

HVAC SYMBOLS LEGEND:

- ☐ ROOF MOUNTED EQUIPMENT
- ▨ EQUIPMENT IN CEILING CAVITY
- ☒ CEILING EXHAUST FAN
- ☒ SUPPLY DUCTWORK/DIFFUSER
- ☒ RETURN DUCTWORK/GRILLE
- ▬ DUCTWORK (ROUND OR RECTANGULAR)
- ▬ DUCT TRANSITION
- ▬ RIGID TO FLEXIBLE DUCTWORK
- ▬ RIGID TO FLEXIBLE DUCTWORK
- ▬ MANUAL VOLUME DAMPER
- ⊙ THERMOSTAT
- ⊕ EQUIPMENT CALLOUT
- AIRFLOW INDICATOR
- S/A SUPPLY AIR
- R/A RETURN AIR
- E/A EXHAUST AIR
- O/A OUTSIDE AIR
- RTU HVAC ROOFTOP UNIT
- EF EXHAUST FAN
- CSD CEILING SUPPLY DIFFUSER
- CRG CEILING RETURN GRILLE
- WSR WALL SUPPLY REGISTER
- TWG TRANSFER WALL GRILLE
- ⊙ CONNECT TO EXISTING
- ◀ DOOR UNDERCUT

ROOFTOP UNIT SCHEDULE (NATURAL GAS-FIRED HEATING)

PLAN MARK	SERVICE LOCATION	MANUFACTURER	MODEL	NOMINAL TONS	SUPPLY CFM	E.S.P.	HP (BELT)	TC (MBH)	SRC (MBH)	MIN O/A	MEDIUM HEAT CAPACITY		ELEC.		NOTES	
											INPUT (MBH)	OUTPUT (MBH)	V/PH/Hz	MCA		MOCP
RTU-3	TENANT - B - CINGULAR	TRANE	YSC048	4	1600	0.75	1	49.2	37.9	300		80	64	208 / 3 / 60	25.3 / 35	A,B,C,D,E,F,G,H,J
RTU-4	TENANT - C - ADVANCED AMERICA	TRANE	YSC048	4	1600	0.75	1	49.2	37.9	300		80	64	208 / 3 / 60	25.3 / 35	A,B,C,D,E,F,G,H,J
RTU-5	TENANT - D - NAIL SALON	TRANE	YSC048	4	1600	0.75	1	49.2	37.9	300		80	64	208 / 3 / 60	25.3 / 35	A,B,C,D,E,F,G,H,J
RTU-6	TENANT - E	TRANE	YSC060	5	2000	0.75	1	63.1	48.2	425		80	64	208 / 3 / 60	30.3 / 45	A,B,C,D,E,F,G,H,J
RTU-7	TENANT - F	TRANE	YSC048	4	1600	0.75	1	49.2	37.9	300		80	64	208 / 3 / 60	25.3 / 35	A,B,C,D,E,F,G,H,J
RTU-8	TENANT - G	TRANE	YSC048	4	1600	0.75	1	49.2	37.9	300		80	64	208 / 3 / 60	25.3 / 35	A,B,C,D,E,F,G,H,J
RTU-9	TENANT - H	TRANE	YSC048	4	1600	0.75	1	49.2	37.9	300		80	64	208 / 3 / 60	25.3 / 35	A,B,C,D,E,F,G,H,J
RTU-10	TENANT - H-1	TRANE	YSC048	4	1600	0.75	1	49.2	37.9	300		80	64	208 / 3 / 60	25.3 / 35	A,B,C,D,E,F,G,H,J
RTU-11	TENANT - H-2	TRANE	YSC048	4	1600	0.75	1	49.2	37.9	300		80	64	208 / 3 / 60	25.3 / 35	A,B,C,D,E,F,G,H,J
RTU-12	TENANT - J - CATO	TRANE	YSC092	7-1/2	3000	0.75	2	95.0	71.8	705		150	121.5	208 / 3 / 60	38.9 / 50	A,B,C,D,E,F,G,H,K,L,M,N
RTU-13	TENANT - J - CATO	TRANE	YSC072	6	2400	0.75	1	72.0	53.6	600		120	97.2	208 / 3 / 60	32.7 / 50	A,B,C,D,E,F,G,H,K,L,M,N
RTU-14	TENANT - K - SHOE SHOW	TRANE	YSC102	8-1/2	3400	0.75	2	105.0	80.1	800		150	121.5	208 / 3 / 60	45.1 / 60	A,B,C,D,E,F,G,H,K,L
RTU-15	TENANT - K - SHOE SHOW	TRANE	YSC102	8-1/2	3400	0.75	2	105.0	80.1	800		150	121.5	208 / 3 / 60	45.1 / 60	A,B,C,D,E,F,G,H,K,L
RTU-16	TENANT - L - IT'S FASHION	TRANE	YSC120	10	4000	0.75	3	118.0	91.7	725		200	162.5	208 / 3 / 60	52.6 / 60	A,B,C,D,E,F,G,H,K,L,M,N
RTU-17	TENANT - M	TRANE	YSC102	8-1/2	3400	0.75	2	105.0	80.1	800		150	121.5	208 / 3 / 60	45.1 / 60	A,B,C,D,E,F,G,H,K,L

