

ABBREVIATIONS

a	48" ABOVE FINISHED FLOOR	FD	FIRE DAMPER
A	GENERAL SERVICE COMPRESSED AIR	FD/SB	FIRE DAMPER WITH INTEGRAL SECURITY BARS
A/AMP	AMPERE	FD	FLOOR DRAIN
AC	AIR COMPRESSOR	FDC	FIRE DEPARTMENT CONNECTION
AC	ALTERNATING CURRENT	FDV	FIRE DEPARTMENT VALVE
ACD	AUTOMATIC COOLING CONDENSATE PUMP	FHC	FIRE HOSE CABINET
ACF	AIRFLOW CENTRIFUGAL FAN	FM	FLOW METER
ACU	AIR CONDITIONING UNIT(S)	FMC	FLEXIBLE METALLIC TUBING
AD	ACCESS DOOR	FOB	FLAT ON BOTTOM
AD	AREA DRAIN	FOF	FUEL OIL FILL
AF	ARC FAULT	FOR	FUEL OIL RETURN
AFF	ABOVE FINISHED FLOOR	FOS	FUEL OIL SUPPLY
AFG	ABOVE FINISHED GRADE	FOT	FLAT ON TOP
AHU	AIR HANDLING UNIT	FOV	FUEL OIL VENT
AIC	AMPS INTERRUPTING CURRENT	FP	FIRE PUMP
AMB	AMBIENT	PFM	FEET PER MINUTE
ANN	ANNUNCIATOR	FPS	FEET PER SECOND
APD	AIR PRESSURE DROP	FS	FLOOR SINK
APPROX	APPROXIMATE	FT	FOOT OR FEET
ARV	AXIAL ROOF VENTILATOR	FVC	FIRE VALVE CABINET
AS	AIR SEPARATOR	G	GAS
ATC	AUTOMATIC TEMPERATURE CONTROL	GA	GAUGE
ATS	AUTOMATIC TRANSFER SWITCH	GAL	GALLONS
AV	ACID VENT (CHEMICAL)	GCC	GRAVITY COOLING CONDENSATE
AVG	AVERAGE	GF	GROUND FAULT
AVTR	ACID VENT THRU ROOF	GND	GROUND
AW	ACID WASTE	OPH	GALLONS PER HOUR
AWG	AMERICAN WIRE GAUGE	OPM	GALLONS PER MINUTE
AWT	AVERAGE WATER TEMPERATURE	GR	GRAINS
b	42" ABOVE FINISHED FLOOR	GRU	GREASE RECOVERY UNIT
BAS	BUILDING AUTOMATION SYSTEM	GW	GREASE WASTE
BDD	BACK DRAFT DAMPER	GWA	GREASE WASTE ABOVE GRADE
BES	BUILDING ENERGY SYSTEM	GWB	GREASE WASTE BURIED
BFW	BOILER FEED WATER	GWH	GAS WATER HEATER
BHP	BRAKE HORSEPOWER	H	HEIGHT
BICF	BACKWARD INCLINED CENTRIFUGAL FAN	HC	HEATING COIL
BMS	BUILDING MANAGEMENT SYSTEM	H/C	HEATING/COOLING
BSMT	BASEMENT	HD	HEAD
BTUH	BRITISH THERMAL UNITS/HOUR	HDPCP	HANDICAP
C	CONDUIT	HP	HORSEPOWER
C/B	CIRCUIT BREAKER	HTR	HEATER
CV	COEFFICIENT, VALVE FLOW	HX	HEAT EXCHANGER
CC	COOLING COIL	HZ	FREQUENCY (CYC, PER SEC.)
CLPS	CLEAN LOW PRESSURE STEAM	ICF	IN-LINE CENTRIFUGAL FAN
CLG	CEILING	IEF	IN-LINE EXHAUST FAN
CMPS	CLEAN MEDIUM PRESSURE STEAM	LBS/HR	POUNDS PER HOUR
CMV	CEILING MOUNTED VENTILATOR	MA	MIXED AIR
CO	CLEANOUT	MFR	MANUFACTURER
CO2	CARBON DIOXIDE	NTS	NOT TO SCALE
COMP	COMPRESSOR	T'STAT	THERMOSTAT
COND	CONDENSER	TYP	TYPICAL
CONV	CONVECTOR	VD	VOLUME DAMPER
CND	CONDENSATE PIPING	VF	VERIFY IN FIELD
EF	EXHAUST FAN		
EXH	EXHAUST		

HVAC DEMOLITION GENERAL NOTES

- BEFORE SUBMITTING BID, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BECOME FULLY FAMILIAR WITH THE EXISTING CONDITIONS AND THE DOCUMENTS OF OTHER TRADES UNDER WHICH THEIR WORK WILL BE ACCOMPLISHED. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS MADE AS A RESULT OF FAILURE TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS.
- THE CONTRACTOR SHALL COORDINATE AND SCHEDULE ANY DAILY INTERRUPTIONS OR SHUTDOWNS OF THE EXISTING SYSTEMS IN ADVANCE WITH OWNER'S DESIGNATED REPRESENTATIVE. THIS SHALL INCLUDE SERVICES INTERRUPTIONS, CONNECTIONS AND DISRUPTIONS EFFECTING OTHER TRADES (MECHANICAL AND ELECTRICAL). INCLUDE ALL WORK REQUIRED TO ALLOW PHASED CONSTRUCTION WHERE NECESSARY.
- DEMOLITION DRAWINGS ARE STRICTLY DIAGRAMMATIC AND SHOW GENERAL ARRANGEMENT AND APPROXIMATE LOCATION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW ALL EQUIPMENT, PIPING OR CONDUIT TO BE REMOVED. EQUIPMENT NOT BEING REUSED SHALL BE REMOVED, INCLUDING ALL ASSOCIATED HANGERS, SUPPORTS, PIPES, CONDUITS, WIRES, AND CONTROLS BACK TO THE POINT OF ORIGIN.
- REFER TO THE ARCHITECTURAL DEMOLITION DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. THE FULL EXTENT OF THE DEMOLITION AND RECONSTRUCTION SCOPE OF WORK SHALL BE DETERMINED BY THE ENTIRE SET OF BID DOCUMENTS.
- THE CONTRACTORS SHALL COORDINATE THE DEMOLITION SCOPE OF WORK WITH THE GENERAL CONTRACTOR'S OR CONSTRUCTION MANAGER'S PHASING SCHEDULE PRIOR TO COMMENCEMENT OF WORK. CARE MUST BE TAKEN SO AS NOT TO DESTROY, REMOVE OR DEMOLISH ANY EQUIPMENT, APPURTENANCES OR DEVICES INTENDED TO REMAIN. PROVIDE TEMPORARY SERVICES AND SYSTEM MODIFICATIONS TO ACCOMMODATE CONTINUOUS OPERATION OF ACTIVE SYSTEM.
- THE LOCATION OF EXISTING HVAC SYSTEM SHOWN ON FLOOR PLANS, IS BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL FIELD VERIFY PRIOR TO COMMENCEMENT OF CONSTRUCTION, EXACT QUANTITY AND LOCATION(S) OF EXISTING EQUIPMENT, PIPING, DUCTWORK, ETC. TO BE REMOVED AND ADJUST AS NECESSARY.
- ALL EQUIPMENT AND ASSOCIATED PIPING INDICATED TO BE REMOVED OR RELOCATED, SHALL BE DISCONNECTED AND REMOVED, INCLUDING HANGERS AND OTHER COMPONENTS, UP TO NEAREST EXISTING ACTIVE MAIN OR BRANCH LINE AND CAPPED AS CLOSE TO THE ACTIVE LINE AS POSSIBLE. NO EQUIPMENT, PIPING, OR CONDUIT SHALL BE ABANDONED IN PLACE, UNLESS SPECIFICALLY NOTED.
- ALL SYSTEMS TO BE REMOVED SHALL BE REMOVED BACK TO THE POINT OF SOURCE. THE CONTRACTOR SHALL VERIFY WHICH SYSTEMS MUST REMAIN ACTIVE TO SERVE ADJACENT SPACES DURING CONSTRUCTION. SHOULD THE CONTRACTOR ENCOUNTER, DURING DEMOLITION OF EXISTING WALLS OR CHASES, ANY PIPING OR CONDUIT WHICH MUST REMAIN ACTIVE, HE SHALL IMMEDIATELY GIVE NOTICE TO THE ENGINEER, GENERAL CONTRACTOR OR CONSTRUCTION MANAGER.
- ALL SALVAGEABLE MATERIALS OR EQUIPMENT TO BE REMOVED SHALL BE TURNED OVER TO THE OWNER AT THE END OF EACH DAY. ITEMS REMOVED AND NOT REUSED OR CLAIMED BY THE OWNER SHALL BECOME PROPERTY OF THE TRADE CONTRACTOR AND SHALL BE TRANSPORTED FROM THE SITE. SITE STORAGE OF REMOVED ITEMS WILL NOT BE PERMITTED.
- PROPERLY DISPOSE OF ALL DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES AND REGULATIONS; THIS APPLIES TO HAZARDOUS MATERIALS AND CONTAMINATED ITEMS TO BE DEMOLISHED.
- THE CONTRACTOR SHALL OBTAIN EXISTING MECHANICAL DRAWINGS FROM THE OWNER IF AVAILABLE TO HELP DETERMINE FULL SCOPE OF WORK.

