

| ROOFTOP AIR CONDITIONING UNIT SCHEDULE | | | | | | | | | | | | | | | | | |
|--|-------------|-----------------|-------------------|----------------------|------------------|-----------------|-------------------|-----------------|------|---------------------|---------------|--------------------|--------------------|---------------|--------------------|-----------|--------------|
| MARK | TRANE MODEL | NOMINAL TONNAGE | TOTAL COOLING MBH | SENSIBLE COOLING MBH | TOTAL SUPPLY CFM | OUTSIDE AIR CFM | APPROX. ESP IN WG | CAPACITY STAGES | EER | MIN. PART LOAD EFF. | SUPPLY FAN HP | ELECTRIC HEAT W/NO | VOLTAGE PHASE V/NO | MCA/MOCP AMPS | APPROX. WEIGHT LBS | HEIGHT IN | NOTES |
| RTU-14 | THD240 | 20.0 | 235.0 | 184.4 | 7,200 | 1,440 | 2.0 | 2 | 11.0 | 12.4 | 5.0 | 36.0 | 460/3 | 65/70 | 2,830 | 67 | 1 THROUGH 25 |

NOTES:

- APPROVED EQUAL MANUFACTURER: CARRIER, LENOX, AOKI, DAKIN
- COOLING CAPACITIES BASED ON STANDARD AHRI CONDITIONS
- DOWN FLOW UNIT. PROVIDE FULL PERMETER ROOF CURB.
- PROVIDE COMPRESSOR 5-YEAR WARRANTY
- PROVIDE PHASE MONITOR DEVICE
- PROVIDE SERVICE CLEARANCES PER MFG'S RECOMMENDATIONS
- PROVIDE MOTORIZED OUTSIDE AIR DAMPER
- PROVIDE SINGLE POINT POWER ENTRY, DISCONNECT TO BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR
- PROVIDE INTERNAL VIBRATION ISOLATION FOR SUPPLY FAN
- INSTALL UNIT LEVEL WITHIN PRESCRIBED TOLERANCES
- PROVIDE 2" THROWAWAY FILTER MERV6
- PROVIDE 120V CONVENIENCE OUTLET. POWER WIRING BY ELECTRICAL CONTRACTOR
- REFRIGERANT TO BE R-410A. PROVIDE REFRIGERANT CHARGE PER MANUFACTURER RECOMMENDATION
- PROVIDE HAIL GUARDS FOR CONDENSERS COILS
- PROVIDE STAINLESS STEEL OR NON-CORROSIVE CONDENSATE DRAIN PAN
- CEILING FAN SIDE ECONOMIZER WITH DUAL ENTHALPHY CONTROL AND BAROMETRIC RELIEF
- PROVIDE VIBRATION/SOUND ISOLATION CURB
- PROVIDE CONTROL MODULE FOR E.M.S. INTERFACE TO MATCH EXISTING NIAGRA AX SYSTEM.
- PROVIDE ELECTRIC HEATER WITH MIN. 2 STAGES IF OVER 10 KW CAPACITY
- PROVIDE FOR THROUGH-CURB ELECTRICAL WIRING
- ROOF SLOPE SWITCH TO BE ACHIEVED USING ROOF CURB. DO NOT SHIM ROOF CURB
- PROVIDE FLOAT CONTACT TO SHUT DOWN UNIT AS PRIMARY DRAIN PAN FILLS
- PROVIDE ROOF CURB ADAPTER AS REQUIRED.
- PROVIDE FACTORY MOUNTED FULLY MODULATING HIGH STATIC VARIABLE SPEED FAN FOR MULTI ZONE VAV.
- PROVIDE DUCT SMOKE DETECTOR IN SUPPLY PLENUM OF A/C UNIT FACTORY INSTALLED

| DUCTLESS AIR CONDITIONING SPLIT SYSTEM SCHEDULE | | | | | | | | | | | | | | | | | | |
|---|------------------|---------|-----------------|-------------------|----------------------|------------------|--------------------|-----------|--------------------|---------------------|--------------------|---------------|------------|---------------|-------|----------|----------|--------------|
| MARK | MITSUBISHI MODEL | INDOOR | NOMINAL TONNAGE | TOTAL COOLING MBH | SENSIBLE COOLING MBH | TOTAL SUPPLY CFM | HEATING @ 47°F MBH | SEER/HSPF | ENTRANSUR/DI/MBH F | LEAVING AIR TEMP °F | VOLTAGE PHASE V/NO | MCA/MOCP AMPS | WEIGHT LBS | DIMENSIONS IN | NOTES | | | |
| MRU/CD-6 | PUY-A12 | PKA-A12 | 1.0 | 12.0 | 9.6 | 320 | N/A | 15.2/ | 75/84 | 55/24 | 208/1 | 15/15 | 1.2/1.5 | 82 | 29 | 32x13x24 | 36x10x12 | 1 THROUGH 10 |
| MRU/CD-7 | PUY-A12 | PKA-A12 | 1.0 | 12.0 | 9.6 | 320 | N/A | 15.2/ | 75/84 | 55/24 | 208/1 | 15/15 | 1.2/1.5 | 82 | 29 | 32x13x24 | 36x10x12 | 1 THROUGH 10 |

