

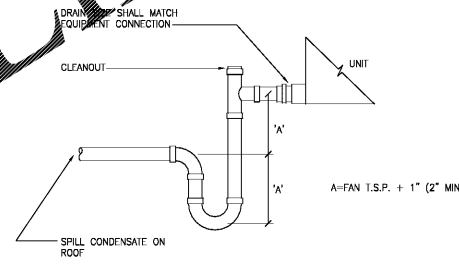
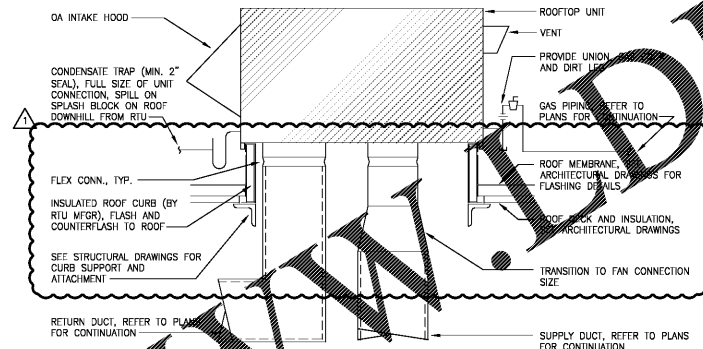
HVAC LEGEND	
SYMBOL	DESCRIPTION
	FUTURE MECHANICAL CONSTRUCTION
	EXISTING MECHANICAL CONSTRUCTION TO BE REMOVED
	CONNECTION TO EXISTING CONSTRUCTION
	THROW / DIRECTION OF AIRFLOW
	AIR DEVICE TAG
	SUPPLY AIR DEVICE
	RETURN / EXHAUST AIR DEVICE
	SLOT AIR DEVICE
	SIDEWALL AIR DEVICE
	DUCTWORK, SIZED AS SPECIFIED (FIRST DIMENSION IS SIDE SHOWN)
	LINED DUCTWORK, SIZED AS SPECIFIED (FIRST DIMENSION IS SIDE SHOWN)
	FLEXIBLE DUCT OR CONNECTOR
	DUCTWORK, SIZED AS SPECIFIED (FIRST DIMENSION IS SIDE SHOWN)
	LINED DUCTWORK, SIZED AS SPECIFIED (FIRST DIMENSION IS SIDE SHOWN)
	FLEXIBLE CONNECTOR
	90 DEGREE ELBOW WITH TURNING VANES
	SMOOTH RADIUS ELBOW WITH FULL-LENGTH SPLITTER VANES
	DUCT TRANSITION
	SQUARE-TO-ROUND DUCT TRANSITION
	DUCT OFFSET: (R)ISE, (D)ROP - ARROW SHOWS DIRECTION OF OFFSET.
	RETURN OPENING ABOVE CEILING, SIZED AS SPECIFIED
	FIRE DAMPER
	FIRE DAMPER - VERTICAL
	SMOKE DAMPER
	SMOKE DAMPER - VERTICAL
	MANUAL DAMPER
	MOTOR-OPERATED DAMPER
	(T)HERMOSTAT, (H)UMIDISTAT
	SENSOR: (T)EMP, (H)UMID, (H)Z, CO, ΔP
	DUCT-MOUNTED SMOKE DETECTOR

ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.