HVAC GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH CURRENT APPLICABLE CODES, ORDINANCES, REGULATORY AGENCIES HAVING JURISDICTION, AND SPECIFICATIONS. SPECIFICATIONS MAY EXCEED REQUIREMENTS OF THE CODE. IN WHICH CASE, THE SPECIFICATION MUST BE FOLLOWED.
- THE INTENT OF THESE DOCUMENTS IS FOR THE MEP TRADES TO FURNISH AND INSTALL COMPLETE MECHANICAL AND ELECTRICAL SYSTEMS. THE SPECIFIED HVAC SYSTEM SHALL BE COMPLETE IN ALL RESPECTS, OPERATIONAL, TESTED, ADJUSTED, APPROVED BY AUTHORITIES HAVING JURISDICTION AND READY FOR BENEFICIAL USE BY THE OWNER.
- THE TRADES SHALL OBTAIN AND REVIEW ALL CONTRACT DOCUMENTS BEFORE SUBMITTING THEIR BID. INFORMATION IS PROVIDED ON THE VARIOUS DRAWINGS, SCHEDULES, SPECIFICATIONS, AND ALL OF THE VARIOUS DOCUMENTS IN THE BIDDING PACKAGE. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY AND FORM A TOTAL PROJECT DESIGN AND INFORMATION SOURCE FOR CONSTRUCTION PURPOSES.
- THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. COORDINATE LOCATIONS OF EQUIPMENT WITH OTHER TRADES BEFORE AND DURING CONSTRUCTION. ANY MODIFICATION TO THE EQUIPMENT LAYOUT, REQUIRED FOR INSTALLATION, IS TO BE PERFORMED UNDER THE CONTRACT AGREEMENT, AT NO ADDITIONAL COST. REFER TO DETAILS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES. DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL ARRANGEMENT OF EQUIPMENT AND PIPING. CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF EQUIPMENT AND PIPING INSTALLATION WITH ALL TRADES BEFORE COMMENCING WORK.
- EQUIPMENT SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS, WHEN EQUIPMENT MUST BE LOCATED ABOVE AN INACCESSIBLE CEILING (GYP BOARD OR EQUIVALENT), OR BEHIND A WALL, AN APPROPRIATE ACCESS DOOR SHALL BE PROVIDED. IF AN ACCESS DOOR IS REQUIRED, IT SHALL BE OF A RATING APPROPRIATE FOR THE WALL/CEILING IN WHICH IT IS TO BE INSTALLED. CONTRACTOR SHALL COORDINATE LOCATIONS OF ACCESS PANELS FOR ALL VALVES AND DEVICES, REQUIRING ACCESS, WITH THE ARCHITECT, PRIOR TO INSTALLATION OF SUCH DEVICES OR OTHER APPURTENANCES.
- REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION AND MOUNTING HEIGHTS OF VARIOUS EQUIPMENT. ALL SUCH EQUIPMENT AND EQUIPMENT COLORS AND FINISHES SHALL BE COORDINATED WITH THE ARCHITECT. MOUNTING HEIGHTS SHALL BE APPROVED BY THE ARCHITECT.
- WHERE A CONFLICT OCCURS BETWEEN THE DOCUMENTS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. CARRY AS PART OF THE BID THE LARGER QUANTITY AND/OR MORE EXPENSIVE ITEM(S).
- COORDINATE PIPING AND CONDUITS ENTERING OR LEAVING THE BUILDING WITH THE SITE CONTRACTOR(S) BEFORE INSTALLATION. COORDINATE INVERTS WITH THE STRUCTURE AND SYSTEM REQUIREMENTS, PRIOR TO INSTALLATION.
- PROVIDE THE REQUIRED/SPECIFIED SLEEVES AND SEALS FOR PIPES OR CONDUIT PENETRATING INTERIOR, AND EXTERIOR WALLS AND FLOOR SLABS.
- INSTALL FLOOR-MOUNTED EQUIPMENT ON A CONCRETE HOUSEKEEPING PAD.
- THIS CONTRACT SHALL INCLUDE ALL THE NECESSARY PIPING, FITTINGS, TRANSITIONS ETC. AS REQUIRED TO INSTALL PIPING AND EQUIPMENT, AND TO AVOID ANY CONFLICTS WITH OTHER TRADES AND THE BUILDING STRUCTURE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS HE MAKES AS A RESULT OF HIS FAILURE TO COORDINATE WITH OTHER TRADES OR BECOME FULLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES.
- DO NOT INSTALL ANY PIPING OVER ELECTRICAL PANELS, TRANSFORMERS, SPECIAL EQUIPMENT, OR THROUGH ELECTRICAL ROOMS, DATA ROOMS, ELEVATOR MACHINE ROOM, STAIRWELL OR STAIRWELL WALLS THAT ARE NOT ASSOCIATED WITH OR SERVE THE RESPECTIVE ROOMS. COORDINATE THE LOCATION OF ELECTRICAL EQUIPMENT IN THE FIELD AND ADJUST AS NECESSARY.
- INSTALL SMOKE DETECTORS IN BOTH SUPPLY & RETURN AIR DUCTS FOR AIR HANDLING EQUIPMENT 2,000 CFM AND GREATER.
- PROVIDE SMOKE DAMPERS AND DUCT SMOKE DETECTORS IN BOTH SUPPLY & RETURN AIR DUCTS (AT EACH FLOOR) FOR AIR HANDLING EQUIPMENT 15,000 CFM AND GREATER.
- PROVIDE SMOKE DAMPERS AND SMOKE DETECTORS AT DUCT PENETRATIONS OF SMOKE-BARRIERS, AND AT ELEVATOR SHAFT VENTS PER CODE REQUIREMENTS.
- PROVIDE FIRE DAMPERS AT DUCT PENETRATIONS OF FIRE-RATED CONSTRUCTION, INCLUDING WALLS, SHAFTS AND FLOOR PENETRATIONS. COORDINATE WITH ARCHITECTURAL DRAWINGS.
- PROVIDE AN AUTOMATIC TEMPERATURE CONTROL SYSTEM COMPLETE IN ALL REGARDS. ALL ZONES, VAV'S AND SYSTEM SHALL BE THERMOSTATICALLY CONTROLLED. REVIEW THE PLANS AND SPECIFICATIONS OF ALL MEP TRADES FOR A COMPLETE SCOPE OF THE WORK.
- TEST AND BALANCE BOTH AIR AND HYDRONIC SYSTEMS, PROVIDE BALANCING REPORT TO ARCHITECT AND ENGINEER.
- PIPING SHALL BE SUPPORTED FROM STRUCTURE ABOVE. TO MAXIMIZE HEAD ROOM, INSTALL PIPING TIGHT TO BOTTOM OF BEAMS WHEN RUNNING PERPENDICULAR TO BEAM; INSTALL PIPING TIGHT TO FLOOR SLAB WHEN RUNNING PARALLEL TO BEAM; PROVIDE ALL NECESSARY FITTINGS AND TRANSITIONS.
- PROVIDE THROTTLING VALVES AND SHUT-OFF VALVES AS INDICATED IN SPECIFICATIONS IN ADDITION TO THOSE INDICATED ON THE DOCUMENTS.
- INSTALL ALL EQUIPMENT VALVES AS REQUIRED BY MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS AND AS DETAILED.
- PROVIDE AIR VENTS AT ALL HIGH POINTS AND DRAINS AT ALL LOW POINTS.
- PROVIDE PRESSURE RELIEF DOORS FOR AIR SYSTEMS, PER THE SPECIFICATIONS.
- PROVIDE MOTORIZED DAMPERS AT ALL PERMANENT OPENINGS (EXHAUST, SUPPLY, RELIEF, O.A. INTAKES, MAKE-UP AIR, SMOKE VENTS, ETC.) EXCEPT DRYER, KITCHEN, AND FUME EXHAUST AND PROVIDE A MEANS TO CONTROL THE DAMPER OPERATION.
- ALL SUPPLY RECTANGULAR 90° ELBOWS SHALL HAVE TURNING VANES.
- PROVIDE DUCT TAKE-OFF TYPES AND VOLUME DAMPERS PER THE SPECIFICATIONS AND DUCT TAKE-OFF DETAILS ON DRAWINGS. TAKE-OFFS SHOWN ON FLOOR PLANS DO NOT REPRESENT THE SPECIFIC TYPE OF TAKE-OFF REQUIRED; CONSULT THE DETAILS AND SPECIFICATIONS.
- PROVIDE VOLUME DAMPERS ON ALL SUPPLY, EXHAUST, AND RETURN BRANCH DUCTS.
- COORDINATE AND VERIFY LOCATIONS OF ALL ITEMS REQUIRING ACCESS WITH ARCHITECT IN FIELD., INCLUDING VALVES, VOLUME DAMPERS, FIRE DAMPERS, ETC.
- ALL EQUIPMENT LOCATED ON THE ROOF THAT REQUIRES SERVICING SHALL BE LOCATED A MINIMUM 10'-0" FROM EDGE OF THE ROOF.
- ALL EXPOSED DUCTWORK SHALL BE FLAT, OVAL, OR ROUND. COORDINATE WITH ARCHITECT'S CEILING PLANS AND IDENTIFY ON DUCTWORK SHOP DRAWINGS.
- PROVIDE DUCT TRANSITIONS AT RTU/AHU CONNECTIONS, ADJUST STEEL FRAMING AND SUPPORTS AFTER FINAL AIR HANDLING UNIT APPROVAL.
- IN TIGHT AREAS ALL DUCTWORK SHALL BE INSTALLED AS HIGH AS POSSIBLE, BETWEEN STEEL & TRUSSES. BRUNCH DUCTWORK SHALL RUN THRU JOIST OPENINGS.
- ALL THERMOSTATS LOCATED ON OUTSIDE WALL SHALL HAVE INSULATED PAD BEHIND.
- ALL MOTORIZED DAMPERS SHALL BE WIRED BY ATC CONTRACTOR, COORDINATE VOLTAGE REQUIREMENTS WITH EQUIPMENT.
- ALL TOILETS & BATHROOMS SHALL HAVE 3/4" UNDERCUT DOORS.
- ALL LOUVERS ARE SELECTED AND SCHEDULED BY ARCHITECT. LOUVER TAGS ARE SHOWN FOR COORDINATION ONLY.
- SEISMICALLY SUPPORT THE EQUIPMENT AS REQUIRED BY CODE, THE AUTHORITY HAVING JURISDICTION, AND/OR AS SPECIFIED. SUBMIT ENGINEERED INSTALLATION DETAILS PER THE SPECIFICATIONS. THE CONTRACTOR'S SEISMIC ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A DETAILED REPORT FOR THE RECORD.
- ALL DUCTWORK AND PIPING CROSSING SEISMIC JOINTS SHALL ACCOMMODATE DIFFERENTIAL MOTION. REFER TO DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATIONS.
- PROVIDE PIPE EXPANSION COMPENSATION FOR THE VARIOUS PIPING SYSTEMS. SUBMIT ENGINEERED DETAILS FOR APPROVAL AND VERIFY INSTALLATION IS IN ACCORDANCE WITH THE CODE. THE CONTRACTOR'S CONSULTING ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A REPORT OF THE FINDINGS.



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Revisions:	

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Boy's & Girls Restroom Modifications
Fair Oaks School
Community Center
 836 Old Colchester Road Oakdale, CT.

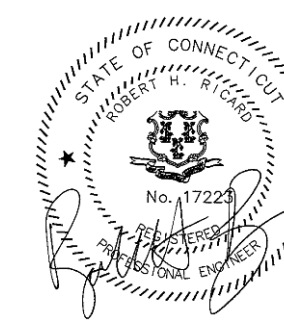
Plans
MECHANICAL
GENERAL NOTES
AND LEGEND

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DRAWN BY:	FSM
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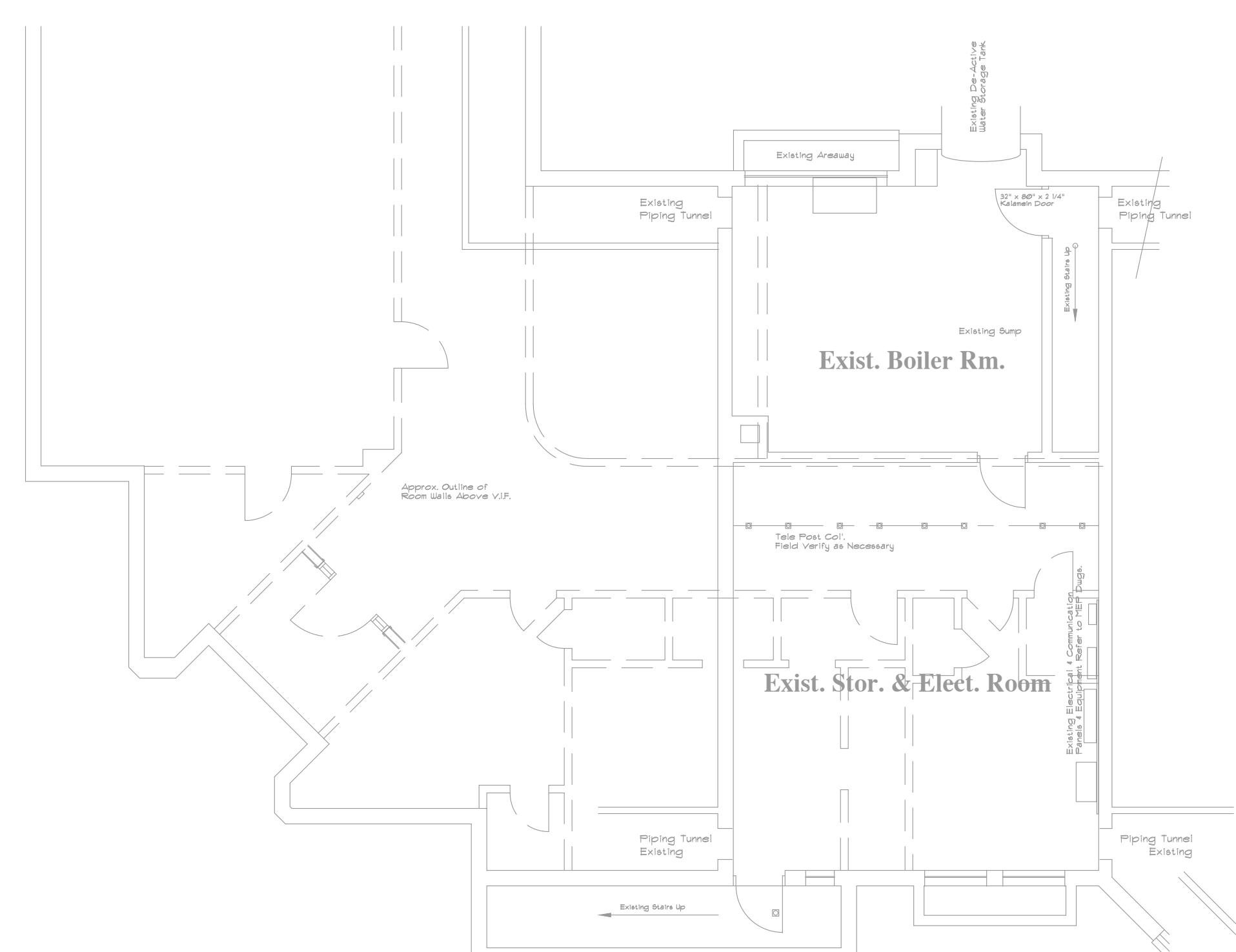
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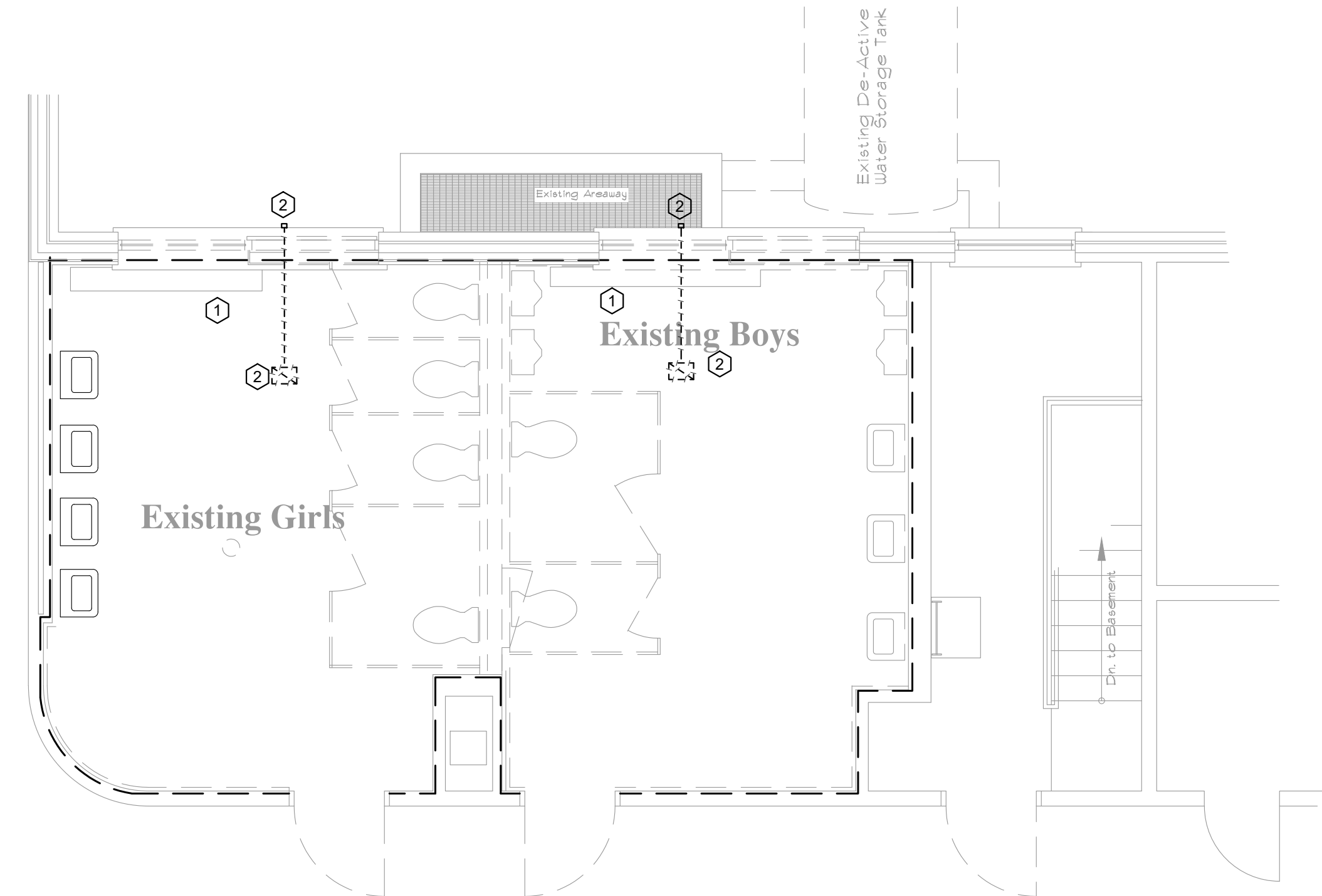


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Date: 2/20/23
 Revisions: REVISION #1



