

ANCHOR BAY SCHOOL DISTRICT LIGHTHOUSE ELEMENTARY SCHOOL

HVAC Upgrade

51880 Washington St, New Baltimore, MI 48047

CONSTRUCTION DOCUMENTS



Peter Basso Associates
CONSULTING ENGINEERS
5145 Livernois, Suite 100
Troy, Michigan 48098-3276
Tel: 248-879-5666
www.PeterBassoAssociates.com
PBA Project No.: 2026.0034.51



CODES AND STANDARDS

2021	MICHIGAN BUILDING CODE
2021	MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS
2021	MICHIGAN MECHANICAL CODE
2023	MICHIGAN ELECTRICAL CODE PART 8

MECHANICAL DRAWING INDEX

CONSTRUCTION DOCUMENTS	
SHEET NO.	SHEET TITLE
MO.1	MECHANICAL STANDARDS AND DRAWING INDEX
MO.2	FIRST FLOOR MECHANICAL COMPOSITE DEMOLITION PLAN
MO.2	FIRST FLOOR MECHANICAL COMPOSITE NEW WORK PLAN
M6.1	MECHANICAL DETAILS
M7.1	MECHANICAL SCHEDULES
MB.1	TEMPERATURE CONTROL STANDARDS AND GENERAL NOTES

ELECTRICAL DRAWING INDEX

CONSTRUCTION DOCUMENTS	
SHEET NO.	SHEET TITLE
EO.1	ELECTRICAL STANDARDS AND DRAWING INDEX
EO.2	ELECTRICAL STANDARD SCHEDULES
EO.3	FIRST FLOOR ELECTRICAL COMPOSITE DEMOLITION PLAN
EO.3	FIRST FLOOR ELECTRICAL COMPOSITE NEW WORK PLAN
E5.1	ONE LINE DIAGRAM



LOCATION MAP
NO SCALE

FEEDER AND BRANCH CIRCUIT SIZING SCHEDULE - GENERAL PURPOSE							
OVERCURRENT DEVICE RATING (AMPERES)	COPPER CONDUCTORS						KEYED NOTES
	WIRE SIZE (AWG OR KCMIL)		CONDUIT SIZE				
	PHASE & NEUTRAL	GROUND	SINGLE PHASE 2 WIRE+G (1PH, 1N, 1G, 2PH, 1G)	SINGLE PHASE 3 WIRE+G (2PH, 1N, 1G)	THREE PHASE 3 WIRE+G (3PH, 1G)	THREE PHASE & NEUTRAL 4 WIRE+G (3PH, 1N, 1G)	
15-20	12	12	3/4"	3/4"	3/4"	3/4"	
25-30	10	10	3/4"	3/4"	3/4"	3/4"	
35-40	8	10	3/4"	3/4"	3/4"	3/4"	
45-50	8 (6)	10	3/4"	3/4"	3/4"	3/4"	1
60	6 (4)	10	3/4" (1")	3/4" (1")	3/4" (1")	1" (1 1/4")	1
70	4	8	1"	1 1/4"	1 1/4"	1 1/4"	
80	4 (3)	8	1"	1 1/4"	1 1/4"	1 1/4"	1
90-100	3 (2)	8	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1
110	2 (1)	6	-	1 1/4"	1 1/4"	1 1/4" (1 1/2")	1
125	1 (1/0)	6	-	1 1/4" (1 1/2")	1 1/4" (1 1/2")	1 1/2"	1
150	1/0	6	-	1 1/2"	1 1/2"	1 1/2"	
175	2/0	6	-	2"	2"	2"	
200	3/0	6	-	2"	2"	2 1/2"	
225	4/0	4	-	2"	2"	2 1/2"	
250	250	4	-	2 1/2"	2 1/2"	2 1/2"	
300	350	4	-	2 1/2"	2 1/2"	3"	
350	500	3	-	3"	3"	3"	
400	500	3	-	3"	3"	3"	
450	2-4/0	2-2	-	2-2"	2-2"	2-2 1/2"	
500	2-250	2-2	-	2-2 1/2"	2-2 1/2"	2-2 1/2"	
600	2-350	2-1	-	2-2 1/2"	2-2 1/2"	2-3"	
700	2-500	2-1/0	-	2-3"	2-3"	2-3 1/2"	
800	2-500	2-1/0	-	2-3"	2-3"	2-3 1/2"	
1000	3-400	3-2/0	-	3-3"	3-3"	3-3"	
1200	3-600	3-3/0	-	3-3 1/2"	3-3 1/2"	3-3 1/2"	
1600	4-600	4-4/0	-	4-3 1/2"	4-3 1/2"	4-3 1/2"	
2000	5-600	5-250	-	5-3 1/2"	5-3 1/2"	5-3 1/2"	

GENERAL NOTES:
 1. CONTRACTOR TO SIZE FEEDERS AND BRANCH CIRCUITS BASED ON THIS SCHEDULE AND OVER CURRENT DEVICE SIZE, UNLESS NOTED OTHERWISE.
 2. CONTRACTOR MAY COMBINE 20A CIRCUITS AS NOTED IN SPECIFICATION.
 3. CONDUCTORS ARE BASED ON THHN/THWN-2 UP TO AND INCLUDING #4/0. LARGER THAN #4/0 ARE BASED ON TYPE XHHW.
 4. CONDUIT SIZES ARE VALID FOR EMT OR RSC. CONDUIT SIZES SHALL BE ADJUSTED AS REQUIRED FOR OTHER TYPES OF CONDUIT.
 5. SIZE OF DISCONNECT SWITCH LOCATED AT EQUIPMENT SHALL BE SIZED BASED UPON OVERCURRENT PROTECTION OF THAT DEVICE.
 6. OBTAIN APPROVAL FROM ENGINEER PRIOR TO INSTALLING DIFFERENT SIZE/QUANTITY OF CONDUCTORS TO OBTAIN AN EQUIVALENT AMPACITY.

KEYED NOTES:
 1. CONDUCTORS ARE BASED ON 90°C, 600V INSULATED WIRE APPLIED AT 75°C FOR TERMINATION RATED 60/75°C OR 75°C. FOR TERMINATION RATED AT 60°C, USE CONDUCTORS AND CONDUIT SIZES INDICATED IN PARENTHESES.

BRANCH CIRCUIT VOLTAGE DROP SCHEDULE FOR SINGLE PHASE CIRCUITS						
BRANCH CKT RATING (A)	WIRE SIZE (AWG)	MAXIMUM BRANCH CIRCUIT LENGTH (IN FEET)				
		120V	208V	240V	277V	480V
20A	12	83	143	165	191	331
	10	128	222	256	295	511
	8	201	348	402	464	804
	6	313	542	625	721	1250
30A	10	85	148	170	197	341
	8	134	232	268	309	536
	6	208	361	417	481	833
	4	313	542	625	721	1250

GENERAL NOTES:
 1. THE ABOVE TABLE VALUES ARE BASED ON COPPER CONDUCTORS, IN STEEL CONDUIT, WITH A LOAD POWER FACTOR OF 0.85 PER NEC CHAPTER 9, TABLE 9.
 2. PROVIDE BRANCH CIRCUIT CONDUCTORS AS INDICATED IN THE TABLE ABOVE FOR ALL LIGHTING AND RECEPTACLE BRANCH CIRCUITS. WHERE BRANCH CIRCUITS SERVE DEDICATED EQUIPMENT, THE CONTRACTOR MAY PERFORM VOLTAGE DROP CALCULATIONS BASED ON ACTUAL EQUIPMENT CONNECTED LOAD AND PROVIDE CONDUCTORS APPROPRIATELY SIZED TO LIMIT VOLTAGE DROP TO A MAXIMUM OF 3%.
 3. CONDUCTOR SIZES ARE BASED ON MAXIMUM OF 9 CURRENT CARRYING CONDUCTORS IN A SINGLE CONDUIT.
 4. LIMITS FOR CONDUCTOR LENGTHS SHOWN ARE BASED ON A MAXIMUM BRANCH CIRCUIT LOADING OF 64% OF THE BRANCH BREAKER RATING AND A MAXIMUM OF 3 PERCENT VOLTAGE DROP TO COMPLY WITH ASHRAE 90.1 AND THE NEC. FOR CIRCUITS LOADED GREATER THAN 64% OF BRANCH BREAKER RATING, THE CONTRACTOR SHALL PROVIDE CONDUCTORS APPROPRIATELY SIZED TO LIMIT VOLTAGE DROP TO 3%.

MOTOR CIRCUIT SIZING SCHEDULE (480V, 3 PHASE)					
MOTOR HP	SWITCH/FUSE	CIRCUIT BREAKER	STARTER SIZE/TYPE	MOTOR DISCONNECT (NOTE 3)	
1/2	30/3A	15A	1	30A	
3/4	30/3A	15A	1	30A	
1	30/6A	15A	1	30A	
1 1/2	30/6A	15A	1	30A	
2	30/6A	15A	1	30A	
3	30/10A	15A	1	30A	
5	30/15A	15A	1	30A	
7 1/2	30/20A	20A	1	30A	
10	30/20A	25A	1	30A	
15	30/30A	40A	2	30A	
20	60/40A	60A	2	60A	
25	60/50A	70A	2	60A	
30	60/60A	80A	3	60A	
40	100/80A	90A	3	100A	
50	100/100A	100A	3	100A	
60	200/125A	125A	4	200A	
75	200/150A	150A	4	200A	
100	200/200A	200A	4	200A	
125	200/200A	225A	5	200A	
150	400/250A	250A	5	400A	
200	400/350A	350A	5	400A	

GENERAL NOTES:
 1. BASED ON MOTOR FULL LOAD AMPERES AS PROVIDED BY THE NEC.
 2. BASED ON MOTOR RUNNING OVERLOAD PROTECTIONS PROVIDED BY THERMAL OVERLOAD RELAYS.
 3. WHERE THE STARTER IS LOCATED REMOTE FROM THE MOTOR, PROVIDE DISCONNECT LOCATED AT THE MOTOR, SIZE AS INDICATED.

RACEWAY / CONDUCTOR / CABLE APPLICATION SCHEDULE												
WIRE	RACEWAY	CABLE / CORD										
		MATERIALS										
COPPER, TYPE THHN/THWN-2	ELECTRICAL METALLIC TUBING (EMT)	INTERMEDIATE METAL CONDUIT (IMC)	RIGID STEEL CONDUIT (RSC)	PVC COATED RIGID STEEL CONDUIT	RIGID NON-METALLIC CONDUIT (RNC) TYPE EPC-40	RIGID NON-METALLIC CONDUIT (RNC) TYPE EPC-80	REINFORCED THERMOSET RESIN CONDUIT (RTRC) TYPE AG	FLEXIBLE METAL CONDUIT (FMC)	LIQUID TIGHT FLEXIBLE METAL CONDUIT (LFMC)	SURFACE RACEWAY	METAL CLAD TYPE CABLE WITH INSULATED GROUND WIRE (TYPE MC)	VFC CABLE
COPPER, TYPE XHHW-2	INTERMEDIATE METAL CONDUIT (IMC)	RIGID STEEL CONDUIT (RSC)	PVC COATED RIGID STEEL CONDUIT	RIGID NON-METALLIC CONDUIT (RNC) TYPE EPC-40	RIGID NON-METALLIC CONDUIT (RNC) TYPE EPC-80	REINFORCED THERMOSET RESIN CONDUIT (RTRC) TYPE AG	FLEXIBLE METAL CONDUIT (FMC)	LIQUID TIGHT FLEXIBLE METAL CONDUIT (LFMC)	SURFACE RACEWAY	METAL CLAD TYPE CABLE WITH INSULATED GROUND WIRE (TYPE MC)	VFC CABLE	

FEEDERS - EXTERIOR
 EXPOSED, SURFACE MOUNTED TO STRUCTURE
 EXPOSED, WITH FREESTANDING SUPPORT
 CONCEALED IN RETAINING WALL OR SIMILAR ELEMENT
 ROOFTOPS (WHEN APPROVED BY ENGINEER)

FEEDERS - INTERIOR
 CONCEALED, ACCESSIBLE CEILINGS
 CONCEALED, INACCESSIBLE CEILINGS
 CONCEALED IN GYPSUM BOARD PARTITION WALLS
 EXPOSED, BELOW 10' AFF AND SUBJECT TO DAMAGE
 EXPOSED, BELOW 10' AFF AND NOT SUBJECT TO DAMAGE
 EXPOSED, ABOVE 10' AFF UNFINISHED SPACES
 EXPOSED, FINISHED SPACES
 DAMP AND WET LOCATIONS

BRANCH CIRCUITS - EXTERIOR
 EXPOSED, SURFACE MOUNTED TO STRUCTURE
 EXPOSED, WITH FREESTANDING SUPPORT
 CONCEALED IN RETAINING WALL OR SIMILAR ELEMENT
 BELOW PARKING LOTS AND ROADWAYS
 BELOW GREEN SPACE
 WITHIN 5' OF FOUNDATION WALL
 ROOFTOPS (WHEN APPROVED BY ENGINEER)

BRANCH CIRCUITS - INTERIOR
 CONCEALED, ACCESSIBLE CEILINGS
 CONCEALED, INACCESSIBLE CEILINGS
 CONCEALED IN GYPSUM BOARD PARTITION WALLS
 EXPOSED, BELOW 10' AFF AND SUBJECT TO DAMAGE
 EXPOSED, BELOW 10' AFF AND NOT SUBJECT TO DAMAGE
 EXPOSED, ABOVE 10' AFF UNFINISHED SPACES
 DAMP AND WET LOCATIONS

SPECIAL APPLICATIONS
 CONNECTION BETWEEN VFC AND MOTORS (KEYED NOTE 1)
 CLASS 1 CONTROL CIRCUITS
 CLASS 2 CONTROL CIRCUITS
 CLASS 3 CONTROL CIRCUITS
 CONNECTIONS TO TRANSFORMERS, MOTORS AND VIBRATING EQUIPMENT

GENERAL NOTES:
 1. TRANSITION FROM PVC/HOPE AND PROVIDE RIGID STEEL OR RTRC SWEEPS WHERE CONDUITS PENETRATE WALLS, CONCRETE SLABS, CONCRETE BASES, AND ASPHALT.
 2. REFER TO SPECIFICATIONS FOR RESTRICTIONS ON MC/AC CABLE INSTALLATION.
 3. EMT SHALL NOT BE USED ON THE EXTERIOR OF A BUILDING OR IN AREAS SUBJECT TO DAMAGE BELOW 10' AFF.

