

**FRANKLIN COUNTY  
CONVENTION FACILITIES  
AUTHORITY**

**COLUMBUS**

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**Addendum No.1  
Request for Bids 2026-07  
Greater Columbus Convention Center  
South Entrance Improvements**

Information Contained within this Addendum No.1 modifies the September 24, 2026 Project Manual for the Greater Columbus Convention Center South Entrance Improvements. Receipt of this Addendum No.1 must be indicated on the Form of Proposal submitted by each bidder.

**New Technical Specifications**

The attached drawings and specifications providing for air curtain and power requirements are hereby incorporated into the Project Manual and made part of the Request for Bids.

Jordan Edmonds  
General Counsel

| SHEET LIST     |                                |
|----------------|--------------------------------|
| SHEET NUMBER   | SHEET NAME                     |
| M001           | HVAC LEGEND AND SPECIFICATIONS |
| M101           | HVAC LEVEL 1 - NEW WORK        |
| Total Count: 2 |                                |

ABBREVIATIONS

|        |                                                       |      |                                                                    |
|--------|-------------------------------------------------------|------|--------------------------------------------------------------------|
| AC     | - AIR COMPRESSOR OR AIR CONDITIONER                   | ID   | - INSIDE DIAMETER                                                  |
| ACCU   | - AIR COOLED CONDENSING UNIT                          | INV  | - INVERT ELEVATION                                                 |
| AD     | - ACCESS DOOR OR AREA DRAIN                           | IN   | - INCHES                                                           |
| ADJ    | - ADJUSTABLE                                          |      |                                                                    |
| AF     | - ABOVE FINISHED FLOOR                                | KEC  | - KITCHEN EQUIPMENT CONTRACTOR                                     |
| AFG    | - ABOVE FINISHED GRADE                                |      |                                                                    |
| AFMS   | - AIR FLOW MEASURING STATION                          | L    | - LENGTH                                                           |
| ALT    | - ALTERNATE                                           | LAT  | - LEAVING AIR TEMPERATURE                                          |
| AP     | - ACCESS PANEL                                        | LAV  | - LAVATORY                                                         |
| APPROX | - APPROXIMATE                                         | LBS  | - POUNDS                                                           |
| ARCH   | - ARCHITECT OR ARCHITECTURAL                          | LPC  | - LOW PRESSURE CONDENSATE RETURN                                   |
| ASSY   | - ASSEMBLY                                            | LPS  | - LOW PRESSURE STEAM SUPPLY                                        |
| ATC    | - AUTOMATIC TEMPERATURE CONTROL (SYNONYMOUS WITH BAS) | LWT  | - LEAVING WATER TEMPERATURE                                        |
|        |                                                       |      |                                                                    |
| BAS    | - BUILDING AUTOMATION SYSTEM                          | MAX  | - MAXIMUM                                                          |
| BDO    | - BACK DRAFT DAMPER                                   | MD   | - MOTORIZED DAMPER                                                 |
| BFP    | - BACKFLOW PREVENTER                                  | MEZZ | - MEZZANINE                                                        |
| BLDG   | - BUILDING                                            | MFR  | - MANUFACTURER                                                     |
| BOB    | - BOTTOM OF BEAM                                      | MH   | - MANHOLE                                                          |
| BOB    | - BOTTOM OF DUCT                                      | MIN  | - MINIMUM OR MINUTE                                                |
| BOE    | - BOTTOM OF EQUIPMENT                                 | MISC | - MISCELLANEOUS                                                    |
| BOF    | - BOTTOM OF FOOTING                                   | MTD  | - MOUNTED                                                          |
| BOG    | - BOTTOM OF GRILLE                                    | MTG  | - MOUNTING                                                         |
| BOP    | - BOTTOM OF PIPE                                      | MPC  | - MEDIUM PRESSURE CONDENSATE RETURN                                |
| BOT    | - BOTTOM                                              | MPS  | - MEDIUM PRESSURE STEAM SUPPLY                                     |
| BTU    | - BRITISH THERMAL UNIT                                | MU   | - WATER MAKE-UP                                                    |
| BTUH   | - BRITISH THERMAL UNIT PER HOUR                       |      |                                                                    |
|        |                                                       | N/C  | - NORMALLY CLOSED                                                  |
| CBD    | - COUNTER BALANCED BACKDRAFT DAMPER                   | N/C  | - NOT IN CONTRACT                                                  |
| CFI    | - CONTRACTOR FURNISHED CONTRACTOR INSTALLED           | N/O  | - NORMALLY OPEN                                                    |
| CFM    | - CUBIC FEET PER MINUTE                               | NOM  | - NOMINAL                                                          |
| CHS    | - CHILLED WATER SUPPLY                                | NPT  | - NATIONAL PIPE THREAD                                             |
| CHR    | - CHILLED WATER RETURN                                | NTS  | - NOT TO SCALE                                                     |
| CHGR   | - CHILLED WATER GLYCOL SOLUTION RETURN                |      |                                                                    |
| CHGS   | - CHILLED WATER GLYCOL SOLUTION SUPPLY                | OA   | - OUTDOOR AIR                                                      |
| CLG    | - CEILING                                             | OB   | - OPPOSED BLADE DAMPER                                             |
| CMU    | - CONCRETE MASONRY UNIT                               | OD   | - OUTSIDE DIAMETER                                                 |
| CO     | - CLEAN OUT                                           | OCFI | - OWNER FURNISHED CONTRACTOR INSTALLED                             |
| CO2    | - CARBON DIOXIDE                                      | OFOI | - OWNER FURNISHED OWNER INSTALLED                                  |
| CONN   | - CONNECT OR CONNECTION                               |      |                                                                    |
| CONTR  | - CONTRACTOR                                          | P    | - PROPANE GAS                                                      |
| CTR    | - CENTER                                              | PC   | - PLUMBING CONTRACTOR (DIVISION 22) OR PUMPED CONDENSATE RETURN    |
| CJ     | - COPPER                                              | PLBG | - PLUMBING                                                         |
| CW     | - COLD WATER                                          | PRSS | - PRESSURE                                                         |
| CWR    | - CONDENSER WATER RETURN                              | PRV  | - PRESSURE REGULATING VALVE                                        |
| CWS    | - CONDENSER WATER SUPPLY                              | PSF  | - POUNDS PER SQUARE FOOT                                           |
|        |                                                       | PSI  | - POUNDS PER SQUARE INCH                                           |
| D      | - DRAIN LINE                                          | PSIG | - POUNDS PER SQUARE INCH GAUGE                                     |
| DB     | - DRY BULB                                            |      |                                                                    |
| DDC    | - DIRECT DIGITAL CONTROLS                             | RA   | - RETURN AIR                                                       |
| DE     | - DEIONIZED WATER                                     | RAD  | - RADIUS                                                           |
| DIA    | - DIAMETER                                            | RCD  | - REFLECTED CEILING PLAN                                           |
| DM     | - DIMENSION                                           | RO   | - ROOF DRAIN                                                       |
| DN     | - DOWN                                                | ROR  | - REVERSE OSMOSIS WATER RETURN                                     |
| DWG    | - DRAWING                                             | REC  | - REQUIRED                                                         |
|        |                                                       | REQD | - REQUIRED                                                         |
| EA     | - EACH OR EXHAUST AIR                                 | RI   | - ROUGH IN                                                         |
| EAT    | - ENTERING AIR TEMPERATURE                            | RL   | - REFRIGERANT LIQUID                                               |
| ECC    | - ELECTRICAL CONTRACTOR (DIVISION 26)                 | ROS  | - REVERSE OSMOSIS WATER SUPPLY                                     |
| EF     | - EXHAUST FAN                                         | ROR  | - REVERSE OSMOSIS WATER RETURN                                     |
| EJ     | - EXPANSION JOINT                                     | RPM  | - REVOLUTIONS PER MINUTE                                           |
| ELEC   | - ELECTRICAL                                          | RS   | - REFRIGERANT SUCTION                                              |
| ELEV   | - ELEVATOR                                            |      |                                                                    |
| EQUIP  | - EQUIPMENT                                           | S    | - SPRINKLER (WET)                                                  |
| ET     | - EXPANSION TANK                                      | SA   | - SUPPLY AIR                                                       |
| ETR    | - EXISTING TO REMAIN                                  | SAN  | - SANITARY OR SANITARY DRAIN                                       |
| EOS    | - EQUIPMENT SUPPLIER                                  | SCH  | - SCHEDULE                                                         |
| ENT    | - ENTERING WATER TEMPERATURE                          | SCW  | - SOFT COLD WATER                                                  |
| EXH    | - EXHAUST                                             | SHT  | - SHEET                                                            |
| EXP    | - EXPANSION                                           | SPEC | - SPECIFICATIONS                                                   |
| EXT    | - EXTERIOR                                            | SQ   | - SQUARE                                                           |
| EX     | - EXISTING                                            | SR   | - SUPPLY RISER                                                     |
|        |                                                       | SR   | - SAFETY RELIEF VALVE                                              |
| FD     | - FLOOR DRAIN                                         | SS   | - STAINLESS STEEL                                                  |
| FF     | - FINISHED FLOOR ELEVATION                            | STD  | - STANDARD                                                         |
| FLR    | - FLOOR                                               | STR  | - STORM OR STORM DRAINAGE                                          |
| FLB    | - FLAT ON BOTTOM                                      | STUC | - STRUCTURAL OR STRUCTURE                                          |
| FOF    | - FUEL OIL FLOW                                       | SUC  | - SITE UTILITY CONTRACTOR                                          |
| FOG    | - FUEL OIL GAUGE                                      |      |                                                                    |
| FOT    | - FUEL OIL RETURN                                     | TA   | - TRANSFER AIR                                                     |
| FOS    | - FUEL OIL SUPPLY                                     | TEMP | - TEMPERATURE                                                      |
| FOT    | - FLAT ON TOP                                         | TOT  | - TOP OF BEAM                                                      |
| FFM    | - FEET PER MINUTE                                     | TOD  | - TOP OF DUCT                                                      |
| FSC    | - FIRE SUPPRESSION CONTRACTOR (DIVISION 21)           | TOE  | - TOP OF EQUIPMENT                                                 |
| FT     | - FEET                                                | TOF  | - TOP OF FOOTING                                                   |
| FTG    | - FOOTING                                             | TOJ  | - TOP OF JOIST                                                     |
|        |                                                       | TOP  | - TOP OF PIPE                                                      |
| G      | - GAS OR NATURAL GAS                                  | TOS  | - TOP OF SLAB OR TOP OF STEEL                                      |
| GA     | - GAUGE                                               | TP   | - TYPICAL                                                          |
| GAL    | - GALLON                                              |      |                                                                    |
| GALV   | - GALVANIZED                                          | U    | - UNIT HEATER                                                      |
| GC     | - GENERAL TRADES CONTRACTOR                           | UNO  | - UNLESS NOTED OTHERWISE                                           |
| GPM    | - GALLONS PER MINUTE                                  |      |                                                                    |
|        |                                                       | V    | - VENT                                                             |
| HB     | - HOSE BIBB                                           | VAC  | - VACUUM                                                           |
| HBC    | - HVAC CONTRACTOR (DIVISION 23)                       | VAV  | - VARIABLE AIR VOLUME                                              |
| HD     | - HUB DRAIN                                           | VE   | - VELOCITY                                                         |
| HP     | - REFRIGERANT HOT GAS                                 | VFD  | - VARIABLE FREQUENCY DRIVE (ADJUSTABLE FREQUENCY MOTOR CONTROLLER) |
| HG     | - HORSEPOWER                                          | VIB  | - VALVE IN BOX                                                     |
| HPC    | - HIGH PRESSURE CONDENSATE RETURN                     | VOL  | - VOLUME                                                           |
| HPS    | - HIGH PRESSURE STEAM SUPPLY                          | VTR  | - VENT THROUGH ROOF                                                |
| HRS    | - HOUR                                                | VR   | - VENT RISER                                                       |
| HT     | - HEAT TRACE                                          |      |                                                                    |
| HTR    | - HEATER                                              | W/   | - WITH                                                             |
| HVAC   | - HEATING, VENTILATING, AND AIR CONDITIONING          | W/O  | - WITHOUT                                                          |
| HW     | - HOT WATER                                           | WB   | - WET BULB                                                         |
| HWR    | - HEATING HOT WATER RETURN                            | WCO  | - WALL CLEANOUT                                                    |
| HWS    | - HEATING HOT WATER SUPPLY                            |      |                                                                    |

