

BEFORE FABRICATION THIS CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS ON JOB AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS

GENERAL REMOVAL NOTES

- THE SCOPE OF REMOVAL SHOWN ON "REMOVALS" DRAWINGS IS DIAGRAMMATIC ONLY AND INDICATES THE INTENT OF THE WORK TO BE PERFORMED AND NOT THE COMPLETE SCOPE OF DEMOLITION AND/OR REMOVAL WORK. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO REMOVE ANY RELATED MECHANICAL DEVICES EVEN IF NOT SPECIFICALLY INDICATED TO BE REMOVED ON THESE DRAWINGS IN ORDER TO ACCOMMODATE NEW WORK.
- DEVICES SHOWN CROSS HATCHED ON DRAWINGS ARE ITEMS TO BE REMOVED. ANY DEVICES REMOVED SHALL INCLUDE (BUT SHALL NOT BE LIMITED TO) THE REMOVAL OF ALL ASSOCIATED PIPING, CONTROLS, ETC. THAT ARE NOT INCORPORATED IN THE NEW LAYOUT, UNTIL SUCH REMOVAL IS COMPLETE. THIS CONTRACTOR SHALL PERFORM ALL WORK REQUIRED TO INSURE CONTINUITY OF SERVICE TO EXISTING REMAINING EQUIPMENT. NO EXTRAS RELATING TO THE SCOPE OF WORK DESCRIBED WILL BE ALLOWED.
- EQUIPMENT, PIPING, ETC., REQUIRED TO RECONNECT SHALL BE INSTALLED CONCEALED WITHIN THE NEW SUSPENDED CEILINGS, PARTITIONS AND/OR WALLS, FLOORS, NO SURFACE MOUNTED OR EXPOSED EQUIPMENT, PIPING, ETC., SHALL BE PERMITTED, UNLESS SPECIFICALLY INDICATED.
- ALL ITEMS TO BE REMOVED SHALL BE REVIEWED WITH THE OWNER PRIOR TO REMOVAL. OWNER SHALL HAVE FIRST SALVAGE RIGHTS. ITEMS THE OWNER WISHES TO KEEP SHALL BE REMOVED WITH CARE AND STORED AS DIRECTED BY OWNER. ITEMS THE OWNER DOES NOT WISH TO KEEP SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.
- REMOVE OR RELOCATE ALL DEVICES LOCATED ON THE EXTERIOR OF THE BUILDING OR ON THE INTERIOR OF EXTERIOR WALLS AS REQUIRED TO ACCOMMODATE A NEW BUILDING ADDITION OR TO ALLOW THE ADDITION OF DOORWAYS INTO THE NEW ADDITION.
- REMOVALS SHALL BE COORDINATED WITH OTHER TRADES AFFECTED.
- REMOVAL OF ANY PIECE OF EQUIPMENT OR TERMINAL DEVICE SHALL INCLUDE REMOVAL OF CONNECTING DUCTWORK AND PIPING BACK TO EXISTING MAINS THAT REMAIN. CAP EACH BRANCH AIR/WATER-TIGHT. CONTROLS AND CONTROL COMPONENTS SHALL ALSO BE REMOVED. DO NOT LEAVE COMPONENTS (CONTROLLERS, PNEUMATICS, ETC.) THAT HAVE NO FUNCTION. PROVIDE CONTROL WIRING, DUCTWORK, PIPING, ETC. AS NECESSARY TO MAINTAIN CONTINUITY OF SERVICE FOR EQUIPMENT OR TERMINAL DEVICES TO REMAIN.
- ALL PIPING TO BE REMOVED SHALL BE PROPERLY PLUGGED OR CAPPED BENEATH FINISHED SURFACES, SO THAT UPON COMPLETION OF ALL NEW WORK, ALL ABANDONED PIPING SHALL BE CONCEALED IN FINISHED AREAS.
- NO DEAD ENDS SHALL BE LEFT ON ANY PIPING UPON COMPLETION OF JOB. BRANCHES SHALL BE CUT AND CAPPED AT MAINS. THE EXISTING SYSTEM SHALL BE LEFT IN PERFECT WORKING ORDER UPON COMPLETION OF NEW WORK.
- CHIMNEY INSPECTION AND SOOT REMOVAL: ON PROJECTS INCLUDING BOILER REMOVAL OR REPLACEMENT, CONTRACTOR SHALL GATHER TOGETHER WITH A VACUUM-CLEANING MACHINE ALL ACCUMULATIONS OF SOOT. HE SHALL REMOVE ALL SOOT FROM THE BASE OF THE CHIMNEY. THE CHIMNEY SHALL BE INSPECTED AND ANY DEFICIENCIES NOTED IN A WRITTEN REPORT.

ABBREVIATIONS

AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
ATC	AUTOMATIC TEMPERATURE CONTROL TRADE CONTRACTOR
ATC	AUTOMATIC TEMPERATURE CONTROL SYSTEM
BMS	BUILDING MANAGEMENT SYSTEM (ATC)
BR	BOTTOM WALL REGISTER
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CR	CEILING REGISTER
CO	CLEAN OUT (DOOR)
CV	MOTORIZED CONTROL VALVE
EC	ELECTRICAL CONTRACTOR
EMS	ENERGY MANAGEMENT SYSTEM (ATC)
FC	FLEXIBLE CONNECTION
FD	FIRE DAMPER
FSC	FULL SIZE CONNECTION
FSD	FIRE/SMOKE DAMPER
GC	GENERAL TRADES CONTRACTOR
HVAC	HEATING, VENTILATING, AIR CONDITIONING CONTRACTOR
MFR	MANUFACTURER
MD	MOTORIZED DAMPER
OAI/TAI	OUTSIDE (FRESH) AIR INTAKE
PFRE	PRE-FINISHED SHEET METAL ENCLOSURE
PL	PLUMBING CONTRACTOR
SMRE	SHEET METAL RISER ENCLOSURE (PRE-FINISHED)
TD	TRANSFER DUCT
TR	TOP WALL REGISTER
WMG	1/2" SQ. WIRE MESH GRILLE
VIF	VERIFY IN FIELD