KEYED NOTES:
 1. NON-ARMORED CABLE SHALL BE INSTALLED IN RACEWAY. ARMORED CABLE SHALL BE INSTALLED IN TRAY OR FREE-AIR AS APPLICABLE.
 2. CONDUIT AND BUILDING WIRE ALLOWED PER ONE OF THE FOLLOWING METHODS: ROUTED OUTSIDE THE BUILDING, ROUTED UNDER A MINIMUM OF 2" OF CONCRETE BENEATH THE BUILDING, OR ENCASED IN A MINIMUM OF 2" OF CONCRETE.
 3. EMERGENCY FEEDERS IN OCCUPANCIES THAT ARE UNDER 700.10(D) SHALL HAVE A TWO HOUR RATING. RATING SHALL BE OBTAINED BY ROUTING CONDUIT AND BUILDING WIRE IN SPRINKLERED SPACE.
 IN A TWO HOUR SHAFT, OUTSIDE OF THE BUILDING, IN A LISTED TWO HOUR RATED RACEWAY, OR UNDER A MINIMUM OF 2" OF CONCRETE; OR BY USING A LISTED TWO-HOUR RATED CABLE ASSEMBLY.
 4. SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS BASED ON UL TESTING AND RATING.
 5. ALL CONDUIT, FITTINGS, AND OTHER ACCESSORIES SHALL BE RATED FOR THE HAZARD CLASSIFICATION OF THE SPACE OR AREA.
 6. INTERMEDIATE METAL CONDUIT AND RIGID STEEL CONDUIT, INCLUDING ALL FITTINGS, BOXES AND SUPPORTS, SHALL BE TREATED WITH CORROSION RESISTANT PAINT. FLEXIBLE CORD SHALL ONLY BE USED FOR FINAL CONNECTION TO LUMINAIRES.

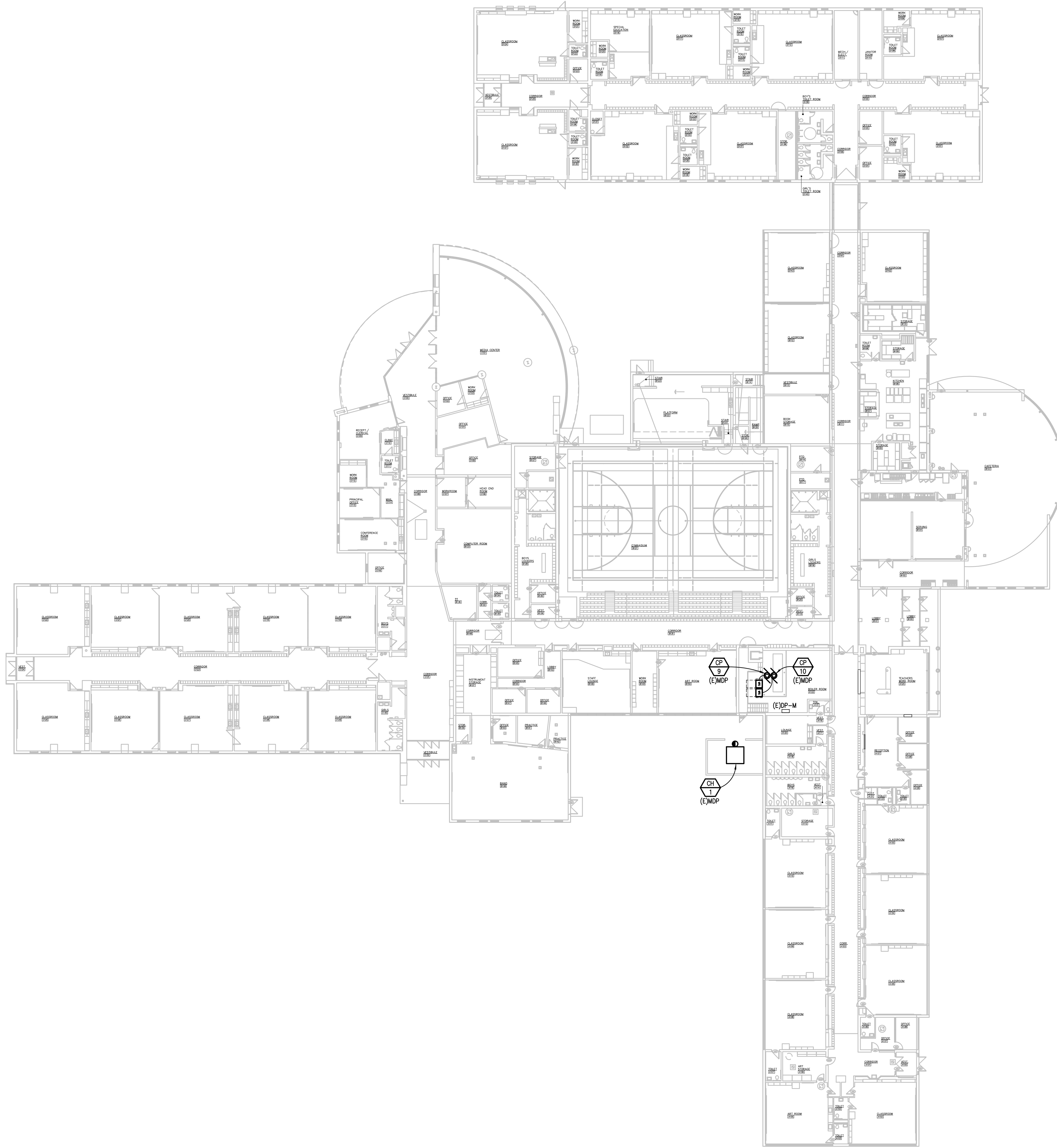
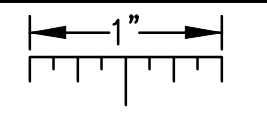
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5145 Livemore, Suite 100
 Troy, Michigan 48066-9276
 www.PeterBassoAssociates.com
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 CONSULTING ENGINEERS

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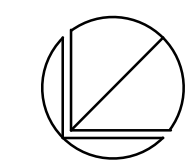
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 ELECTRICAL STANDARD
 SCHEDULES
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 CONSTRUCTION DOCUMENTS
 SHEET No.

THE FOLLOWING DIMENSION EQUALS ONE INCH WHEN PRINTED TO SCALE.



ELECTRICAL GENERAL NOTES:

1. THESE DRAWINGS REPRESENT THE GENERAL EXTENT AND ARRANGEMENT OF SYSTEMS. COORDINATE EXACT EQUIPMENT LOCATIONS, ELEVATIONS, AND FINAL CONNECTION REQUIREMENTS. PROVIDE EACH SYSTEM COMPLETE, INCLUDING ALL NECESSARY COMPONENTS, FITTINGS AND OFFSETS.
2. INSTALL SYSTEMS SUCH THAT REQUIRED CLEARANCE AND SERVICE ACCESS SPACE IS PROVIDED AROUND ALL MECHANICAL AND ELECTRICAL EQUIPMENT, AND AROUND ANY COMPONENTS WHICH REQUIRE SERVICE ACCESS.
3. COORDINATE AND PROVIDE ACCESS DOORS WITHIN INACCESSIBLE CEILING, SHAFT, AND CHASE AREAS FOR ALL COMPONENTS WHICH REQUIRE SERVICE ACCESS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
4. PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL SYSTEMS.
5. MOTOR CIRCUIT PROTECTION SHALL BE SIZED IN ACCORDANCE WITH MOTOR CIRCUIT SIZING SCHEDULES SHOWN ON "ELECTRICAL STANDARD SCHEDULES DRAWING" UNLESS OTHERWISE NOTED.
6. COORDINATE THE MOUNTING HEIGHTS OF DEVICES WITH ARCHITECTURAL ELEVATIONS AND THE TRADES INSTALLING THE WORK.
7. REFER TO MECHANICAL SCHEDULE SHEETS FOR ELECTRICAL REQUIREMENTS FOR MECHANICAL EQUIPMENT. PROVIDE ALL CONNECTIONS, STARTERS, DISCONNECTS, ETC. AS REQUIRED BY SCHEDULES AND WHERE NOTED ELSEWHERE. VERIFY REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH SHOP DRAWINGS SUBMITTALS. NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN EQUIPMENT SUBMITTALS AND ELECTRICAL DRAWINGS. WHERE CIRCUIT SIZES ARE SHOWN ON THE ELECTRICAL DRAWINGS THAT DIFFER FROM WHAT IS INDICATED ON THE MECHANICAL SCHEDULES, PROVIDE THE CIRCUIT OF HIGHER AMPACITY.
8. REFER TO TEMPERATURE CONTROLS SHEETS FOR REQUIRED FIRE ALARM CONTROL MODULES, DUCT SMOKE DETECTORS, AND MOTOR CONTROLLERS. PROVIDE ALL ACCESSORIES INDICATED.



FIRST FLOOR ELECTRICAL COMPOSITE NEW WORK PLAN
SCALE: 1" = 20' - 0"

REVISION

REVISION

5145 Livemore, Suite 100
Troy, Michigan 48066-8276
www.PeterBassoAssociates.com
PBA Project#: 22081004.01

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SHEET TITLE
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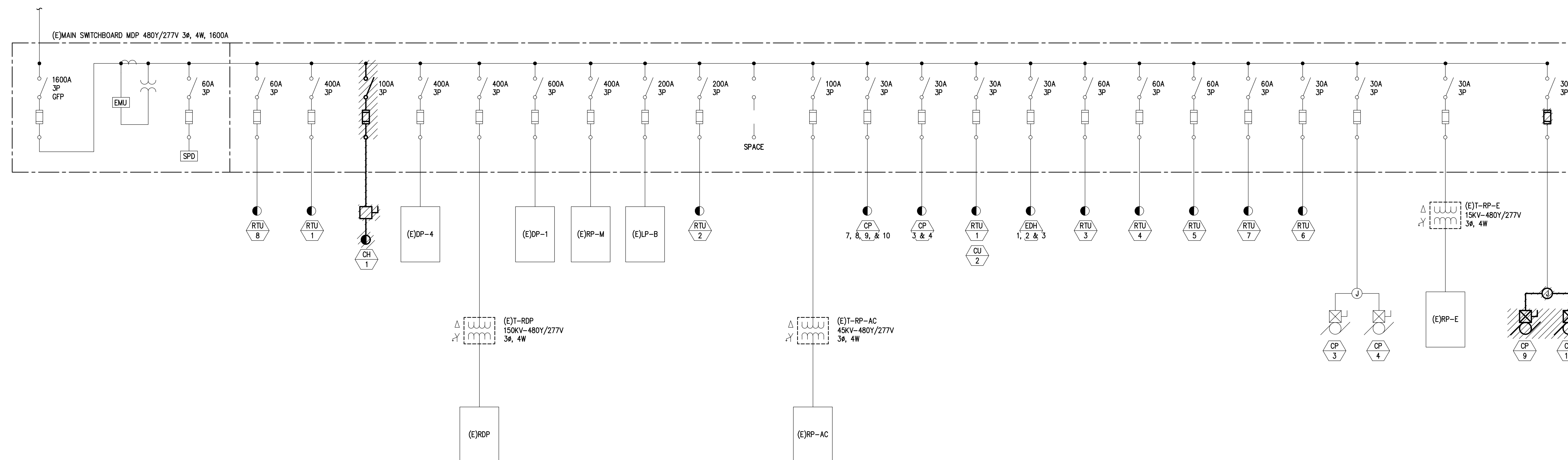
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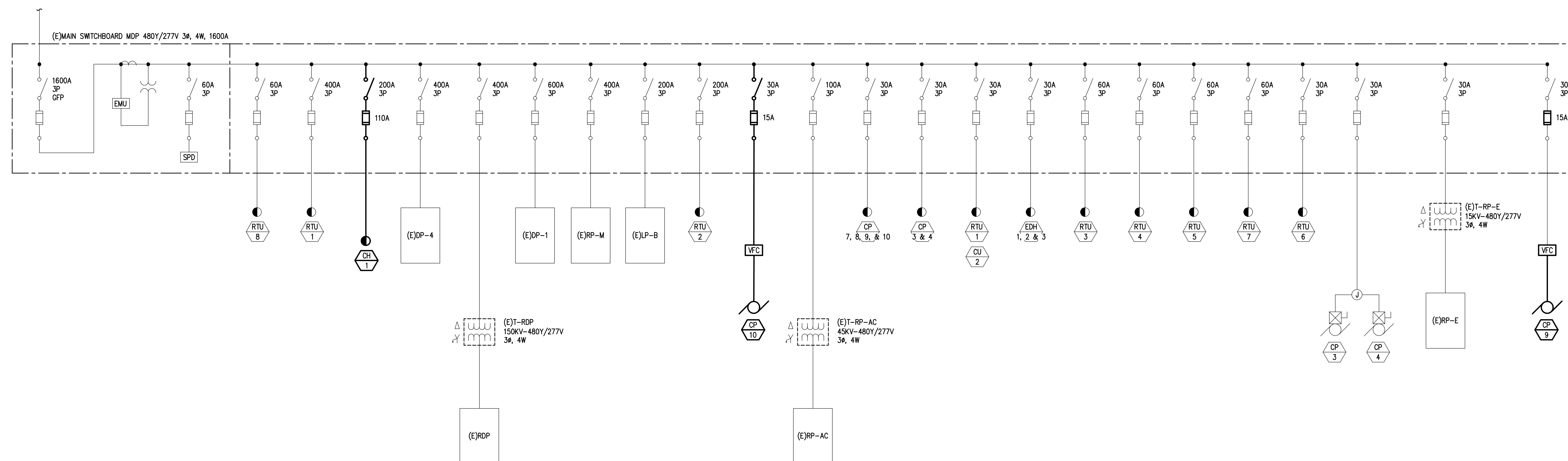
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DIAGRAM GENERAL NOTES:

1. THESE DRAWINGS REPRESENT THE GENERAL EXTENT AND ARRANGEMENT OF SYSTEMS. COORDINATE EXACT EQUIPMENT LOCATIONS, ELEVATIONS, AND FINAL CONNECTION REQUIREMENTS. PROVIDE EACH SYSTEM COMPLETE, INCLUDING ALL NECESSARY COMPONENTS, FITTINGS AND OFFSETS.
2. FEEDER AND BRANCH CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH THE "FEEDER AND BRANCH CIRCUIT SIZING SCHEDULE-GENERAL PURPOSE" ON THE "ELECTRICAL STANDARD SCHEDULES DRAWING" UNLESS SPECIFICALLY NOTED OTHERWISE.
3. MOTOR CIRCUIT PROTECTION SHALL BE SIZED IN ACCORDANCE WITH THE MOTOR CIRCUIT SIZING SCHEDULES ON THE "ELECTRICAL STANDARD SCHEDULES DRAWING" UNLESS SPECIFICALLY NOTED OTHERWISE.



ONE LINE DIAGRAM - DEMOLITION
NO SCALE



ONE LINE DIAGRAM - NEW WORK
NO SCALE

**MAIN SWITCHBOARD
CONNECTED LOAD CALCULATION**

MAIN SWITCHBOARD METERED LOAD 677 (1.25)	846 KVA
ADDED LOAD	
MDP (CH-1)	9 KVA
TOTAL CONNECTED LOAD	855 KVA

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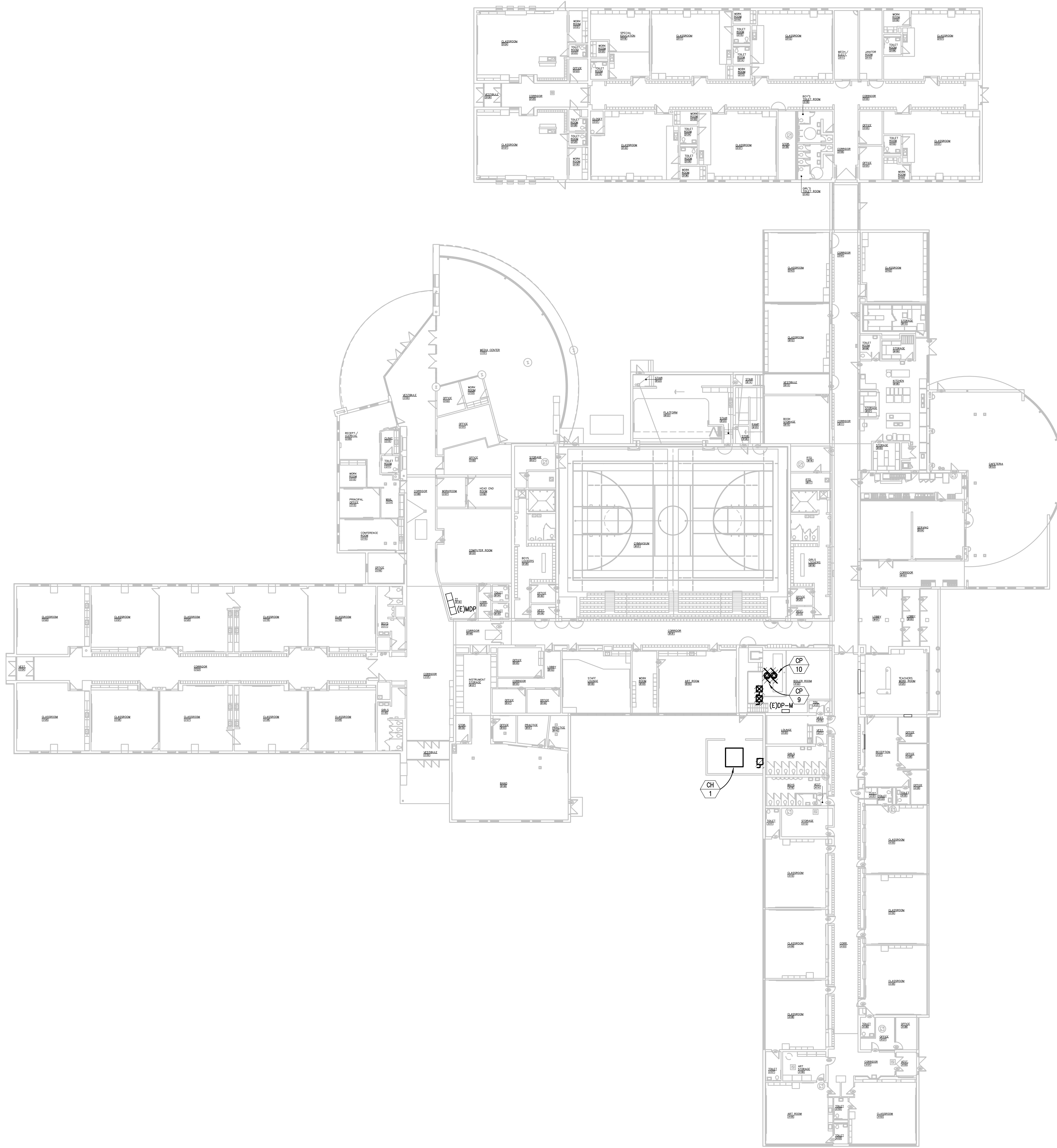
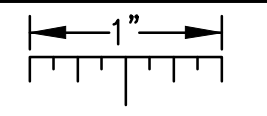
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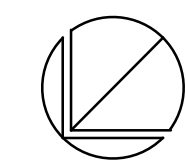
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THE FOLLOWING DIMENSION EQUALS ONE INCH WHEN PRINTED TO SCALE.



1. VISIT THE SITE PRIOR TO SUBMISSION OF BID TO EXAMINE THE EXISTING CONDITIONS AND THE EXTENT OF DEMOLITION WORK.
2. EXAMINE THE DRAWINGS OF OTHER TRADES AND BE FAMILIAR WITH THE DEMOLITION REQUIRED BY OTHER TRADES. PERFORM ALL INCIDENTAL ELECTRICAL DEMOLITION AND/OR RELOCATION REQUIRED TO FACILITATE THE DEMOLITION WORK OF OTHER TRADES, WHETHER OR NOT SPECIFICALLY INDICATED.
3. REMOVE EQUIPMENT OR MATERIALS AS INDICATED ON PLAN WITH CROSS HATCHING. DEMOLITION SHALL INCLUDE, BUT NOT BE LIMITED TO, THOSE COMPONENTS SHOWN.
4. COORDINATE WITH NEW WORK PLANS, ONE LINE DIAGRAMS AND RISER DIAGRAMS FOR EXTENT OF DEMOLITION WORK.
5. PROVIDE PROPER SUPPORT FOR EXISTING TO REMAIN CONDUITS AND BOXES WHERE EXISTING SUPPORT IS TO BE REMOVED. RE-ROUTE BRANCH CIRCUIT CONDUITS AND RELOCATE JUNCTION BOXES AS REQUIRED TO FACILITATE INSTALLATION OF NEW EQUIPMENT AND SYSTEMS IN CEILING SPACES.
6. REMOVE ALL CONDUIT AND WIRE BACK TO THE SOURCE OR NEAREST UPSTREAM DEVICE REMAINING IN SERVICE.
7. MAINTAIN ELECTRICAL SERVICE TO ALL LIGHTING FIXTURES, DEVICES AND EQUIPMENT THAT ARE TO REMAIN. EXTEND CONDUIT AND WIRE AS REQUIRED WHERE DEMOLITION WORK AFFECTS ELECTRICAL SERVICE TO DOWNSTREAM LOADS THAT ARE TO REMAIN.
8. DISPOSE OF ALL MATERIALS OFF SITE AND INCLUDE ALL COSTS FOR DISPOSAL IN BID. ALL MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, INCLUDING TOLP TESTING, PROPER DISPOSAL AND/OR RECYCLING OF FLUORESCENT LAMPS.
9. PROVIDE BLANK COVER PLATES WHERE SWITCHES AND DEVICES ARE REMOVED BUT EXISTING WALLS REMAIN INTACT.
10. RING OUT AND TAG ALL CIRCUITS AFFECTED BY THIS ALTERATION AT BOTH ENDS. MARK ALL UNUSED CIRCUIT BREAKERS "SPARE".
11. PROVIDE UPDATED TYPED-IN DIRECTORIES FOR ALL PANELS AFFECTED BY THIS ALTERATION.
12. VERIFY ALL UNDERGROUND AND IN SLAB UTILITY LOCATIONS PRIOR TO SAW-CUTTING OR PENETRATING ANY FLOOR SLAB.
13. COORDINATE ANY SHUT DOWN OF EXISTING SERVICES AND EQUIPMENT THAT ARE REMAINING IN USE WITH THE OWNER'S REPRESENTATIVE. WHERE EXISTING BUILDING SERVICE IS REQUIRED TO BE SHUT DOWN, INCLUDE ALL ASSOCIATED OVERTIME COSTS TO PERFORM THIS WORK DURING WEEKENDS AND EVENINGS INCLUDE ALL COSTS FOR PROVIDING TEMPORARY POWER. WHERE SHUT DOWNS MUST OCCUR FOR PERIODS LONGER THAN THESE HOURS. COORDINATE ELECTRICAL SHUT DOWNS WITH THE OWNER 72 HOURS PRIOR TO SHUT DOWN.



FIRST FLOOR ELECTRICAL COMPOSITE DEMOLITION PLAN
SCALE: 1" = 20' - 0"

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DATE
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ISSUE
CONSTRUCTION
DOCUMENTS

SHEET No.

