, 2-#12 AWG + #12 GND	'D'			
32	PUMP P-4 (IV	•	0.20	1	15	100	3/4"C, 2-#12 AWG + #12 GND	<b>+</b>			
33		NEL - BOILER RM	0.71	1	20	100	3/4"C, 2-#12 AWG + #12 GND	1			
34	<u> </u>	PANEL – BOILER RM PANEL – BOILER RM	0.71	1	20	100	3/4"C, 2-#12 AWG + #12 GND	+			
35 36	ERV-1 - BOIL		0.09	1 2	20 15	100	3/4°C, 2-#12 AWG + #12 GND 3/4°C, 2-#12 AWG + #12 GND	+			
36 37		- BOILER ROOM	0.34	1	15	100	3/4°C, 2-#12 AWG + #12 GND	1			
3 <i>7</i> 38		DOILLIV KOOM	-	_	-	-		1			
39	PREPARED SP	ACE		 	<u> </u>	100		1			
39 40	PREPARED SP			1	_	100		1			
40 41	PREPARED SP			1	<del>-</del>	100		1			
<del>4</del> 1 42	PREPARED SP			1	_	100		1			
r۷	TINLI ANLU SP	TOTAL KVA:		'	<del>-</del>	100		+			
	<u> </u> AD/LAG OPERA		_		<u> </u>		<u> </u> <u>ERNATE #1:</u> WIRING, CONDUIT AND CIRCUI				

REVISIONS DESCRIPTION DATE

CONSULTANT:

### **SALAMONE** ASSOCIATES, P.C.

CONSULTING ENGINEERS

116 North Plains Industrial Road Wallingford, Connecticut 06492 Phone: (203) 281-6895 Fax: (203) 287-8728

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PROJECT TITLE

CONTRACT DOCUMENTS FOR HVAC UPGRADES AT

COLEBROOK CONSOLIDATED SCHOOL

STATE PROJECT # CV 029-003 HVAC COLEBROOK, CONNECTICUT

DRAWING TITLE

ELECTRICAL PANELBOARD SCHEDULES

JOB NO.	3779.01
PROJECT MANAGER	JAS
ENGINEER/DESIGNER	FB
DRAWN BY	CK
SCALE	AS NOTED
DATE	JANUARY 24, 2024
	PROJECT MANAGER ENGINEER/DESIGNER DRAWN BY SCALE

### BASE BID NOTE:

CONTRACTOR SHALL CARRY AN ALLOWANCE OF \$15,000 AS PART OF THEIR BASE BID FOR EVERSOURCE CHARGES."

#### ELECTRICAL NOTES:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK INCLUDING TOOLS, MATERIAL, MANPOWER, ETC. REQUIRED FOR COMPLETE AND PROPER INSTALLATION OF PROPOSED MATERIALS,
- FIXTURES AND/OR EQUIPMENT. 2. DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL VERIFY ALL LOCATIONS, QUANTITIES AND DIMENSIONS OF PROPOSED MATERIALS, FIXTURES AND/OR EQUIPMENT WITHIN AND AFFECTING PROJECT SCOPE OF WORK.
- 3. ALL WORK SHALL BE PERFORMED IN A SAFE AND ORDERLY MANNER WITH QUALIFIED AND LICENSED PERSONNEL IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES AND ALL APPLICABLE CODES AND STANDARDS. TYPICAL.
- 4. ROUTING OF ALL CONDUIT SHALL BE COORDINATED WITH EXISTING CONDITIONS, STRUCTURAL FRAMING ELEMENTS AND ALL OTHER PROJECT DISCIPLINES. TYPICAL
- BUILDINGS WILL BE OCCUPIED DURING ALL PHASES OF CONSTRUCTION. ALL WORK WILL BE PERFORMED CAUSING MINIMAL DISRUPTION TO THE FACILITY. CONTAIN AND CONTROL CONSTRUCTION DEBRIS SO AS NOT TO INTERFERE WITH DAILY OPERATION OF BUILDING. KEEP EGRESS PATHS FREE AND CLEAR OF ANY OBSTRUCTIONS.
- ALL SERVICE DISRUPTIONS MUST BE SCHEDULED A MINIMUM OF 72 HOURS IN ADVANCE WITH THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL NOT DAMAGE ANY EXISTING EQUIPMENT,
- PIPING, OR ASSOCIATED ACCESSORIES WHICH ARE TO REMAIN. PROVIDE ALL REQUIRED PENETRATIONS. COORDINATE WITH EXISTING STRUCTURAL ELEMENTS. FIRE STOP ALL PENETRATIONS. TYPICAL
- INSTALL ALL EQUIPMENT AND ASSOCIATED ACCESSORIES PER NEC AND MANUFACTURER'S REQUIREMENTS.