**NOTE:**  
ALL SYMBOLS AND ABBREVIATIONS ARE  
SUBJECT TO MODIFICATIONS ON OTHER  
DRAWINGS.  
ALL SYMBOLS OR ABBREVIATIONS MIGHT  
NOT NECESSARILY BE USED ON THIS  
PROJECT.

| <b>SPECIFICATIONS (DIVISION 23)</b>               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| <b>GENERAL REQUIREMENTS</b>                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1                                                 | PROVIDE A COMPLETE HVAC SYSTEM AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN. WORK INCLUDES, BUT IS NOT NECESSARILY LIMITED TO, THE FOLLOWING PRINCIPAL CATEGORIES:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| A                                                 | ALTERATION WORK IN THE EXISTING BUILDING.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 2                                                 | OBTAIN AND PAY FOR ALL PERMITS. UPON COMPLETION, PROVIDE A CERTIFICATE OF APPROVAL FROM THE GOVERNING INSPECTION AUTHORITY.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 3                                                 | DURING THE BIDDING PERIOD, THE SITE AND PREMISES OF THE PROPOSED WORK, REPORT IMMEDIATELY ANY SIGNIFICANT OBSERVED DISCREPANCIES RELATED TO THE PRELIMINARY DESIGN OR REQUIRED WORK. REPORTER SHALL COMPLY WITH OHIO BUILDING CODE, OHIO MECHANICAL CODE AND ALL OTHER APPLICABLE CODES, LAWS AND ORDINANCES.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 4                                                 | THIS CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP, EQUIPMENT, AND MATERIAL ENTERING INTO THIS CONTRACT FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE. ANY WORK PROVEN TO BE DEFECTIVE DURING THIS PERIOD SHALL BE MADE GOOD BY THIS CONTRACTOR WITHOUT EXPENSE TO THE OWNER.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 5                                                 | EQUIPMENT CONTROL PANELS CONTAINING POWER CONTROL COMPONENTS SHALL BE MARKED WITH THE MINIMUM SCOR RATING. THE RATING SHALL NOT BE LESS THAN THE AVAILABLE FAULT CURRENT. REFER TO THE ELECTRICAL DRAWINGS FOR THE CALCULATED AVAILABLE FAULT AT THE DISTRIBUTION PANEL, MCC OR PANELBOARD SERVING THE EQUIPMENT. INCLUDE CONFIRMATION OF BEING PROTECTED FROM THE FAULT CURRENT IN THE EQUIPMENT SHOP DRAWING SUBMITTAL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 6                                                 | WHERE TRADE NAMES, BRANDS OR MANUFACTURERS ARE LISTED, ANY ONE OF THE SEVERAL NAMED ARE CONSIDERED EQUALLY ACCEPTABLE. NO UNNAMED PRODUCT OR MATERIAL SHALL BE USED UNLESS APPROVED IN WRITING BY THE ENGINEER. SUBMIT ELECTRICIAN SHOP DRAWINGS ON MAJOR ITEMS OF EQUIPMENT AND MATERIALS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 7                                                 | PLAN WORK AS TO PROVIDE REASONABLE CONTINUOUS SERVICE OF EXISTING SYSTEMS. SHUTDOWN OF SYSTEMS SHALL BE BID OUTSIDE NORMAL WORKING HOURS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>BASIC HVAC MATERIALS AND METHODS</b>           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 8                                                 | WORKMANSHIP SHALL BE FIRST CLASS. THE OWNER, THE ARCHITECT, OR ENGINEER'S JUDGMENT SHALL PREVAIL IF THE QUALITY IS SUSPECT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 9                                                 | PROTECT MATERIALS AND EQUIPMENT AFTER DELIVERY TO THE JOB SITE. RESPECT OTHER TRADES AS RELATED TO PROJECT THEIR WORK AND TO AVOID CONFLICTS. CALL ATTENTION TO PROBLEMS RELATIVE TO SPACE REQUIREMENTS SO EARLY RESOLUTION MAY BE OBTAINED. RESPECT OWNER'S PROPERTY AT ALL TIMES. TEMPORARILY REMOVE STORE AND RE-INSTALL CEILING WHEN REQUIRED TO PREFORM WORK.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 10                                                | CUT AND PATCH TO INSTALL WORK OR PAY OTHERS TO PERFECT SUCH WORK. CONCRETE SHALL BE SAW CUT OR CORE DRILLED. WORKMANSHIP SHALL BE FIRST CLASS. THE ARCHITECT OR ENGINEER'S JUDGMENT SHALL PREVAIL IF THE QUALITY IS SUSPECT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 11                                                | IN ALTERATION AND REMODELING WORK, PERFORM ALL REMOVAL AND RELOCATION WORK KINDRED TO THE HVAC WORK. LEAVE ALL EXISTING CHANGES OR VARIATIONS WHICH ARE MADE DURING CONSTRUCTION. REMOVE EXTRANEOUS PIPING AND EQUIPMENT. NO REMOVED MATERIAL SHALL BE REUSED UNLESS EXPRESSLY SHOWN.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| A                                                 | WHEN IT IS NECESSARY TO ROUTE/A SECTION OF ACTIVE DUCTWORK OR PIPING THE ROUTED SECTION SHALL BE INSTALLED BEFORE REMOVING THE EXISTING IN ORDER TO MINIMIZE SYSTEM DOWN TIME. ROUTED SECTIONS SHALL BE INSULATED AS REQUIRED FOR NEW WORK. PATCH INSULATION ON EXISTING DUCTWORK AND PIPING WHICH HAS BEEN DAMAGED OR REMOVED IN THIS WORK.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 12                                                | REFINISH ANY SURFACE DISTURBED DURING THIS WORK TO MATCH EXISTING, EXCEPT WHERE REFINISHING OF THAT SURFACE IS INCLUDED UNDER THE GENERAL CONTRACT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 13                                                | ASSET CONTRACTOR SHALL MAINTAIN A SEPARATE SET OF AS-BUILT PRINTS OF THE CONTRACT DOCUMENTS AND SHALL SHOW SUFFICIENT CHANGES OR VARIATIONS WHICH ARE MADE DURING CONSTRUCTION. UPON COMPLETION OF THE WORK, THESE DRAWINGS SHALL BE TURNED OVER TO THE ARCHITECT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>SHOP DRAWINGS</b>                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| A                                                 | ELECTRONIC COPIES OF SHOP DRAWINGS AND DESCRIPTIVE INFORMATION OF EQUIPMENT AND MATERIALS SHALL BE FURNISHED. SUBMIT TO THE ARCHITECT AND/OR ENGINEER FOR REVIEW AS STATED IN THE GENERAL CONDITIONS AND SUPPLEMENTARY CONDITIONS. THEY SHALL BE SUBMITTED AS SOON AS PRACTICABLE AND BEFORE EQUIPMENT IS INSTALLED AND BEFORE SPECIAL EQUIPMENT IS MANUFACTURED. SUBMITTAL INFORMATION SHALL CLEARLY IDENTIFY EACH ITEM OF EQUIPMENT, INCLUDING MODEL NUMBER, SERIAL NUMBER, PERFORMANCE DATA, ELECTRICAL CHARACTERISTICS, FEATURES, SPECIFIED OPTIONS AND ADDITIONAL INFORMATION SUFFICIENT TO EVIDENCE COMPLIANCE WITH THE CONTRACT DOCUMENTS. PRODUCT CATALOGS, BROCHURES, ETC. SUBMITTED WITHOUT PROJECT SPECIFIC CALLED MARKING ENGINEERING SUBMITTED FOR REVIEW WILL BE REJECTED AND RETURNED WITHOUT REVIEW. SHOP DRAWINGS FOR EQUIPMENT, FIXTURES, DEVICES AND MATERIALS SHALL BE LABELED AND IDENTIFIED SAME AS SHOWN ON THE CONTRACT DOCUMENTS. IF COMPLIANCE WITH THE ABOVE CRITERIA IS NOT PROVIDED, SHOP DRAWINGS WILL BE SUBJECT TO REJECTION AND RETURNED WITHOUT REVIEW. SAMPLES SHALL BE SUBMITTED WHEN REQUESTED OR AS SPECIFIED HERE WITH-IN.                                                                              |