NOTES:

- APPROVED EQUAL MANUFACTURER: CARRIER, DAKIN, LG
- COOLING CAPACITIES BASED ON STANDARD AHRI CONDITIONS
- HIGH SIDEWALL INDOOR UNIT. INSTALL REFRIGERANT LINES THROUGH REAR OF UNIT CONCEALED WITHIN WALL. NO EXPOSED PIPING SHALL BE ALLOWED.
- SUPPLY AIRFLOW CFM BASED ON HIGH SPEED AND DRY COIL
- COOLING ONLY UNIT
- PROVIDE LOW AMBIENT CONTROL
- PROVIDE AND INSTALL INTEGRAL/ACCESSORY CONDENSATE PUMP WITHIN INDOOR UNIT AND WIRE TO UNIT TERMINAL BLOCK PER MANUFACTURER'S INSTRUCTIONS
- PROVIDE MIN. 30K EFF. FILTER
- PROVIDE HARD WIRE WALL MOUNTED THERMOSTAT COMPATIBLE WITH EXISTING NIAGRA AX SYSTEM.
- INDOOR UNIT POWER SUPPLIED FROM OUTDOOR UNIT

| EXHAUST FAN SCHEDULE | | | | | | | | | | | | | | | |
|----------------------|-----------------|--------------|-----------|-------------------|-------------------|-------|---------------|-------|--------|--------------------|------------|-----------------|------------|-----------|-------------|
| MARK | GREENHECK MODEL | SERVICE AREA | CONFIGUR. | TOTAL COOLING MBH | APPROX. ESP IN WG | SONES | SUPPLY FAN HP | RPM | DRIVE | VOLTAGE PHASE V/NO | WEIGHT LBS | DIMENSION IN | OPENING IN | CONTROL | NOTES |
| TEF-6 | 0-095-VG | 217/218 | ROOF | 875 | 0.25 | 10.5 | 1/8 | 1,720 | DIRECT | 120/1 | 38 | 22" x 42" x 15" | 12x12 | INTERLOCK | 1 THROUGH 8 |

NOTES:

- APPROVED EQUAL MANUFACTURER: COOK, PENN, ACME
- ROOF MOUNTED CENTRIFUGAL EXHAUST FAN
- PROVIDE FACTORY MOUNTED DISCONNECT SWITCH
- PROVIDE ROOF CURB SLOPED TO MATCH ROOF SLOPE TO ENSURE FAN IS LEVEL
- BEARINGS WITH GREASE FITTINGS
- PROVIDE MOTOR WITH THERMAL OVERLOADS
- INTERLOCK WITH VAV4-1
- PROVIDE INDOOR FACTORY MOUNTED SPEED CONTROLLER FOR DIRECT DRIVE FAN

GENERAL FAN NOTES:

- MOTOR STARTERS, DISCONNECTS (IF NOT FACTORY PROVIDED) AND ALL EQUIPMENT NORMAL POWER WIRING BY ELECTRICAL CONTRACTOR
- ALL CONTINUOUS-DUTY MOTORS SHALL BE PROVIDED WITH OVERLOAD PROTECTION ACCORDING TO THE NATIONAL ELECTRICAL CODE PAR. 430-32.
- FIELD ADJUST OPENINGS WITH STRUCTURE.
- SEE PROJECT PLANS AND SPECIFICATIONS FOR OTHER FIELD SUPPLIED ITEMS AND ADDITIONAL INFORMATION.
- ALL FANS ON ROOF SHALL BE PAINTED AS PER ARCHITECTURAL SPECIFICATIONS.