REVISIONS DESCRIPTION DATE

CONSULTANT:

# **SALAMONE**

CONSULTING ENGINEERS

#### 116 North Plains Industrial Road Wallingford, Connecticut 06492

### Phone: (203) 281-6895 Fax: (203) 287-8728

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CONTRACT DOCUMENTS FOR HVAC UPGRADES AT

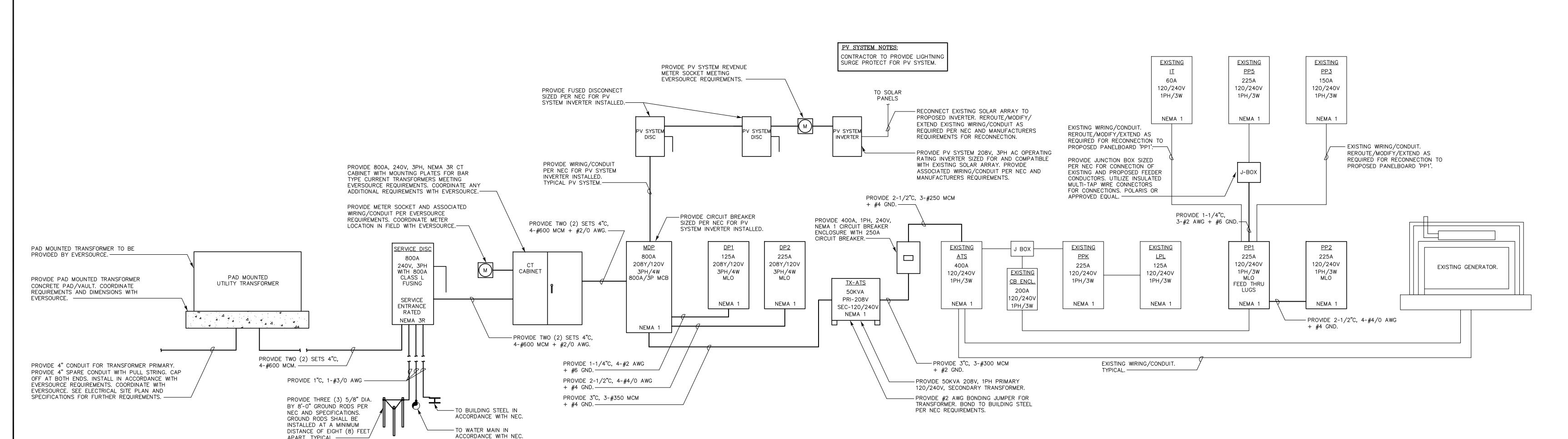
**COLEBROOK** CONSOLIDATED **SCHOOL** 

STATE PROJECT # CV 029-003 HVAC COLEBROOK, CONNECTICUT