HVAC ABBREVIATIONS			
ABBREV.	DEFINITION	ABBREV.	DEFINITION
A/C	ABOVE CEILING	I.T.	INSIDE TECHNOLOGY
ABV	ABOVE	ID	INSIDE DIAMETER
AD	ACCESS DOOR	IE	INVERT ELEVATION
ADJ	ADJUSTABLE	L&S	LOUVER AND SCREEN
AF	ABOVE FINISHED FLOOR	LAHJ	LOCAL AUTHORITY HAVING JURISDICTION
AMB	AMBIENT	LAT	LEAVING AIR TEMPERATURE
ARCH	ARCHITECT(URAL)	LDB	LEAVING DRY BULB
B/F	BELOW FLOOR	LF	LINEAR FEET
B/G	BELOW GRADE	LWB	LEAVING WET BULB
BAS	BUILDING AUTOMATION SYSTEM	MBH	1000 BTUH
BB	BASE BUILDING	MD	MANUAL DAMPER
BD	BACKDRAFT DAMPER	MECH	MECHANICAL
BEL	BELOW	MFR	MANUFACTURER
BHP	BRAKE HORSEPOWER	MIN	MINIMUM
BLDG	BUILDING	MOD	MOTOR-OPERATED DAMPER
BOD	BOTTOM OF DUCT	MOV	MOTOR-OPERATED VALVE
BTUH	BRITISH THERMAL UNITS PER HOUR	MTD	MOUNTED
CAP	CAPACITY	N/A	NOT APPLICABLE
CD	CONDENSATE DRAIN	NC	NOISE CRITERIA
CF(1/M)	CUBIC FEET PER (HOUR / MINUTE)	NIC	NOT IN CONTRACT
CLG	CEILING	NOM	NOMINAL
CO	CARBON MONOXIDE or CLEANOUT	OA	OUTSIDE AIR
CONC	CONCRETE	OC	ON CENTERS
CONN	CONNECT(ION)	OD	OUTSIDE DIAMETER
CONT	CONTINUATION	OPNG	OPENING
CW	DOMESTIC COLD WATER	PH	PHASE
D	DRAIN	PLBG	PLUMBING
DB	DECEBEL or DRY BULB TEMPERATURE	PRV	PRESSURE REDUCING VALVE
DDC	DIRECT DIGITAL CONTROLS	PSI	POUNDS PER SQUARE INCH
DA	DIAMETER	R	R-VALUE or REFRIGERANT
DIV 15	DIVISION 15000 (MECHANICAL)	RA	RETURN AIR
DIV 16	DIVISION 16000 (ELECTRICAL)	RET	RETURN
DN	DOWN	RH	RELATIVE HUMIDITY
DP	PRESSURE DROP	RLGH	REFRIGERANT LIQUID AND HOT GAS
DWC(S)	DRAWING(S)	RS&L	REFRIGERANT SUCTION AND LIQUID
EA	EXHAUST or EXHAUST AIR	SA	SUPPLY AIR
EAT	ENTERING AIR TEMPERATURE	SAN	SANITARY
EDB	ENTERING DRY BULB	SD	SMOKE DAMPER or SMOKE DETECTOR
EFF	EFFICIENCY	SENS	SENSIBLE
ELEC	ELECTRICAL	SF	SQUARE FEET
ELEV	ELEVATION	SP	STATIC PRESSURE
ESP	EXTERNAL STATIC PRESSURE	SP(S)	SPECIFY or SPECIFICATIONS
EWB	ENTERING WET BULB	SQ	SQUARE
EXH	EXHAUST	SUP	SUPPLY AIR
EXIST	EXISTING	TBD	TO BE DETERMINED
FA	FREE AREA	THRU	THROUGH
FACP	FIRE ALARM CONTROL PANEL	TOD	TOP OF DUCT
FD	FIRE DAMPER	TSP	TOTAL STATIC PRESSURE
FLEX	FLEXIBLE	TSTAT	THERMOSTAT
FLR	FLOOR	TYP	TYPICAL
FP	FIRE PROTECTION	UNO	UNLESS NOTED OTHERWISE
FP(M/S)	FEET PER (MINUTE / SECOND)	VA	VOLT AMPERE
FSD	COMBINATION FIRE AND SMOKE DAMPER	VFD	VARIABLE FREQUENCY DRIVE
GAL	GALLONS	W/	WITH
GP(D/H/M)	GALLONS PER (DAY / HOUR / MINUTE)	WB	WET BULB TEMPERATURE
H2	HYDROGEN	WC	WATER COLUMN
HD	HEAD	WG	WATER GAUGE
HP	HORSEPOWER	WT	WEIGHT
HW(R)	DOMESTIC HOT WATER (RECIRCULATION)	XTFR	TRANSFER
HZ	HERTZ	XFMTR	TRANSFORMER

ALL ABBREVIATIONS MAY NOT APPEAR ON DRAWINGS.