GENERAL NOTES

- BEFORE SUBMITTING A PROPOSAL, BIDDERS SHALL EXAMINE ALL RELATED TO THIS WORK AND SHALL BECOME FULLY INFORMED AS TO THE EXTENT AND CHARACTER OF THE WORK REQUIRED AND ITS RELATION TO THE OTHER WORK IN THE BUILDING.
- BEFORE COMMENCING WORK, THE CONTRACTOR WILL EXAMINE ALL CONDITIONS OF THE PROJECT UPON WHICH HIS WORK IS IN ANY WAY DEPENDENT FOR PERFECT WORKMANSHIP ACCORDING TO THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. NO "WAIVER OF RESPONSIBILITY" FOR INCOMPLETE, INADEQUATE OR DEFECTIVE ADJOINING WORK WILL BE CONSIDERED UNLESS NOTICE HAS BEEN FILED BY THIS CONTRACTOR AND ACCEDED TO BY THE OWNER'S REPRESENTATIVE IN WRITING BEFORE THE CONTRACTOR BEGINS ANY PART OF THE WORK.
- THE CONTRACTOR WILL PAY FOR ALL LICENSES, PERMITS AND INSPECTION FEES REQUIRED BY CIVIL AUTHORITIES HAVING JURISDICTION. COMPLY WITH ALL LAWS, ORDINANCES, REGULATIONS, AND FIRE UNDERWRITER'S REQUIREMENTS APPLICABLE TO WORK HEREIN SPECIFIED WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
- SMALL SCALE DRILLING THROUGH WALLS AND FLOORS OR CUTTING OF PIPING INSULATION WHICH MAY CONTAIN ASBESTOS SHALL BE PERFORMED BY A PERSON WITH A "RESTRICTED ASBESTOS HANDLER ALLIED TRADES CERTIFICATE" AND SHALL HAVE A COPY OF IT IN HIS POSSESSION AT ALL TIMES WHILE WORKING OF THE PROJECT. THIS SHALL ALSO APPLY TO REMOVAL OF PIPING, DUCTWORK OR EQUIPMENT INSULATION.
- IT IS SPECIFICALLY INTENDED THAT ANYTHING (WHETHER MATERIAL OR LABOR), WHICH IS USUALLY FURNISHED AS A PART OF SUCH EQUIPMENT, AS IS HEREINAFTER CALLED FOR (AND WHICH IS NECESSARY FOR THE COMPLETION AND PROPER OPERATION) SHALL BE FURNISHED AS PART OF THIS CONTRACT WITHOUT ADDITIONAL COST THE OWNER, WHETHER OR NOT SHOWN IN DETAIL OR DESCRIBED IN THE SPECIFICATIONS.
- WHEN DRAWINGS AND SPECIFICATIONS CONFLICT OR THERE IS A QUESTION AS TO THE PROPER INTENT OF THIS CONTRACT, THE CONTRACTOR SHALL ASSUME THE GREATER QUANTITY, THE HIGHER QUALITY AND/OR THE MORE EXPENSIVE METHOD IN HIS PRICING. ALL QUESTIONS SHALL BE DIRECTED TO THE ARCHITECT/ENGINEER IN WRITING ONLY AND ONLY UP TO TEN (10) DAYS PRIOR TO BIDDING.
- THE DRAWINGS INDICATE THE GENERAL RUNS OF THE PIPING, DUCTWORK, ETC. SYSTEMS AND THE LOCATION OF EQUIPMENT AND APPARATUS, HOWEVER IT SHALL BE UNDERSTOOD THAT THE RIGHT IS RESERVED BY THE ARCHITECT/ENGINEER TO CHANGE THE LOCATION OF PIPING WORK, DUCTWORK, EQUIPMENT AND APPARATUS TO A REASONABLE EXTENT AS BUILDING CONDITIONS MAY DICTATE, PRIOR TO THEIR INSTALLATION WITHOUT EXTRA COST TO THE OWNER.
- ALL DUCT DIMENSIONS SHOWN ARE CLEAR INSIDE DIMENSIONS. THE CONTRACTOR SHALL ACCOUNT FOR ANY LINING IN SIZING OF SHEET METAL.
- ALL COMPONENTS SUPPLIED BY THIS CONTRACTOR SHALL BE UL LISTED AND/OR ETL LABELED AND SHALL CONFORM TO ASHRAE STANDARD 15.
- ANY CHANGES FROM THE DRAWINGS AND SPECIFICATIONS AND ANY INTERPRETATION THEREOF SHALL HAVE THE PRIOR APPROVAL OF THE ARCHITECT/ENGINEER. THE CONTRACTOR SHALL SUBMIT IN WRITING, AT THE TIME OF SIGNING THE CONTRACT, ANY ITEMS OF NECESSARY LABOR AND MATERIALS, WHICH, IN HIS OPINION, ARE LACKING IN REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS TO INSURE A COMPLETE JOB IN ALL RESPECTS. NO CONSIDERATION WILL BE GRANTED TO ALLEGED MISUNDERSTANDING OF MATERIALS TO BE FURNISHED, WORK TO BE DONE, OR CONDITIONS TO BE COMPLIED WITH, IT BEING UNDERSTOOD THAT THE TENDER OF A PROPOSAL CARRIES WITH IT THE AGREEMENT TO ALL ITEMS AND CONDITIONS REFERRED TO HEREIN, OR INDICATED ON THE ACCOMPANYING DRAWINGS.
- FURNISH ALL COMBINATION MOTOR STARTER/DISCONNECTS FOR EQUIPMENT (WITH THE EXCEPTION OF STARTERS AND ELECTRIC ITEMS ALREADY MOUNTED ON EQUIPMENT OR EQUIPMENT NOT REQUIRING SAME). FAN MOTOR STARTER/DISCONNECTS SHALL HAVE CONTACTS FOR ATC CONNECTION AND A TERMINAL BLOCK CONNECTION FOR FIRE ALARM FAN SHUTDOWN. STARTERS PER MANUFACTURERS RECOMMENDATIONS, UNDERWRITERS INSPECTION AND CERTIFICATE REQUIRED. COORDINATE WITH ELECTRICAL CONTRACTOR.
- THIS CONTRACTOR SHALL COORDINATE WITH OTHER TRADES PROVIDING ELECTRIC, GAS, WATER, ETC. CONNECTIONS TO SYSTEMS OR EQUIPMENT THAT ARE PART OF THIS CONTRACT. PROVIDE EQUIPMENT THAT ARE PART OF THIS CONTRACT. PROVIDE EQUIPMENT CUTS AND EXACT LOCATIONS, INCLUDING ORIENTATION OF ALL SYSTEMS AND EQUIPMENT REQUIRING SUCH CONNECTIONS. THIS SHALL BE DONE WELL IN ADVANCE OF THOSE TRADES INSTALLING THEIR CONNECTION WORK.
- COORDINATION DRAWINGS (IF APPLICABLE): ATTENTION IS DIRECTED TO DIVISION 1 FOR COORDINATION DRAWING REQUIREMENTS FOR THIS PROJECT. THESE DRAWINGS ARE CRITICAL TO THE PROPER EXECUTION OF THE WORK AND FAILURE TO HONOR THESE REQUIREMENTS MAY BECOME THE BASIS FOR DENIAL OF ANY AND ALL CLAIMS FOR EITHER OR BOTH "TIME" AND "MONEY".
- LOCATION AND SIZES OF EXISTING PIPING, DUCTWORK, EQUIPMENT, ETC. ARE APPROXIMATE. EXACT SIZES AND LOCATIONS OF ALL EXISTING WORK SHALL BE VERIFIED ON THE JOB.
- BEFORE FABRICATION THIS CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS ON JOB AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS.
- THE CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO SUBMISSION OF BID TO DETERMINE WHAT WORK MUST BE PERFORMED AFTER NORMAL BUSINESS HOURS. UNLESS OTHERWISE DIRECTED ANY NOISY WORK (CHOPPING, CORE DRILLING, HAMMERING, ETC.) AND BUILDING POWER INTERRUPTIONS SHALL BE PERFORMED OUTSIDE OF NORMAL BUSINESS HOURS. CONFIRM NORMAL BUSINESS HOURS WITH BUILDING OWNER. NO ADDITIONAL COST WILL BE CHARGED TO OWNER FOR WORK PERFORMED OUTSIDE NORMAL BUSINESS HOURS.
- REFER TO ARCHITECT'S REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL CEILING MOUNTED ITEMS.
- OPENINGS AROUND PENETRATIONS THROUGH FIRE RESISTANCE RATED WALLS, PARTITIONS, FLOORS OR CEILINGS SHALL BE FIRE STOPPED USING APPROVED METHODS. ALL SLEEVES MUST HAVE BUSHINGS. SEALANT SHALL BE 3 HOUR FIRE BARRIER #CP-25 (NO LESS THAN 3" THICK BACKED UP WITH MINERAL WOOL).
- PREPARE "AS-BUILT" DRAWINGS THAT REFLECT ACTUAL CONSTRUCTION AND SHOW DEVIATIONS FROM DESIGN DRAWINGS.