ED0.3

MECHANICAL ABBREVIATION LIST

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A	COMPRESSED AIR	FLA	FULL LOAD AMPS	PAU	PACKAGED AIR CONDITIONING UNIT
A(##)	COMPRESSED AIR (SPECIFIC PSIG)	FLR	FLOOR	PBD	PARALLEL BLADE DAMPER
AAY	AUTOMATIC AIR VENT	FM	FLOW METER	PC	PUMPED CONDENSATE
ACC	AIR COOLING CONDENSER	FS	FLOW SWITCH	PCW	PROCESS COOLING WATER
ACCU	AIR COOLED CONDENSING UNIT	FOB	FLAT ON BOTTOM	PCWR	PROCESS COOLING WATER RETURN
AD	ACCESS DOOR	FOT	FLAT ON TOP	PCWS	PROCESS COOLING WATER SUPPLY
AD	AREA DRAIN	FP	FEET PER MINUTE	PD	PRESSURE DROP (FEET OF WATER)
AE	AIR EXTRACTOR	FR	FIRE RISK	PH	PERIMETER HEAT
AFF	ABOVE FINISHED FLOOR	FPTU	FAN POWERED (AIR) TERMINAL UNIT	PHR	PERIMETER HEAT RETURN
AHU	AIR HANDLING UNIT	FS	FLOOR SINK	PHS	PERIMETER HEAT SUPPLY
ALT	ALTERNATE	FSEC	FOOD SERVICE EQUIPMENT CONTRACTOR	PNL	PANEL
AMP	AMPERE	FT	FEET	PPM	PARTS PER MILLION
APD	AIR PRESSURE DROP	FTR	FINNED TUBE RADIATION	PRESS	PRESSURE
AR	ARCON	FV	FACE VELOCITY	PRV	PRESSURE REDUCING VALVE
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR-CONDITIONING ENGINEERS	G	NATURAL GAS	PSAN	PUMPED SANITARY
ASR	AUTOMATIC SPRINKLER RISER	GAL	GALLON	PST	PUMPED STORM
ATD	AIR TRANSFER DUCT	GAL	GALLON	PSI	POUNDS PER SQUARE INCH
AUX	AUXILIARY	GRH	GRAVITY RELIEF HOOD	PSIA	POUNDS PER SQUARE INCH - ABSOLUTE
AV	ACID VENT	GPM	GALLONS PER MINUTE	PSIG	POUNDS PER SQUARE INCH - GAUGE
AVTR	ACID VENT THROUGH ROOF	GSAN	GREASE SANITARY WASTE		
AW	ACID WASTE			(R)	RELOCATED
BAS	BUILDING AUTOMATION SYSTEM	H	HYDROGEN	R	RETURN GRILLE OR REGISTER
BCU	BLOWER COIL UNIT	HB	HOSE BIBB	RA	RETURN AIR
BDJ	BACKDRIFT DAMPER	HC	HEATING COIL	RAT	RETURN AIR TEMPERATURE
BFF	BELOW FINISHED FLOOR	HD	HOT WATER HEATING	RC	RAIN CONDUCTOR
BFP	BACKFLOW PREVENTER	HEPA	HIGH EFFICIENCY PARTICULATE ARRESTANCE	RD	RADIANT CEILING PANEL
BHP	BRAKE HORSEPOWER	HL	HIGH LIMIT	RD	ROOF DRAIN
BDD	BOTTOM OF DUCT	HLD	HAND/OPER/AUTO	REQD	REQUIRED
BOP	BOTTOM OF PIPE	HP	HEAT PUMP	REF	REFRIGERANT LIQUID
BTU	BRITISH THERMAL UNIT	HPW	HIGH PRESSURE DOMESTIC HOT WATER	RF	RETURN FAN
BTUH	BRITISH THERMAL UNIT PER HOUR	HPHW	HIGH PRESSURE DOMESTIC HOT WATER	RH	RELATIVE HUMIDITY
BVC	BEVERAGE CONDUNIT	HPHW	HIGH PRESSURE DOMESTIC HOT WATER RETURN	RL	REFRIGERANT LIQUID
BWV	BACKWATER VALVE	HPWR	HIGH PRESSURE DOMESTIC HOT WATER RETURN	RFA	RELIEF AIR FAN
C	COMMON	HPLR	HEAT PUMP LOOP RETURN	RO	REVERSE OSMOSIS RETURN
CAP	CAPACITY	HPLS	HEAT PUMP LOOP SUPPLY	ROR	REVERSE OSMOSIS RETURN
CAV	CONSTANT AIR VOLUME	HR	HOUR	RPM	REVERSE OSMOSIS SUPPLY
CB	CATCH BASIN	HTC	HEATING	RPM	REVOLUTIONS PER MINUTE
CC	COOLING COIL	HV	HEATING VENTILATING	RPDA	REDUCED PRESSURE BACKFLOW PREVENTION DETECTION ASSY
CD	COLD DECK	HVAC	HEATING, VENTILATING, AIR CONDITIONING	RPZA	REDUCED PRESSURE BACKFLOW PREVENTION ZONE ASSY
CE	CONDENSATE DRAIN	HW	HOT WATER HEATING	RS	REFRIGERANT SUCTION
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	HWR	HOT WATER HEATING RETURN	RTU	ROOFTOP UNIT
CFH	CUBIC FEET PER HOUR	HWS	HOT WATER HEATING SUPPLY	S	SUPPLY AIR DIFFUSER OR GRILLE
CFM	CUBIC FEET PER MINUTE	HWT	HOT WATER HEATING TANK	SA	SUPPLY AIR
CH	CHILLER	HWL	HOT WATER HEATING LOAD	SA	SUPPLY AIR
CHW	CHILLED WATER	HWS	HOT WATER HEATING SUPPLY	SB	SANITARY WASTE
CHWR	CHILLED WATER RETURN	HWL	HOT WATER HEATING LOAD	SB	SANITARY WASTE
CHWS	CHILLED WATER SUPPLY	HXL	HEAT EXCHANGER	SB	SANITARY WASTE
CLG	COOLING	HZ	HERTZ	SCRC	SHORT CIRCUIT CURRENT RATING
CLD	CONDENSATE	IAQ	INDOOR AIR QUALITY	SCF	SCHEMATIC FAN
CND	CONDENSATE (SPECIFIC PSIG)	ID	INSIDE DIAMETER	SH	SHOWER
CO	CLEAN OUT	IE	INVERT ELEVATION	SK	SNK
CO2	CARBON DIOXIDE	IE	INVERT ELEVATION	SMR	SNOW MELT RETURN
CONT	CONTINUATION OR CONTINUED	INTAKE HOOD	INTAKE HOOD	SMS	SNOW MELT SUPPLY
CONTR	CONTRACTOR	IN	INCHES	SP	STATIC PRESSURE
CONV	CONVECTOR	IN	INCHES	SPEC	SPECIFICATION
CP	CIRCULATING PUMP	IN	INCHES	SPR	SPRINKLER
CRU	CONDENSATE RETURN UNIT	IN	INCHES	SQFT	SQUARE FOOT/SQUARE FEET
CSS	CLINICAL SERVICE SINK	IN	INCHES	S/S	SERVICES SINK
CT	COOLING TOWER	IN	INCHES	ST	STANDARD
CUH	CABINET UNIT HEATER	IN	INCHES	STD	STANDARD
CW	DOMESTIC COLD WATER	IN	INCHES	STK	STEAM
CWF	DOMESTIC COLD WATER - FILTERED	IN	INCHES	STM	STEAM
CWR	CONDENSER WATER RETURN	IN	INCHES	SW	SWITCH
CWS	CONDENSER WATER SUPPLY	IN	INCHES	SW	SWITCH
D&T	DRIP AND TRAP	LAT	LEAVING AIR TEMPERATURE	T	TRANSFER GRILLE
DA	DISCHARGE AIR	LAV	LAVATORY	TC	TEMPERATURE CONTROL
DAT	DISCHARGE AIR TEMPERATURE	LBS	POUNDS	TC	TEMPERATURE CONTROL PANEL
DB	DRY BULB	LBS	POUNDS	TD	TEMPERATURE CONTROL PANEL
DDC	DIRECT DIGITAL CONTROL	LL	LOW LIMIT	TEMP	TEMPERATURE
DEG	DEGREE	LPC	LOW PRESSURE CONDENSATE	TEMP	TEMPERATURE
DFU	DRAINAGE FIXTURE UNITS	LPS	LOCKED ROTOR AMPS	TH	TEMPERATURE
DIA	DIAMETER	LRA	LEAVING AIR TEMPERATURE	TH	TEMPERATURE
DIR	DIRECTION OF RETURN	LWB	LEAVING WATER TEMPERATURE	TH	TEMPERATURE
DIS	DIODE	LWT	LEAVING WATER TEMPERATURE	TH	TEMPERATURE
DMPR	DAMPEN	MA	MIXED AIR	TK	TANK
D/N	DAY/NIGHT	MAT	MIXED AIR TEMPERATURE	TMR	TIMER SWITCH
DN	DOWN	MAU	MAKE-UP AIR UNIT	TPD	TEPID WATER
DNZ	DOWNSPOUT NOZZLE	MAX	MAXIMUM	TSP	TOTAL STATIC PRESSURE
DS	DUCT SILENCER	MBSH	MAXIMUM BRITISH THERMAL UNITS PER HOUR	TU	TERMINAL UNIT
DT	DRAIN TILE	MCA	MINIMUM CIRCUIT AMPACITY	TV	TURNING VANES
DTC	DRAIN TILE CONNECTION	MCC	MOTOR CONTROL CENTER	TW	TEMPERED WATER
DWH	DOMESTIC WATER HEATER	MCC	MOTOR CONTROL CENTER	TYP	TYPICAL
DWS	DRAINAGE	MCC	MOTOR CONTROL CENTER	UH	UNIT HEATER
(E)	EXISTING	MEZ	MEZZANINE	UL	UNDERWRITER'S LABORATORY
E	EXHAUST GRILLE OR REGISTER	MFR	MANUFACTURER	UN	UNLESS OTHERWISE NOTED
EA	EACH	MH	MANHOLE	UR	URINAL
EA	EXHAUST AIR	MIN	MINIMUM	UV	UNIT VENTILATOR
EAT	ENTERING AIR TEMPERATURE	MIS	MISCELLANEOUS	V	VALVE
EC	EXPANSION COMPENSATOR	MMSH	MILLION BRITISH THERMAL UNITS PER HOUR	VAC	VACUUM
ECM	ELECTRONICALLY COMMUTATED MOTOR	MOP	MAXIMUM OVERCURRENT PROTECTION	VAV	VARIABLE AIR VOLUME
ECUH	ELECTRIC CABINET UNIT HEATER	M/S	MINIMUM	VBR	VACUUM BREAKER
EDB	ENTERING DRY BULB	MTD	MOUNTED	VD	VOLUME DAMPER (MANUALLY ADJUSTABLE)
EER	ENERGY EFFICIENCY RATIO	MTR	MOTOR	VOL	VOLUME
EES	EMERGENCY EYE WASH / SHOWER	MV	MEDICAL VACUUM	VFC	VARIABLE FREQUENCY CONTROLLER
EW	EMERGENCY EYE WASH	N2O	NITROGEN	VTR	VENT THROUGH ROOF
EF	EXHAUST FAN	NC	NORMALLY CLOSED	VTU	VENTURI TERMINAL UNIT
EFF	EFFICIENCY	NC	NORMALLY CLOSED	W	WASTE
CHC	ELECTRIC HEATING COIL	NCTC	NORMALLY CLOSED TIMED CLOSED	W&V	WASTE AND VENT
EJ	EXPANSION JOINT	NCTO	NORMALLY CLOSED TIMED OPEN	WAGO	WASTE ANESTHETIC GAS DISPOSAL
EL	ELEVATION	NFA	NATIONAL FIRE PROTECTION ASSOCIATION	WB	WET BULB
ELEC	ELECTRICAL	NOTC	NORMALLY OPEN TIMED CLOSED	WC	WATER CLOSET
EMS	ENERGY MANAGEMENT SYSTEM	NOTO	NORMALLY OPEN TIMED OPEN	WC	WATER COLUMN
ERL	ENERGY RECOVERY LOOP	NO	NOT IN CONTRACT	WG	WATER GAUGE
ERL	ENERGY RECOVERY LOOP RETURN	NO	NOMINAL	WH	WALL HYDRANT
ERLS	ENERGY RECOVERY LOOP SUPPLY	NO	NOMINAL	WMSD	WASHING MACHINE SUPPLY AND DRAIN BOX
ERU	ENERGY RECOVERY UNIT	NP	NON POTABLE COLD WATER	WPD	WATER PRESSURE DROP
ESH	EMERGENCY SHOWER	NPW	NON POTABLE HOT WATER	W	WEIGHT
ESP	EXTERNAL STATIC PRESSURE	OAT	OXYGEN	XFMR	TRANSFORMER
EUH	ELECTRIC UNIT HEATER	OB	OUTSIDE AIR	ZVB	ZONE VALVE BOX
EMB	ENTERING WET BULB	OB	OUTSIDE AIR		
EW	ELECTRIC WATER COOLER	OC	ON CENTER/CENTER TO CENTER		
EW	ENTERING WATER TEMPERATURE	OD	OUTSIDE DIAMETER		
EXH	EXHAUST	OED	OPEN ENDED DUCT		
F	FIRE PROTECTION	OFI	OWNER FURNISHED, CONTRACTOR INSTALLED		
F	DEGREE FAHRENHEIT	OFI	OWNER FURNISHED, CONTRACTOR INSTALLED		
F&B	FACE AND BIPASS	OL	OVERLOAD		
F&T	FLOAT AND THERMOSTATIC	OR	OVERFLOW RAIN CONDUCTOR		
FA	FACE AREA	OS	OVERFLOW ROOF DRAIN		
FD	FLOOR DRAIN	OS&Y	OUTSIDE SCREW AND YOKE		
FFD	FUNNEL FLOOR DRAIN	OS	OVERLOAD		
FG	FUEL GAS RETURN	OS	OVERLOAD		
FOS	FUEL GAS SUPPLY	OS	OVERLOAD		
FR	FIRE HYDRANT	OS	OVERLOAD		
FHC	FIRE HOSE CABINET	OS	OVERLOAD		
FHR	FIRE HOSE RACK	OS	OVERLOAD		
FHV	FIRE HOSE VALVE	OS	OVERLOAD		