1
 M-1
BASEMENT DEMOLITION PART PLAN
 SCALE: 1/8" = 1'-0"

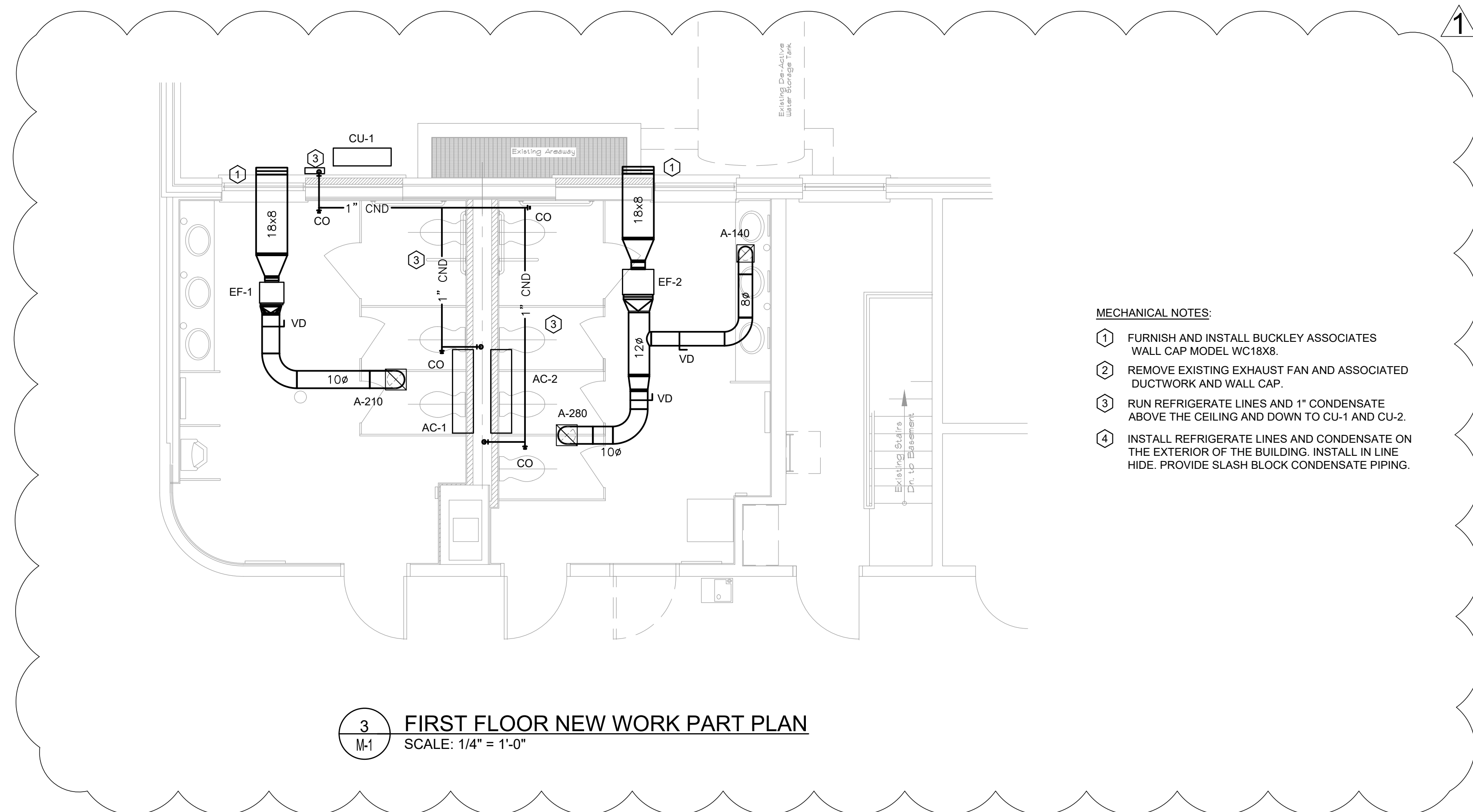


2
 M-1
FIRST FLOOR DEMOLITION PART PLAN
 SCALE: 1/4" = 1'-0"

- MECHANICAL DEMOLITION NOTES:**
- ① REMOVE STEAM CONVECTOR, REMOVE STEAM SUPPLY AND CONDENSATE RETURN BACK TO MAIN AND CAP.
 - ② REMOVE EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK AND WALL CAP.

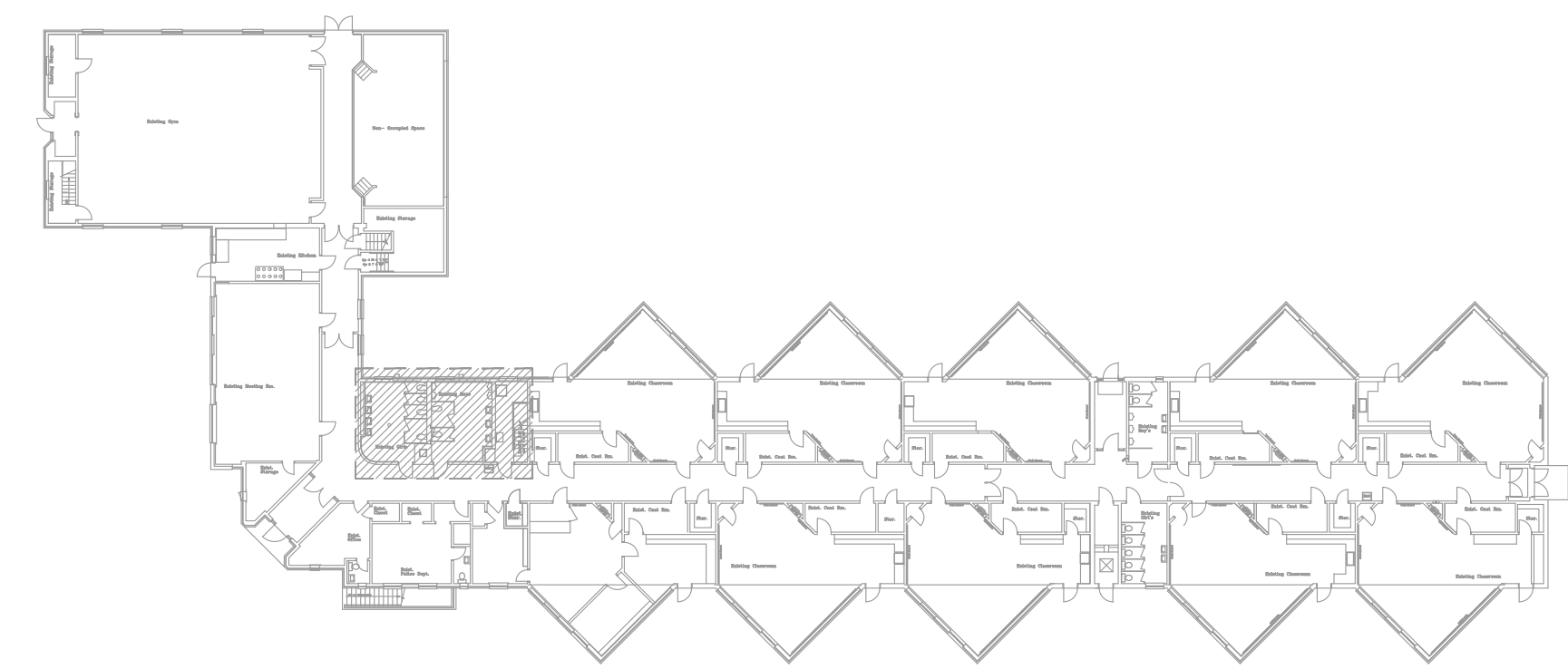
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3
 M-1
FIRST FLOOR NEW WORK PART PLAN
 SCALE: 1/4" = 1'-0"

- MECHANICAL NOTES:**
- ① FURNISH AND INSTALL BUCKLEY ASSOCIATES WALL CAP MODEL WC18X8.
 - ② REMOVE EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK AND WALL CAP.
 - ③ RUN REFRIGERATE LINES AND 1" CONDENSATE ABOVE THE CEILING AND DOWN TO CU-1 AND CU-2.
 - ④ INSTALL REFRIGERATE LINES AND CONDENSATE ON THE EXTERIOR OF THE BUILDING. INSTALL IN LINE HIDE. PROVIDE SLASH BLOCK CONDENSATE PIPING.



Key Plan Main Level Floor
 No Scale

Plans MECHANICAL FLOOR PLANS

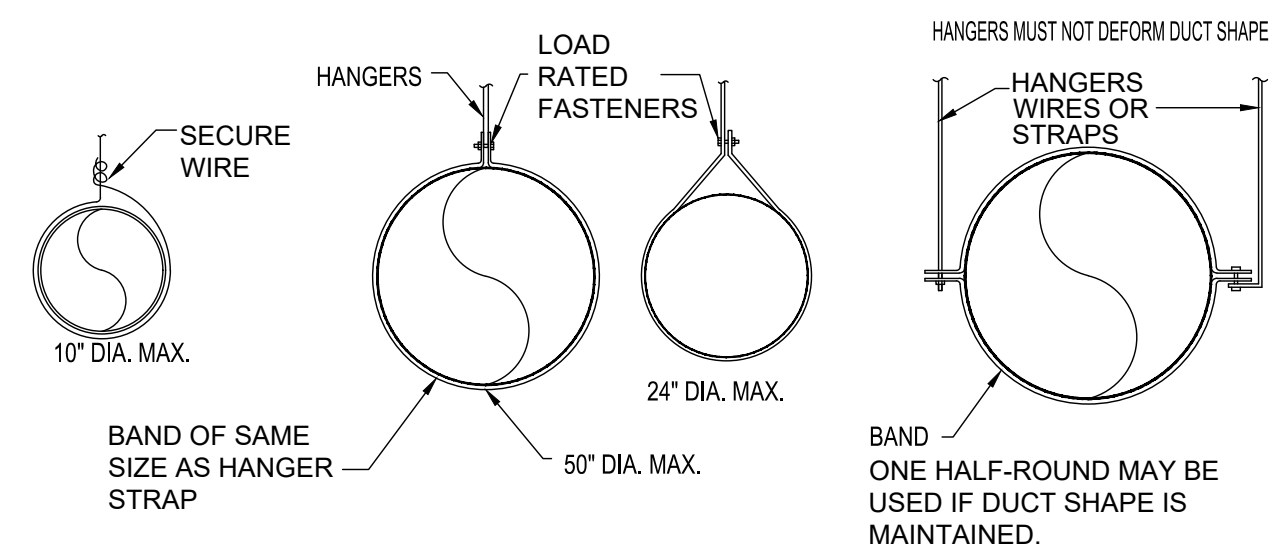
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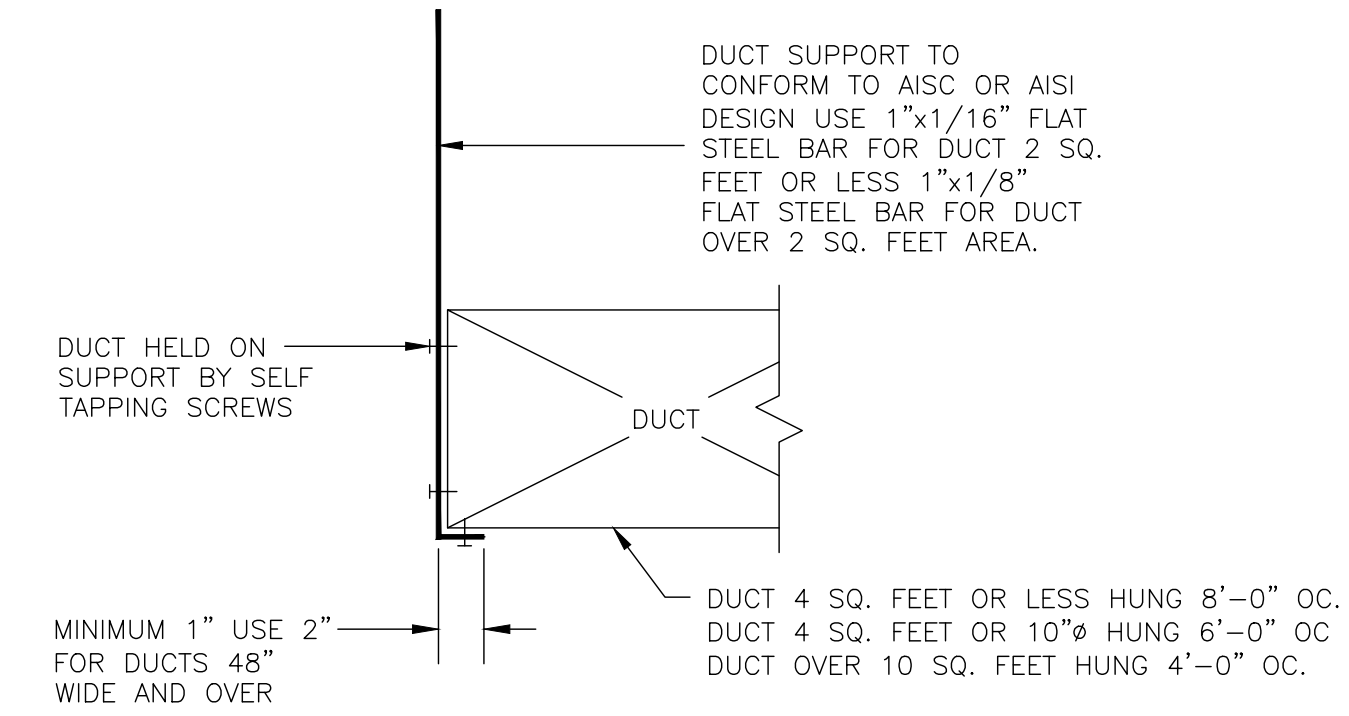
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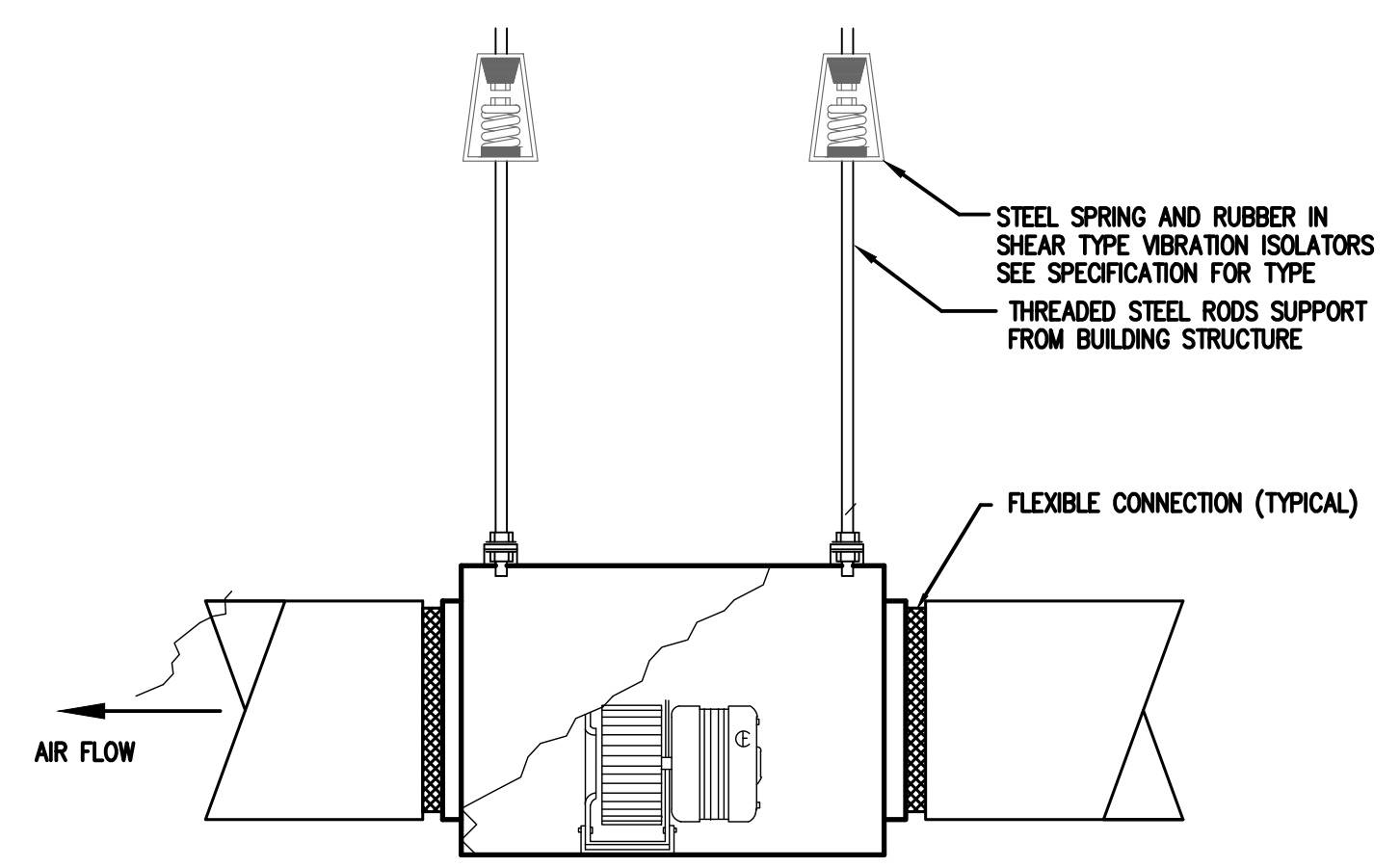
MINIMUM HANGER SIZES FOR ROUND DUCT			
DIA.	MAXIMUM SPACING	WIRE DIA.	STRAP
10" dn	12'	One 12 ga.	1" x 22 ga.
11-18"	12'	Two 12 ga. or One 8 ga.	1" x 22 ga.
19-24"	12'	Two 10 ga.	1" x 22 ga.
25-36"	12'	Two 8 ga.	1" x 20 ga.
37-50"	12'	Two 10 ga.	Two 1" x 20 ga.
51-60"	12'	Two 8 ga.	Two 1" x 18 ga.
61-84"	12'	Two 8 ga.	Two 1" x 16 ga.