| B                                                 | ALL SHOP DRAWINGS SUBMITTED TO HEAVY SHALL BE DISTRIBUTED TO THE PROJECT MANAGER (DAVID LOVANO-DCL@nvoenergy.com) AND TEAM CONSTRUCTION ADMINISTRATION EMAIL, CORPORATE CA@heavy.com).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| C                                                 | THE REVIEW OF SHOP DRAWINGS BY THE ARCHITECT OR ENGINEER SHALL NOT RELEASE THE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS IN THE SHOP DRAWINGS. DEVIATIONS FROM SPECIFICATIONS AND DRAWING REQUIREMENTS SHALL BE CALLED WITH COLOR BANDS AND ARROW MARKERS SHALL BE AT EACH VALVE AND AT LEAST ONE IN EACH ROOM, BUT NO MORE THAN 20 FT INTERVALS. COLOR BAND SHALL MATCH EXISTING OR AS DICTATED BY OWNER. TURN OVER VALVE TAG SCHEDULE TO ARCHITECT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| D                                                 | FAILURE TO FURNISH CONSTRUCTION ADMINISTRATION ITEMS IN THIS MANNER MAY RESULT IN DELAYED RESPONSES.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| E                                                 | IT IS HIGHLY RECOMMENDED THAT A CONSTRUCTION ADMINISTRATION COMMUNICATION PLAN BE DEVELOPED BY THE PRIME CONTRACTOR AND SHARED WITH THE ARCHITECT, ENGINEER, AND OWNER TO ESTABLISH EXPECTATIONS FOR CONSTRUCTION ADMINISTRATION ITEM DISSEMINATION AND WHAT PLAT FORM IS TO BE USED (POPS WITH EMAIL, BIM, OTHER OR SOFTWARE, ETC.).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| F                                                 | AT A MINIMUM, SHOP DRAWINGS OF THE FOLLOWING HVAC EQUIPMENT AND MATERIALS SHALL BE SUBMITTED:<br><br>AIR CURTAINS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>IDENTIFICATION OF HVAC EQUIPMENT</b>           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 14                                                | MARK ALL DUCT SYSTEMS AND PIPING SYSTEMS AND TAG ALL VALVES. ANY EXISTING DUCTWORK AND PIPING ENCOUNTERED SHALL ALSO BE MARKED. VALVE TAGS SHALL BE NON FERROUS METAL, 1" DIAMETER AND ATTACHED BY COPPER LOCK HOOPS. PIPEIDERS SHALL BE MARKED WITH COLOR BANDS AND ARROW MARKERS SHALL BE AT EACH VALVE AND AT LEAST ONE IN EACH ROOM, BUT NO MORE THAN 20 FT INTERVALS. COLOR BAND SHALL MATCH EXISTING OR AS DICTATED BY OWNER. TURN OVER VALVE TAG SCHEDULE TO ARCHITECT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>ELECTRICAL REQUIREMENTS FOR HVAC EQUIPMENT</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 15                                                | EQUIPMENT CONTROL PANELS CONTAINING POWER CONTROL COMPONENTS SHALL BE MARKED WITH THE MINIMUM SCOR RATING. THE RATING SHALL NOT BE LESS THAN THE AVAILABLE FAULT CURRENT. REFER TO THE ELECTRICAL DRAWINGS FOR THE CALCULATED AVAILABLE FAULT AT THE DISTRIBUTION PANEL, MCC OR PANELBOARD SERVING THE EQUIPMENT. INCLUDE CONFIRMATION OF BEING PROTECTED FROM THE FAULT CURRENT IN THE EQUIPMENT SHOP DRAWING SUBMITTAL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 16                                                | NOTE: EQUIPMENT WITH ELECTRONICALLY COMMUTATED MOTORS (ECMs) ARE SOMETIMES FACTORY PROGRAMMED TO LIMIT CURRENT DRAW TO THE MOTOR TO LIMIT THE AVAILABLE BRAKE HORSEPOWER TO BETTER MATCH SPECIFIED PERFORMANCE AND REDUCE REQUIRED POWER CIRCUITING. THIS REDUCED BRAKE HORSEPOWER IS BELOW THE MOTOR'S NAMEPLATE RATING. THE ELECTRICAL DESIGN DOCUMENTS MAY BE SIZED BASED ON THE ECM'S NAMEPLATE MOTOR HORSEPOWER. THE EQUIPMENT SUPPLIER SHALL BE RESPONSIBLE FOR PROVIDING THE CORRECT INFORMATION REGARDING THE EQUIPMENT'S OVERCURRENT PROTECTION ON THE DESIGN DOCUMENTS. DIFFERS FROM THEIR SELECTED EQUIPMENT'S NAMEPLATE DATA. ANY REQUIRED REVISIONS TO THE SHOP DRAWING SUBMITTAL MUST BE SUBMITTED PRIOR TO THE EQUIPMENT BEING SUBMITTED ON THE SHOP DRAWING SUBMITTAL. THE REQUIRED REVISIONS MUST BE FORWARDED TO THE DIVISION 23 CONTRACTOR FOR REVIEW AND APPROVAL. THE REQUIRED REVISIONS MUST BE FORWARDED TO THE ARCHITECT FOR REVIEW AND APPROVAL. THE REQUIRED REVISIONS MUST BE FORWARDED TO THE ARCHITECT FOR REVIEW AND APPROVAL. HOWEVER, ANY ADDITIONAL COST ASSOCIATED WITH INCREASED ELECTRICAL FEEDER/BREAKER SIZES OR LACK OF COORDINATION LISTED ABOVE SHALL BE THE DIVISION 23 CONTRACTOR'S RESPONSIBILITY. |
| 17                                                | REFER TO THE ELECTRICAL DRAWINGS AND VERIFY ADEQUACY OF FEEDER SIZE, SETS OF CONDUCTORS AND SIZE, DISCONNECTING MEANS AND OTHER ELECTRICAL REQUIREMENTS. COMPARE THESE TO THE REQUIREMENTS OF THE EQUIPMENT TO BE FURNISHED AND REPORT DEFICIENCIES AND/OR DISCREPANCIES TO THE ENGINEER IN THE BID PERIOD FOR RESOLUTION BY ADDENDUM. BEAR ALL COSTS FOR ELECTRICAL CHANGES WHERE SUCH ISSUES ARE NOT PROPERLY RESOLVED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 18                                                | GENERAL PURPOSE MOTORS SHALL BE INDUCTION TYPE 1750 RPM DESIGN "B" WITH COPPER WINDINGS, CLASS B OR F INSULATION, AND MOTOR ENCLOSURE TO SUIT APPLICATION. SERVICE FACTOR SHALL BE 1.15 MINIMUM.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 19                                                | PREMIUM EFFICIENCY MOTORS SHALL BE EQUAL TO CENTURY YE + 3", GENERAL ELECTRIC ENERGY SAVER (MOTOR EFFICIENCY), BALDOR SUPER E PREMIUM EFFICIENT OR RELAXAN "PREMIUM ELECTRIC EFFICIENT" SERIES. MOTOR EFFICIENCIES SHALL BE TESTED AND CONFORM TO NEMA STANDARD PUBLICATION MG-1 AND IEEE 112 TEST METHOD B.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 20                                                | REFER TO THE ELECTRICAL DRAWINGS AND VERIFY ADEQUACY OF FEEDER SIZE, SETS OF CONDUCTORS AND SIZE, DISCONNECTING MEANS AND OTHER ELECTRICAL REQUIREMENTS. COMPARE THESE TO THE REQUIREMENTS OF THE EQUIPMENT TO BE FURNISHED AND REPORT DEFICIENCIES AND/OR DISCREPANCIES TO THE ENGINEER IN THE BID PERIOD FOR RESOLUTION BY ADDENDUM. BEAR ALL COSTS FOR ELECTRICAL CHANGES WHERE SUCH ISSUES ARE NOT PROPERLY RESOLVED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>BASIC HVAC REQUIREMENTS</b>                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 21                                                | AS EACH SYSTEM IS PUT INTO OPERATION, ALL ITEMS OF EQUIPMENT INCLUDED THEREIN SHALL BE ADJUSTED TO PERFECT WORKING ORDER. THIS SHALL INCLUDE BALANCING AIR AND ADJUSTING FAN SPEEDS, BELTS, PULLEYS, TIGHTENING PACKING GLANDS, OILING AND ADJUSTING ALL OPERATING EQUIPMENT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 22                                                | VERSE THE OWNER'S REPRESENTATIVES IN ALL MATTERS PERTAINING TO THE PROPER OPERATION AND MAINTENANCE OF EQUIPMENT WHICH IS FURNISHED. INSTALLATION, MAINTENANCE AND OPERATING INSTRUCTIONS, PAMPHLETS, OR BROCHURES AND WARRANTIES, SHALL BE OBTAINED FROM EACH MANUFACTURER OF THE PRINCIPAL ITEMS OF EQUIPMENT, AND THESE SHALL BE TURNED OVER TO THE ARCHITECT. IN ADDITION, THE CONTRACTOR SHALL PREPARE A CHARTING ALL ITEMS OF EQUIPMENT, A PERIOD OF 48 HOURS OF CONTINUOUS OPERATION INDICATING THE NATURE OF MAINTENANCE REQUIRED, THE RECOMMENDED FREQUENCY OF CHECKING THESE POINTS AND THE TYPE OF LUBRICATING MEDIA REPLACEMENT MEET FULLY THE REQUIREMENTS OF THE CONTRACT. OPERATING AND MAINTENANCE INSTRUCTIONS AND WIRING DIAGRAMS SHALL BE FURNISHED ON EACH PIECE OF EQUIPMENT.                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 23                                                | AFTER ALL EQUIPMENT HAS BEEN ADJUSTED, THE CONTRACTOR SHALL MAKE A TRIAL RUN AND DEMONSTRATE TO THE ARCHITECT AND THE OWNER THAT THE REQUIREMENTS OF THE CONTRACT HAVE BEEN FULFILLED. DURING THIS RUN, THE CONTRACTOR SHALL EXPLAIN TO THE OWNER'S REPRESENTATIVE THE COMPLETE OPERATION OF THE SYSTEM AND THE FUNCTION OF ALL ITEMS OF EQUIPMENT. A PERIOD OF 48 HOURS OF CONTINUOUS OPERATION INDICATING THE NATURE OF MAINTENANCE REQUIRED, THE RECOMMENDED FREQUENCY OF CHECKING THESE POINTS AND THE TYPE OF LUBRICATING MEDIA REPLACEMENT MEET FULLY THE REQUIREMENTS OF THE CONTRACT. OPERATING AND MAINTENANCE INSTRUCTIONS AND WIRING DIAGRAMS SHALL BE FURNISHED ON EACH PIECE OF EQUIPMENT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 24                                                | WHEN THE PROJECT INVOLVES A COMMISSIONING AGENT - THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING START-UP ACTIVITIES, TEST & BALANCE, AND AUTOMATIC TEMPERATURE CONTROL COORDINATION MEETINGS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

