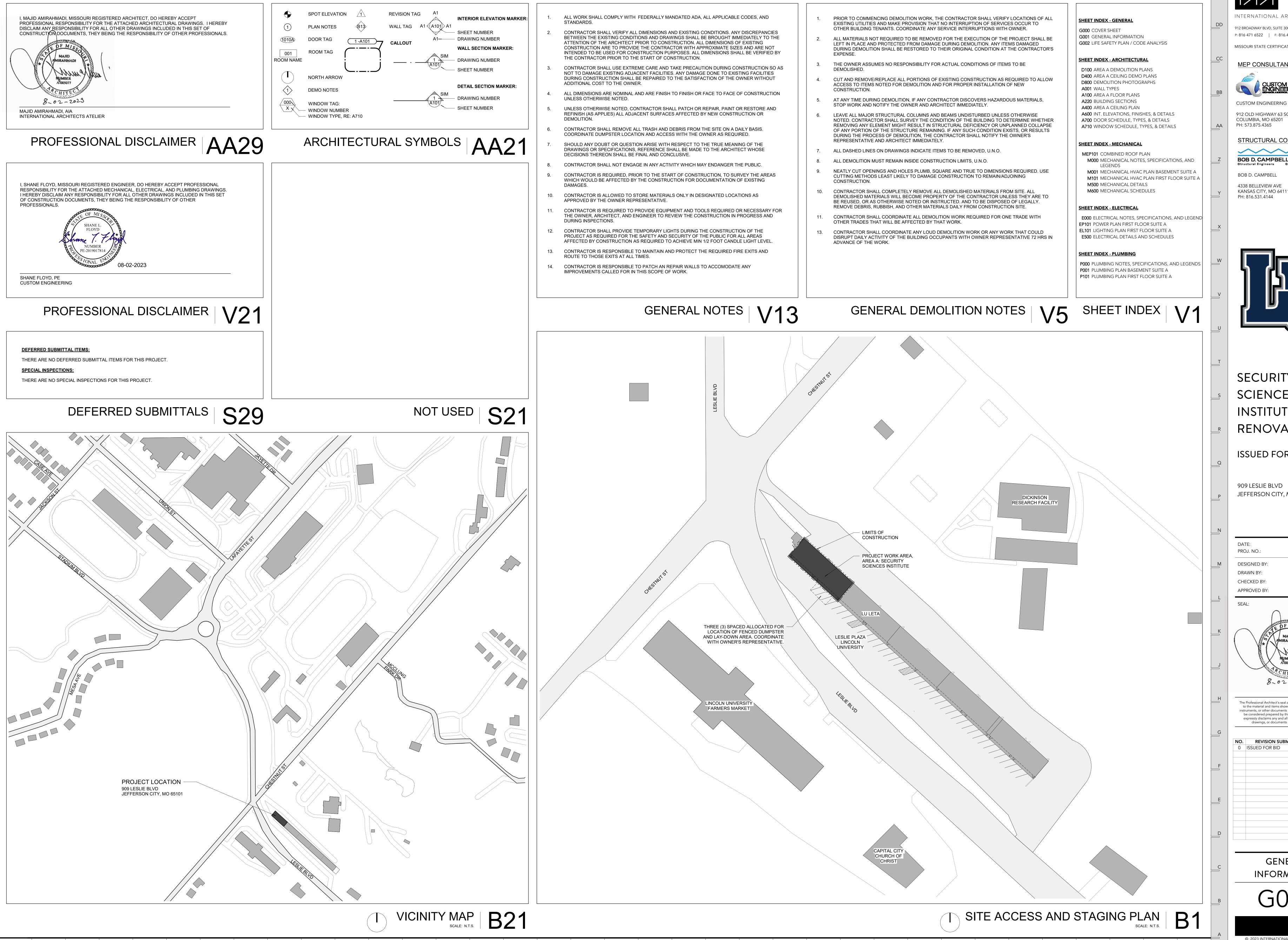


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MEP CONSULTANT

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STRUCTURAL CONSULTANT

BOB D. CAMPBELL & CO.

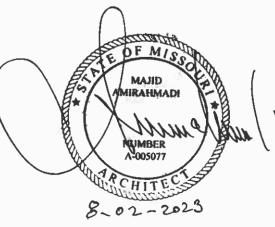
BOB D. CAMPBELL 4338 BELLEVIEW AVE KANSAS CITY, MO 64111

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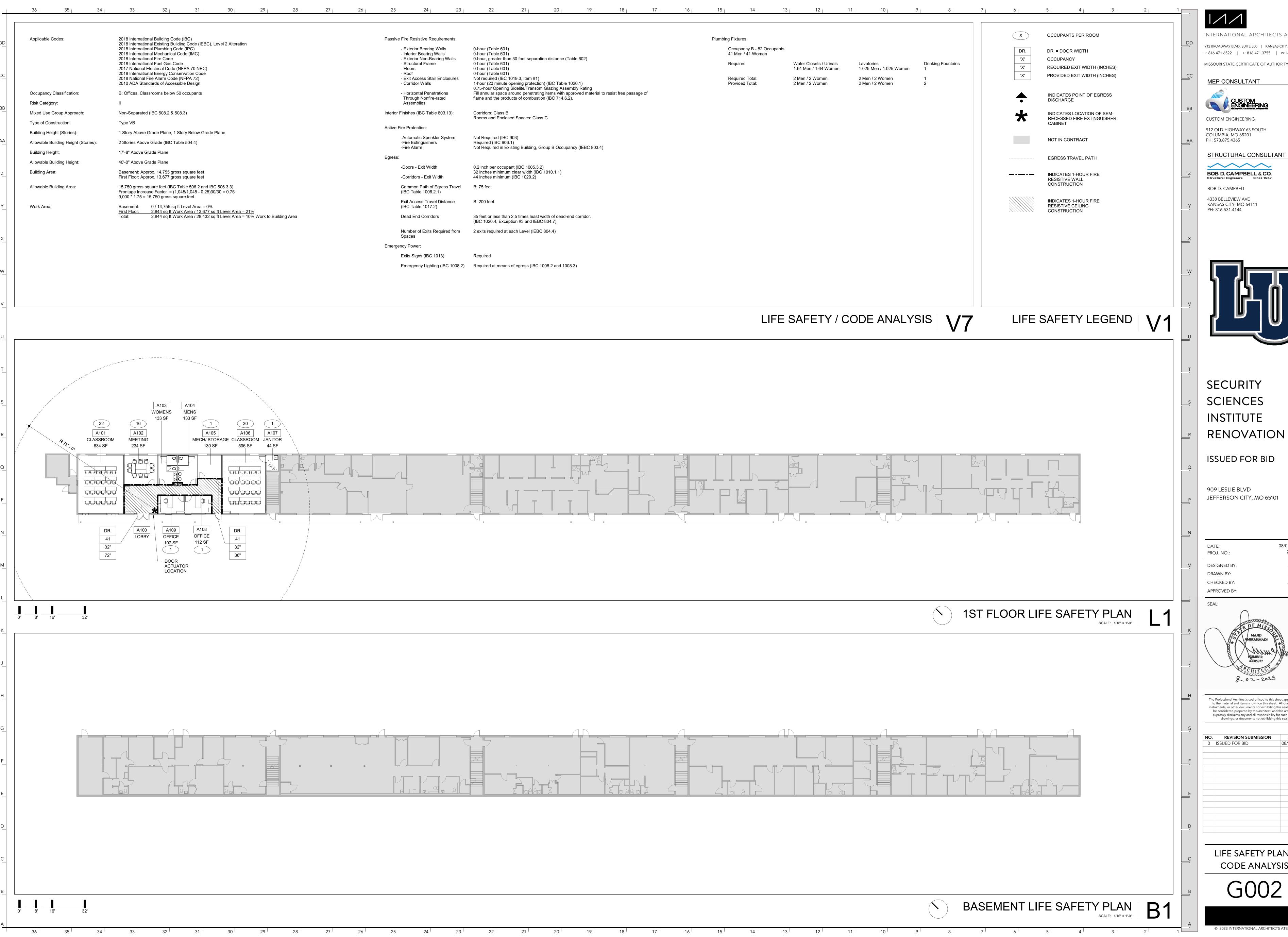


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> GENERAL INFORMATION

G001



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LIFE SAFETY PLAN / CODE ANALYSIS



EXISTING GYPSUM BOARD CEILINGS HAVE BEEN TESTED TO CONTAIN HAZARDOUS MATERIALS. CONTRACTOR'S HAZARDOUS ABATEMENT CONTRACTOR SHALL REMOVE ALL HAZARDOUS MATERIAL. NO OTHER DEMOLITION WORK SHALL OCCUR UNTIL AFTER ABATEMENT IS COMPLETE. RE: HAZARDOUS BUILDING MATERIALS SURVEY INCLUDED

- REFER TO G001 FOR GENERAL NOTES AND GENERAL DEMOLITION
- 2. ALL LOOSE FURNISHINGS TO BE REMOVED BY OWNER PRIOR TO PREPARE ALL EXISTING WALLS WITHIN PROJECT SCOPE TO RECEIVE NEW FINISHES. REMOVE AND PATCH ALL NAIL HOLES AND DAMAGED AREAS IN GYPSUM. REMOVE ALL ADHESIVES AND
- THE ORIGINAL DRAWINGS STATE THAT THE EXISTING FLOORING IS 3/4" PLYWOOD SUBFLOORING WITH 1/4" PLYWOOD UNDERLAYMENT ON TOP. AFTER REMOVAL OF ALL EXISTING WALL CONSTRUCTION AND OTHER MATERIALS ATTACHED TO PLYWOOD FLOORING, PATCH PLYWOOD UNDERLAYMENT WITH NEW PLYWOOD AS REQUIRED TO CREATE A FLUSH FLOORING SUBSTRATE TO RECEIVE NEW FLOORING FINISHES.
- REMOVE EXISTING FINISHES AS REQUIRED TO REMOVE ANY CONCEALED ELECTRICAL, PLUMBING OR MECHANICAL SCOPE. RE: MEP DRAWINGS. PATCH SURFACES AND FINISH TO MATCH
- \(1 \) REMOVE EXISTING PARTITION, INCLUDING BASE, ELECTRICAL / FA DEVICES, RECEPTACLES, CONDUIT, ETC. TO EXTENTS SHOWN ON PLAN. PATCH EXISTING FLOOR UNDERLAYMENT, CEILING, AND WALL
- REMOVE EXISTING DOOR, FRAME, DOOR STOPS, AND ASSOCIATED
- REMOVE EXISTING CARPET FLOORING, MASTIC, FLOORING TRANSITIONS, ETC. TO PLYWOOD FLOORING. PREPARE EXISTING
- REMOVE EXISTING VINYL FLOOR TILE, BASE, AND ALL ASSOCIATED ADHESIVE, FLOORING TRANSTITIONS, ETC. TO PLYWOOD FLOOR.
- REMOVE EXISTING FINISH WALL BOARD INCLUDING WALL BASE BACK TO EXISTING WOOD STUD FRAMING TO EXTENTS SHOWN ON PLAN. INSPECT CONDITIONS OF EXISTING CAVITY INSULATION FOR DAMAGE. REMOVE & REPLACE ALL INSULATION WITH NEW GLASS FIBER BATT INSULATION FULLY FILLING EXISTING WALL CAVITY.
- 6 EXISTING PLYWOOD FLOOR TO REMAIN. CLEAN AND PREPARE EXISTING SUBFLOOR SURFACE TO RECEIVE NEW UNDERLAYMENT
- REMOVE EXISTING BASE AND ALL ASSOCIATED ADHESIVES BACK TO EXISTING GYPSUM BOARD WALL SURFACE. PREPARE SURFACES TO
- PATCH/REPAIR WALL AND FLOORS TO REMAIN. RE: PLUMBING
- REMOVE EXISTING MIRROR OR BATHROOM ACCESSORIES AND ALL ASSOCIATED ADHESIVES, FASTENERS, ETC BACK TO FINISHED WALL.
- (10) REMOVE EXISTING CASEWORK INCLUDING COUNTERTOP, BASE
- EXTERIOR BRICK WALL AND FRAMING ASSEMBLY BELOW WINDOW TO FLOOR. PREPARE OPENING TO RECEIVE NEW STOREFRONT
- 13> REMOVE EXISTING SLIDING GLASS DOOR AND FRAME. PREPARE

- EXISTING CEILING TEXTURE CONTAINS HAZARDOUS MATERIALS. EXISTING GYPSUM BOARD CEILINGS SHALL BE REMOVED BY CONTRACTOR'S HAZARDOUS ABATEMENT CONTRACTOR. REMOVE EXISTING ABOVE CEILING BLOWN-IN ROOF INSULATION, AND ASSOCIATED FRAMING/SUSPENSION SYSTEM BACK TO EXISTING WOOD TRUSSES. PREPARE TRUSSES TO RECEIVE NEW CEILING
- 7 REMOVE EXISTING WALL HUNG CASEWORK AND ALL ASSOCIATED
- REMOVE EXISTING FIRE EXTINGUISHER. IF EXTINGUISHER HAS NOT EXPIRED, RETURN FIRE EXTINGUISHER TO OWNER.
- REMOVE EXISTING FRP WALL BOARD ABOVE MOP SINK AND ALL ASSOCIATED TRIMS. PATCH EXISTING WALL FINISHES TO REMAIN TO
- REMOVE EXISTING UNDERLAYMENT PANELS DOWN TO EXISTING PLYWOOD FLOORING. CLEAN AND PREPARE PLYWOOD TO RECEIVE
- (22) REMOVE EXISTING 1/4" PLYWOOD UNDERLAYMENT PANELS AT FLOORING AREAS OF NEW RESTROOMS DOWN TO EXISTING 3/4" PLYWOOD SUBFLOORING. PREPARE SUBFLOORING TO RECEIVE NEW CERAMIC TILE FLOORING UNDERLAYMENT. REFER TO NEW
- REMOVE EXISTING EXTERIOR WOOD SIDING WITHIN BRICK MASONRY OPENING BACK TO EXISTING WOOD STUDS. PREPARE ROUGH OPENING TO RECEIVE NEW EXTERIOR WALL CONSTRUCTION.
- REMOVE CEILING DIFFUSERS/GRILLES. RE: MECHANICAL.
- (26) REMOVE EXISTING ROOFTOP EQUIPMENT RE: MECHANICAL.
- CREATE NEW ROOF OPENING FOR NEW ROOFTOP EQUIPMENT. RE: MECHANICAL. COORDINATE WITH NEW MECHANICAL UNIT REQUIREMENTS AND EXISTING ROOF TRUSS LOCATIONS FOR FINAL OPENING LOCATIONS TO NOT BE IN CONFLICT WITH TRUSSES.
- ELECTRICAL. CENTER FLOOR OUTLET LOCATIONS BETWEEN
- REMOVE EXISTING ELECTRICAL PANEL, RE: ELECTRICAL. REMOVE EXISTING GYPSUM WALL BOARD AS REQUIRED TO ACCESS AND REMOVE ALL ELECTRICAL COMPONENTS REQUIRED TO BE REMOVED. PATCH WALL WITH NEW GYPSUM BOARD.
- REMOVE EXISTING GYPSUM WALL BOARD TO INSTALL NEW COMPONENTS, RE: ELECTRICAL. PATCH WALL WITH NEW GYPSUM
- EXISTING CEILING TILES AND GRID TO REMAIN, REMOVE, SALVAGE, AND REPLACE TILES & INSULATION AS REQUIRED FOR NEW PLUMBING CONSTRUCTION. CEILING TILES & INSULATION TO BE REINSTALLED AT SAME LOCATION ONCE PLUMBING WORK IS
- REMOVE EXISTING GYPSUM BOARD CEILING FOR PLUMBING CONTRUCTION ACCESS, RE: PLUMBING. ONCE MEP WORK IS COMPLETE, INSTALL NEW GYPSUM BOARD CEILING AND PAINT.
- (33) NEATLY COREDRILL EXISTING MASONRY VENEER AS REQUIRED FOR NEW CONDUIT AND WIRING FOR NEW ADA DOOR HARDWARE. RE:
- CUT ABANDONED EXISTING VENT SERVING FIRST FLOOR. RE: MECHANICAL. RE: A220 FOR INSTALLING CAP TO VENT.

B1

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STRUCTURAL CONSULTANT

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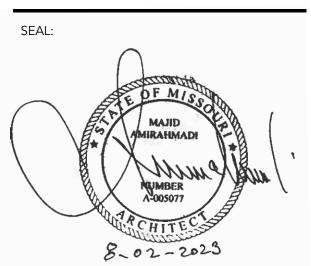


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DATE: PROJ. NO.:	08/02/2023 221202
DESIGNED BY:	AO, JL
DRAWN BY:	AO, JL
CHECKED BY:	JL, MA
APPROVED BY:	MA

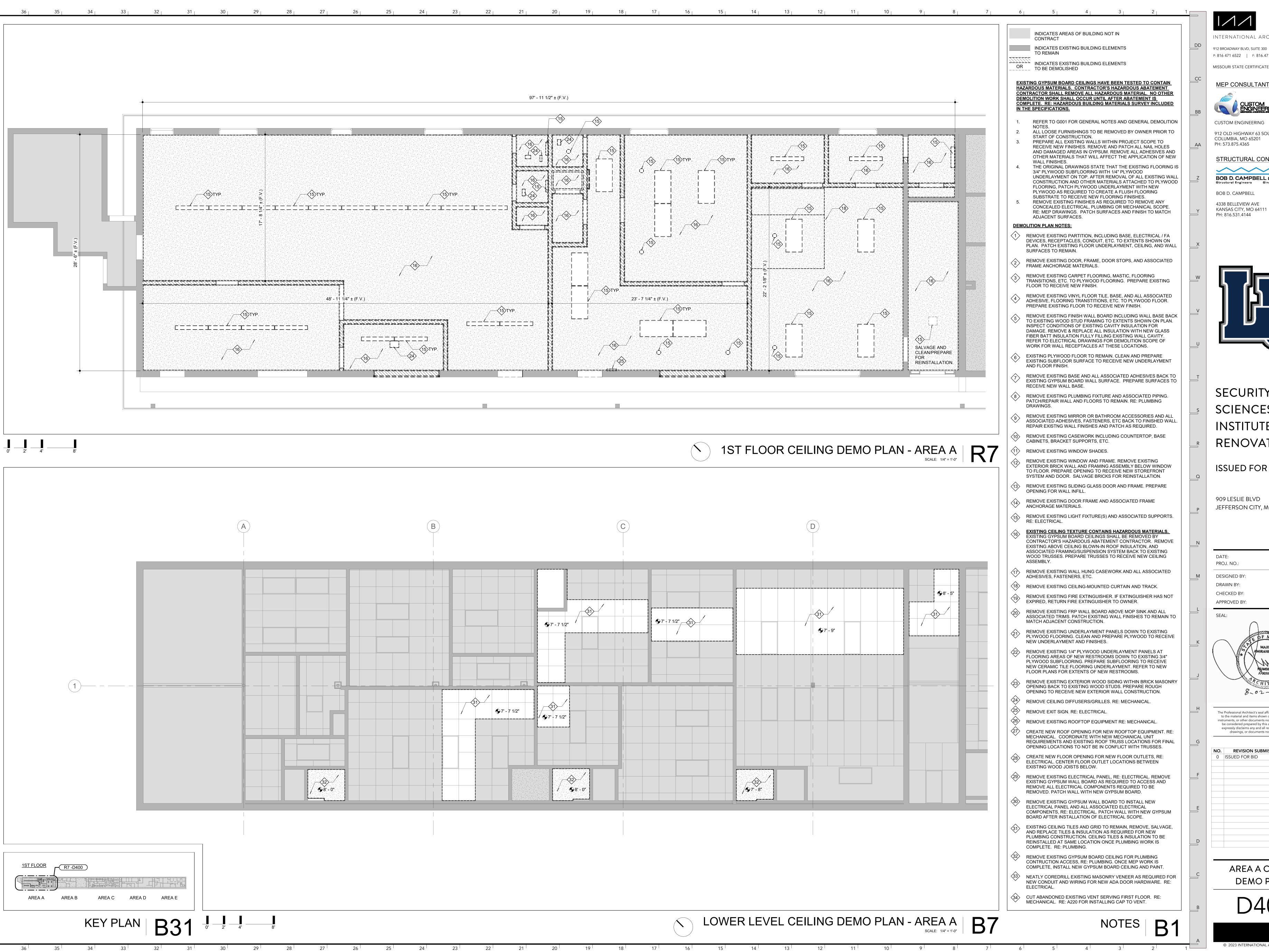


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AREA A DEMOLITION **PLANS**



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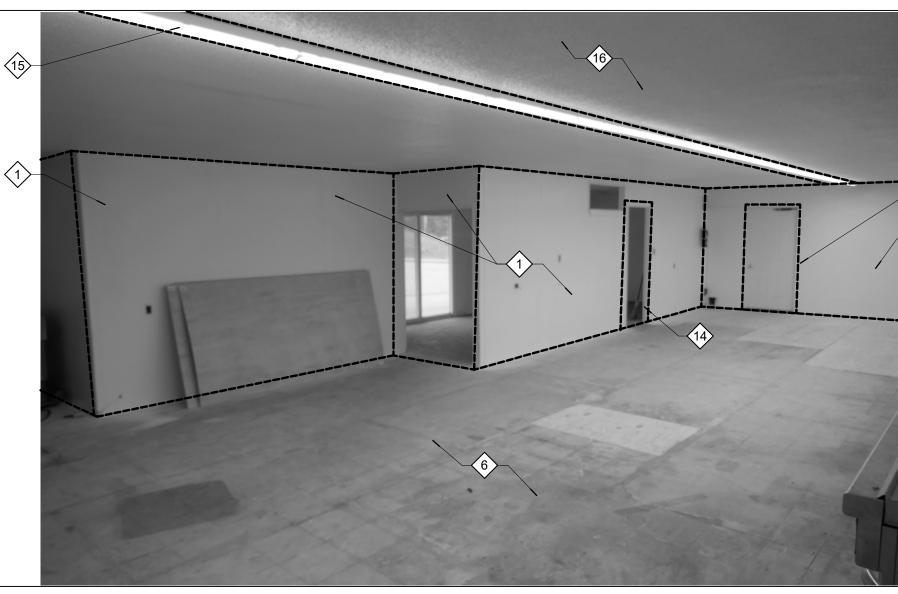
NO. REVISION SUBMISSION 0 ISSUED FOR BID

AREA A CEILING DEMO PLANS

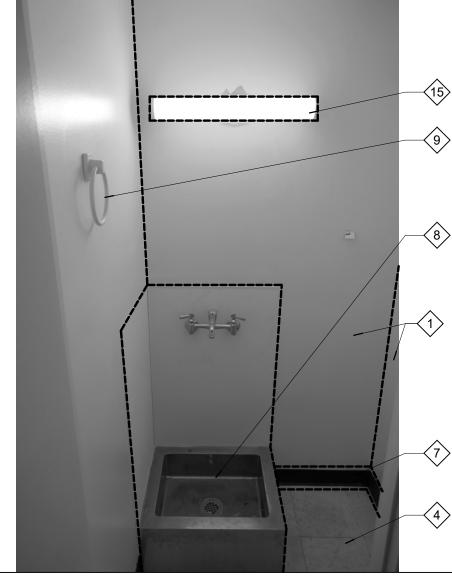


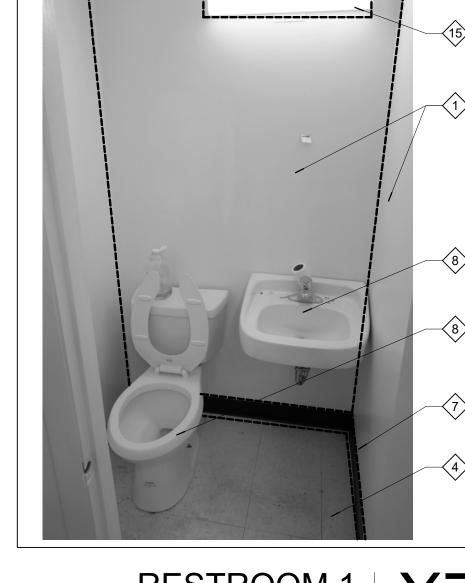
OPEN SPACE DEMO PHOTO 1 X27

ENTRY LOBBY DEMO PHOTO R27

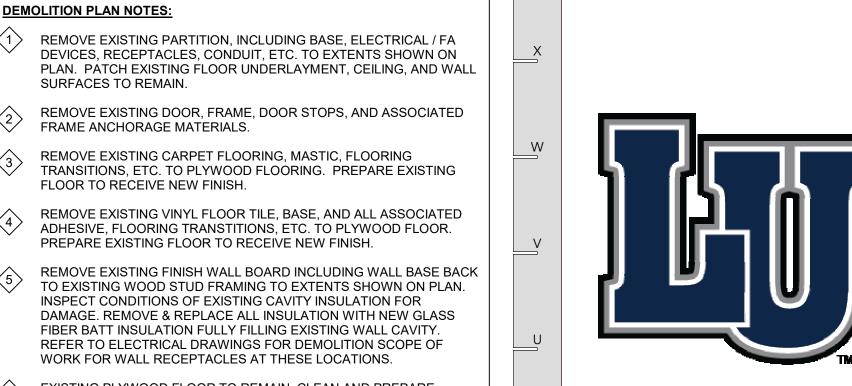


OPEN SPACE DEMO PHOTO 2 X17 JANITOR CLOSET X12









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08/02/2023

221202

AO, JL

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CHECKED BY:

APPROVED BY:

SEAL:

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EXISTING PLYWOOD FLOOR TO REMAIN. CLEAN AND PREPARE EXISTING SUBFLOOR SURFACE TO RECEIVE NEW UNDERLAYMENT AND FLOOR FINISH.

REMOVE EXISTING BASE AND ALL ASSOCIATED ADHESIVES BACK TO EXISTING GYPSUM BOARD WALL SURFACE. PREPARE SURFACES TO

RECEIVE NEW WALL BASE. REMOVE EXISTING PLUMBING FIXTURE AND ASSOCIATED PIPING. PATCH/REPAIR WALL AND FLOORS TO REMAIN. RE: PLUMBING

INDICATES AREAS OF BUILDING NOT IN

INDICATES EXISTING BUILDING ELEMENTS

EXISTING GYPSUM BOARD CEILINGS HAVE BEEN TESTED TO CONTAIN AZARDOUS MATERIALS. CONTRACTOR'S HAZARDOUS ABATEMENT CONTRACTOR SHALL REMOVE ALL HAZARDOUS MATERIAL. NO OTHER

COMPLETE. RE: HAZARDOUS BUILDING MATERIALS SURVEY INCLUDED

REFER TO G001 FOR GENERAL NOTES AND GENERAL DEMOLITION

ALL LOOSE FURNISHINGS TO BE REMOVED BY OWNER PRIOR TO

OTHER MATERIALS THAT WILL AFFECT THE APPLICATION OF NEW

THE ORIGINAL DRAWINGS STATE THAT THE EXISTING FLOORING IS

UNDERLAYMENT ON TOP. AFTER REMOVAL OF ALL EXISTING WALL CONSTRUCTION AND OTHER MATERIALS ATTACHED TO PLYWOOD

PREPARE ALL EXISTING WALLS WITHIN PROJECT SCOPE TO RECEIVE NEW FINISHES. REMOVE AND PATCH ALL NAIL HOLES AND DAMAGED AREAS IN GYPSUM. REMOVE ALL ADHESIVES AND

FLOORING, PATCH PLYWOOD UNDERLAYMENT WITH NEW

REMOVE EXISTING FINISHES AS REQUIRED TO REMOVE ANY

CONCEALED ELECTRICAL, PLUMBING OR MECHANICAL SCOPE.