SCHEDULE NOTES:

- A. DIVISION 15 SHALL PROVIDE, SET AND PERFORM EQUIPMENT START-UP.
- B. EQUIPMENT SELECTION BASED ON 80°F DB/ 67°F WB EVAP. COIL EAT AND 95°F OUTDOOR AMBIENT.
- C. SUPPLIER SHALL FURNISH 14" HIGH INSULATED ROOF CURB INSTALLED BY DIVISION 15.
- D. SUPPLIER SHALL FURNISH THERMOSTAT WITH LOCKING COVER, INSTALLED BY DIVISION 15 (FINAL LOCATION BY TENANT). DIVISION 15 SHALL PROVIDE LOW VOLTAGE CONTROL WIRE. THERMOSTATS INSTALLED ON OUTSIDE WALL SHALL HAVE INSULATED BACK. DIVISION 16 SHALL PROVIDE CONDUIT FOR LOW VOLTAGE CONTROL WIRE.
- E. DIVISION 15 SHALL PROVIDE SMOKE DETECTOR IN RETURN DUCTWORK, REMOTE LIGHT, AND TEST/RESET STATION.
- F. DIVISION 16 SHALL PROVIDE WIRING AND INTERLOCK FOR SMOKE DETECTOR, REMOTE LIGHT, AND TEST/RESET STATION.
- G. SUPPLIER SHALL FURNISH UNPOWERED 120V GFCI OUTLET IN UNIT CABINET AND DIVISION 16 SHALL PROVIDE FUSED DISCONNECT. RE: ELECTRICAL DRAWINGS.
- H. SUPPLIER SHALL FURNISH (2) SETS OF FILTERS FOR REPLACEMENT BY DIVISION 15 PRIOR TO TEST AND BALANCE AND RELEASE TO OWNER.
- I. SUPPLIER SHALL FURNISH UNIT WITH HAIL GUARDS TO PROTECT THE CONDENSING COIL.
- J. SUPPLIER SHALL FURNISH FACTORY-INSTALLED 0-25% MANUALLY ADJUSTABLE OUTDOOR AIR DAMPER.
- K. SUPPLIER SHALL FURNISH EQUIPMENT WITH FACTORY INSTALLED ENTHALPY TYPE ECONOMIZER WITH BAROMETRIC RELIEF DAMPER.
- L. DIVISION 15 SHALL PROVIDE ROOFTOP UNIT WITH DUAL COMPRESSORS.
- M. PROVIDE BURGLAR BARS FOR SUPPLY AND RETURN AIR DROPS. BARS SHALL BE #4 REBAR (1/2") 6" O.C. IN BOTH DIRECTIONS.
- N. DIVISION 15 SHALL PROVIDE SMOKE DETECTOR(S) IN RETURN AND SUPPLY DUCT PLENUMS, REMOTE LIGHT, AND TEST/RESET STATION. DIVISION 16 SHALL PROVIDE WIRING AND INTERLOCK FOR SMOKE DETECTOR, REMOTE LIGHT, AND TEST/RESET STATION.