DRAWING TITLE

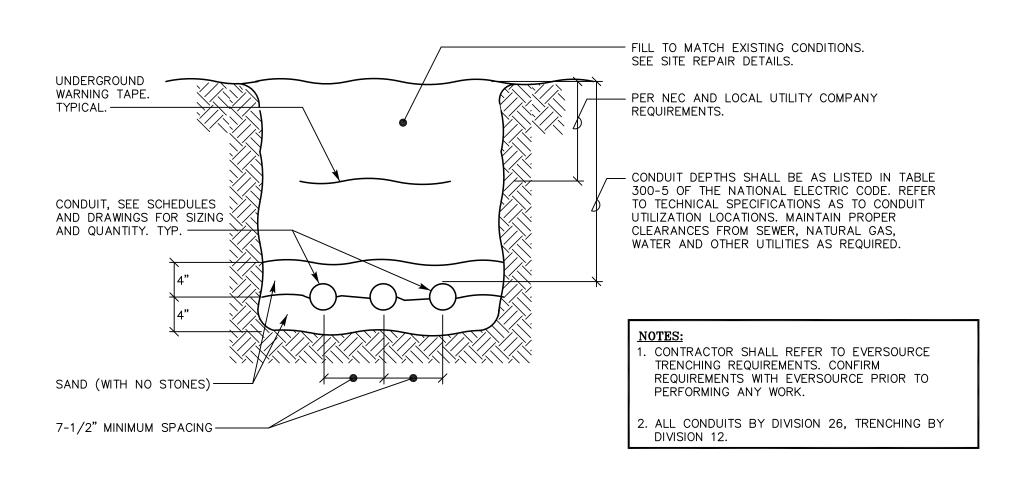
### POWER RISER DIAGRAM

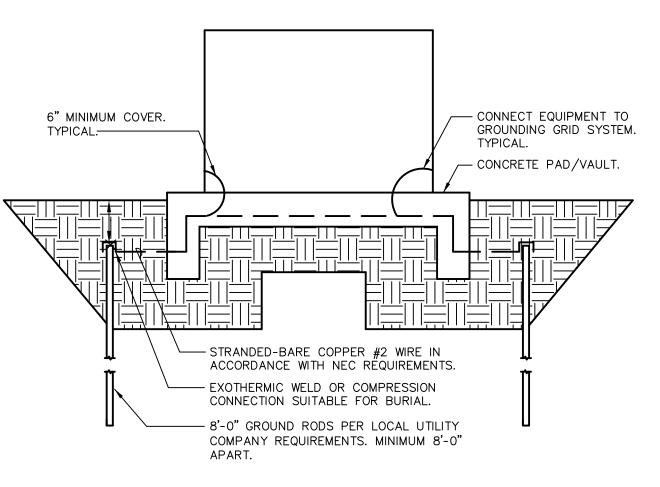
3779.01
JAS
FB
CK
AS NOTED
JANUARY 24, 2024



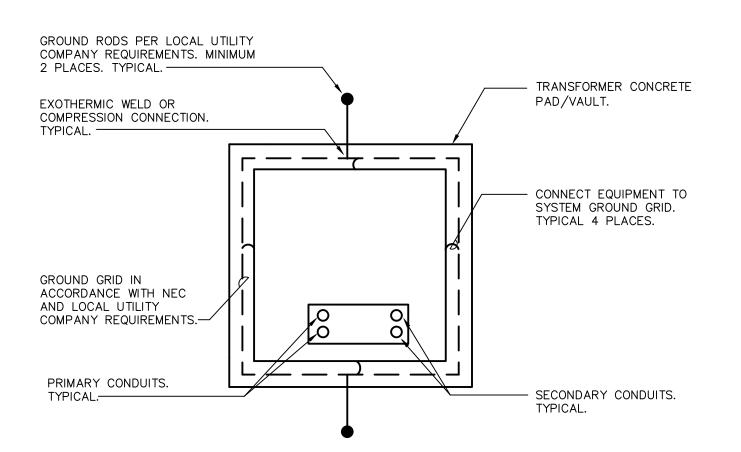
APART. TYPICAL. ————

POWER RISER DIAGRAM SCALE: NTS

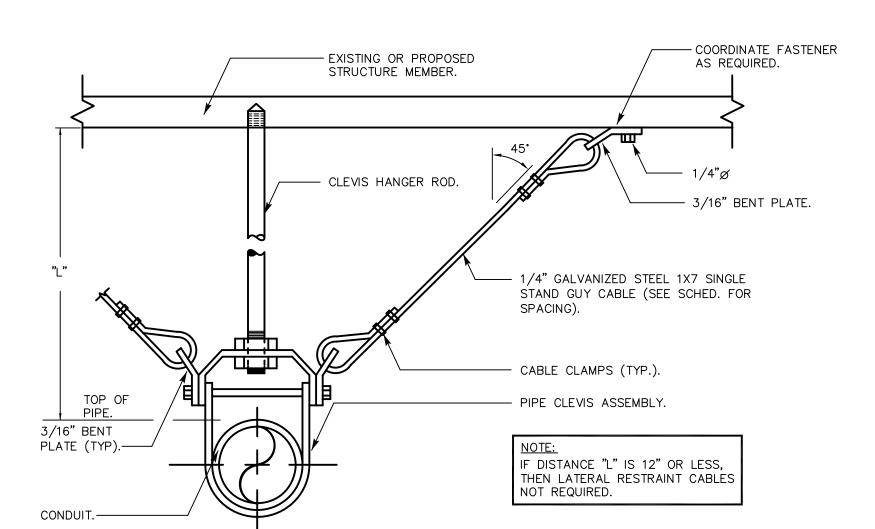




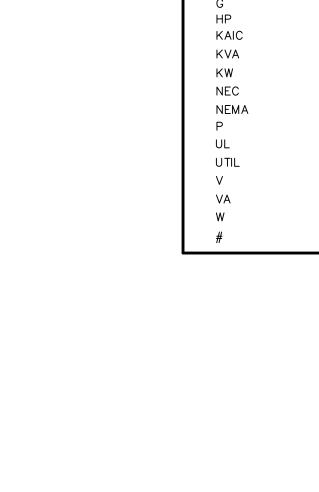
TRANSFORMER GROUNDING GRID ELEVATION DETAIL SCALE: N.T.S.