RE: MEP DRAWINGS. PATCH SURFACES AND FINISH TO MATCH

PLYWOOD AS REQUIRED TO CREATE A FLUSH FLOORING SUBSTRATE TO RECEIVE NEW FLOORING FINISHES.

DEMOLITION WORK SHALL OCCUR UNTIL AFTER ABATEMENT IS

3/4" PLYWOOD SUBFLOORING WITH 1/4" PLYWOOD

INDICATES EXISTING BUILDING ELEMENTS

START OF CONSTRUCTION.

WALL FINISHES.

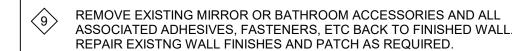
ADJACENT SURFACES.

TO REMAIN

IN THE SPECIFICATIONS.

TO BE DEMOLISHED

OR



REMOVE EXISTING CASEWORK INCLUDING COUNTERTOP, BASE CABINETS, BRACKET SUPPORTS, ETC.

(11) REMOVE EXISTING WINDOW SHADES.

REMOVE EXISTING WINDOW AND FRAME. REMOVE EXISTING EXTERIOR BRICK WALL AND FRAMING ASSEMBLY BELOW WINDOW TO FLOOR. PREPARE OPENING TO RECEIVE NEW STOREFRONT SYSTEM AND DOOR. SALVAGE BRICKS FOR REINSTALLATION.

REMOVE EXISTING SLIDING GLASS DOOR AND FRAME. PREPARE OPENING FOR WALL INFILL.

REMOVE EXISTING DOOR FRAME AND ASSOCIATED FRAME ANCHORAGE MATERIALS.

REMOVE EXISTING LIGHT FIXTURE(S) AND ASSOCIATED SUPPORTS.

RE: ELECTRICAL. EXISTING CEILING TEXTURE CONTAINS HAZARDOUS MATERIALS. EXISTING GYPSUM BOARD CEILINGS SHALL BE REMOVED BY

EXISTING ABOVE CEILING BLOWN-IN ROOF INSULATION, AND ASSOCIATED FRAMING/SUSPENSION SYSTEM BACK TO EXISTING WOOD TRUSSES. PREPARE TRUSSES TO RECEIVE NEW CEILING ASSEMBLY.

REMOVE EXISTING WALL HUNG CASEWORK AND ALL ASSOCIATED ADHESIVES, FASTENERS, ETC.

(18) REMOVE EXISTING CEILING-MOUNTED CURTAIN AND TRACK.

REMOVE EXISTING FIRE EXTINGUISHER. IF EXTINGUISHER HAS NOT EXPIRED, RETURN FIRE EXTINGUISHER TO OWNER. REMOVE EXISTING FRP WALL BOARD ABOVE MOP SINK AND ALL

MATCH ADJACENT CONSTRUCTION. REMOVE EXISTING UNDERLAYMENT PANELS DOWN TO EXISTING PLYWOOD FLOORING. CLEAN AND PREPARE PLYWOOD TO RECEIVE NEW UNDERLAYMENT AND FINISHES.

ASSOCIATED TRIMS. PATCH EXISTING WALL FINISHES TO REMAIN TO

REMOVE EXISTING 1/4" PLYWOOD UNDERLAYMENT PANELS AT FLOORING AREAS OF NEW RESTROOMS DOWN TO EXISTING 3/4" PLYWOOD SUBFLOORING. PREPARE SUBFLOORING TO RECEIVE NEW CERAMIC TILE FLOORING UNDERLAYMENT. REFER TO NEW FLOOR PLANS FOR EXTENTS OF NEW RESTROOMS.

REMOVE EXISTING EXTERIOR WOOD SIDING WITHIN BRICK MASONRY OPENING BACK TO EXISTING WOOD STUDS. PREPARE ROUGH OPENING TO RECEIVE NEW EXTERIOR WALL CONSTRUCTION.

REMOVE CEILING DIFFUSERS/GRILLES. RE: MECHANICAL

REMOVE EXIT SIGN. RE: ELECTRICAL.

REMOVE EXISTING ROOFTOP EQUIPMENT RE: MECHANICAL. CREATE NEW ROOF OPENING FOR NEW ROOFTOP EQUIPMENT. RE: MECHANICAL. COORDINATE WITH NEW MECHANICAL UNIT REQUIREMENTS AND EXISTING ROOF TRUSS LOCATIONS FOR FINAL

CREATE NEW FLOOR OPENING FOR NEW FLOOR OUTLETS, RE: ELECTRICAL. CENTER FLOOR OUTLET LOCATIONS BETWEEN EXISTING WOOD JOISTS BELOW.

29 REMOVE EXISTING ELECTRICAL PANEL, RE: ELECTRICAL. REMOVE EXISTING GYPSUM WALL BOARD AS REQUIRED TO ACCESS AND REMOVE ALL ELECTRICAL COMPONENTS REQUIRED TO BE REMOVED. PATCH WALL WITH NEW GYPSUM BOARD.

OPENING LOCATIONS TO NOT BE IN CONFLICT WITH TRUSSES.

ELECTRICAL PANEL AND ALL ASSOCIATED ELECTRICAL COMPONENTS, RE: ELECTRICAL. PATCH WALL WITH NEW GYPSUM BOARD AFTER INSTALLATION OF ELECTRICAL SCOPE.

(30) REMOVE EXISTING GYPSUM WALL BOARD TO INSTALL NEW

(31) EXISTING CEILING TILES AND GRID TO REMAIN, REMOVE, SALVAGE, AND REPLACE TILES & INSULATION AS REQUIRED FOR NEW PLUMBING CONSTRUCTION. CEILING TILES & INSULATION TO BE REINSTALLED AT SAME LOCATION ONCE PLUMBING WORK IS COMPLETE. RE: PLUMBING.

REMOVE EXISTING GYPSUM BOARD CEILING FOR PLUMBING CONTRUCTION ACCESS, RE: PLUMBING. ONCE MEP WORK IS COMPLETE, INSTALL NEW GYPSUM BOARD CEILING AND PAINT.

(33) NEATLY COREDRILL EXISTING MASONRY VENEER AS REQUIRED FOR NEW CONDUIT AND WIRING FOR NEW ADA DOOR HARDWARE. RE:

(34) CUT ABANDONED EXISTING VENT SERVING FIRST FLOOR. RE: MECHANICAL. RE: A220 FOR INSTALLING CAP TO VENT.

B1

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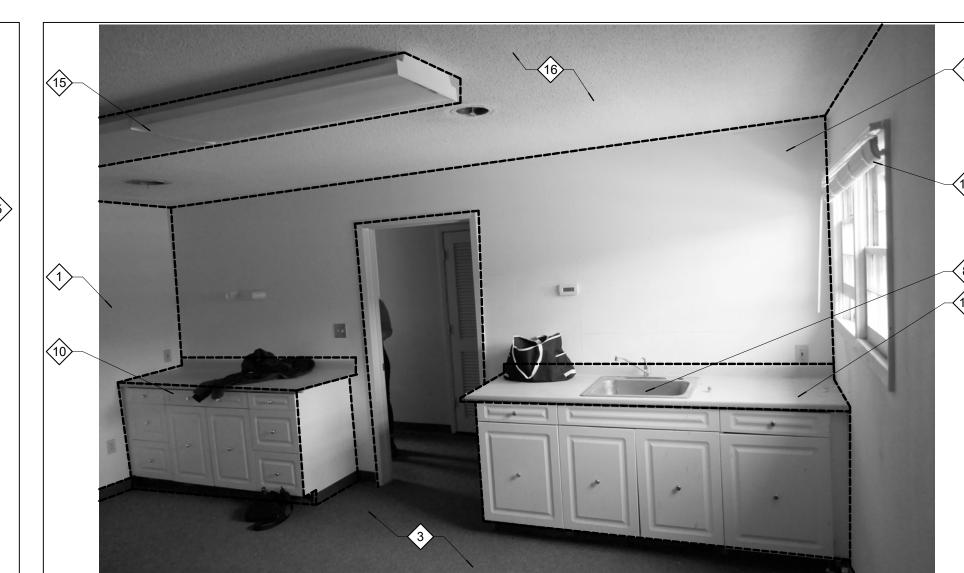
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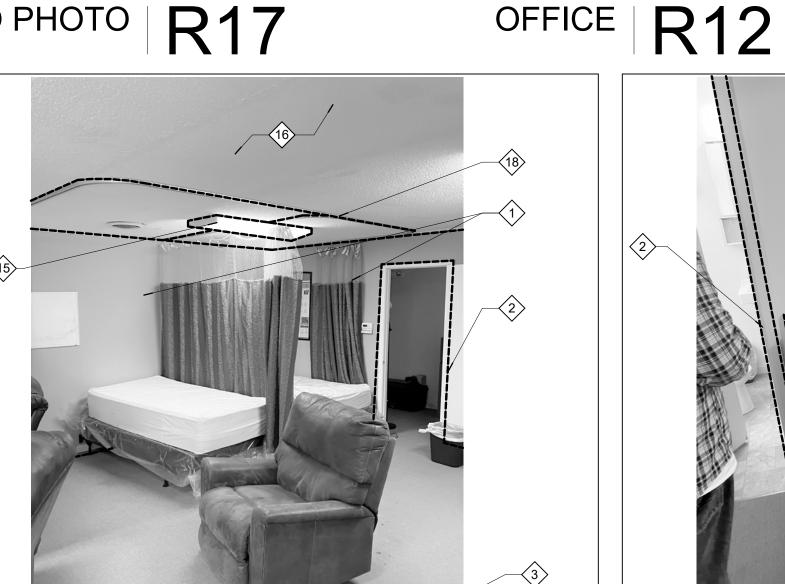
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DEMOLITION PHOTOGRAPHS



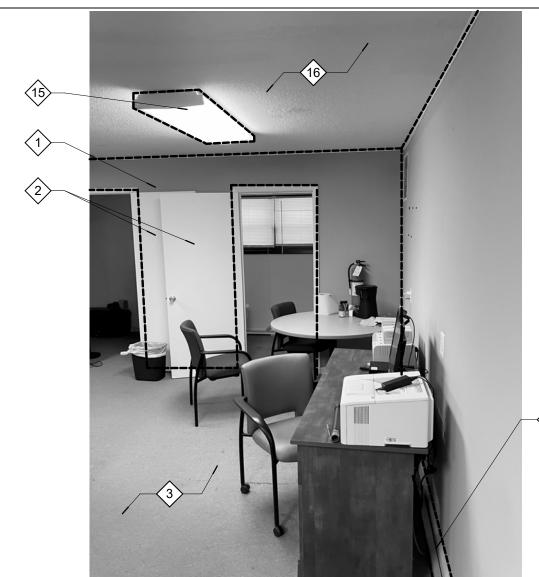
BREAK ROOM DEMO PHOTO R17



RESTING QUARTERS 2 J13



BREAK ROOM 2



BRICKS WITH NEW BRICKS

WHEN INFILLING WALL.

CONTRACTOR AND IN

INSTALL NEW BRICK

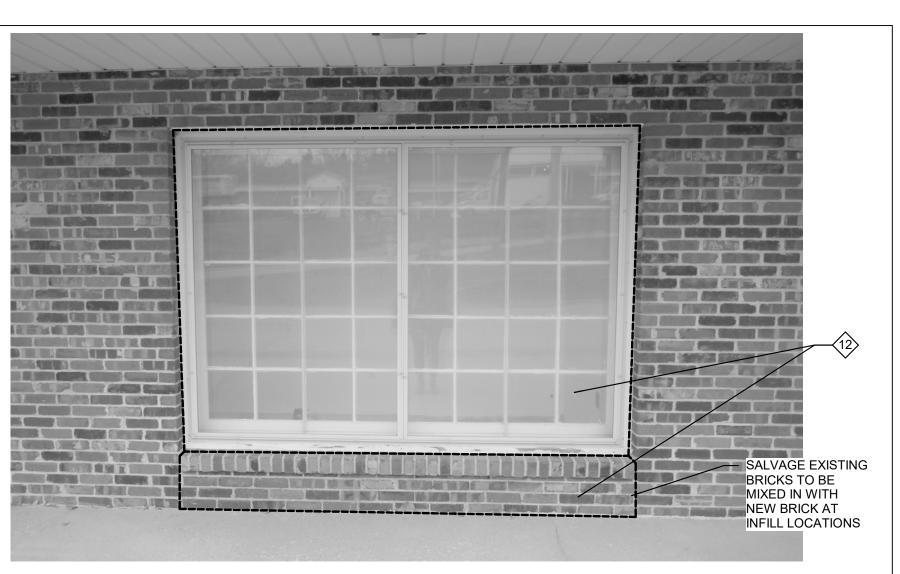
EXTERIOR WALL.

CONTROL JOINT, THIS

SIDE OF OPENING, WHEN

CONSTRUCTING INFILL OF





EXTERIOR WINDOW DEMO PHOTO

OPEN OFFICE 1 J27 EXISTING BRICKS AS REQUIRED ABOVE OPENING TO ACCESS AND REMOVE EXISTING STEEL LINTEL. MIX IN SALVAGED

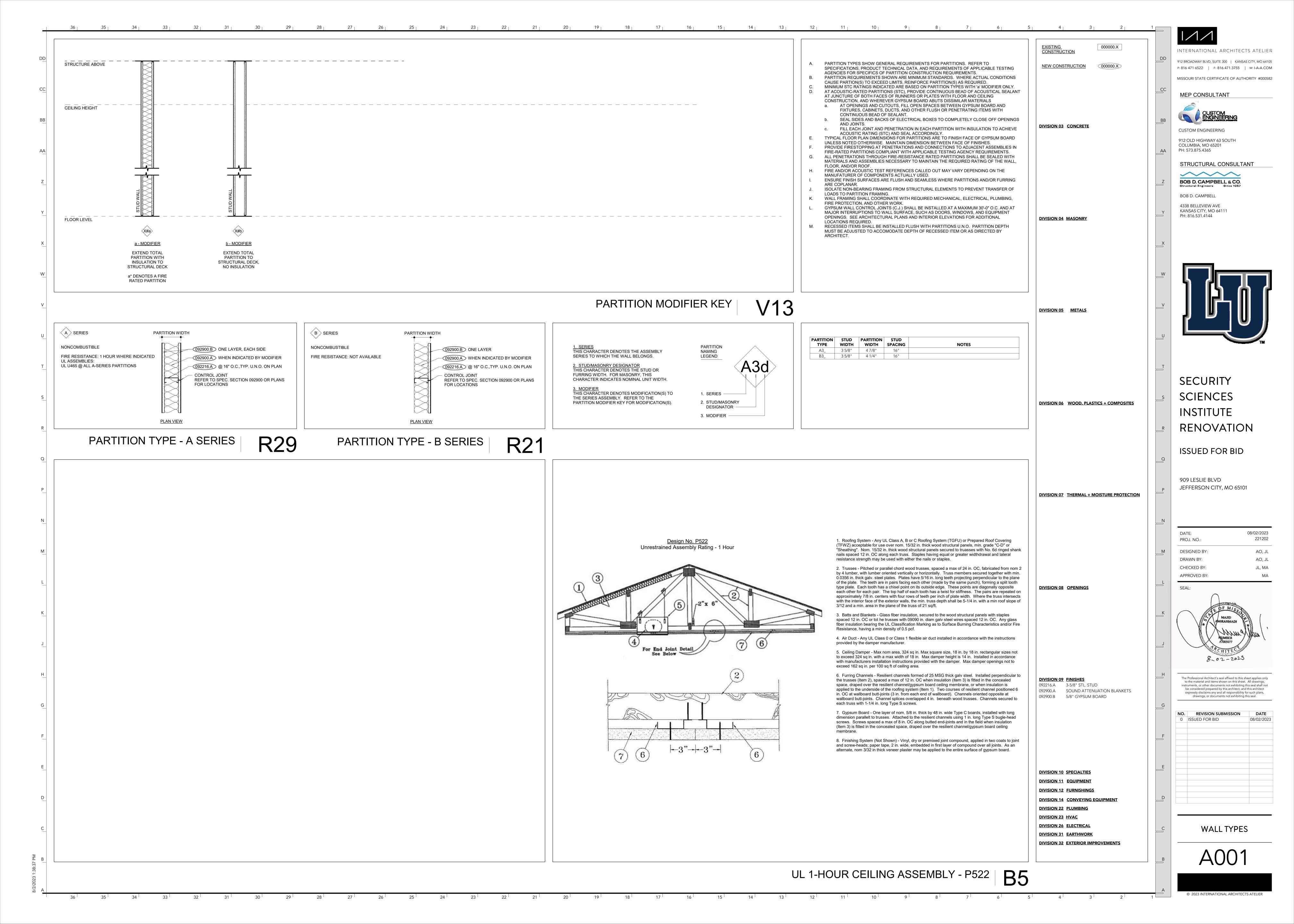
REMOVE BRICKS NEATLY

BRICKS WHEN INFILLING

TO TOOTH IN NEW

EXTERIOR WALL

EXTERIOR SLIDING DOOR DEMO PHOTO B27





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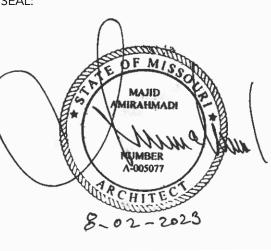


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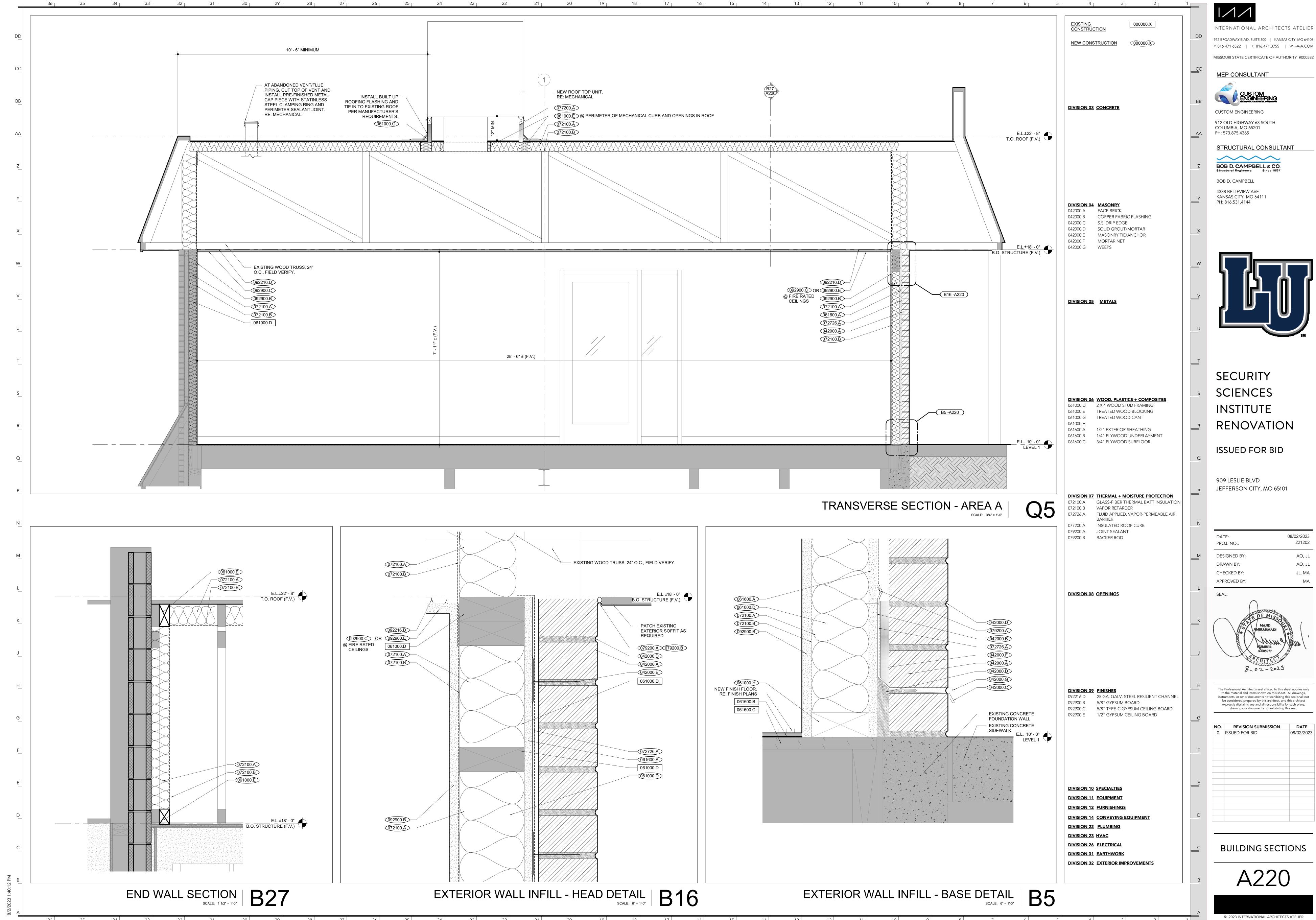
08/02/2023 221202 DESIGNED BY: AO, JL DRAWN BY: CHECKED BY:



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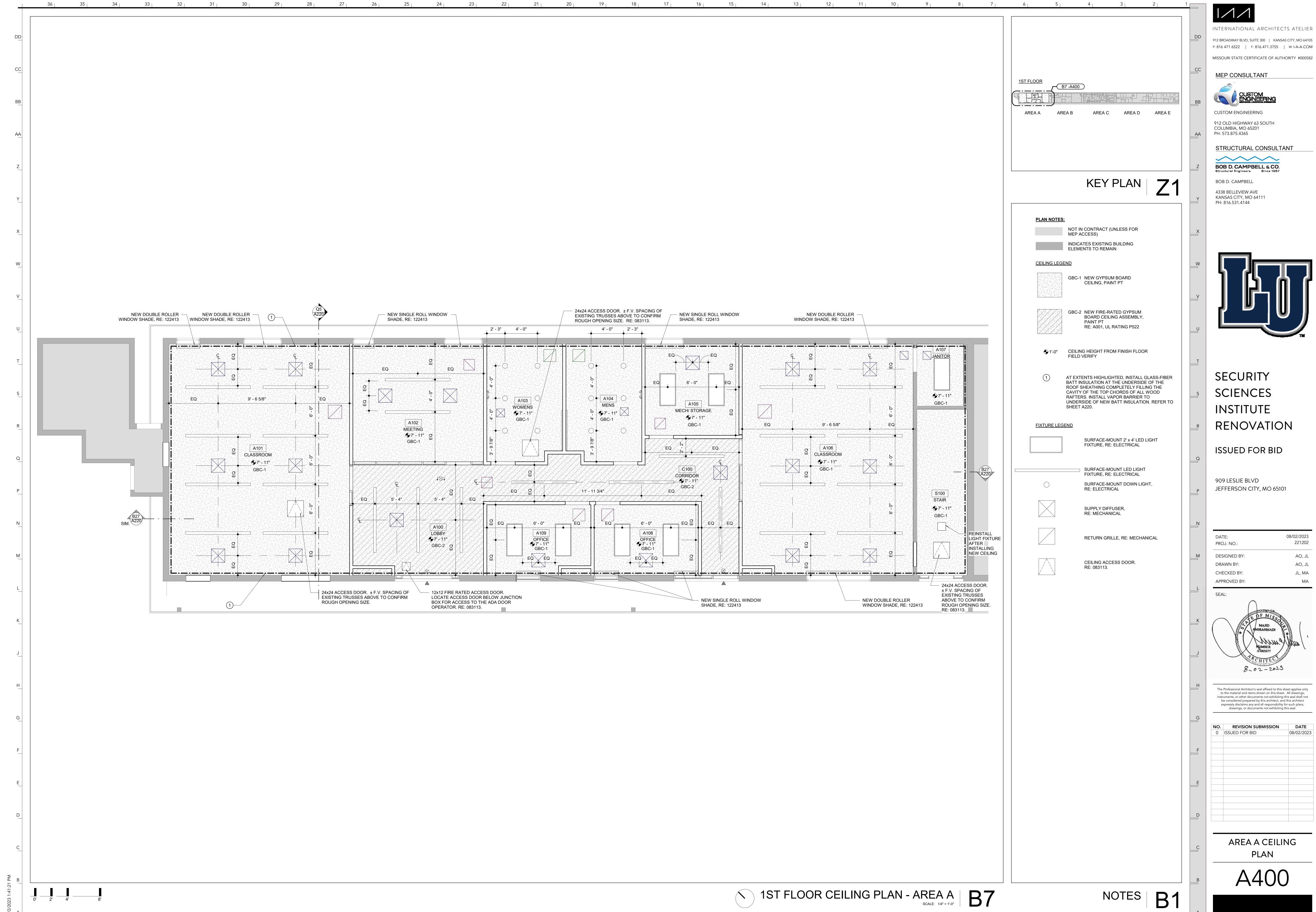
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> AREA A FLOOR **PLANS**