TEMPERATURE CONTROL - PARTIAL SYMBOLS LIST

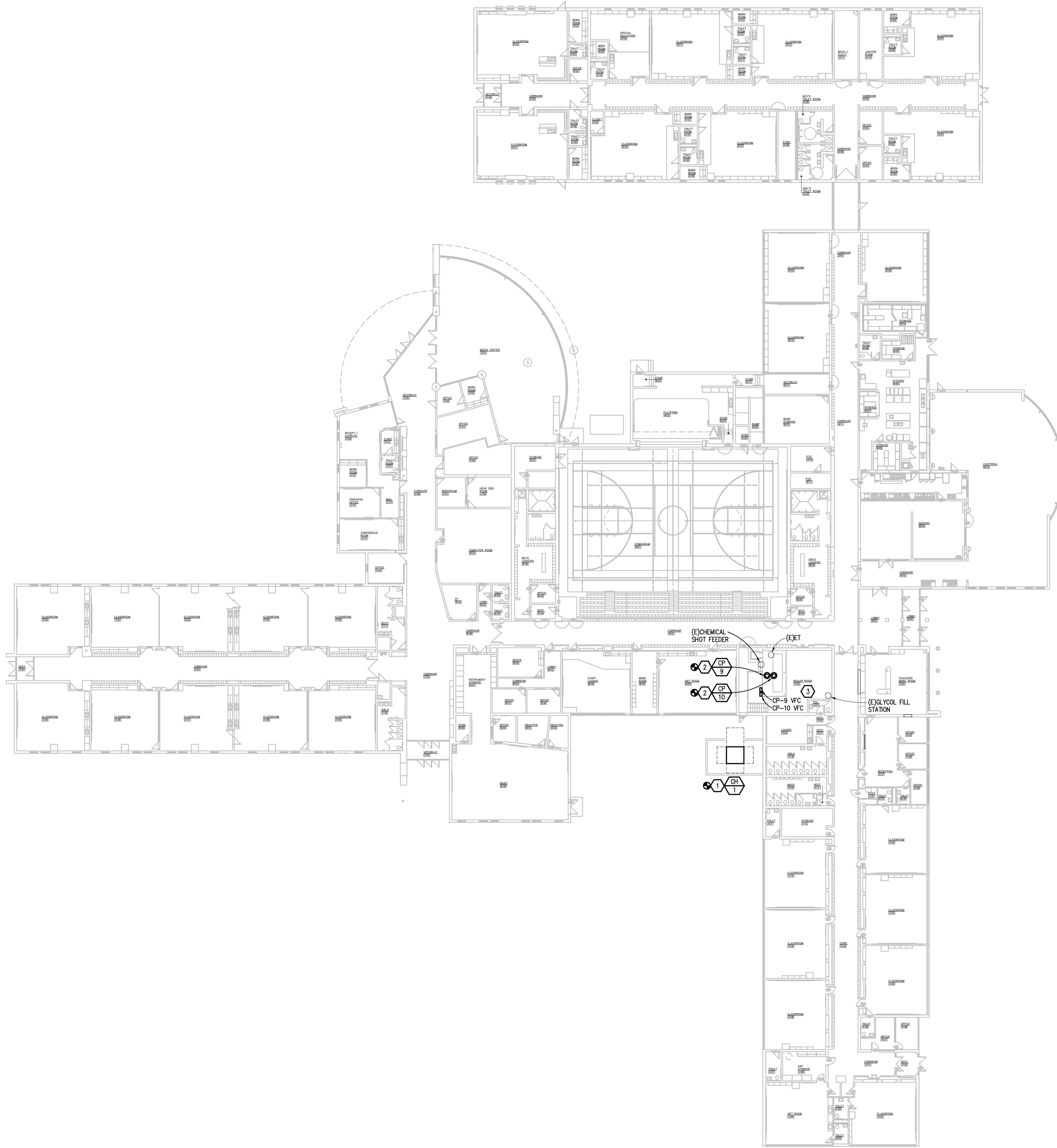
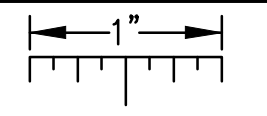
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	CARBON DIOXIDE SENSOR		OCCUPANCY SENSOR
	CARBON MONOXIDE SENSOR		PRESSURE TRANSMITTER
	DIFFERENTIAL PRESSURE TRANSMITTER		STATIC PRESSURE SENSOR OR PROBE
	FLOW METER		VALVE - 2 WAY CONTROL VALVE
	GUARD FOR STAT OR SENSOR		VALVE - 3 WAY CONTROL VALVE
	HUMIDISTAT OR HUMIDITY SENSOR (AS DEFINED ON TC DRAWINGS)		THERMOSTAT OR TEMPERATURE SENSOR (AS DEFINED ON TC DRAWINGS)

NOTE: LIST OF ADDITIONAL SYMBOLS & ABBREVIATIONS ASSOCIATED WITH TEMPERATURE CONTROLS ARE IDENTIFIED ON TC DRAWINGS.

MECHANICAL SYMBOL LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	AIR VENT - AUTOMATIC		AIR TERMINAL UNIT
	AIR VENT - MANUAL		AIR TERMINAL UNIT WITH HEATING COIL
	BACKFLOW PREVENTER		VENTURI AIR TERMINAL UNIT
	CATCH BASIN		VENTURI AIR TERMINAL UNIT WITH HEATING COIL
	CIRCULATING PUMP		DAMPER - HORIZONTAL FIRE (EXISTING, NEW)
	CLEAN OUT - IN FLOOR		DAMPER - HORIZONTAL FIRE / SMOKE (EXISTING, NEW)
	CLEAN OUT - FLANGE		DAMPER - SMOKE (EXISTING, NEW)
	DIRECTION OF FLOW		DAMPER - VERTICAL FIRE (EXISTING, NEW)
	DIRECTION OF PITCH - DOWN		DAMPER - VERTICAL FIRE / SMOKE (EXISTING, NEW)
	FINNED TUBE RADIATION		DAMPER - BACK DRAFT
	FIRE PROTECTION - SAMESE CONNECTION - FREE STANDING		DAMPER - MOTORIZED
	FIRE PROTECTION - SAMESE CONNECTION - WALL MOUNTED		DAMPER - VOLUME (MANUALLY ADJUSTABLE)
	FIRE PROTECTION - SPRINKLER HEAD, CONCEALED		DIFFUSER - BLANK OFF
	FIRE PROTECTION - SPRINKLER HEAD, PENDANT		DIFFUSER - LINEAR SLOT
	FIRE PROTECTION - SPRINKLER HEAD, UPRIGHT		DIFFUSER - SQUARE OR RECTANGULAR
	FIRE PROTECTION - SPRINKLER HEAD, SIDEWALL		DUCT CROSS SECTION - SUPPLY
	FLOOR DRAIN		DUCT CROSS SECTION - RETURN
	FLOOR DRAIN - ELEVATION		DUCT CROSS SECTION - EXHAUST
	FLOOR DRAIN - FUNNEL		DUCT - FLEXIBLE CONNECTION
	FLOOR DRAIN - FUNNEL, ELEVATION		DUCT - FLEXIBLE DUCT
	FLOW MEASURING DEVICE (FOR TEST AND BALANCING)		DUCT TAKE-OFF - ROUND CONICAL
	FLOW SWITCH		DUCT TAKE-OFF - RECTANGULAR WITH SHOE TAP
	FLOW METER		ELBOW - RECTANGULAR WITH TURNING VANES
	HOSE BIBB		ELBOW - RECTANGULAR / ROUND SMOOTH RADIUS
	MANHOLE		ELBOW DOWN - RECTANGULAR
	OPEN SITE DRAIN		ELBOW DOWN - ROUND
	PIPE - ANCHOR		ELBOW UP - RECTANGULAR
	PIPE - CAP OR PLUG		ELBOW UP - ROUND
	PIPE - ELBOW DOWN		FAN - AXIAL
	PIPE - ELBOW UP		FAN - CENTRIFUGAL (ELEVATION)
	PIPE - EXPANSION JOINT OR COMPENSATOR		VARIABLE FREQUENCY CONTROLLER SERVING EQUIPMENT XX-#
	PIPE - FLANGE		HEATING COIL
	PIPE - HOSE AND BRAID FLEXIBLE CONNECTION		INCLINED DROP IN DIRECTION OF AIRFLOW
	PIPE - RUBBER FLEXIBLE CONNECTION		INCLINED RISE IN DIRECTION OF AIRFLOW
	PIPE - GUIDE		INTAKE OR RELIEF HOOD
	PIPE - TEE DOWN		REGISTER - RETURN OR EXHAUST
	PIPE - TEE UP		REGISTER - RETURN WITH BOOT
	PIPE - UNION		REGISTER - TRANSFER GRILLE
	PRESSURE AND TEMPERATURE TEST PLUG		ROOF EXHAUST FAN
	PRESSURE GAUGE AND COOK		RECTANGULAR DUCT
	REDUCER - CONCENTRIC		TRANSITION - CONCENTRIC
	REDUCER - ECCENTRIC		TRANSITION - ECCENTRIC
	ROOF/OVERFLOW DRAIN		UNIT HEATER - HORIZONTAL THROW
	STEAM TRAP - FLOAT AND THERMOSTATIC		UNIT HEATER - VERTICAL THROW
	STEAM TRAP - BUCKET		DOUBLE LINE DUCTWORK SYMBOLS
	STRAINER		DUCT TAKE-OFF - RECTANGULAR WITH SHOE TAP
	STRAINER WITH VALVE AND BLOW-OFF		DUCT TAKE-OFF - ROUND CONICAL
	THERMOMETER		ELBOW - RECTANGULAR WITH TURNING VANES
	TRAP		ELBOW - RECTANGULAR SHORT RADIUS WITH SPLITTER VANES
	VALVE - ANGLE		ELBOW - ROUND
	VALVE - BALL		ELBOW - RECTANGULAR SMOOTH RADIUS
	VALVE - BUTTERFLY		ELBOW DOWN - RECTANGULAR
	VALVE - BALANCE (I.E. BALANCE VALVE TO 0.5 GPM)		ELBOW DOWN - ROUND
	VALVE - COMBINATION BALANCE & FLOW MEASURING (I.E. BALANCE VALVE TO 0.5 GPM)		ELBOW UP - RECTANGULAR
	VALVE - CHECK		ELBOW UP - ROUND
	VALVE - SPRING CHECK		HEATING COIL
	VALVE - GAS (MANUAL)		INCLINED DROP IN DIRECTION OF AIRFLOW
	VALVE - GLOBE		

THE FOLLOWING DIMENSION EQUALS ONE INCH WHEN PRINTED TO SCALE.



HVAC PIPING GENERAL NOTES:

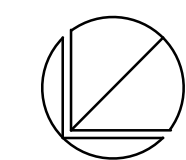
1. THESE DRAWINGS ARE DIAGRAMMATIC, AND REPRESENT THE GENERAL INTENT AND ARRANGEMENT OF SYSTEMS. THEY ARE NOT TO BE CONSIDERED FABRICATION/COORDINATION/SHOP DRAWINGS. COORDINATION WITH OTHER TRADES IS REQUIRED. PROVIDE THE ADDITIONAL FITTINGS AND OFFSETS THAT WILL BE REQUIRED TO COMPLETE EACH SYSTEM AND TO AVOID INTERFERENCES WITH ALL OTHER SYSTEMS INCLUDING THE STRUCTURE, SHEET METAL, OTHER PIPING SYSTEMS, ELECTRICAL CONDUITS, BUS DUCTS, CABLE TRAY, LIGHT FIXTURES, ETC. AND/OR OTHER SPACE CONSTRAINTS.
2. INSTALL SYSTEMS SUCH THAT REQUIRED CLEARANCE AND SERVICE ACCESS SPACE IS PROVIDED AROUND ALL MECHANICAL AND ELECTRICAL EQUIPMENT, AND AROUND ANY COMPONENTS WHICH REQUIRE SERVICE ACCESS.
3. PIPING AND DUCTWORK SHALL NOT BE INSTALLED ABOVE ELECTRICAL TRANSFORMERS, SWITCHBOARDS, PANELBOARDS OR MOTOR CONTROL CENTERS.
4. COORDINATE AND PROVIDE ACCESS DOORS WITHIN INACCESSIBLE CEILING, SHAFT, AND CHASE AREAS FOR ALL COMPONENTS WHICH REQUIRE SERVICE ACCESS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
5. PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL SYSTEMS.
6. SUBMIT PROPOSED METHODS OF ANCHORING AND GUIDING PIPING SYSTEMS TO STRUCTURAL ENGINEER FOR APPROVAL.
7. COORDINATE LOCATION OF DUCT-MOUNTED HYDRONIC DEVICES WITH SHEET METAL TRADES.
8. BRANCH PIPING SERVING TERMINAL UNIT HEATING COILS OR RADIANT CEILING PANELS SHALL BE 3/4" UNLESS OTHERWISE NOTED. BRANCH PIPING SERVING MORE THAN ONE TERMINAL UNIT HEATING COIL SHALL BE 1" UNLESS OTHERWISE NOTED. BRANCH PIPING SERVING HOT WATER UNIT HEATERS AND CABINET UNIT HEATERS SHALL BE 1" UNLESS OTHERWISE NOTED.
9. REFER TO TEMPERATURE CONTROLS STANDARD MOUNTING HEIGHTS DETAIL FOR ELEVATIONS OF WALL MOUNTED TEMPERATURE CONTROL DEVICES.
10. STEAM AND CONDENSATE SYSTEMS ARE DESIGNED BASED ON THE ASSUMPTION OF A SUPERVISED WARM-UP PROCEDURE.

SHEET METAL GENERAL NOTES:

1. THESE DRAWINGS ARE DIAGRAMMATIC, AND REPRESENT THE GENERAL INTENT AND ARRANGEMENT OF SYSTEMS. THEY ARE NOT TO BE CONSIDERED FABRICATION/COORDINATION/SHOP DRAWINGS. COORDINATION WITH OTHER TRADES IS REQUIRED. PROVIDE THE ADDITIONAL FITTINGS AND OFFSETS THAT WILL BE REQUIRED TO COMPLETE EACH SYSTEM AND TO AVOID INTERFERENCES WITH ALL OTHER SYSTEMS INCLUDING THE STRUCTURE, PIPING SYSTEMS, ELECTRICAL CONDUITS, BUS DUCTS, CABLE TRAY, LIGHT FIXTURES, ETC. AND/OR OTHER SPACE CONSTRAINTS.
2. INSTALL SYSTEMS SUCH THAT REQUIRED CLEARANCE AND SERVICE ACCESS SPACE IS PROVIDED AROUND ALL MECHANICAL AND ELECTRICAL EQUIPMENT, AND AROUND ANY COMPONENTS WHICH REQUIRE SERVICE ACCESS.
3. PIPING AND DUCTWORK SHALL NOT BE INSTALLED ABOVE ELECTRICAL TRANSFORMERS, SWITCHBOARDS, PANELBOARDS OR MOTOR CONTROL CENTERS.
4. COORDINATE AND PROVIDE ACCESS DOORS WITHIN INACCESSIBLE CEILING, SHAFT, AND CHASE AREAS FOR ALL COMPONENTS WHICH REQUIRE SERVICE ACCESS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
5. PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL SYSTEMS.
6. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR DIMENSIONED LOCATION OF GRILLES, REGISTERS, AND DIFFUSERS.
7. REFER TO TEMPERATURE CONTROLS STANDARD MOUNTING HEIGHTS DETAIL FOR ELEVATIONS OF WALL MOUNTED TEMPERATURE CONTROL DEVICES.