LEGEND

	EXISTING DUCTWORK, EQUIPMENT, ETC. TO REMAIN		HOT WATER COIL IDENTIFICATION
	EXISTING DUCTWORK, EQUIPMENT, ETC. TO BE REMOVED		HOT WATER HEATER IDENTIFICATION
	POINT OF CHANGE IN DUCT SIZE NEW DUCTWORK		HOT WATER PUMP IDENTIFICATION
	THERMAL ACOUSTIC LINING NEW DUCTWORK		HEAT EXCHANGER IDENTIFICATION
	FLEXIBLE CONNECTION NEW DUCTWORK		MAKEUP AIR UNIT IDENTIFICATION
	POINT OF CHANGE IN DUCT SIZE		GAS FIRED RADIANT HEATER IDENTIFICATION
	SQUARE DUCT TURN WITH TURNING VANES		SUPPLY FAN IDENTIFICATION
	EXISTING CEILING DIFFUSER		ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION
	EXISTING 3-WAY CEILING DIFFUSER		RETURN FAN IDENTIFICATION
	EXISTING 2-WAY CEILING DIFFUSER		ROOFTOP UNIT IDENTIFICATION
	EXISTING CEILING REGISTER		UNIT HEATER IDENTIFICATION
	TYPE - SEE SCHEDULE NEW 2-WAY CEILING DIFFUSER		UNIT VENTILATOR IDENTIFICATION
	TYPE - SEE SCHEDULE NEW 3-WAY CEILING DIFFUSER		UNIT VENTILATOR AIR CONDITIONER IDENTIFICATION
	TYPE - SEE SCHEDULE NEW 2-WAY CEILING DIFFUSER		UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION
	TYPE - SEE SCHEDULE CEILING EXHAUST/RETURN REGISTER		VERTICAL UNIT VENTILATOR IDENTIFICATION
	TYPE - SEE SCHEDULE REGISTER/DIFFUSER IDENTIFICATION		EXISTING AIR CONDITIONING UNIT IDENTIFICATION
	DUCT DROP; DUCT RISE		EXISTING AIR HANDLING UNIT IDENTIFICATION
	DUCT MTD. MANUAL AIR VOLUME DAMPER (W/LOCKING DEVICE)		EXISTING BOILER IDENTIFICATION
	MOTORIZED AIR VOLUME DAMPER (W/ACCESS DOOR)		EXISTING CHEMICAL FEED TANK IDENTIFICATION
	FIRE & AIR FIRE DAMPER (U.L. APPROVED) & ACCESS DOOR		EXISTING CABINET HEATER IDENTIFICATION
	FSD & AIR COMBINATION FIRE/SMOKE DAMPER (U.L. APPROVED) & ACCESS DOOR		EXISTING CHILLED WATER PUMP IDENTIFICATION
	HWS HOT WATER HEATING SUPPLY PIPING		EXISTING CONDENSATE PUMP IDENTIFICATION
	HWR / HWRR HOT WATER RETURN / HOT WATER REVERSE RETURN PIPING		EXISTING CONVECTOR IDENTIFICATION
	CHWS CHILLED WATER SUPPLY PIPING		EXISTING CONDENSING UNIT IDENTIFICATION
	CHWRR CHILLED WATER RETURN PIPING		EXISTING DEHUMIDIFIER IDENTIFICATION
	L LIQUID REFRIGERANT PIPING		EXISTING DEDICATED OUTDOOR AIR SYSTEM IDENTIFICATION
	S SUCTION REFRIGERANT PIPING		EXISTING DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION
	HG HOT GAS REFRIGERANT PIPING		EXISTING DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION
	CD CONDENSATE DRAIN PIPING		EXISTING DIRECT EXPANSION REFRIGERANT COIL IDENTIFICATION
	GLWS GEOTHERMAL GROUND LOOP WATER SUPPLY PIPING		EXISTING EXHAUST FAN IDENTIFICATION
	GLWRR GEOTHERMAL GROUND LOOP WATER RETURN PIPING		EXISTING ENERGY RECOVERY UNIT IDENTIFICATION
	EHWS EXISTING HOT WATER HEATING SUPPLY PIPING		EXISTING EXPANSION TANK IDENTIFICATION
	EHWR EXISTING HOT WATER HEATING RETURN PIPING		EXISTING INDOOR VRF FAN COIL UNIT IDENTIFICATION
	EHWRR EXISTING HOT WATER HEATING REVERSE RETURN PIPING		EXISTING VRF FLOW SELECTOR IDENTIFICATION
	ECHWS EXISTING CHILLED WATER SUPPLY PIPING		EXISTING FUEL OIL TANK IDENTIFICATION
	ECHWRR EXISTING CHILLED WATER RETURN PIPING		EXISTING FUEL OIL PUMP IDENTIFICATION
	ELPS EXISTING LOW PRESSURE STEAM PIPING		EXISTING GLYCOL FEED SYSTEM IDENTIFICATION
	ECR EXISTING CONDENSATE RETURN PIPING		EXISTING GEOTHERMAL PUMP IDENTIFICATION
	FLOW DIRECTION WITHIN PIPE CONNECTION TO EQUIPMENT ABOVE		EXISTING GRAVITY RELIEF VENT IDENTIFICATION
	GATE VALVE (HORIZONTAL/VERTICAL)		EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION
	COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER)		EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION
	2 - WAY CONTROL VALVE		EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION
	3 - WAY CONTROL VALVE		EXISTING HUMIDIFIER IDENTIFICATION
	EXPANSION JOINT, ANCHOR AND GUIDES		EXISTING HOT WATER COIL IDENTIFICATION
	CHECK VALVES		EXISTING HOT WATER HEATER IDENTIFICATION
	PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP)		EXISTING HOT WATER PUMP IDENTIFICATION
	AUTOMATIC AIR VENT IDENTIFICATION		EXISTING HEAT EXCHANGER IDENTIFICATION
	THERMOMETER		EXISTING MAKEUP AIR UNIT IDENTIFICATION
	PRESSURE GAUGE (WITH SHUT-OFF COCK)		EXISTING SOUND ATTENUATOR IDENTIFICATION
	AIR HANDLING UNIT IDENTIFICATION		EXISTING SUPPLY FAN IDENTIFICATION
	BOILER IDENTIFICATION		EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION
	CHEMICAL FEED TANK IDENTIFICATION		EXISTING RETURN FAN IDENTIFICATION
	CABINET HEATER IDENTIFICATION		EXISTING ROOFTOP UNIT IDENTIFICATION
	CHILLED WATER PUMP IDENTIFICATION		EXISTING UNIT HEATER IDENTIFICATION
	CONDENSATE PUMP IDENTIFICATION		EXISTING UNIT VENTILATOR IDENTIFICATION
	CONVECTOR IDENTIFICATION		EXISTING UNIT VENTILATOR AIR CONDITIONER IDENTIFICATION
	CONDENSING UNIT IDENTIFICATION		EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION
	DEHUMIDIFIER IDENTIFICATION		EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION
	DEDICATED OUTDOOR AIR SYSTEM IDENTIFICATION		EXISTING WALL MTD. TEMPERATURE SENSOR/THERMOSTAT
	DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION		WALL MTD. CARBON DIOXIDE SENSOR
	DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION		RELATIVE HUMIDITY SENSOR
	DIRECT EXPANSION REFRIGERANT COIL IDENTIFICATION		COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER)
	EXHAUST FAN IDENTIFICATION		SUMMER/WINTER VALVE
	ENERGY RECOVERY UNIT IDENTIFICATION		DOOR UNDERCUT
	EXPANSION TANK IDENTIFICATION		LOW DOOR LOUVER
	INDOOR VRF FAN COIL UNIT IDENTIFICATION		POINT OF DISCONNECTION
	VRF FLOW SELECTOR IDENTIFICATION		POINT OF CONNECTION, NEW TO EXISTING
	FUEL OIL TANK IDENTIFICATION		SECTION/DETAIL/ELEVATION/PART PLAN NUMBER DRAWING NUMBER
	FUEL OIL PUMP IDENTIFICATION		SECTION/ELEVATION IDENTIFICATION
	GLYCOL FEED SYSTEM IDENTIFICATION		
	GEOTHERMAL PUMP IDENTIFICATION		
	GRAVITY RELIEF VENT IDENTIFICATION		
	GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION		
	AIR SOURCE HEAT PUMP VRF IDENTIFICATION		
	HUMIDIFIER IDENTIFICATION		

DISTRICT-WIDE
CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC UPGRADES

CHAPPAQUA CENTRAL
SCHOOL DISTRICT
66 Roaring Brook Road
Chappaqua, NY 10514



CONSTRUCTION DOCUMENTS

SED Control No.
HG: 66-10-04-06-0-015-023
AP: 66-10-04-06-7-052-001
CS: 66-10-04-06-7-027-002
OB: 66-10-04-06-0-026-002
SB: 66-10-04-06-0-036-007



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Key Plan

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Professional Seal

4	09/16/2024	ISSUE FOR BID
3	10/27/2023	SED ISSUE
2	08/31/2023	ISSUE FOR PRICING - 90% CD
1	06/10/2023	SCHEMATIC DESIGN
No.	Date	Issue

Sheet Title

LEGEND, NOTES, & ABBREVIATIONS

Job No. 2023-1028	Sheet Number
Date 09/16/2024	
Scale AS NOTED	
Drawn / Checked BGA/BGA	