TRANSFORMER GROUNDING GRID PLAN VIEW SCALE: N.T.S.



TYPICAL SEISMIC RESTRAINT ASSEMBLY OF SUSPENDED CONDUIT



- TOPSOIL FERTILIZE AND

— 6" TOPSOIL

-ROUNDED CONCRETE TOP 1/2" CROWN

-6"ø CONCRETE FILLED STEEL PIPE PAINT

SAFETY YELLOW

-----STEEL PIPE SLEEVE — EXISTING GRADE

-UNDISTURBED SOIL

-CONCRETE FOOTING

-10x10x1/4" THICK PLATE

WELDED ALL AROUND

TRENCH WIDTH

GRASS AREA REPAIR DETAIL
SCALE: N.T.S.

1'-6" DIA

TYPICAL STEEL BOLLARD DETAIL SCALE: N.T.S.

RESEED AFFECTED AREAS

EXISTING GRADE -

TRENCH

SUBGRADE -

A.F.F.

AWG

FAAP

FACP

ECTRICAL ABBREVIATIONS	ELECT	TRICAL SYMBOL LIST
AMPERES ABOVE FINISHED FLOOR AMERICAN WIRE GAUGE	H <b>⊠</b> OR <b>⊠</b>	CEILING OR WALL MOUNTED EXIT SIGN WITH DIRECTIONAL ARROWS AS INDICATED ON PLANS
CONDUIT CIRCUIT EMERGENCY	×	EXIT SIGN SHADING INDICATES LIGHTED FACE
FIRE ALARM FIRE ALARM ANNUNCIATOR PANEL FIRE ALARM CONTROL PANEL GROUNDED HORSEPOWER INTERRUPTING CAPACITY (KILOAMPERE)	→ OR →	DUPLEX OR QUADRUPLEX RECEPTACLE GFCI - GROUND FAULT CIRCUIT INTERRUPTER IG - ISOLATED GROUND WP - WEATHERPROOF L - LOCKABLE COVER
KILOVOLT-AMPERE		AUTOMATIC DOOR OPENER
KILOWATT NATIONAL ELECTRIC CODE	CR	CARD ACCESS READER
NATIONAL ELECTRICAL MANUFACTURERS ASS. POLE	<b>(A)</b>	SPECIAL PURPOSE CONNECTION
UNDERWRITER'S LABORATORY UTILITY VOLTS VOLT-AMPERES WATTS WIRE SIZE IN AWG, OR MCM WHEN INDICATED	\$	SWITCH (NONE) - SINGLE POLE 2 - TWO POLE 3 - THREE WAY 4 - FOUR WAY D - DIMMER TOL - THERMAL OVERLOAD PROTECTION DEVICE K - KEYED K3 - KEYED 3 WAY LK - KEYED LOW VOLTAGE LK3 - KEYED 3 WAY LOW VOLTAGE OS - OCCUPANCY SENSOR
	ф	DISCONNECT SWITCH
	<u></u>	CEILING MOUNTED OCCUPANCY SENSOR
	DS	CEILING MOUNTED DAYLIGHT SENSOR

——— 1LP1

### WARNING

BRANCH CIRCUIT HOMERUN (ARROWS

INDICATE CIRCUIT NUMBERS)

### "CALL BEFORE YOU DIG" 1-800-922-4455

"CONTRACTOR SHALL REGISTER HIS INTENTION TO START EXCAVATIONS AT OR NEAR A PUBLIC UTILITY AT LEAST TWO FULL WORKING DAYS PRIOR TO THE

CONTRACTOR IS RESPONSIBLE FOR REPAIR AND PAYMENT FOR ALL UTILITIES DAMAGED DURING CONSTRUCTION. . THE LOCATION OF ALL UNDERGROUND UTILITIES IS BASED UPON THE BEST AVAILABLE INFORMATION. CONTRACTOR TO CONFIRM

3. CONTRACTOR TO RETURN SITE TO ORIGINAL CONDITION AFTER INSTALLATION OF UNDERGROUND UTILITIES.

LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO

COMMENCEMENT OF ANY EXCAVATION.