CONSTRUCTION KEY NOTES:

1. EXTEND EXISTING CHWS/R PIPING AS REQUIRED TO RECONNECT TO NEW CHILLERS.
2. RECONNECT CHWS/R PIPING TO NEW PUMPS.
3. INSTALL NEW WFC IN EXISTING DISCONNECT LOCATION.



FIRST FLOOR MECHANICAL COMPOSITE NEW WORK PLAN
SCALE: 1" = 20' - 0"

REVISION

REVISION

5145 Livemore, Suite 100
Troy, Michigan 48066-9276
www.PeterBassoAssociates.com
PBA Project No.: 2208-0004-01



Peter Basso Associates
CONSULTING ENGINEERS

PROJECT TITLE
**ANCHOR BAY SCHOOL DISTRICT
LIGHTHOUSE ELEMENTARY SCHOOL
HVAC Upgrade**
51880 Washington St, New Baltimore, MI 48047

SHEET TITLE
**FIRST FLOOR MECHANICAL
COMPOSITE NEW WORK PLAN**

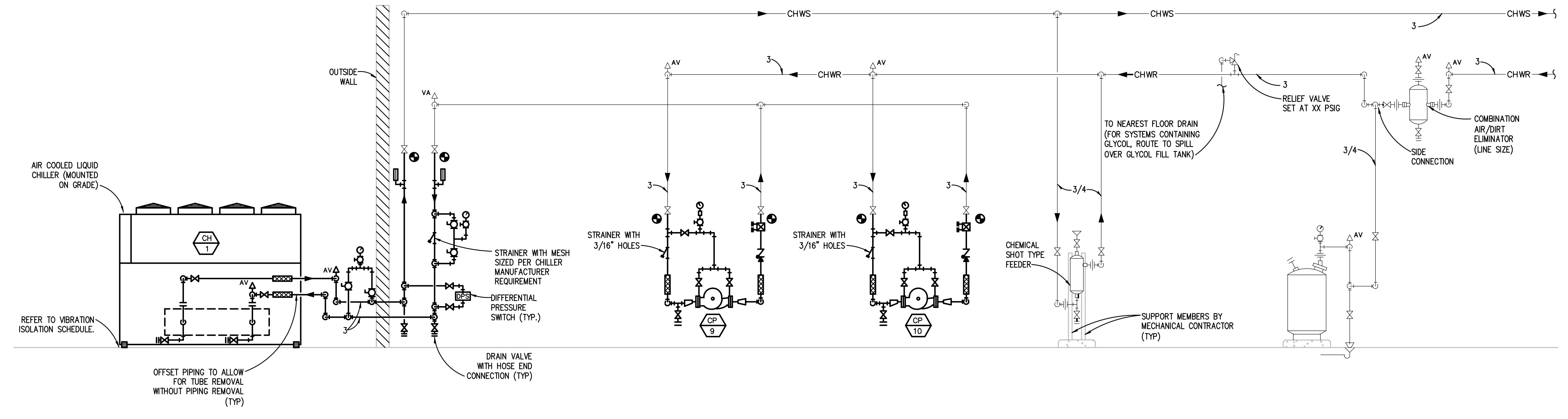
DATE
05-01-2026

ISSUE
CONSTRUCTION DOCUMENTS

SHEET No.

M0.2

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CHILLER SYSTEM PIPING DIAGRAM
NO SCALE

NOTES
CONTRACTOR SHALL ADD PROPYLENE GLYCOL TO THE CHILLED WATER SYSTEM TO ACHIEVE A 35% PROPYLENE GLYCOL FLUID MIXTURE.
ESTIMATED SYSTEM VOLUME: 200 GAL
CURRENT GLYCOL PERCENTAGE: 27%

REVISION

REVISION

5145 Livernois, Suite 100
Troy, Michigan 48066-3276
www.PeterBassoAssociates.com
PBA Project No.: 2026-0034-01

Peter Basso Associates
CONSULTING ENGINEERS

PROJECT TITLE
**ANCHOR BAY SCHOOL DISTRICT
LIGHTHOUSE ELEMENTARY SCHOOL
HVAC Upgrade**
51880 Washington St, New Baltimore, MI 48047

SHEET TITLE
MECHANICAL DETAILS

DATE
05-01-2026

ISSUE
CONSTRUCTION DOCUMENTS

SHEET No.

TEMPERATURE CONTROL - SYMBOLS LIST

SCHEMATIC SYMBOLS

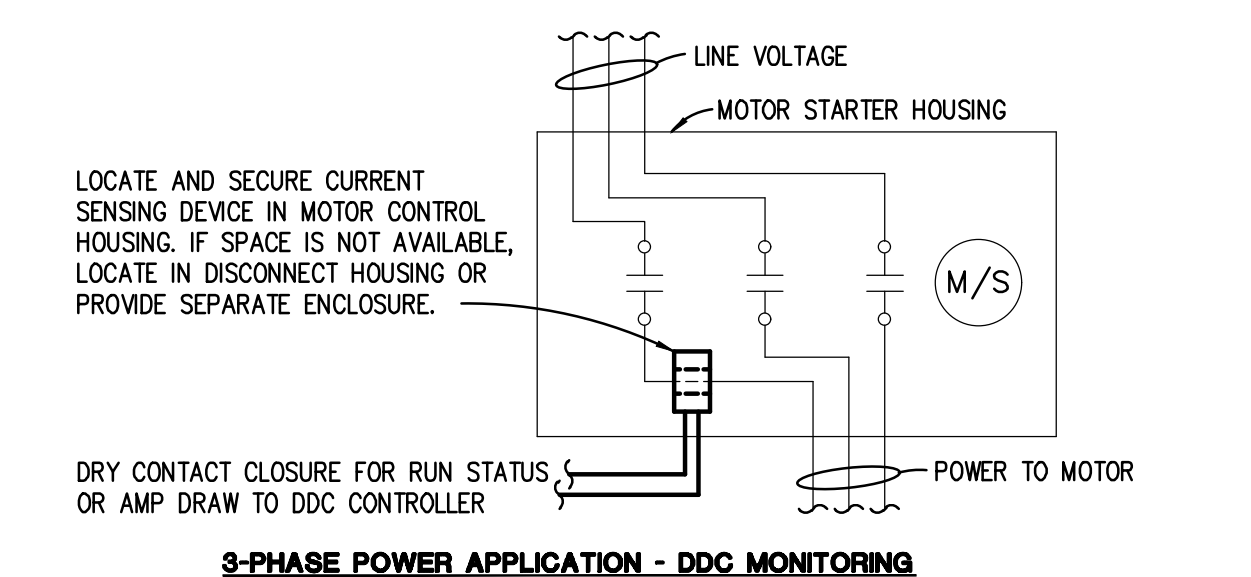
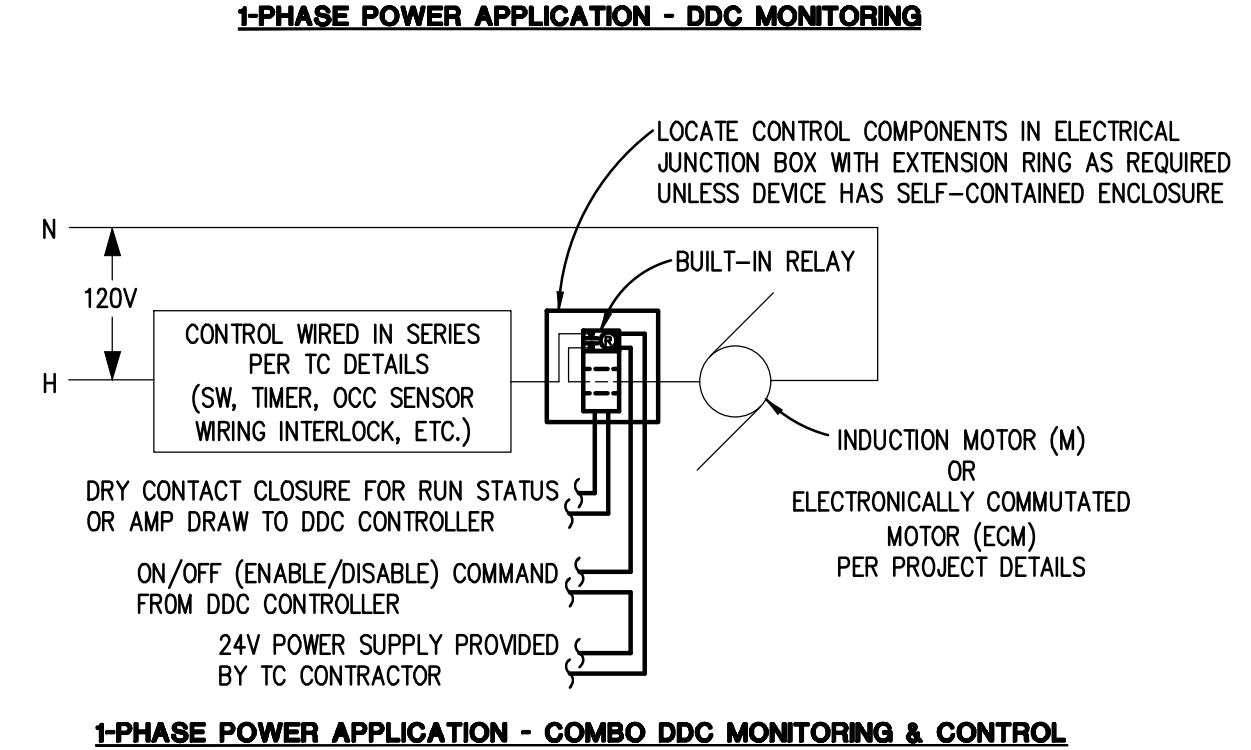
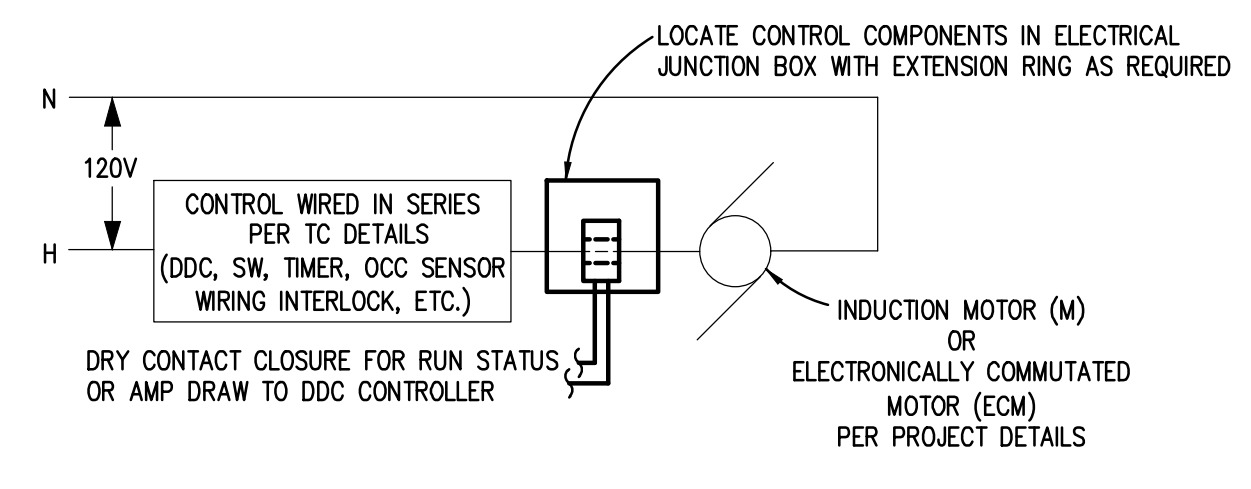
SYMBOL	DESCRIPTION
AD	AQUASTAT, STRAP ON BULB
CO2	CARBON DIOXIDE SENSOR - WALL MOUNTED
CO2D	CARBON DIOXIDE SENSOR - DUCT MOUNTED
CS	CURRENT SWITCH
CT	CURRENT TRANSDUCER
DB	DAMPER - OPPOSED BLADE
DBP	DAMPER - PARALLEL BLADE
M	DAMPER MOTOR
DPS	DIFFERENTIAL PRESSURE SWITCH
DPT	DIFFERENTIAL PRESSURE TRANSMITTER
ECM	ELECTRONICALLY COMMUTATED MOTOR
GM	FIRE ALARM SYSTEM, ADDRESSABLE CONTROL MODULE
FM	FLOW METER
FS	FLOW SWITCH
FZ	FREEZE/STAT
G	GUARD FOR STAT OR SENSOR
H	HUMIDIFIER
H	HUMIDISTAT OR HUMIDITY SENSOR (AS DEFINED ON TC DRAWINGS)
H	HUMIDITY SENSOR, DUCT MOUNTED
LA	LEVEL SWITCH OR TRANSMITTER
LS	LIMIT SWITCH
---	LINE - ELECTRIC
---	LINE - INSTRUMENT AIR (PNEUMATIC)
M/S	MOTOR STARTER
OS	OCCUPANCY SENSOR
PT	PRESSURE TRANSMITTER
R	RELAY, ELECTRIC
N	SELECTOR SWITCH, (N=NUMBER OF POSITIONS)
A	SIGNAL - DDC/BAS, ANALOG INPUT
AO	SIGNAL - DDC/BAS, ANALOG OUTPUT
D	SIGNAL - DDC/BAS, DIGITAL INPUT
DO	SIGNAL - DDC/BAS, DIGITAL OUTPUT
AA	SIGNAL - PACKAGED EQUIPMENT, ANALOG INPUT
AOA	SIGNAL - PACKAGED EQUIPMENT, ANALOG OUTPUT
DA	SIGNAL - PACKAGED EQUIPMENT, DIGITAL INPUT
DOA	SIGNAL - PACKAGED EQUIPMENT, DIGITAL OUTPUT
SD	SMOKE DETECTOR - DUCT MOUNTED
S/S	START/STOP RELAY
SP1	STATIC PRESSURE TRANSMITTER
SP	STATIC PRESSURE SENSOR OR PROBE

SCHEMATIC SYMBOLS (CONT.)