- ### GENERAL NOTES
- REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
  - WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE BUILDING CODES AND STANDARDS ADOPTED BY THE AUTHORITY HAVING JURISDICTION AND ALL APPLICABLE LOCAL ORDINANCES.
  - CONTRACTOR SHALL OBTAIN ALL PERMITS, LICENSES, INSPECTIONS, ETC., AND PAY ALL INCIDENTAL FEES, AS REQUIRED TO OBTAIN A PERMIT AND A PERMANENT CERTIFICATE OF OCCUPANCY.
  - WORK SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION TO AVOID CONFLICTS. CONFLICTS WHICH ARISE DUE TO LACK OF PROPER COORDINATION SHALL BE CORRECTED AT THE CONTRACTOR'S COST.
  - DESIGN INDICATED IS SCHEMATIC AND MAY NOT REFLECT ALL CONSTRAINTS IMPOSED BY ACTUAL PROJECT CONDITIONS. CONTRACTOR SHALL VISIT SITE AND REVIEW CONSTRUCTION DOCUMENTS (INCLUDING ALL TRADES) TO FAMILIARIZE HIMSELF WITH THE PROJECT PRIOR TO BID. CONTRACTOR'S BID SHALL INCLUDE ANY AND ALL COSTS REQUIRED TO REWORK THE DESIGN TO FIT WITHIN THE PHYSICAL CONSTRAINTS WHILE ACHIEVING THE OVERALL DESIGN INTENT.
  - THE BASIS-OF-DESIGN PRODUCTS WERE USED TO DETERMINE DIMENSIONS, INSTALLATION AND ACCESS CLEARANCES, SUPPORTS, ELECTRICAL SERVICE, CONNECTION ARRANGEMENTS, ETC. WHERE ALTERNATE PRODUCTS ARE PROVIDED, IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL REQUIREMENTS AND RECTIFY ANY CONFLICTS AT THE CONTRACTOR'S COST.
  - MECHANICAL CONSTRUCTION SHALL NOT BE INSTALLED WITHIN ELECTRICAL ROOMS, IT CLOSETS, TELEPHONE ROOMS, OR ELEVATOR EQUIPMENT ROOMS EXCEPT PORTIONS OF EACH SYSTEM SERVING THAT SPECIFIC ROOM. IN NO CASE MAY PIPING BE INSTALLED DIRECTLY ABOVE EQUIPMENT WITHIN THESE ROOMS. ALL WORK SHALL BE INSTALLED TO AVOID CONFLICT WITH ELECTRICAL EQUIPMENT "DEDICATED SPACE" AS REQUIRED BY NEC AND LOCAL ORDINANCES. COORDINATE LOCATIONS OF ALL ELECTRICAL GEAR (DISTRIBUTION PANELS, TRANSFORMERS, SWITCHGEAR, ETC.) WITH ELECTRICAL CONTRACTOR PRIOR TO FABRICATION AND INSTALLATION.
  - CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL EQUIPMENT AND DEVICES WITH THE ELECTRICAL CONTRACTOR PRIOR TO ORDERING.
  - ALL MATERIALS AND EQUIPMENT SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO ORDERING. CONTRACTOR ASSUMES LIABILITY AND COSTS FOR ANY PRODUCT WHICH IS ORDERED PRIOR TO RECEIPT OF APPROVED SUBMITTALS.
  - ALL MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A MINIMUM PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE. ADDITIONAL WARRANTY SHALL APPLY WHERE SPECIFIED.
  - EQUIPMENT START-UP AND COMMISSIONING SHALL BE PERFORMED BY FACTORY-AUTHORIZED AGENTS ONLY. SUBMIT WRITTEN START-UP PROCEDURES TO OWNER AND ENGINEER FOR APPROVAL PRIOR TO PERFORMANCE OF START-UP ACTIVITIES. FINAL REPORTS SHALL BE APPROVED BY OWNER AND ENGINEER.
  - ALL PENETRATIONS OF FIRE AND/OR SMOKE RATED ASSEMBLIES SHALL BE FIRE STOPPED WITH UL-LISTED SYSTEM APPROVED FOR THE APPLICATION.
  - FLASH AND SEAL ALL PENETRATIONS OF BUILDING EXTERIOR, WALLS AND ROOF WITH APPROVED SEALANT.
  - ALL WORK INSTALLED WITHIN HVAC PLENUMS SHALL BE PLENUM RATED (25/50 FLAME SPREAD/SMOKE DEVELOPED) AND, WHERE REQUIRED BY THE LAHJ, SHALL BE NON-COMBUSTIBLE.
  - ALL EQUIPMENT SHALL BE NEW. CONTRACTOR SHALL TEST EXISTING EQUIPMENT FOR PROPER OPERATION AND REPAIR CONDITION TO OWNER. ALL UNREPORTED EQUIPMENT IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED OR REPLACED IF NOT FUNCTIONAL AT THE DATE OF BENEFICIAL OCCUPANCY. NEW EQUIPMENT SHALL BE UL OR ETL LISTED AND LABELED. GAS-FIRED EQUIPMENT SHALL ALSO BE AIA OR CSA LISTED AND LABELED. INSTALL ALL EQUIPMENT PER THESE DOCUMENTS, MANUFACTURER'S RECOMMENDATIONS, AND CODE REQUIREMENTS FOR SPECIFIC APPLICATION.
  - EXCEPT WHERE SPECIFIED OTHERWISE, MECHANICAL CONTRACTOR SHALL PROVIDE STARTERS AND ELECTRICAL DISCONNECTS FOR ALL ELECTRICAL EQUIPMENT FURNISHED UNDER THIS CONTRACT.
  - PROVIDE PERMANENT LABELS FOR ALL EQUIPMENT, CONTROLS, AND PIPING.