WITH THE CX AGENT TO ENSURE THEIR PARTICIPATION AND THAT ALL EQUIPMENT IS PROPERLY FUNCTIONING ACCORDING TO THE DESIGN REQUIREMENTS PRIOR TO FINAL ACCEPTANCE.

**CONTROL POWER AND WIRING FOR HVAC**

25 PROVIDE ALL ELECTRICAL WIRING, BOTH LINE VOLTAGE AND LOW VOLTAGE, WHICH IS REQUIRED TO PERFORM THE AUTOMATIC CONTROL FUNCTIONS. WIRING, BOTH LINE AND LOW VOLTAGE, SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE (NEC) AND SHALL BE SUBJECT TO APPROVAL OF THE LOCAL CODE ENFORCING AUTHORITIES.

26 COMMUNICATION WIRE SHALL BE CATEGORY 6 PLENUM RATED, 4 TWISTED PAIR, NON-SHIELDED (UTP) STATION CLASS (CAPABLE OF TRANSMISSION SPEEDS UP TO 100 MBUS) SHALL BE USED FOR CONTROL SYSTEM NETWORKING. CABLE SHALL BE INSULATED WITH FEP MATERIAL AND SEQUENTIALLY MARKED AT 2 FOOT INTERVALS. COLOR AS SELECTED BY OWNER.

27 ALL LINE VOLTAGE WIRING AND LOW VOLTAGE WIRING (EXCEPT AS STATED BELOW) SHALL BE RUN IN CONDUIT. LOW VOLTAGE WIRING CONCEALED ABOVE ACCESSIBLE CEILINGS MAY BE RUN WITHOUT CONDUIT. OPEN WIRING DROPPING INTO WALLS SHALL BE RUN IN CONDUIT. THERMOSTATS SHALL BE INSTALLED ON A SINGLE GANG BOX AND CONDUIT SHALL BE INSTALLED TO EXTEND INTO THE PLENUM. OPEN WIRING SHALL BE BUNDLED AND SUPPORTED AT 3 FT. MAXIMUM INTERVALS WITH A SYSTEM OF J-HOOKS. OPEN WIRING IN AIR PLenums SHALL BE RATED FOR SUCH USE AND SO LABELED.