| VAV BOX SCHEDULE | | | | | | | | | | | | | |
|------------------|----------------|--------|------------|----------|-------------|---------------|----------|---------------|------------------|--------------------|----------------------|-------------|--|
| SELECTION DATA | | FAN | | | PRIMARY AIR | | | HEATER | | | NOTES | | |
| UNIT TAG | MANUF. & MODEL | TYPE | INLET SIZE | FAN SIZE | FAN CFM | MIN. CLG. CFM | HIG. CFM | MAX. CLG. CFM | ELECTRIC HEAT KW | VOLTAGE PHASE V/NO | ELECTRIC HEAT STAGES | NOTES | |
| VAV14-1 | TITUS D1F5 | SERIES | 10 | B | 350 | 145 | 145 | 350 | 2.0 | 277/1 | SCR | 1 THROUGH 7 | |
| VAV14-2 | TITUS D1F5 | SERIES | 14 | C | 1,500 | 290 | 290 | 1,500 | 5.5 | 277/1 | SCR | 1 THROUGH 7 | |
| VAV14-3 | TITUS D1F5 | SERIES | 12 | C | 1,310 | 210 | 210 | 1,310 | 3.0 | 277/1 | SCR | 1 THROUGH 7 | |
| VAV14-4 | TITUS DESV | SINGLE | 6 | - | - | 55 | 55 | 320 | 2.0 | 277/1 | SCR | 1 THROUGH 6 | |
| VAV14-5 | TITUS D1F5 | SERIES | 14 | D | 1,830 | 290 | 290 | 1,830 | 9.0 | 277/1 | SCR | 1 THROUGH 7 | |
| VAV14-6 | TITUS DESV | SINGLE | 8 | - | - | 100 | 100 | 380 | 2.0 | 277/1 | SCR | 1 THROUGH 6 | |
| VAV14-7 | TITUS DESV | SINGLE | 6 | - | - | 55 | 55 | 360 | 2.0 | 277/1 | SCR | 1 THROUGH 6 | |
| VAV14-8 | TITUS DESV | SINGLE | 8 | - | - | 100 | 100 | 390 | 2.0 | 277/1 | SCR | 1 THROUGH 6 | |
| VAV14-9 | TITUS DESV | SINGLE | 6 | - | - | 55 | 55 | 140 | 2.0 | 277/1 | SCR | 1 THROUGH 6 | |
| VAV14-10 | TITUS DESV | SINGLE | 6 | - | - | 55 | 55 | 320 | 2.0 | 277/1 | SCR | 1 THROUGH 6 | |
| VAV14-11 | TITUS DESV | SINGLE | 6 | - | - | 55 | 55 | 160 | 2.0 | 277/1 | SCR | 1 THROUGH 6 | |
| VAV14-12 | TITUS D1F5 | SERIES | 8 | B | 480 | 100 | 100 | 480 | 2.0 | 277/1 | SCR | 1 THROUGH 7 | |

NOTES:

- CONTROLS TO MATCH EXISTING NIAGRA AX SYSTEM, PROVIDE ROOM THERMOSTAT/SENSOR WITH OVERRIDE CAPABILITY
- POWER BY DIV. 16. CONTROL WIRING BY CONTROL CONTRACTOR. CONTROL POWER TRANSFORMER BY VAV MANUFACTURER.
- FOR LONGER DUCT CONNECTION TO BOX THAN RECOMMENDED INLET RUN, MAKE THE TAP FOR BOXES AT THE MAIN DUCTWORK SIZED FOR MAIN STATIC PRESSURE LOSS. REDUCE TAP DOWN TO BOXES INLET SIZE JUST BEFORE CONNECTION AND PROVIDE MIN LENGTH OF DUCT TO INLET AS RECOMMENDED BY MANUFACTURER FOR PROPER PRESSURE READING.
- FOR BOXES WITH ELECTRIC HEATER, BOX SHALL BE FUSED BY MANUFACTURER IF REQUIRED MCA (AMPS) IS BELOW THE MIN. AVAILABLE SIZE OF COMMERCIAL BREAKER. CONTRACTOR SHALL COORDINATE PRIOR TO PURCHASING.
- PROVIDE FACTORY MOUNTED DISCHARGE AIR TEMPERATURE SENSOR.
- PROVIDE ROOF HEATER CONTROL.
- PROVIDE ECM FAN MOTOR.

| CIRCULATION FAN SCHEDULE | | | | | | | | | | | | | |
|--------------------------|--------------------|----------------------|--------|--------|--------------------|---------------|------------|-------------------|-----------|--|--|--|--|
| MARK | MANUFACTURER MODEL | SERVICE AREA | FAN HP | DRIVE | VOLTAGE PHASE V/NO | MCA/MOCP AMPS | WEIGHT LBS | BLADE DIAMETER FT | NOTES | | | | |
| CF-1-1.3.3.4 | BAI | MEZZANINE SPEC. AREA | 1.5 | DIRECT | 460/3 | 2.5/10 | 255 | 12 | 1.2,3,4,5 | | | | |
| CF-1-5.6.7 | ARL | MEZZANINE SPEC. AREA | 30W | DIRECT | 120/1 | 0.4/15 | - | - | - | | | | |

NOTES:

- APPROVED EQUAL MANUFACTURER: RITHEDE, MACROAIR, PATTERSON, GREENHECK
- CEILING HIGH VOLUME LOW SPEED FAN
- PROVIDE FACTORY MOUNTED DISCONNECT SWITCH
- PROVIDE BAYCON DIGITAL WALL CONTROLLER
- PROVIDE MOUNTING KIT AS REQUIRED

| AHU FILTER SCHEDULE | | | | | | | | | | | | | |
|---------------------|------|---------------|------------------|--------------|-------------------|--------------------|-----------------|--|--|--|--|--|--|
| NOMINAL TONNAGE | MERV | SIZE WxHxD IN | APPROX. PD IN WG | AIR FLOW CFM | MAX. VELOCITY FPM | MEDIA AREA SQ. FT. | NOTES | | | | | | |
| 1.5-2.0 | 7 | 16x20x4 | 0.15 | 800-900 | 300 | 10.4 | ALL NOTES APPLY | | | | | | |
| 2.5-3.0 | 7 | 20x24x4 | 0.16 | 1,000-1,200 | 360 | 15.8 | ALL NOTES APPLY | | | | | | |
| 3.5 | 7 | 24x24x4 | 0.15 | 1,400 | 350 | 19.0 | ALL NOTES APPLY | | | | | | |
| 4.0-5.0 | 7 | 25x29x4 | 0.17 | 1,800-1,950 | 390 | 24.0 | ALL NOTES APPLY | | | | | | |

NOTES:

- PROVIDE A FILTER COMPARTMENT WITH HINGED ACCESS DOOR

| AIR DISTRIBUTION SCHEDULE | | | | | | | | | | | | | |
|---------------------------|-------------|----------------------|-----------|----------|----------|------------|----------------|------------------------|--|--|--|--|--|
| TAG | TITUS MODEL | FACE SIZE | NECK SIZE | MATERIAL | FRAME | FINISH | NOISE CRITERIA | NOTES | | | | | |
| A | TMS-AA | 24x24 | - | ALUMINUM | LAY-IN | WHITE | 30 | 1,2,3,4,9,12,13,22,23 | | | | | |
| B | TMS-AA | 12x12 | - | ALUMINUM | LAY-IN | WHITE | 30 | 1,2,3,4,9,12,13,22,23 | | | | | |
| C | ML | (2) 1" SLOTS 4" LONG | - | ALUMINUM | LINEAR | SEE NOTE 2 | 30 | 1,2,3,8,9,12,17,19,22 | | | | | |
| D | S300FS | 12x6 | 10x4 | ALUMINUM | SIDEWALL | SEE NOTE 2 | 30 | 1,2,3,6,15,16,20,21 | | | | | |
| E | J300FS | 10x10 | 8x8 | ALUMINUM | SIDEWALL | SEE NOTE 2 | 30 | 1,2,3,6,15,16,21 | | | | | |
| AA | PAR-AA | 24x24 | - | ALUMINUM | LAY-IN | WHITE | 30 | 1,2,3,5,11,12,13,22,23 | | | | | |
| BB | PAR-AA | 12x12 | - | ALUMINUM | LAY-IN | WHITE | 30 | 1,2,3,5,11,12,13,22,23 | | | | | |
| CC | J30FL | 6x6 | 8x6 | ALUMINUM | SIDEWALL | SEE NOTE 2 | 30 | 1,2,3,7,14 | | | | | |

NOTES:

- APPROVED EQUAL MANUFACTURER: PRICE, CARNES, METALARE, NALOR
- FINAL COLOR SELECTION SUBJECT TO ARCHITECT APPROVAL
- CONTRACTOR TO COORDINATE FINAL SELECTION WITH ARCHITECT AND OWNER. VERIFY CEILING SYSTEM FOR EXACT BORDER TYPE, I.E. STANDARD GRID OR NARROW GRID
- SQUARE LOWER FACE CEILING SUPPLY DIFFUSER WITH INSULATED TOP PANEL
- SQUARE PERFORATED CEILING RETURN REGISTER WITH INSULATED TOP PANEL
- DOUBLE DEFLECTION SIDEWALL SUPPLY GRILLE
- SMALL RETURN GRILLES
- LINEAR CEILING DIFFUSER WITH ADJUSTABLE DEFLECTION VANES BEHIND EACH SLOT
- PROVIDE SPIN-IN COLLAR WITH VOLUME DAMPER AT TRUNK TO FLEX DUCT CONNECTION
- PROVIDE STEEL OPPOSED BLADE VOLUME DAMPER
- PROVIDE VOLUME CONTROL DAMPERS FOR ALL RETURN GRILLES OR REGISTERS FOR BALANCED AIRFLOW. NOT REQUIRED IN TRANSFER.
- FLEX DUCT SIZE TO BE SAME AS DIFFUSER NECK SIZE.
- ROUND NECK OR PROVIDE SQUARE-TO-ROUND ADAPTER
- FRONT BLADES PARALLEL TO SHORT DIMENSION
- BLADES PARALLEL TO LONG (HORIZONTAL) DIMENSION
- HORIZONTAL BLADES SET AT 22° ANGLE
- CONCEALED FASTENING - NO SCREW HOLES
- PROVIDE STRAIGHTENING VANES
- PROVIDE END FRAME, ALIGNMENT STRIPS AND FACTORY PLENUMS. INSULATE PLENUMS WITH R-6 INSULATION.
- MATCH RADIUS OF ROUND DUCT TO RADIUS OF AIR DEVICE
- PROVIDE CONCEALED AIR TIGHT SEAL AROUND DIFFUSER TO PREVENT AIR LEAKAGE
- PROVIDE CEILING TRUNK KIT FOR INSTALLATION IN GYPSUM CEILING
- PROVIDE YOUNG REGULATOR BORDEN REMOTE CABLE CONTROL LOCKING MODEL 270 WITH 300000 DAMPER OR EQUAL FOR DIFFUSERS ABOVE HARD CEILING