PACKAGED ROOFTOP AIR CONDITIONING UNITS													
MARK	NOM TONS	SEER	SUPPLY FAN		OA CFM	HEATER		ELEC		WEIGHT (LBS)	BASIS OF DESIGN		REMARKS
			CFM	ESP (W.G.)		MBH	EFF	V/PH	DISC BY		MANUFACTURER	MODEL	
RTU-2C-1,2,3	5	14.0	2,000	1.0	100	100	80	208/3	E.C.	850	TRANE	YSC060	(1)(2)(3)
RTU-2C-4 (FUTURE)	5	14.0	2,000	1.0	100	100	80	208/3	E.C.	850	TRANE	YSC060	(1)(2)(3)(4)

- UL AND CSA LISTED NAT GAS HEATING FURNACE AND DX COOLING UNIT; HEAVY GAUGE STEEL CABINET; BAKED ENAMEL FINISH; SEAMLESS TOP; REMOVABLE ACCESS PANELS; FWD CURVED, EVAPORATOR FAN W/ADJ BELT DRIVE; ALUMINIZED STEEL HEAT EXCHANGER W/INDUCED DRAFT BLOWER AND SPARK PILOT IGNITION; ALUMINUM FIN/COPPER TUBE EVAPORATOR COIL WITH FRETZESTIA; FILTER RACK WITH 1" PLATED MEDIA MERV 8 FILTER; SCROLL COMPRESSOR WITH VIBRATION ISOLATION MOUNTING; THERMOSTATIC EXPANSION VALVE; ALUMINUM FIN/COPPER TUBE CONDENSER COIL W/WAL GUARD; DIRECT DRIVE PROPPELLER TYPE CONDENSER FAN EXTERNAL SERVICE VALVES; RETROFITABLE FILTER DRYER; COMPACT CASE HEATER; COMPRESSOR START ASSIST; SHORT CYCLE, THERMAL AND H/L/O PRESSURE COMPRESSOR OVERLOAD PROTECTION; CONTROL VOLTAGE TRANSFORMER; LOW AMPERE KIT FOR COOLING OPERATION DOWN TO 0F; SINGLE POINT ELECTRICAL CONNECTION; R-410A.
- 7-DAY PROGRAMMABLE, AUTOMATIC CHANGEOVER COMBINATION THERMOSTAT AND HUMIDISTAT WITH SETPOINT OVERLAP PROTECTION, 5F DE/AD/AND, SETBACK CONTROL WITH 4 OCCUPIED/UNOCCUPIED EVENTS PER DAY (75F COOL/70F HEAT OCCUPIED, 85F COOL/55F HEAT UNOCCUPIED), SYSTEM AUTO/HEAT/COOL/OFF HIGH-LIMIT CONTROL, AND 2-HOUR PROGRAM OVERRIDE, OPTIMUM START CONTROL; 24 HR BATTERY BACK-UP, PHASE REMOTE TEMP SENSOR WHERE INDICATED.
- INSULATED 14" ROOF CURB.
- SHOWN FOR REFERENCE, NOT INCLUDED IN SCOPE OF WORK.