28 THERMOSTATS AND OTHER WALL MOUNTED SENSORS SHALL BE INSTALLED ON A SINGLE GANG BOX. EMT CONDUIT SHALL BE INSTALLED FROM THE WALL BOX TO THE PLENUM. CABLING WITHIN THE WALL SHALL BE IN CONDUIT.

29 PROVIDE ELECTRICAL CIRCUITS FROM THE NEAREST APPROPRIATE EMERGENCY ELECTRICAL PANEL TO SERVE CONTROL PANELS, TRANSFORMERS, AND OTHER CONTROL EQUIPMENT AND DEVICES. CIRCUITS SERVING CONTROL PANELS AND TRANSFORMERS FOR LOW VOLTAGE SERVICE SHALL BE INDEPENDENT AND USED FOR NO OTHER PURPOSE. CIRCUITS FOR VAV CONTROL, TRANSFORMERS, AND OTHER CONTROL EQUIPMENT SHALL NOT ON EMERGENCY POWER. PROVIDE CIRCUIT WIRING FROM THE ELECTRICAL PANEL. THESE CIRCUITS SHALL BE CLEARLY IDENTIFIED AT THE PANELS. COORDINATE WITH THE ELECTRICAL CONTRACTOR.

**23.34.33 AIR CURTAIN**

**GENERAL**

31 AIR CURTAIN UNIT SHALL BE NON-HEATED AIR TYPE HAVING CAPACITIES AS SHOWN ON DRAWINGS.

31 AIR CURTAINS SHALL BE LICENSED TO BEAR THE AMCA CERTIFIED RATING SEAL.

32 EQUIPMENT SHALL CARRY AN ALL INCLUSIVE MANUFACTURER'S PARTS AND LABOR WARRANTY FOR A PERIOD OF ONE (1) YEAR(S) FROM DATE OF FINAL ACCEPTANCE OR DATE OF BENEFICIAL USE, AS AGREED TO BETWEEN CONTRACTOR AND ARCHITECT OR CONSTRUCTION MANAGER. ANY MATERIALS, EQUIPMENT, OR CONTROLS FOUND TO BE DEFECTIVE DURING THIS WARRANTY PERIOD SHALL BE MADE GOOD WITHOUT EXPENSE TO THE OWNER, INCLUDING ANY REQUIRED REPLACEMENT OF FLUIDS, GLYCOL, OR REFRIGERANT. THE WARRANTY SHALL INCLUDE A DELAYED START-UP PROVISION SUCH THAT THE WARRANTY DOES NOT BEGIN AT TIME OF DELIVERY. THE LABOR FOR THE WARRANTY SHALL BE PERFORMED BY THE MANUFACTURER'S AUTHORIZED SERVICE AGENT.

**PRODUCTS**

33 UNIT SHALL BE FACTORY ASSEMBLED WITH A RIGID 16 GAUGE WELDED STEEL BASE FRAME. FANS SHALL BE FORWARD CURVED CENTRIFUGAL TYPE, DOUBLE WIDTH, DOUBLE INLET DESIGN WITH 2 SPEED OPEN DRIP-PROOF SPLIT CAPACITOR DUDED STRATED MOTOR(S) WITH BUILT-IN THERMAL OVERLOAD PROTECTION.

34 AIR CURTAIN SHALL PRODUCE A STRONG, LOW TURBULENT AIR STREAM WITH AN AVERAGE AIR VELOCITY AT THE NOZZLE OF 1600 FPM ON LOW SPEED AND 2100 FPM ON HIGH SPEED.

35 UNIT SHALL BE INTERNALLY WIRED TO A JUNCTION BOX ON TOP AND SHALL BE OPERATED BY A HIGH/LOW/OFF SWITCH. PROVIDE INTERNALLY WIRED RELAY AND AUTOMATIC DOOR SWITCH, CONTROL OF UNIT THRU DOOR SWITCH.

36 SOUND POWER LEVEL, MEASURED TO FEET AWAY FROM UNIT IN FREE FIELD SHALL BE NO MORE THAN 54 DBA ON LOW SPEED AND 59 DBA ON HIGH SPEED.

37 AIR CURTAINS SHALL BE BERNER MINIVEL OR EQUAL BY DYNAFLEX, MARS, OR POWERED AIRE.

38 UNITS SHALL BE INSTALLED IN LOCATIONS SHOWN ON THE DRAWINGS. UNITS SHALL BE SUSPENDED FROM BUILDING  
STRUCTURE WITH STEEL HANGER RODS AND AUXILIARY ANGLES AND FASTENING DEVICES.

39 PROVIDE ALL INTERLOCK WIRING BETWEEN DOOR SWITCH, THERMOSTAT AND UNIT, ALL IN CONDUIT.



| DESCRIPTION | DATE       |
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| BID SET     | 09/24/2026 |
| ADDENDUM 1  | 09/28/2026 |

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**HVAC**

SEAL

NICHOLAS  
GRAVES  
E-82240

09/25/2026

**BBCO DESIGN PROJECT NUMBER:**  
**2026-011**

**SHEET NUMBER**

**M001**

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**BBCO DESIGN PROJECT NUMBER:**  
**2026-011**

**SHEET NUMBER**  
**M101**

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GENERAL NOTES

- A. PROVIDE A SEPARATE NEUTRAL CONDUCTOR WITH EACH 20A-120V POWER CIRCUIT - GROUND TOTAL SYSTEM PER NEC 250.
- B. ALL EMPTY CONDUITS SHALL BE INSTALLED WITH PULLWIRE.
- C. FOR FINISHED AREAS OUTSIDE EXHIBIT HALL AND LOADING DOCKS, ALL WIRING AND CONDUIT SHALL BE INSTALLED CONCEALED ABOVE ALL LAY-IN CEILING SYSTEMS. WHERE WIRING IS REQUIRED TO BE RUN EXPOSED ALONG WALLS AND CEILINGS, IT SHALL BE RUN IN METAL SURFACE RACEWAY, UNLESS INDICATED OTHERWISE, MOUNTED TIGHT TO EXISTING SURFACE MATCHING CONTOUR OF BUILDING LINES AND PAINTED (AT OWNERS DIRECTION) TO MATCH SURFACES ON WHICH THEY ARE MOUNTED. COORDINATE ALL LOCATIONS AND ROUTES WITH OWNER/ENGINEER PRIOR TO ROUGH-IN.
- D. UTILIZE EXISTING CONDUIT/RACEWAY SYSTEMS, INCLUDING BRANCH CIRCUITRY TO SERVE NEW WORK WHERE FEASIBLE AND INSTALLATION MEETS NEC REQUIREMENTS.
- E. ALL EXISTING ELECTRICAL WORK WHICH DOES NOT INTERFERE WITH REMODELING SCOPE OF WORK SHALL BE MAINTAINED ACTIVE. LABEL ALL CIRCUIT BREAKERS MADE SPARE DUE TO REMOVALS AS "SPARE" TO SERVE FUTURE CIRCUITS.
- F. ALL EXPOSED CONDUIT ABOVE GRADE SHALL BE RIGID GALVANIZED METALLIC WITH ALL STEEL FITTING. PAINT TO MATCH SURFACES ON WHICH THEY ARE MOUNTED.
- G. ALL EXTERIOR MOUNTED CONDUIT SHALL BE SEALED WATER AND MOISTURE TIGHT. ALL EXTERIOR MOUNTED DEVICES SHALL BE WEATHERPROOF UNLESS OTHERWISE NOTED.
- H. E.C. IS REQUIRED TO SUPPORT ALL EXISTING WIRING AND CABLING, CONDUITS AND OTHER RACEWAYS LOCATED ABOVE ACCESSIBLE CEILINGS TO MEET NEC ARTICLE 300. SCOPE INCLUDES ALL SUPPORT AND ASSOCIATED FITTINGS INDEPENDENT OF CEILING GRID/SYSTEM AS REQUIRED.
- I. CONTRACTOR SHALL RESPECT THE OWNERS PROPERTY AND PROTECT FROM DUST AND DEBRIS THROUGHOUT THE COMPLETE PROJECT. PROVIDE DROP CLOTHS, VISQUEEN, ETC... TO ELIMINATE ANY AND ALL MESSES. WORK AREA(S) SHALL BE CLEANED UP PRIOR TO EACH WORK DAYS COMPLETION.
- J. EXACT LOCATION OF ALL DEVICES SERVING AIR CURTAIN EQUIPMENT TO BE VERIFIED AT SITE WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH-IN.
- Y. BRANCH CIRCUIT WIRE SIZING CHART TO BE UTILIZED AS GUIDELINE FOR VOLTAGE DROP COMPENSATION, INCREASE CONDUIT SIZING PER WIRE SIZE.

