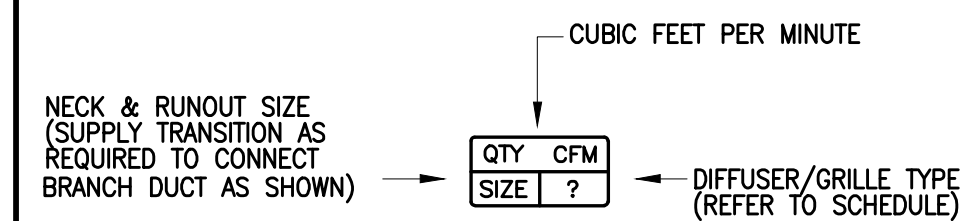
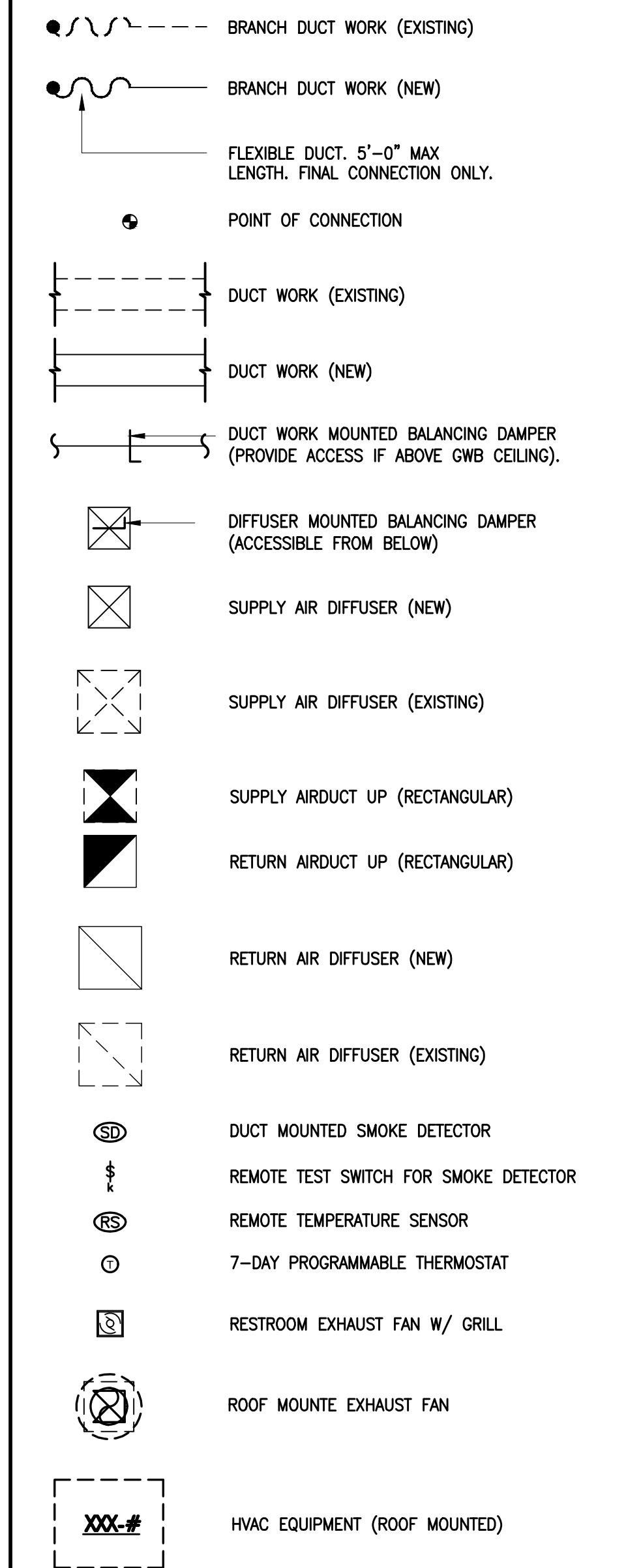


LEGEND

DIFFUSER/GRILLE TAG



LINE-TYPE & SYMBOLS



TEMPORARY SERVICES

THE CONTRACTOR SHALL PROVIDE THE FOLLOWING SPECIFIC ITEMS OF TEMPORARY SERVICES:

- TEMPORARY WATER – WATER REQUIRED IN THE PERFORMANCE OF THE CONTRACT SHALL BE PROVIDED AND PAID FOR BY THE CONTRACTOR. WATER USED FOR HUMAN CONSUMPTION SHALL CONFORM TO REQUIREMENTS OF STATE AND LOCAL AUTHORITIES FOR POTABLE WATER.
- TEMPORARY HEAT – WHEN REQUIRED FOR PROPER INSTALLATION OR PROTECTION OF ANY PORTION OF THE WORK, THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY HEATING UNITS AS APPROVED BY THE LANDLORD OR LOCAL AUTHORITY.
- COST OF LANDLORD PROVIDED UTILITY SERVICES – IF THE LANDLORD ELECTS TO PROVIDE TEMPORARY UTILITY SERVICES, THE CONTRACTOR WILL BE SO INFORMED BY THE TENANT. THE CONTRACTOR SHALL MAKE PROVISIONS OR COORDINATE WITH LANDLORD'S GENERAL CONTRACTOR TO PAY THE COST OF SAID TEMPORARY CONSTRUCTION AND UTILITY SERVICES.