NOTE TO CONTRACTOR: ROOFTOP UNIT PRICING MAY INCLUDE ALTERATIONS FROM BASE SPECIFIED TRANE UNITS.

GRILLE, REGISTER AND DIFFUSER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SERVICE TYPE	MOUNTING TYPE
CSD	E.H. PRICE	ASCD	SUPPLY DIFFUSER	LAY-IN CEILING
CSD2	E.H. PRICE	ASCD	SUPPLY DIFFUSER	SURFACE
CRG	E.H. PRICE	80	CEILING RETURN GRILLE	LAY-IN CEILING
CRG2	E.H. PRICE	80	CEILING RETURN GRILLE	SURFACE
CEG	E.H. PRICE	80	CEILING RETURN GRILLE	LAY-IN CEILING
WSR	E.H. PRICE	520D	SUPPLY REGISTER	WALL OR SA DUCT
WRG	E.H. PRICE	535D	WALL RETURN GRILLE	WALL

SCHEDULE NOTES:

- A. EQUIPMENT PROVIDED BY DIVISION 15.
- B. SUPPLIER SHALL FURNISH ALL EQUIPMENT WITH BAKED ENAMEL WHITE FINISH AND ALL ALUMINUM CONSTRUCTION.
- C. REFERENCE ARCHITECTURAL CEILING PLANS FOR COORDINATION OF INSTALLATION AND FRAME TYPE FOR EACH DEVICE.
- D. REFERENCE PLANS FOR NOMINAL REGISTER OR GRILLE FACE BLADE SIZES.
- E. SUPPLIER SHALL FURNISH REGISTERS WITH DAMPER AND DOUBLE DEFLECTION ADJUSTABLE BLADES PARALLEL TO LONG DIMENSION.
- F. SUPPLIER SHALL FURNISH SUPPLY DIFFUSERS WITH ROUND COLLAR EQUAL TO BRANCH DUCT SIZE INDICATED ON PLANS.