1. 20A-120V CIRCUITS

A #12 WIRE - 60' LENGTH MAX.

B #10 WIRE - 94' LENGTH MAX.

C # 8 WIRE - 137' LENGTH MAX.

D # 6 WIRE - 218' LENGTH MAX.
2. 20A-277V CIRCUITS

A #12 WIRE - 138' LENGTH MAX.

B #10 WIRE - 219' LENGTH MAX.

C # 8 WIRE - 318' LENGTH MAX.

D # 6 WIRE - 504' LENGTH MAX.
- ELECTRICAL SYMBOLS
- |  |                                                                                                                                                                                                                                                                                                                                                |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | DASH SYMBOL. INDICATES PARTICULAR OUTLET OR DEVICE TO BE REMOVED AND CIRCUITRY MADE CONTINUOUS WHERE REQUIRED.                                                                                                                                                                                                                                 |
|  | EXISTING OUTLET OR DEVICE TO REMAIN. MAINTAIN EXISTING CIRCUITING.                                                                                                                                                                                                                                                                             |
|  | ELECTRICAL CONNECTION.                                                                                                                                                                                                                                                                                                                         |
|  | 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R (18" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                                        |
|  | 20A-125V DUPLEX RECEPTACLE AT NODE WALL, FLUSH MOUNTED IN FACE OF NODE WALL. MANUFACTURED BY BOCCI SERIES "Z2 ALTERNATE" OR EQUAL BY TRUFIG.                                                                                                                                                                                                   |
|  | 20A-125V DUPLEX RECEPTACLE AT NODE WALL COUNTER. FLUSH MOUNTED IN TOP OF NODE WALL COUNTER. MANUFACTURED BY MCKEYTT SERIES "PCS368BUSB3F" WITH SATIN ALUMINUM FINISH.                                                                                                                                                                          |
|  | 20A-125V SINGLE RECEPTACLE, NEMA 5-20R (18" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                                        |
|  | 100A-277/480V-3PH-5W PIN AND SLEEVE RECEPTACLE. LEVITON 5100M9W. EQUAL BY HUBBELL, OR APPROVED EQUAL (60" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                          |
|  | 100A-120/208V-3PH-5W PIN AND SLEEVE RECEPTACLE. LEVITON 5100M7W. EQUAL BY HUBBELL, OR APPROVED EQUAL (60" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                          |
|  | 100A-120/208V-3PH-5W PIN AND SLEEVE RECEPTACLE. LEVITON 5100R9W WITH BACK BOX BX 100-V. EQUAL BY HUBBELL, OR APPROVED EQUAL (24" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                   |
|  | SPECIAL PURPOSE RECEPTACLE. REFER TO NOTE ON PLAN.                                                                                                                                                                                                                                                                                             |
|  | 20A-125V DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R, (18" MH UNLESS NOTED OTHERWISE) TWO GANG ASSEMBLY.                                                                                                                                                                                                                                              |
|  | 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R WITH BOTTOM OUTLET CONTROLLED BY WALL SWITCH. (18" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                          |
|  | 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R (48" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                                        |
|  | 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R WITH 2 INTEGRAL USB CHARGERS (18" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                           |
|  | 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R, WITH GROUND FAULT CIRCUIT INTERRUPTER (18" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                 |
|  | 20A-125V WEATHERPROOF DUPLEX RECEPTACLE, NEMA 5-20R (HORIZONTAL 18" MH UNLESS NOTED OTHERWISE) WITH TAYMAC #10310 STANDARD COVER, VERTICAL MOUNT.                                                                                                                                                                                              |
|  | 20A-125V WEATHERPROOF DUPLEX RECEPTACLE, NEMA 5-20R WITH GROUND FAULT CIRCUIT INTERRUPTER (18" MH UNLESS NOTED OTHERWISE), WITH TAYMAC #20310 STANDARD COVER, VERTICAL MOUNT.                                                                                                                                                                  |
|  | 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R, ON EMERGENCY POWER (18" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                    |
|  | 20A-125V POWERLOCK GROUNDING TYPE RECEPTACLE, HOSPITAL USE (66" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                    |
|  | 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R, AND (1) DATA DEVICE IN FSR FL-200 FLOOR BOX (4" DEEP). FLOOR BOX SHALL BE TILE AND CARPET SCRUB WATER RATED. PROVIDE COVER FOR MOUNTING WITH CERAMIC TILE WITH SQUARE FLANGE. COORDINATE COVER FINISH WITH ARCHITECT. RUN (1) 1" CONDUIT FOR POWER, REFER TO TECH PLANS FOR DATA CONDUIT REQUIREMENTS. |
|  | 20A-125V DUPLEX PEDESTAL TYPE FLOOR RECEPTACLE, NEMA 5-20R, IN HUBBELL BA-2527 FLOOR BOX WITH SA-2525 COVERPLATE AND SC-3091 HOUSING. PROVIDE CARPET FLANGE WHERE REQUIRED.                                                                                                                                                                    |
|  | 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R, IN HUBBELL BA-2527 FLUSH FLOOR BOX WITH ROUND SA-3925 COVERPLATE. PROVIDE CARPET FLANGE WHERE REQUIRED.                                                                                                                                                                                                |
|  | 20-125V DUPLEX RECEPTACLE, NEMA 5-20R, WITH ISOLATED GROUND (18" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                   |
|  | 20A-125/250V-1PH-4W SINGLE RECEPTACLE, NEMA 14-20R (18" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                            |
|  | 30A-125/250V-1PH-4W SINGLE RECEPTACLE, NEMA 14-30R (18" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                            |
|  | 50A-125/250V-1PH-4W SINGLE RECEPTACLE, NEMA 14-50R (18" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                            |
|  | 20A-250V-3PH-4W SINGLE RECEPTACLE, NEMA 15-20R (18" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                                |
|  | 30A-250V-3PH-4W SINGLE RECEPTACLE, NEMA 15-30R (18" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                                |
|  | 50A-250V-3PH-4W SINGLE RECEPTACLE, NEMA 15-50R (18" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                                |
|  | JUNCTION BOX.                                                                                                                                                                                                                                                                                                                                  |
|  | MULTI-OUTLET RECEPTACLES ASSEMBLY, NEMA 5-15R (SINGLE OUTLETS ON 18" CENTERS) (48" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                 |
|  | WIREMOLD RACEWAY, AS NOTED ON PLANS.                                                                                                                                                                                                                                                                                                           |
|  | CLOCK HANGER OUTLET, SINGLE NEMA 5-15R RECESSED IN COVER PLATE (84" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                |
|  | SINGLE POLE SWITCH (46" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                                                            |
|  | TWO POLE WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                                                          |
|  | MULTI-WAY WALL SWITCH, # INDICATES NUMBER OF WAYS (46" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                             |
|  | SWITCH WITH NEON PILOT LIGHT. ONE-GANG ASSEMBLY (46" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                               |
|  | KEY OPERATED WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                                                      |
|  | LOW-VOLTAGE MOMENTARY WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                                             |
|  | LIGHTING DIMMER SWITCH (46" MH UNLESS NOTED OTHERWISE) 1000 WATTS UNLESS OTHERWISE INDICATED.                                                                                                                                                                                                                                                  |
|  | SWITCH WITH RECEPTACLE (46" MH UNLESS NOTED OTHERWISE) STANDARD TWO-GANG ASSEMBLY OF SWITCH AND RECEPTACLE.                                                                                                                                                                                                                                    |
|  | FLUSH FRACTIONAL HORSEPOWER MOTOR STARTER WITH NEON PILOT LIGHT. ONE-GANG ASSEMBLY (46" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                            |
|  | HP RATED WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).                                                                                                                                                                                                                                                                                          |
|  | ELECTRICAL PANEL OR SWITCHBOARD PER DRAWINGS.                                                                                                                                                                                                                                                                                                  |
|  | PULL BOX.                                                                                                                                                                                                                                                                                                                                      |
|  | DISCONNECT SWITCH.                                                                                                                                                                                                                                                                                                                             |
|  | MOTOR STARTER.                                                                                                                                                                                                                                                                                                                                 |
|  | COMBINATION MOTOR STARTER AND DISCONNECT SWITCH.                                                                                                                                                                                                                                                                                               |
|  | ELECTRIC MOTOR.                                                                                                                                                                                                                                                                                                                                |
|  | UNIT HEATER.                                                                                                                                                                                                                                                                                                                                   |
|  | FAN COIL.                                                                                                                                                                                                                                                                                                                                      |
|  | AIR CONDITIONER.                                                                                                                                                                                                                                                                                                                               |