NOTE FOR TENANT GENERAL CONTRACTOR:

IT IS THE RESPONSIBILITY OF THE TENANT'S GENERAL CONTRACTOR TO MAKE USE OF APPLICABLE NOTES & SPECIFICATIONS LISTED ON THIS SHEET AS THEY MAY PERTAIN TO THE SPECIFIC JOB. REFERENCE SHEET E51 FOR ANY OVERRIDING SPECIFICATIONS.

WARRANTY

ALL MATERIALS, EQUIPMENT, AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF ACCEPTANCE. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIONAL AND ACCEPTANCE BY TENANT SHALL BE A CONDITION OF THIS CONTRACT. ALL WORK FOUND TO BE DEFECTIVE SHALL BE REPAIRED OR REPLACED BY THE SUB-CONTRACTOR WITHOUT ADDITIONAL CHARGE TO THE TENANT.

GENERAL

A. THE GENERAL CONDITIONS OF THE GENERAL SPECIFICATIONS, ALONG WITH ALL APPLICABLE INSTRUCTIONS TO BIDDERS SHALL FORM A PART OF THIS SECTION OF THE SPECIFICATIONS.

B. REQUIREMENTS FOR BIDDERS AND CONTRACTORS WHICH ARE CONTAINED IN OTHER SECTIONS OF THESE SPECIFICATIONS SHALL BE CONSIDERED BINDING UNDER THIS SECTION, UNLESS OTHERWISE NOTED HEREIN.

C. ALL WORK TO BE ACCOMPLISHED IN COMPLIANCE WITH THESE PLANS AND SPECIFICATIONS SHALL BE APPROVED IN WRITING BY THE OWNER. ALL COSTS INCURRED BY POMS AS A RESULT OF UNAUTHORIZED CHANGES ARE THE RESPONSIBILITY OF THE INDIVIDUAL(S) MAKING THE CHANGE.

SCOPE

EACH CONTRACTOR SHALL BECOME THOROUGHLY ACQUAINTED WITH THE CONSTRUCTION DETAILS BEFORE SUBMITTING BID. NO ALLOWANCES WILL BE MADE BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS. ALL PERFORMANCE OF CONSTRUCTION SHALL BE AS REQUIRED BY THE FACE OF THE GENERAL CONSTRUCTION.

INSPECTION OF SITE

FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR A COMPLETE AND OPERATING HEATING, VENTILATING, AND AIR CONDITIONING SYSTEM, EXCEPT AS SPECIFICALLY EXCLUDED BY THE DRAWINGS, AND/OR TENANT'S DIRECTIONS.

EQUIPMENT

- SHOP DRAWINGS TO BE SUBMITTED TO AND APPROVED BY THE ENGINEER PRIOR TO ORDERING, PURCHASING, OR FABRICATING ANY MECHANICAL EQUIPMENT. SHOP DRAWINGS ARE TO INCLUDE:
 - ALL EQUIPMENT SCHEDULE OR SPECIFIED ON THE DRAWINGS. EQUIPMENT DIMENSIONS TO BE BASED ON SUBMITTED EQUIPMENT.
 - CONTROL WIRING SCHEMATICS AND REFRIGERANT PIPING DRAWINGS (WHERE REQUIRED) CERTIFIED BY THE EQUIPMENT MANUFACTURER.
 - ALL MECHANICAL EQUIPMENT TO BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
 - ALL MECHANICAL EQUIPMENT AND SYSTEMS TO BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER OWNER OCCUPANCY.
 - ALL HVAC COMPRESSORS TO HAVE EXTENDED 4-YEAR MANUFACTURER'S WARRANTY FOR A TOTAL 5-YEAR WARRANTY.
 - HVAC EQUIPMENT TO AUTOMATICALLY SHUTDOWN ON CALL FROM FIRE ALARM.
 - PROVIDE BMS SYSTEM TO PROVIDE CONTROL AND MONITORING OF ALL HVAC EQUIPMENT.