FOR ADDITIONAL INFORMATION REFER TO THE LATEST EDITION OF SMACNA

1
 M-2 **ROUND DUCT HANGER DETAIL**
 SCALE: N.T.S



2
 M-2 **RECTANGULAR DUCT HANGER DETAIL**
 SCALE: N.T.S



3
 M-2 **IN-LINE FAN DETAIL**
 SCALE: N.T.S

DUCTLESS SPLIT SYSTEM SCHEDULE								
EVAPORATOR UNIT								
TAG	MFR	MODEL	CFM	COOLING (BTUH)	HEATING (BTUH)	MAX SOUND LEVEL dB(c)	MOUNTING	VOLTS/ PHASE
AC-1	DAIKIN	FS12NA	137-226-221-304-424	12,000	12,300	21-24-29-36-44	WALL	208/1
AC-2	DAIKIN	FS12NA	137-226-221-304-424	12,000	12,300	21-24-29-36-44	WALL	208/1
CONDENSING UNIT								
TAG	CAPACITY (TONS)	MODEL	REFRIGERANT TYPE	SEER	MCA	MOCP	VOLTS/ PHASE	
CU-1	1.5	MXZ-3C24NA3	R410A	20.0	22.1	25	208/1	

GENERAL NOTES/ACCESSORIES:

1. ACCEPTABLE MANUFACTURERS BY: DAIKIN, SAMSUNG, FUJITSU
2. PROVIDE WIRED DELUXE REMOTE CONTROLLER
3. PROVIDE CONDENSATE PUMP EQUAL TO ASPEN MINI.
4. PROVIDE EACH AC UNIT WITH MODEL PAC-YT53CRAU THERMOSTAT AND LOCKING COVER.
5. LOW AMBIENT BAFFLE KIT.
6. PROVIDE UL LISTED DRAIN PAN CONDENSATE OVERFLOW SENSOR
7. VARIABLE COMPRESSOR SPEED INVERTER TECHNOLOGY
8. PROVIDE CONDENSING UNIT SUPPORTS.
9. INSTALL REFRIGERANT PIPING IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.

EXHAUST FAN SCHEDULE								
TAG	MFR	MODEL NUMBER	TYPE	DRIVE	CFM	ESP (IN WC)	RPM	MOTOR WATTS
EF-1	GREENHECK	CSP-A290	INLINE	DIRECT	210	.5	840	102
EF-2	GREENHECK	CSP-A510	INLINE	DIRECT	420	.25	1070	210

TAG	VOLTS/ PHASE	SERVICES	SONES	REMARKS
EF-1	115/1	GIRLS BATHROOM	4.1	① ②
EF-2	115/1	BOYS BATHROOM	2.8	① ②

ACCEPTABLE MANUFACTURERS BY: COOK, TWIN CITY FANS.

ADDITIONAL ACCESSORIES

- ① SWITCH W/PILOT LIGHT
- ② RUBBER ISOLATED MOUNTING BRACKET

REGISTERS, GRILLES, AND DIFFUSERS (RGD'S)			
CEILING RETURN/EXHAUST REGISTER TYPE A			
CFM	NECK SIZE		
0-150	8 x 8		
151-250	10 x 10		
251-350	12 x 12		
351-500	14 x 14		

TYPE	MFG	MODEL	DESCRIPTION
A	PRICE	630	RETURN/EXHAUST CEILING/WALL REGISTER, 0.666" SPACING, ALUMINUM CONSTRUCTION WITH FLANGED BORDERS.

ACCEPTABLE MANUFACTURERS: TITUS, KRUEGER

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Plans
MECHANICAL
SCHEDULE AND
DETAILS

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 DATE: 12/22/2022

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PLUMBING RENOVATION/ DEMOLITION GENERAL NOTES

- BEFORE SUBMITTING BID, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BECOME FULLY FAMILIAR WITH THE EXISTING CONDITIONS AND THE DOCUMENTS OF OTHER TRADES UNDER WHICH THEIR WORK WILL BE ACCOMPLISHED. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS MADE AS A RESULT OF FAILURE TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS.
- THE CONTRACTOR SHALL COORDINATE AND SCHEDULE ANY DAILY INTERRUPTIONS OR SHUTDOWNS OF THE EXISTING SYSTEMS IN ADVANCE WITH OWNER'S DESIGNATED REPRESENTATIVE. THIS SHALL INCLUDE SERVICES INTERRUPTIONS, CONNECTIONS AND DISRUPTIONS EFFECTING OTHER TRADES (MECHANICAL AND ELECTRICAL). INCLUDE ALL WORK REQUIRED TO ALLOW PHASED CONSTRUCTION WHERE NECESSARY.
- DEMOLITION DRAWINGS ARE STRICTLY DIAGRAMMATIC AND SHOW GENERAL ARRANGEMENT AND APPROXIMATE LOCATION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW ALL EQUIPMENT, PIPING OR CONDUIT TO BE REMOVED. EQUIPMENT NOT BEING REUSED SHALL BE REMOVED, INCLUDING ALL ASSOCIATED HANGERS, SUPPORTS, PIPES, CONDUITS, WIRES, AND CONTROLS BACK TO THE POINT OF ORIGIN.
- REFER TO THE ARCHITECTURAL DEMOLITION DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. THE FULL EXTENT OF THE DEMOLITION AND RECONSTRUCTION SCOPE OF WORK SHALL BE DETERMINED BY THE ENTIRE SET OF BID DOCUMENTS.
- THE CONTRACTORS SHALL COORDINATE THE DEMOLITION SCOPE OF WORK WITH THE GENERAL CONTRACTOR'S OR CONSTRUCTION MANAGER'S PHASING SCHEDULE PRIOR TO COMMENCEMENT OF WORK. CARE MUST BE TAKEN SO AS NOT TO DESTROY, REMOVE OR DEMOLISH ANY EQUIPMENT, APPURTENANCES OR DEVICES INTENDED TO REMAIN. PROVIDE TEMPORARY SERVICES AND SYSTEM MODIFICATIONS TO ACCOMMODATE CONTINUOUS OPERATION OF ACTIVE SYSTEM.
- THE LOCATION OF EXISTING PLUMBING SYSTEM SHOWN ON FLOOR PLANS, IS BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL FIELD VERIFY PRIOR TO COMMENCEMENT OF CONSTRUCTION, EXACT QUANTITY AND LOCATION(S) OF EXISTING EQUIPMENT, PIPING, PLUMBING FIXTURES TO BE REMOVED AND ADJUST AS NECESSARY.
- ALL EQUIPMENT, PLUMBING FIXTURES AND ASSOCIATED PIPING INDICATED TO BE REMOVED OR RELOCATED, SHALL BE DISCONNECTED AND REMOVED, INCLUDING HANGERS AND OTHER COMPONENTS, UP TO NEAREST EXISTING ACTIVE MAIN OR BRANCH LINE AND CAPPED AS CLOSE TO THE ACTIVE LINE AS POSSIBLE. NO EQUIPMENT, PIPING, OR CONDUIT SHALL BE ABANDONED IN PLACE, UNLESS SPECIFICALLY NOTED.
- ALL SYSTEMS TO BE REMOVED SHALL BE REMOVED BACK TO THE POINT OF SOURCE. THE CONTRACTOR SHALL VERIFY WHICH SYSTEMS MUST REMAIN ACTIVE TO SERVE ADJACENT SPACES DURING CONSTRUCTION. SHOULD THE CONTRACTOR ENCOUNTER, DURING DEMOLITION OF EXISTING WALLS OR CHASES, ANY PIPING OR CONDUIT WHICH MUST REMAIN ACTIVE, HE SHALL IMMEDIATELY GIVE NOTICE TO THE ENGINEER, GENERAL CONTRACTOR OR CONSTRUCTION MANAGER.
- ALL SALVAGEABLE MATERIALS OR EQUIPMENT TO BE REMOVED SHALL BE TURNED OVER TO THE OWNER AT THE END OF EACH DAY. ITEMS REMOVED AND NOT REUSED OR DISCLAIMED BY THE OWNER SHALL BECOME PROPERTY OF THE TRADE CONTRACTOR AND SHALL BE TRANSPORTED FROM THE SITE. SITE STORAGE OF REMOVED ITEMS WILL NOT BE PERMITTED.
- PROPERLY DISPOSE OF ALL DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES AND REGULATIONS; THIS APPLIES TO HAZARDOUS MATERIALS AND CONTAMINATED ITEMS TO BE DEMOLISHED.
- THE PLUMBING CONTRACTOR SHALL VERIFY EXACT LOCATION AND INVERT ELEVATION OF EXISTING BURIED SANITARY, WASTE OR STORM PIPING PRIOR TO ANY EXCAVATION FOR NEW PIPING CONNECTION AND SHALL NOTIFY ENGINEER OF ANY PROBLEMS.