SYMBOL	DESCRIPTION
SW	SWITCH
T	TEMPERATURE SENSOR - RIGID ELEMENT IN WELL
T	TEMPERATURE SENSOR - STRAP ON BULB
T	TEMP SENSOR - DUCT MOUNTED AVG ELEMENT
T	TEMP SENSOR - DUCT MOUNTED RIGID ELEMENT
T	THERMOSTAT OR TEMPERATURE SENSOR (AS DEFINED ON TC DRAWINGS)
TS	TIMER SWITCH
TR	TRANSFORMER
V	VALVE - 2 WAY CONTROL VALVE
V	VALVE - 3 WAY CONTROL VALVE
VFC	VARIABLE FREQUENCY CONTROLLER
VS	VELOCITY SENSOR
VB	VIBRATION SWITCH
M/S	COIL - MOTOR STARTER CONTACTOR
R	COIL - RELAY
I	CONTACT - INSTANT OPERATING, NO
I	CONTACT - INSTANT OPERATING, NC
G	GROUND
M/S	MOTOR, SINGLE PHASE
P	PUSH BUTTON - MOMENTARY, NC (MUSHROOM HEAD)
H	SWITCH - 3 POSITION SELECTOR HAND/OFF/AUTO
F	SWITCH - FLOW (AIR, WATER, ETC.), NO
L	SWITCH - LIMIT, NO
P	SWITCH - PRESSURE & VACUUM, NC
T	SWITCH - TEMPERATURE ACTUATED, NO
OL	THERMAL OVERLOAD, SINGLE PHASE
OL	THERMAL OVERLOAD CONTACTS-3 PHASE
TR	TRANSFORMER
W	WIRE TERMINATION AT DEVICE
W	WIRE TO WIRE TERMINATION
W	WIRING NOT CONNECTED

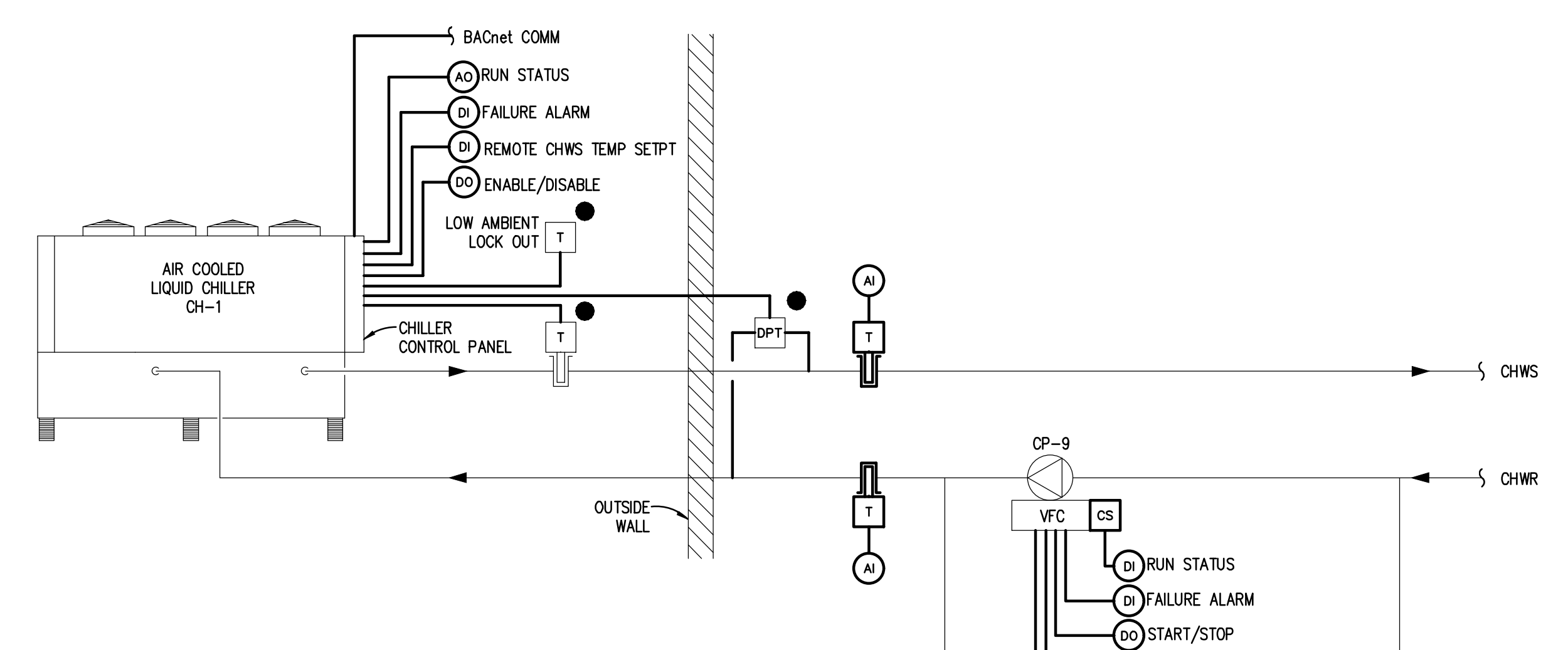
ABBREVIATION	DESCRIPTION
BAS	BUILDING AUTOMATION SYSTEM
DDC	DIRECT DIGITAL CONTROL
TC	TEMPERATURE CONTROLS
NO	NORMALLY OPEN
NC	NORMALLY CLOSED

- NOTES:
- SOME SYMBOLS & ABBREVIATIONS SHOWN MAY NOT APPLY TO THIS PROJECT.
 - REFER TO MECHANICAL STANDARDS ON DRAWING M0.1 FOR ADDITIONAL SYMBOLS & ABBREVIATIONS THAT MAY BE USED ON TEMPERATURE CONTROL DRAWINGS.



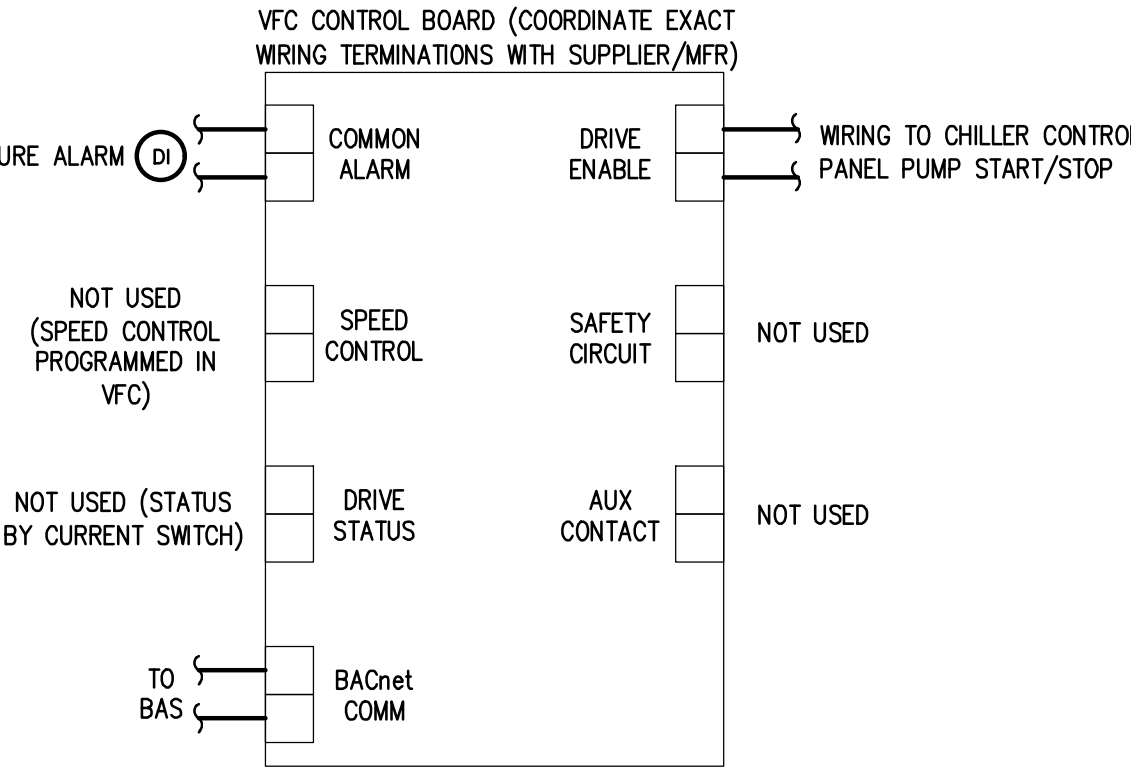
CURRENT SWITCH INSTALLATION DETAILS

- TYPICAL
- NOTES:
- CURRENT SWITCH (CS) OR CURRENT TRANSDUCER (CT) AMP MONITORING AS APPLICABLE PER CONTROL DETAILS SHALL BE INSTALLED FOR DDC SYSTEM STATUS INDICATION OF FAN OR PUMP OPERATION. APPROPRIATE TIME DELAY FOR STATUS FEEDBACK UPON DDC START AND STOP COMMANDS SHALL BE INCLUDED WITH THE DDC LOGIC TO AVOID NUISANCE OPERATIONAL ALARMS.
 - REVIEW EQUIPMENT SHOP DRAWINGS TO DETERMINE POTENTIAL AMPERAGE RANGE OF FAN OR PUMP OPERATION FOR AMPERAGE TRIP SETTING REQUIREMENTS PRIOR TO SELECTING APPROPRIATE CURRENT SWITCH (MINIMUM SPEED AMPERAGE FOR FFTU WITH ECM CAN BE VERY LOW).
 - FOR ECM CURRENT SWITCH APPLICATIONS: PROVIDE CURRENT SWITCH RATED FOR ECM OPERATION WITH AMPERAGE TRIP SETTING HIGHER THAN TRICKLE/IDLE/STANDBY AMPERAGE ASSOCIATED WITH ECM WHEN OFF AND AMPERAGE TRIP SETTING LOWER THAN THE MINIMUM SPEED OPERATION OF FAN OR PUMP AS SET BY THE TAG CONTRACTOR.
 - FOR INDUCTION MOTOR CURRENT SWITCH APPLICATIONS (AS APPLICABLE): AMPERAGE TRIP SETTING SHALL BE ADJUSTABLE TO ACCOMMODATE VFC MINIMUM SPEED SETTING, TO DETECT FAN BELT LOSS, OR TO DETECT PUMP COUPLING DETACHMENT.
 - WHEN FAN OR PUMP IS ON AND NOT IN ALARM, DDC SYSTEM SHALL TOTALIZE RUN TIME HOURS FOR OPERATOR INFORMATION FROM BUILDING AUTOMATION SYSTEM OPERATOR INTERFACE.



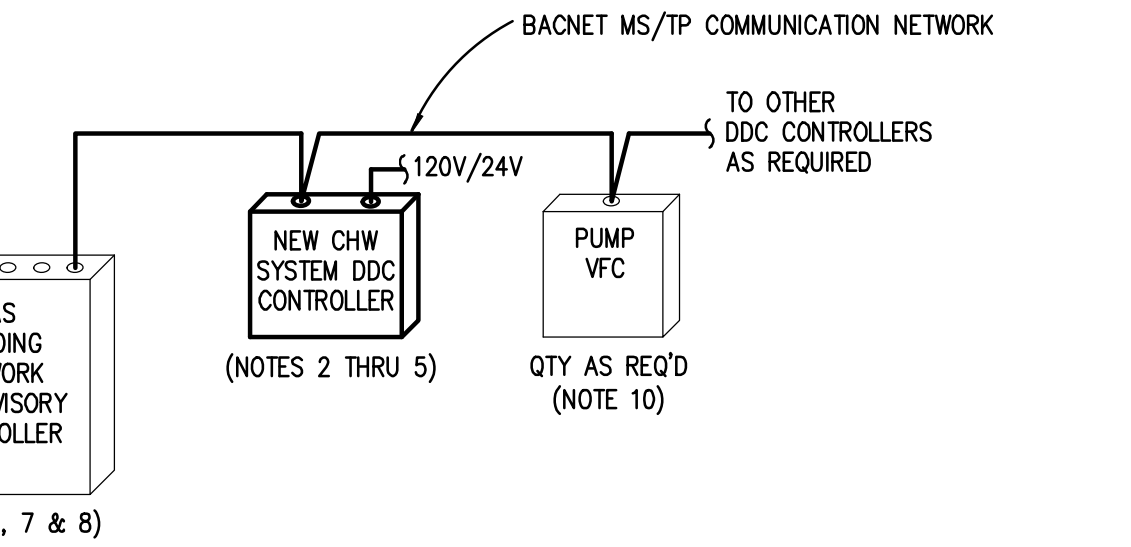
CHILLED WATER SYSTEM CONTROL

- NOTE:
- DESIGNATES CHILLED WATER SYSTEM CONTROL DEVICE FURNISHED BY CHILLER MANUFACTURER AND WIRED BY TEMPERATURE CONTROLS CONTRACTOR.
 - TC SHALL COORDINATE PUMP VFD MINIMUM SPEED WITH BALANCER AND CHILLER MANUFACTURER TO MAINTAIN CHILLER MINIMUM EVAPORATOR FLOW UNDER ALL LOAD CONDITIONS.