H001-AP

DISTRICT-WIDE
CAPITAL IMPROVEMENTS
NEW CONSTRUCTION
& ATHLETIC
UPGRADES

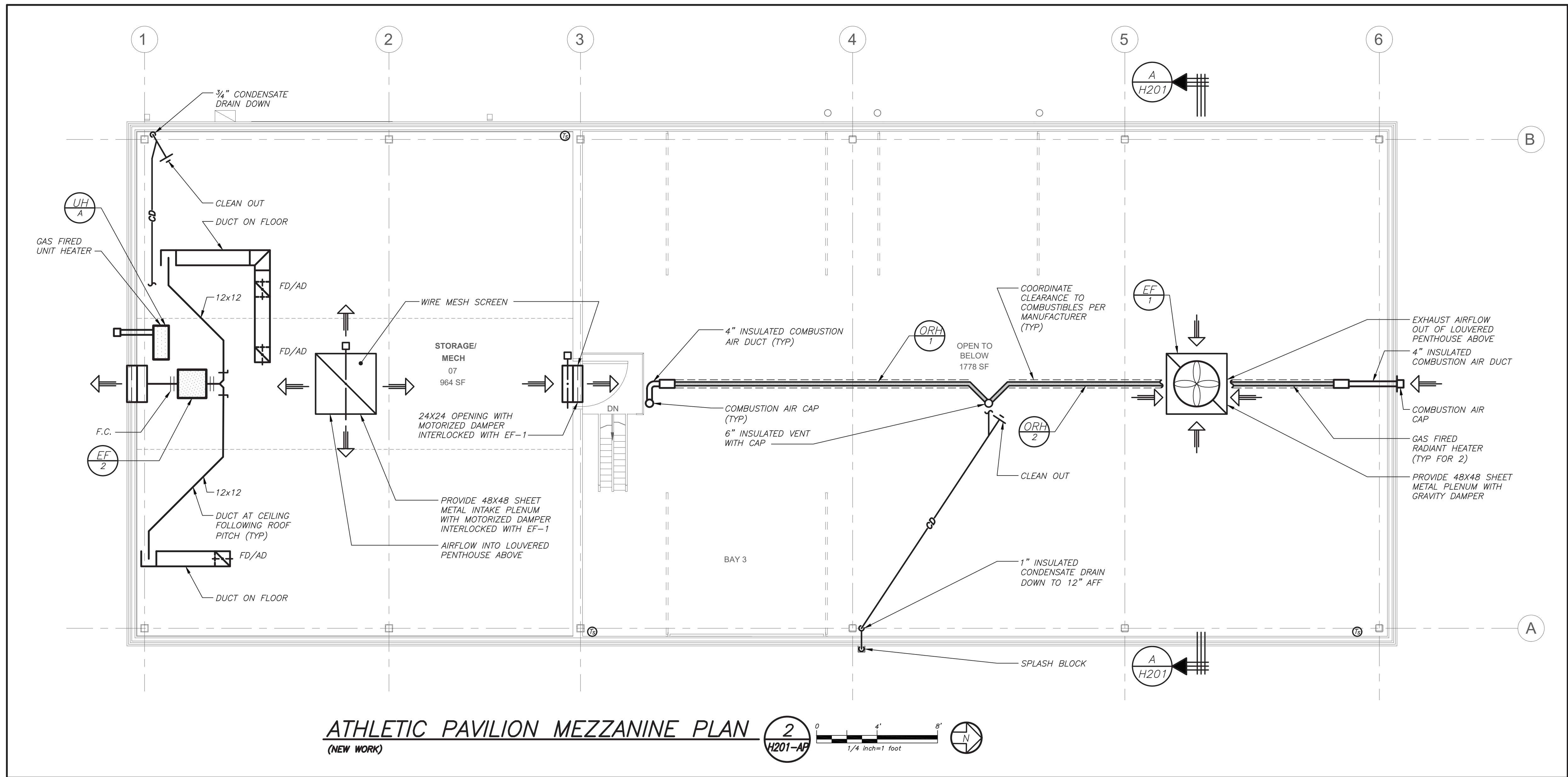
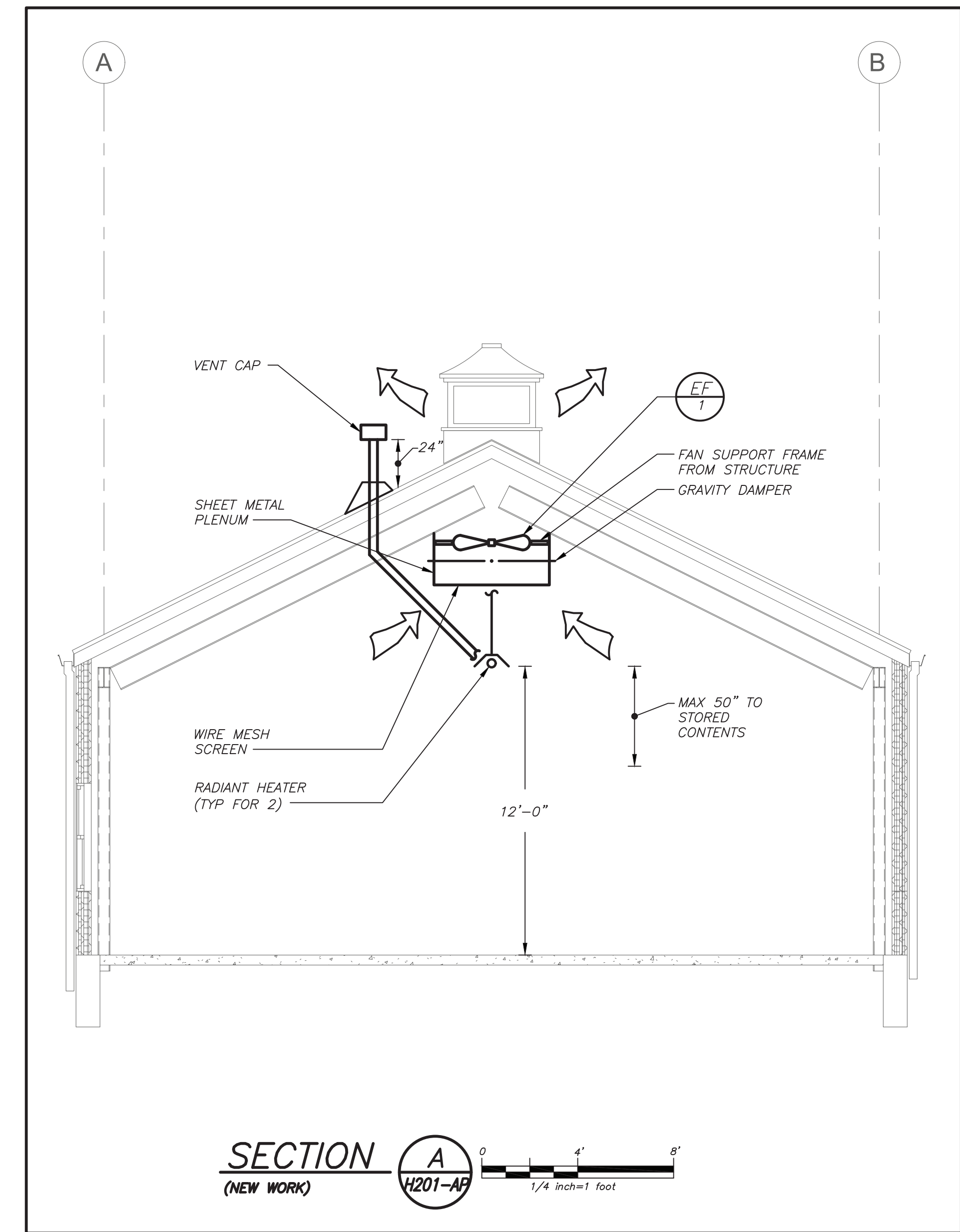
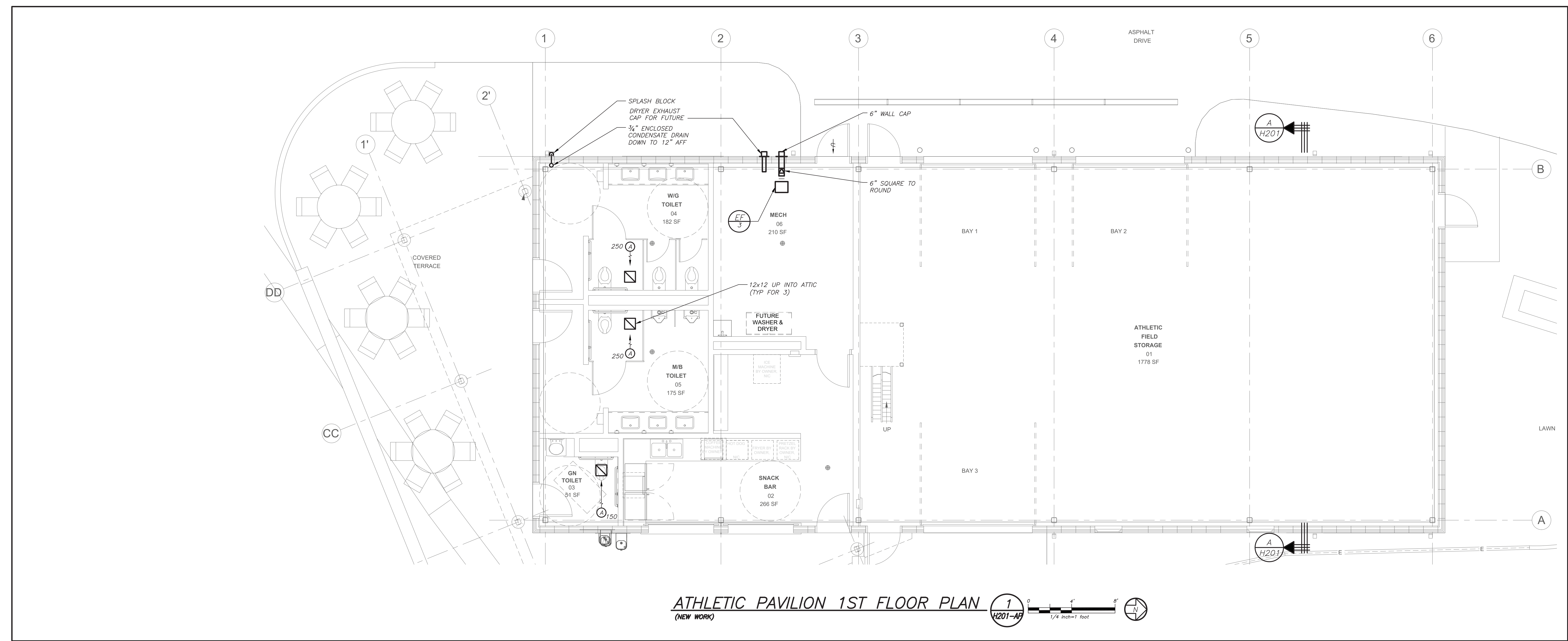
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CONSTRUCTION DOCUMENTS

SED Control No.
HG: 66-10-04-06-0-015-023
AP: 66-10-04-06-7-052-001
CS: 66-10-04-06-7-027-002
OB: 66-10-04-06-0-026-002
SB: 66-10-04-06-0-036-007

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BEFORE FABRICATION THIS CONTRACTOR SHALL
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JOB AND COORDINATE HIS WORK WITH THE WORK
OF ALL OTHER CONTRACTORS

Key Plan

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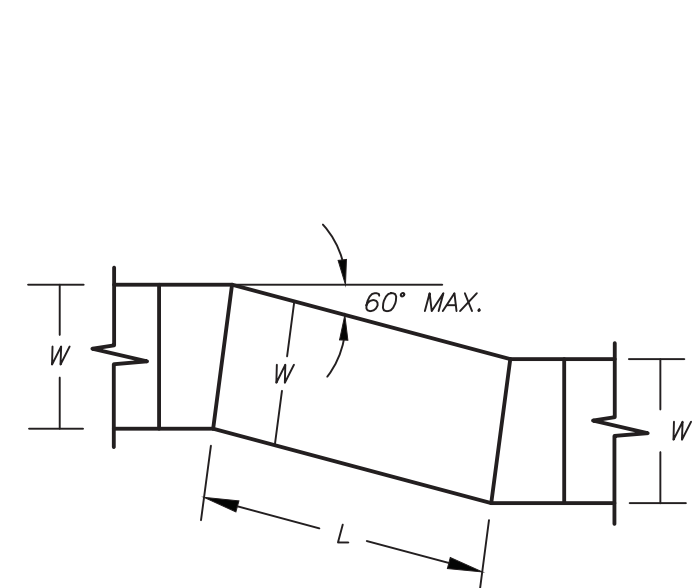
Professional Seal

4	09/16/2024	ISSUE FOR BID
3	10/27/2023	SED ISSUE
2	08/31/2023	ISSUE FOR PRICING - 90% CD
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No.	Date	Issue