EXHAUST FAN SCHEDULE

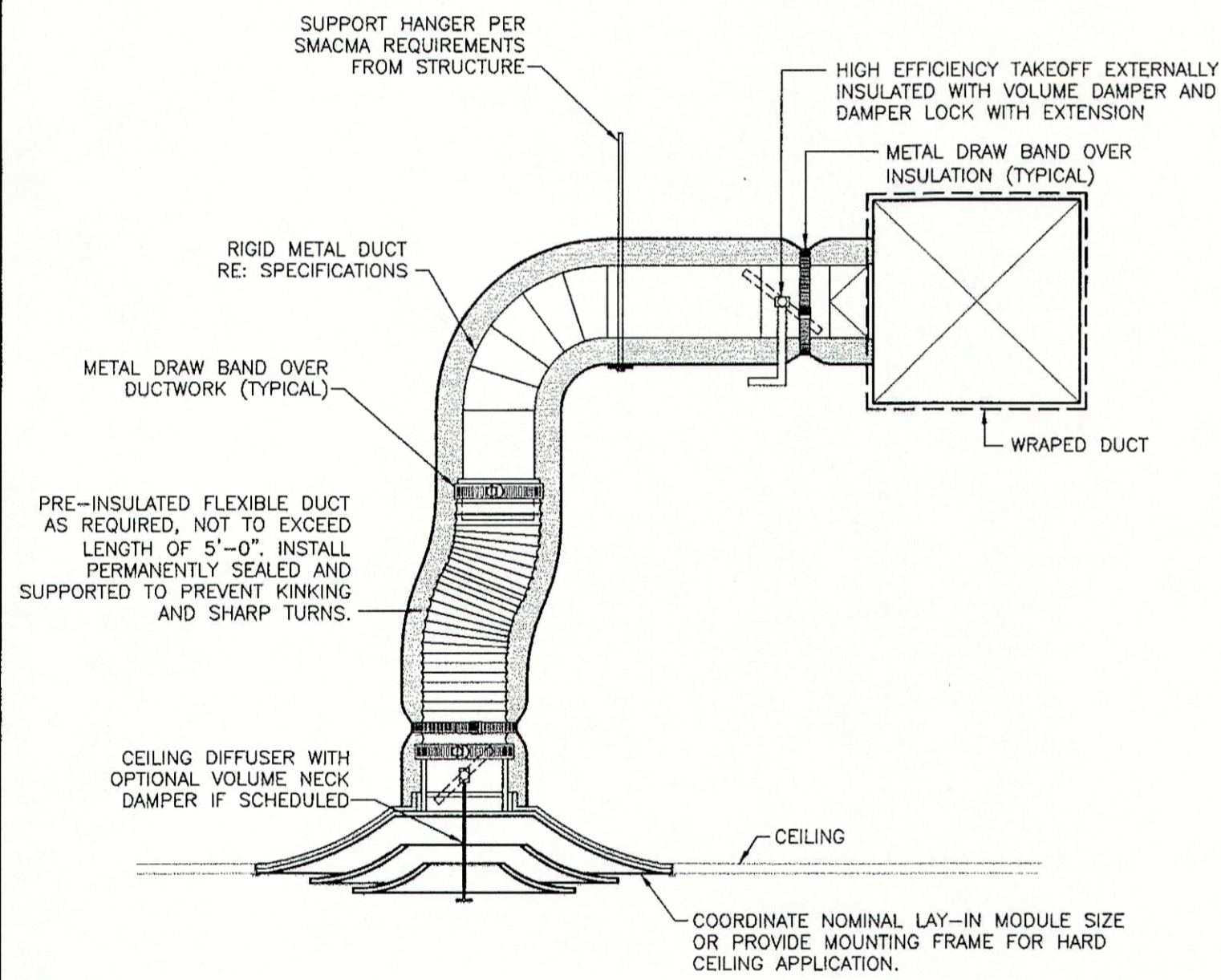
PLAN MARK	SERVICE LOCATION	MANUFACTURER	MODEL / TYPE	CFM	E.S.P. (IN)	MOTOR	HP	RPM	V/PH/Hz	NOTES
EF-#	TYPICAL RESTROOM	GREENHECK	SPA-125	115	0.25	DIRECT	53 W	1100	120/1/60	A-E
EF-16	TENANT - D - NAIL SALON	GREENHECK	GB-091-4	400	0.35	DIRECT	0.25	1725	115/1/60	A,F,G,H,J

SCHEDULE NOTES:

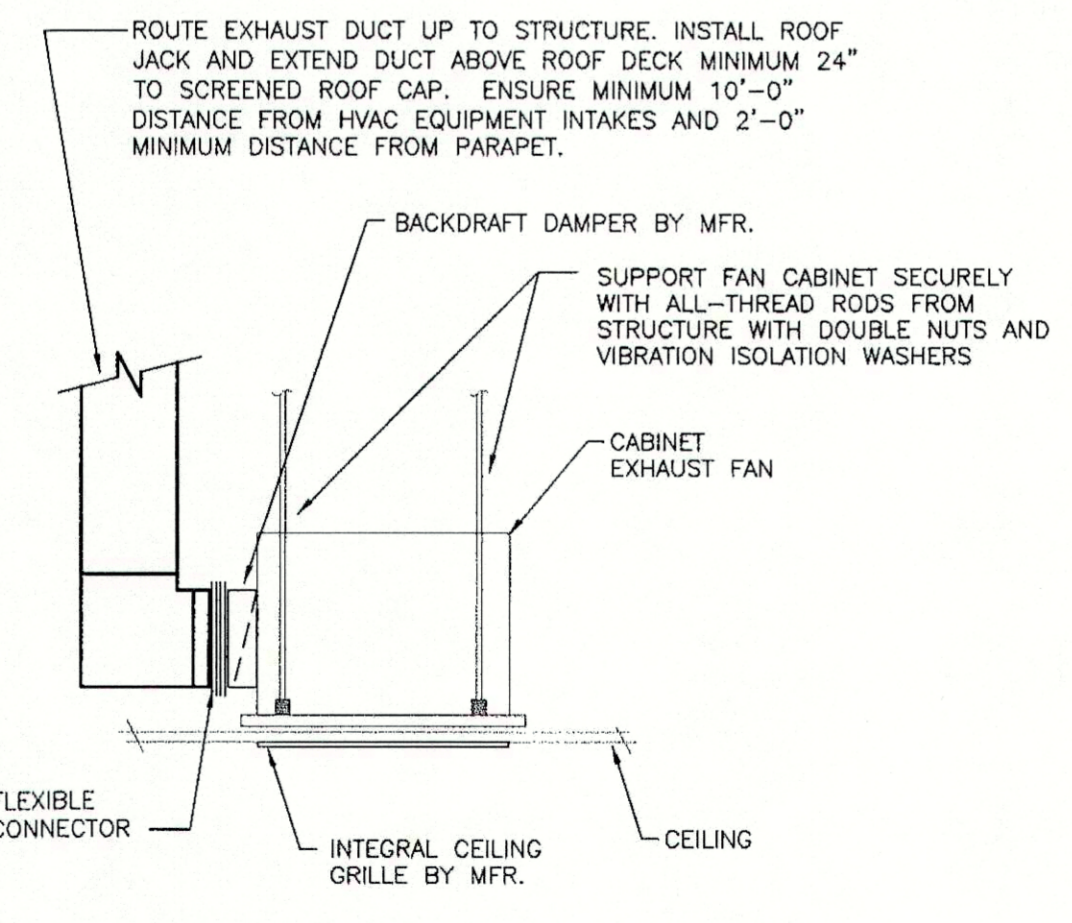
- A. EQUIPMENT PROVIDED BY DIVISION 15.
- B. SUPPLIER SHALL FURNISH ROOF CAP WITH SCREEN AND BACKDRAFT DAMPER FOR INSTALLATION BY DIVISION 15. ROOF CAP SHALL EXTEND 24" ABOVE DECK.
- C. SUPPLIER SHALL FURNISH CEILING GRILLE, HANGER RODS, AND VIBRATION ISOLATION FOR INSTALLATION BY DIVISION 15.
- D. SUPPLIER SHALL PROVIDE FAN WITH INTEGRAL PLUG TYPE DISCONNECT AND RECEPTACLE.
- E. DIVISION 16 SHALL WIRE FAN WITH RESTROOM LIGHT SWITCH.
- F. FURNISH 12" ROOF CURB, BACKDRAFT DAMPER, AND BIRDSCREEN.
- G. CONTROL WITH TIMESWITCH PROVIDED BY DIVISION 16 CONTRACTOR. FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED HOURS.
- H. FURNISH DISCONNECT SWITCH AND MOTOR STARTER FOR INSTALLATION BY DIVISION 16 CONTRACTOR.
- J. DIVISION 16 CONTRACTOR SHALL INTERLOCK FAN WITH ROOFTOP UNIT.

GENERAL HVAC NOTES:

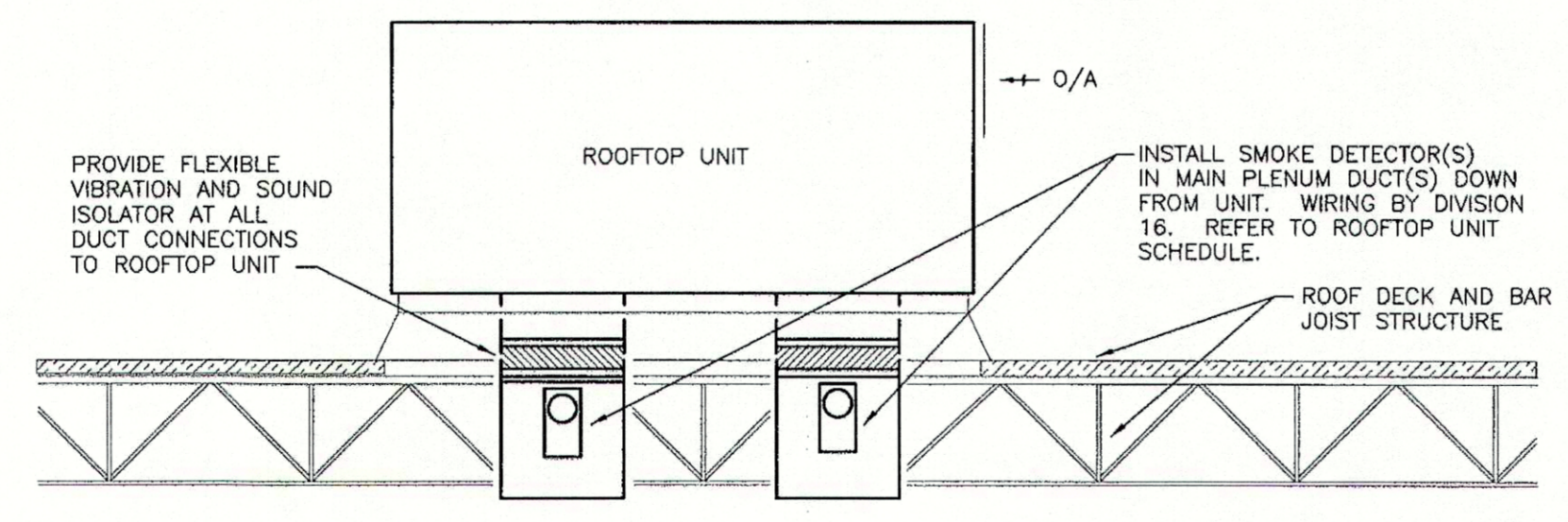
1. PRIOR TO SUBMITTING BID, VISIT THE JOB SITE AND BECOME FULLY ACCQUAINTED WITH THE EXISTING CONDITIONS OF THE PROJECT. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND OTHER DRAWINGS FOR ADDITIONAL REQUIREMENTS WHICH MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER AND/OR OWNER OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
2. COORDINATE THE INSTALLATION OF THE MECHANICAL SYSTEMS WITH OTHER TRADES TO ENSURE A NEAT AND ORDERLY INSTALLATION. COORDINATE INSTALLATION OF DUCTWORK AND PIPING TO AVOID CONFLICTS WITH ELECTRICAL PANELS, LIGHTING FIXTURES, ETC.
3. AVOID DAMAGING EXISTING SURFACES AND EQUIPMENT TO REMAIN FOR NEW INSTALLATION DURING WORK. REPAIR DAMAGE CAUSED DURING CONSTRUCTION AT NO EXTRA COST TO THE OWNER.
4. ALL MECHANICAL EQUIPMENT SHOWN ON THE MECHANICAL PLANS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR UNLESS OTHERWISE NOTED.
5. NEW MECHANICAL EQUIPMENT, DUCTWORK AND PIPING IS SHOWN AT APPROXIMATE LOCATIONS. FIELD MEASURE FINAL DUCTWORK AND PIPING LOCATIONS PRIOR TO FABRICATION AND MAKE ADJUSTMENTS AS REQUIRED TO FIT THE DUCTWORK AND PIPING WITHIN THE AVAILABLE SPACE. VERIFY THAT FINAL EQUIPMENT LOCATIONS MEET MANUFACTURER'S RECOMMENDATIONS REGARDING SERVICE CLEARANCE AND PROPER AIRFLOW CLEARANCE AROUND EQUIPMENT.
6. REFER TO ARCHITECTURAL DRAWINGS FOR RELATED CONSTRUCTION DETAILS AS APPLICABLE TO THE HVAC SYSTEM. VERIFY CHASES AND PENETRATIONS SHOWN ON ARCHITECTURAL DRAWINGS THAT ARE INTENDED FOR DUCTWORK AND PIPING MEET REQUIREMENTS.
7. COORDINATE LOCATION OF ROOF MOUNTED HVAC EQUIPMENT AND ROOF PENETRATIONS WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
8. INSTALL DUCTWORK AND PIPING PARALLEL TO BUILDING COLUMN LINES UNLESS OTHERWISE SHOWN OR NOTED.
9. SEAL PENETRATIONS THROUGH THE BUILDING COMPONENTS IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. FIREPROOF PENETRATIONS THROUGH FIRE RATED COMPONENTS IN ACCORDANCE WITH U.L. REQUIREMENTS.