ELECTRIC HEATERS									
MARK	TYPE	SERVICE	HEATER		ELEC (60 HZ)		BASIS OF DESIGN		
			KW	#STEPS	V/PH	DISC BY	MANUFACTURER	MODEL	REMARKS
FUH-2C-LL	SUSPENDED	LANDLORD'S ROOM	3.3	1	208/1	EC	MARQUEE	510	(1)

- SUSPENDED, FORCED AIR UNIT HEATER; UL LISTED; HEAVY DUTY GALVANIZED STEEL CABINET WITH BAKED ENAMEL FINISH; MOUNTING BRACKET WITH ADJUST SHIELD; ADJUSTABLE STEEL DISCHARGE LOUVER AND INLET GUARD; TOTALLY ENCLOSED MOTOR AND DIRECT DRIVE PROPPELLER TYPE FAN; TOTAL ENCLOSED CORROSION-RESISTANT HEATING ELEMENT; BUILT-IN THERMOSTAT AND INTEGRAL CONTROL VOLTAGE TRANSFORMER AND INTEGRAL CIRCUIT BREAKERS, DISCONNECT SWITCH, THERMAL CUT OUT.

FANS - WHITE BOX 2C-1 [REF. M7.1 (2)]									
MARK	TYPE	SERVICE	CFM	ESP (W.G.)	MOTOR	ELEC (60 HZ)		BASIS OF DESIGN	
						V/PH	DISC BY	MANUFACTURER	MODEL
EF-2C-1.2	CEILING-MID	RESTROOMS	100	0.375	80 W	208/1	MC	GREENIECK	SP-B110 (1)

- DIRECT DRIVE, GALVANIZED STEEL FORMERLY FINISHED WITH LOW SOLUBLE CORROSION; HEAVY GAUGE CABINET INTERNALLY LINED WITH 1/2" ACOUSTICAL LINER; CEILING MOUNTED; ELECTRICAL DISCONNECT, INTERLOCK WITH LIGHTS.

DIFFUSERS, REGISTERS AND GRILLES - WHITE BOX 2C-1 [REF. M7.1 (2)]												
MARK	TYPE	MOUNTING	NECK DAMPER	MAX NC	MAX ΔP	SIZE		MAT'L	FINISH	BASIS		REMARKS
						NECK	FRAME			MFR	MODEL	
S1	4-WAY LOUVERED DIFFUSER	LAY-IN	N	30	0.1"	PER PLANS	24x24	AL	WHITE	TITUS	TMS	
R1	EGGCRATE GRILLE	LAY-IN	N	30	0.05"	PER PLANS	24x24, UNO	AL	WHITE	TITUS	50F	(1)

- PROVIDE 12" PLENUM WITH ROUND NECK FOR FLEX DUCT CONNECTION.

1. ROOFTOP UNIT - GAS HEAT  
MO.1 SCALE: NONE

2. ROOFTOP UNIT CONDENSATE DRAIN  
MO.1 SCALE: NONE

3. SUSPENDED ELECTRIC UNIT HEATER  
MO.1 SCALE: NONE



Date	Description	Date
03/29/19	ISSUED FOR BID AND PERMIT	
05/30/19	ISSUED FOR BID	
10/16/20	RE-ISSUED FOR BID AND PERMIT	

**Salem Gate Market**

**ANCHOR 2B AND RETAIL 2C**

1454 AND 1460 OLD SALEM ROAD  
CONYERS, GEORGIA

HVAC GENERAL NOTES AND DETAILS

Date: 3/29/19  
Drawn by: SL  
Checked by: KSM  
Project No.: 18.110  
Sheet No.: M0.1 (2)