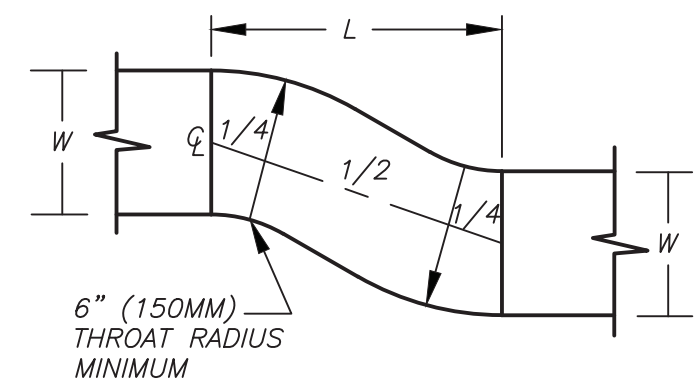
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ATHLETIC
PAVILION FLOOR
PLANS
(NEW WORK)

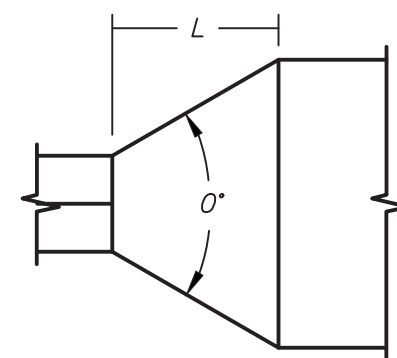
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Date 09/16/2024	
Scale AS NOTED	
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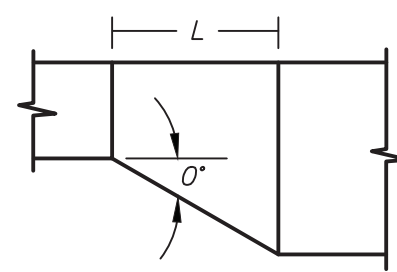
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(MITERED)



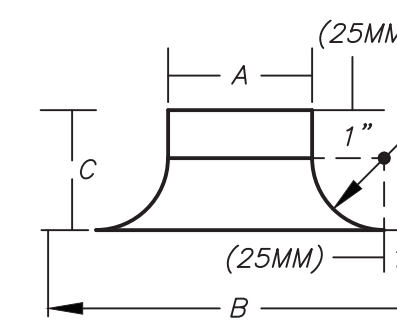
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(RADIUSSED
OR OEGEE)



CONCENTRIC TRANSITION
0" MAX. 45° DIVERGING,
60° CONVERGING



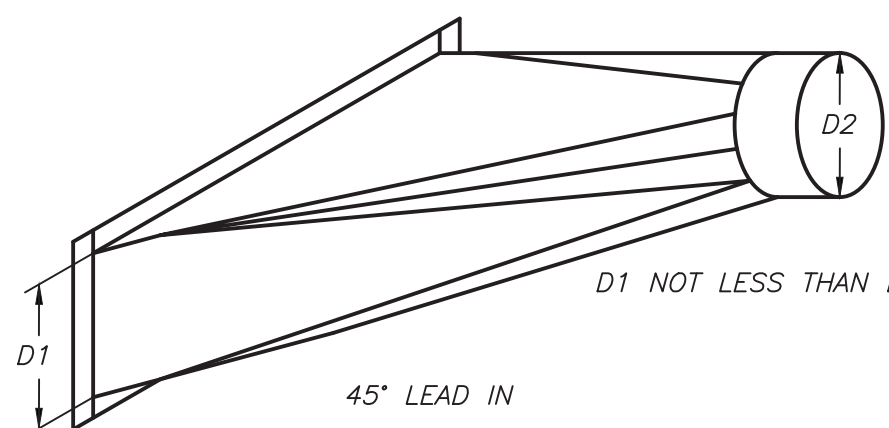
CONCENTRIC TRANSITION
0" MAX. 30°
(EXCEPT 45° IS PERMITTED
AT ROUND TO FLAT OVAL)



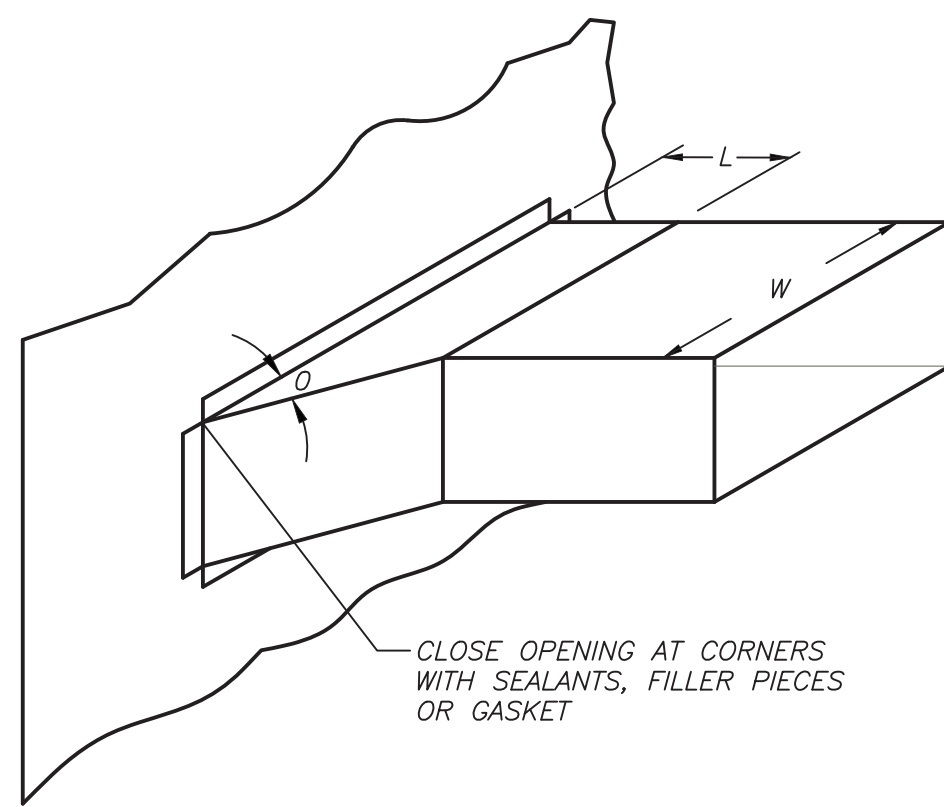
STANDARD BELLMOUTH
(ON SHORT PATTERN BELL
C=3" (76MM)
B= A+4" (102MM)

DUCT OFFSETS AND TRANSITIONS DETAIL

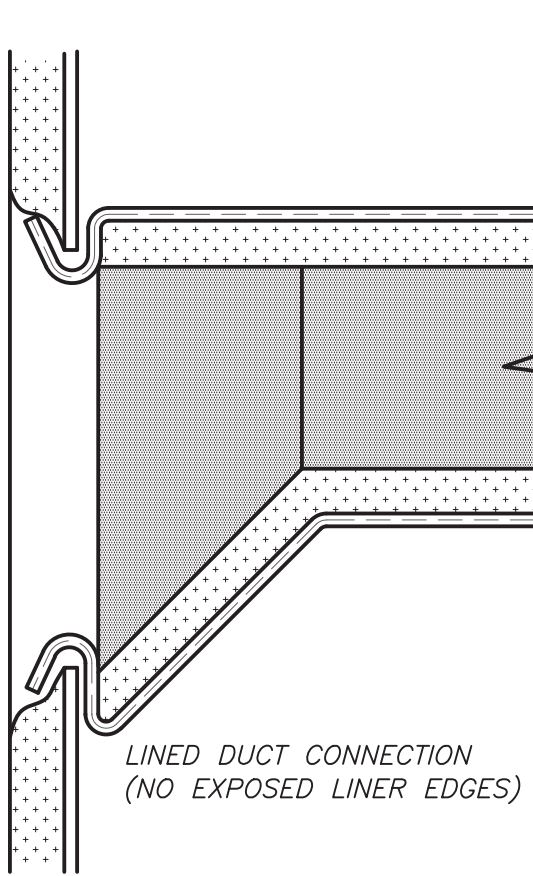
7
H301-AP
NO SCALE



DO NOT USE CONNECTIONS WITH SCOOPS



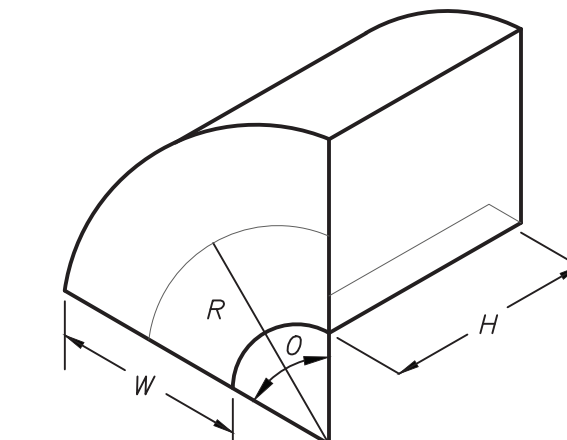
CLOSE OPENING AT CORNERS
WITH SEALANTS, FILLER PIECES
OR GASKET



LINED DUCT CONNECTION
(NO EXPOSED LINER EDGES)