DUCTWORK

- SQUARE AND RECTANGULAR DUCTWORK SHALL BE CONSTRUCTED OF NEW GALVANIZED PRIME GRADE SHEET STEEL OF THE FOLLOWING GAUGES:

| DUCT SIZE | GAUGE |
|--------------|-------------------|
| 12" AND LESS | NO. 24 U.S. GAUGE |
| 13" TO 30" | NO. 24 U.S. GAUGE |
| 31" TO 54" | NO. 22 U.S. GAUGE |
| 55" TO 84" | NO. 20 U.S. GAUGE |
| 85" AND OVER | NO. 18 U.S. GAUGE |
- SQUARE AND RECTANGULAR DUCTWORK SHALL BE CONSTRUCTED AS FOLLOWS:

| SIZE | METHOD |
|--------------|--|
| 17" AND LESS | 3" AND DRIVE CLEATS |
| 18" TO 30" | 1" STANDING SEAMS ON 3'-0" CENTERS |
| 31" TO 54" | 1-1/4" STANDING SEAMS ON 3'-0" CENTERS |
- ROUND DUCTWORK SHALL BE CONSTRUCTED OF NEW GALVANIZED PRIME GRADE SHEET STEEL OF THE FOLLOWING GAUGES:

| DUCT SIZE (DIAMETER) | DUCTS | FITTINGS |
|----------------------|-------|----------|
| 8" AND LESS | 24 | 22 |
| 9" TO 18" | 20 | 20 |
| 19" TO 30" | 22 | 18 |
- ALL 90 DEGREE ELBOWS FOR ROUND DUCTWORK SHALL BE FIVE (5) PIECE. ALL LONGITUDINAL SEAMS SHALL BE FORMED BY PITTSBURGH LOCKS. JOINTS SHALL BE SWAGGED WITH ONE-HALF INCH (1/2") OVERLAP.
- ALL DUCTWORK SHALL BE MADE AIR TIGHT WITH MASTIC AND PRESSURE SENSITIVE TAPE.
- ALL SUPPLY, RETURN AND OUTSIDE AIR DUCTWORK LOCATED WITHIN THE BUILDING SHALL BE INSULATED WITH GLASS FIBER INSULATION WITH FOIL VAPOR BARRIER WITH A MINIMUM OF R-6.
- ALL SUPPLY AND RETURN AIR DUCTS LOCATED OUTSIDE OF THE BUILDING OR EXPOSED TO THE WEATHER SHALL HAVE RIGID INSULATION ON THE INTERIOR OF THE DUCT WITH A MINIMUM OF R-8.
- CONTRACTOR WILL INSTALL INSECT SCREENS ON ALL DUCT OPENINGS WHICH LEAD TO OR ARE OUTSIDE. INSECT SCREENS SHALL BE 10 GAUGE, ONE-DIGIT INCH (1/8") MESH IN REMOVABLE GALVANIZED STEEL FRAMES.

TESTING AND ADJUSTING

CONTRACTOR WILL DEMONSTRATE OPERATION OF SYSTEM TO FULL SATISFACTION OF TENANT. WILL BALANCE AIR FLOW ACCORDANCE WITH AIR QUANTITIES ON DRAWINGS AND WILL RECORD VOLUME READINGS IN ACCORDANCE WITH ASHRAE AND PROVIDE SAME TO TENANT. MEASUREMENTS SHALL BE LAID OUT. A CERTIFIED AIR BALANCE REPORT SHALL BE SUBMITTED TO OWNER AND LANDLORD. GAS PIPING SHALL MEET TEST REQUIREMENTS OF UPC.

HANGERS AND SUPPORTS

- ALL HORIZONTAL DUCTS HAVING A HALF-PERIMETER OF 40 INCHES OR LESS SHALL BE SUPPORTED BY MEANS OF BAND IRON HANGERS OF NO. 18 U.S. GAUGE ATTACHED TO THE DUCT BY MEANS OF NUTS, SCREWS, OR CLAMPS, AND FASTENED TO STRUCTURE ABOVE BY TOSSEL BOLTS OR OTHER MEANS. EACH SECTION OF DUCTWORK SHALL HAVE AT LEAST ONE PAIR OF SUPPORTS. VERTICAL DUCTS SHALL BE SUPPORTED WITH 1-1/4" x 1-1/4" x 1-1/4" ANGLES WHERE THEY PASS THROUGH THE FLOOR LINES.
- ALL HORIZONTAL DUCTS HAVING A HALF-PERIMETER OF 40 INCHES OR MORE SHALL BE SUPPORTED BY MEANS OF ANGLE IRON TRAPEZOID HANGERS. EACH SECTION OF DUCTWORK SHALL HAVE AT LEAST ONE PAIR OF SUPPORTS.