SUPPLY AIR DIFFUSER OR REGISTER
 RETURN/TRANSFER OR EXHAUST AIR GRILLE

| SUBMITTALS AND SHOP DRAWINGS REQUIREMENTS | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 1. THE CONTRACTOR SHALL PROVIDE SUBMITTALS AND SHOP DRAWINGS FOR APPROVAL AND ASSEMBLY INTO ELECTRONIC (PDF) PACKAGES PER BELOW. ALL SUBMITTALS NOT ORGANIZED PER PACKAGES SHALL RESULT IN REJECTION OF SUBMITTALS. | | | | | | | | | | | | | |
| 2. COORDINATE WITH GENERAL PROJECT TERMS AND CONDITIONS FOR SUBMITTING PROCEDURES AND PROCESS. | | | | | | | | | | | | | |
| 3. CONTRACTOR SHALL REVIEW EACH SUBMITTAL AND CHECK FOR COORDINATION WITH OTHER WORK OF THE CONTRACT AND FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. MARK WITH APPROVAL STAMP BEFORE SUBMITTING TO ARCHITECT. FAILURE TO COMPLY WITH REQUIREMENTS IDENTIFIED HEREIN SHALL RESULT IN REJECTION OF SUBMITTAL. | | | | | | | | | | | | | |
| 4. SUBMITTAL PACKAGES: PACKAGE 1 - MECHANICAL EQUIPMENT PACKAGE 2 - MECHANICAL DUCTWORK AND ACCESSORIES PACKAGE 3 - MECHANICAL CONTROLS PACKAGE 4 - MECHANICAL REPORT | | | | | | | | | | | | | |
| 5. ALL ITEMS AND MATERIALS SHALL BE ORGANIZED AND CLEARLY MARKED WITH TAGS MATCHING CONSTRUCTION DOCUMENTS. | | | | | | | | | | | | | |
| 6. MARK EACH SUBMITTAL TO SHOW WHICH PRODUCTS AND OPTIONS ARE APPLICABLE AND INCLUDE THE FOLLOWING INFORMATION WHERE APPLICABLE: MANUFACTURER'S CATALOG CUTS AND MANUFACTURER'S PRODUCT SPECIFICATIONS. GENERIC PRODUCT DATA SHALL NOT BE ACCEPTABLE. | | | | | | | | | | | | | |
| 7. IDENTIFY DEVIATIONS FROM THE CONTRACT DOCUMENTS ON SUBMITTALS. ANY COSTS INCURRED BY THE ENGINEER FOR DEVIATIONS REQUIRING REVISION OR EXTENSIVE REVIEW SHALL BE PAID BY CONTRACTOR. | | | | | | | | | | | | | |