CHW PUMP VFC WIRING

- NOTES:
- WIRING DETAIL IDENTIFIES INTENT AND DOES NOT INDICATE ACTUAL WIRING REQUIREMENTS. CONSULT WITH VFC SUPPLIER FOR THE ACTUAL WIRING REQUIREMENTS.



BUILDING AUTOMATION SYSTEM ARCHITECTURE

- NO SCALE
- NOTES:
- EXISTING BUILDING AUTOMATION SYSTEM FOR BUILDING IS AUTOMATED LOGIC OPERATOR INTERFACE PLATFORM.
 - REFER TO TEMPERATURE CONTROL SCHEMATICS FOR THE REQUIRED POINTS ASSOCIATED FOR EACH NEW HVAC SYSTEM PER MECHANICAL DRAWINGS.
 - TC CONTRACTOR SHALL DETERMINE DDC CONTROLLER QUANTITY AND AUXILIARY PANEL REQUIREMENTS BASED ON POINT DENSITIES AND LOCATIONS PER AVAILABLE MOUNTING SPACE. UNLESS SPECIFICALLY NOTED IN DESIGN DRAWINGS, TC CONTRACTOR SHALL LOCATE TEMPERATURE CONTROL PANELS WITH CONTROLLERS AND AUX COMPONENTS AS REQUIRED. COORDINATE WITH OTHER TRADES.
 - TC CONTRACTOR SHALL PROVIDE REQUIRED POWER SUPPLIES AS INDICATED IN TC GENERAL NOTES.
 - TC CONTRACTOR SHALL PROVIDE 24V TRANSFORMERS REQUIRED FOR TC CONTRACTOR PROVIDED CONTROLLERS AS REQUIRED. TRANSFORMERS SHALL BE LOCATED WITHIN EQUIPMENT ENCLOSURES OR OTHER TC PROVIDED ENCLOSURES TO BE LOCATED IN MECHANICAL OR ELECTRICAL ROOMS - COORDINATE LOCATIONS. MAXIMUM TRANSFORMER SIZE SHALL BE 100VA.
 - TC CONTRACTOR SHALL PROVIDE AUXILIARY PANEL FOR GAUGES, TRANSMITTERS, RELAYS, POWER TRANSFORMERS, ETC.
 - GRAPHICS FOR OPERATOR INTERFACE OF SYSTEMS ARE TO BE BUILT ON THE EXISTING TROILUM N4 SERVER APPLICATION SOFTWARE LOCATED ON THE DISTRICT'S IT NETWORK.
 - DDC CONTROLLERS FOR PACKAGED CONTROL EQUIPMENT SHALL INCLUDE BACNET MS/TP INTERFACE CARDS FOR THIS PROJECT. TO CONTRACTOR TO PROVIDE BACNET NETWORK WIRING TO PACKAGED CONTROLLERS.
 - TC CONTRACTOR SHALL PROVIDE BACnet COMMUNICATION TO VARIABLE FREQUENCY CONTROLLERS FOR NEW EQUIPMENT WHERE APPLICABLE FOR ADDITIONAL MONITORING INFORMATION. REFER TO VFC BACnet INTERFACE & MONITORING REQUIREMENTS DETAIL.

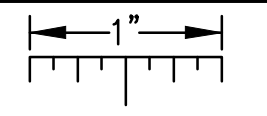
VFC BACnet INTERFACE & MONITORING REQUIREMENTS

- TYPICAL FOR PUMP VFCs
- NOTE:
- TC CONTRACTOR SHALL COORDINATE BACnet-MS/TP OPEN PROTOCOL WIRE TERMINATION REQUIREMENTS AND POINT INTEGRATION CAPABILITIES WITH VFC SUPPLIER/MANUFACTURER AND PROVIDE APPROPRIATE BAS COMPONENTS FOR COMMUNICATION INTERFACE TO BAS.
- | MONITORING POINTS | MONITORING POINTS |
|------------------------------------|-----------------------------|
| ● ON/OFF ACTIVE COMMAND STATUS | ● MOTOR AMPS |
| ● ON/OFF RUN STATUS | ● MOTOR TORQUE |
| ● COMMON ALARM STATUS | ● POWER (KW) |
| ● REMOTE VFC (ALARM) RESET | ● ACCUMULATED KWH |
| ● CURRENT SPEED COMMAND (0-100%) | ● ACCUMULATED KWH RESET |
| ● CURRENT OPERATING FREQUENCY (Hz) | ● DC LINK VOLTAGE |
| ● RUNTIME HOURS | ● MOTOR THERMAL (0-100%) |
| ● RUNTIME HOURS RESET | ● INVERTER THERMAL (0-100%) |
| ● MOTOR VOLTAGE | ● HEAT SINK TEMPERATURE |

TC GENERAL NOTES

- THESE GENERAL NOTES SHALL BE APPLICABLE FOR ALL TEMPERATURE CONTROL (TC) DRAWINGS.
- "PROVIDE" IS DEFINED AS "FURNISH AND INSTALL".
- TEMPERATURE CONTROLS CONTRACTOR (TC CONTRACTOR) SHALL BE RESPONSIBLE TO COMPLY WITH ALL APPLICABLE CODES AND STANDARDS.
- FOR TEMPERATURE CONTROL DRAWINGS ONLY: ALL DETAILED INFORMATION IDENTIFIED WITH HEAVY LINE WEIGHT SHALL BE PROVIDED BY TC CONTRACTOR. ALL OTHER INFORMATION IDENTIFIED WITH LIGHT LINE WEIGHT SHALL BE PROVIDED BY OTHER TRADES.
- ALL CONTROL SCHEMATICS AND WIRING DIAGRAMS ARE FOR THE CLARIFICATION OF EQUIPMENT INTERLOCKING FUNCTIONS AND THE INTERFACE OF VARIOUS CONTRACTORS' WORK AND SHALL NOT BE MISTAKEN AS SHOP DRAWINGS FOR ACTUAL INSTALLATION.
- TO CONTRACTOR SHALL PROVIDE DDC CONTROLLERS AS REQUIRED TO MEET INTENT OF DESIGN DOCUMENTS. REFER TO THE PLANS FOR THE DDC FUNCTIONS THAT APPLY TO EACH MECHANICAL SYSTEM.
- ALL TO PROVIDED COMPONENTS AND ALL TO CONTRACTOR INSTALLED WIRING SHALL BE LABELED PER SPECIFICATIONS.
- ALL WIRING AND SYSTEM CONTROL VOLTAGES SHALL BE IN ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATION AND THE ELECTRICAL SPECIFICATIONS.
- VARIABLE FREQUENCY CONTROLLER AND PUMP MOTOR STARTERS, STARTER WIRING, CONTROL VOLTAGE TRANSFORMERS AND ASSOCIATED POWER WIRING SHALL BE PROVIDED BY OTHER TRADES.
- ALL DDC AND CONTROL INTERLOCK WIRING SHALL BE BY TC CONTRACTOR UNLESS OTHERWISE NOTED. TC CONTRACTOR SHALL COORDINATE WITH VFC AND MOTOR STARTER SUPPLIERS TO DETERMINE EXACT WIRING REQUIREMENTS AND TERMINATION POINTS.
- ALL DDC AND CONTROL INTERLOCK WIRING BETWEEN COMPONENTS SHALL BE INSTALLED WITHOUT INTERMEDIATE STOPS. WIRE SPLICING AT INTERMEDIATE TERMINAL STRIPS IS NOT ACCEPTABLE.
- ALL ELECTRICAL WIRING AND RACEWAY SYSTEMS SHALL COMPLY WITH ELECTRICAL SPECIFICATION REQUIREMENTS. WHERE RACEWAY IS REQUIRED, TWO SEPARATE ELECTRICAL RACEWAY SYSTEMS SHALL BE PROVIDED: ONE FOR 120V WIRING AND THE OTHER FOR 24V WIRING.
- TC CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER SUPPLIES REQUIRED FOR TC SYSTEM UNLESS OTHERWISE NOTED. REFER TO ELECTRICAL PANEL SCHEDULES FOR SPARE CIRCUITS OR CIRCUITS DEDICATED TO TEMPERATURE CONTROLS. COORDINATE CIRCUIT USE WITH ELECTRICAL CONTRACTOR.
- TO CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL FIELD MOUNTED COMPONENTS.
- TC CONTRACTOR SHALL PROVIDE AUXILIARY PANELS FOR REQUIRED PANEL MOUNTED EQUIPMENT SUCH AS RELAYS, TRANSDUCERS, CONTROL TRANSFORMERS, ETC. AUXILIARY PANELS SHALL BE LOCATED NEXT TO ASSOCIATED DDC PANEL. DEPENDING ON WIRE QUANTITY OR COMPLEXITY, PROVIDE CONDUITS BETWEEN PANELS OR WIRING THROUGH WITH CONDUIT STUBS ABOVE ALL ASSOCIATED PANELS.
- REMOTELY MOUNTED FIELD DEVICES SUCH AS RELAYS, CONTROL TRANSFORMERS, ETC., SHALL BE HOUSED IN AN ENCLOSURE PROVIDED BY THE TC CONTRACTOR.
- CONTROL TRANSFORMERS WHEN REQUIRED SHALL BE SIZED FOR 150% OF ACTUAL LOAD.
- CURRENT SWITCHES USED FOR OPERATIONAL STATUS SHALL HAVE CURRENT THRESHOLD SETPOINT ADJUSTED TO INDICATE BELT OR DRIVE FAILURE.
- ALL CONTROL VALVES AND ASSOCIATED CONTROL ACTUATORS IDENTIFIED ON TC DRAWINGS SHALL BE FURNISHED BY TC CONTRACTOR UNLESS OTHERWISE NOTED. DAMPER SIZE AND LOCATIONS ARE INDICATED ON MECHANICAL FLOOR PLAN DRAWINGS.
- ALL CONTROL VALVES FURNISHED BY THE TC CONTRACTOR SHALL BE INSTALLED BY THE MECHANICAL CONTRACTOR. ALL PIPE PENETRATIONS AND BASIC FITTINGS REQUIRED FOR SENSOR INSTALLATIONS SHALL BE PROVIDED BY MECHANICAL CONTRACTOR.
- ALL INSTRUMENTATION TUBING REQUIRED FOR DPS AND DPT COMPONENT INSTALLATIONS SHALL BE PROVIDED BY TC CONTRACTOR.
- TC CONTRACTOR SHALL FIELD MOUNT ALL REQUIRED "SHIPPED LOOSE" PACKAGED CONTROL COMPONENTS FURNISHED BY EQUIPMENT SUPPLIERS WHERE INDICATED. ALL REQUIRED 24V AND 120V FIELD WIRING SHALL BE PROVIDED BY TC CONTRACTOR UNLESS NOTED OTHERWISE. TC CONTRACTOR SHALL COORDINATE SPECIFIC SYSTEM WIRING REQUIREMENTS WITH PACKAGED EQUIPMENT SUPPLIERS.

THE FOLLOWING DIMENSION EQUALS ONE INCH WHEN PRINTED TO SCALE.

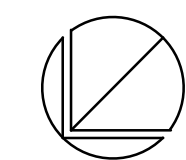


MECHANICAL DEMOLITION GENERAL NOTES:

1. ANY INTERRUPTION OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE PERFORMED AT A TIME APPROVED IN ADVANCE BY THE OWNER'S REPRESENTATIVE.
2. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. ACTUAL ROUTING AND SIZES OF EXISTING PIPING AND DUCTWORK MIGHT DIFFER TO A LIMITED EXTENT FROM WHAT IS SHOWN. MAJOR DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL EXISTING CONDITIONS SHALL BE REPORTED TO THE ENGINEER.
3. THE EXACT EXTENT OF DEMOLITION SHALL BE AS REQUIRED BY THE NEW WORK.
4. ALL MECHANICAL ITEMS TO BE REMOVED SHALL BE REMOVED COMPLETE, INCLUDING ALL RELATED ITEMS SUCH AS HANGERS, SUPPORTS, CONTROLS, ETC. CAP ALL OPEN ENDED PIPES AND DUCTWORK.

DEMOLITION KEY NOTES:

- A. REMOVE EXISTING CHILLER AND ASSOCIATED CHWS/R PIPING BACK TO ISOLATION VALVE. PREPARE CHWS/R PIPING FOR RECONNECTION.
- B. REMOVE EXISTING PUMPS AND PREPARE CHWS/R PIPING FOR RECONNECTION. PROVIDE PRE-DEMOLITION WATER FLOW AND HEAD PRESSURE READINGS.



FIRST FLOOR MECHANICAL COMPOSITE DEMOLITION PLAN
SCALE: 1" = 20' - 0"

REVISION

REVISION

5145 Livernois, Suite 100
Troy, Michigan 48066-9276
www.PeterBassoAssociates.com
PBA Project No.: 22081004.01

Peter Basso Associates
CONSULTING ENGINEERS

PROJECT TITLE
**ANCHOR BAY SCHOOL DISTRICT
LIGHTHOUSE ELEMENTARY SCHOOL
HVAC Upgrade**

51880 Washington St, New Baltimore, MI 48047

SHEET TITLE
**FIRST FLOOR MECHANICAL
COMPOSITE DEMOLITION PLAN**

DATE
05-01-2026

ISSUE
CONSTRUCTION DOCUMENTS

SHEET No.

MD0.2

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