DAMPERS

- SPLITTER DAMPERS SHALL BE FABRICATED OF SHEET STEEL NOT LESS THAN NO. 16 U.S. GAUGE WITH THE LEADING EDGE HEMMED. EACH DAMPER SHALL BE LARGE ENOUGH TO COVER THE SMALLER OF THE TWO OPENINGS IT CONTROLS. DAMPERS SHALL BE CONTROLLED AS FOLLOWS:
 - EXPOSED OR ACCESSIBLE DUCTWORK – LOCKING QUADRANTS EQUAL TO YOUNG REGULATOR NO. 1 WITH DAMPER ROD END BEARINGS ON OPPOSITE END.
 - CONCEALED DUCTWORK – LOCKING QUADRANT EQUAL TO YOUNG REGULATOR NO. 315 (CHROMIUM PLATED WITH DAMPER ROD END BEARINGS ON BOTH ENDS).
- VOLUME DAMPERS SHALL BE OF THE OPPOSED INTERLOCKING TYPE AS MANUFACTURED BY AMERICAN FOUNDRY AND FURNACES CO. (AF700) OR EQUAL. BLADES SHALL BE OF NO. 16 GAUGE SHEET METAL AND SHALL NOT EXCEED 48" IN LENGTH OR 12" IN WIDTH. BLADES SHALL BE ON ONE-HALF INCH (1/2") DIAMETER RUSTPROOF AXLE. BEARINGS SHALL BE OF THE SELF-LUBRICATING FERRULE TYPE.
- DOUBLE-THICKNESS TURNING VANES ARE REQUIRED IN SQUARE ELBOWS. PROVIDE AND INSTALL BARBER-COLMAN RETURNERS OR EQUAL. TURNING VANES SHALL BE OF THE SAME GAUGE METAL AS THE DUCT IN WHICH THEY ARE INSTALLED. RADIIUS ELBOWS SHALL HAVE A CENTERLINE RADIUS OF ONE AND ONE-HALF (1-1/2) TIMES THE DUCT WIDTH.

SUPPORT OF DUCT SYSTEM

DUCTWORK SHALL BE SUPPORTED AT ALL TURNS AND TRANSITIONS. SUPPORT STRAIGHT DUCT EVERY 9'-0" UP TO 35', EVERY 6'-0" FOR DUCT FROM 35' TO 59', AND EVERY 4'-0" FOR DUCT 60' AND ABOVE.

HANGER DESIGN SHALL BE AS DESCRIBED IN THE LATEST EDITION OF THE "SMACNA" MANUAL. REINFORCEMENT MEMBERS MAY BE USED TO SUPPORT THE DUCT SYSTEM PROVIDED DETAILS OUTLINED IN THE AFOREMENTIONED DOCUMENTS ARE ADHERED TO.

REINFORCEMENT

ALL DUCTS REQUIRING REINFORCEMENT SHALL BE REINFORCED ACCORDING TO THE LATEST EDITION OF "SMACNA" MANUAL.

MATERIALS FOR REINFORCEMENT MEMBERS SHALL BE GALVANIZED STEEL. ALL SCREWS AND WASHERS SHALL BE PLATED OR GALVANIZED.

ACCESSORY ITEMS

ALL MANUAL DAMPERS, FIRE DAMPERS, TURNING VANES, REGISTER CONNECTIONS, ACCESS DOORS OR OTHER ASSOCIATED ACCESSORIES SHALL BE INSTALLED ACCORDING TO THE LATEST PUBLICATION OF "SMACNA" MANUAL.

SYSTEM COMMISSIONING

- PRIOR TO THE FINAL MECHANICAL AND PLUMBING INSPECTIONS, THE COMMISSIONING AGENT(CMA) SHALL PROVIDE A COMMISSIONING REPORT TO THE ENGINEER OF RECORD, OWNER, AND OWNER'S AUTHORIZED AGENT. THIS REPORT SHALL BE MADE AVAILABLE TO THE CODE OFFICIAL(S) UPON REQUEST.
- THE COMMISSIONING REPORT SHALL INCLUDE DOCUMENTATION ON THE FOLLOWING ITEMS AS A MINIMUM:
 - TEST AND BALANCE FOR ALL AIR MOVING EQUIPMENT, INCLUDING AIR FLOW MEASUREMENTS FOR OUTSIDE AIR, SUPPLY AIR, RETURN AIR, AND EXHAUST.
 - TEMPERATURE CHANGE FOR ALL HEATING AND COOLING EQUIPMENT IN ALL MODES OF OPERATION.
 - ECONOMIZERS SHALL BE TESTED AND CALIBRATED.
 - EACH SUPPLY, RETURN, AND EXHAUST OUTLET SHALL BE BALANCED TO WITHIN 5% OF SPECIFIED AIRFLOW.
 - ALL CONTROL DEVICES SHALL BE TESTED, CALIBRATED, AND ADJUSTED.
- A PRELIMINARY COMMISSIONING REPORT SHALL BE COMPLETED NOTING ANY DEFICIENCIES AND PROVIDED TO THE ENGINEER OF RECORD. AFTER ALL DEFICIENCIES ARE RECONCILED, A FINAL REPORT SHALL BE PROVIDED AS NOTED ABOVE.

H.V.A.C.

GENERAL

A. THE WORK COVERED BY THIS SECTION OF THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE RESPECTIVE DRAWINGS, INFORMATION, INSTRUCTIONS TO BIDDERS, AND THE GENERAL CONDITIONS, ADDENDA, OR DIRECTIVES WHICH MAY BE ISSUED BY THE OWNER, HERETHIN, OR ELSEWHERE.