| MECHANICAL NOTES | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| PART 1 - GENERAL | | | | | | | | | | | | | |
| A. REVISIONS OF REGULATORY AGENCIES AND STANDARDS | | | | | | | | | | | | | |
| 1. ALL EQUIPMENT, MATERIAL AND INSTALLATION SHALL MEET THE REQUIREMENTS OF ONE OR MORE OF THE FOLLOWING: | | | | | | | | | | | | | |
| a. INTERNATIONAL BUILDING CODE (IBC), 2012 EDITION, WITH GEORGIA SUPPLEMENTS AND AMENDMENTS (2014) (2015) (2017) (2018) | | | | | | | | | | | | | |
| b. INTERNATIONAL MECHANICAL CODE (IMC), 2012 EDITION, WITH GEORGIA SUPPLEMENTS AND AMENDMENTS (2014) (2015) | | | | | | | | | | | | | |
| c. INTERNATIONAL ENERGY CONSERVATION CODE (IECC), 2009 EDITION, WITH GEORGIA SUPPLEMENTS AND AMENDMENTS (2011) (2012) | | | | | | | | | | | | | |
| d. STANDARD FOR THE INSTALLATION OF AIR-CONDITIONING AND VENTILATION SYSTEMS (NFPA 90A), 2013 EDITION | | | | | | | | | | | | | |
| e. STANDARD FOR VENTILATION CONTROL AND FIRE PROTECTION OF COMMERCIAL COOKING (NFPA 96), 2014 EDITION | | | | | | | | | | | | | |
| f. SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION (SMACNA) 55, 92, AND 95 | | | | | | | | | | | | | |
| g. LIFE SAFETY CODE (NFPA 101), 2012 EDITION, WITH GEORGIA AMENDMENTS (2013) | | | | | | | | | | | | | |
| h. NATIONAL SOCIETY OF HEATING, REFRIGERATION AND AIR-CONDITIONING ENGINEERS (ASHRAE) STANDARDS 15, 34, AND 82.1, 2013 EDITION | | | | | | | | | | | | | |
| i. AIR MOVEMENT AND CONTROL ASSOCIATION (AMCA) STANDARD 205 | | | | | | | | | | | | | |
| j. AMERICAN ELECTRICITY WORKING CODE (NEC), 2017 EDITION | | | | | | | | | | | | | |
| k. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) Z10.1-95, Z10.3-95, Z21.3-94, Z21.53-95 STANDARD FOR THE INSTALLATION, MAINTENANCE AND USE OF LOCAL PROTECTIVE SIGNALING SYSTEMS (NFPA 72) | | | | | | | | | | | | | |
| B. SCOPE OF WORK | | | | | | | | | | | | | |
| 1. THE CONTRACTOR SHALL VISIT THE JOB SITE AND REVIEW CONSTRUCTION AND VENDOR DRAWINGS FOR ALL TRADES PRIOR TO BID TO BECOME FAMILIAR WITH THE PROJECT AND INTENT OF THE DRAWINGS. | | | | | | | | | | | | | |
| 2. THE CONTRACTOR SHALL OBTAIN A PERMIT FOR WORK TO BE COMPLETED AND INCLUDE COST FOR ALL PERMIT FEES, PERMITS, INSPECTIONS AND TESTING IN THE BID. | | | | | | | | | | | | | |
| 3. THE CONTRACTOR SHALL PROVIDE ALL NEW MATERIAL IN ACCORDANCE WITH THESE DOCUMENTS AND APPLICABLE SPECIFICATIONS. ALL EQUIPMENT SHALL BE UL OR ETL LISTED. | | | | | | | | | | | | | |
| 4. THE CONTRACTOR SHALL COORDINATE THE MECHANICAL WORK WITH OTHER TRADES AND MAKE PROPER PROVISIONS IN RELATION TO THEIR WORK. ANY CHANGES REQUIRED DUE TO LACK OF COORDINATION, SHALL BE MADE AT THE CONTRACTORS' EXPENSE. | | | | | | | | | | | | | |
| 5. THIS IS A REMOVAL OF AN EXISTING SPACE. CONTRACTOR TO VISIT SITE PRIOR TO BID. CONTRACTOR SHALL INSPECT ALL EXISTING AND NEW COMPONENTS OF THE MECHANICAL SYSTEMS AND ENSURE THAT ALL WORK IS IN ACCORDANCE WITH ALL APPLICABLE SPECIFICATIONS. | | | | | | | | | | | | | |
| 6. ALL WORK SHALL BE PERFORMED BY A LICENSED MECHANICAL CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. | | | | | | | | | | | | | |
| 7. MECHANICAL PLANS, IN GENERAL, ARE DIAGRAMMATIC IN NATURE AND ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, PLUMBING, ELECTRICAL, FIRE SPRINKLER, AND STRUCTURAL PLANS AND SHALL BE SUBJECT TO THE MECHANICAL CONTRACTOR'S INTERPRETATION. | | | | | | | | | | | | | |
| 8. DUCTWORK CHANGES MAY BE MADE BY CONTRACTOR USING EQUIVALENT SIZED DUCT. CONTACT ARCHITECT FOR APPROVAL. | | | | | | | | | | | | | |
| 9. THE CONTRACTOR IS EXPECTED TO PROVIDE ALL MATERIAL NECESSARY FOR A COMPLETE OPERATING SYSTEM. IT IS NOT THE INTENT OF THESE DOCUMENTS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. | | | | | | | | | | | | | |
| 10. THE CONTRACTOR SHALL PROVIDE INSURANCE FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE PROJECT AS REQUIRED BY GENERAL CONTRACTOR. | | | | | | | | | | | | | |
| 11. THE CONTRACTOR SHALL MAINTAIN AN ACCURATE RECORD SET OF ANY DEVIATIONS BETWEEN THE WORK AS DESIGNED IN THESE DOCUMENTS AND THAT OF WHICH IS ACTUALLY INSTALLED. THIS RECORD SET OF DRAWINGS SHALL BE KEPT WITH THE GENERAL CONTRACTOR AND TURNED OVER TO OWNER AT PROJECT COMPLETION. | | | | | | | | | | | | | |
| C. ITEMS | | | | | | | | | | | | | |
| 1. "CONCEALED" AS USED IN THE DOCUMENTS AND APPLICABLE SPECIFICATIONS MEANS CONCEALED IN MASONRY OR OTHER CONSTRUCTION, BEHIND WALLS, OR ABOVE CEILING. | | | | | | | | | | | | | |
| 2. "EXPPOSED" AS USED IN THE DOCUMENTS AND APPLICABLE SPECIFICATIONS MEANS EXPOSED TO VIEW INDORS. | | | | | | | | | | | | | |
| 3. "PROVIDE" AS USED IN THE DOCUMENTS AND APPLICABLE SPECIFICATIONS MEANS TO SUPPLY AND INSTALL COMPLETE. | | | | | | | | | | | | | |
| 4. "REMOVE" AS USED IN THE DOCUMENTS AND APPLICATION SPECIFICATIONS MEANS TO REMOVE AND DISPOSE COMPLETELY. | | | | | | | | | | | | | |
| D. WARRANTY | | | | | | | | | | | | | |
| 1. ALL MATERIAL AND WORK PERFORMED SHALL BE GUARANTEED FOR PERIOD NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE. | | | | | | | | | | | | | |
| 2. CONTRACTOR SHALL PROVIDE COMPRESSOR WARRANTIES FOR FIVE YEARS. ANY PARTS REQUIRING SYSTEM SHUTDOWN SHALL BE DONE DURING NORMAL OPERATING HOURS. | | | | | | | | | | | | | |
| 3. ANY CORRECTIONS FOR DEFECTIVE MATERIALS AND INSTALLATION SHALL BE MADE AT THE CONTRACTORS EXPENSE DURING THE WARRANTY PERIOD. | | | | | | | | | | | | | |