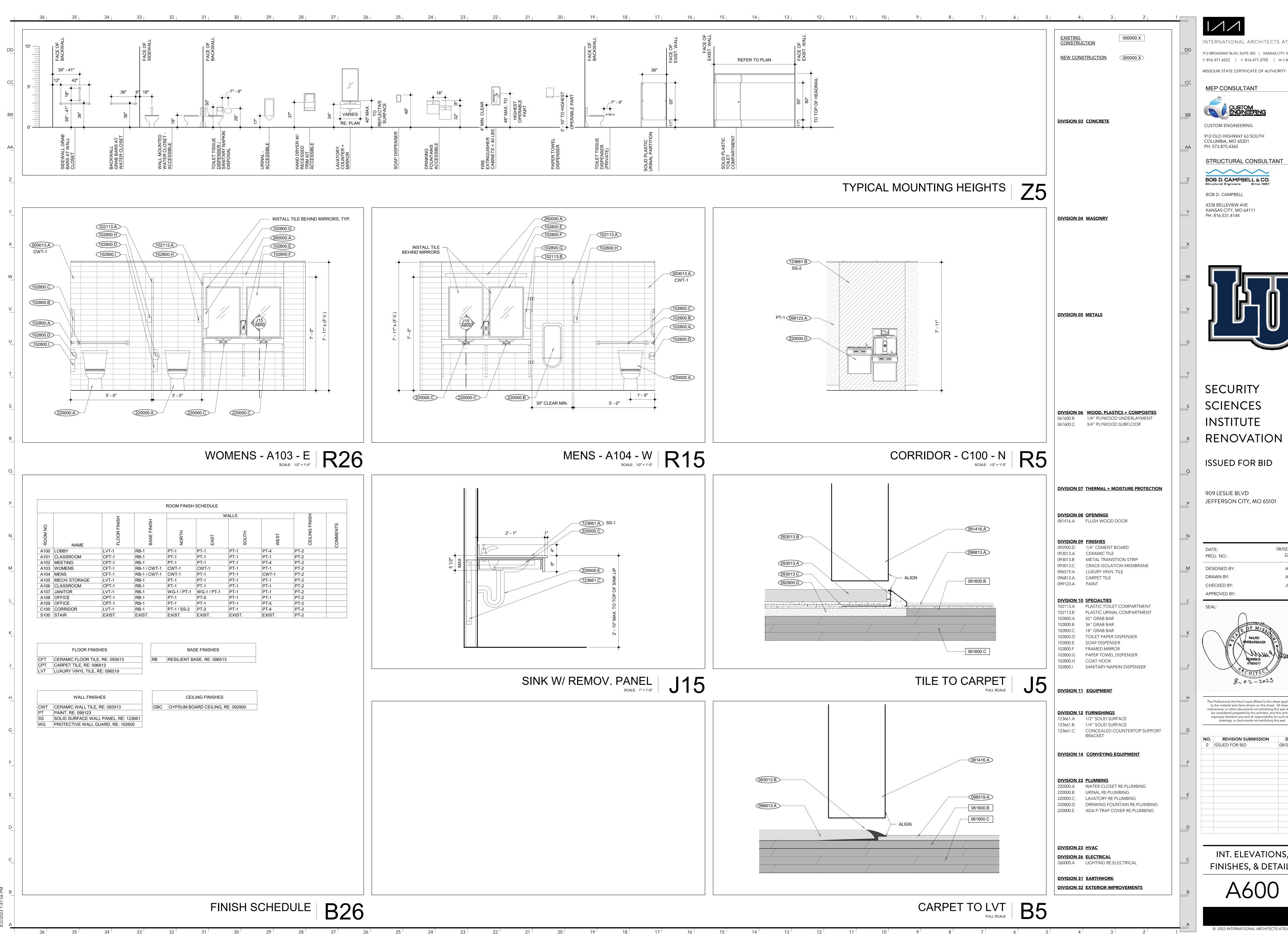
08/02/2023 221202 AO, JL



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08/02/2023 221202 AO, JL AO, JL JL, MA



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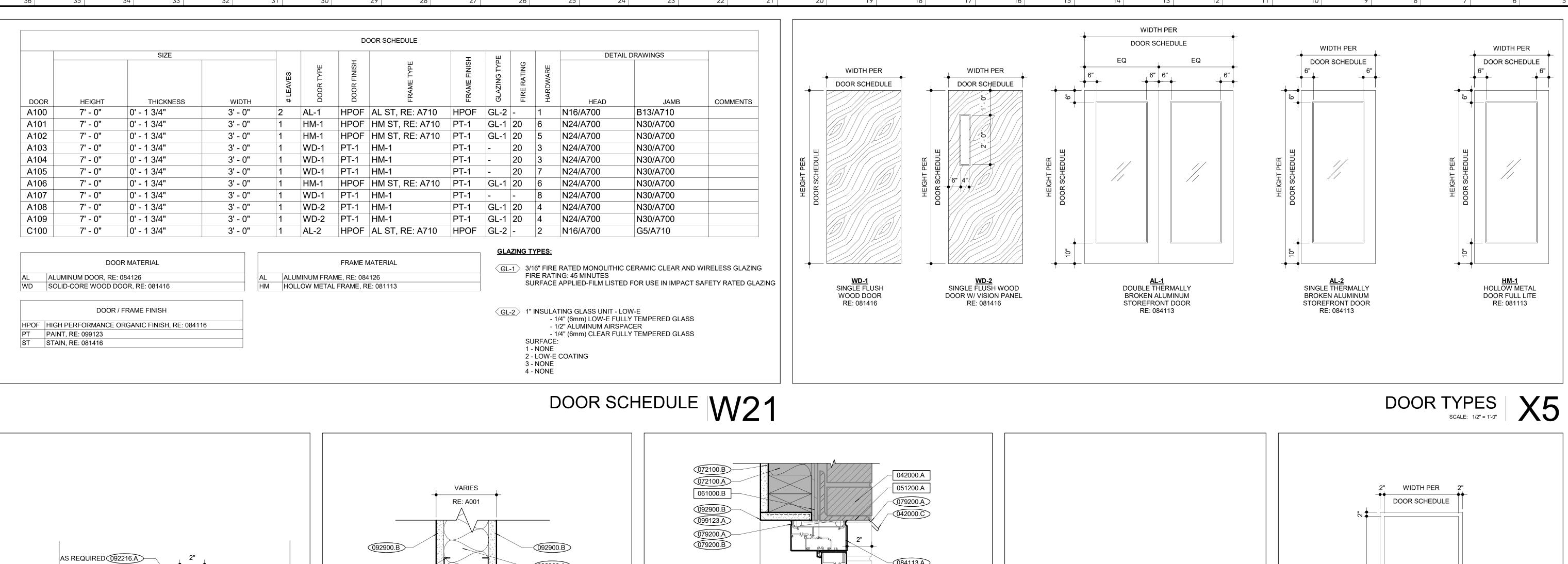
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INT. ELEVATIONS, FINISHES, & DETAILS



051200.A STEEL ANGLE WIDTH PER DOOR SCHEDULE 061000.B 1/2" PLYWOOD HM-1 HOLLOW METAL DOOR FRAME RE: 081113

DIVISION 07 THERMAL + MOISTURE PROTECTION 072100.A GLASS-FIBER THERMAL BATT INSULATION 072100.B VAPOR RETARDER 079200.A JOINT SEALANT 079200.B BACKER ROD

> **DIVISION 08 OPENINGS** 081113.A HOLLOW METAL DOOR FRAME 084113.A ALUMINUM STOREFRONT 084113.B ALUMINUM DOOR

DIVISION 09 FINISHES 092216.A 3-5/8" STL. STUD 092900.A SOUND ATTENUATION BLANKETS 092900.B 5/8" GYPSUM BOARD

099123.A PAINT

DIVISION 10 SPECIALTIES **DIVISION 11 EQUIPMENT DIVISION 12 FURNISHINGS DIVISION 14 CONVEYING EQUIPMENT** DIVISION 22 PLUMBING DIVISION 23 HVAC **DIVISION 26 ELECTRICAL** DIVISION 31 EARTHWORK

DIVISION 32 EXTERIOR IMPROVEMENTS

000000.X

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CONSTRUCTION

NEW CONSTRUCTION

DIVISION 03 CONCRETE

DIVISION 04 MASONRY

042000.A FACE BRICK

DIVISION 05 METALS

DIVISION 06 WOOD, PLASTICS + COMPOSITES

042000.C S.S. DRIP EDGE

WIDTH PER

DOOR SCHEDULE

<u>**HM-1**</u> HOLLOW METAL

DOOR FULL LITE

RE: 081113

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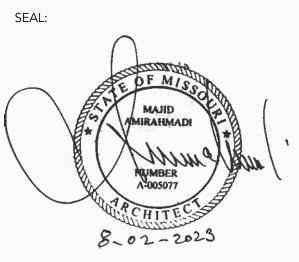


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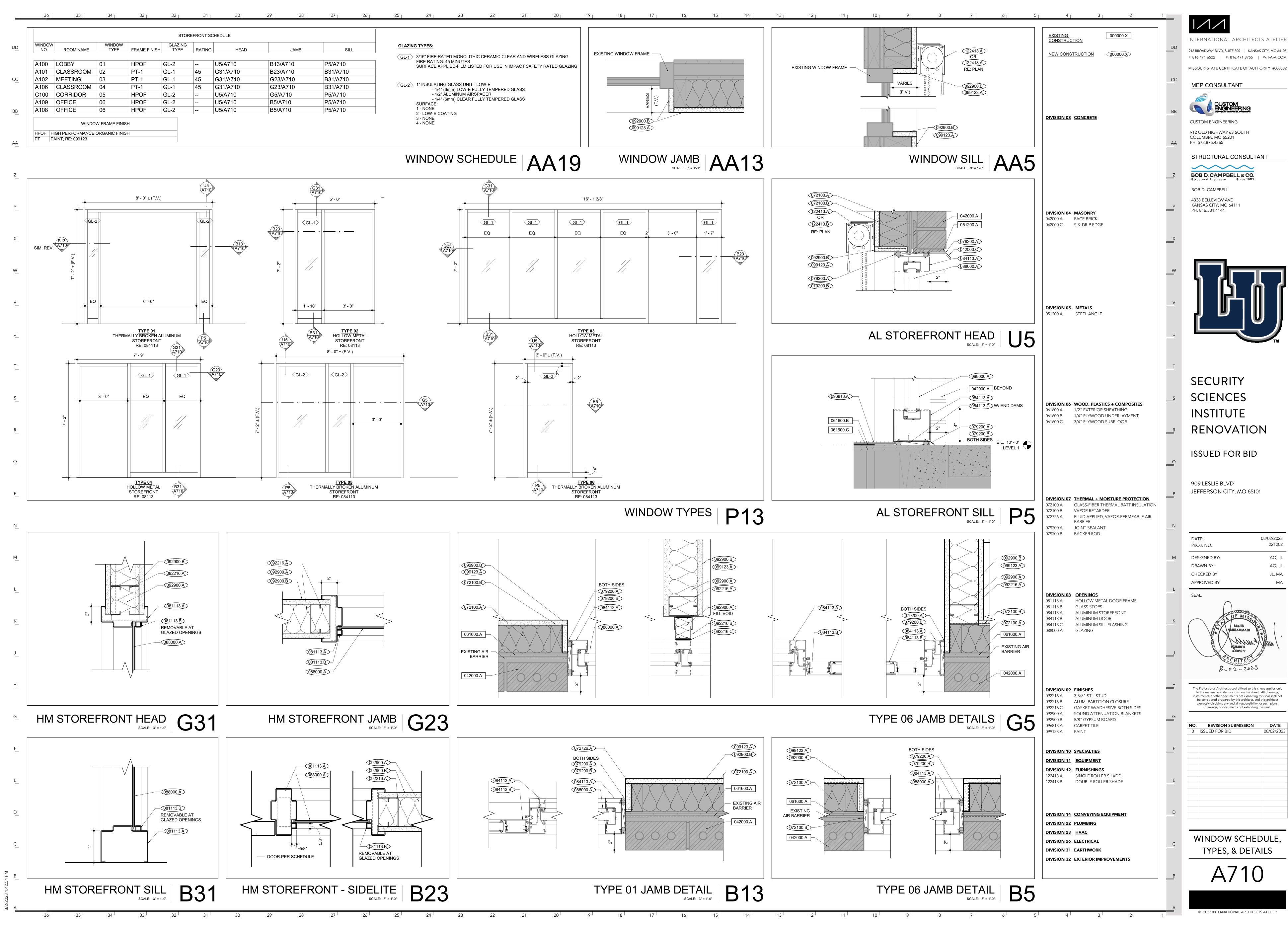


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DOOR SCHEDULE, TYPES, & DETAILS

(092900.B) DOOR PER SCHEDULE 092900.B DOOR PER SCHEDULE 092900.A FRAME TYPES | N5 H.M. FRAME JAMB DETAIL SCALE: 3" = 1"-0" N30 H.M. FRAME HEAD DETAIL SCALE: 3" = 1"-0" N24 ALUMINUM FRAME HEAD DETAIL SCALE: 3" = 1"-0" N16



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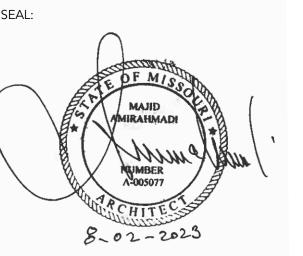


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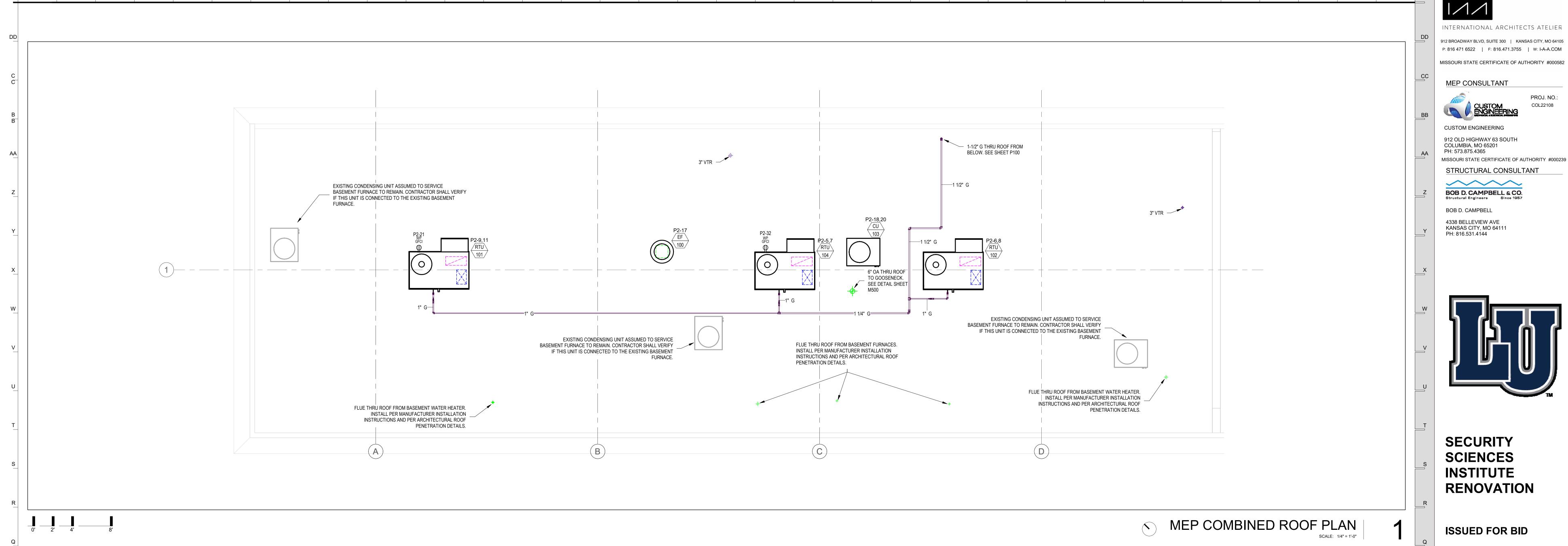


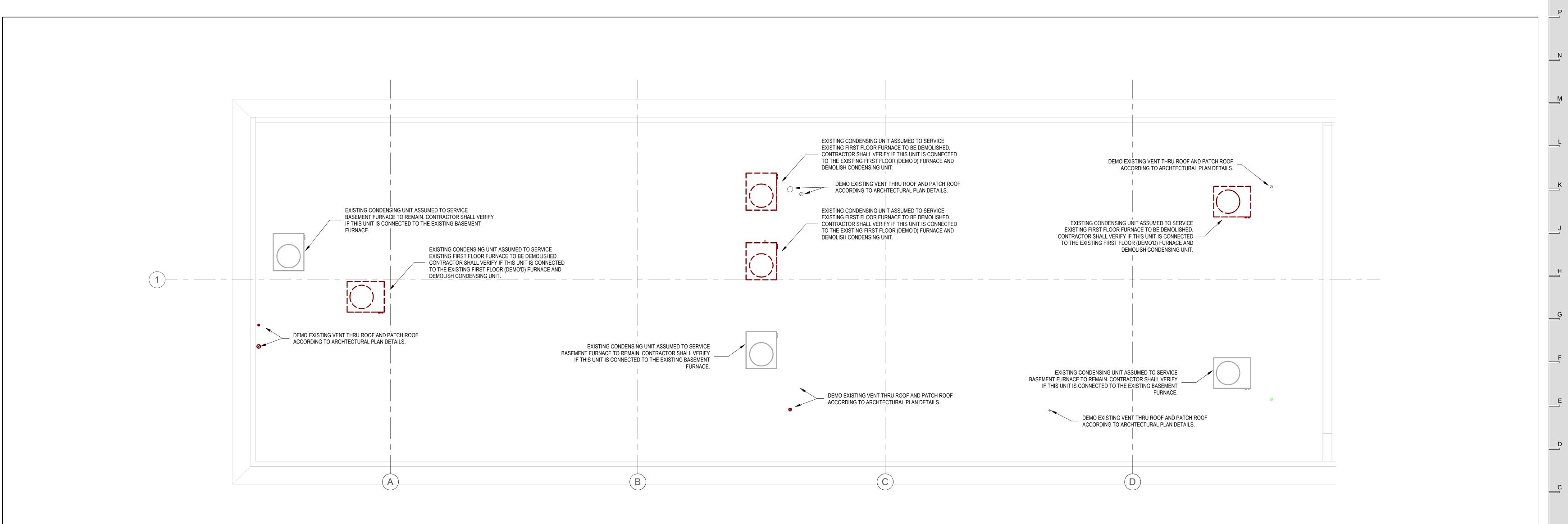
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COMBINED ROOF PLAN