|  | CONDENSING UNIT.                                                                                                                                                                                                                                                                                                                               |
|  | UNIT VENTILATOR.                                                                                                                                                                                                                                                                                                                               |
|  | CORD REEL.                                                                                                                                                                                                                                                                                                                                     |
|  | POWER POLE.                                                                                                                                                                                                                                                                                                                                    |
|  | PUSHBUTTON (46" MH UNLESS NOTED OTHERWISE) EDWARDS 852 (120 VOLT).                                                                                                                                                                                                                                                                             |
|  | HANDICAP DOOR OPERATOR MOTOR ASSEMBLY BY OTHERS. 120V POWER CONNECTION AND CONDUIT FROM DOOR FRAME TO COMMON SMS JUNCTION BOX ABOVE ACCESSIBLE CEILING PER DIV 26. LOW VOLTAGE WIRING AND INTERFACE WITH SMS AND DOOR ACTUATOR BUTTONS PER DIV 28.                                                                                             |
|  | WALL/PEDESTAL MOUNT HANDICAP DOOR ACTUATOR BUTTON, FURNISHED BY OTHERS. BOX AS REQUIRED BY SYSTEM MANUFACTURER WITH INSTALLATION AND CONDUIT TO COMMON SMS JUNCTION BOX ABOVE ACCESSIBLE CEILING PER DIV 26. ALL LOW VOLTAGE WIRING AND INTERFACE WITH SMS AND DOOR MOTOR PER DIV 28.                                                          |
- NOTE: ALL SYMBOLS AND ABBREVIATIONS ARE SUBJECT TO MODIFICATIONS ON OTHER DRAWINGS.
- ALL SYMBOLS OR ABBREVIATIONS MIGHT NOT NECESSARILY BE USED ON THIS PROJECT.
- ABBREVIATIONS
- |        |                                                                                 |       |                                                     |
|--------|---------------------------------------------------------------------------------|-------|-----------------------------------------------------|
| AAP    | - AREA ALARM PANEL - MEDICAL GAS                                                | ID    | - INSIDE DIAMETER                                   |
| ACC    | - ACCESS                                                                        | IN    | - INCHES                                            |
| ADJ    | - ADJUSTABLE                                                                    | KEC   | - KITCHEN EQUIPMENT CONTRACTOR                      |
| AF     | - ARC FAULT CIRCUIT INTERRUPTER                                                 | L     | - LENGTH                                            |
| AFCI   | - ARC FAULT CIRCUIT INTERRUPTER                                                 | LBS   | - POUNDS                                            |
| AFF    | - ABOVE FINISHED FLOOR TO BOTTOM OF ITEM                                        |       |                                                     |
| AFG    | - ABOVE FINISHED GRADE TO BOTTOM OF ITEM                                        |       |                                                     |
| ALT    | - ALTERNATE                                                                     | MAP   | - MASTER ALARM PANEL (MEDICAL GAS)                  |
| AP     | - ACCESS PANEL                                                                  | MAX   | - MAXIMUM                                           |
| APPROX | - APPROXIMATE                                                                   | MEZZ  | - MEZZANINE                                         |
| ARCH   | - ARCHITECT OR ARCHITECTURAL                                                    | MFR   | - MANUFACTURER                                      |
| ASSY   | - ASSEMBLY                                                                      | MH    | - MANHOLE OR MOUNTING HEIGHT TO CENTER LINE OF ITEM |
| ATS    | - AUTOMATIC TRANSFER SWITCH                                                     | MIN   | - MINIMUM OR MINUTE                                 |
|        |                                                                                 | MISC  | - MISCELLANEOUS                                     |
| BLDG   | - BUILDING                                                                      | MTD   | - MOUNTED                                           |
| BOE    | - BOTTOM OF EQUIPMENT                                                           | MTG   | - MOUNTING                                          |
| BOT    | - BOTTOM                                                                        |       |                                                     |
| BTWN   | - BETWEEN                                                                       | NIC   | - NOT IN CONTRACT                                   |
|        |                                                                                 | NOM   | - NOMINAL                                           |
| CFCI   | - CONTRACTOR FURNISHED CONTRACTOR INSTALLED                                     | NTS   | - NOT TO SCALE                                      |
| CKT    | - CIRCUIT                                                                       |       |                                                     |
| CLG    | - CEILING                                                                       | OD    | - OUTSIDE DIAMETER                                  |
| CMU    | - CONCRETE MASONRY UNIT                                                         | OFCI  | - OWNER FURNISHED CONTRACTOR INSTALLED              |
| CONN   | - CONNECT OR CONNECTION                                                         | OFCI  | - OWNER FURNISHED OWNER INSTALLED                   |
| CONTR  | - CONTRACTOR                                                                    | PC    | - PLUMBING CONTRACTOR (DIVISION 22)                 |
| CORR   | - CORRIDOR                                                                      | PLBG  | - PLUMBING                                          |
| CTR    | - CENTER                                                                        |       |                                                     |
|        |                                                                                 |       |                                                     |
| D      | - DEPTH                                                                         | RAD   | - RADIUS                                            |
| DET    | - DETAIL                                                                        | REC   | - RECESSED                                          |
| DIA    | - DIAMETER                                                                      | RECD  | - REQUIRED                                          |
| DIM    | - DIMENSION                                                                     | RI    | - ROUGH-IN                                          |
| DIV    | - DIVISION                                                                      |       |                                                     |
| DN     | - DOWN                                                                          | S     | - SURFACE MOUNTED                                   |
| DWG    | - DRAWING                                                                       | SC    | - SECURITY CONTRACTOR                               |
|        |                                                                                 | SCH   | - SCHEDULE                                          |
| EA     | - EACH                                                                          | SHT   | - SHEET                                             |
| EC     | - ELECTRICAL CONTRACTOR (DIVISION 26)                                           | SMS   | - SECURITY MANAGEMENT SYSTEM                        |
| EJ     | - EXPANSION JOINT                                                               | SPEC  | - SPECIFICATIONS                                    |
| ELEC   | - ELECTRICAL                                                                    | SO    | - SQUARE                                            |
| ELEV   | - ELEVATION OR ELEVATOR                                                         | SS    | - STAINLESS STEEL                                   |
| EM     | - EMERGENCY                                                                     | STD   | - STANDARD                                          |
| EQ     | - EQUAL                                                                         | STRUC | - STRUCTURAL OR STRUCTURE                           |
| EQS    | - EQUIPMENT SUPPLIER                                                            | SUC   | - SITE UTILITY CONTRACTOR                           |
| EQU    | - EQUIPMENT                                                                     |       |                                                     |
| EX     | - EXISTING TO REMAIN                                                            | TC    | - TECHNOLOGY CONTRACTOR                             |
| EX     | - EXISTING                                                                      | TEMP  | - TEMPERATURE                                       |
| EXP    | - EXPANSION                                                                     | TOE   | - TOP OF EQUIPMENT                                  |
| EXT    | - EXTERIOR                                                                      | TYP   | - TYPICAL                                           |
|        |                                                                                 |       |                                                     |
| FCE    | - FIRE CONTROL EQUIPMENT                                                        | UNO   | - UNLESS NOTED OTHERWISE                            |
| FF     | - FINISHED FLOOR ELEVATION                                                      |       |                                                     |
| FLR    | - FLOOR                                                                         | VFD   | - VARIABLE FREQUENCY DRIVE                          |
| FSC    | - FIRE SUPPRESSION CONTRACTOR (DIVISION 21)                                     | VOL   | - VOLUME                                            |
| FT     | - FEET                                                                          |       |                                                     |
| FTG    | - FOOTING                                                                       | W     | - WITH                                              |
|        |                                                                                 | W/O   | - WITHOUT                                           |
| GC     | - GENERAL CONTRACTOR                                                            | WP    | - WEATHERPROOF                                      |
| GF     | - GROUND FAULT CIRCUIT INTERRUPTER                                              |       |                                                     |
| GFCI   | - GROUND FAULT CIRCUIT INTERRUPTER OR GOVERNMENT FURNISHED CONTRACTOR INSTALLED | ZVC   | - ZONE VALVE CABINET                                |
| GFFT   | - GROUND FAULT FEED THRU                                                        |       |                                                     |
|        |                                                                                 |       |                                                     |
| HC     | - HVAC CONTRACTOR (DIVISION 23)                                                 |       |                                                     |
| HP     | - HORSE POWER OR HIGH POINT                                                     |       |                                                     |
| HVAC   | - HEATING, VENTILATING, AND AIR CONDITIONING                                    |       |                                                     |
- GENERAL FLOOR PLAN NOTES
- |    |                                                                         |
|----|-------------------------------------------------------------------------|
|    | DETAIL: B = DETAIL DESIGNATION<br>E2 = SHEET WHERE DETAIL IS LOCATED    |
|    | SECTION: 1 = SECTION DESIGNATION<br>E2 = SHEET WHERE SECTION IS LOCATED |
|    | PLAN NOTE. APPLIES ONLY TO THE SHEET WHICH IT IS SHOWN.                 |
|    | DETAIL NOTE. APPLIES ONLY TO THE ASSOCIATED DETAIL.                     |
|    | WIRE & CONDUIT IN WALL OR ABOVE CEILING.                                |
|    | WIRE & CONDUIT IN OR BELOW SLAB OR GRADE.                               |
|    | CONDUIT TO BE REMOVED.                                                  |
|    | EXISTING WIRE & CONDUIT TO REMAIN.                                      |
|    | CONDUIT FOR DATA CIRCUITRY.                                             |
|    | WIRE & CONDUIT FOR EMERGENCY CIRCUITRY.                                 |
|    | WIRE & CONDUIT FOR FIRE ALARM CIRCUITRY.                                |
| </ |                                                                         |