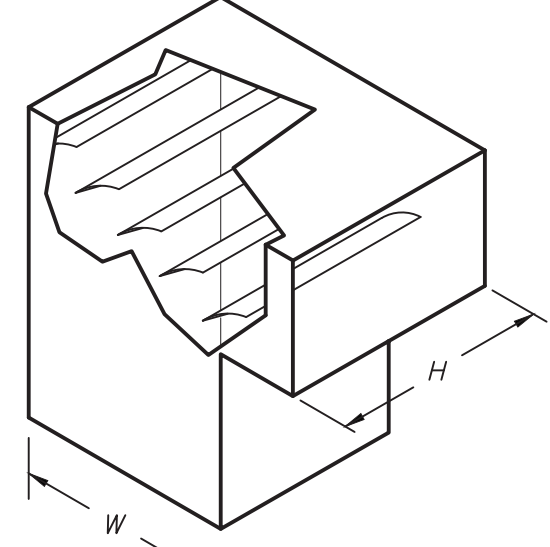
DUCT BRANCH CONNECTIONS DETAIL

4
H301-AP
NO SCALE

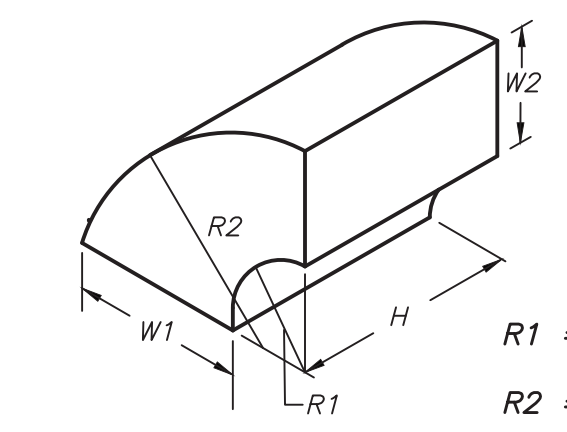


TYPE RE 1
RADIUS ELBOW

CENTERLINE $R = 3W/2$ UNLESS OTHERWISE
SPECIFIED- IS NOT RESTRICTED TO 90°
SQUARE THROAT $R/W = 0.5$, MAY BE USED,
UP TO 1000 FPM (5 MPS)