#### ELECTRICAL GENERAL NOTES . SEE SPECIFICATIONS, DIVISION 26 ELECTRICAL. 2. PROVIDE A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM INCLUDING ALL NECESSARY MATERIAL, LABOR AND EQUIPMENT. 3. ELECTRICAL PLANS AND DETAILS AND ONE LINE DIAGRAMS SHOW THE GENERAL LOCATION AND ARRANGEMENT OF THE ELECTRICAL SYSTEM. THEY ARE DIAGRAMMATIC AND DO NOT SHOW ALL CONDUIT BODIES. CONNECTORS, BENDS, FITTINGS, HANGERS AND ADDITIONAL PULL AND JUNCTION BOXES. 4. PROVIDE MODIFICATIONS/ADDITIONS TO EXISTING FIRE ALARM SYSTEM. 5. ALL EQUIPMENT AND MATERIAL SHALL BE LABELED, LISTED AND INSTALLED IN ACCORDANCE WITH THEIR LISTING. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES. ALL WORK SHALL BE DONE WITH LICENSED WORKMEN IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES. THE DEFINITION OF ELECTRICAL TERMS USED SHALL BE AS DEFINED IN THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) WITH CT AMENDMENTS. 9. THE TERM "INDICATED" SHALL MEAN "AS SHOWN ON CONTRACT DOCUMENTS (SPECIFICATIONS, DRAWINGS AND RELATED ATTACHMENTS)".

10. THE TERM "PROVIDE" SHALL MEAN "TO FURNISH, INSTALL AND CONNECT 11. THE TERM "SIZE" SHALL MEAN ONE OR MORE OF THE FOLLOWING: "LENGTH, CURRENT AND VOLTAGE RATING, NUMBER OF POLES, NEMA SIZE AND OTHER

SIMILAR ELECTRICAL CHARACTERISTICS". 12. THE TERM "SPACE" ON PANELBOARD AND SWITCHBOARD SCHEDULES SHALL MEAN "PROVIDE SPACE TO INSTALL THE NUMBER OF POLES AND SIZE OF THE PROTECTIVE DEVICE INDICATED WITH ALL NECESSARY BUS AND FITTINGS TO

13. ELECTRICAL PLANS AND DETAILS DO NOT SHOW ALL INTERFERENCES AND CONDITIONS, VISIBLE AND/OR HIDDEN, THAT MAY EXIST; THUS REQUIRING THE CONTRACTOR TO INSPECT AND SURVEY THE SPACE BEFORE PERFORMING THE WORK.

14. COORDINATE ELECTRICAL WORK WITH OWNER.

INSTALL THE DEVICE AT SOME FUTURE DATE".

15. COORDINATE ELECTRICAL WORK WITH OTHER DIVISIONS OF THIS PROJECT. 16. TURN OVER TO THE OWNER ALL MANUFACTURERS WARRANTIES FOR EQUIPMENT AND MATERIAL PROVIDED.

17. UNLESS OTHERWISE INDICATED, ALL ELECTRICAL EQUIPMENT HAS BEEN BASED ON SQUARE D PRODUCTS.

18. THE CONTRACTOR MAY SUBSTITUTE EQUIPMENT OF ANOTHER MANUFACTURER IF IT IS OF EQUAL QUALITY AND RATING, SUBJECT TO OWNER'S AND ENGINEER'S REVIEW AND ACCEPTANCE.

9. UNLESS OTHERWISE INDICATED, ALL ENCLOSURES FOR EQUIPMENT PROVIDED SHALL BE NEMA TYPE 1.

20. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS TO BE COPPER THHN/THWN-2. 21. UNLESS OTHERWISE INDICATED, ALL OUTLET AND SWITCH BOXES TO BE CAST

IRON WITH THREADED HUBS. 22. IN INTERIOR PROTECTED LOCATIONS, OUTLET AND SWITCH BOXES MAY BE STEEL 23. UNLESS OTHERWISE INDICATED, PROVIDE HEAVY-DUTY GRADE, 20 AMPERE RECEPTACLES AND SWITCHES. ALL PLATES IN FINISHED AREAS TO BE BRUSHED STAINLESS STEEL. PLATES FOR SURFACE MOUNTED INTERIOR BOXES

MAY BE STAMPED STEEL. PLATES EXPOSED TO WEATHER OR WATER TO BE GASKETED, WEATHERPROOF TYPE. COLOR BY ARCHITECT. 24. BEFORE SELECTING MATERIAL AND EQUIPMENT, AND PROCEEDING WITH WORK, INSPECT AREAS WHERE MATERIAL AND EQUIPMENT ARE TO BE INSTALLED TO INSURE SUITABILITY, AND CHECK NEEDED SPACE FOR PLACEMENT, CLEARANCES

AND INTERCONNECTIONS. 25. BEFORE CUTTING OR DRILLING INTO BUILDING ELEMENTS, INSPECT AND LAYOUT WORK TO AVOID DAMAGING STRUCTURAL ELEMENTS AND BUILDING UTILITIES.

26. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE

27. THE MEASUREMENT FROM ABOVE FINISHED FLOOR (AFF) SHALL BE TAKEN FROM THE FINISHED FLOOR SURFACE TO THE TOP OF WALL RECEPTACLES AND SWITCH BOXES, TO THE CENTER LINE OF WALL LIGHTING OUTLET BOXES, TO THE TOP OF WALL MOUNTED EQUIPMENT ENCLOSURES, TO THE CENTER LINE OF THE TOP MOST SWITCH HANDLE, OR TO THE LOWEST SURFACE OF CEILING LIGHTING FIXTURES OTHER CEILING MOUNTED EQUIPMENT.

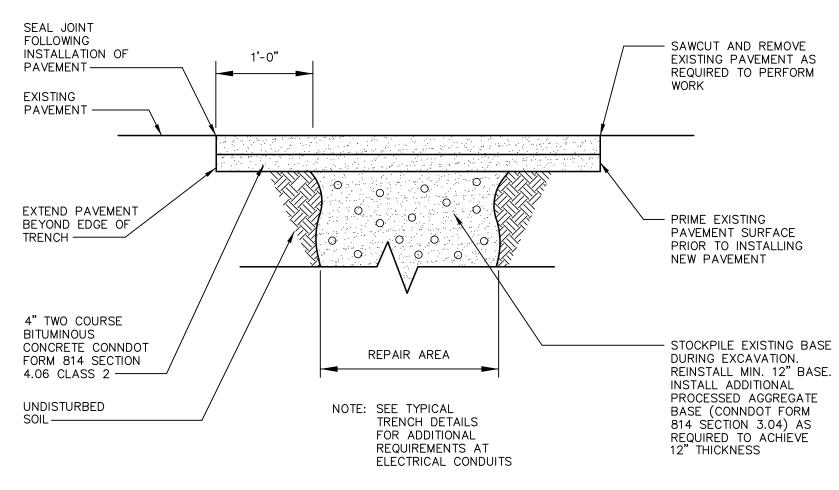
28. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS ARE NO. 12 AWG. 29. CONDUIT SIZE FOR INDICATED CONDUCTORS SHALL BE BASED ON CHAPTER 9

30. THE CONTRACTOR MAY GROUP BRANCH CIRCUIT HOME RUN CONDUCTORS IN A SINGLE RACEWAY IN ACCORDANCE WITH THE NEC.

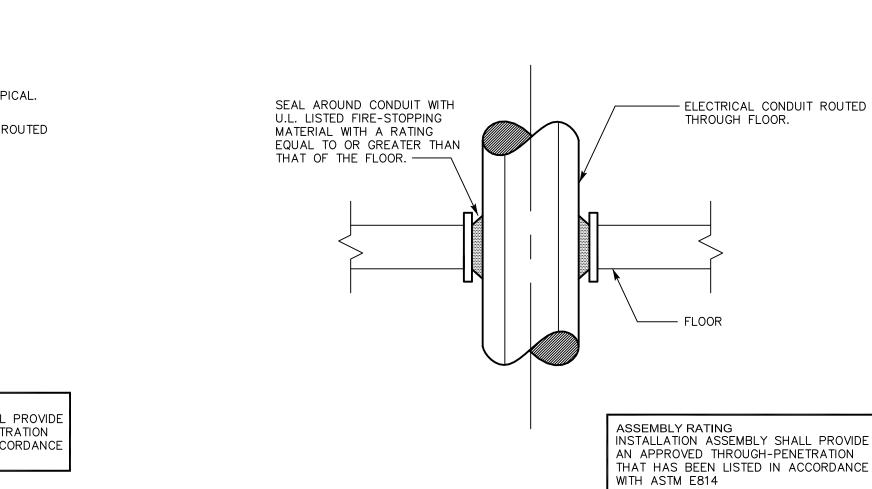
ALL BLANK COVER PLATES TO BE STAINLESS STEEL. 32. REFER TO ARCHITECTURAL DRAWINGS FOR WALL SWITCH BOXES AND