PLUMBING GENERAL NOTES

- THE PROJECT DRAWINGS AND SPECIFICATIONS ARE BASED ON THE CONSTRUCTION SPECIFICATIONS INSTITUTE (CSI) DOCUMENTATION FORMAT. SPECIFICATION AND DRAWING CONTENTS ARE ARRANGED BY TOPIC AND CATEGORY AND ARE NOT INTENDED TO AWARD DIVISION OF WORK.
- ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH CURRENT APPLICABLE CODES, ORDINANCES, THE REGULATORY AGENCIES HAVING JURISDICTION AND THE SPECIFICATIONS. THE SPECIFICATIONS MAY EXCEED THE REQUIREMENTS OF THE CODE, IN WHICH CASE, THE SPECIFICATION MUST BE FOLLOWED.
- THE INTENT OF THESE DOCUMENTS IS FOR THE MEP TRADES TO FURNISH AND INSTALL COMPLETE MECHANICAL AND ELECTRICAL SYSTEMS. THE SPECIFIED PLUMBING SYSTEM SHALL BE COMPLETE IN ALL RESPECTS; OPERATIONAL, TESTED, ADJUSTED, APPROVED BY THE AUTHORITIES HAVING JURISDICTION AND READY FOR BENEFICIAL USE BY THE OWNER.
- THE TRADES SHALL OBTAIN AND REVIEW ALL CONTRACT DOCUMENTS BEFORE SUBMITTING A BID. INFORMATION IS PROVIDED ON THE VARIOUS DRAWINGS, SCHEDULES, SPECIFICATIONS AND ALL OF THE VARIOUS DOCUMENTS IN THE BIDDING PACKAGE. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY AND FORM A TOTAL PROJECT DESIGN AND INFORMATION SOURCE FOR CONSTRUCTION PURPOSES.
- THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. COORDINATE LOCATIONS OF EQUIPMENT WITH OTHER TRADES BEFORE AND DURING CONSTRUCTION. ANY MODIFICATION TO THE EQUIPMENT LAYOUT, REQUIRED FOR INSTALLATION, IS TO BE PERFORMED UNDER THE CONTRACT AGREEMENT, AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL ARRANGEMENT OF EQUIPMENT AND PIPING. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF EQUIPMENT AND PIPING INSTALLATION WITH ALL THE TRADES BEFORE COMMENCING WORK.
- EQUIPMENT SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS. WHEN EQUIPMENT MUST BE LOCATED ABOVE AN INACCESSIBLE CEILING (GYP BOARD OR EQUIVALENT), OR BEHIND A WALL, AN APPROPRIATE ACCESS DOOR SHALL BE PROVIDED. IF AN ACCESS DOOR IS REQUIRED, IT SHALL BE OF A RATING APPROPRIATE FOR THE WALL/CEILING IN WHICH IT IS TO BE INSTALLED. THE CONTRACTOR SHALL COORDINATE LOCATIONS OF ACCESS PANELS FOR ALL VALVES AND DEVICES, REQUIRING ACCESS, WITH THE ARCHITECT, PRIOR TO INSTALLATION OF SUCH DEVICES OR OTHER APPURTENANCES.
- COORDINATE EXACT LOCATION OF PLUMBING SERVICES ENTERING THE BUILDING WITH THE SITE CONTRACTOR AND UTILITY DRAWINGS PRIOR TO INSTALLATION. COORDINATE ALL FOUNDATION WALL PENETRATIONS AND INVERT ELEVATIONS WITH THE GENERAL CONTRACTOR AND/OR CONSTRUCTION MANAGER BEFORE COMMENCING WORK.
- WHERE A CONFLICT OCCURS BETWEEN THE DOCUMENTS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. CARRY AS PART OF THE BID THE LARGER QUANTITY AND/OR MORE EXPENSIVE ITEM(S).
- THIS CONTRACT SHALL INCLUDE ALL THE NECESSARY PIPING, FITTINGS, TRANSITIONS ETC. AS REQUIRED TO INSTALL PIPING AND EQUIPMENT, AND TO AVOID ANY CONFLICTS WITH OTHER TRADES AND THE BUILDING STRUCTURE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS HE MAKES AS A RESULT OF HIS FAILURE TO COORDINATE WITH OTHER TRADES OR BECOME FULLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES.
- DO NOT INSTALL ANY PIPING OVER ELECTRICAL PANELS, TRANSFORMERS, SPECIAL EQUIPMENT, OR THROUGH ROOMS THAT ARE NOT ASSOCIATED WITH OR SERVING THE RESPECTIVE ROOMS. COORDINATE THE LOCATION OF ELECTRICAL EQUIPMENT IN THE FIELD AND ADJUST AS NECESSARY.
- IT IS NOT THE INTENT OF THE DRAWINGS TO SHOW INDIVIDUAL BRANCH PIPING TO EACH PLUMBING FIXTURE. ONLY THE BRANCH PIPING TO GROUPS OF FIXTURES IS INDICATED. EACH AND EVERY FIXTURE SHALL BE PROPERLY PIPED TO WATER, WASTE, AND VENT PIPING SYSTEMS. REFER TO THE PLUMBING SCHEDULES FOR INDIVIDUAL PIPE SIZES TO EACH FIXTURE.
- REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES OR EQUIPMENT. ALL SUCH EQUIPMENT AND EQUIPMENT COLORS AND FINISHES SHALL BE COORDINATED WITH THE ARCHITECT. MOUNTING HEIGHTS SHALL BE APPROVED BY THE ARCHITECT.
- FLOOR MOUNTED PLUMBING EQUIPMENT SHALL BE INSTALLED ON A 6" CONCRETE HOUSE-KEEPING PAD. COORDINATE SIZE AND FINAL LOCATION OF ALL CONCRETE PADS WITH THE STRUCTURAL ENGINEER. PADS SHALL BE MINIMUM 6" LARGER THAN THE EQUIPMENT IN BOTH HORIZONTAL DIRECTIONS.
- INSTALL WATER HAMMER ARRESTORS (WHA) AT ALL QUICK CLOSING VALVES (FLUSH VALVES, SOLENOID VALVES, ETC.); SIZE SHALL BE BASED ON FIXTURE UNITS PER PDI STANDARDS AND INSTALLED PER MANUFACTURER'S RECOMMENDATION.
- ALL PIPING, DRAINS, STRAINERS, FAUCETS, FAUCET AERATORS, FILTERS, ETC. SHALL BE THOROUGHLY CLEANED AND FLUSHED IMMEDIATELY BEFORE PROJECT COMPLETION. PROVIDE CERTIFICATION ON CONTRACTOR'S LETTER HEAD THAT THIS WORK HAS BEEN COMPLETED.
- DOMESTIC WATER DROPS AND RISERS INSTALLED IN EXTERIOR WALLS SHALL BE INSTALLED ON THE WARM SIDE OF INSULATION AND THE LOCATION SHALL BE MADE INFILTRATION FREE.
- BEFORE INSTALLATION, COORDINATE THE WORK WITH OWNER-FURNISHED EQUIPMENT, INCLUDING REQUIRED SERVICE CONNECTIONS, FACTORY START UPS AND INSTALLATION OF FIELD DEVICES.
- PIPE ALL CONDENSATE DRAINS FROM MECHANICAL EQUIPMENT COOLING COILS, BY GRAVITY (INTERIOR AIR HANDLING UNITS, FAN COIL UNITS, AC UNITS, ETC.) TO FLOOR DRAINS OR JANITOR'S SINKS OR OTHER APPROVED LOCATION THROUGH AN AIR GAP. EACH CONDENSATE DRAIN SHALL BE TRAPPED AT THE EQUIPMENT DRAIN OUTLET. REFER TO TRAP DETAILS ON DRAWINGS. COORDINATE EXACT LOCATION OF EQUIPMENT WITH THE HVAC CONTRACTOR AND ADJUST AS NECESSARY.
- INSULATE ALL WASTE ABOVE SLAB "P" TRAPS AND BRANCH WASTE PIPING RECEIVING CONDENSATE FROM EQUIPMENT.
- ALL INDIRECT WASTE DRAINS SHALL BE PIPED TO FLOOR DRAINS, FUNNELS OR FIXED AIR GAP FITTINGS, THROUGH AIR GAP OR TO A SINK DRAIN TAILPIECE.
- INSTALL TRAP PRIMERS FOR EACH INDIVIDUAL FLOOR DRAIN OR, AS A OPTION, CONTRACTOR MAY UTILIZED UTILITY DISTRIBUTION UNIT FOR MULTIPLE DRAIN. CONNECT TRAP PRIMER TO NEAREST ACTIVE COLD WATER MAIN; PROVIDE ISOLATION VALVES AND EXTEND TO FLOOR DRAIN.
- COORDINATE ALL PLUMBING EQUIPMENT REQUIRING POWER, FOR EXACT LOCATION AND POWER REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR.
- SEISMICALLY SUPPORT THE EQUIPMENT AS REQUIRED BY CODE, THE AUTHORITY HAVING JURISDICTION, AND/OR AS SPECIFIED. SUBMIT ENGINEERED INSTALLATION DETAILS PER THE SPECIFICATIONS. THE CONTRACTOR'S SEISMIC ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A REPORT FOR THE RECORD.
- PROVIDE PIPE EXPANSION COMPENSATION FOR THE VARIOUS PIPING SYSTEMS. SUBMIT ENGINEERED DETAILS FOR APPROVAL AND VERIFY INSTALLATION IS IN ACCORDANCE WITH THE CODE. THE CONTRACTOR'S CONSULTING ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A REPORT OF THE FINDINGS.

ABBREVIATIONS	
AAV	AIR ADMITTANCE VALVE
ABV.	ABOVE
AFF	ABOVE FINISHED FLOOR
BEL	BELOW
BFP	BACKFLOW PREVENTER DEVICE
BV	BALANCE VALVE
CW	COLD WATER
HW	HOT WATER
CO	CLEANOUT
ECO	CLEANOUT, EXISTING
CLG	CEILING
CP	CIRCULATOR PUMP
CFH	CUBIC FEET PER HOUR
CND	CONDENSATE DRAIN PIPING
DF	DRINKING FOUNTAIN
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EX., EXIST.	EXISTING
FL	FLOOR
FS	FLOOR SINK
G	GAS
GPM	GALLONS PER MINUTE
HW	HOT WATER
HC	HANDICAPPED ACCESSIBLE
INV. ELEV.	INVERT ELEVATION
LAV	LAVATORY
PSI	POUNDS PER SQUARE INCH
RD	ROOF DRAIN
SAN	SANITARY
TMV	THERMOSTATIC MIXING VALVE
UR	URINAL
V	VENT
VIF	VERIFY IN FIELD
VTR	VENT THRU ROOF
W	WASTE
WC	WATER CLOSET
WHA	WATER HAMMER ARRESTOR
WCO	WALL CLEANOUT

PLUMBING SYMBOL LEGEND	
	BALL VALVE
	BUTTERFLY VALVE
	GATE VALVE
	CHECK VALVE
	BACKFLOW PREVENTER ASSEMBLY (RPZ)
	BALANCING VALVE (CALIBRATED)
	GAS VALVE, (BALL OR PLUG)
	PRESSURE REDUCING VALVE
	SOLENOID VALVE
	THERMOSTATIC MIXING VALVE
	HOT WATER RETURN PUMP
	HOSE BIBB (HB) OR DRAIN VALVE
	WALL HYDRANT (WH) (EXTERIOR)
	GLOBE VALVE
	MOTORIZED VALVE
	UNION
	STRAINER
	PIPE DROP WITH VALVE
	PIPE ELBOW DOWN OR DROP
	PIPE ELBOW UP
	WALL CLEANOUT
	PIPE CAP
	P-TRAP
	OVERFLOW DOWNSPOUT NOZZLE (ODN)
	T&P RELIEF VALVE
	WATER METER ASSEMBLY
	GAS METER ASSEMBLY
	GAS PRESSURE REGULATOR
	PRESSURE GAUGE
	THERMOMETER
	TRAP PRIMER
	ELECTRONIC TRAP PRIMER
	FLOOR CLEANOUT
	FLOOR DRAIN (FD)
	FLOOR SINK (FS)

PLUMBING PIPING SYMBOL LEGEND	
	FIRE SERVICE
	WATER SERVICE
	COLD WATER
	HOT WATER
	HOT WATER RECIRCULATION
	VENT PIPING
	SANITARY OR WASTE ABOVE GRADE
	SANITARY OR WASTE BURIED
	COMBINATION WASTE & VENT ABOVE GRADE
	COMBINATION WASTE & VENT BURIED
	INDIRECT WASTE
	STORM DRAIN BURIED
	PIPING WITH HEAT TRACE or HEAT CABLE
	PIPING - DEMOLITION (TO BE REMOVED)

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Boy's & Girls Restroom Modifications
Fair Oaks School
Community Center
 836 Old Colchester Road Oakdale, CT.

**Plans
 PLUMBING
 GENERAL NOTES
 AND LEGEND**

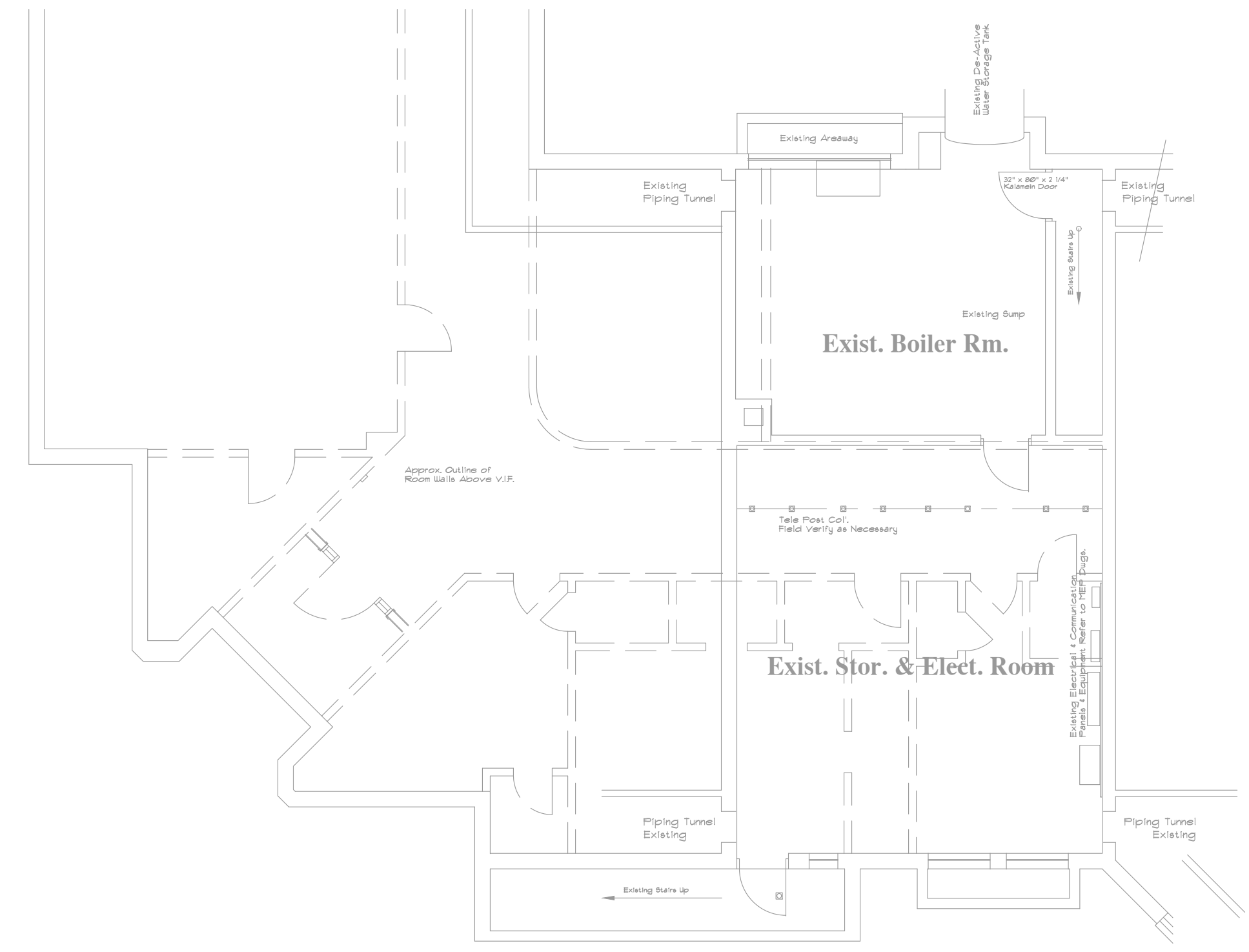
PROJECT NO: 2022-10.22
 SCALE: AS NOTED
 DRAWN BY: FSM
 CHECKED BY: BJZ
 DATE: 12/22/2022
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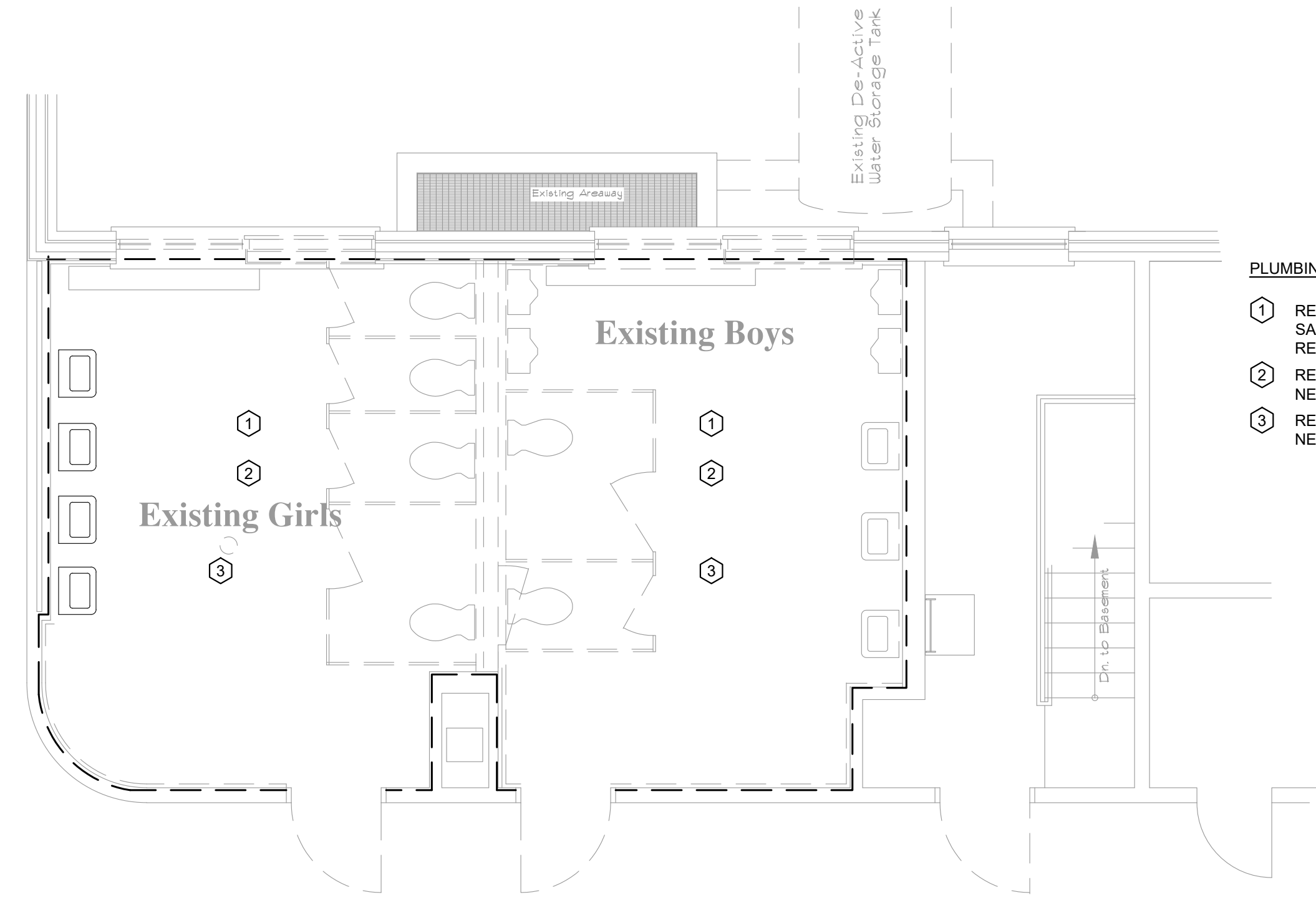