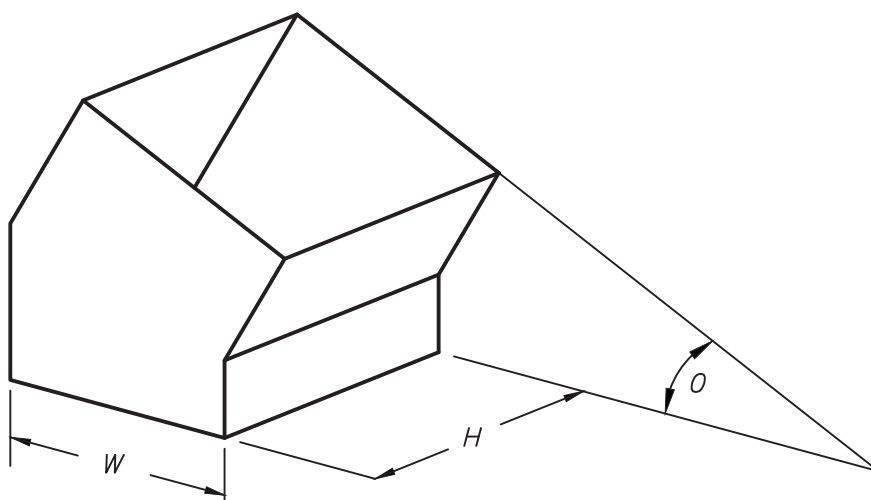


TYPE RE 2
SQUARE THROAT ELBOW
WITH VANES



TYPE RE 5
DUAL RADIUS ELBOW

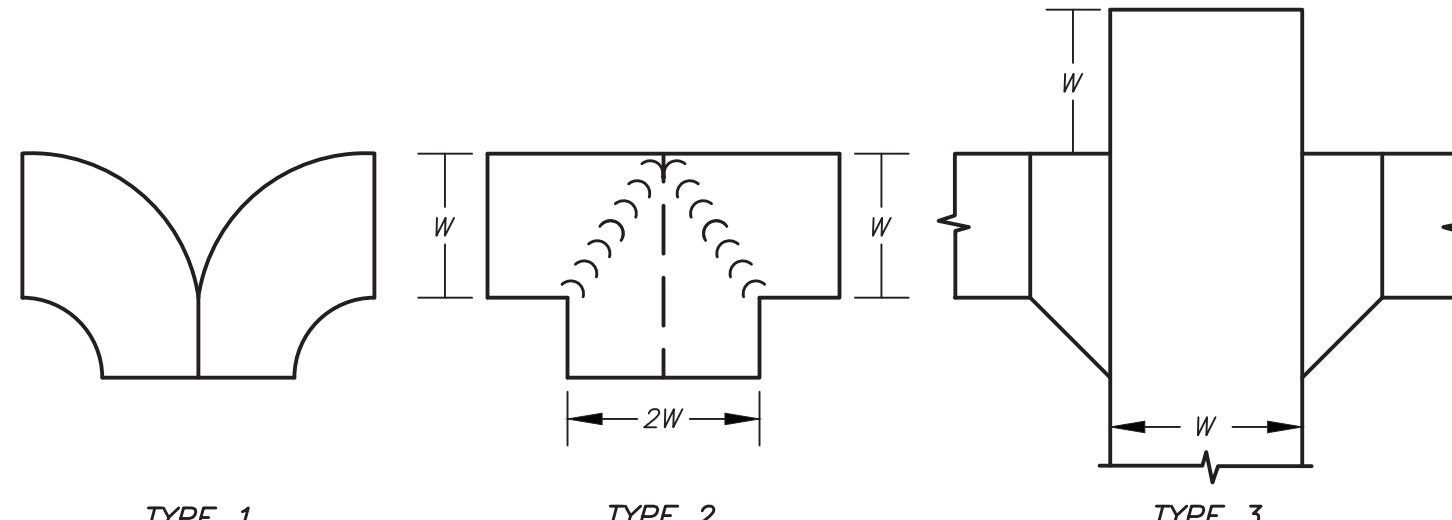
BEAD, CROSSBREAK AND REINFORCE FLAT SURFACES AND STRAIGHT DUCT



TYPE RE 6
MITERED ELBOW

DUCT RECTANGULAR ELBOWS DETAIL

5
H301-AP
NO SCALE

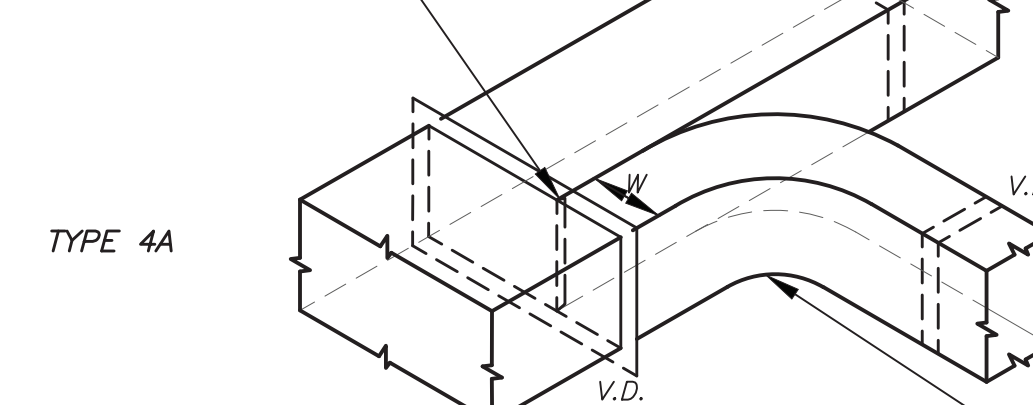


TYPE 1

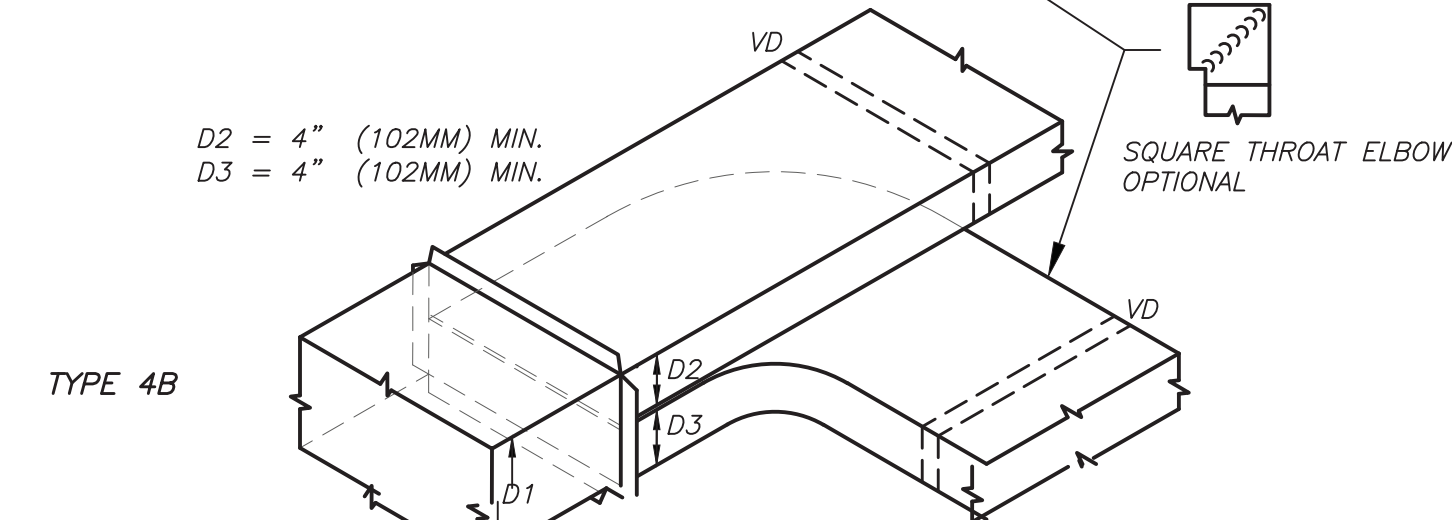
TYPE 2

TYPE 3

* S-SLIP OR U CLIP OPTIONAL
ALL SUCH CONNECTIONS TO BE
SEALED



TYPE 4A



TYPE 4B

VOLUME CONTROL BY BRANCH DAMPERS
SPLITTER LENGTH SHOULD BE 1.5 W OR 1.5 D3

DUCT DIVIDED FLOW BRANCHES DETAIL

6
H301-AP
NO SCALE

SCHEDULE OF EXHAUST FANS

MARK	SERVICE	LOCATION	MODEL No. ①	TYPE	CFM	EXT. S.P. IN H ₂ O	RPM	HP	ELECTRIC V/PH/HZ	SIZE (IN)	WEIGHT (LBS.)	REMARKS
①	ATHLETIC FIELD STORAGE	STORAGE	SBE	PROPELLER	2,500	0.35	810	1/2	120/1/60	32Lx32Wx20H	100	REFER TO ②④⑤
②	ATHLETIC PAVILION TOILETS	MECH 07	SQ-99-VG	IN-LINE CENTRIFUGAL	650	1.0	1860	1	120/1/60	21Lx15Wx15H	67	REFER TO ②③⑤
③	ATHLETIC PAVILION MECH	MECH 06	SP-A250	CABINET	250	0.25	900	60W	120/1/60	14Lx12Wx12H	25	REFER TO ②③⑤

NOTES
① AS MANUFACTURED BY "GREENHECK".
② INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
③ PROVIDE VIBRATION ISOLATORS, BACKDRAFT DAMPER, SPEED CONTROL, DISCONNECT SWITCH, AND NAMEPLATE IDENTIFYING FAN MARK, MODEL NO., CFM, RPM, HP, AND ELECTRICAL SERVICE.
④ PROVIDE ROOF CURB, WEATHERPROOF FACTORY MOUNTED DISCONNECT SWITCH, INTERNALLY MOUNTED VARIABLE SPEED CONTROLLER, MOTORIZED DAMPER, AND NAMEPLATE IDENTIFYING FAN MARK, MODEL NO., CFM, RPM, HP, AND ELECTRICAL SERVICE.
⑤ INDICATED EQUIPMENT DESIGNATIONS ARE FOR USE IN CONSTRUCTION ONLY. CONTRACTOR SHALL COORDINATE WITH OWNER ON DESIRED FINAL TAG IDENTIFICATION / NUMBERING / LETTERING. OWNER APPROVED DESIGNATIONS SHALL BE USED IN BMS PROGRAMMING AND ON PERMANENT EQUIPMENT IDENTIFICATION TAGS. AS-BUILT DRAWINGS SHALL BE UPDATED WITH FINAL IDENTIFICATION TAG DESIGNATIONS.

SCHEDULE OF GAS UNIT HEATERS

MARK	MODEL No. ①	BURNER DATA INPUT (BTUH) OUTPUT (BTUH)	FUEL	MOTOR HP	ELECTRIC SERVICE	PHYSICAL DATA LxWxH	WEIGHT (LBS)	REMARKS
①	UEASB5	85,000 79,050	PROPANE	0.5	120/1/60	30/33/21	105	REFER TO ②③④

NOTES
① AS MANUFACTURED BY "REZNOR".
② INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
③ SET TO LOW SPEED. PROVIDE UNIT MOUNTED VARIABLE SPEED CONTROLLER AND MANUAL THERMOSTAT.
④ SUPPORT BY STRUCTURE & PROVIDE ALL CLEARANCES.

SCHEDULE OF REGISTERS AND DIFFUSERS

MARK	TYPE	SERVICE	MODEL No. ①	DIRECTION DISCHARGE	DAMPER TYPE	FINISH	REMARKS
①	CEILING REGISTER	RETURN	635	-	OPPOSED BLADE	PER ARCH.	REFER TO ②③④⑤

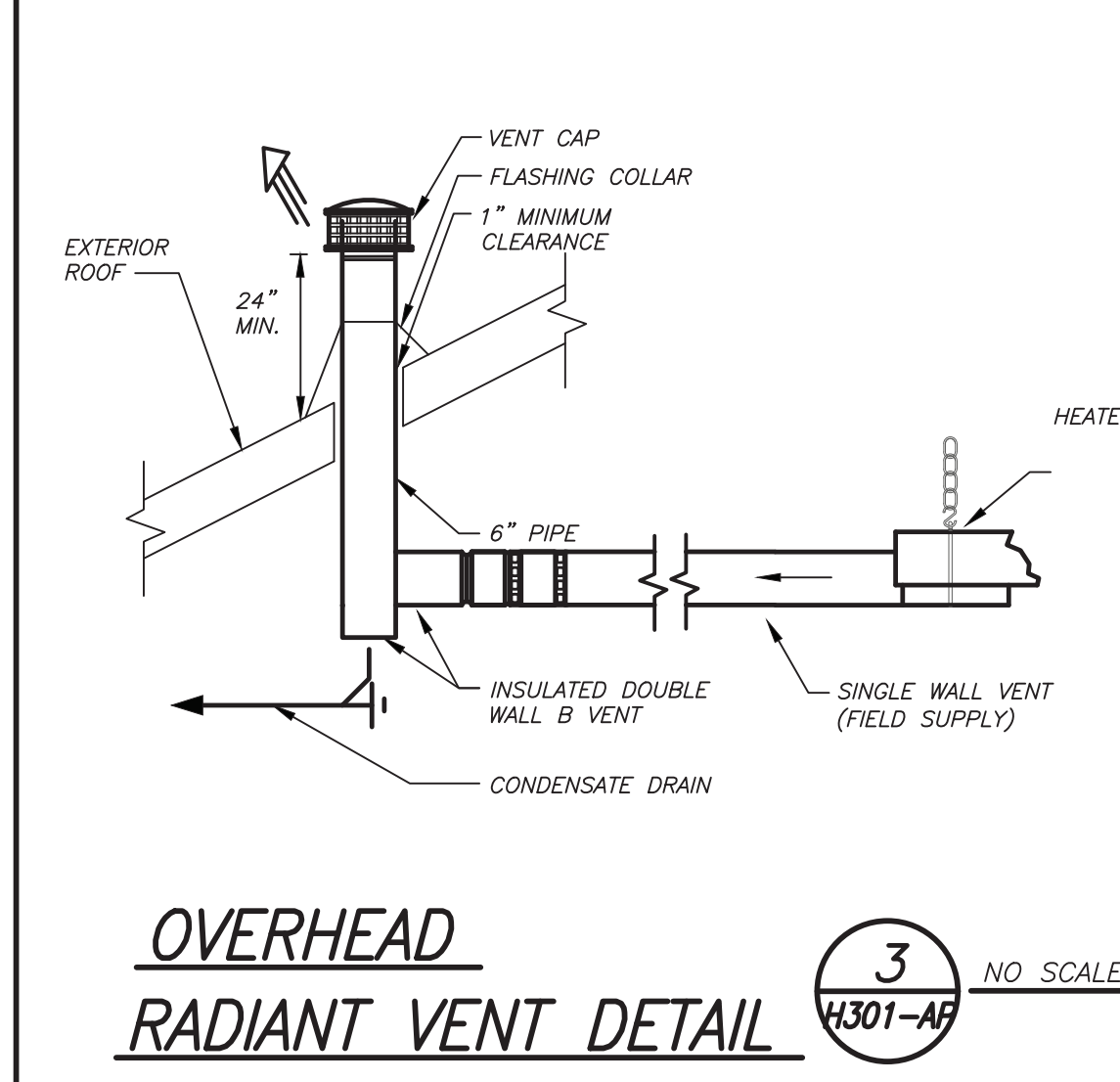
NOTES
① AS MANUFACTURED BY "PRICE".
② INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
③ PROVIDE CABLE OPERATED DAMPERS IN UN-ACCESSIBLE AREAS.
④ PROVIDE MOUNTING FRAME COMPATIBLE W/ MOUNTING SURFACE, COORDINATE ALL BORDER TYPES, COLORS, FINISHES, AND DIMENSIONS WITH ARCHITECT.