B. THE LISTING HEREIN OF AN ARTICLE OR MATERIAL, INSTALL OR METHOD, REQUIRES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL EACH ITEM LISTED, UNLESS SPECIFICALLY NOTED TO THE CONTRARY. THE CONTRACTOR SHALL PERFORM EACH OPERATION PRESCRIBED OR LISTED ACCORDING TO THE CONDITIONS STATED.

EXAMINATION OF SITE

ALL CONTRACTORS SUBMITTING PROPOSALS FOR THIS WORK SHALL FIRST EXAMINE THE SITE AND ALL EXISTING CONDITIONS. ALL PROPOSALS SHALL TAKE INTO CONSIDERATION ALL SUCH CONDITIONS AS MAY AFFECT THE WORK UNDER THIS CONTRACT.

SCOPE

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REINFORCEMENT

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MATERIALS FOR REINFORCEMENT MEMBERS SHALL BE GALVANIZED STEEL. ALL SCREWS AND WASHERS SHALL BE PLATED OR GALVANIZED.

ACCESSORY ITEMS

ALL MANUAL DAMPERS, FIRE DAMPERS, TURNING VANES, REGISTER CONNECTIONS, ACCESS DOORS OR OTHER ASSOCIATED ACCESSORIES SHALL BE INSTALLED ACCORDING TO THE LATEST PUBLICATION OF "SMACNA" MANUAL.

VENTILATION SCHEDULE (2024 OHIO MECHANICAL CODE)

| ROOM # | DESCRIPTION | AREA (SQFT) | OCC | Rp | Ra | Vbz | EXHAUST (CFM/SQFT) | EXHAUST (CFM) | | |
|--------|-------------|-------------|-----|-----|------|------|--------------------|---------------|-------|------|
| 101 | RECEPTION | 1125 | 34 | 5 | 0.06 | 236 | | 0 | | |
| 102 | CLOSET | 24 | | | 0.12 | 3 | | 0 | | |
| 103 | TOILET ROOM | 65 | | | | 0 | | 50 | | |
| 104 | TOILET ROOM | 65 | | | | 0 | | 50 | | |
| 105 | UTILITY | 289 | 1 | 5 | 0.06 | 25 | | 0 | | |
| 106 | BREAK ROOM | 272 | 1 | 5 | 0.06 | 23 | | 0 | | |
| 107 | STORAGE | 82 | | | 0.12 | 10 | | 0 | | |
| 108 | GROOMING | 255 | 2 | 7.5 | 0.06 | 30 | 0.5 | 128 | | |
| 109 | HALL | 317 | | | 0.06 | 19 | | 0 | | |
| 110 | OFFICE | 237 | 1 | 5 | 0.06 | 20 | | 0 | | |
| 111 | JANITOR | 118 | | | | 0 | | 0 | | |
| 112 | GROOMING | 278 | 2 | 7.5 | 0.06 | 32 | 0.5 | 139 | | |
| 113 | BATHING | 251 | 3 | 7.5 | 0.06 | 34 | 0.5 | 126 | | |
| 114 | DRYING ROOM | 220 | 7 | 7.5 | 0.06 | 63 | 0.5 | 110 | | |
| 115 | ELEC ROOM | 56 | | | | 0 | | 0 | | |
| 116 | KENNELS | 5940 | 59 | 7.5 | 0.18 | 1515 | 0.9 | 5346 | | |
| 117 | PLAY AREA | 561 | 6 | 7.5 | 0.18 | 143 | 0.9 | 505 | | |
| 118 | PLAY AREA | 678 | 7 | 7.5 | 0.18 | 173 | 0.9 | 610 | | |
| 119 | PLAY AREA | 1071 | 11 | 7.5 | 0.18 | 273 | 0.9 | 964 | | |
| 120 | PLAY AREA | 1108 | 11 | 7.5 | 0.18 | 283 | 0.9 | 997 | | |
| 121 | PLAY AREA | 168 | 2 | 7.5 | 0.18 | 43 | 0.9 | 151 | | |
| 122 | TRAINING | 188 | 1 | 5 | 0.06 | 16 | | 0 | | |
| | | | | | | | TOTAL | 2939 | TOTAL | 9175 |

| UNIT | Vbz | Ez | VoZ | OA PROVIDED |
|--------|------|-----|------|-------------|
| RTU-1 | 236 | 0.8 | 295 | 300 |
| RTU-2 | 134 | 0.8 | 168 | 600 |
| RTU-3 | 124 | 0.8 | 155 | 700 |
| DOAS-1 | 1515 | 0.8 | 1893 | 6000 |

AIR BALANCE CALCULATION

| UNIT | OA (CFM) | EXHAUST (CFM) |
|-----------------|--------------|---------------|
| RTU-1 | +300 | |
| RTU-2 | +600 | |
| RTU-3 | +700 | |
| DOAS-1 | +6000 | |
| LOUVERS | +3000 | |
| EF-1 | | -600 |
| EF-2 | | -700 |
| EF-3 | | -1500 |
| EF-4 | | -1500 |
| EF-5 | | -1500 |
| EF-6 | | -1500 |
| EF-7 | | -1500 |
| EF-8 | | -1500 |
| SUBTOTAL | 10800 | -10300 |