| MECHANICAL SHEET INDEX | | | | | | | | | | | | | |
|------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| SHEET# | DESCRIPTION | | | | | | | | | | | | |
| M-001 | MECHANICAL NOTES AND SCHEDULES | | | | | | | | | | | | |
| M-201 | PROPOSED MEZZANINE LEVEL MECHANICAL PLANS | | | | | | | | | | | | |
| M-201A | PROPOSED ALTERNATE MEZZANINE LEVEL MECHANICAL PLAN | | | | | | | | | | | | |
| M-701 | MECHANICAL DETAILS | | | | | | | | | | | | |

| MECHANICAL ABBREVIATION LEGEND | | | | | | | | | | | | | |
|--------------------------------|-------------------------------------|---------|-----------------------------------|--|--|--|--|--|--|--|--|--|--|
| AFF | ABOVE FINISHED FLOOR | LD8 | LEAVING DRY BULB | | | | | | | | | | |
| APPROX | APPROXIMATE | LWG | LEAVING WET BULB | | | | | | | | | | |
| BAS | BUILDING AUTOMATION SYSTEM | MAX | MAXIMUM | | | | | | | | | | |
| CFM | CUBIC FEET PER MINUTE | MBH | THOUSAND BTU PER HOUR | | | | | | | | | | |
| DB | DRY BULB | MIN | MINIMUM | | | | | | | | | | |
| DA, Ø | DIAMETER | NA | NOT APPLICABLE | | | | | | | | | | |
| DX | DIRECT EXPANSION | N.C. | NORMALLY CLOSED | | | | | | | | | | |
| EA | EXHAUST AIR | N.O. | NORMALLY OPEN | | | | | | | | | | |
| EA | ENTERING AIR TEMPERATURE | OA | OUTDOOR AIR | | | | | | | | | | |
| EER | ENERGY EFFICIENCY RATING | PD | PRESSURE DROP | | | | | | | | | | |
| ESB | ENTERING DRY BULB | PSIG | POUNDS PER SQUARE INCH GAUGE | | | | | | | | | | |
| EFF | EFFICIENCY | RA | RETURN AIR | | | | | | | | | | |
| ESP | EXTERNAL STATIC PRESSURE | RH | RELATIVE HUMIDITY | | | | | | | | | | |
| ETR | EXISTING TO REMAIN | RRM | REVOLUTIONS PER MINUTE | | | | | | | | | | |
| EWB | ENTERING WET BULB | SA | SUPPLY AIR | | | | | | | | | | |
| FLA | FULL LOAD AMPERAGE | SEER | SEASONAL ENERGY EFFICIENCY RATING | | | | | | | | | | |
| FT | FEET | SQ. FT. | SQUARE FEET | | | | | | | | | | |
| H | HEIGHT | TEMP | TEMPERATURE | | | | | | | | | | |
| HP | HORSEPOWER | TYP | TYPICAL | | | | | | | | | | |
| HSPF | HEATING SEASONAL PERFORMANCE FACTOR | UC | UNDERCUT DOOR 3/4" | | | | | | | | | | |
| IEER | INTEGRATED ENERGY EFFICIENCY RATING | V | VOLTS | | | | | | | | | | |
| IN | INCHES | W | WIDTH | | | | | | | | | | |
| IN WG | INCHES WATER GAUGE | WB | WET BULB | | | | | | | | | | |
| KW | KILOWATTS | °F | DEGREES FAHRENHEIT | | | | | | | | | | |
| LAT | LEAVING AIR TEMPERATURE | Δt | TEMPERATURE DIFFERENCE | | | | | | | | | | |