10. COORDINATE THE EXACT MOUNTING SIZE AND FRAME TYPE OF DIFFUSERS, REGISTERS AND GRILLES WITH THE SUPPLIER TO MEET THE CEILING, WALL AND DUCT INSTALLATION REQUIREMENTS.
11. ADJUST LOCATION OF CEILING DIFFUSERS, REGISTERS AND GRILLES AS REQUIRED TO ACCOMMODATE FINAL CEILING GRID AND LIGHTING LOCATIONS.
12. LOCATE AND SET THERMOSTATS. DIVISION 15 SHALL PROVIDE LOW VOLTAGE CONTROL WIRE. DIVISION 16 SHALL PROVIDE CONDUIT FOR LOW VOLTAGE CONTROL WIRE. VERIFY EXACT LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION. INSTALL DEVICES 48" AFF TO MEET ADA REQUIREMENTS UNLESS NOTED OTHERWISE ON PLANS.
13. COORDINATE THE LOCATION AND ELEVATION OF WALL-MOUNTED DEVICES WITH PRESENTATION BOARDS, DISPLAY CABINETS, SHELVES OR OTHER COMPONENTS SHOWN ON THE ARCHITECTURAL DRAWINGS THAT ARE TO BE INSTALLED UNDER OTHER DIVISIONS. CONTRACTOR WILL NOT BE REIMBURSED FOR RELOCATION OF WALL-MOUNTED DEVICES CAUSED BY A LACK OF COORDINATION.
14. PROVIDE A PREFABRICATED 45 DEGREE, HIGH EFFICIENCY, RECTANGULAR/ROUND BRANCH DUCT TAKEOFF FITTING WITH MANUAL BALANCING DAMPER AND LOCKING QUADRANT FOR BRANCH DUCT CONNECTIONS AND TAKE-OFFS TO INDIVIDUAL DIFFUSERS, REGISTERS AND GRILLES.
15. BRANCH DUCTWORK TO AIR OUTLETS SHALL BE SAME SIZE AS OUTLET NECK SIZE UNLESS OTHERWISE NOTED.
16. RIGID DUCTWORK INSULATION: REFERENCE SPECIFICATION SECTION 15A-2-1.
17. PROVIDE THERMAFLEX TYPE G-KM, FLEXMASTER TYPE B, OR APPROVED EQUAL FLEXIBLE DUCTWORK. FLEXIBLE DUCTWORK SHALL BE LISTED UNDER UL 181 AS CLASS 1 AIR DUCT AND BE PROVIDED WITH INTEGRAL 2" THICK, 3/4 LB DENSITY FIBERGLASS INSULATION. FLEXIBLE DUCTWORK SHALL NOT EXCEED 9'-0" IN LENGTH AND SHALL BE INSTALLED AND SUPPORTED TO AVOID SHARP BENDS AND SAGGING.
18. PROVIDE EQUIPMENT VENTS AND FLUES PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AND EQUIPMENT SPECIFICATIONS. KEEP PENETRATIONS THROUGH ROOF A MINIMUM OF 10'-0" FROM HVAC EQUIPMENT FRESH AIR INLETS AND 2'-0" FROM ROOF PARAPETS.
19. PROVIDE A NEW SET OF AIR FILTERS IN UNITS JUST BEFORE TEST AND BALANCE AND TURNING SYSTEM(S) OVER TO OWNER.