MEP101

MEP COMBINED ROOF PLAN DEMO

GENERAL MECHANICAL SYMBOLS	EQUIPMENT	ABBREVIATIONS
REVISION NUMBER - SHOWN ON PLANS	EQUIPMENT SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY APPROVED BY OSHA.	Ø DIAMETER LAT LEAVING AIR TEMPERATURE LB POUND
POINT WHERE NEW CONNECTS TO EXISTING OR EXISTING SEPARATES FROM DEMOLISHED	INSTALL EQUIPMENT WHILE MAINTAINING CLEARANCES AS RECOMMENDED BY MANUFACTURER AND REQUIRED BY APPLICABLE CODES AND STANDARDS.	A AMP LB/HR POUNDS PER HOUR ABV ABOVE LP LOW PRESSURE
DETAIL NUMBER ON SHEET SHEET NUMBER WHERE DETAIL APPEARS	3. PROVIDE CONNECTIONS IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION	AC AIR CONDITIONING LVR LOUVER AC/HR AIR CHANGES PER HOUR LWT LEAVING WATER TEMPERATURE ADD ADDENDUM
REYNOTE	INSTRUCTIONS AND APPLICABLE CODES AND STANDARDS. COORDINATE CONNECTION REQUIREMENTS FOR FINAL EQUIPMENT SELECTIONS WITH OTHER AFFECTED TRADES.	AFF ABOVE FINISHED FLOOR M/A MIXED AIR AFUE ANNUAL FUEL UTILIZATION MAX MAXIMUM
CONTINUATION SYMBOL	4. VERIFY FINAL CONNECTION SIZES WITH OWNER PROVIDED EQUIPMENT AND PROVIDE	EFFICIENCY MBH ONE THOUSAND BTU PER HOU ALT ALTERNATE MCF ONE THOUSAND CUBIC FEET
ITEMS TO DEMOLISHED	REQUIRED ISOLATION VALVES, CHECK VALVES, UNIONS, GAUGES, AND SO FORTH FOR A COMPLETE INSTALLATION.	AP ACCESS PANEL MD MOTORIZED DAMPER ARCH ARCHITECT/ARCHITECTURAL MECH MECHANICAL
= = = = PIPING TO BE DEMOLISHED	5. PROVIDE ENGRAVED PLASTIC LAMINATE NAMEPLATES ON [ALL][AFFECTED] NEW [AND EXISTING] EQUIPMENT. SURVEY BUILDING TO ENSURE THAT NAMES ARE UNIQUE AND	MFR MANUFACTURER BFF BELOW FINISHED FLOOR MIN MINIMUM BHP BRAKE HORSE POWER MISC MISCELLANEOUS
AREA NOT IN CONTRACT	CONSISTENT WITH EXISTING CONVENTIONS.	BLW BELOW MTD MOUNTED BTU BRITISH THERMAL UNITS MTR MOTOR
PIPE SIZE/SYSTEM TAG (DIAMETER)	6. KITCHEN HOOD EXHAUST SYSTEM: 6.1. ACCUREX IS THE BASIS OF DESIGN.	BTUH BRITISH THERMAL UNITS PER HOUR MUA MAKE-UP AIR
ABOVE GROUND PIPING 1/8" / 12" SLOPE PIPE SLOPE TAG (STEAM PIPING)	6.2. CAPTIVEAIRE IS AN ALTERNATE. CONTROL WIRING SPECIFICATIONS	CAP CAPACITY NC NOISE CRITERIA CD CEILING DIFFUSER N.C. NORMALLY CLOSED CFM CUBIC FEET PER MINUTE NIC NOT IN CONTRACT
EXISTING PIPE TAG	1. ELECTRICAL WIRING SPECIFICATIONS 1. ELECTRICAL WIRING AND WIRING CONNECTIONS NEEDED FOR THE INSTALLATION OF	CFM CUBIC FEET PER MINUTE NIC NOT IN CONTRACT CLG CEILING NO NUMBER CON'T CONTINUED N.O. NORMALLY OPEN
12"x8" S/A SQUARE DUCT/SYSTEM TAG (WIDTH X HEIGHT)	MECHANICAL SYSTEMS SHALL BE PROVIDED BY MECHANICAL CONTRACTOR UNLESS OTHERWISE INDICATED.	CRD CEILING RADIATION DAMPER NTS NOT TO SCALE
12"/8" S/A OVAL DUCT/SYSTEM TAG (WIDTH / HEIGHT)	2. INSTALL CONTROL WIRING, WITHOUT SPLICES BETWEEN TERMINAL POINTS, COLOR CODED.	D DEGREE O/A OUTSIDE AIR DB DRY BULB OPER OPERATOR
12"Ø S/A ROUND DUCT/SYSTEM TAG (DIAMETER)	INSTALL IN NEAT, WORKMANLIKE MANNER, SECURELY FASTENED. INSTALL IN ACCORDANCE WITH APPLICABLE NATIONAL ELECTRICAL CODE EDITION AND THE ELECTRICAL SPECIFICATIONS.	DIA DIAMETER DIDW DOUBLE INLET DOUBLE WIDTH PD PRESSURE DROP DN DOWN PRESS PRESSURE
DROP X RECTANGULAR SUPPLY/OUTSIDE AIR DUCT RISE	3. INSTALL VOLTAGE CIRCUITS LOCATED IN CONCRETE SLAB AND MASONRY WALLS, OR	DX DIRECT EXPANSION PSI POUNDS PER SQUARE INCH DWG DRAWING PSIG POUNDS PER SQUARE INCH
	EXPOSED IN OCCUPIED AREAS, IN ELECTRICAL CONDUIT. ALL WIRING IN AREAS NOT USED FOR AIR MOVEMENT SHALL BE IN ELECTRIC METALLIC TUBING EXCEPT LOW VOLTAGE	GAUGE EA EACH PWR POWER
DROP ROUND SUPPLY/OUTSIDE AIR DUCT RISE	WIRING MAY BE IN APPROVED SIGNAL CABLE WHERE APPROVED BY LOCAL CODES.	E/A EXHAUST AIR EAT ENTERING AIR TEMPERATURE R/A RETURN AIR EFF EFFICIENCY RCP RADIANT CEILING PANEL
DROP RECTANGULAR RETURN/TRANSER AIR DUCT RISE	TESTING, BALANCE AND ADJUSTMENT	EFF
DROP ROUND RETURN/TRANSER AIR DUCT RISE	DUCTWORK AND PIPING SHALL BE BALANCES BY QUALIFIED PERSONNEL WHO HAVE PREVIOUS EXPERIENCE WITH BALANCING PROCEDURES AND ARE FAMILIAR WITH TESTING AND DATA AND THE PROCEDURES OF THE ASSOCIATED AND DATA AND COMPANY (AARO) OF	ER EXHAUST REGISTER RG RETURN GRILLE ESP EXTERNAL STATIC PRESSURE RH RELATIVE HUMIDITY
	AND BALANCING PROCEDURES OF THE ASSOCIATED AIR BALANCE COUNCIL (AABC) OR NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB). CERTIFIED TAB PROFESSIONAL IS NOT REQUIRED.	EWT ENTERING WATER TEMPERATURE RL/A RELIEF AIR EXIST EXISTING RM ROOM
DROP RECTANGULAR EXHAUST DUCT AIR DUCT RISE	BALANCING SHALL INCLUDE THE BALANCING OF THE EQUIPMENT AND AIR DISTRIBUTION	RPM REVOLUTIONS PER MINUTE F DEGREES FAHRENHEIT FC FORWARD CURVED S/A SUPPLY AIR
DROP ROUND EXHAUST DUCT AIR DUCT RISE	SYSTEMS TO PROVIDE DESIGN QUANTITIES INDICATED AND VERIFICATIONS OF PERFORMANCE OF ALL EQUIPMENT AND AUTOMATIC CONTROLS.	FD FIRE DAMPER SF SQUARE FOOT FL FLOOR SD SMOKE DAMPER
	MECHANICAL SPECIFICATIONS	FPM FEET PER MINUTE SM SURFACE MOUNT SP STATIC PRESSURE
GRILLES, REGISTERS & DIFFUSERS TAG	PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE COMPLETE	FTHD FEET OF HEAD SPEC SPECIFICATION FTR FIN TUBE RADIATION SR SUPPLY REGISTER
	INSTALLATION OF THE MECHANICAL SYSTEMS INDICATED.	FTWG FEET OF HEAD WATER GAUGE STD STANDARD GA GAUGE T THERMOSTAT
AIR DEVICE SD1 400	2. OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATES OF COMPLIANCE OR APPROVAL AS REQUIRED BY THE AUTHORITIES.	GA GAUGE T THERMOSTAT GAL GALLON T/A TRANSFER AIR GALV GALVANIZED TD TEMPERATURE DROP
	3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES, AND REGULATION SO THE GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE.	GC GENERAL CONTRACTOR TEMP TEMPERATURE GPM GALLONS PER MINUTE TYP TYPICAL
GENERAL SPECIFICATIONS	4. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS NECESSARY	HP HORSE POWER VAC VACUUM
ALL WORK SHALL BE DONE IN STRICT CONFORMANCE WITH THE LOCAL BUILDING CODES.	TO INSTALL ALL NEW MECHANICAL SYSTEMS WITHIN THE CONFINES OF THE SPACES AVAILABLE AND WITHOUT INTERFERENCES.	HT HEIGHT VAV VARIABLE AIR VOLUME HTG HEATING VENT VENTILATION HTR HEATER VFD VARIABLE FREQUENCY DRIVE
2. ALL MATERIALS SHALL BE NEW, FIRST CLASS, AND INSTALLED TO MANUFACTURER'S	5. PLANS ARE INTENDED TO INDICATE THE GENERAL SCOPE OF WORK. DETAILS OF INSTALLATION COVERED BY CODE AND OTHER MINOR ITEMS NOT SHOWN SHALL BE	HUM HUMIDITY V VOLTAGE HWS HEATING WATER SUPPLY
WRITTEN SPECIFICATIONS. 3. ALL SYSTEMS SHALL BE COMPLETE AND OPERABLE IN EVERY WAY.	INSTALLED IN ACCORDANCE WITH LOCAL CODES AND ACCEPTABLE INDUSTRY STANDARDS. ALL MECHANICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH	HWR HEATING WATER RETURN W/ WITH HZ HERTZ W/O WITHOUT
ALL SYSTEMS SHALL BE COMPLETE AND OPERABLE IN EVERY WAY. 4. GUARANTEE ALL WORKMANSHIP AND MATERIALS FOR ONE YEAR FROM FINAL ACCEPTANCE.	LOCAL CODES AND MANUFACTURER'S INSTRUCTIONS. CONTRACTOR SHALL SITE VERIFY EXISTING CONDITIONS.	WB WET BULB IN INCH INWC INCHES WATER COLUMN ZD ZONE DAMPER
PROVIDE FIVE YEAR AIR CONDITIONING COMPRESSOR WARRANTY.	6. DURING CONSTRUCTION, ALL EQUIPMENT, PIPE, DUCT, ETC. SHALL BE COVERED, PLUGGED, OR CAPPED AS REQUIRED TO KEEP CLEAN AND UNDAMAGED. ALL DAMAGED ITEMS SHALL	INWC INCHES WATER COLUMN ZD ZONE DAMPER KW KILOWATT
5. INSPECT JOB SITE PRIOR TO BIDDING TO DETERMINE EXACT JOB REQUIREMENTS. SEE ARCHITECTURAL DRAWINGS FOR CONSTRUCTION DETAILS.	BE RESTORED TO ORIGINAL CONDITION OR REPLACED. ALL PROTECTIVE COVERINGS SHALL BE REMOVED BEFORE FINAL ACCEPTANCE.	ABBREVIATIONS - CONTROLS
ARCHITECTURAL DRAWING DIMENSIONS SHALL GOVERN IN ALL CASES. COORDINATE ENGINEERING DRAWINGS WITH ARCHITECTURAL DRAWINGS FOR ALL EQUIPMENT LAYOUTS	7. PROVIDE ALL CUTTING AND PATCHING OF WALLS, FLOORS, CEILINGS, AND ROOFS AS	ADDREVIATIONS - CONTROLS AI ANALOG INPUT EC ELECTRONICALLY COMMUTATED
AND LOCATIONS.	NEEDED TO INSTALL MECHANICAL SYSTEMS. PATCHING WORK SHALL INCLUDE METHODS AND MATERIALS NEEDED FOR AFFECTED SURFACES TO MATCH ADJACENT AREAS. SEAL	AO ANALOG OUTPUT ENTH ENTHALPY AR ANALOG REGISTER
7. LAYOUTS AND ROUTINGS SHOWN ON THE PLANS ARE APPROXIMATE AND GENERAL IN NATURE.	AROUND ALL EXTERIOR WALL PENETRATIONS WEATHER-TIGHT. 8. COORDINATE ALL ROOFING WORK WITH OWNER OR RESPONSIBLE PARTY, SO THAT ROOF	FLA FULL LOAD AMPS BI BINARY INPUT
8. CONTRACTOR IS RESPONSIBLE FOR REVIEWING AND UNDERSTANDING ALL DRAWINGS AND	WARRANTY WILL BE MAINTAINED.	BO BINARY OUTPUT HR HEATING WATER RETURN HS HEATING WATER SUPPLY
ASPECTS OF THE PROJECT SCOPE, AND FOR INCLUDING IN HIS BID ALL WORK ASSOCIATED WITH HIS TRADE, REGARDLESS OF WHICH DRAWING OR SHEET IT IS SHOWN ON.	9. FIELD SUPPORT ALL MECHANICAL SYSTEM EQUIPMENT AND MATERIALS FROM STRUCTURE.	CALC CALCULATION HW HEATING WATER CO2 CARBON DIOXIDE CRTL CONTROL P PUMP
9. COORDINATE WORK WITH ALL OTHER TRADES. EACH SUBCONTRACTOR SHALL REVIEW ENTIRE DRAWING SET AND AVOID CONFLICTS WITH OTHER TRADES.	10. CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.	PA PRIMARY AIR DA DISCHARGE AIR PH PHASE
10. REPRESENTATIVES FROM APPLICABLE TRADES SHALL BE AVAILABLE FOR BAS, PLC,	11. OPERATION AND MAINTENANCE MANUALS: A. DURING THE COURSE OF CONSTRUCTION, COLLECT AND COMPILE OPERATING	DDC DIRECT DIGITAL CONTROL PID PROPORTIONAL-INTEGRAL-DERIVATIV DIFF DIFFERENTIAL POT POTENTIOMETER
MECHANICAL AND FIRE ALARM SYSTEMS VALIDATION, COMMISSIONING AND TESTING. 11. REPRESENTATIVES FROM APPLICABLE TRADES SHALL ASSIST EQUIPMENT	INSTRUCTIONS, WIRING, DIAGRAMS, CATALOG CUTS, LUBRICATION AND PREVENTATIVE MAINTENANCE INSTRUCTIONS, PARTS LISTS, ETC. FOR ALL EQUIPMENT FURNISHED	GENERAL FIRE PROTECTION NOTES
MANUFACTURERS WITH SET-UP, TESTING, AND CLEAN-UP ACTIVITIES.	UNDER THIS CONTRACT. B. ALL LITERATURE AND INSTRUCTION SHIPPED WITH THE EQUIPMENT SHALL BE SAVED	ALL WORK & MATERIALS SHALL BE IN COMPLIANCE WITH STATE & LOCAL CODE REQUIREMENTS. SUBCONTRACTOR SHALL OBTAIN & PAY FOR ALL PERMITS & INSPECTION
12. CONTRACTOR SHALL COMPLY WITH THE FOLLOWING PROJECT SPECIFICATIONS: 12.1.01 3000 ADMINISTRATIVE REQUIREMENTS	FOR INCLUSION IN THE OPERATION AND MAINTENANCE MANUALS. C. ALL LITERATURE LISTED ABOVE AND ALL PAPERS LISTING WARRANTIES, ETC. SHALL BE BOUND IN A 3-RING BINDER AND LABELED WITH THE PROJECT NAME, ADDRESS,	FEES AS NECESSARY FOR CONSTRUCTION.
12.2.01 4000 QUALITY REQUIREMENTS 12.3.01 4533 CODE-REQUIRED SPECIAL INSPECTIONS AND PROCEDURES	ARCHITECT, ENGINEER, CONTRACTORS, ETC. 1	2. ALL FIRE PROTECTION SYSTEMS & COMPONENTS SHALL BE IN COMPLIANCE WITH NFPA SECTIONS 13, & 24 AS WELL AS LOCAL FIRE PREVENTION REQUIREMENTS.
12.4.01 6000 PRODUCT REQUIREMENTS 12.5.01 7000 EXECUTION AND CLOSEOUT REQUIREMENTS 12.6.01 7800 CLOSEOUT SUBMITTALS	12. MANUFACTURERS, MODEL NUMBERS, ETC. INDICATES OR SCHEDULED ON THE DRAWINGS SHALL BE INTERPRETED AS HAVING ESTABLISHED A STANDARD OF QUALITY AND SHALL NOT	3. FIRE SPRINKLER CONTRACTOR SHALL VERIFY WITH CURRENT NFPA THE SPRINKLER HEAD SPACING & DENSITY FOR ALL OCCUPANCY TYPES.
13. REFER TO ARCHITECTURAL CONSTRUCTION DOCUMENTS FOR MORE INFORMATION.	BE CONSTRUCTED AS LIMITING COMPETITION, ARTICLES, FIXTURES, ETC., OF EQUAL QUALITY BY MANUFACTURERS SHALL BE ACCEPTABLE, SUBJECT TO STRUCTURAL AND ELECTRICAL CONSTRAINTS OF THE PROJECT DESIGN, UNLESS NOTED OTHERWISE.	4. SUBCONTRACTOR SHALL DO ALL NECESSARY CUTTING & PATCHING, AS WELL AS ALL 4. SUBCONTRACTOR SHALL DO ALL NECESSARY CUTTING & PATCHING, AS WELL AS ALL
FIRE PENETRATION NOTES	13. CONDENSATE DRAIN PIPING TO BE FIELD ROUTED TO NEAREST DRAIN RECEPTACLE. REFER	NECESSARY PIPE & EQUIPMENT SUPPORTS.
THIS PROJECT CONTAINS FIRE RATED ASSEMBLIES. LOCATIONS ARE INDICATED ON	TO PLUMBING SHEETS FOR WASTE/VENT PIPING AND LOCATIONS.	5. PRESSURE TEST MODIFICATIONS TO EXISTING SYSTEM & REPAIR ANY LEAKS. SUBCONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO PROPERTY & PERSONNEL CAUSED BY FAULTY INSTALLATION OR MATERIALS.
ARCHITECTURAL PLANS. 2. ALL CONTRACTORS SHALL PROVIDE PROTECTION FOR THEIR PENETRATIONS THRU THESE	14. MECHANICAL PIPING: A. SOME PIPING MAY HAVE BEEN SHOWN OFFSET FOR CLARITY.	6. THE SPRINKLER SUBCONTRACTOR SHALL REFER TO PLANS & MAKE ADJUSTMENTS TO
ASSEMBLIES AS FOLLOWS. A. FOR ALL PENETRATIONS THRU OR INTO FIRE RATED VERTICAL OR HORIZONTAL ASSEMBLIES:	 B. PROVIDE OFFSETS AND TRANSITIONS AS NECESSARY TO AVOID OBSTRUCTIONS. C. FIELD VERIFY EXACT ROUTING OF PIPING. MOUNT PIPING FROM STRUCTURE ABOVE AS HIGH AS POSSIBLE UNLESS NOTED OTHERWISE. ROUTE PIPING PARALLEL OR 	NUMBER, TYPE, & LOCATION OF HEADS, TO COMPLY WITH LOCAL CODES & NEW CONSTRUCTION. HE SHALL ALSO COORDINATE HIS FINAL SHOP DRAWINGS WITH THE OTHE
a. A UL LISTED PENETRATION FIRESTOP SYSTEM SHALL BE INSTALLED AS TESTED IN ACCORDANCE WITH ASTM E814 OR UL 1479 (IBC 714.3)	PERPENDICULAR TO BUILDING LINES. D. USE CLEVIS-STYLE HANGERS TO SUPPORT PIPING EVERY 6'-0" WITH INSULATION	TRADES TO AVOID CONFLICT WITH HIS PIPING & THE LIGHTS, PIPING, CONDUITS, & DUCTWORK OF OTHER RESPECTIVE SUBCONTRACTORS ON THIS PROJECT. SHOP
b. GENERAL CONTRACTOR TO PROVIDE AND MAINTAIN A BOOK WITH ALL FIRE PENETRATION PROTECTIVE SYSTEMS THAT WILL BE USED ON THIS PROJECT. THIS	PROTECTION SHIELDS AND ALL-THREAD RODS FROM STRUCTURE ABOVE, NOT FROM OTHER PIPING, DUCTWORK, CONDUIT, AND SO FORTH. DO NOT SUPPORT OTHER	DRAWINGS & APPLICABLE HYDRAULIC CALCULATIONS THAT ARE SEALED BY A FIRE PROTECTION CONSULTANT & PROFESSIONAL ENGINEER SHALL BE SUBMITTED FOR OWNER'S APPROVAL FOR ALL SPRINKLER SYSTEM MODIFICATIONS.
BOOK MUST REMAIN ON SITE AT ALL TIMES.	PIPING, CEILING GRID, DUCTWORK, CONDUIT, AND SO FORTH FROM PIPING. E. PROVIDE DIELECTRIC CONNECTIONS BETWEEN FERROUS AND NONFERROUS PIPING. F. PROPERLY DISPOSE OF ALL REFRIGERANT IN ACCORDANCE WITH EPA 40 CFR 82.	7. AS REQUIRED, FIRE STOPPING SHALL BE DONE BY METHODS REQUIRED BY LOCAL
	1. THE END OF SELECTION IN ACCOMMING WITH EFA 40 CFR 02.	AUTHORITIES. FIRE STOP MATERIALS SHALL BE HILTI SILICONE ELASTOMER OR EQUAL.
		PROVIDE FIRE STOPPING AT ALL FLOOR & WALL PENETRATIONS. 9. SUBMIT CERTIFICATION UPON COMPLETION OF FIRE PROTECTION PIPING WORK WHICH
		INDICATES THAT WORK HAS BEEN TESTED IN ACCORDANCE WITH NFPA 13, AND ALSO THAT THE SYSTEM IS OPERATIONAL, COMPLETE, AND WITHOUT DEFECTS.
		10. PROVIDE REQUIRED UNDERGROUND WATER SERVICE LINE AT THE LOCATION(S) INDICATED
		ON THE DRAWING. CONSULT WITH THE CITY WATER DEPARTMENT AND LOCAL AUTHORITIES WITH RESPECT TO NECESSARY MATERIALS AND LABOR TO CONFORM WITH ALL LOCAL BEOLUBEMENTS.
		REQUIREMENTS. 11. PROVIDE FIRE DEPARTMENT CONNECTION THROUGH EXTERIOR BUILDING WALL WHERE
		SHOWN ON THE PLANS. COORDINATE THE EXACT LOCATION, PIPE THREADS AND FITTINGS WITH THE LOCAL FIRE DEPARTMENT TO ENSURE EXACT MATCH.
		12. SPRINKLER HEAD TEMPERATURE RATINGS SHALL BE APPROPRIATE FOR THE AMBIENT CONDITIONS IN THE IMMEDIATE AREAS.
		13. INSTALL HANGERS AND SUPPORTS FOR SPRINKLER PIPING ACCORDING TO NFPA 13.
		COMPLY WITH REQUIREMENTS FOR HANGER MATERIALS IN NFPA 13.

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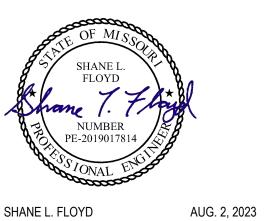
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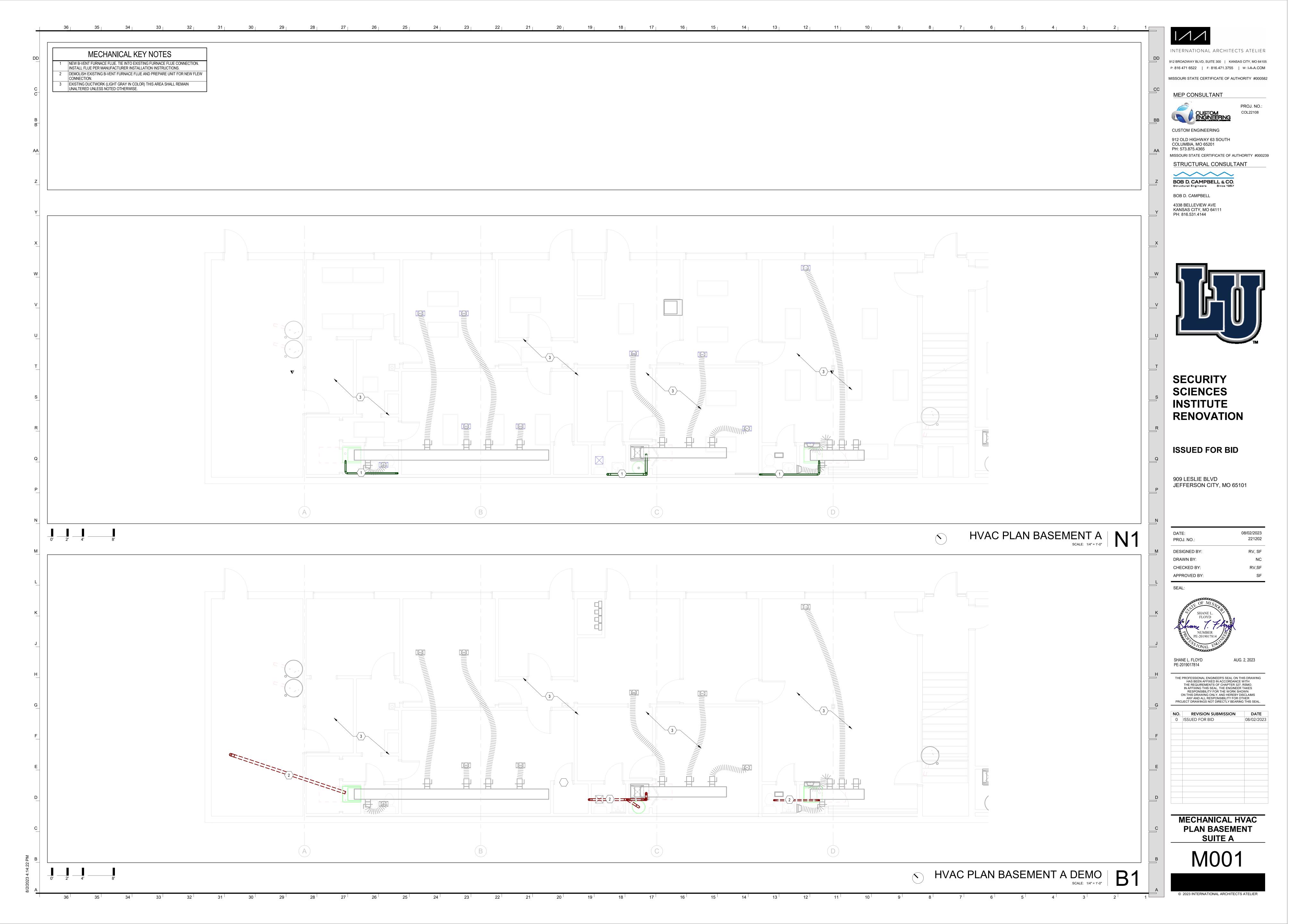
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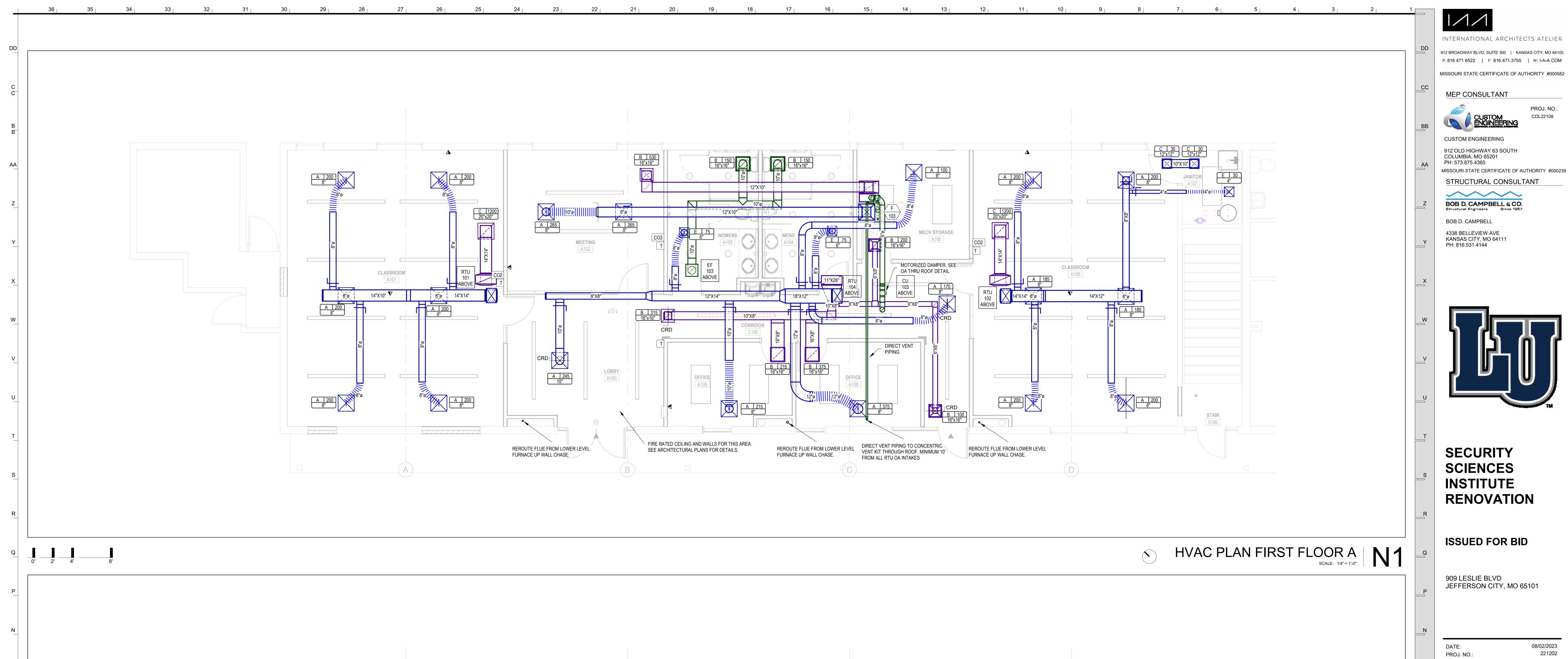
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MECHANICAL NOTES, SPECIFICATIONS, AND LEGENDS





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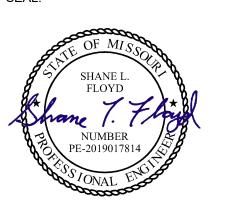


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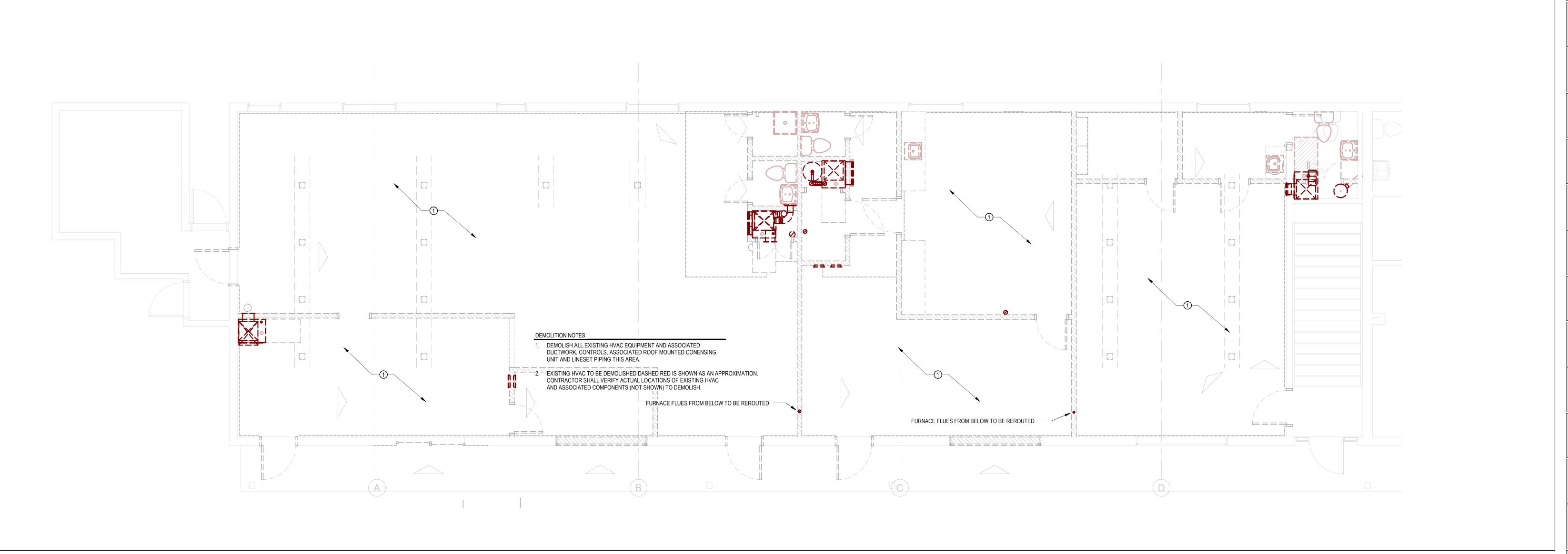
SHANE L. FLOYD PE-2019017814 AUG. 2, 2023

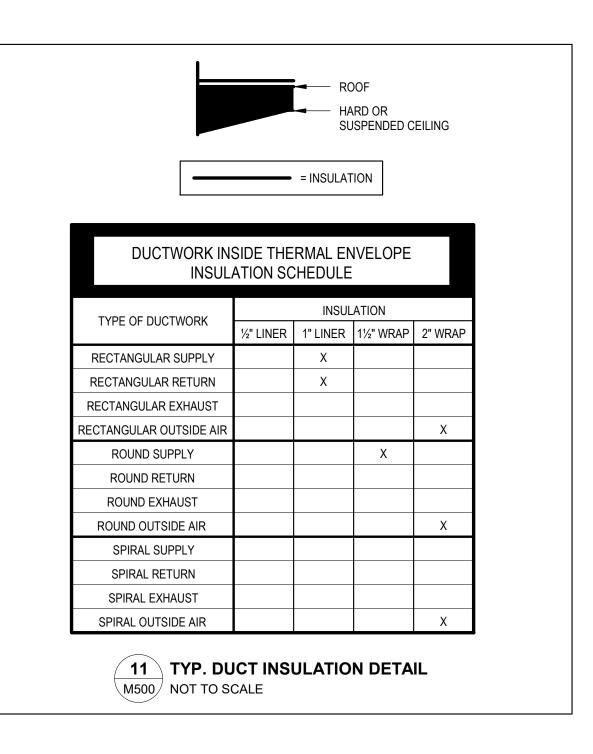
THE PROFESSIONAL ENGINEER'S SEAL ON THIS DRAWING HAS BEEN AFFIXED IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 327, RSMO. IN AFFIXING THIS SEAL, THE ENGINEER TAKES RESPONSIBILITY FOR THE WORK SHOWN ON THIS DRAWING ONLY, AND HEREBY DISCLAIMS ANY AND ALL RESPONSIBILITY FOR OTHER PROJECT DRAWINGS NOT DIRECTLY BEARING THIS SEAL.