| GENERAL DEMOLITION NOTES | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 1. ALL EXISTING EQUIPMENT, DUCTWORK, CONDUIT, CABLE, PIPING, HANGERS, SUPPORT AND CONTROLS THAT ARE NOT BEING REVISED TO BE REMOVED IN THEIR ENTIRETY. | | | | | | | | | | | | | |
| 2. THE CONTRACTOR SHALL PROVIDE PROTECTION FOR ALL PARTS OF THE BUILDING, ITS CONTENTS AND OCCUPANTS WHEREVER WORK UNDER THIS CONTRACT IS PERFORMED. | | | | | | | | | | | | | |
| 3. DEMOLITION SHALL INCLUDE REMOVAL OF EXISTING BUILDING CONSTRUCTION TO EXTENT REQUIRED TO PERFORM CONSTRUCTION ACTIVITIES INDICATED. | | | | | | | | | | | | | |
| 4. THE DEMOLITION PROCEDURES SHALL PROVIDE FOR SAFE CONDUCT OF THE WORK, PROTECTION OF PERSONNEL, CAREFUL REMOVAL AND DISPOSITION OF MATERIALS SPECIFIED TO BE SALVAGED, PROTECTION OF PROPERTY TO REMAIN UNDISTURBED, COORDINATION WITH OTHER WORK IN PROGRESS, AND TIMELY DISCONNECTION OF UTILITY SERVICES. | | | | | | | | | | | | | |
| 5. EXISTING WORK TO REMAIN SHALL BE PROTECTED FROM DAMAGE WORK DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED TO MATCH EXISTING WORK OR WORK INSTALLED UNDER THIS CONTRACT DEPENDING ON CONTRACT REQUIREMENTS. | | | | | | | | | | | | | |
| 6. EXISTING WORK SHALL BE CUT, DRILLED, ALTERED, REMOVED OR TEMPORARILY REMOVED AND REPLACED FOR PERFORMANCE OF WORK UNDER THE CONTRACT. WORK DEFACED DURING THIS CONTRACT SHALL BE RESTORED TO THE CONDITION AT TIME OF AWARD OF CONTRACT. CUT, ALTER, REMOVE OR TEMPORARILY REMOVE AND REPLACE EXISTING WORK FOR THE INSTALLATION OF MECHANICAL, PLUMBING AND ELECTRICAL WORK AND OTHER CONSTRUCTION. | | | | | | | | | | | | | |
| 7. PROPERLY REMOVE AND DISPOSE OF ALL EXISTING FIXTURES AS REQUIRED TO ACCOMMODATE NEW PLAN. REFER TO THE ARCHITECTURAL DEMOLITION PLANS. CONSULT WITH THE OWNER AND OBTAIN OWNERS APPROVAL PRIOR TO DISPOSAL OF REMOVED MATERIAL. | | | | | | | | | | | | | |
| 8. FOR ALL ADDITIONAL INFORMATION REGARDING CONTRACTUAL RESPONSIBILITIES, COORDINATE WITH ARCHITECTURAL PLANS. | | | | | | | | | | | | | |

| MECHANICAL LEGEND | |
|-------------------|--|
| ----- | EXISTING |
| ----- | NEW SCOPE OF WORK |
| ----- | REFRIGERANT PIPING |
| ----- | DROPPING OR RISING PIPE |
| ----- | PIPE TO OR FROM ABOVE |
| ----- | INSULATING GATE OR BALL VALVE |
| ----- | RECTANGULAR DUCT SIZE: FIRST DIMENSION IS SIDE DRAWN |
| ----- | ROUND DUCTWORK OR FLUE PIPING |
| ----- | RECTANGULAR TO ROUND DUCT TRANSITION |
| ----- | NEW FLEXIBLE ROUND DUCT |
| ----- | FLEXIBLE DUCT CONNECTION |
| ----- | ADJUSTABLE DEFLECTOR VANES AT BRANCH DUCT |
| ----- | SQUARE DUCT ELBOW WITH 90° |