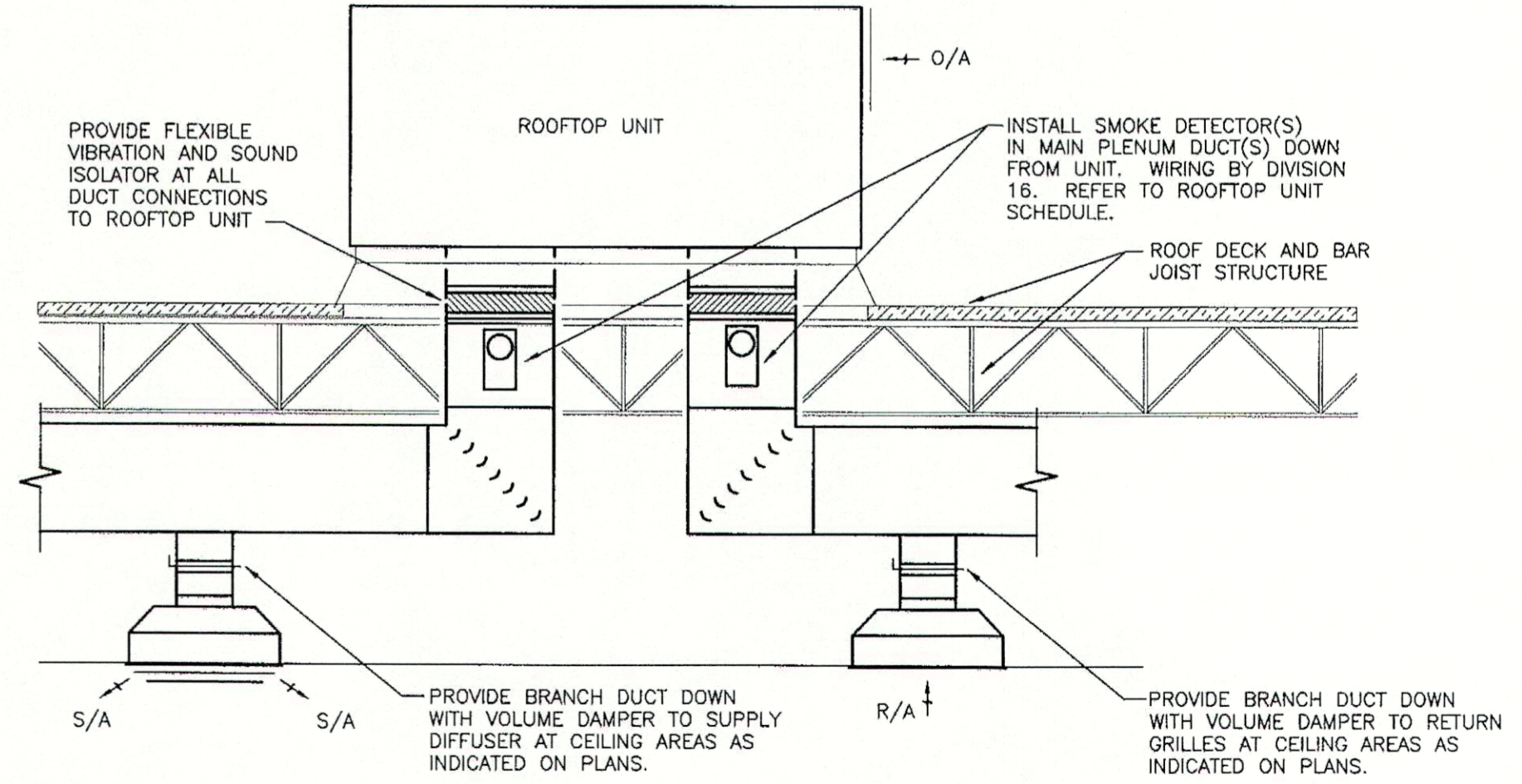
4 CEILING DIFFUSER DETAIL NOT TO SCALE



3 CABINET EXHAUSTER ABOVE CEILING DETAIL NOT TO SCALE



2 HVAC ROOFTOP UNIT DETAIL (SHELL DESIGN) NOT TO SCALE



1 HVAC ROOFTOP UNIT DETAIL NOT TO SCALE

CRN	REV	DATE	DESCRIPTION	BY
1	1	08/13/07	REVISION #1	
2	1	08/13/07	REVISION #2	
3	1	08/13/07	REVISION #3	
4	1	08/13/07	REVISION #4	
5	1	08/13/07	REVISION #5	

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 MICHAEL E. HENDERSON
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 PROFESSIONAL ENGINEER
 IN
 MECHANICAL ENGINEERING
 DATE: _____
 SIGNATURE: _____

PROPOSED RETAIL DEVELOPMENT
 CITY OF BOULTE
 ST. CHARLES PARISH, LOUISIANA
 FOR THE SPECTRA GROUP, INC.
 MEMPHIS, TENNESSEE

DRAWN BY: _____
 CHECKED BY: KLB
 DATE: 8/13/07
 SCALE: AS NOTED ON DWG
 PROJECT NO. 076001106
 FILE: 076001106M4DWG
 SHEET

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