

Rooftop Unit Schedule

UNIT		BLOWER SECTION			EVAPORATOR SECTION		CONDENSOR SECTION					HEATING SECTION			ELECTRIC		WEIGHT	REMARKS		
TAG	MANUFACTURER/MODEL NO.	CFM	HP	O.A. (CFM)	FT2	REFRIG. LBS. TOTAL	MBH CAP.	NOM. TONS	COMP. TYPE	NO. COMP.	KW	SEER	INPUT MBH	OUTPUT MBH	AFUE	VOLT	FLA	FUSE	LBS	
RTU 1	CARRIER/48HCEA06B2A5-0F1	2000	2.4	330	7.3	R410A/13.3	57.5	5	SCROLL	1	4.6	15.20	115	90	81	208/3	29/40		600	1,2,3
RTU 2	CARRIER/48HCEA07B1A5-0F1	2200	1.7	400	8.9	R410A/14.0	73.0	6	SCROLL	1	6.0	12.00/EEER	125	103	82	208/3	32/50		745	1,2,3

DATA ABOVE IS BASED UPON FIRST MANUFACTURER LISTED.

REMARKS:

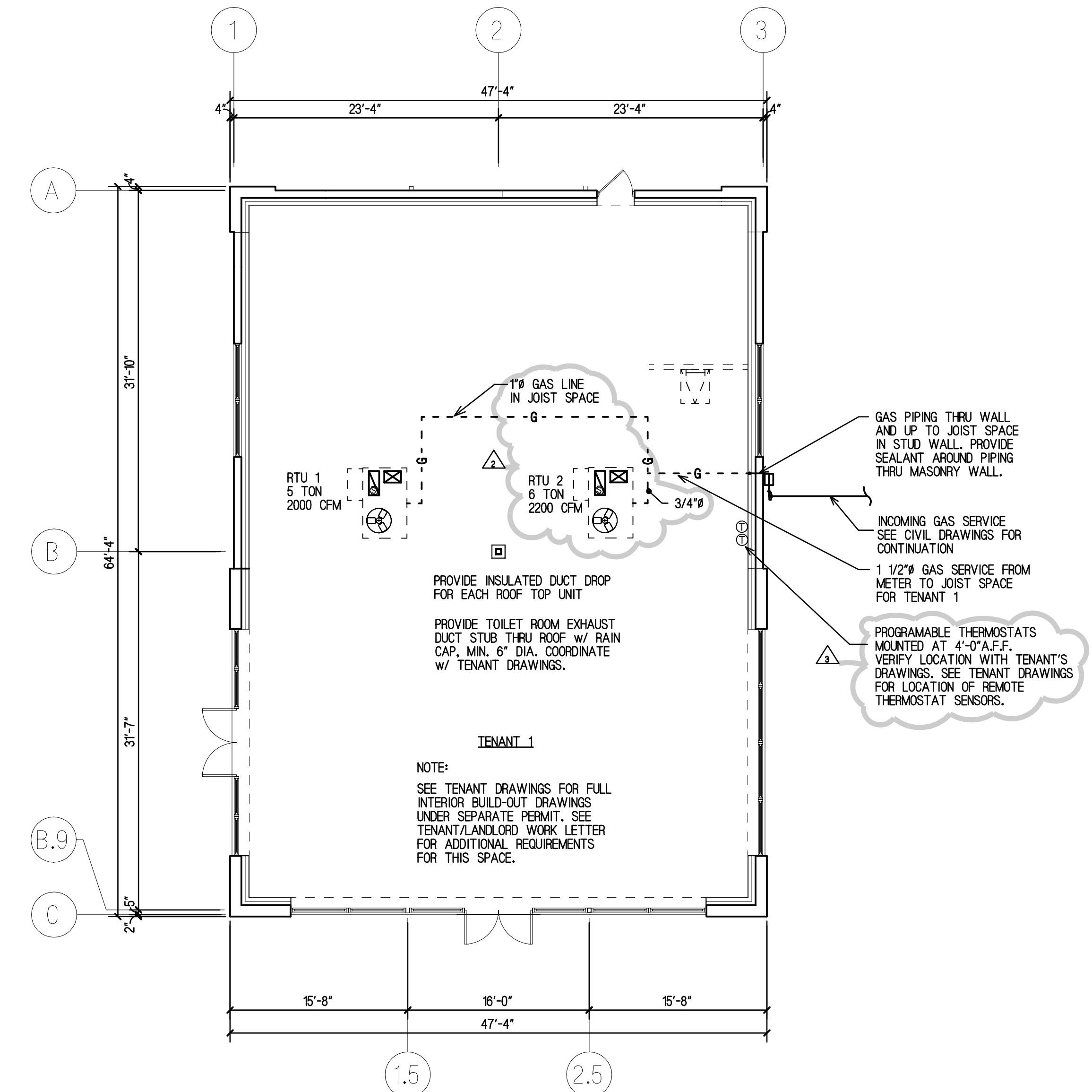
- PROVIDE RTU w/ ECONOMIZER, BAROMETRIC RELIEF w/ ENTHALPY CONTROL, DISPOSABLE FILTERS, MANUAL FRESH AIR DAMPER & 14" INSULATED ROOF CURB.
- PROVIDE COMMERCIAL GRADE 7 DAY PROGRAMABLE THERMOSTAT AND REMOTE SENSORS FOR EACH UNIT. PROVIDE LOCKING LUCITE COVER. MOUNT THERMOSTAT 4'-0" A.F.F. COORDINATE LOCATION OF THERMOSTAT AND SENSORS WITH TENANT'S DRAWINGS. VERIFY MODEL OF THERMOSTAT WITH TENANT PRIOR TO PURCHASING.
- SMOKE DETECTORS TO BE PROVIDED IN RETURN AIR DUCTS OF 2000 CFM OR LARGER (FURNISHED, INSTALLED AND WIRED COMPLETE BY HVAC CONTRACTOR). PROVIDE REMOTE TESTER AT LOCATIONS RECOMMENDED BY LOCAL FIRE DEPARTMENT. VERIFY w/ TENANT PLANS. TEST SWITCH TO BE MOUNTED @ +/-6'-6" A.F.F.