RECEPTACLE MOUNTING HEIGHTS. 33. PROVIDE ELECTRICAL WIRING AND CONDUIT TO ALL APPLIANCES AND

MECHANICAL EQUIPMENT/SYSTEMS. 34. ALL MANUFACTURER'S WARRANTEES FOR EQUIPMENT AND MATERIALS PROVIDED

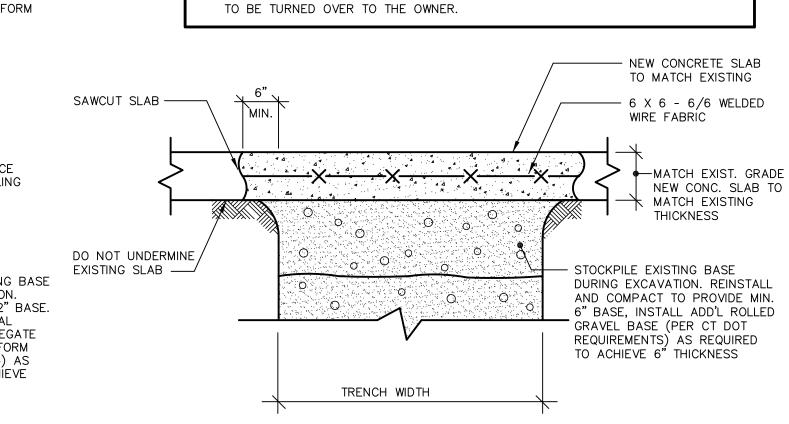


### TYPICAL BITUMINOUS PAVEMENT REPAIR DETAIL SCALE: N.T.S.

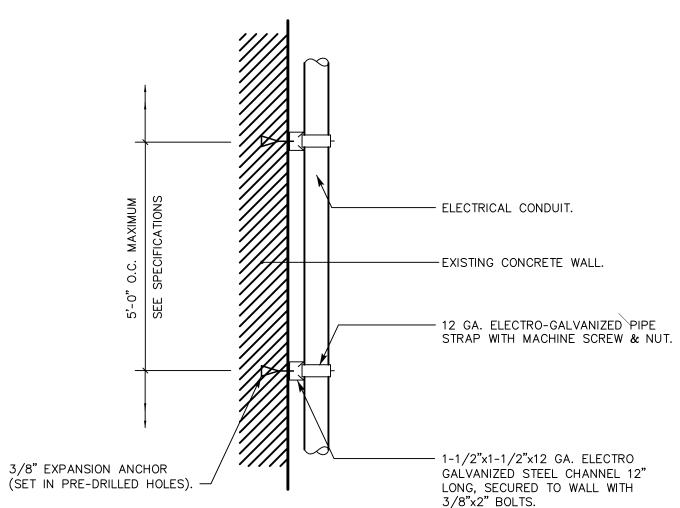


TYPICAL CONDUIT FLOOR PENETRATION DETAIL (UL XHEX C-AJ-1008)

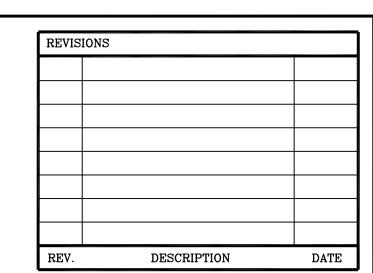
SCALE: N.T.S.



### **CONCRETE SLAB REPAIR**



TYPICAL VERTICAL CONDUIT SUPPORT DETAIL SCALE: N.T.S.



CONSULTANT: **SALAMONE** 

### ASSOCIATES, P.C.

CONSULTING ENGINEERS 116 North Plains Industrial Road Wallingford, Connecticut 06492

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NOTES:

PROJECT TITLE CONTRACT DOCUMENTS FOR HVAC UPGRADES

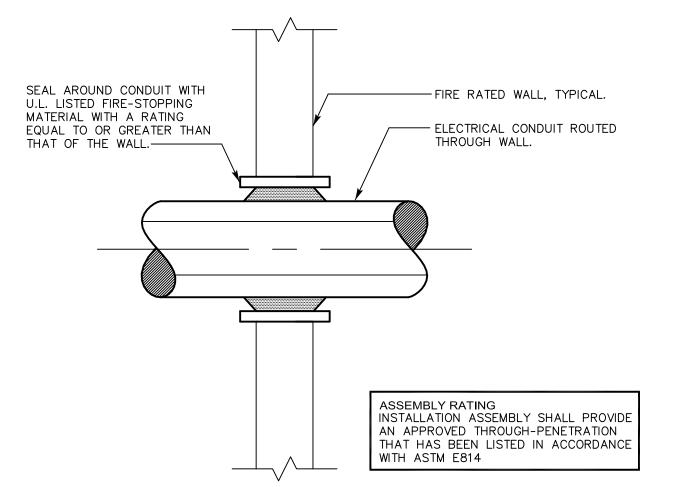
> COLEBROOK CONSOLIDATED **SCHOOL** STATE PROJECT #
> CV 029-003 HVAC

COLEBROOK, CONNECTICU'