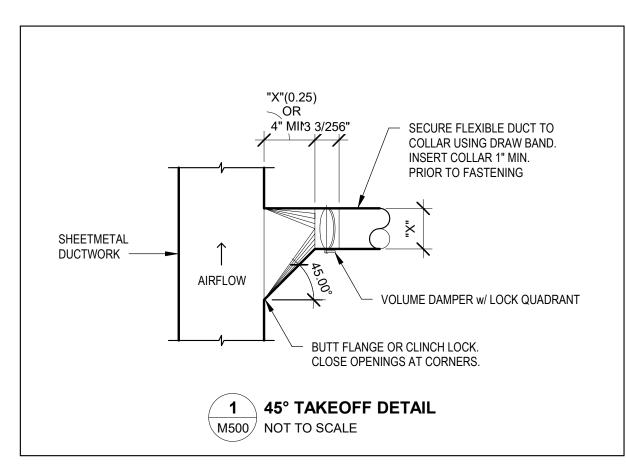
NO. REVISION SUBMISSION 0 ISSUED FOR BID

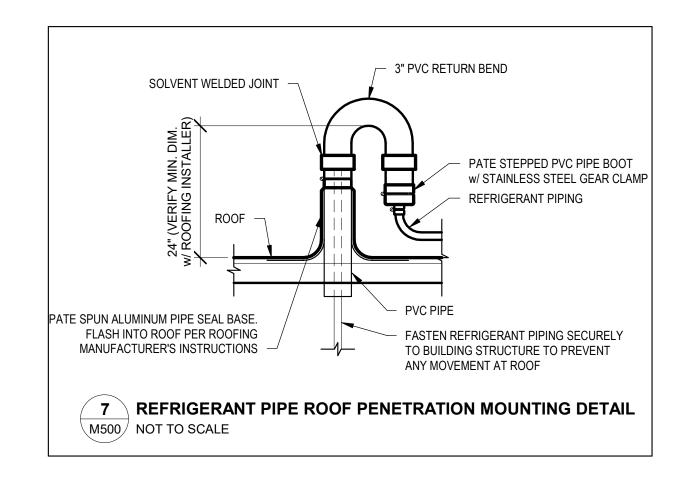
MECHANICAL HVAC **PLAN FIRST FLOOR** SUITE A

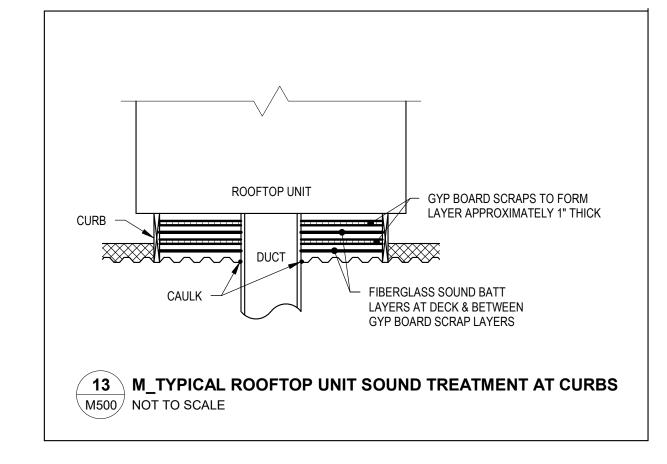
M101

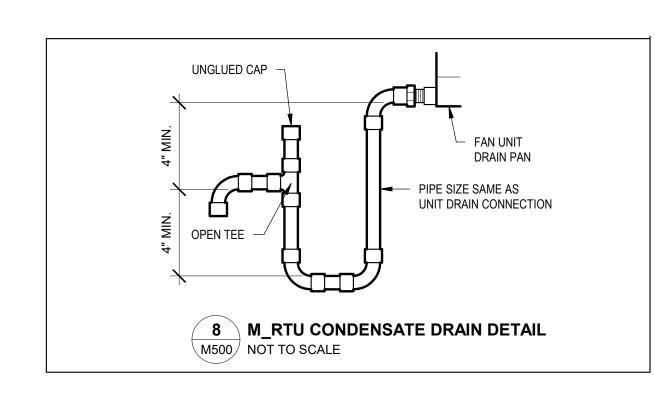


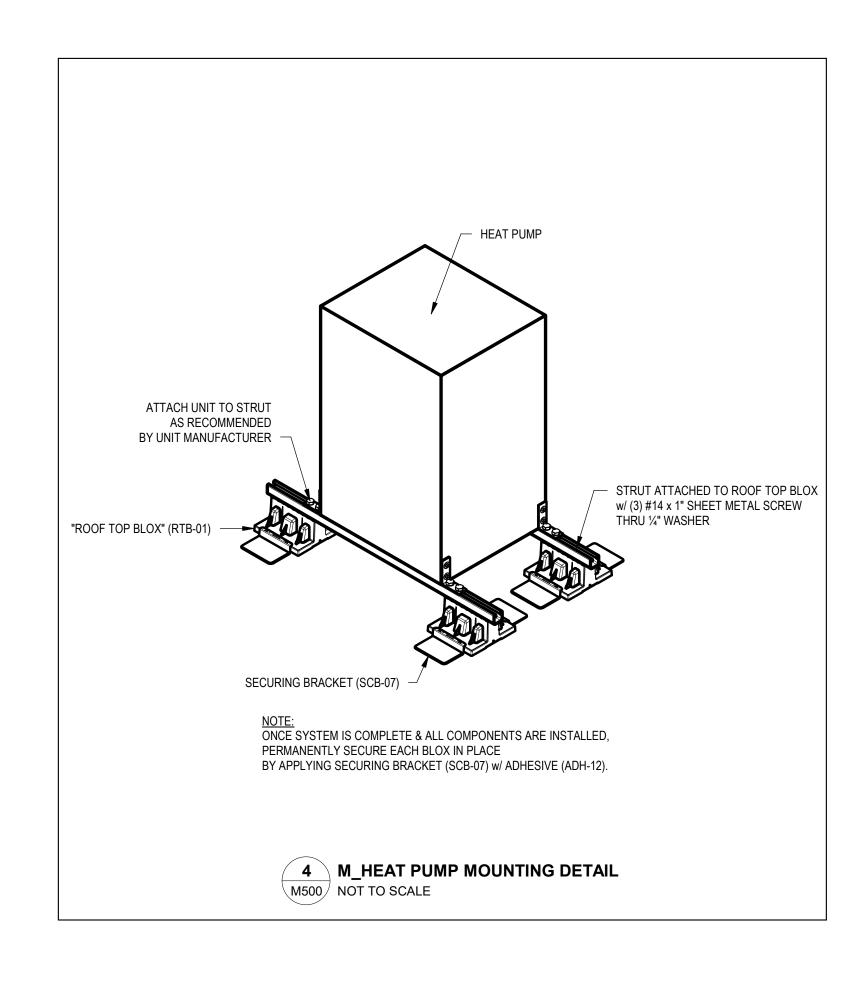


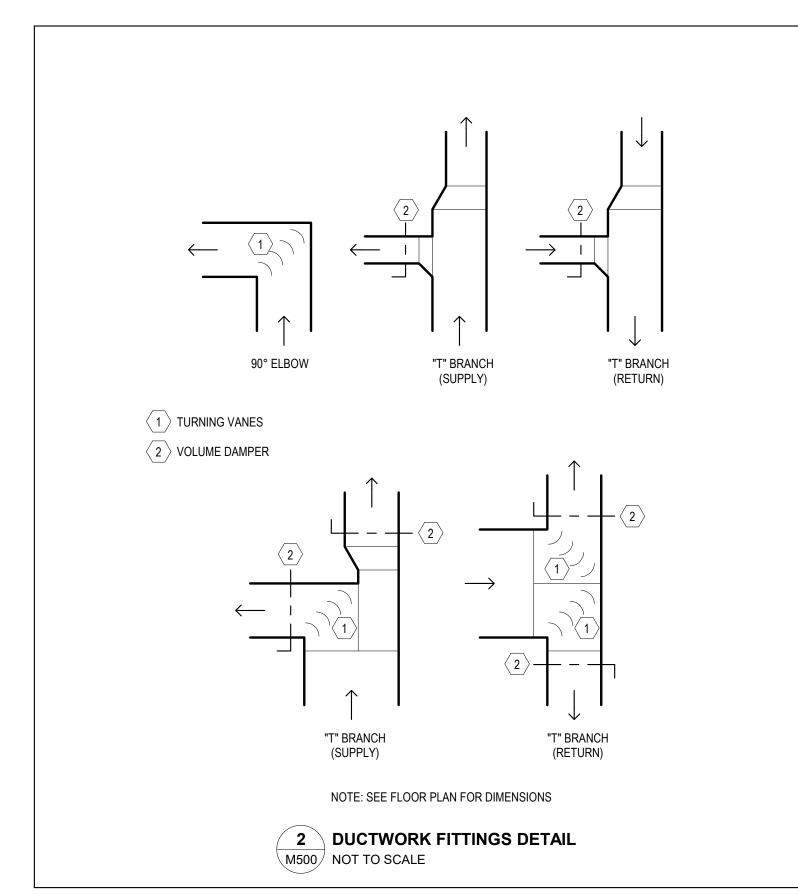


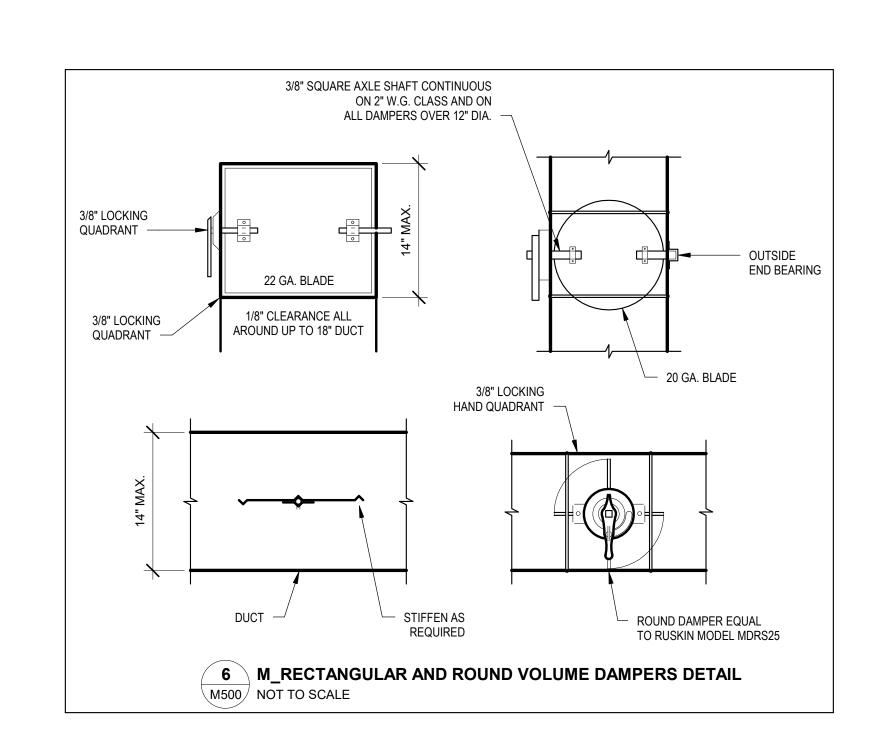


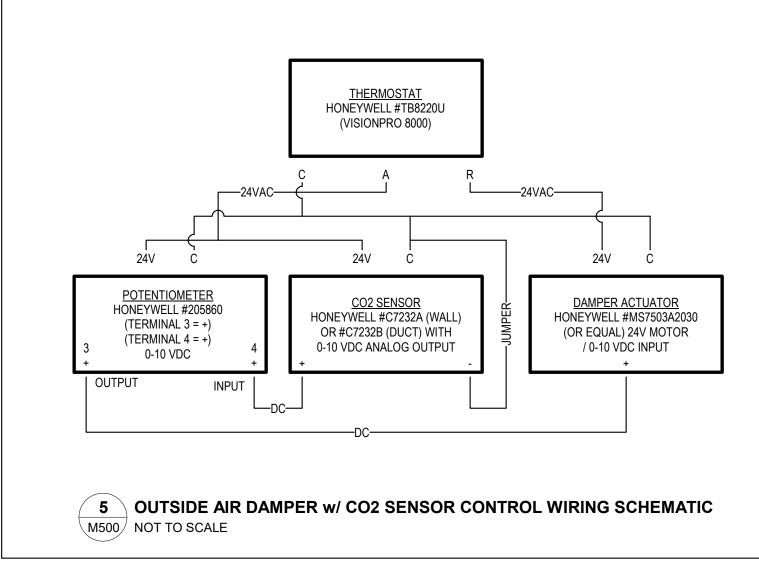


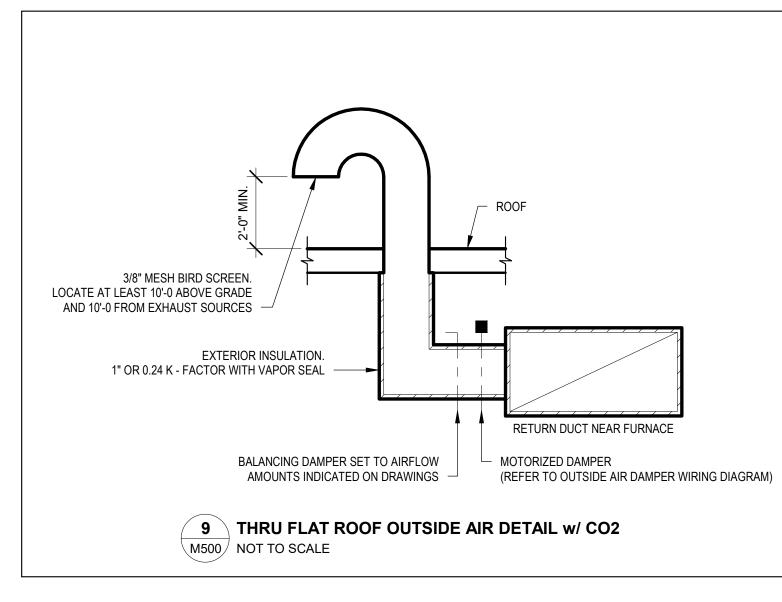


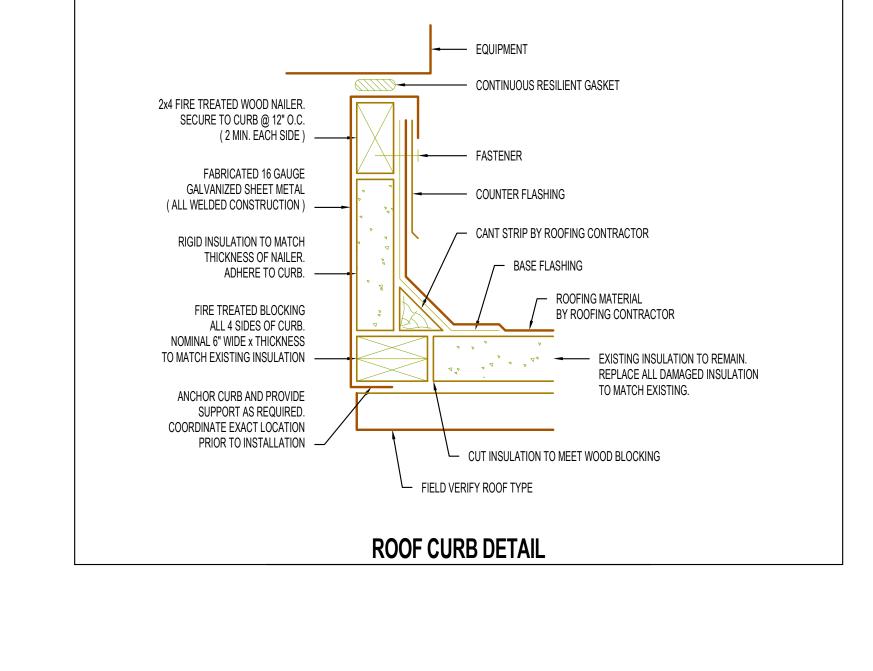


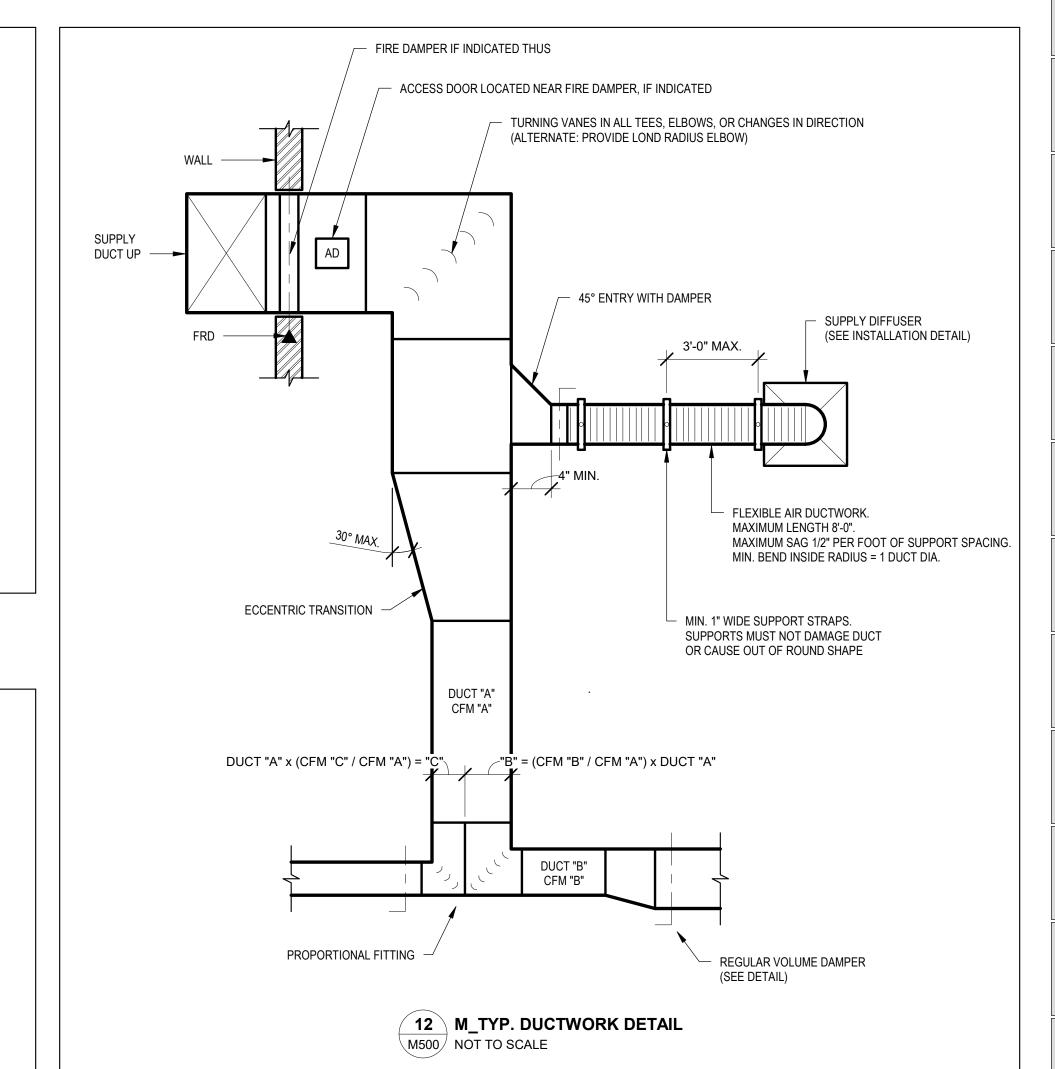














INTERNATIONAL ARCHITECTS ATELIER

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MISSOURI STATE CERTIFICATE OF AUTHORITY #000582

PROJ. NO.: COL22108

MEP CONSULTANT

CUSTOM

CUSTOM ENGINEERING
912 OLD HIGHWAY 63 SOUTH
COLUMBIA, MO 65201
PH: 573.875.4365

PH: 573.875.4365

MISSOURI STATE CERTIFICATE OF AUTHORITY #000239

STRUCTURAL CONSULTANT

BOB D. CAMPBELL & CO.

BOB D. CAMPBELL

4338 BELLEVIEW AVE
KANSAS CITY, MO 64111
PH: 816.531.4144



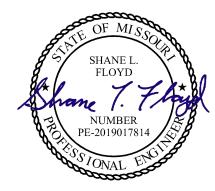
SECURITY SCIENCES INSTITUTE RENOVATION

ISSUED FOR BID

909 LESLIE BLVD JEFFERSON CITY, MO 65101

DATE:	08/02/2023
PROJ. NO.:	221202
DESIGNED BY:	RV, SF
DRAWN BY:	NC
CHECKED BY:	RV,SF
APPROVED BY:	SF

SEAL:



SHANE L. FLOYD AUG. 2, 2023 PE-2019017814

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NO. REVISION SUBMISSION

0	ISSUED FOR BID	08/02/2023

MECHANICAL DETAILS

M500

DIFFUSER NECK	SIZING SCHEDULE
MAX CFM	NECK SIZE
90	6" DIA
200	8" DIA
350	10" DIA
500	12" DIA

AIR BALANCE CALCULATION (CFM)				
SOURCE	INTAKE	EXHAUST	NET	NET %
RTU-101	50		50	
RTU-102	50		50	
F-103	15		15	
RTU-104	110		110	
EF-100		200	-200	
TOTAL	225	-200	25	11%

	AIR DEVICES SCHEDULE										
MARK	MFR.*	MODEL*	MOUNTING	SERVICE	THROW	FACE SIZE	MATERIAL	FINISH	REMARKS		
Α	PRICE	SPD	CEILING	SUPPLY	8'	20X20	STEEL	WHITE	WITH BUTTERFLY DAMPER		
В	PRICE	80	CEILING	RETURN / EXHAUST		16X16	ALUMINUM	WHITE			
С	PRICE	80	CEILING	RETURN	622	20X20	ALUMINUM	WHITE			
E	PRICE	SPD	CEILING	SUPPLY	6'	12X12	STEEL	WHITE	WITH BUTTERFLY DAMPER		
* OR APPRO	VED EQUAL			100							
** INDICATE	S DIFFUSER CONNECTION	SIZE									

ION FLOW	CFM		NOTES		
TEOW	Crw	VOLTS	AMPS	MAX CKT	NUIES
FAN DOWNBLAS	ST 200	120	5	15	1
			VOLTS	VOLTS AMPS	VOLTS AMPS MAX CKT

EQUAL TO JENCO #SDB STYLE ROOF EXHAUSTER WITH BACKDRAFT DAMPER. 3/8"SP, DIRECT DRIVE,

	SPLIT SYSTEM EQUIPMENT SCHEDULE														
MARK	RK DESCRIPTION FL	FLOW	TONS	0514	OA CFM	HEATING (GAS)		COOLING (80/67 DB/WB)		ELECTRICAL			PHYSICAL		NOTES
IVIARIN	DESCRIPTION	FLOW	10113	CFM		KBTU IN	KBTU OUT	KBTU SEN	KBTU TOT	VOLTS	AMPS	MAX CKT	DIM'S (LxW)	WEIGHT	NOIES
F-103	FURNACE	UP	1.5	600	65 / 15	40	37	1.EX		120	9.0	20	15x29	120	1,2,3,4
CU-103	CONDENSING UNIT	· ·	1.5					14	18	208/1	12.0	20	37x23	125	5,6
HVAC NOTE	ES:														

- THE HVAC CONTRACTOR IS REQUIRED TO SEND THE ELECTRICIAN COPY OF SUBMITTAL DATA, CLEARLY INDICATING THE ELECTRICAL REQUIRMENTS FOR ALL HVAC EQUIPMENT. THIS MUST BE SENT WITHIN 1 WEEK OF RECIEPT OF SUBMITTAL APPROVAL. THIS MUST BE SENT WITHIN 1 WEEK OF RECIEPT OF SUBMITTAL APPROVAL.
- 1.) HONEYWELL #TH8320R1003 (VISIONPRO 8000) PROGRAMMABLE THERMOSTAT, SET TO RUN FAN CONTINUOUSLY DURING OCCUPIED HOURS.
- 2.) 90%+EFFICIENCY, CONDENSING FURNACE WITH CORROSION-PROOF CONDENSATE DRAIN PAN, AND LIFETIME HEAT-EXCHANGER WARRANTY.
- 3.) MOTORIZED OUTSIDE AIR DAMPER
- 4.) CO2 DETECTOR HONEYWELL #C7232A, 24V, WALL OR DUCT MOUNTED TO OPEN & CLOSE MOTORIZED OUTSIDE AIR DAMPER TO PROVIDE FRESH AIR AMOUNTS AS REQUIRED. BY CO2 LEVELS. SET OA DAMPER MAX/MIN POSITION TO AMOUNTS SHOWN. OTHER UNITS SHALL BE BALANCED TO FLOWS SHOWN ON PLAN.

5.)	13.4 SEER2 MIN., AND HAIL GUARDS	
6.)	LOW AMBIENT CONTROLS TO 0 DEG. F	

	ROOFTOP UNIT SCHEDULE																
MARK DESCRIPTION	DESCRIPTION	TONS	MIN. EFFICIENCY SEER2	MIN # COOLING STAGES	FLOW	CFM	OA CFM (MAX/MIN)	HEATIN	HEATING (GAS)		COOLING 67°WB, 80°DB, 95°F AMBIENT		ELECTRICAL			PHYSICAL	
			SLLKZ	COOLING STAGES				KBTU IN KBT	KBTU OUT	KBTU SEN KBT	КВТИ ТОТ	VOLTS	AMPS	MAX ACR BREAKER	WEIGHT (LBS)	BS) DIMENSIONS (LxWxH)	
RTU-101	ROOFTOP UNIT	3	13.4	1	DOWN	1200	180 / 50	90	73	28	40.8	240/1	29	40	512	75x45x34	1,2,3,4,5,7
RTU-102	ROOFTOP UNIT	3	13.4	1	DOWN	1200	180 / 50	90	73	28	40.8	240/1	29	40	512	75x45x34	1,2,3,4,5,7
RTU-104	ROOFTOP UNIT	4	13.4	1	DOWN	1,255	110	90	73	31.5	47.9	240/1	42	60	573	75x45x34	1,2,3,4,5,6,7,8

- THE HVAC CONTRACTOR IS REQUIRED TO SEND THE ELECTRICIAN COPY OF SUBMITTAL DATA, CLEARLY INDICATING THE ELECTRICAL REQUIRMENTS FOR ALL HVAC EQUIPMENT. THIS MUST BE SENT WITHIN 1 WEEK OF RECIEPT OF SUBMITTAL APPROVAL.

DISCONNECT SWITCH.

- 1.) HONEYWELL #TH8320R1003 (VISIONPRO 8000) PROGRAMMABLE THERMOSTAT, SET TO RUN FAN CONTINUOUSLY DURING OCCUPIED HOURS.
- 2.) FACTORY MOUNTED DISCONNECT, SS OR RESIN-BASED DRAIN PAN, AND HAIL GUARDS
- 3.) ECONOMIZER WITH SINGLE DRY BULB CONTROL, SET TO ENABLE ECONOMIZER AT 65° OAT, AND BAROMETRIC RELIEF SIZED AT 100% OF SUPPLY FLOW.
- 4.) WITH FACTORY 14" CURB
- 5.) CO2 DETECTOR HONEYWELL #C7232A, 24V, RETURN-DUCT MOUNTED TO OPEN & CLOSE MOTORIZED OUTSIDE AIR DAMPER TO PROVIDE FRESH AIR AMOUNTS AS REQUIRED BY CO2 LEVELS. SET OA DAMPER MAX/MIN POSITION TO AMOUNTS SHOWN.
- 6.) WITH HOT-GAS REHEAT COIL / DEHUMIDIFICATION OPTION.
- 7.) IECC 2015 COMPLIANT, WITH ECONOMIZER FAULT DETECTION AND NOTIFICATION 8.) PROVIDE WITH GFCI PROTECTED CONVENIENCE RECEPTACLE, WIRED THRU WEATHERPROOF ROOF RECEPTACLE CIRCUIT AS SHOWN ON PLAN.