| V | U | T | S | R | Q | P | N | M | L | K | J | H | G | F | E | D | C | B | A |
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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

## MOTORS, STARTERS, DISCONNECTS & CONTROLS

NOTES:  
1. DOOR SWITCH PROVIDED AND INSTALLED BY HVAC CONTRACTOR.

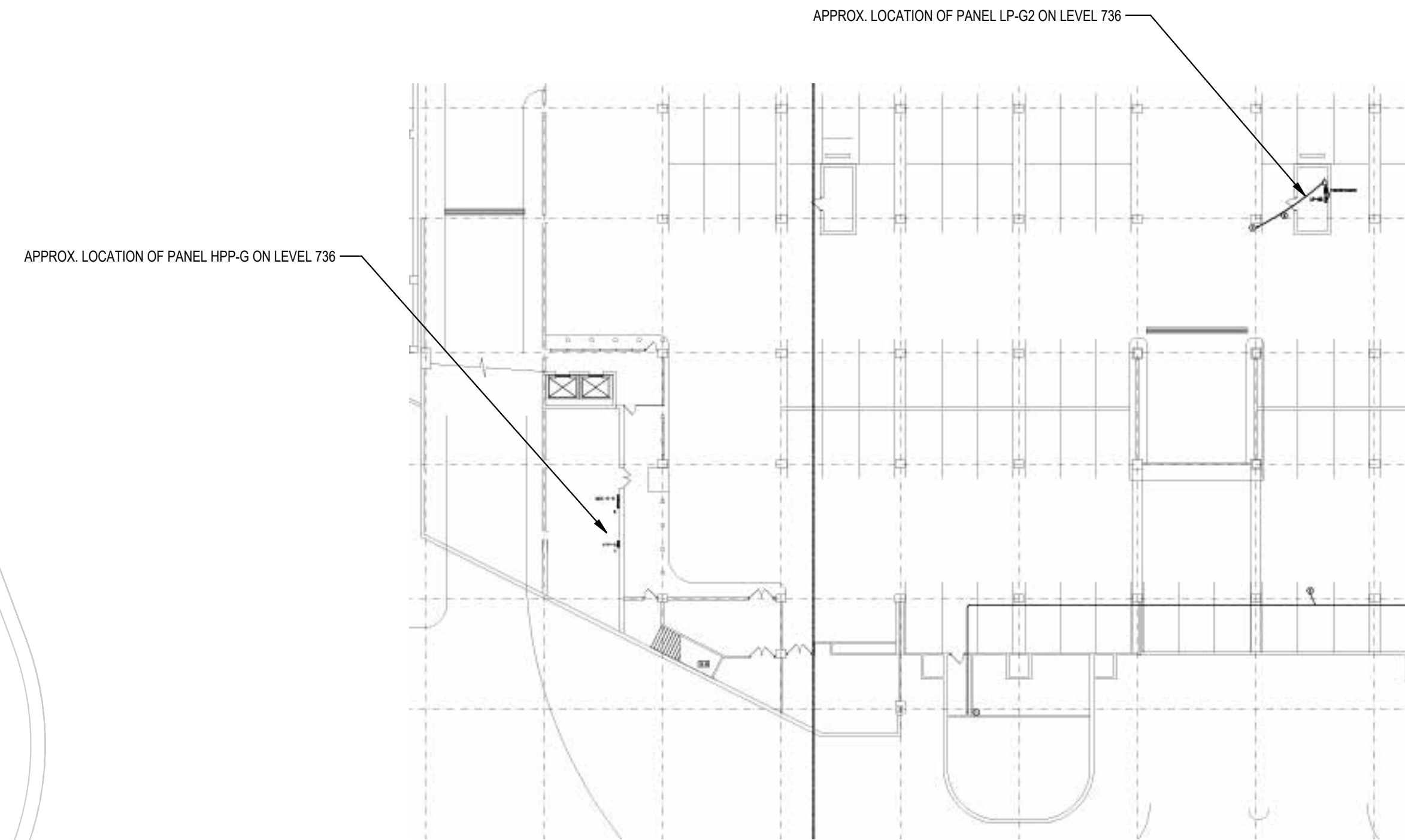
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**2 FIRST FLOOR NEW WORK PLAN**  
SCALE: 3/16" = 1'-0"

SCALE: 3/16" = 1'-0"

## PLAN NOTES

1. NEW AC CURTAIN, PROVIDE 480V, 3PH, 15A CIRCUIT FROM PANEL HPP-G. EC TO FIELD VERIFY AND CONFIRM THAT THERE IS ENOUGH SPACE PRIOR TO START OF WORK. EC SHALL PROVIDE A 30 DAY PEAK DEMAND OF PANEL HPP-G IN ACCORDANCE WITH EXCEPTION UNDER NEC 220.87. TO FEED THE NEW AIR CURTAIN, FIELD COORDINATE ROUTING OF NEW BRANCH CIRCUIT. CONDUIT SHALL NOT BE EXPOSED IN PUBLIC AREAS.
2. PROVIDE 120V, 20A CIRCUIT FOR AUTOMATIC SLIDING DOOR FROM PANEL LP-G2. EC TO FIELD VERIFY AND CONFIRM IF THERE IS SPARE/SPACE PRIOR TO START OF WORK.
3. NEW CARD READER, PROVIDE NECESSARY CONDUIT AND ACCESSORIES FOR A FULLY FUNCTIONAL SYSTEM. COORDINATE ALL WORK WITH LOW VOLTAGE CONTRACTOR.



**LEVEL 736 (FOR REFERENCE ONLY)**

## KEY PLAN



P: 614-457-2696 [www.heapy.com](http://www.heapy.com)  
PROJECT NO. 2026-07104



326 SOUTH HIGH STREET  
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INFO@BBCODESIGN.COM  
BBCODESIGN.COM

| DESCRIPTION | DATE       |
|-------------|------------|
| BID SET     | 09/24/2026 |
| ADDENDUM 1  | 09/28/2026 |

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SHEET TITLE

FIRST FLOOR NEW WORK PLAN

PROJECT TITLE

GCCC EXTERIOR DOOR REPLACEMENT

400 N. HIGH ST. COLUMBUS, OH 43215

SEAL

STATE OF OHIO

DANIEL E. DOWLER

69074

PROFESSIONAL ENGINEER

REGISTERED

*[Handwritten Signature]*

23 SEP 2026

**BBCO DESIGN PROJECT NUMBER:**  
**2026-011**

**E001**

| V | U | T | S | R | Q | P | N | M | L | K | J | H | G | F | E | D | C | B | A |
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