Ventilation Schedule

NO.	ROOM NAME	AREA (S.F.)	HEAT LOSS BTUH	OCCUPANTS /1000 S.F.	OCCUPANT COUNT	CODE (CFM/OC)	NATURAL ACTUAL		CFM REQ'D		CFM ACTUAL			REMARKS	
							LIGHT	VENT	SUPPLY	EXHAUST	O.A.	SUPPLY	EXHAUST		O.A.
TENANT 1	FUTURE RETAIL	2824	124,284	-	-	.30 CFM/SF	535	63	NR	NR	602	3,550	-	638	RTU-1 & 2

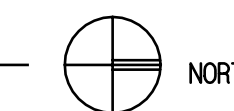
General Mechanical Notes

- IT IS THE INTENT OF THESE DRAWINGS AND ATTACHED ARCHITECTURAL AND MECHANICAL SPECIFICATIONS THAT THE H.V.A.C. CONTRACTOR SHALL PROVIDE, DELIVER AND INSTALL ALL HEATING, VENTILATING AND AIR-CONDITIONING SYSTEMS, DUCTWORK, DIFFUSERS, GRILLES, LOUVERS, INSULATION, EXHAUST AIR SYSTEMS, ACCESSORIES, TEMPERATURE CONTROL SYSTEMS, SPECIALTIES, PIPING, WIRING, GAS SERVICE AND DISTRIBUTION PIPING, TOOLS AND EQUIPMENT FOR A COMPLETE INSTALLATION OF ALL H.V.A.C. SYSTEMS, GUARANTEE AND SERVICE.
- THE GENERAL CONDITIONS, LATEST A.I.A. EDITION, SUPPLEMENTARY GENERAL CONDITIONS AND SPECIFICATIONS ARE A PART OF THIS PROJECT.
- OSHA RULES, REGULATIONS AND REQUIREMENTS ARE A PART OF THIS PROJECT. H.V.A.C. CONTRACTOR SHALL FOLLOW THEM ALONG WITH FEDERAL, STATE AND LOCAL REQUIREMENTS FOR THE SAFETY OF WORKERS ON THE JOB AND PASSERS-BY.
- PROVIDE ALL NECESSARY LIABILITY INSURANCE POLICIES AS REQUIRED BY THE ARCHITECTURAL SPECIFICATIONS. THIS CONTRACTOR SHALL KEEP THE ARCHITECT, ENGINEER, THEIR CONSULTANTS AND THE OWNER OF THE PROJECT HARMLESS FROM ALL CLAIMS, LOSSES, EXPENSES OF ANY KIND, INCLUDING BUT NOT LIMITED TO ATTORNEY'S EXPENSES AND FEES, WHERE CLAIMS ARE FILED BY THEIR OWN EMPLOYEES OR ANY SUB-CONTRACTOR HIRED BY THIS CONTRACTOR AND/OR THEIR EMPLOYEES. THIS INDEMNITY SHALL ALSO APPLY TO ANY CLAIMS FILED BY OTHERS BECAUSE OF WORK DONE BY THIS CONTRACTOR.
- THIS CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL ALL ITEMS SPECIFIED USING CONSTRUCTION METHODS THAT WILL PROTECT PERITY AT ALL TIMES AND PREVENT BODILY INJURY AND/OR DEATH. SPECIAL ATTENTION AND PRE-CAUTION SHALL BE PAID BY THE CONTRACTOR IN SELECTING THE SAFEST METHODS OR MEANS FOR THE INSTALLATION.
- THIS ARCHITECT/ENGINEER HAS NO CONTRACTUAL DUTY TO CONTROL THE SAFEST METHODS OR MEANS OF THE WORK, JOB SITE RESPONSIBILITIES, SUPERVISION OR TO SUPERVISE SAFETY AND DOES NOT VOLUNTARILY ASSUME ANY SUCH DUTY OR RESPONSIBILITY.
- ALL WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH FEDERAL, STATE AND LOCAL CODES ACCEPTED BY THE ARCHITECT AND LEFT IN PERFECT OPERATING CONDITION.
- H.V.A.C. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO SUBMITTING HIS FINAL BID. IF THERE ARE ANY DISCREPANCIES NOTIFY THE ARCHITECT AT ONCE.
- OBTAIN AND PAY ALL FEES AND PERMITS TO ALL PRIVATE AND PUBLIC AGENCIES HAVING JURISDICTION OVER THE PROJECT, PRIOR TO ORDERING, MANUFACTURING, PURCHASING OR INSTALLING ANY SYSTEM OR PIECE OF EQUIPMENT.