Duilding	III.eei		Duildings	
Building: System Tag/Name:	LU SSI RTU-101 / RM: 101		Building: System Tag/Name:	F-103 / RM: 102
Operating Condition Description:	K10-1017 KW, 101		Operating Condition Description:	1-100 / Km. 102
Units (select from pull-down list)	IP		Units (select from pull-down list)	IP
munda fan Cuadam	Manuel Haite	Custom	Inputs for System	Name Units System
Inputs for System Floor area served by system	Name Units As sf	System 635	Floor area served by system	Name Units As sf System 229
Population of area served by system (including diversity)	Ps P 100% diversity	26	Population of area served by system (including diversity)	Ps P 100% diversity 10
Design primary supply fan airflow rate	Vpsd cfm	800	Design primary supply fan airflow rate	Vpsd cfm 600
OA req'd per unit area for system (Weighted average)	Ras cfm/sf	0.06	OA req'd per unit area for system (Weighted average)	Ras cfm/sf 0.06
OA reg'd per person for system area (Weighted average)	Rps cfm/p	5.0	OA req'd per person for system area (Weighted average)	Rps cfm/p 5.0
Inputs for Potentially Critical zones		Potentially Critical Zones	Inputs for Potentially Critical zones	Potentially Critical Zones
Zone Name	Zone title turns purple italic for critical zone(s)	enter name enter name	Zone Name	Zone title turns purple italic for critical zone(s) enter name enter name
Zone Tag		entertag entertag	Zone Tag	enter tag enter tag
Space type		Conference/mee Office space	Space type	Select from pull-down list Conference/mee ting
NAME OF THE OWNER OWNER OF THE OWNER OWNE	Select from pull-down list	ting	Floor Area of zone	Select from pull-down list Az sf ting 229
Floor Area of zone Design population of zone	Az sf Pz P (default value listed; may be overridder	035	Design population of zone	Pz P (default value listed; may be overridden) 10 0
Design total supply to zone (primary plus local recirculated)	Vdzd cfm	800	Design total supply to zone (primary plus local recirculated)	Vdzd cfm 600
Induction Terminal Unit, Dual Fan Dual Duct or Transfer Fan?	Select from pull-down list or leave blank if N/A	333	Induction Terminal Unit, Dual Fan Dual Ductor Transfer Fan?	Select from pull-down list or leave blank if N/A
Local recirc. air % representative of ave system return air	Er	199	Local recirc. air % representative of ave system return air	Er e
Inputs for Operating Condition Analyzed		,	Inputs for Operating Condition Analyzed	
Percent of total design airflow rate at conditioned analyzed	Ds %	100% 100% 100%		Ds % 100% 100% 100%
Air distribution type at conditioned analyzed	Select from pull-down list	CSCRH CS		Select from pull-down list CSCRH CS
Zone air distribution effectiveness at conditioned analyzed	Ez	0.80 1.00	Zone air distribution effectiveness at conditioned analyzed Primary air fraction of supply air at conditioned analyzed	Ez 0.80 1.00 Ep
Primary air fraction of supply air at conditioned analyzed	Ep		Results	i e-p
Ventilation System Efficiency	Ev	0.95	Ventilation System Efficiency	Ev 0.97
Outdoor air intake required for system	Vot cfm	177 ←MAXIMUM OA REQUIRED	Outdoor air intake required for system	Vot cfm 65 ←MAXIMUM OA REQUIRED
Outdoor air per unit floor area	Vot/As cfm/sf	0.28	Outdoor air per unit floor area	Vot/As cfm/sf 0.29
Outdoor air per person served by system (including diversity)	Vot/Ps cfm/p	6.8	Outdoor air per person served by system (including diversity)	Vot/Ps cfm/p 6.5
Outdoor air as a % of design primary supply air	Ypd cfm	22%	Outdoor air as a % of design primary supply air	Ypd cfm 11%
	42	·		
Building:	LU SSI		Building:	LU SSI
System Tag/Name:	LU SSI RTU-102 / RM: 106		System Tag/Name:	LU SSI RTU-104 / RM: 103,104,105,107,108,109,110
System Tag/Name: Operating Condition Description:	200 (200 (200 (200 (200 (200 (200 (200		The second secon	
System Tag/Name: Operating Condition Description: Units (select from pull-down list)	RTU-102 / RM: 106		System Tag/Name: Operating Condition Description: Units (select from pull-down list)	RTU-104 / RM: 103,104,105,107,108,109,110 IP
System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System	IP Name Units	System	System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System	RTU-104 / RM: 103,104,105,107,108,109,110 IP Name Units System
System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system	RTU-102 / RM: 106 IP Name Units As sf	660	System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system	RTU-104 / RM: 103,104,105,107,108,109,110
System Tag/Name: Operating Condition Description: Units (select from pull-down list) nputs for System Floor area served by system Population of area served by system (including diversity)	RTU-102 / RM: 106	660 26	System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system Population of area served by system (including diversity)	RTU-104 / RM: 103,104,105,107,108,109,110
System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system Population of area served by system (including diversity) Design primary supply fan airflow rate	RTU-102 / RM: 106 IP Name Units As sf Ps P 100% diversity Vpsd cfm	660 26 800	System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system Population of area served by system (including diversity) Design primary supply fan airflow rate	RTU-104 / RM: 103,104,105,107,108,109,110
System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system Population of area served by system (including diversity) Design primary supply fan airflow rate OA req'd per unit area for system (Weighted average)	RTU-102 / RM: 106 IP Name Units As sf Ps P 100% diversity Vpsd cfm Ras cfm/sf	660 26	System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system Population of area served by system (including diversity) Design primary supply fan airflow rate OA req'd per unit area for system (Weighted average)	RTU-104 / RM: 103,104,105,107,108,109,110
System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system Population of area served by system (including diversity) Design primary supply fan airflow rate OA req'd per unit area for system (Weighted average) OA req'd per person for system area (Weighted average)	RTU-102 / RM: 106 IP Name Units As sf Ps P 100% diversity Vpsd cfm	660 26 800 0.06	System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system Population of area served by system (including diversity) Design primary supply fan airflow rate	RTU-104 / RM: 103,104,105,107,108,109,110
System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system Population of area served by system (including diversity) Design primary supply fan airflow rate OA req'd per unit area for system (Weighted average)	RTU-102 / RM: 106 IP Name Units As sf Ps P 100% diversity Vpsd cfm Ras cfm/sf	660 26 800 0.06 5.0	System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system Population of area served by system (including diversity) Design primary supply fan airflow rate OA req'd per unit area for system (Weighted average) OA req'd per person for system area (Weighted average)	Name Units System As sf 847 Ps P 100% diversity 31 Vpsd cfm 1,475 Ras cfm/sf 0.07 Rps cfm/p 0.8
System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system Population of area served by system (including diversity) Design primary supply fan airflow rate OA req'd per unit area for system (Weighted average) OA req'd per person for system area (Weighted average) Inputs for Potentially Critical zones	RTU-102 / RM: 106 IP Name Units As sf Ps P 100% diversity Vpsd cfm Ras cfm/sf Rps cfm/p	660 26 800 0.06 5.0 Potentially Critical Zones enter name enter tag enter tag	System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system Population of area served by system (including diversity) Design primary supply fan airflow rate OA req'd per unit area for system (Weighted average) OA req'd per person for system area (Weighted average) Inputs for Potentially Critical zones	Name Units System
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System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system Population of area served by system (including diversity) Design primary supply fan airflow rate OA req'd per unit area for system (Weighted average) OA req'd per person for system area (Weighted average) Inputs for Potentially Critical zones Zone Name Zone Tag Space type	RTU-102 / RM: 106 IP Name Units As sf Ps P 100% diversity Vpsd cfm Ras cfm/sf Rps cfm/p Zone title turns purple italic for critical zone(s) Select from pull-down list	660 26 800 0.06 5.0 Potentially Critical Zones enter name enter tag enter tag	System Tag/Name: Operating Condition Description: Units (select from pull-down list) Inputs for System Floor area served by system Population of area served by system (including diversity) Design primary supply fan airflow rate OA req'd per unit area for system (Weighted average) OA req'd per person for system area (Weighted average) Inputs for Potentially Critical zones Zone Name Zone Tag Space type	Name Units System As sf System As sf System Sy
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909 LESLIE BLVD JEFFERSON CITY, MO 65101

DATE: PROJ. NO.:	08/02/2023 221202
DESIGNED BY:	SF
DRAWN BY:	NC
CHECKED BY:	SF
APPROVED BY:	SF

SEAL:



SHANE L. FLOYD PE-2019017814 AUG. 2, 2023

THE PROFESSIONAL ENGINEER'S SEAL ON THIS DRAWING
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ANY AND ALL RESPONSIBILITY FOR OTHER
PROJECT DRAWINGS NOT DIRECTLY BEARING THIS SEAL.

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MECHANICAL SCHEDULES

GENERAL DEMOLITION NOTES LIGHTING SYMBOLS GENERAL ELECTRICAL NOTES THIS IS A GENERAL LEGEND SHEET. SOME SYMBOLS AND ABBREVIATIONS MAY NOT BE DEMOLITION PLANS SHOW THE GENERAL EXTENT OF THE ELECTRICAL DEMOLITION WORK. HATCH AND 'E' DENOTES EMERGENCY FIXTURE USED ON THIS SPECIFIC PROJECT. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT ELECTRICAL SERVICES TO ALL EQUIPMENT BEING REMOVED, SEE MECHANICAL PLANS. OWNER SHALL HAVE THE OPTION RECESSED CEILING MOUNTED LIGHT FIXTURES ALL WORK SHALL CONFORM WITH THE MOST CURRENT NATIONAL ELECTRICAL CODE AND TO RETAIN REUSABLE ITEMS, SUCH AS COVER PLATES, RECEPTACLES, LIGHTS, PANELS, ALL STATE AND LOCAL CODES AND ORDINANCES AND O.S.H.A. WHERE MINIMUM CODE ETC. NOT BEING USED IN THE FINISHED WORK. COORDINATE WITH OWNER PRIOR TO SURFACE CEILING MOUNTED LIGHT FIXTURES REQUIREMENTS ARE EXCEEDED BY THE REQUIREMENTS INDICATED IN THE STARTING DEMOLITION. PROPERLY AND LEGALLY DISPOSE OF ALL EQUIPMENT AND SPECIFICATIONS AND ON THESE DRAWINGS. THE DRAWINGS AND SPECIFICATIONS SHALL MATERIALS BEING REMOVED. LED STRIP FIXTURE TAKE PRECEDENCE. (IN THE CASE OF CODE CONFLICT DIRECTION SHALL BE TAKEN FROM E.C. SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOLLOWING THE MORE STRICT OF THE CONFLICTING CODES). Ю WALL MOUNTED LIGHT FIXTURE THE REQUIREMENTS FOR DEMOLITION WORK WITHIN THE GOVERNING MUNICIPALITY. CAREFULLY REVIEW CONTRACT DOCUMENTS INCLUDING DRAWINGS & PROJECT MANUAL CEILING MOUNTED EXIT LIGHT INFORMATION REGARDING WORK OF THE VARIOUS TRADES & SUBCONTRACTORS ARE E.C. SHALL BE TOTALLY RESPONSIBLE FOR SAFE PROCEDURES, PRACTICES AND DISPERSED THROUGHOUT THE DOCUMENTS & CANNOT BE ACCURATELY DETERMINED OPERATION. FOR ALL EXISTING ELECTRICAL DEVICES TO BE REMOVED. E.C. SHALL $+\otimes$ WALL MOUNTED EXIT LIGHT WITHOUT REFERENCE TO THE FULL SET OF DOCUMENTS. CONTRACTOR SHALL PROTECT ALL SURFACES, FURNISHINGS, EQUIPMENT, ETC. ADJACENT TO DEMOLITION COORDINATE INSTALLATION OF UTILITIES TO PROVIDE THE GREATEST POSSIBLE AREAS FROM DAMAGE. $\mathop{\sharp}\otimes\mathop{\sharp}$ CLEARANCE FOR INSTALLATION OF THE MECHANICAL, PIPING, ETC. CONDUIT & PIPE TO BE EXIT LIGHT. ARROW INDICATES THE DIRECTION THE CHEVRON POINTS. IF WALL MOUNTED - CENTERLINE 90" RUN TO MAXIMIZE USE OF CEILING SPACE FOR USE BY OTHER TRADES. FOR ALL EXISTING ELECTRICAL DEVICES TO BE REMOVED, E.C. SHALL VERIFY PANEL AND CIRCUIT NUMBERS IN THE EXISTING ELECTRICAL PANELS AND ISOLATE WIRING AT THE CONDUIT ROUTES SHOWN ARE DIAGRAMMATIC ONLY. CONTRACTOR SHALL FIELD VERIFY BREAKERS, CONTRACTOR SHALL REMOVE ALL CABLE AND ACCESSIBLE EXPOSED CONDUIT EMERGENCY LIGHT FIXTURE WITH BATTERY BACKUP. AND PROVIDE CONDUIT ROUTES AS REQUIRED. CONTRACTOR IS RESPONSIBLE FOR BETWEEN END DEVICE AND IT'S UPSTREAM POWER SOURCE. REMOVE ALL ELECTRICAL MOUNT 90" AFF TO CENTERLINE U.N.O. ROUTING ALL CONDUITS NOT SHOWN ON THE DRAWINGS, INCLUDING BUT NOT LIMITED TO APPURTENANCES (DISCONNECT, STARTER, WIRING, CONDUIT, CONDUIT STRAPS, ETC.) CONDUITS SHOWN ON THE ONE-LINE AND CONTROL DIAGRAMS AS WELL AS HOME RUNS ASSOCIATED WITH THE DEVICE AND / OR EQUIPMENT THAT IS BEING REMOVED. PROVIDE SINGLE POLE WALL SWITCH - 42" AFF U.N.O., "a" INDICATES SHOWN ON THE PLAN DRAWINGS, CONDUITS SHALL BE ROUTED AS DEFINED IN THE BLANK METAL COVER PLATES FOR ALL JUNCTION BOXES NO LONGER IN USE THAT ARE SPECIFICATIONS. EMBEDDED IN CONCRETE OR MASONRY WALLS. PROVIDE PLUGS FOR ALL PANELS WHERE CONDUIT HAS BEEN REMOVED. COVER PLATES SHALL BE PAINTED TO MATCH EXISTING 3-WAY WALL SWTCH - 42" AFF U.N.O. WHERE EXISTING CIRCUITS, CONDUCTORS, CONDUITS, JUNCTION BOXES, PANELS, SWITCHES AND OTHER EQUIPMENT CONFLICTS WITH NEW CONSTRUCTION, EXISTING EQUIPMENT SHALL BE RELOCATED TO MAINTAIN FUNCTION AND SERVICE. DIMMER WALL SWITCH - 42" AFF U.N.O. REFER TO SPECIFICATIONS FOR REMOVAL AND ABATEMENT REQUIREMENTS OF HAZARDOUS ENVIRONMENTAL CONDITIONS. WALL MOUNTED OCCUPANCY SENSOR SWITCH - 42" AFF AT THE CONCLUSION OF THIS PROJECT PROVIDE AN UPDATED TYPEWRITTEN, AS-BUILT DIRECTORY INSIDE EACH PANELBOARD/SWITCHBOARD PROPERLY IDENTIFYING EACH FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO BEGINNING WORK. CIRCUIT USED & THE SPECIFIC LOAD SERVED. ALSO PROVIDE SCHEDULES ON CD DISK. OC) CEILING MOUNTED OCCUPANCY SENSOR ALL DEVICES SHOWN COVERED BY HATCH LINES ON THE DEMOLITION PLAN(S) SHALL BE FIELD VERIFY EXACT LOCATION OF ALL FLOOR PENETRATIONS PRIOR TO ROUGH-IN REMOVED, UNLESS NOTED OTHERWISE. \Rightarrow DUPLEX CONVENIENCE RECEPTACLE - 18" AFF UNO INSTALLATION. "XX" DESIGNATES TYPE E.C. SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOLLOWING OPENINGS SHALL BE CUT TO THE EXACT SIZE REQUIRED IN ORDER TO MAINTAIN ANY THE REQUIREMENTS FOR DEMOLITION WORK WITHIN THE GOVERNING MUNICIPALITY. GFCI RECEPTACLE "XX" DESIGNATES TYPE MATERIAL RATINGS AND SEALED TO MAINTAIN RATING. PROVIDE ALL NECESSARY FLOOR CUTTING/PENETRATIONS AND ALL OF THE RE-PATCHING FOR THE COMPLETE EXECUTION E.C. SHALL BE TOTALLY RESPONSIBLE FOR SAFE PROCEDURES, PRACTICES AND ISOLATED GROUND RECEPTACLE "XX" DESIGNATES TYPE OF THIS WORK. OPERATION. FOR ALL EXISTING ELECTRICAL DEVICES TO BE REMOVED. E.C. SHALL PROTECT ALL SURFACES, FURNISHINGS, EQUIPMENT, ETC. ADJACENT TO DEMOLITION SPLIT RECEPTACLE "XX" DESIGNATES TYPE ALL EXIT AND EMERGENCY LIGHTS SHALL BE CONNECTED TO AN UN-SWITCHED CIRCUIT AREAS FROM DAMAGE. SERVING THIS AREA. EMERGENCY RECEPTACLE "XX" DESIGNATES TYPE FOR ALL EXISTING ELECTRICAL DEVICES TO BE REMOVED, E.C. SHALL VERIFY PANEL AND CONCEAL ALL ELECTRICAL WIRING AND RACEWAYS WHERE CONSTRUCTION PERMITS. CIRCUIT NUMBERS IN THE EXISTING ELECTRICAL PANELS AND ISOLATE WIRING AT THE WP -WEATHERPROOF RECEPTACLE "XX" DESIGNATES TYPE EXPOSED RACEWAY SHALL BE MINIMIZED WHERE STRUCTURE IS EXPOSED TO VIEW. BREAKERS. CONTRACTOR SHALL REMOVE ALL CABLE AND ACCESSIBLE EXPOSED CONDUIT WHERE NECESSARY, CAREFULLY INSTALL RACEWAYS PARALLEL TO WALLS, BEAMS AND BETWEEN END DEVICE AND IT'S UPSTREAM POWER SOURCE. REMOVE ALL ELECTRICAL SINGLE RECEPTACLE - 18" AFF UNO COLUMNS. EXPOSED RACEWAY SHALL BE HELD TIGHT TO STRUCTURE & LOCATED SO AS TO APPURTENANCES (WIRING, CONDUIT, CONDUIT STRAPS, ETC.) ASSOCIATED WITH THE KEEP IT AS INCONSPICUOUS AS POSSIBLE. DEVICE AND/OR EQUIPMENT THAT IS BEING REMOVED. PROVIDE BLANK METAL COVER FOURPLEX CONVENIENCE RECEPTACLE - 18" AFF UNO PLATES FOR ALL JUNCTION BOXES NO LONGER IN USE THAT ARE EMBEDDED IN CONCRETE PROVIDE FIRESTOPPING TO MAINTAIN FIRE RATINGS AT ALL PENETRATIONS OF RATED OR MASONRY WALLS. PROVIDE PLUGS FOR ALL PANELS WHERE CONDUIT HAS BEEN CT ← DUPLEX CONVENIENCE RECEPTACLE - ABOVE COUNTER CONSTRUCTION. REMOVED. COVER PLATES SHALL BE PAINTED TO MATCH EXISTING CONDITIONS. DUPLEX RECEPTACLE - CEILING MOUNTED 12. ALL SPARE WIRES SHALL BE TAPED AND COILED. 1. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO BEGINNING WORK. DUPLEX RECEPTACLE - FLOOR MOUNTED 13. COORDINATE ALL DEVICES AND WIRING WITH EQUIPMENT NAMEPLATE DATA. VERIFY THE 12. CONTRACTOR SHALL REMOVE ALL DEMOLISHED ELECTRICAL EQUIPMENT FROM THE SITE ELECTRICAL LOADS, MOUNTING HEIGHTS AND NEMA CONFIGURATIONS WITH THE PLUMBING AND DISPOSE OF PROPERLY. RANGE RECEPTACLE AND OTHER CONTRACTORS AND SUPPLIERS PRIOR TO ROUGH-IN. CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS AND RELOCATION REQUIRED TO SPECIAL PURPOSE RECEPTACLE 14. PROVIDE FINAL CONNECTION, WIRING, HOOK-UP, ETC. FOR ALL EQUIPMENT AND CONTROLS MAINTAIN ALL ELECTRICAL CIRCUITS TO AREAS OUTSIDE DEMOLITION. REQUIRING ELECTRICAL POWER TO OPERATE. PATCH HOLES AFTER REMOVAL OF ELECTRICAL EQUIPMENT IN AREAS OF DEMOLITION. JUNCTION BOX 5. FURNISH AND INSTALL ALL WIRE, WIREWAY, CONDUIT, CONNECTORS, OUTLETS, ETC. TELEPHONE OUTLET - 18" AFF UNO NECESSARY TO ACHIEVE A COMPLETE AND WORKING INSTALLATION. 5. ALL DEVICES AND EQUIPMENT LOCATED IN THE DEMOLITION PLAN SHALL BE REMOVED. DATA OUTLET - 18" AFF UNO 16. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH A PULL WIRE OR STRING. 16. NOT ALL EQUIPMENT MAY BE SHOWN. CONTRACTOR SHALL VISIT THE SITE BEFORE 7. ALL ELECTRICAL DEVICES IN PUBLIC AREAS SHALL BE MOUNTED PER A.D.A. BIDDING AND BECOME FAMILIAR WITH THE SCOPE OF DEMOLITION REQUIREMENTS. CARD READER EXISTING ELECTRICAL SYSTEMS LAYOUT, LOCATION AND SIZES ARE BASED ON AS-BUILT DOCUMENTS AND LIMITED FIELD SURVEYS. DUE TO HIDDEN CONDITIONS AT TIME OF B. ALL EXTERIOR MOUNTED ELECTRICAL DEVICES AND EQUIPMENT SHALL BE IN FIRE ALARM HORN-STROBE WEATHERPROOF ENCLOSURE AND U.L. LISTED FOR WET LOCATION AND/OR UL/NEMA 3R SURVEY, CONTRACTOR SHALL ADVISE ENGINEER OF RECORD OF ANY FIELD CONDITIONS OF AFFECTED SYSTEMS THAT ARE NOT REFLECTED IN THIS SET OF DOCUMENTS PRIOR TO FIRE ALARM STROBE DEMOLITION OF THE SYSTEM AND BEFORE THE START OF NEW WORK TO THE SYSTEM. 9. CONTRACTOR SHALL REFER TO ARCHITECTS DETAILS AND ELEVATIONS FOR POWER/LIGHTING PANELBOARD COORDINATION OF LOCATION OF ALL WIRING DEVICES BEFORE ROUGH-IN OF J-BOXES. PROVIDE MATCHING BLANK COVER PLATES WHERE DEVICES ARE BEING REMOVED FROM EXISTING WALLS TO REMAIN. DISTRIBUTION PANEL OR MAIN SWITCH GEAR 20. NO "PIGGYBACK" BREAKERS SHALL BE ALLOWED. GENERAL CONSTRUCTION NOTES DISCONNECT SWITCH 21. ALL SINGLE-PHASE CIRCUITS SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR. ALL ELECTRICAL WORK SHALL CONFORM WITH LOCAL AND STATE ELECTRICAL CODES, COMBINATION MAGNETIC MOTOR STARTER 22. ALL FEEDERS SHALL HAVE A SEPARATE COPPER GROUNDING CONDUCTOR INSTALLED. IN O.S.H.A., AND THE LATEST NATIONAL ELECTRICAL CODE AND ELECTRICAL SPECIFICATIONS. NO CASE SHALL THE CONDUIT OR RACEWAY BE USED AS THE GROUNDING CONDUCTOR. *\O*< MOTOR ALL ELECTRICAL LIGHT AND POWER WIRE SHALL NOT BE SMALLER THAN #12 A.W.G. 23. ALL ELECTRICAL LIGHTING WIRE SHALL NOT BE SMALLER THAN #12A.W.G. TIN-PLATED COPPER. ALUMINUM CONDUCTORS SHALL NOT BE PERMITTED. ALL SERVICE, FEEDER, CONTACTOR COPPER WIRE. AND BRANCH CIRCUIT CONDUCTORS SHALL HAVE TYPE THWN/THHN (90 DEGREE) INSULATION. LIGHTING FIXTURE WIRE INSULATION SHALL HAVE A TEMPERATURE RATING THERMOSTAT 24. ALUMINUM CONDUCTORS SHALL NOT BE PERMITTED. NOT LESS THAN THE INDIVIDUAL LIGHTING FIXTURE'S MANUFACTURER RECOMMENDED RATING. NON-METALLIC CABLE IS NOT PERMITTED. TIME SWITCH 25. NON-METALLIC CABLE IS NOT PERMITTED. E.C. SHALL FURNISH AND INSTALL, FOR WORK DESIGNATED AS HIS RESPONSIBILITY, ALL 26. COLOR AND MATERIAL FOR ALL SWITCHES, AND COVER PLATES SHALL BE SELECTED BY **ABBREVIATIONS** WIRE, WIREWAY, CONDUIT, CONNECTORS, OUTLETS, ETC. NECESSARY TO ACHIEVE A COMPLETE ELECTRICAL INSTALLATION. WHERE AN ELECTRICAL DEVICE IS REQUIRED BY CODE BUT NOT SHOWN, IT SHALL BE FURNISHED AND INSTALLED BY E.C. AS THOUGH FULLY ABOVE COUNTER THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING ALL CONDUITS NOT SHOWN ON SHOWN AND SPECIFIED. ABOVE FINISHED FLOOR THE PLANS. THIS SHALL INCLUDE ALL CONDUITS SHOWN ON THE ONE-LINES AND ABOVE FINISHED GRADE HOMERUNS SHOWN ON THE PLAN DRAWINGS. CONDUITS SHALL BE ROUTED AS INDICATED THE TERM "E.C." IN THESE NOTES REFERS TO THE ELECTRICAL SUBCONTRACTOR. ON THE DRAWINGS AND DEFINED IN THE SPECIFICATIONS. ELECTRICAL CONTRACTOR SHALL COORDINATE THIS WORK WITH THE MECHANICAL ELECTRICAL CONTRACTOR 18. IN AREAS WHERE OVERHEAD BRIDGE CRANES OPERATE CONDUIT SHALL BE ROUTED TO CONTRACTOR. **EXISTING** AVOID INTERFERENCE. IN AREAS WHERE GENERAL MAINTENANCE ACTIVITY OCCURS, FIRE ALARM CONTROL PANEL CONDUIT SHALL BE ROUTED TO AVOID OR MINIMIZE THE POTENTIAL INTERFERENCE. ELECTRICAL CONNECTION TO ALL EQUIPMENT SUPPLIED BY OTHERS SHALL BE THE GENERAL CONTRACTOR RESPONSIBILITY OF THE E.C. UNLESS OTHERWISE NOTED. GROUND FAULT CIRCUIT INTERRUPTER 29. INSTALL ANY / ALL CORD SETS SUPPLIED WITH THE EQUIPMENT. GROUND FAULT INTERRUPTER COORDINATE WIRING OF THERMOSTATS WITH THE MECHANICAL SUBCONTRACTOR. GROUNDED 0. MOUNT DISCONNECT SWITCHES AND COMBINATION STARTERS AT 65" AFF. TO TOP OF KILOVOLT ENCLOSURE UNLESS OTHERWISE INDICATED. CONTRACTOR SHALL INCLUDE IN BID ALL {UTILITY COMPANY} CHARGES TO PROJECT. KILOWATT MAIN DISTRIBUTION PANEL IF EQUIPMENT SUPPLIED BY MANUFACTURER HAS A LARGER LOAD THAN VALUE SHOWN, MAIN LUGS ONLY THE CABLE CONDUIT AND ELECTRICAL EQUIPMENT SHALL BE ENLARGED, AS REQUIRED, TO NATIONAL ELECTRICAL CODE ACCOMMODATE THE HIGHER VALUE NOT TO SCALE PANELBOARD 2. INFORMATION RELATED TO CIRCUIT IDENTIFICATION, WIRE & CONDUIT SIZES, AND ROUTING, SERVICE ENTRANCE LISTED LABELED IS ON THE FOLLOWING DRAWING TYPES. **GENERAL FIRE PROTECTION NOTES** UNLESS NOTED OTHERWISE A. ONE-LINE DIAGRAMS SHOW CIRCUIT IDENTIFICATION, WIRE QUANTITY AND SIZES, AND WEATHERPROOF CONDUIT SIZE WITHIN STRUCTURES. ONE-LINE DIAGRAMS ALSO INDICATE ORIGIN AND ALL WORK & MATERIALS SHALL BE IN COMPLIANCE WITH STATE & LOCAL CODE DESTINATION OF CIRCUITS, AND IDENTIFY CIRCUITS ROUTED UNDERGROUND REQUIREMENTS. SUBCONTRACTOR SHALL OBTAIN & PAY FOR ALL PERMITS & INSPECTION LOW VOLTAGE SYSTEMS THROUGH EXISTING DUCTBANKS FEES AS NECESSARY FOR CONSTRUCTION. B. SITE PLANS INDICATE THE GENERAL ROUTING OF UNDERGROUND CONDUITS AND CONTRACTOR SHALL PROVIDE 1-INCH CONDUIT AND JUNCTION BOXES FOR ROUGH-IN ONLY ALL FIRE PROTECTION SYSTEMS & COMPONENTS SHALL BE IN COMPLIANCE WITH NFPA DUCTBANKS. CIRCUITS ROUTED IN UNDERGROUND CONDUITS OR DUCT BANKS ARE FOR LOW VOLTAGE SYSTEMS AS SHOWN ON THE PLANS. 1-INCH CONDUITS SHALL BE SECTIONS 13, & 24 AS WELL AS LOCAL FIRE PREVENTION REQUIREMENTS. INDICATED IN DUCT BANK SECTIONS REFERENCED ON THE SITE PLAN. INSTALLED IN WALLS WITH THE INTENT THAT THE LOW VOLTAGE CABLINE WILL THEN RUN ABOVE CEILINGS EXPOSED TO THE IT ROOM COMMUNICATION RACKS OR TO OTHER FIRE SPRINKLER CONTRACTOR SHALL VERIFY WITH CURRENT NFPA THE SPRINKLER HEAD C. DUCT BANK SECTIONS AND SCHEDULES IDENTIFY CONDUIT SIZE CONDUIT MATERIAL, DESIGNATED EQUIPMENT. LOW VOLTAGE SYSTEMS INCLUDE IT/DATA/PHONE SYSTEM, SPACING & DENSITY FOR ALL OCCUPANCY TYPES. ARRANGEMENT OF THE UNDERGROUND CONDUITS, AND CIRCUITS ROUTED IN EACH ACCESS CONTROL/SECURITY SYSTEM, AND A/V SYSTEM. UNDERGROUND CONDUIT. SUBCONTRACTOR SHALL DO ALL NECESSARY CUTTING & PATCHING, AS WELL AS ALL CONTRACTOR SHALL PROVIDE CONDUIT AND JUNCTION BOXES FOR ROUGH-IN ONLY FOR NECESSARY PIPE & EQUIPMENT SUPPORTS. FIRE PENETRATION NOTES DATA/PHONE LOCATIONS AS SHOWN ON THE POWER PLANS, TO OWNERS IT CLOSET IN TENANT SPACE ADJACENT TO THIS SPACE AND IN BASEMENT. COORDINATE EXACT IT PRESSURE TEST MODIFICATIONS TO EXISTING SYSTEM & REPAIR ANY LEAKS. THIS PROJECT CONTAINS FIRE RATED ASSEMBLIES. LOCATIONS ARE INDICATED ON CLOSET LOCATION WITH OWNERS IT REPRESENTATIVE. SUBCONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO PROPERTY & PERSONNEL A. ALL WORK SHALL BE COORDINATED WITH THE OWNER SUB-CONTRACTOR. ARCHITECTURAL PLANS. CAUSED BY FAULTY INSTALLATION OR MATERIALS. ALL CONTRACTORS SHALL PROVIDE PROTECTION FOR THEIR PENETRATIONS THRU THESE ASSEMBLIES AS FOLLOWS. CONTRACTOR SHALL PROVIDE CONDUIT AND JUNCTION BOXES FOR ROUGH-IN ONLY FOR THE SPRINKLER SUBCONTRACTOR SHALL REFER TO PLANS & MAKE ADJUSTMENTS TO A. FOR ALL PENETRATIONS THRU OR INTO FIRE RATED VERTICAL OR HORIZONTAL ACCESS CONTROLS AND SECURITY DEVICES AS SHOWN ON THE SECURITY PLANS TO NUMBER, TYPE, & LOCATION OF HEADS, TO COMPLY WITH LOCAL CODES & NEW ASSEMBLIES: OWNERS IT CLOSET IN TENANT SPACE ADJACENT TO THIS SPACE AND IN BASEMENT. CONSTRUCTION. HE SHALL ALSO COORDINATE HIS FINAL SHOP DRAWINGS WITH THE OTHER a. A UL LISTED PENETRATION FIRESTOP SYSTEM SHALL BE INSTALLED AS TESTED IN COORDINATE EXACT IT CLOSET LOCATION WITH OWNERS IT REPRESENTATIVE. ALL WORK TRADES TO AVOID CONFLICT WITH HIS PIPING & THE LIGHTS, PIPING, CONDUITS, & ACCORDANCE WITH ASTM E814 OR UL 1479 (IBC 714.3) SHALL BE COORDINATED WITH THE OWNER SUB-CONTRACTOR. DUCTWORK OF OTHER RESPECTIVE SUBCONTRACTORS ON THIS PROJECT. SHOP b. GENERAL CONTRACTOR TO PROVIDE AND MAINTAIN A BOOK WITH ALL FIRE DRAWINGS & APPLICABLE HYDRAULIC CALCULATIONS THAT ARE SEALED BY A FIRE PENETRATION PROTECTIVE SYSTEMS THAT WILL BE USED ON THIS PROJECT. THIS CONTRACTOR SHALL PROVIDE CONDUIT AND JUNCTION BOXES FOR ROUGH-IN ONLY FOR PROTECTION CONSULTANT & PROFESSIONAL ENGINEER SHALL BE SUBMITTED FOR BOOK MUST REMAIN ON SITE AT ALL TIMES. A/V DEVICES AS SHOWN ON THE POWER PLANS TO OWNERS IT CLOSET IN TENANT SPACE OWNER'S APPROVAL FOR ALL SPRINKLER SYSTEM MODIFICATIONS. ADJACENT TO THIS SPACE AND IN BASEMENT. COORDINATE EXACT IT CLOSET LOCATION WITH OWNERS IT REPRESENTATIVE. THE AV DEVICES SHOWN ARE FOR REFERENCE ONLY. AS REQUIRED, FIRE STOPPING SHALL BE DONE BY METHODS REQUIRED BY LOCAL FINAL LOCATIONS AND QUANTITIES WILL BE DETERMINED BY OWNER SUB-CONTRACTOR AUTHORITIES. FIRE STOP MATERIALS SHALL BE HILTI SILICONE ELASTOMER OR EQUAL. AND SHALL BE COORDINATED WITH SUB-CONTRACTOR. PROVIDE FIRE STOPPING AT ALL FLOOR & WALL PENETRATIONS. THE FOLLOWING ITEMS SHALL BE PROVIDED FOR AND INSTALLED BY THE OWNER SUB-