ROOFTOP HVAC SCHEDULE

| MARK. | MANUFACTURER MODEL NUMBER | NOMINAL TONNAGE | TYPE | OSA (CFM) | SUPPLY FAN | | | COOLING | | | GAS HEATING | | ELECTRICAL | | EST. WEIGHT (LBS) | NOTES | |
|------------------|---|-----------------|------------|-----------|------------|--------|------|-------------|-------------|---------------------|-------------|--------------|------------|------|-------------------|-------|----------|
| | | | | | CFM | E.S.P. | H.P. | SENS. (MBH) | TOTAL (MBH) | EFFICIENCY | INPUT (MBH) | OUTPUT (MBH) | VOLTS/PH | MCA | | | MAX FUSE |
| RTU-1 (EXISTING) | CARRIER PGD442090 | 3.5 | HORIZONTAL | 300 | 1,400 | 0.5 | - | - | - | - | 65.0 | 52.0 | 208/1 | 26 | 40 | - | 1,3 |
| RTU-2 (EXISTING) | CARRIER PGD460461 | 5.0 | HORIZONTAL | 600 | 2,000 | 0.5 | - | - | - | - | 130.0 | 104.0 | 208/1 | 38.3 | 60 | - | 1,3 |
| RTU-3 (NEW) | TRANE YSC060 | 5.0 | HORIZONTAL | 700 | 2,000 | 0.5 | 1.0 | 49.3 | 60.0 | 14.0 SEER 12.0 EER | 100.0 | 81.0 | 460/3 | 13.0 | 15.0 | 797 | 3,4 |
| DOAS-1 (NEW) | CAPTIVEAIRE CASHVAC4-1600-30-40T-2-DOAS | 40 | HORIZONTAL | 6,000 | 6,000 | 2.0 | 7.4 | 195.6 | 499.4 | 17.1 IEER 5.9 ISMRE | 599.0 | 485.3 | 460/3 | 95.7 | 100 | 5476 | 2,3,4,5 |

NOTES:

- EXISTING UNIT TO REMAIN. PERFORM MAINTENANCE AND REPORT ANY DEFICIENCIES TO ENGINEER OF RECORD.
- DOAS UNIT SHALL BE CONTROLLED BY ROOM SENSOR. SUPPLY AIR TEMPERATURE SHALL RESET AS REQUIRED TO MAINTAIN SPACE TEMPERATURE.
- PROVIDE BACKET COMPATIBLE CONTROLLER AND WALL SENSOR (TEMPERATURE/HUMIDITY)
- PROVIDE UNIT WITH ENTHALPY CONTROLLED ECONOMIZER, HALL GUARD AND 5 YEAR COMP. WARRANTY.
- CONTACT PREFERRED CAPTIVEAIRE VENDOR RYAN MASSEY (615) 924-7465 & RYAN.MASSEY@CAPTIVEAIRE.COM

SPLIT SYSTEM SCHEDULE

| MARK. | MANUFACTURER MODEL NUMBER | NOMINAL TONNAGE | TYPE | OSA (CFM) | SUPPLY FAN | | | COOLING | | | HEAT PUMP | | ELECTRICAL | | EST. WEIGHT (LBS) | NOTES | | |
|------------|---------------------------|-----------------|------------------|-----------|------------|--------|------|-------------|-------------|------------------------|---------------------|---------------------|-------------|----------|-------------------|-------|-------|------|
| | | | | | CFM | E.S.P. | H.P. | SENS. (MBH) | TOTAL (MBH) | EFFICIENCY | OUTPUT @ 17°F (MBH) | OUTPUT @ -4°F (MBH) | EFFICIENCY | VOLTS/PH | | | MCA | MOCP |
| HP-1 AHU-1 | LG #LCO88HV | 3/4 | CEILING CASSETTE | 40 | 300 | - | - | - | 9.9 | 20.20 SEER2 13.65 EER2 | 11.0 | 9.0 | 10.55 HSPF2 | 230/1 | 11.9 | 15 | 71 31 | 1,3 |

NOTES:

- PROVIDE WITH WIRED 7-DAY PROGRAMMABLE THERMOSTAT W/ OCCUPANCY SENSOR SETBACK

EXHAUST FAN SCHEDULE

| MARK. | MANUFACTURER MODEL NUMBER | CFM | SP (W/C) | RPM | ELECTRICAL | | | UNIT INTERLOCK | EST. WEIGHT (LBS) | NOTES |
|-------|---------------------------|-------|----------|------|------------|-----|------|----------------|-------------------|-------|
| | | | | | VOLTS/PH | FLA | HP | | | |
| EF-1 | CAPTIVEAIRE DR30HFA | 600 | 0.5 | 1268 | 120/1 | 4.8 | 0.33 | RTU-1 | 98 | 1 |
| EF-2 | CAPTIVEAIRE DR30HFA | 700 | 0.5 | 1268 | 120/1 | 4.8 | 0.33 | RTU-2 | 98 | 1 |
| EF-3 | CAPTIVEAIRE DUBSHFA | 1,500 | 0.5 | 1119 | 120/1 | 9.8 | 0.75 | LOUVER | 98 | 1 |
| EF-4 | CAPTIVEAIRE DUBSHFA | 1,500 | 0.5 | 1119 | 120/1 | 9.8 | 0.75 | LOUVER | 98 | 1 |
| EF-5 | CAPTIVEAIRE DUBSHFA | 1,500 | 0.5 | 1119 | 120/1 | 9.8 | 0.75 | DOAS-1 | 98 | 1 |
| EF-6 | CAPTIVEAIRE DRB3HFA | 1,500 | 0.5 | 1119 | 120/1 | 9.8 | 0.75 | DOAS-1 | 98 | 1 |
| EF-7 | CAPTIVEAIRE DUBSHFA | 1,500 | 0.5 | 1119 | 120/1 | 9.8 | 0.75 | DOAS-1 | 98 | 1 |
| EF-8 | CAPTIVEAIRE DUBSHFA | 1,500 | 0.5 | 1119 | 120/1 | 9.8 | 0.75 | DOAS-1 | 98 | 1 |

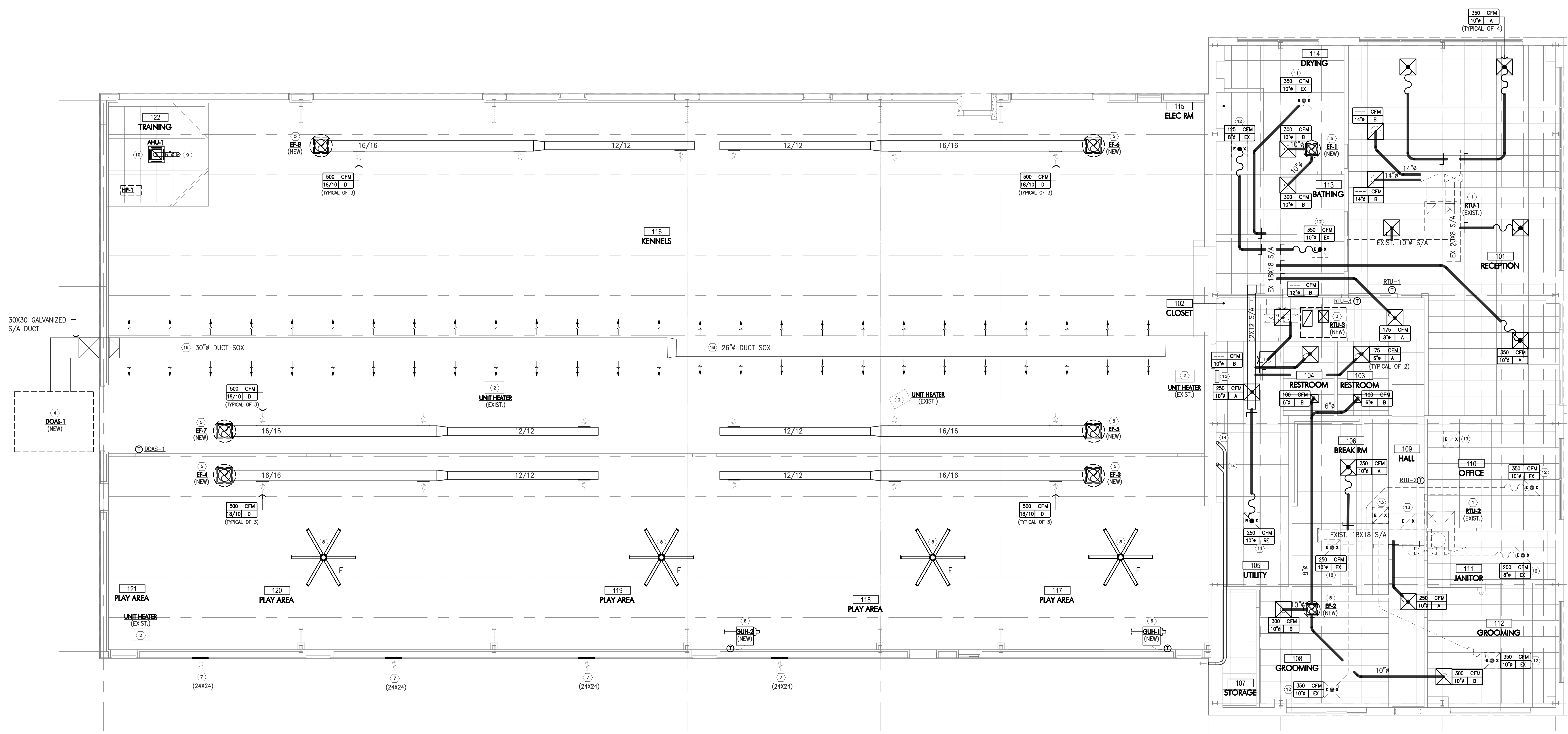
NOTES:

- FAN SHALL BE INTERLOCKED TO RUN CONCURRENTLY WITH UNIT INDICATED. PROVIDE RELAY(S) AS REQUIRED. COORDINATE WIRING WITH ELECTRICAL.