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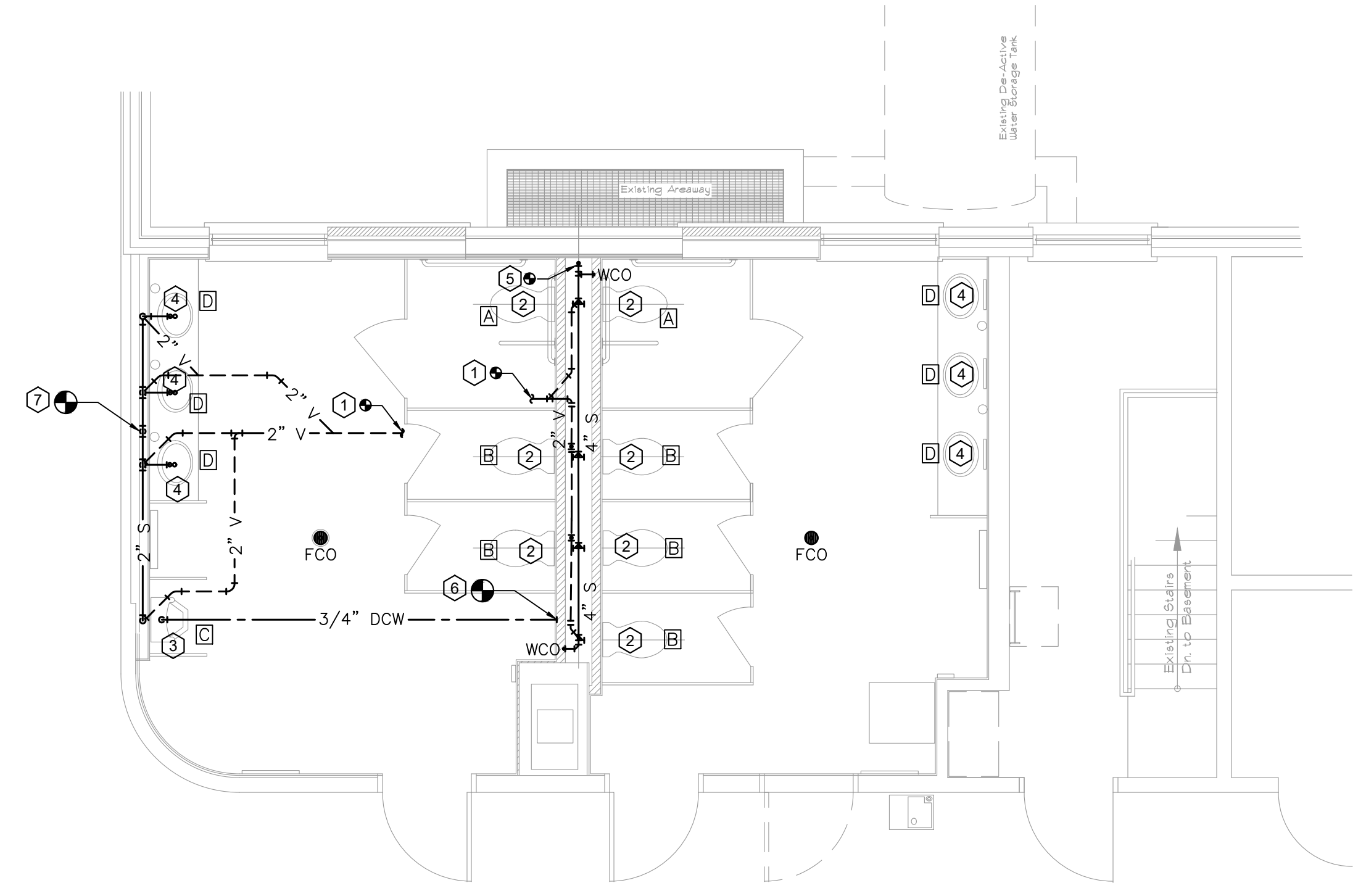
1 BASEMENT DEMOLITION PART PLAN
 SCALE: 1/8" = 1'-0"



2 FIRST FLOOR DEMOLITION PART PLAN
 SCALE: 1/4" = 1'-0"

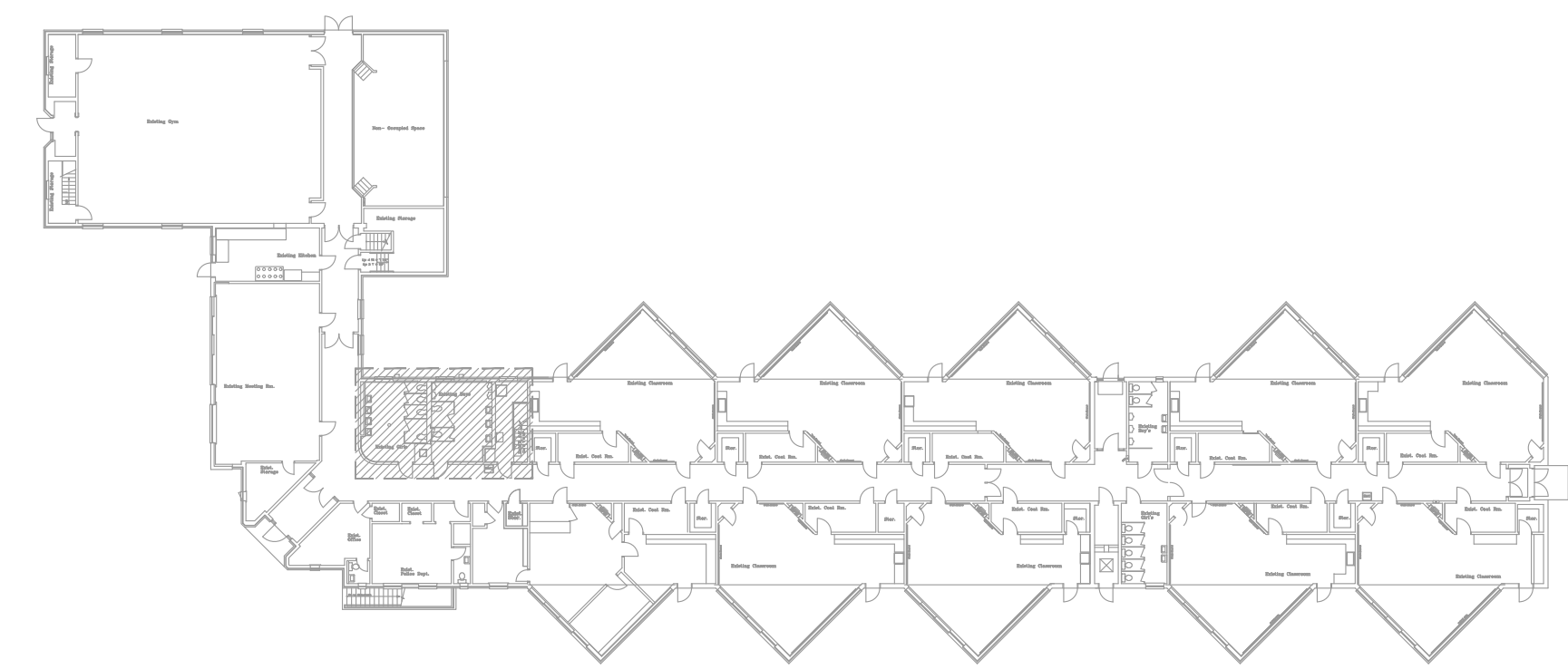
- PLUMBING DEMOLITION NOTES:**
- 1 REMOVE ALL PLUMBING FIXTURES, DOMESTIC WATER, SANITARY, WASTE AND VENT FAR ENOUGH AWAY TO RE-PIPE FOR THE NEW FIXTURES LOCATIONS.
 - 2 REMOVE ALL HANGERS AND CARRIERS. PREPARE FOR NEW WORK.
 - 3 REMOVE EXISTING FLOOR DRAIN AND PREPARE FOR NEW WORK.

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3 FIRST FLOOR NEW WORK PART PLAN
 SCALE: 1/4" = 1'-0"

- PLUMBING KEY NOTES:**
- 1 CONNECT NEW 2" VENT TO EXISTING. VERIFY EXACT LOCATION IN THE FIELD.
 - 2 INSTALL ALL NEW CARRIERS FOR WATER CLOSETS AND RE-PIPE THE DOMESTIC COLD WATER. INSTALL WATER HAMMER ARRESTERS PER DETAIL #1 ON DRAWING P-2.
 - 3 INSTALL ALL NEW CARRIERS FOR URNLS AND RE-PIPE THE DOMESTIC COLD WATER, WASTE AND VENT. INSTALL WATER HAMMER ARRESTERS PER DETAIL #1 ON DRAWING P-2.
 - 4 RE-PIPE THE DOMESTIC HOT & COLD WATER, WASTE AND VENT FOR NEW LAVATORY SINK LOCATIONS.
 - 5 4" SANITARY DOWN TO BASEMENT. CONNECT TO EXISTING SANITARY IN BASEMENT. VERIFY THE EXACT LOCATION IN THE FIELD.
 - 6 CONNECT NEW 3/4" DCW TO EXISTING IN WET WALL.
 - 7 CONNECT NEW 2" WASTE TO EXISTING. FIELD VERIFY THE EXISTING LOCATION.



Key Plan Main Level Floor
 No Scale

Boy's & Girls Restroom Modifications
Fair Oaks School
Community Center
 836 Old Colchester Road Oakdale, CT.