- CONSUL AND CHECK AT ALL TIMES THE LATEST ARCHITECTURAL, ELECTRICAL, PLUMBING AND EQUIPMENT DRAWINGS FOR EXACT LOCATION OF EACH DIFFUSER, REGISTER, GRILLE, LOUVER, DUCT AND EQUIPMENT. INSTALL, PIPE AND WIRE ALL EQUIPMENT AND DEVICES AS RECOMMENDED BY EACH MANUFACTURER.
- DUE TO CLEARANCE LIMITATION, PORTION OF THE DUCTWORK SHALL BE INSTALLED BETWEEN JOIST SPACE OR THROUGH THE WEBS OF THE JOIST, RE-SIZE TO FIT IN THE AVAILABLE SPACE AT NO EXTRA COST. NO DUCT SHALL BE INSTALLED CLOSER THAN 6" ABOVE FLOURESCENT LIGHTING FIXTURES.
- OMISSIONS FROM THE ARCHITECT'S DRAWINGS OR SPECIFICATIONS OF ANY ITEM NECESSARY FOR THE PROPER COMPLETION OR OPERATION OF THE WORK SHALL NOT RELIEVE THE CONTRACTOR FROM FURNISHING THE SAME WITHOUT ANY ADDITIONAL COST TO THE OWNER. WHERE DIFFERENT DUCT, PIPE OR EQUIPMENT SIZES ARE SPECIFIED ON THE DRAWINGS, THE LARGER SIZE SHALL BE USED.
- ALL EXCAVATING, BACKFILLING AND RESTORATION OF ALL DISTURBED SURFACES TO THEIR ORIGINAL CONDITION FOR THE ENTIRE H.V.A.C. INSTALLATION SHALL BE PROVIDED BY THE H.V.A.C. CONTRACTOR.
- SUBMIT AND OBTAIN A REVIEW FROM THE ARCHITECT PRIOR TO ORDERING, MANUFACTURING, PURCHASING OR INSTALLING ANY SYSTEM OR PIECE OF EQUIPMENT.
- ALL EQUIPMENT SHALL BEAR THE UL/AGA LABEL FOR ITS SPECIFIC USE AND INSTALLATION.
- TYPE AND FRAME NEATLY IN A GLASS ENCLOSURE, EACH SYSTEM'S OPERATING INSTRUCTIONS AND INSTRUCT THE OWNER OR HIS REPRESENTATIVE ON THE OPERATION OF EACH SYSTEM.
- ROOF AND WALL OPENINGS, INSTALLATION OF CURBS, SLEEVES AND FLASHING SHALL BE PROVIDED BY THE GENERAL CONTRACTOR. H.V.A.C. CONTRACTOR SHALL PROVIDE THE ROOF CURBS, SLEEVES, WEATHER-PROOFING AND SHALL BE RESPONSIBLE FOR THE CORRECT INSTALLATION OF EACH OPENING.
- EACH AIR DISTRIBUTION SYSTEM SHALL BE PROPERLY BALANCED AND SET TO SATISFY ALL MINIMUM REQUIREMENTS OF THE CODE EXHAUST AND OUTSIDE AIR INTAKE. PROVIDE A BALANCING REPORT PERFORMED BY AN INDEPENDENT MEMBER OF THE ASSOCIATED AIR BALANCING COUNCIL. PROVIDE ALL INFORMATION AS SET BY THE COUNCIL, ASHRAE OR SMACNA.
- ALL HEATING, VENTILATING AND AIR-CONDITIONING SYSTEMS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE THE OWNER ACCEPTS THE PROJECT. REFRIGERANT COMPRESSORS SHALL HAVE AN ADDITIONAL FIVE (5) YEAR GUARANTEE.
- MAKE ALL NECESSARY ADJUSTMENTS, AIR BALANCINGS AND CORRECTIONS AS NEEDED FOR PROPER FUNCTION OF EACH SYSTEM WITHOUT EXTRA COST. AFTER COMPLETION OF THE PROJECT, SUBMIT THREE (3) SETS OF "AS-BUILT" SHOP DRAWINGS AND ALL MANUFACTURER'S WARRANTIES, GUARANTEES AND INSTRUCTIONS OF ALL INSTALLED SYSTEMS AND EQUIPMENT PROPERLY BOUND AND HANDED TO THE ARCHITECT FOR OWNER'S FILE.
- TEMPERATURE CONTROL SYSTEMS, PANELS, THERMOSTATS, CLOCK, RELAYS, DEVICES, SPECIALTIES, WIRING, PIPING AND INTERLOCKING SHALL BE PROVIDED BY THE H.V.A.C. CONTRACTOR OR HIS TEMPERATURE SUB-CONTRACTOR. H.V.A.C. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE ENTIRE TEMPERATURE CONTROL INSTALLATION.
- DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED IN STRICT ACCORDANCE WITH SMACNA, ASHRAE, NFPA STANDARDS AND SHALL COMPLY WITH NFPA 90A BULLETIN, FEDERAL, STATE AND LOCAL CODES. DUCTWORK SHALL BE ZINC COATED SHEET METAL. PROVIDE LOCK TYPE SPLITTER OR VOLUME DAMPERS OR AIR EXTRACTORS ON ALL DUCT TAKE-OFFS.
- INSTALL DUCT SMOKE DETECTORS ON ALL AIR DISTRIBUTION SYSTEMS AND WIRE TO SPRINKLER/A.C.P. SYSTEM TO SATISFY LOCAL ORDINANCES. PROVIDE REMOTE TEST SWITCHES FOR ALL DUCT SMOKE DETECTORS. CONTACT LOCAL FIRE DEPARTMENT MARSHALL PRIOR TO INSTALLATION FOR PROPER PLACEMENT.
- ALL DUCT AND PIPING INSULATION, COVERING, VAPOR BARRIER AND ADHESIVES SHALL HAVE A FLAME SPREAD RATING OF NOT MORE THAN 20 AND SMOKE DEVELOPMENT RATING OF NOT MORE THAN 40. ARMAFLEX AND CANVAS COVERING SHALL NOT BE ACCEPTABLE.
- ALL DUCTS EXPOSED TO THE WEATHER SHALL BE SEAM CONSTRUCTION, COVERED WITH 1" THICK DUCT INSULATION WITH FACTORY APPLIED REINFORCED ALUMINUM FOIL AND PAINTED WITH TWO (2) COATS OF W.P. PAINT, INCLUDING SUPPORTS. ALL SPECIFIED DUCT SIZES ARE I.D..
- PROVIDE GAS SERVICE, DISTRIBUTION PIPING AND GAS CONNECTIONS TO EACH PIECE OF GAS-FIRED EQUIPMENT. GAS PIPING SHALL BE BLACK STEEL SCHEDULE #40 WITH MALLEABLE FITTINGS. INSTALL ACCESSIBLE SHUT-OFF VALVES AND SEDIMENT TRAPS ON ALL GAS-FIRED EQUIPMENT. GAS PIPING SHALL BE MARKED WITH AN APPROVED PERMANENT IDENTIFICATION BY THE INSTALLER SO THAT THE PIPING SYSTEM IS READILY IDENTIFIABLE. ALL GAS PIPING SHALL BE RUN INSIDE BUILDING IN JOIST SPACE. GAS METER TO BE OUTSIDE. PROVIDE 25db. AIR TEST REQUIRED ON GAS PIPING AT TIME OF ROUGH INSPECTION.
- ALL EXHAUST DUCTWORK, ELECTRICAL WORK AND LAY-IN CEILING SHALL BE INSTALLED IN ACCORDANCE WITH PLENUM CEILING RESTRICTIONS AND REQUIREMENTS.
- ALL FRSH AIR INTAKES SHALL BE 10'-0" MINIMUM FROM ANY EXHAUST OR CONTAMINATE VENTS.
- CONTRACTOR SHALL COORDINATE WITH TRUSS FABRICATOR AS REQUIRED TO PROVIDE CURB REINFORCEMENT TO ROOF STRUCTURE AND ROOF OPENINGS.
- CONTRACTOR SHALL MARK ALL GAS PIPING TO IDENTIFY THE UNIT METER SOURCE IN ACCORDANCE WITH THE INTERNATIONAL FUEL GAS CODE SECTION 401.7.
- SEE SHEET P1 FOR ADDITIONAL GAS PIPING SPECIFICATIONS AND SHEETS E1 FOR ADDITIONAL ELECTRICAL SPECIFICATIONS.



HVAC Plan

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



DATE
OCTOBER 7, 2014

REVISIONS
 A DECEMBER 30, 2014
 B JANUARY 6, 2015
 C JANUARY 6, 2015 (ISSUED FOR BID/CONSTRUCTION)

PROPOSED DEVELOPMENT FOR:
BOLINGBROOK SEMU, LLC.
 LOCATION
 123 N. WEBER ROAD
 BOLINGBROOK, ILLINOIS

Reitan Architects, LLC.
 1325 Willey Road - Suite 166 - Schaumburg, Illinois 60173
 PH. 847-519-1227 - FAX 847-519-0347
 Assumed Name No. 184-004083

THIS IS TO CERTIFY THAT THESE PLANS WERE PREPARED UNDER MY PERSONAL SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF THEY COMPLY WITH ALL CITY AND STATE REQUIREMENTS FOR THE VILLAGE OF BOLINGBROOK, ILLINOIS.

SHEET NAME
 MECHANICAL
 PLAN &
 SCHEDULES

SHEET
M1
 OF 1
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PROJECT NO.
 1414