GAS FIRED UNIT HEATER SCHEDULE

| MARK. | MANUFACTURER MODEL NUMBER | SUPPLY FAN | | | GAS HEATING | | | ELECTRICAL | | | EST. WEIGHT (LBS) | NOTES |
|-------|---------------------------|------------|--------|------|-------------|--------------|------------|------------|-----|------|-------------------|-------|
| | | CFM | E.S.P. | H.P. | INPUT (MBH) | OUTPUT (MBH) | EFFICIENCY | VOLTS/PH | FLA | MOCP | | |

| Revisions | Date | Description | By |
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1 Mechanical Plan
Scale: 3/16" = 1'-0"
PLAN TRUE NORTH

- KEY NOTES**
- EXISTING ROOFTOP HVAC UNIT TO REMAIN.
 - EXISTING GAS UNIT HEATER TO REMAIN.
 - EXISTING ROOF TOP UNIT SHALL BE REPLACED WITH NEW UNIT. TOC SHALL RECONNECT CONDENSATE DRAIN AND GAS PIPING AS REQUIRED.
 - NEW DOAS UNIT SHALL BE INSTALLED ABOVE SLAB AT OUTSIDE OF SPACE.
 - NEW EXHAUST FAN UNIT TO BE INSTALLED ON ROOF.
 - MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL UNIT HEATER AT 12'-0" A.F.F. IN PLAY AREAS. THERMOSTAT FOR UNIT HEATER AT 48" A.F.F. MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL CONTROL WIRING REQUIRED FOR OPERATING THE UNIT HEATER.
 - PROVIDE INTAKE LOUVER (GREENHECK EA60-601 OR EQUAL) IN SIZE SHOWN ON PLAN AS HIGH AS POSSIBLE. EXHAUST FANS EF-3 & EF-4 SHALL BE ELECTRICALLY INTERLOCKED WITH WALL LOUVERS AS SHOWN. COORDINATE FINISH WITH LANDLORD'S REPRESENTATIVE. LANDLORD MUST APPROVE LOUVER APPEARANCE AND LOCATION IN WRITING PRIOR TO ORDERING AND INSTALLATION.
 - HVLS FAN TYPE "T" TO BE INSTALLED AT 15'-0" A.F.F.
 - PROVIDE 6" OUTSIDE AIR DUCT UP THRU ROOF. TERMINATE WITH ROOF CAP. LOCATE A MINIMUM OF 10FT FROM ANY EXHAUST OR PLUMBING VENT.
 - GC SHALL FURNISH AND INSTALL CASSETTE AHU WITH GRILLE. UNIT SHALL BE MOUNTED IN CEILING AS SHOWN AND MOUNT HEAT TRAMP UNIT ON ROOF PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE REFRIGERANT SUCTION/LIQUID PIPING TO ASSOCIATED AC UNIT. SIZED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ACTUAL PIPE ROUTING. PROVIDE SPLASH BLOCK FOR CONDENSATE DRAIN.
 - EXISTING S/A GRILLE SHALL BE RELOCATED AND RECONNECT. BALANCE TO CFM AS SHOWN.
 - EXISTING R/A GRILLE TO REMAIN. BALANCE TO CFM AS SHOWN.
 - EXISTING R/A GRILLE TO REMAIN. (TYPICAL)
 - ROUTE DRYER VENT OUT THRU EXTERIOR WALL. TERMINATE WITH WALL CAP.
 - PROVIDE BACNET CONTROLLER FOR CONTROL & MONITORING OF HVAC UNITS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL WIRING AND DEVICES. FINAL CONNECTIONS AND COMMISSIONING OF SYSTEM. CONTROLS CONTRACTOR SHALL PROVIDE INSTRUCTION MANUAL AND IN PERSON TRAINING OF CUSTOMER REPRESENTATIVE(S) PRIOR TO COMPLETION OF PROJECT. SYSTEM SHALL BE CONTROLLABLE BOTH REMOTELY AND THROUGH PC IN MANAGER'S OFFICE.
 - PROVIDE POROUS FABRIC DUCTWORK WITH LINEAR VENTS/DUCTS OR APPROVED EQUAL TO TIGHT TO STRUCTURE. COORDINATE DESIGN WITH MANUFACTURER BASED ON SITE MEASUREMENTS AND CONDITIONS.

NOTES:
GC MUST REMOVE ALL ABANDONED ROOFTOP AND/OR MECHANICAL EQUIPMENT ABOVE THE LEASED PREMISES AND WITHIN THE LEASED PREMISES. PATCH AND REPAIR ROOF AS NEEDED.