Plans
PLUMBING
FLOOR PLANS

PROJECT NO:	2022-10-22
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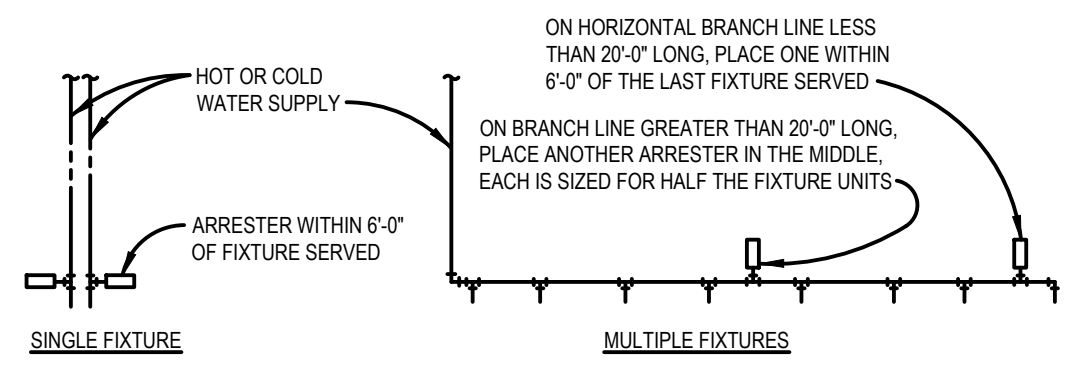
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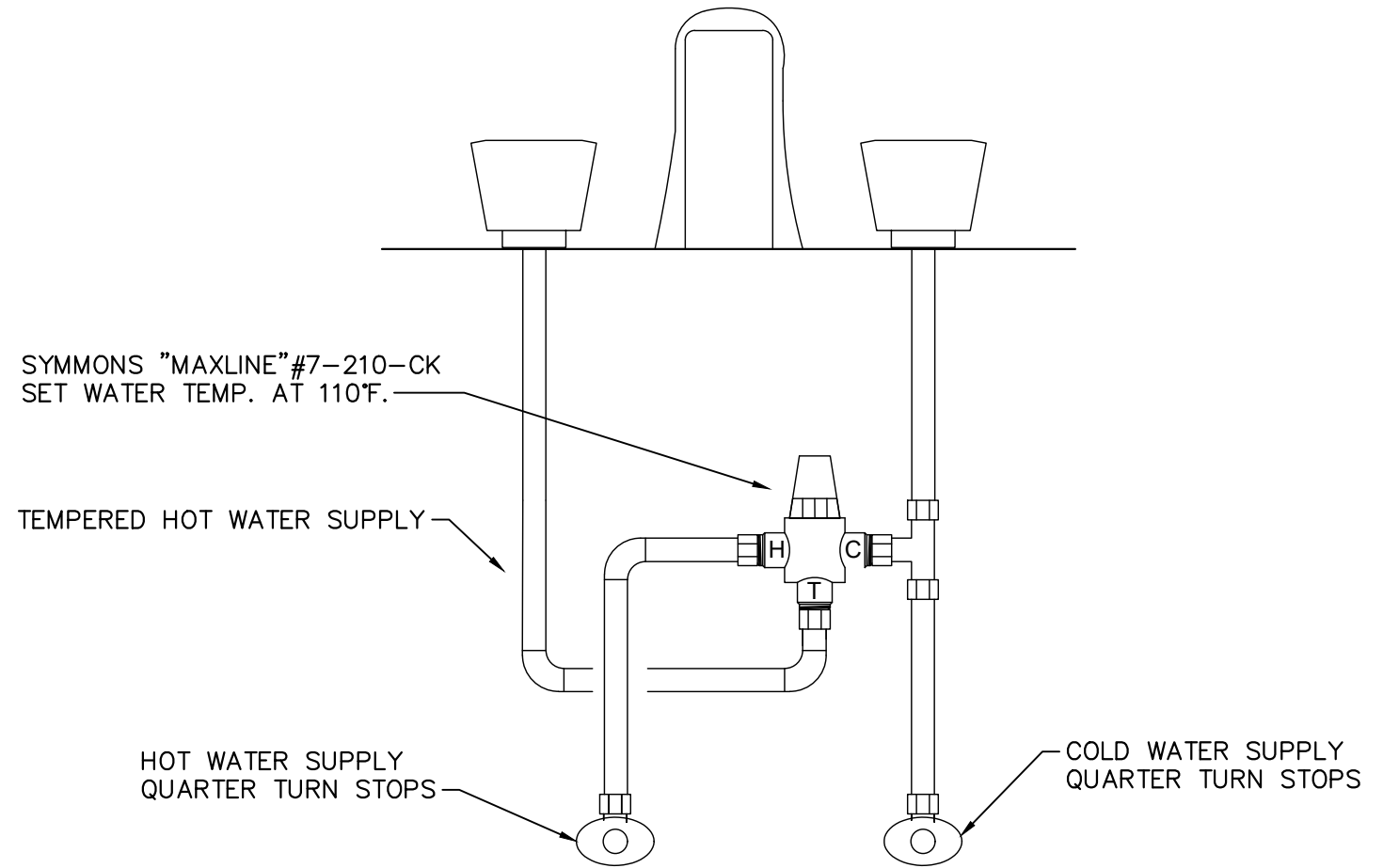


PDI SIZE	FIXTURE UNIT LOAD
AA	1-3
A	4-11
B	12-32
C	33-60
D	61-113
E	114-154
F	155-330

FIXTURE UNIT TABULATION		
FIXTURE	COLD	HOT
VALVE WATER CLOSET	10	-
TANK WATER CLOSET	5	-
URINAL	5	-
LAVATORY	1.5	1.5
SINK	2	2
MOP BASIN	3	3
SHOWER/BATH TUB	2	3
DRINKING FOUNTAIN	0.5	-

PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUIVALENT WITH PISTON AND O-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE #1010 OR ANSI #A112.26.1M CERTIFICATION. SIZE AND INSTALL PER PDI #WH-201 STANDARD OR MANUFACTURER'S INSTRUCTION. TABLES ABOVE ARE BASED ON SIOUX CHIEF PRODUCT LINE. IF PRESSURE IS IN EXCESS OF 65 PSIG THEN UPSIZE ARRESTER BY ONE (EXAMPLE: AN 'A' ARRESTER WOULD BECOME A 'B' ARRESTER.)

1 WATER HAMMER ARRESTERS
 SCALE: N.T.S



2 BELOW DECK MIXING VALVE DETAIL
 SCALE: N.T.S

SYMBOL	FIXTURE TYPE	MANUFACTURER MODEL NUMBER	PIPE SIZES				DESCRIPTION
			HOT (IN)	COLD (IN)	SOIL OR WASTE (IN)	VENT (IN)	
A	WC ^H C	AMERICAN STANDARD "AFWALL" MODEL #3351.128	---	1	4	2	WALL MOUNTED, SIPHON JET FLUSH ACTION TYPE, WATER CLOSET. VITREOUS CHINA, ELONGATED BOWL, 1.28 GALLON FLUSH CYCLE, 1-1/2" TOP SPUD, FURNISH COMPLETE WITH GASKET, BOLTS AND CAPS, COLOR: WHITE SEAT: CHURCH, MODEL 3155C: ELONGATED OPEN FRONT SEAT, WITHOUT COVER, ANTI-BACTERIAL. COLOR: WHITE CARRIER: SMITH OR EQUAL FLUSH VALVE: SLOAN ROYAL, MODEL 115-1.28 MANUAL WATER CLOSET FLUSH VALVE, DIAPHRAGM TYPE, 1.28 GPF, VACUUM BREAKER, 1-1/2" TOP SPUD, ANGLE VALVE SCREWDRIVER STOP, VANDAL RESISTANT STOP CAP, BUMPER.
B	WC	AMERICAN STANDARD "AFWALL" MODEL #3351.128	---	1	4	2	WALL MOUNTED, SIPHON JET FLUSH ACTION TYPE, WATER CLOSET. VITREOUS CHINA, ELONGATED BOWL, 1.28 GALLON FLUSH CYCLE, 1-1/2" TOP SPUD, FURNISH COMPLETE WITH WAX GASKET, BOLTS AND CAPS, COLOR: WHITE SEAT: CHURCH, MODEL 3155C: ELONGATED OPEN FRONT SEAT, WITHOUT COVER, ANTI-BACTERIAL. COLOR: WHITE CARRIER: SMITH OR EQUAL FLUSH VALVE: SLOAN ROYAL, MODEL 115-1.28 MANUAL WATER CLOSET FLUSH VALVE, DIAPHRAGM TYPE, 1.28 GPF, VACUUM BREAKER, 1-1/2" TOP SPUD, ANGLE VALVE SCREWDRIVER STOP, VANDAL RESISTANT STOP CAP, BUMPER.
C	URINAL	AMERICAN STANDARD "WASHBROOK" MODEL #6590.125	---	3/4	2	2	WALL HUNG, FLUSHING RIM, WASHOUT FLUSH ACTION, VITREOUS CHINA, EXTENDED SIDES, 0.125 GALLON FLUSH, 3/4" TOP INLET, 2" OUTLET. FURNISH COMPLETE WITH GASKET, AND MOUNTING HARDWARE. COLOR: WHITE MEETS ANSI A117.1 AND A.D.A. REQUIREMENTS. CARRIER: SMITH OR EQUAL FLUSH VALVE: SLOAN ROYAL, MODEL 186-0.13 URINAL FLUSH VALVE, DIAPHRAGM TYPE, 0.13 GPF, VACUUM BREAKER, 3/4" TOP SPUD, ANGLE VALVE SCREWDRIVER STOP, VANDAL RESISTANT STOP CAP, BUMPER.
D	WC ^H C	AMERICAN STD. "RONDALYN" MODEL #0491019.020	1/2	1/2	1-1/2	1-1/2	DROP-IN COUNTERTOP SINK, VITREOUS CHINA, UNGLAZED RIM, REAR OVERFLOW, OVERALL DIMENSIONS 19-1/8", MOUNTING KIT AND TEMPLATE. 3-HOLE DRILLING, 4" CENTERS, COORDINATE WITH ARCHITECT. COLOR: WHITE MEETS ANSI A117.1 AND A.D.A. REQUIREMENTS FAUCET TO BE DELTA, MODEL #523LF-TGMHDF, SINGLE LEVER HANDLE, 4" CENTERS WITH DECK PLATE, 1/2" I.P. ADAPTERS, BRUSHED NICKEL FINISH. 1.2 GPM AERATOR (0.5 GPM AERATOR FOR PUBLIC FAUCETS). #BDT THERMOSTATIC MIXING VALVE. TRIM: CHROME PLATED CAST BRASS OFFSET TAILPIECE AND 1-1/2" CHROME PLATED P-TRAP, MINIMUM 17ga CONSTRUCTION. 3/8" N.P.T. ANGLE SUPPLY CONNECTION AND FOUR ARM HANDLE STOP TRUEBRO INSULATION KIT FOR DRAIN AND WATER PIPING.
WCO	CLEANOUT WALL TYPE	SMITH MODEL #4450, WITH COVER SCREW LENGTH VERIFIED IN THE FIELD	---	---	4	---	CAST IRON CLEANOUT TEE AND COUNTERSUNK PLUG WITH CHROME PLATED, BRONZE ROUND FRAME AND SECURED COVER. PROVIDE WITH VANDAL PROOF SCREWS AND POLISHED BRONZE FRAME AND COVER. SIZE AS INDICATED ON FLOOR PLANS. MODEL 4550S: FACE OF WALL - TILE, MASONRY, DRY WALL MODEL 4555S: FLUSH WITH WALL - PLASTER, WET WALL
FCO	CLEANOUT FLOOR TYPE	SMITH MODEL #4120 SERIES	---	---	VERIFY IN FIELD	---	CAST IRON CLEANOUT WITH ROUND, ADJUSTABLE CORRUGATED SECURED NICKEL BRONZE TOP. GASKET TYPE SEAL WITH BRONZE CLOSURE PLUG. SUPPLY WITH FLASHING FLANGE WITH FLASHING CLAMP, VANDAL PROOF, POLISHED BRONZE TOP. SIZE AS INDICATED ON FLOOR PLANS

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Boy's & Girls Restroom Modifications
Fair Oaks School
Community Center
 836 Old Colchester Road Oakdale, CT.

Plans
PLUMBING
SCHEDULE AND
DETAILS

PROJECT NO:	2022-10.22
SCALE:	AS NOTED
DRAWN BY:	FSM
CHECKED BY:	BJZ
DATE:	12/22/2022

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Date: _____
 Revisions: _____

PLUMBING SPECIFICATIONS

GENERAL CONDITIONS OF THE CONTRACT

IT IS THE INTENT OF THE SPECIFICATIONS AND DRAWINGS TO PROVIDE FOR FINISHED WORK, TESTED AND READY FOR OPERATION.

WORK OF THIS SECTION SHALL BE GOVERNED BY THE CONTRACT DOCUMENTS. PROVIDE MATERIALS, LABOR, EQUIPMENT AND SERVICES NECESSARY TO FURNISH, DELIVER AND INSTALL ALL WORK AS SPECIFIED AND AS REQUIRED BY JOB CONDITIONS. WHERE A CONFLICT EXISTS BETWEEN THESE NOTES, THE DRAWINGS AND THE FOLLOWING SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.

ITEMS AND SERVICES NOT SHOWN ON THE DRAWINGS OR STATED IN THE SPECIFICATIONS, BUT REQUIRED TO RENDER THE WORK COMPLETE AND READY FOR OPERATION, SHALL BE PROVIDED WITHOUT ADDITIONAL COST.

DRAWINGS ARE DIAGRAMMATIC AND ARE NOT TO BE SCALED. DRAWINGS INDICATE A GENERAL ARRANGEMENT OF WORK AND ARE NOT TO BE CONSIDERED SUB-CONTRACTOR DOCUMENTS. IT IS THE INTENT OF THESE DOCUMENTS TO INCLUDE THE PROVISION AND INSTALLATION OF ALL NECESSARY WORK AND MATERIALS FOR COMPLETE, OPERATIONAL AND CODE COMPLIANT SYSTEMS BY THE CONTRACTOR.

GENERAL DESIGN CONCEPTS INDICATED MUST BE FOLLOWED OR BETTERED.

THE BID SHALL INCLUDE OFFSETS, ADDITIONAL PIPING, VALVES, EQUIPMENT AND COMPONENTS AS REQUIRED TO MEET CONSTRUCTION CONDITIONS FOR PROPER OPERATION.

THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED AND PAY ALL APPLICABLE FEES. INCLUDED SHALL BE ANY UTILITY COST ASSOCIATED WITH ANY NEW OR MODIFIED SERVICES.

CONSULT ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR SPACE CONDITIONS AND ADDITIONAL REQUIREMENTS.

PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT'S GENERAL CONDITIONS AND IN COORDINATION WITH ALL OTHER TRADES. ALL WORK SHALL BE DONE IN CONFORMANCE AND PROVISIONS OF ALL APPLICABLE LOCAL, STATE AND FEDERAL CODES AND LAWS AS REFERENCED OR STATED.

CONNECTICUT CODES AND STANDARDS:
 2021 INTERNATIONAL BUILDING CODE
 2021 INTERNATIONAL ENERGY CONSERVATION CODE WITH AMENDMENTS
 2021 INTERNATIONAL EXISTING BUILDING CODE
 2021 INTERNATIONAL MECHANICAL CODE
 2021 INTERNATIONAL PLUMBING CODE
 2020 NATIONAL ELECTRICAL CODE (NFPA 70)
 ICC/ANSI A117.1-2009 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

WORK SHALL INCLUDE ALL INCIDENTALS, LABOR, MATERIAL, EQUIPMENT, APPLIANCES, SERVICES, HOISTING, SCAFFOLDING, SUPPORTS, TOOLS, CONSUMABLE ITEMS AND ADMINISTRATIVE TASKS/DUTIES REQUIRED TO COMPLETE AND MAKE OPERABLE WORK SHOWN ON THE DRAWINGS OR SPECIFIED HEREIN.

STORE MATERIALS INSIDE AND PROTECTED FROM DEBRIS, WEATHER AND MOISTURE.

COORDINATION
 CONTRACTOR IS REQUIRED TO OBTAIN COMPLETE SETS OF THE CONTRACT DOCUMENTS FOR COORDINATION WITH ALL OTHER TRADES.