#### DRAWING TITLE **ELECTRICAL SYMBOLS** NOTES, DETAILS AND **ABBREVIATIONS**

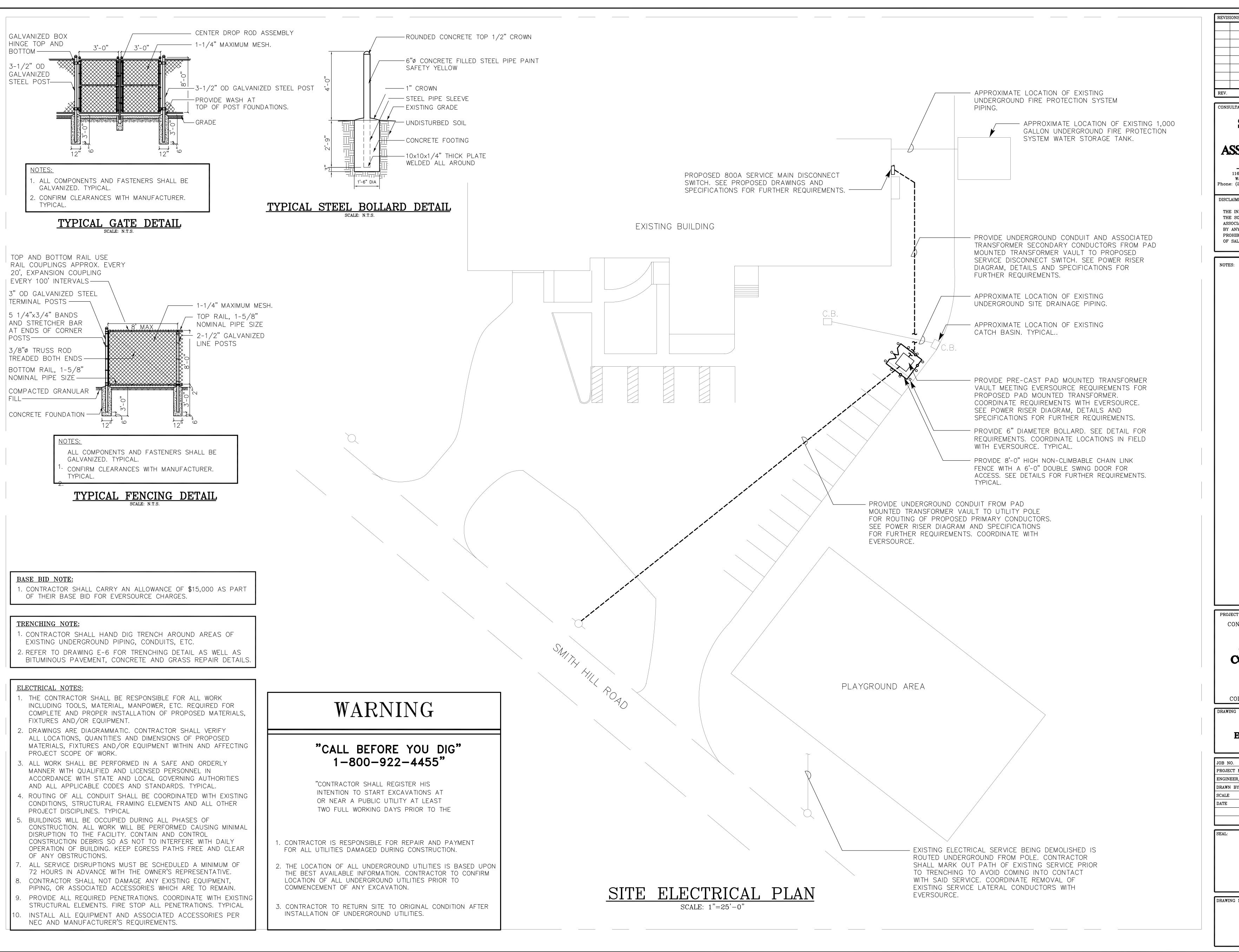
JOB NO.	3779.01
PROJECT MANAGER	JAS
ENGINEER/DESIGNER	FB
DRAWN BY	CK
SCALE	AS NOTED
DATE	JANUARY 24, 2024

E-6



TYPICAL CONDUIT WALL PENETRATION DETAIL (UL XHEX C-AJ-1008)

SCALE: N.T.S.



REVISIONS DESCRIPTION DATE

CONSULTANT:

### **SALAMONE** ASSOCIATES, P.C.

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CONTRACT DOCUMENTS FOR HVAC UPGRADES

**COLEBROOK** CONSOLIDATED **SCHOOL** 

STATE PROJECT # CV 029-003 HVAC

COLEBROOK, CONNECTICU

SITE ELECTRICAL PLAN

JOB NO.	3779.01
PROJECT MANAGER	JAS
ENGINEER/DESIGNER	FB
DRAWN BY	CK
SCALE	AS NOTED
DATE	JANUARY 24, 2024

DRAWING NO.

SE-1