SUBMIT CERTIFICATION UPON COMPLETION OF FIRE PROTECTION PIPING WORK WHICH

THE SYSTEM IS OPERATIONAL, COMPLETE, AND WITHOUT DEFECTS.

WITH THE LOCAL FIRE DEPARTMENT TO ENSURE EXACT MATCH.

COMPLY WITH REQUIREMENTS FOR HANGER MATERIALS IN NFPA 13.

CONDITIONS IN THE IMMEDIATE AREAS.

REQUIREMENTS.

INDICATES THAT WORK HAS BEEN TESTED IN ACCORDANCE WITH NFPA 13, AND ALSO THAT

PROVIDE REQUIRED UNDERGROUND WATER SERVICE LINE AT THE LOCATION(S) INDICATED

WITH RESPECT TO NECESSARY MATERIALS AND LABOR TO CONFORM WITH ALL LOCAL

PROVIDE FIRE DEPARTMENT CONNECTION THROUGH EXTERIOR BUILDING WALL WHERE SHOWN ON THE PLANS. COORDINATE THE EXACT LOCATION, PIPE THREADS AND FITTINGS

SPRINKLER HEAD TEMPERATURE RATINGS SHALL BE APPROPRIATE FOR THE AMBIENT

3. INSTALL HANGERS AND SUPPORTS FOR SPRINKLER PIPING ACCORDING TO NFPA 13.

ON THE DRAWING. CONSULT WITH THE CITY WATER DEPARTMENT AND LOCAL AUTHORITIES

DWG

FACE

GFCI

I MDP

NTS

U.N.O.

CONTRACTORS AND ARE NOT INCLUDED IN THIS CONTRACT FOR LOW VOLTAGE SYSTEMS:

E. ALL A/V EQUIPMENT INCLUDING TV'S, PROJECTORS, SPEAKERS, MICROPHONES, ETC.

F. ALL ACCESS CONTROL/SECURITY EQUIPMENT INCLUDING CAMERAS, CARD READERS,

. ALL LOW VOLTAGE CABLING

B. DATA FACEPLATES AND WALL JACKS

MOTION DETECTORS, DOOR BELLS, ETC.

TERMINATIONS AND TESTING OF LOW VOLTAGE CABLING

). ALL IT EQUIPMENT INCLUDING RACKS, SWITCHES, PATCH PANELS, ETC.

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BOB D. CAMPBELL & CO.

BOB D. CAMPBELL 4338 BELLEVIEW AVE KANSAS CITY, MO 64111 PH: 816.531.4144



SECURITY

ISSUED FOR BID

909 LESLIE BLVD JEFFERSON CITY, MO 65101

DATE:	08/02/2023
PROJ. NO.:	221202
DESIGNED BY:	RV, SF
DRAWN BY:	NC
CHECKED BY:	RV,SF
APPROVED BY:	SF

SEAL:



SHANE L. FLOYD

PE-2019017814

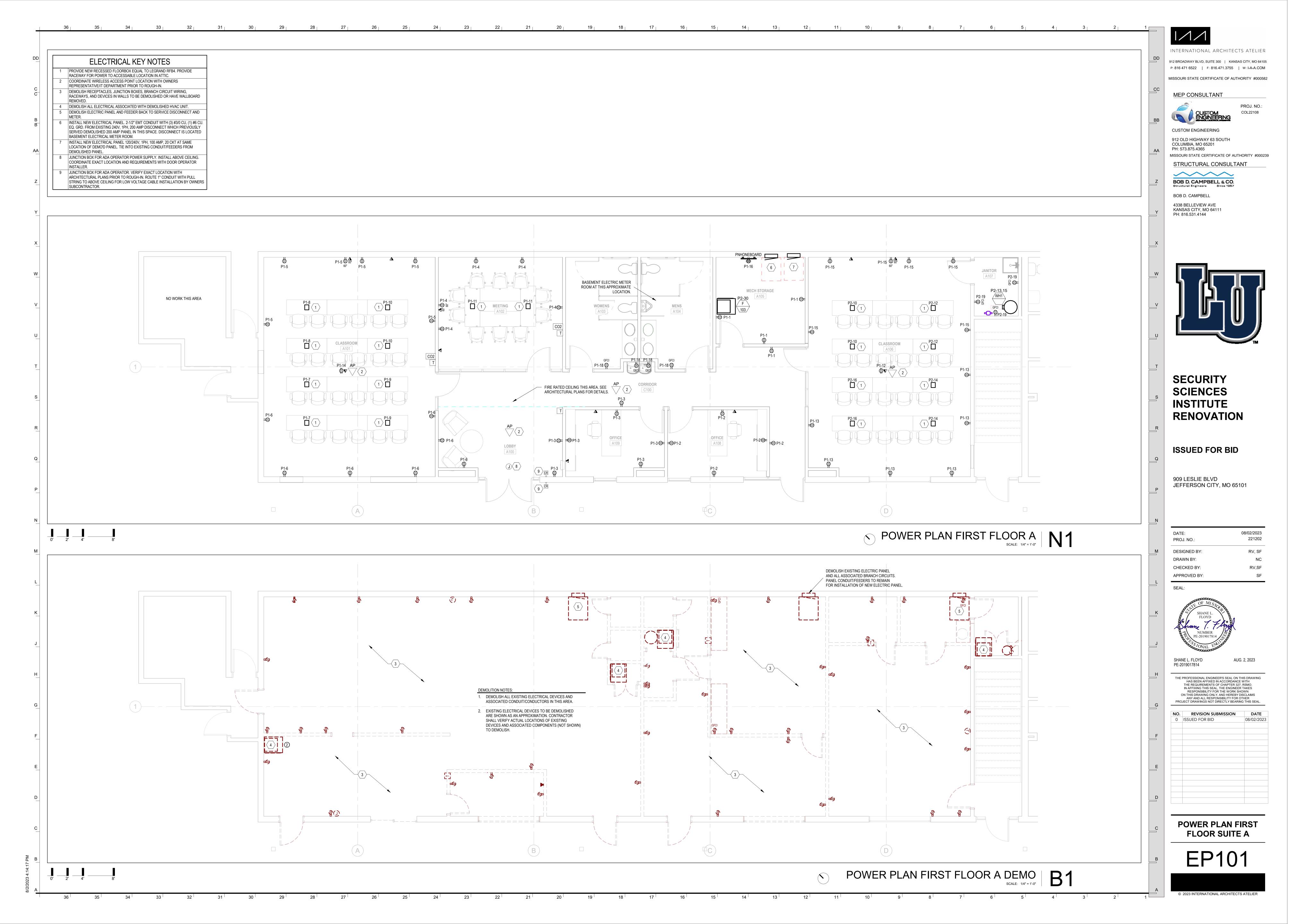
THE PROFESSIONAL ENGINEER'S SEAL ON THIS DRAWING HAS BEEN AFFIXED IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 327, RSMC IN AFFIXING THIS SEAL, THE ENGINEER TAKES RESPONSIBILITY FOR THE WORK SHOWN ON THIS DRAWING ONLY, AND HEREBY DISCLAIMS PROJECT DRAWINGS NOT DIRECTLY BEARING THIS SEAL

AUG. 2, 2023

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REVISION SUBMISSION

ELECTRICAL NOTES, SPECIFICATIONS, **AND LEGENDS**



LIGHTING KEY NOTES LIGHTING FIXTURE SCHEDULE WALL MOUNTED VACANCY SENSOR. SET TO 20 MINUTES. POWER PACK WITH LOW VOLTAGE MOTION SENSOR, SET TO VACANCY MODE WITH PUSH BUTTON DIMMER TYPE MANUFACTURER DESCRIPTION **CATALOG/SERIES NUMBER** BACKUP TYPE VOLTAGE CCT (°K) LUMENS MOUNTING FINISH OVERRIDE SWITCH. SET TO 20 MINUTES. 8' STRIP LIGHT FOCAL POINT FSM4LS-FL-1000LF-35K-1C-UNV-LD1-SM-WH 8FT DIGITAL LIGHTING MANAGEMENT CONTROL SYSTEM WITH (2) ZONES OF CONTROL. MOTION SENSORS SHALL BE 8' STRIP LIGHT WITH EMERGENCY DRIVER FSM4LS-FL-1000LF-35K-1C-UNV-LD1-SM-EM-WH SURFACE FOCAL POINT SET TO OCCUPANCY MODE. SET TO 20 MINUTES. 5 BUTTON PUSH BUTTON WALL SWITCH SHALL BE PROGRAMMED 8FT TO PROVIDE THE FOLLOWING LIGHT SCENES. {1-4 = TOP TO BOTTOM} 6" SURFACE DOWNLIGHT - 1ST BUTTON = ALL LIGHTS ON SLD612 8 35 WH UNV SURFACE - 2ND BUTTON = FRONT TWO ROW LIGHTS DIM TO 50%, BACK TWO ROWS 100% ON. METALUX 2X4 FLAT PANEL 4,990 SURFACE WHITE 24FP4735C - 3RD BUTTON = FRONT TWO ROW LIGHTS DIM TO 25%, BACK TWO ROWS DIM TO 75% ON. WALL / CEILING WHITE SURE-LITES Emergency Exit Sign APCH7 UNV R - 4TH BUTTON = ALL LIGHTS AT 50%. POWERED FROM SURE-LITES OUTDOOR REMOTE EMERGENCY HEAD APWR1 **VERIFY PROGRAMMED LIGHT LEVELS PER BUTTON WITH OWNERS REPRESENTATIVE PRIOR TO PROGRAMMING** **EMERGENCY EXIT** 4 LIGHTING FIXTURE TO BE REMOVED WITH CEILING AND REUSED IN SAME LOCATION COOPER LIGHTING EMERGENCY LIGHT AP2SQLED FOCAL POINT 5' WALL MOUNTED STRIP LIGHT FSM2LW-AS-375LF-35K-1C-UNV-LD1-WH 5FT *OR EQUAL В О P2 - 3___

> HATCH REPRESENTS FIRE RATED CEILING. SEE ARCHITECTURAL PLANS FOR DETAILS.

X	LIGHTING CONTROL SCHEDULE								
TAG	MANUFACTURER*	MODEL NO.*	DESCRIPTION	FUNCTION	MOUNTING	REMARKS			
OC1	WATTSTOPPER	DT-300	CEILING MOUNTED MOTION SENSOR	OCCUPANCY	CEILING				
OC2	WATTSTOPPER	LMDC-100	CEILING MOUNTED MOTION SENSOR	OCCUPANCY	CEILING				
RC	WATTSTOPPER	LMRC-112	2-ZONE ROOM CONTROLLER,0-10V DIMMING	ROOM CONTROL	-				
PP	WATTSTOPPER	BZ-150	POWER PACK	POWER	-				
WS1	WATTSTOPPER	DCLV2	DIMMER SWITCH	MANUAL	WALL	0-10V DIMME			
WS2	WATTSTOPPER	LMSW-105	DIGITAL WALL PUSH BUTTON SWITCH	MANUAL	WALL				
\$VC	WATTSTOPPER	DW-311	DIMMABLE WALL MOUNTED VACANCY SENSOR	VACANCY	WALL	0-10V DIMME			

TYPICAL MOUNTING HEIGHTS; MAY BE SUPERCEDED BY BID DOCUMENTS OR ADJUSTED TO SUIT ACTUAL CONDITIONS. WHEN IN DOUBT COORDINATE WITH MIDWEST ELECTRONICS PROJECT MANAGER. * ALL DEVICE FINISH COLORS SHALL BE SELECTED BY ARCHITECT.

CLASSROOM

LIGHTING PLAN FIRST FLOOR A DEMO SCALE: 1/4" = 1'-0" B1

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912 OLD HIGHWAY 63 SOUTH

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	DRAWN BY:	NC
	CHECKED BY:	RV,SF
	APPROVED BY:	SF
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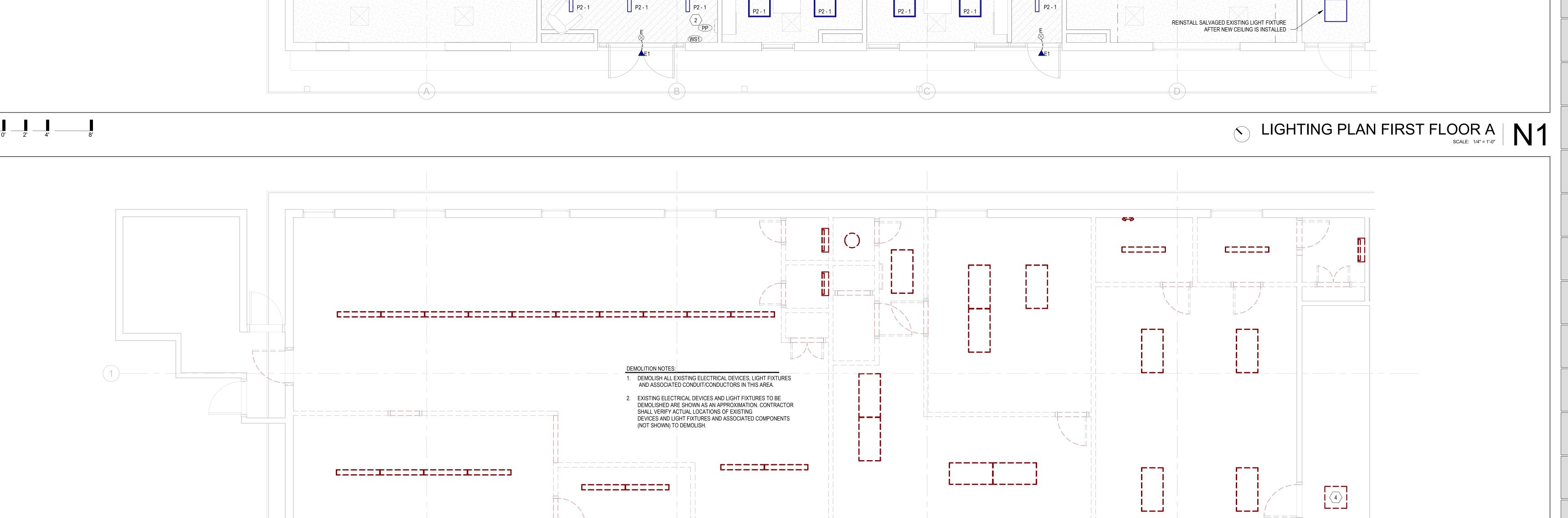


SHANE L. FLOYD PE-2019017814 AUG. 2, 2023

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	NO.	REVISION SUBMISSION	DATE
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LIGHTING PLAN FIRST FLOOR SUITE



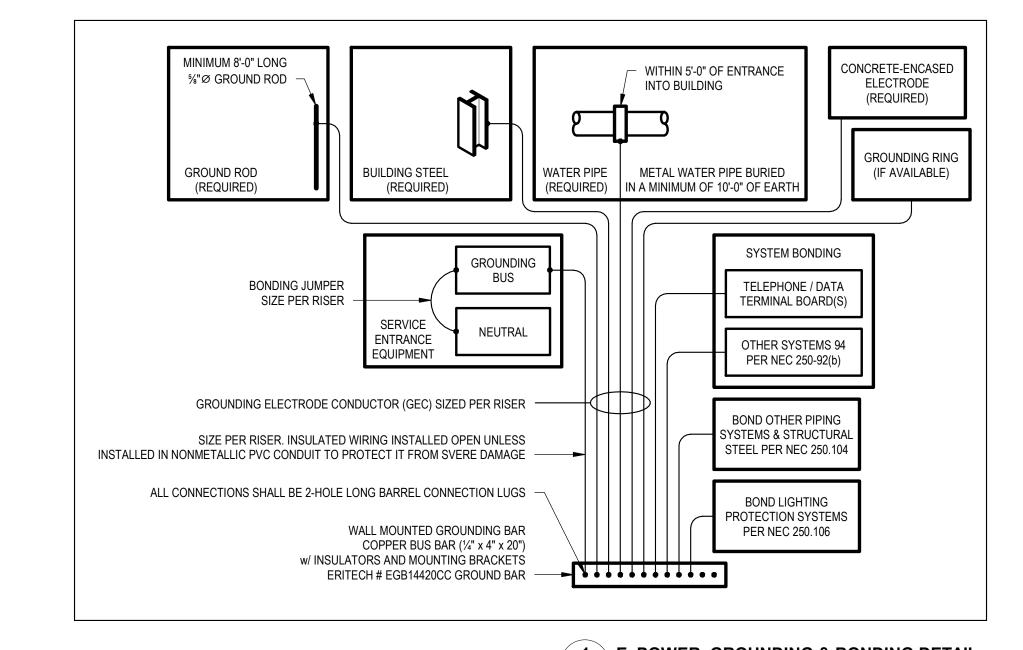
WOMENS

MENS

A104

В	ranch Panel: P1 Location: UPPER FLOOF Supply From: Mounting: RECESSED Enclosure: NEMA1	R A 169		I	Volts: Phases: Wires:	•	Single			A.I.C. Rating: Mains Type: M.L.O. Mains Rating: 100 A	
Notes:											
СКТ	Circuit Description	Trip	Poles		4	E	3	Poles	Trip	Circuit Description	СКТ
1	RCPT MECH ROOM	20 A	1	6 A	8 A			1	20 A	RCPT EAST OFFICE	2
3	RCPT WEST OFFICE	20 A	1			11 A	8 A	1	20 A	RCPT CONFERENCE ROOM	4
5	RCPT WEST CLASSROOM NORTH	20 A	1	9 A	11 A			1	20 A	RCPT WEST CLASSROOM SOUTH	6
7	FLOOR RCPT WEST CLASSROOM 3	20 A	1			6 A	6 A	1	20 A	FLOOR RCPT WEST CLASSROOM 1	8
9	FLOOR RCPT WEST CLASSROOM 4	20 A	1	6 A	6 A			1	20 A	FLOOR RCPT WEST CLASSROOM 2	10
11	FLOOR RCPT CONFERENCE ROOM	20 A	1			6 A	2 A	1	20 A	CEILING RCPT EAST CLASSROOM	12
13	RCPT EAST CLASSROOM SOUTH	20 A	1	9 A	2 A			1	20 A	CEILING RCPT WEST CLASSROOM	14
15	RCPT EAST CLASSROOM NORTH	20 A	1			9 A	2 A	1	20 A	PHONEBOARD RCPT	16
17	SPARE	20 A	1	0 A	8 A			1	20 A	RCPT BATHROOM AND WF	18
19	SPARE	20 A	1			0 A	0 A	1	20 A	SPARE	20
		Tota	al Load:	7620	AV C	5760) VA				
			l Amps:		ŀΑ	48	^	-			