SHOP DRAWINGS

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER INITIAL REVIEW AND APPROVAL, REVISED IF REQUIRED AND RESUBMITTED AS PER ENGINEER'S COMMENTS PRIOR TO CONSTRUCTION.

ACCEPTANCE OF DEVIATIONS OR SUBSTITUTIONS FROM BASE SPECIFIED ITEMS OR EQUIPMENT SHALL BE AT THE ENGINEER'S DISCRETION. ANY CHANGES REQUIRED FOR ACCOMMODATION SHALL BE AT NO ADDITIONAL COST.

OWNER'S MANUAL AND AS BUILT DRAWINGS

UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL PROVIDE AN OWNER'S MANUAL WITH AS-BUILT DRAWINGS REFLECTING INSTALLED CONDITIONS.

THE OWNER'S MANUAL SHALL CONSIST OF ALL DOCUMENTATION PROVIDED AS SHOP DRAWINGS, MANUALS PACKED WITH EQUIPMENT AND COMPLETE PARTS BREAKDOWN WITH PART NUMBERS AND DIAGRAMS. THE OWNER'S MANUALS SHALL BE IN A THREE RING BINDER. PROVIDE NAMES AND PHONE NUMBERS OF SUPPLY HOUSES WHERE PARTS MAY BE PURCHASED.

AS-BUILT DRAWINGS SHALL CONSIST OF FIELD MARK-UPS TO THE CONSTRUCTION DRAWINGS AND INCLUDE ANY ADDITIONAL DETAILS TO CLEARLY REFLECT INSTALLED CONDITIONS. ANY ISSUED OR SUPPLEMENTAL SKETCHES OR DIRECTIVES SHALL BE INCORPORATED INTO THE FINAL CONSTRUCTION MARK-UPS.

CONTRACTOR SHALL MAINTAIN, ON-SITE, A FIELD MARK-UP SET OF DOCUMENTS WHICH SHALL BE KEPT CURRENT WITH ANY CHANGES FROM THE ORIGINAL CONTRACT DOCUMENTS. THESE MARK-UPS ARE TO BE PROVIDED AS AS-BUILT DRAWINGS FOR COMPARISONS.

BASES, HANGERS AND SUPPORTS

THE CONTRACTOR SHALL PROVIDE, OR CAUSE TO BE PROVIDED BY ANOTHER CONTRACTOR, ALL REQUIRED BASES AND SUPPORTS FOR PIPING AND EQUIPMENT PROVIDED UNDER THESE SPECIFICATIONS.

PROVIDE ADJUSTABLE CLEVIS HANGERS FOR ALL SINGLE RUN PIPING, WHERE REQUIRED, OVERSIZE TO ACCOMMODATE INSULATION TO PASS THROUGH, PROVIDE INSULATION SHIELDS, WHERE POSSIBLE, GROUP PIPING TO ALLOW TRAPEZE HANGERS TO BE USED.

PROVIDE ALL ANCHORS, INSERTS AND BEAM CLAMPS REQUIRED FOR HANGERS AND SUPPORTS. IF ADDITIONAL STRUCTURAL MEMBERS OR SUPPORTS ARE REQUIRED, THE CONTRACTOR IS TO COORDINATE WITH THE STRUCTURAL CONTRACTOR FOR PROVISION OF THESE MEMBERS. ALL PIPING AND EQUIPMENT IS TO BE SECURELY FASTENED TO THE BUILDING STRUCTURE IN AN ACCEPTABLE MANNER.

ALL PIPING PASSING THROUGH WALLS AND FLOORS SHALL BE SLEEVED. THE SLEEVES SHALL HAVE AN INSIDE DIAMETER 1" LARGER THAN THE PIPE AND INSULATION, IF INSULATED. INSULATION SHALL PASS CONTINUOUS THROUGH THE SLEEVE.

PIPE SEALS AND FIRE-STOPS

SEAL ALL PIPING PASSING THROUGH FIRE AND/OR SMOKE RATED PARTITIONS, WALLS AND FLOORS WITH A UL LISTED, APPROVED AND TESTED FIRE AND/OR SMOKE SEALING MATERIAL EQUIVALENT TO THE RATING OF THE WALL, PARTITION OR FLOOR. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR COMPATIBILITY WITH WALL AND FLOOR CONSTRUCTION.

FOR INTERIOR PARTITIONS, WALLS AND FLOORS, SLEEVES SIZED TO ALLOW INSULATION TO PASS THROUGH CONTINUOUS WITH A MAXIMUM 1" ANNULAR SPACE BETWEEN THE INSULATION AND SLEEVE. SLEEVES TO BE CUT SMOOTH AND INSTALLED FLUSH WITH FINISHED WALLS AND 2" ABOVE FINISHED FLOORS. FILL THE ANNULAR SPACE WITH UL SEALING MATERIAL.

CLEANING AND PROTECTION AGAINST FOREIGN MATTER

THE JOBSITE SHALL BE KEPT CLEAN AT ALL TIMES. CAP EXPOSED PIPING AND COVER FLOOR DRAINS TO INSURE ADEQUATE PROTECTION AGAINST THE ENTRANCE OF FOREIGN MATTER.

AT COMPLETION OF THE PROJECT, ALL EQUIPMENT, FIXTURES, ETC. SHALL BE CLEANED.

OPERATING INSTRUCTIONS

UPON THE COMPLETION OF ALL WORK, TESTING AND ADJUSTING THE CONTRACTOR SHALL FURNISH PERSONNEL TO INSTRUCT THE OWNER'S REPRESENTATIVES IN THE OPERATION, ADJUSTMENT AND MAINTENANCE OF THE EQUIPMENT AND SYSTEMS FURNISHED.

GUARANTEES

IN ADDITION TO THE CONTRACTOR'S GUARANTEE, PROVIDE ALL APPLICABLE EXTENDED GUARANTEES FOR EQUIPMENT.

PLUMBING PIPING INSULATION

PROVIDE 1" GLASS FIBER INSULATION FOR ALL NEW COPPER PIPING (HOT AND COLD WATER), INCLUDES INSULATION FOR FITTINGS AND VALVES. INSULATION TO BE AS MANUFACTURED BY KNAUF, MANVILLE, OWENS-CORNING OR CERTAIN-TEED.

INSULATION TO HAVE A "K" VALUE OF 0.24 AT 75°F. FLAME SPREAD/SMOKE OF 5/50. MAX. 850°F RATING. VAPOR BARRIER WHITE KRAFT PAPER WITH GLASS FIBER YARN BONDED TO ALUMINIZED FILM.

AT ALL FITTINGS AND VALVES PROVIDE PRE-MOLDED PVC JACKET BY ZESTON.

BEFORE INSTALLING INSULATION, ALL REQUIRED PIPING IS TO BE TESTED AND APPROVED.

INSULATION IS TO PASS CONTINUOUSLY THROUGH HANGERS, WALLS, SLEEVES AND OTHER PIPE PENETRATIONS.

PLUMBING PIPING

PIPING MATERIAL SHALL BE AS FOLLOWS:

SANITARY/WASTE PIPING ABOVE AND BELOW FLOOR SLAB - CAST IRON, HUBLESS, NEOPRENE GASKET, STAINLESS STEEL HEAVY DUTY CLAMP AND SHIELD COUPLING, CISPI 301.

VENT PIPING ABOVE AND BELOW FLOOR SLAB - CAST IRON, HUBLESS, NEOPRENE GASKET, STAINLESS STEEL HEAVY DUTY CLAMP AND SHIELD COUPLING, CISPI 301.

WATER PIPING - COPPER, TYPE L, ASTM B88, SOLDER OR PRESS CONNECTIONS.

BALL VALVES SHALL BE BRONZE, TWO PIECE, FULL PORT, EXTENDED LEVER HANDLE FOR INSULATION, CLASS 150-400 PSI WOG, AS MANUFACTURED BY MILWAUKEE, NIBCO OR APOLLO.

NO PIPING SHALL BE COVERED UNTIL TESTED AND APPROVED BY THE AUTHORITIES HAVING JURISDICTION.

INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION WITHOUT STRESSING PIPE, JOINTS OR CONNECTED EQUIPMENT.

CONCEALED PIPING AND ACCESSORIES SHALL BE ARRANGED TO USE THE MINIMUM AMOUNT OF ACCESS DOORS AND PANELS.

PIPING SHALL BE RUN CONCEALED IN FURRED SPACES, CHASES, WALLS, ETC. CONTRACTOR SHALL OBTAIN PERMISSION TO RUN EXPOSED PIPING.

PROVIDE ISOLATION AND SHUT-OFF VALVES AT ALL BRANCH LINES AND EQUIPMENT.

PROVIDE LISTED AND APPROVED DIELECTRIC FITTINGS WHEN JOINING DISSIMILAR METALS.

RUN ALL SANITARY AND WASTE PIPING AT A MINIMUM OF 1/8" PER FOOT FOR PIPING. SLOPE VENT PIPING TO DRAIN.

PIPE HANGERS SHALL BE PLACED ADJACENT TO MOTOR DRIVEN EQUIPMENT. HANGERS AND SUPPORTS SHALL BE AS FOLLOWS:

COPPER PIPING

1/2" TO 1-1/4" AT MAXIMUM 6'-0" SPACING
 1-1/2" TO 3" AT MAXIMUM 10'-0" SPACING

CAST IRON PIPING

1-1/2" TO 2" AT MAXIMUM 10'-0" SPACING
 2-1/2" AND ABOVE AT MAXIMUM 5'-0" SPACING

WATER PIPING IS TO BE FLUSHED AND DISINFECTED IN ACCORDANCE WITH LOCAL AND STATE HEALTH REGULATIONS. AFTER FLUSHING AND DISINFECTING, THE WATER IS TO BE TESTED BY THE CONTRACTOR THROUGH AN INDEPENDENT LAB WITH A WRITTEN REPORT.

ALL NEW WATER, SANITARY, WASTE, AND VENT PIPING SHALL BE PRESSURE TESTED AS FOLLOWS:

SANITARY, WASTE, AND VENT PIPING - HYDROSTATIC TEST AT 10 FT HEAD FOR A MINIMUM 4 HOURS. SUBMIT WRITTEN/SIGNED TEST RESULTS.

WATER PIPING - HYDROSTATIC TEST AT 125 PSI OR 1-1/2 TIMES OPERATING PRESSURE (WHICHEVER IS GREATER) FOR A MINIMUM 4 HOURS WITH MAXIMUM LOSS OF 2 PSI. SUBMIT WRITTEN/SIGNED TEST RESULTS. AIR TESTING WILL NOT BE ACCEPTABLE.

PLUMBING PIPING SPECIALTIES

CLEANOUTS IN INTERIOR FINISHED FLOORS SHALL HAVE A CAST IRON BODY WITH ANCHOR FLANGE, THREADED TOP ASSEMBLY AND ROUND GASKETED SCORED COVER. FOR FINISHED FLOORS PROVIDE DEPRESSED COVER TO ACCEPT FLOOR FINISH.

WATER HAMMER ARRESTORS SHALL BE STAINLESS STEEL CONSTRUCTION, BELLOWS TYPE, PRECHARGED, AIR CHAMBERS ARE NOT ACCEPTABLE. INSTALL WATER HAMMER ARRESTORS AT ALL QUICK CLOSING VALVES, ON HOT AND/OR COLD WATER SUPPLIES TO NEW INDIVIDUAL FIXTURES OR IN BANKS OF FIXTURES.

PLUMBING EQUIPMENT AND FIXTURES

ALL PLUMBING EQUIPMENT AND FIXTURES SHALL BE NEW, COMPLETE WITH ALL TRIM AS SPECIFIED.

FOR ALL EQUIPMENT AND FIXTURES, INSTALL AS PER MANUFACTURER'S INSTRUCTIONS, AS REQUIRED BY CODE, AND IN COMPLIANCE WITH CONDITIONS FOR CERTIFICATION (IF ANY). RETAIN ALL INFORMATION, MANUALS AND PARTS DIAGRAMS PACKAGED WITH THE UNITS.

COORDINATE ALL RELATED ELECTRICAL WORK AND REQUIRED CONNECTIONS TO ACHIEVE AN OPERATIONAL SYSTEM. VERIFY THAT ELECTRICAL POWER HAS PROPER CHARACTERISTICS.

ALL EQUIPMENT SHALL BE UL TESTED AND APPROVED AND IF APPLICABLE SHALL HAVE NSF CERTIFICATION.

PLUMBING FIXTURES SHALL BE INSTALLED WITH TRIM, INCLUDING BUT NOT LIMITED TO, FAUCETS, CARRIERS, WATER SUPPLIES, SUPPLY STOPS, TRAPS, TAILPIECES, HARDWARE, HANGERS/SUPPORTS, AND FASTENING DEVICES.

PLUMBING FIXTURES AND TRIM SHALL BE OF THE MANUFACTURER LISTED ON THE DRAWINGS OR AN APPROVED EQUAL MEETING THE OPERATIONAL CHARACTERISTICS, FUNCTION, SIMILAR APPEARANCE AND QUALITY OF THE SPECIFIED ITEMS.

FOR ALL EXPOSED PIPING TO FIXTURES, PROVIDE CHROME PLATED PIPES, ESCUTCHEONS AT WALLS, SUPPLY TUBES AND SUPPLY STOPS. DRAIN PIPING SHALL BE MINIMUM 17 GA, CHROME PLATED CAST BRASS. P-TRAPS SHALL HAVE CLEANOUT PLUGS.

SEAL FIXTURES TO WALLS AND FLOOR WITH APPROVED SILICONE SEALANT, COLOR TO MATCH FIXTURE COLOR OR CLEAR.

UPON COMPLETION OF INSTALLATION OF PLUMBING EQUIPMENT AND FIXTURES, TEST TO DEMONSTRATE CAPABILITY AND COMPLIANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND CODES. FOR ALL EQUIPMENT, REPAIR OR REPLACE ANY MALFUNCTIONING EQUIPMENT OR FIXTURES AND RETEST.

ADJUST WATER PRESSURES THROUGH VALVES OR STOPS TO OBTAIN PROPER FLOW RATES AND PRESSURES REQUIRED.

UPON COMPLETION OF INSTALLATION OF EQUIPMENT OR FIXTURES, THOROUGHLY CLEAN ALL EXPOSED SURFACES, TRIM AND PIPING, FLUSH STRAINERS AND VERIFY FINAL OPERATION.

PROVIDE ALL WARRANTIES AND GUARANTEES TO THE OWNER WITH ALL NAMES, ESTABLISHED DATES, AND ANY ADDITIONAL INFORMATION REQUIRED FOR ENFORCEMENT.

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