RETURN NECK SIZE PER CFM RANGE (NOT TO EXCEED 675 fpm)	
50 TO 148	6X6
150 TO 249	8X8
250 TO 399	10X10
400 TO 599	12X12
600 TO 799	14X14
800 TO 1099	16X16
1100 TO 1399	18X18
1400 TO 2000	24X24

SCHEDULE OF GAS FIRED RADIANT HEATERS

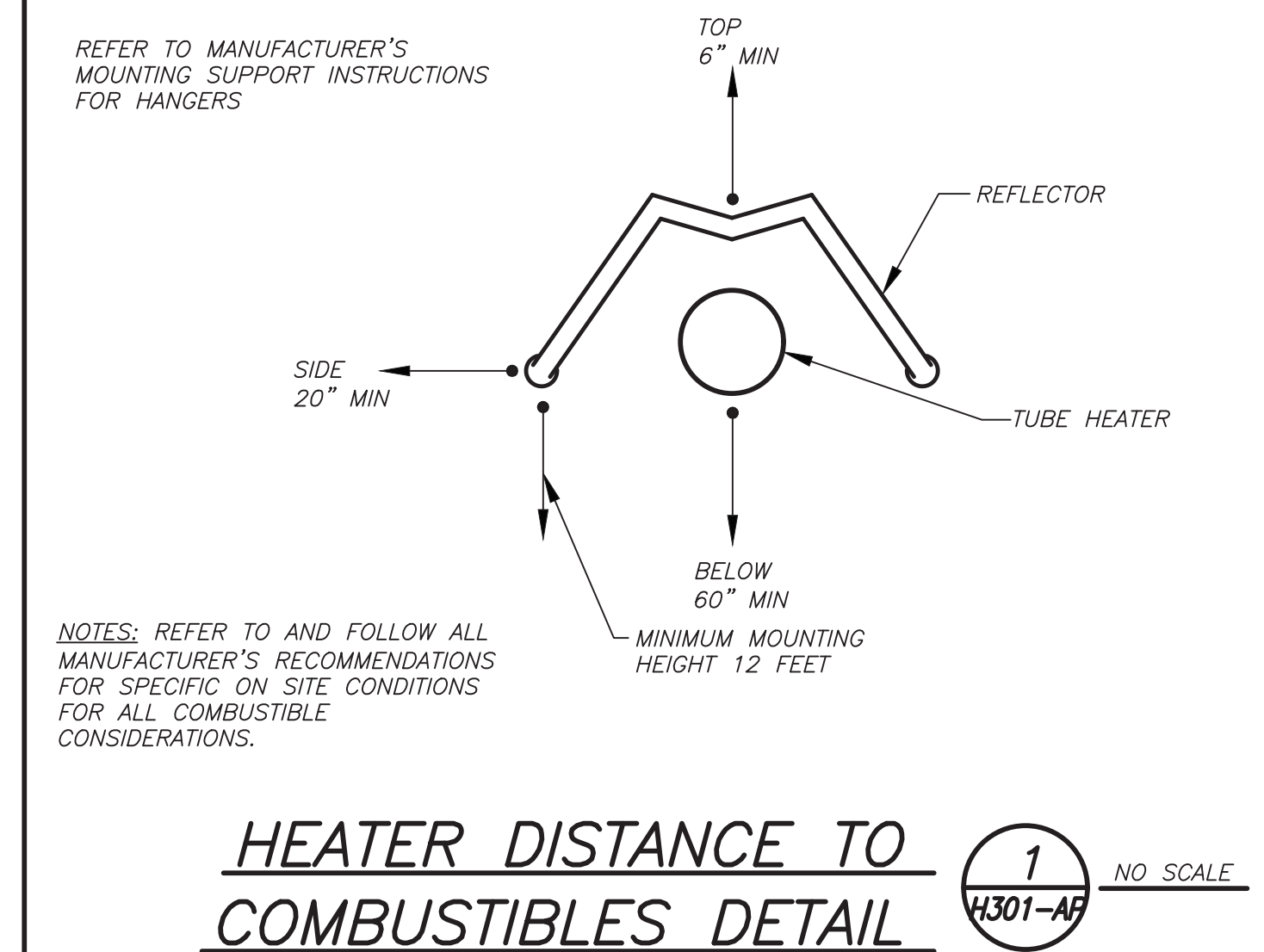
MARK	SERVICE	LOCATION	TYPE	MODEL No. ①	GAS TYPE	INPUT MBH	ELECTRIC SERVICE	REMARKS
①	STORAGE BAYS	UPPER CEILING	OVERHEAD RADIANT	SST-X	PROPANE	65	120/1/60	REFER TO ②③④⑤

NOTES
① AS MANUFACTURED BY "SCHWANK".
② INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
③ PROVIDE MANUAL THERMOSTAT AND INTAKE/VENT CAPS.
④ PROVIDE ALL REQUIRED MOUNTING BRACKETS, HANGING RODS/CHAINS AND ATTACHMENTS AND SECURE TO STRUCTURE IN AN APPROVED MANNER.
⑤ MANUFACTURER TO SUBMIT SHOP DRAWING TO THIS CONFIGURED SPECIFIC INSTALLATION.



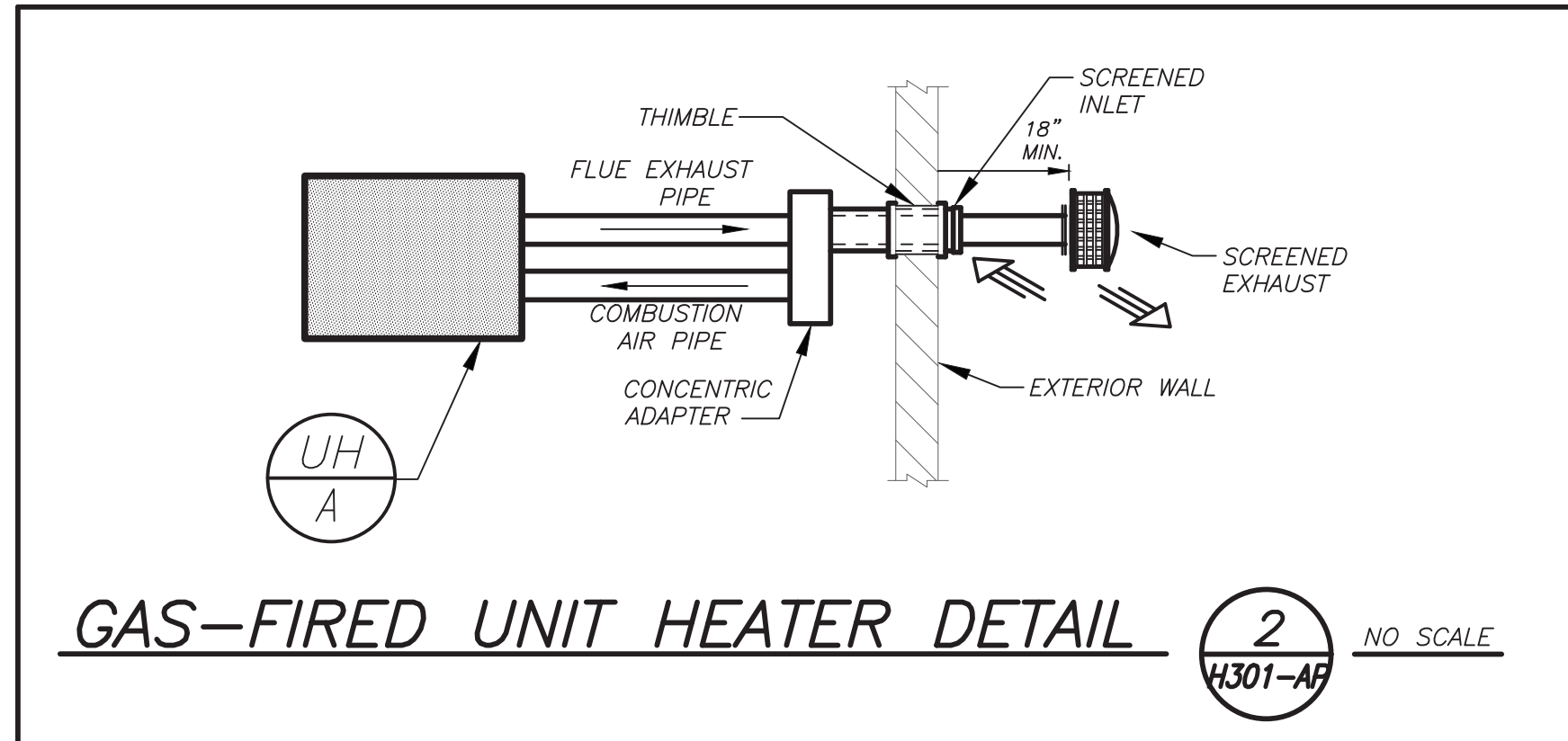
OVERHEAD RADIANT VENT DETAIL

3
H301-AP
NO SCALE



HEATER DISTANCE TO COMBUSTIBLES DETAIL

1
H301-AP
NO SCALE



GAS-FIRED UNIT HEATER DETAIL

2
H301-AP
NO SCALE

BEFORE FABRICATION THIS CONTRACTOR SHALL
VERIFY ALL MEASUREMENTS AND CONDITIONS ON
JOB AND COORDINATE HIS WORK WITH THE WORK
OF ALL OTHER CONTRACTORS

DISTRICT-WIDE CAPITAL IMPROVEMENTS NEW CONSTRUCTION & ATHLETIC UPGRADES

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Chappaqua, NY 10514

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285 MAIN STREET MOUNT KISCO, NEW YORK 10549
P: 914.666.5900 KGDARCHITECTS.COM

CONSTRUCTION DOCUMENTS

SED Control No.
HG: 66-10-04-06-0-015-023
AP: 66-10-04-06-7-052-001
CS: 66-10-04-06-7-027-002
OB: 66-10-04-06-0-026-002
SB: 66-10-04-06-0-036-007

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914.328.6060 CENTER@BGA-ENG.COM WWW.BGA-ENG.COM

Key Plan

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Professional Seal

No.	Date	Issue
4	09/16/2024	ISSUE FOR BID
3	10/27/2023	SED ISSUE
2	08/31/2023	ISSUE FOR PRICING - 90% CD
1	06/10/2023	SCHEMATIC DESIGN

Sheet Title

SCHEDULES & DETAILS

Job No.	Sheet Number
2023-1028	
Date	
09/16/2024	
Scale	
AS NOTED	
Drawn / Checked	
BGA/BGA	

H301-AP