Notes:	Location: UPPER FLOG Supply From: Mounting: RECESSED Enclosure: NEMA1	OR A 169		Ī	Volts: Phases: Wires:) Single			A.I.C. Rating: Mains Type: M.L.O. Mains Rating: 200 A MCB Rating: 200 A	
СКТ	Circuit Description	Trip	Poles		Δ	I	3	Poles	Trip	Circuit Description	СКТ
1	LIGHTING SOUTH	20 A	1	4 A	2 A			1	20 A	LIIGHTING WEST CLASSROOM	2
3	LIGHTING NORTH	20 A	1			3 A	3 A	1	20 A	LIGHTING EAST CLASSROOM	4
5	RTU-104	45 A	2	30 A	30 A			2	45 A	RTU-102	6
7						30 A	30 A				8
9	RTU-101	45 A	2	30 A	6 A			1	20 A	FLOOR RCPT EAST CLASSROOM 1	10
11						30 A	6 A	1	20 A	FLOOR RCPT EAST CLASSROOM 2	12
13	WH1	30 A	2	19 A	6 A			1	20 A	FLOOR RCPT EAST CLASSROOM 4	14
15						19 A	6 A	1	20 A	FLOOR RCPT EAST CLASSROOM 3	16
17	EXHAUST FAN	20 A	1	9 A	16 A			2	20 A	CU-103	18
19	RCPT JANITOR CLOSET	20 A	1			5 A	16 A				20
21	RCPT	20 A	1	3 A	0 A			1	20 A	SPARE	22
23	SPARE	20 A	1			0 A	0 A	1	20 A	SPARE	24
25	SPARE	20 A	1	0 A	0 A			1	20 A	SPARE	26
27	SPARE	20 A	1			0 A	0 A	1	20 A	SPARE	28
29	SPARE	20 A	1	0 A	11 A			1	20 A	F-103	30
31	SPARE	20 A	1			0 A	3 A	1	20 A	WP ROOF RECEPTACLE	32
33	SPARE	20 A	1	0 A	0 A			1	20 A	SPARE	34
35	SPARE	20 A	1			0 A	0 A	1	20 A	SPARE	36
37	SPARE	20 A	1	0 A	0 A			1	20 A	SPARE	38
39	SPARE	20 A	1			0 A	0 A	1	20 A	SPARE	40
41	SPARE	20 A	1	0 A	0 A			1		SPARE	42
			al Load:		3 VA	1802	25 VA				
			l Amps:		5 A		0 A	_			



1 E_POWER_GROUNDING & BONDING DETAIL NOT TO SCALE

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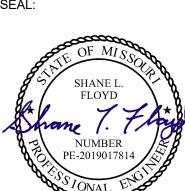
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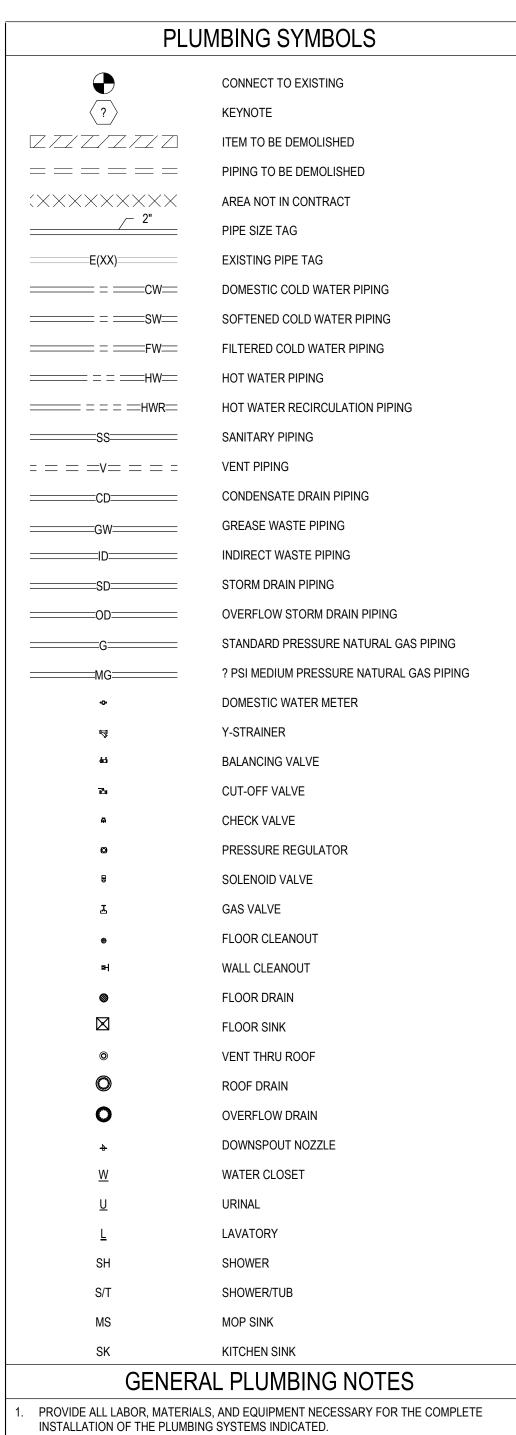
SHANE L. FLOYD AUG. 2, 2023 PE-2019017814

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NO.	REVISION SUBMISSION	DATE
0	ISSUED FOR BID	08/02/2023

ELECTRICAL DETAILS AND SCHEDULES

E500



- OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATES OF COMPLIANCE OR APPROVAL AS REQUIRED BY THE AUTHORITIES.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES,

- AND REGULATION SO THE GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE.
- COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS NECESSARY TO INSTALL ALL NEW PLUMBING SYSTEMS WITHIN THE CONFINES OF THE SPACES AVAILABLE AND WITHOUT INTERFERENCES.
- PLANS ARE INTENDED TO INDICATE THE GENERAL SCOPE OF WORK. DETAILS OF INSTALLATION COVERED BY CODE AND OTHER MINOR ITEMS NOT SHOWN SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES AND ACCEPTABLE INDUSTRY STANDARDS. ALL MECHANICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES AND MANUFACTURER'S INSTRUCTIONS. CONTRACTOR SHALL SITE VERIFY EXISTING CONDITIONS.
- DURING CONSTRUCTION, ALL FIXTURES, EQUIPMENT, PIPE, ETC. SHALL BE COVERED, PLUGGED. OR CAPPED AS REQUIRED TO KEEP CLEAN AND UNDAMAGED. ALL DAMAGED ITEMS SHALL BE RESTORED TO ORIGINAL CONDITION OR REPLACED. ALL PROTECTIVE COVERINGS SHALL BE REMOVED BEFORE FINAL ACCEPTANCE.
- PROVIDE ALL CUTTING AND PATCHING OF WALLS, FLOORS, CEILINGS, AND ROOFS AS NEEDED TO INSTALL MECHANICAL SYSTEMS. PATCHING WORK SHALL INCLUDE METHODS AND MATERIALS NEEDED FOR AFFECTED SURFACES TO MATCH ADJACENT AREAS. SEAL
- AROUND ALL EXTERIOR WALL PENETRATIONS WEATHERTIGHT. COORDINATE ALL ROOFING WORK WITH OWNER OR RESPONSIBLE PARTY, SO THAT

EXISTING ROOF WARRANTY (IF ANY) WILL BE MAINTAINED.

- FIELD SUPPORT ALL MECHANICAL SYSTEM EQUIPMENT AND MATERIALS FROM STRUCTURE.
- 10. CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.

SPECIFIC MODELS ARE SPECIFIED TO ESTABLISH QUALITY ONLY. SUBSTITUTIONS MAY BE

- MADE WITH ENGINEER'S APPROVAL. ARCHITECTURAL DRAWING DIMENSIONS SHALL GOVERN IN ALL CASES. COORDINATE
- ENGINEERING DRAWINGS WITH ARCHITECTURAL DRAWINGS FOR ALL EQUIPMENT LAYOUTS AND LOCATIONS.
- 3. CONTRACTOR IS TO INCLUDE COSTS FOR ALL PERMITS, INSPECTIONS, TAPS, METERS & FUEL ASSOCIATED WITH HIS WORK.
- 14. ALL SYSTEMS SHALL BE COMPLETE AND OPERABLE IN EVERY WAY.
- 15. CONTRACTOR IS RESPONSIBLE FOR REVIEWING AND UNDERSTANDING ALL DRAWINGS AND ASPECTS OF PROJECT SCOPE AND FOR INCLUDING IN HIS BID ALL WORK ASSOCIATED WITH HIS TRADE, REGARDLESS OF WHICH SHEET IT IS SHOWN ON.

GENERAL PLUMBING SPECIFICATIONS

- SOME PIPING MAY HAVE BEEN SHOWN OFFSET FOR CLARITY ON DRAWINGS. PROVIDE OFFSETS AND TRANSITIONS AS NECESSARY TO AVOID OBSTRUCTIONS.
- FIELD VERIFY EXACT ROUTING OF PIPING. MOUNT PIPING FROM STRUCTURE ABOVE AS HIGH AS POSSIBLE UNLESS NOTED OTHERWISE. ROUTE PIPING PARALLEL OR PERPENDICULAR TO BUILDING LINES.
- INSTALL EXPOSED DOMESTIC WATER PIPING AT HIGHEST ELEVATION POSSIBLE, UNLESS OTHERWISE INDICATED.
- REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE MOUNTING AND LOCATIONS.
- BURIED EXTERIOR WASTE PIPING ELEVATION SHALL BE MINIMUM 30" BELOW GRADE. BURIED EXTERIOR DOMESTIC WATER PIPING ELEVATION SHALL BE MINIMUM 48' BELOW GRADE. SAW CUT EXISTING FLOOR AS REQUIRED TO INSTALL UNDERFLOOR PIPING. PATCH FLOOR | EUH | ELECTRIC UNIT HEATER TO MATCH ADJACENT FLOOR SURFACE ELEVATION.
- NO PIPING SHALL BE ROUTED OVER ELECTRICAL PANELS

FIXTURES.

- PERFORM EXCAVATING AND BACKFILLING IN ACCORDANCE WITH OSHA 29 CFR 1926.651
- ALL BRAZING & WELDING SHALL REQUIRE A HOT WORK PERMIT. COORDINATE ALL NECESSARY REQUIREMENTS WITH OWNER.
- USE CLEVIS-STYLE HANGERS TO SUPPORT PIPING EVERY 6'-0" WITH INSULATION PROTECTION SHIELDS AND ALL-THREAD RODS FROM STRUCTURE ABOVE, NOT FROM OTHER PIPING, DUCTWORK, CONDUIT, AND SO FORTH. DO NOT SUPPORT OTHER PIPING, CEILING GRID. DUCTWORK, CONDUIT, AND SO FORTH FROM PIPING.
- PLUMBING FIXTURES SHALL BE AS INDICATED ON DRAWING. FURNISH AND INSTALL CHROME STOP VALVES, SUPPLIES, ESCUTCHEONS AND TRAPS AS REQUIRED FOR ALL
- ALL SEWER VENT TERMINATIONS SHALL BE LOCATED MINIMUM 10' HORIZONTALLY OR 3' HIGHER THAN ANY AIR INTAKE. PLUMBER IS RESPONSIBLE TO REROUTE ANY VENT TERMINATIONS AS REQUIRED TO ACCOMPLISH THIS REQUIREMENT.

EQUIPMENT

- EQUIPMENT SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY APPROVED BY OSHA.
- INSTALL EQUIPMENT WHILE MAINTAINING CLEARANCES AS RECOMMENDED BY MANUFACTURER AND REQUIRED BY APPLICABLE CODES AND STANDARDS.
- PROVIDE CONNECTIONS IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND APPLICABLE CODES AND STANDARDS. COORDINATE CONNECTION
- VERIFY FINAL CONNECTION SIZES WITH OWNER PROVIDED EQUIPMENT AND PROVIDE REQUIRED ISOLATION VALVES, CHECK VALVES, UNIONS, GAUGES, AND SO FORTH FOR A COMPLETE INSTALLATION.

REQUIREMENTS FOR FINAL EQUIPMENT SELECTIONS WITH OTHER AFFECTED TRADES.

PROVIDE ENGRAVED PLASTIC LAMINATE NAMEPLATES ON ALL NEW EQUIPMENT. SURVEY BUILDING TO ENSURE THAT NAMES ARE UNIQUE AND CONSISTENT WITH EXISTING CONVENTIONS.

SITE UTILITIES

- REFERENCE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING SITE UTILITIES. CONTACT THE LOCAL GAS COMPANY AND ARRANGE FOR GAS SERVICE AS INDICATED ON DRAWINGS. INCLUDE ALL COSTS, CHARGES, FEES, ETC., INCURRED BY LOCAL AUTHORITIES INTO BID. PROVIDE ALL MATERIALS AS REQUIRED BY LOCAL AUTHORITIES FOR GAS SERVICE INSTALLATION. ALL WORK SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF LOCAL AUTHORITIES.
- CONTACT THE LOCAL WATER DEPARTMENT AND ARRANGE FOR WATER AND WASTE SERVICES AS INDICATED ON DRAWINGS. INCLUDE ALL COSTS, CHARGES, FEES, ETC., INCURRED BY LOCAL AUTHORITIES INTO BID. PROVIDE ALL MATERIALS AS REQUIRED BY LOCAL AUTHORITIES FOR WATER AND WASTE SERVICE INSTALLATIONS. ALL WORK SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF LOCAL AUTHORITIES.

FIRE PENETRATION NOTES

THIS PROJECT CONTAINS FIRE RATED ASSEMBLIES. LOCATIONS ARE INDICATED ON ARCHITECTURAL PLANS. ALL CONTRACTORS SHALL PROVIDE PROTECTION FOR THEIR PENETRATIONS THRU THESE

BOOK MUST REMAIN ON SITE AT ALL TIMES.

- ASSEMBLIES AS FOLLOWS. A. FOR ALL PENETRATIONS THRU OR INTO FIRE RATED VERTICAL OR HORIZONTAL ASSEMBLIES:
- a. A UL LISTED PENETRATION FIRESTOP SYSTEM SHALL BE INSTALLED AS TESTED IN ACCORDANCE WITH ASTM E814 OR UL 1479 (IBC 714.3) b. GENERAL CONTRACTOR TO PROVIDE AND MAINTAIN A BOOK WITH ALL FIRE PENETRATION PROTECTIVE SYSTEMS THAT WILL BE USED ON THIS PROJECT. THIS

EQUIPMENT ABBREVIATIONS

AC	AIR CONDITIONING UNIT	ET	EXPANSION TANK
ACC	AIR COOLED CONDENSER	EWH	ELECTRIC WALL HEATER
ACCU	AIR COOLING CONDENSING UNIT	FCU	FAN COIL UNIT
AHU	AIR HANDLING UNIT	FP	FIRE PUMP
AS	AIR SEPARATOR	GI	GREASE INTERCEPTOR
В	BOILER	GRV	GRAVITY ROOF VENTILATOR
CH	CHILLER	HWP	HEATING WATER PUMP
CT	COOLING TOWER	HX	HEAT EXCHANGER
CUH	CABINET UNIT HEATER	HRU	HEAT RECOVERY UNIT
CWP	CONDENSER WATER PUMP	PRV	POWER ROOF VENTILATOR
CHWP	CHILLED WATER PUMP	RE	RETURN/EXHAUST FAN
DBP	DOMESTIC WATER BOOSTER PUMP	RTU	ROOFTOP UNIT
DC	DUCT MOUNTED COIL	SEP	SEWAGE EJECTOR PUMP
DCP	DOMESTIC WATER CIRCULATING PUMP	SF	SUPPLY FAN
EF	EXHAUST FAN	SP	SUMP PUMP

EDC ELECTRIC DUCT COIL

ABBREVIATIONS

UH UNIT HEATER

WH WATER HEATER

		/ \DDI \L V	17 (110	110
	Ø	DIAMETER	HWR	HOT WATER RETURN
	°	DEGREE	HYD	HYDRANT
	ABV	ABOVE	ID	INDIRECT
	AC	AIR CONDITIONING	IN .	INCH
	AD	AREA DRAIN	INV	INVERT
	ADD	ADDENDUM	LB	POUND
	AFF	ABOVE FINISHED FLOOR	LB/HR	POUNDS PER HOUR
	ALT	ALTERNATE	LP	LOW PRESSURE
	AP	ACCESS PANEL	MAX	MAXIMUM
	ARCH	ARCHITECT/ARCHITECTURAL	MBH	ONE THOUSAND BTU PER HOUR
	BFF	BELOW FINISHED FLOOR	MCF	ONE THOUSAND CUBIC FEET
	BLW	BELOW	MECH	MECHANICAL
	BTU	BRITISH THERMAL UNITS	MFR	MANUFACTURER
	BTUH	BRITISH THERMAL UNITS PER HOUR	MIN	MINIMUM
	CAP	CAPACITY	MISC	MISCELLANEOUS
	CB	CATCH BASIN	MTR	MOTOR
	CFM	CUBIC FEET PER MINUTE	NC	NORMALLY CLOSED
	CLG	CEILING	NIC	NOT IN CONTRACT
	CO	CLEAN OUT	NO	NORMALLY OPEN
	CW	COLD WATER	NTS	NOT TO SCALE
	DIA	DIAMETER	0	OXYGEN
	DN	DOWN	OD	OVERFLOW ROOF DRAIN
	DW	DISTILLED WATER	PD	PRESSURE DROP
	EA	EACH	PIV	POST INDICATOR VALVE
	EDF	ELECTRIC DRINKING FOUNTAIN	PLBG	
	ELEC	ELECTRICAL	PRESS	
	EQUIP		PR	
	E/A		PSI	POUNDS PER SQUARE INCH
		EXHAUST AIR		
	EXIST	EXISTING	PSIG	POUNDS PER SQUARE INCH GAUGE
	°F	DEGREES FAHRENHEIT	PWR	POWER
	FCO	FLOOR CLEAN OUT	RD	ROOF DRAIN
	FD	FLOOR DRAIN	REC	RECESSED
	FL	FLOOR	RED	REDUCER
	FO	FUEL OIL	RM	ROOM
	FOV	FUEL OIL VENT	RPM	REVOLUTIONS PER MINUTE
	FOR	FUEL OIL RETURN	RW	RAIN WATER
	FOS	FUEL OIL SUPPLY	SF	SQUARE FOOT
	FPHB	FROST-PROOF HOSE BIBB	SS	SANITARY SEWER
	FS	FLOOR SINK	SF	SQUARE FOOT
	FT	FOOT/FEET	SP	STANDPIPE
	G	GAS	STM	STEAM
	GAL	GALLON	TDR	TRENCH DRAIN
	GC	GENERAL CONTRACTOR	TEMP	TEMPERATURE
	GPM	GALLONS PER MINUTE	TYP	TYPICAL
	GW	GREASE WASTE	UG	UNDERGROUND
•	HB	HOSE BIBB	VAC	VACUUM
	HP	HORSE POWER	V	VENT
	HTG	HEATING	VTR	VENT THROUGH ROOF
	HTR	HEATER	W	WASTE
	HW	HOT WATER	WCO	WALL CLEAN OUT

GENERAL FIRE PROTECTION NOTES

ALL WORK & MATERIALS SHALL BE IN COMPLIANCE WITH STATE & LOCAL CODE REQUIREMENTS. SUBCONTRACTOR SHALL OBTAIN & PAY FOR ALL PERMITS & INSPECTION FEES AS NECESSARY FOR CONSTRUCTION.

FIRE SPRINKLER CONTRACTOR SHALL VERIFY WITH CURRENT NFPA THE SPRINKLER HEAD

- ALL FIRE PROTECTION SYSTEMS & COMPONENTS SHALL BE IN COMPLIANCE WITH NFPA SECTIONS 13, & 24 AS WELL AS LOCAL FIRE PREVENTION REQUIREMENTS.
- SPACING & DENSITY FOR ALL OCCUPANCY TYPES. SUBCONTRACTOR SHALL DO ALL NECESSARY CUTTING & PATCHING, AS WELL AS ALL
- NECESSARY PIPE & EQUIPMENT SUPPORTS. PRESSURE TEST MODIFICATIONS TO EXISTING SYSTEM & REPAIR ANY LEAKS.

SUBCONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO PROPERTY & PERSONNEL

- CAUSED BY FAULTY INSTALLATION OR MATERIALS. THE SPRINKLER SUBCONTRACTOR SHALL REFER TO PLANS & MAKE ADJUSTMENTS TO NUMBER, TYPE, & LOCATION OF HEADS, TO COMPLY WITH LOCAL CODES & NEW CONSTRUCTION. HE SHALL ALSO COORDINATE HIS FINAL SHOP DRAWINGS WITH THE OTHER TRADES TO AVOID CONFLICT WITH HIS PIPING & THE LIGHTS, PIPING, CONDUITS, & DUCTWORK OF OTHER RESPECTIVE SUBCONTRACTORS ON THIS PROJECT. SHOP DRAWINGS & APPLICABLE HYDRAULIC CALCULATIONS THAT ARE SEALED BY A FIRE
- AS REQUIRED, FIRE STOPPING SHALL BE DONE BY METHODS REQUIRED BY LOCAL AUTHORITIES. FIRE STOP MATERIALS SHALL BE HILTI SILICONE ELASTOMER OR EQUAL.

PROTECTION CONSULTANT & PROFESSIONAL ENGINEER SHALL BE SUBMITTED FOR

PROVIDE FIRE STOPPING AT ALL FLOOR & WALL PENETRATIONS.

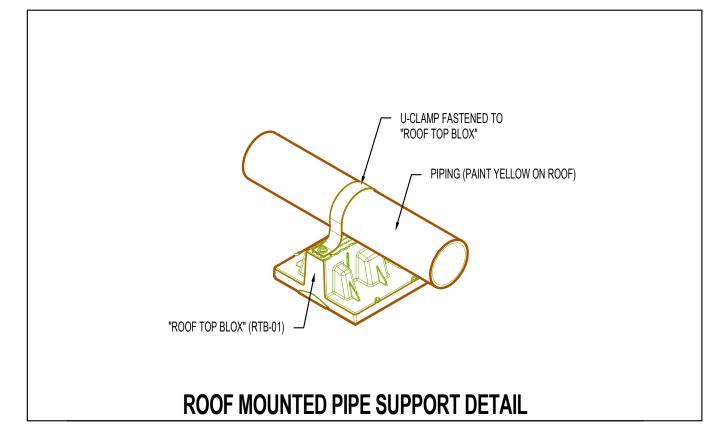
OWNER'S APPROVAL FOR ALL SPRINKLER SYSTEM MODIFICATIONS.

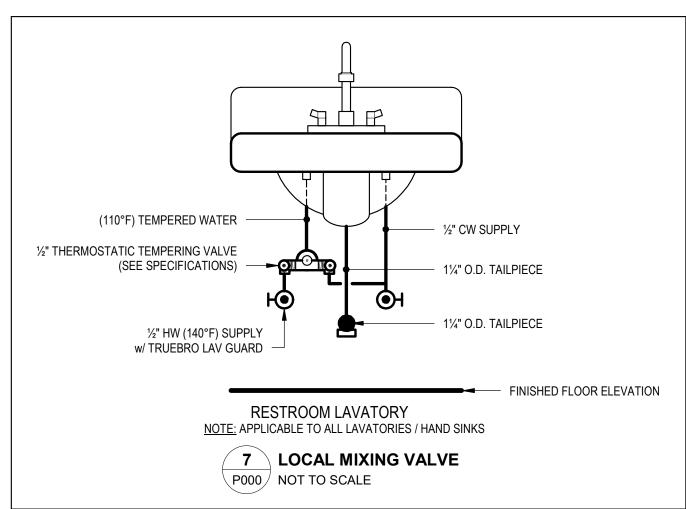
- SUBMIT CERTIFICATION UPON COMPLETION OF FIRE PROTECTION PIPING WORK WHICH INDICATES THAT WORK HAS BEEN TESTED IN ACCORDANCE WITH NFPA 13, AND ALSO THAT THE SYSTEM IS OPERATIONAL, COMPLETE, AND WITHOUT DEFECTS.
- PROVIDE REQUIRED UNDERGROUND WATER SERVICE LINE AT THE LOCATION(S) INDICATED ON THE DRAWING. CONSULT WITH THE CITY WATER DEPARTMENT AND LOCAL AUTHORITIES WITH RESPECT TO NECESSARY MATERIALS AND LABOR TO CONFORM WITH ALL LOCAL REQUIREMENTS.
- PROVIDE FIRE DEPARTMENT CONNECTION THROUGH EXTERIOR BUILDING WALL WHERE SHOWN ON THE PLANS. COORDINATE THE EXACT LOCATION, PIPE THREADS AND FITTINGS WITH THE LOCAL FIRE DEPARTMENT TO ENSURE EXACT MATCH.
- . SPRINKLER HEAD TEMPERATURE RATINGS SHALL BE APPROPRIATE FOR THE AMBIENT CONDITIONS IN THE IMMEDIATE AREAS.
- . INSTALL HANGERS AND SUPPORTS FOR SPRINKLER PIPING ACCORDING TO NFPA 13. COMPLY WITH REQUIREMENTS FOR HANGER MATERIALS IN NFPA 13.

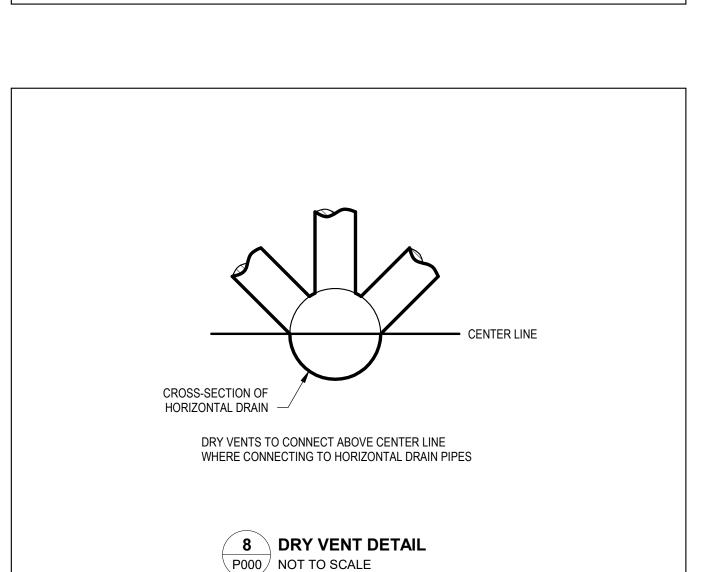
				PLUMBING FIXTURE SCHEDULE
MARK	DESCRIPTION	MANUFACTURER*	MODEL*	REMARKS
DF1	DRINKING FOUNTAIN	Elkay	EZSTL8WSLK	HI / LOW WITH BOTTLE FILLER
FBV	FLOW BALANCING VALVE	NEXUS	DYNAMIC ND	PRESSURE INDEPENDENT FLOW VALVE. SEE DWG FOR GPM
FD1	FLOOR DRAIN	Zurn Industries, LLC	ZN415-5B	WITH PROSET TG33-ZURN TRAP GUARD
LAV1	LAVATORY	American Standard	9482.000	WITH ZURN Z81104-XL FAUCET & MV
MS1	Mop Service Basin	Zurn Industries, LLC	Z1996-24	WITH CHICAGO FAUCET 897 RCF FAUCET
MV	MIXING VALVE	WATTS	LFUSG-B	3/8" POINT OF USE THERMOSTATIC
RP1	RECIRCULATION PUMP	Grundfos	UP15	
UR1	URINAL	AMERICAN STD.	6550.001	WHITE, WITH ZURN Z-6003AV FLUSH VALVE (MANUAL)
WC1	WATER CLOSET	American Standard	215AA.104.020	WHITE, WITH CHURCH 295SSCT SEAT
WH1	WATER HEATER	AO SMITH	DEN-40	WITH EXPANSION TANK - WATTS PLT-12

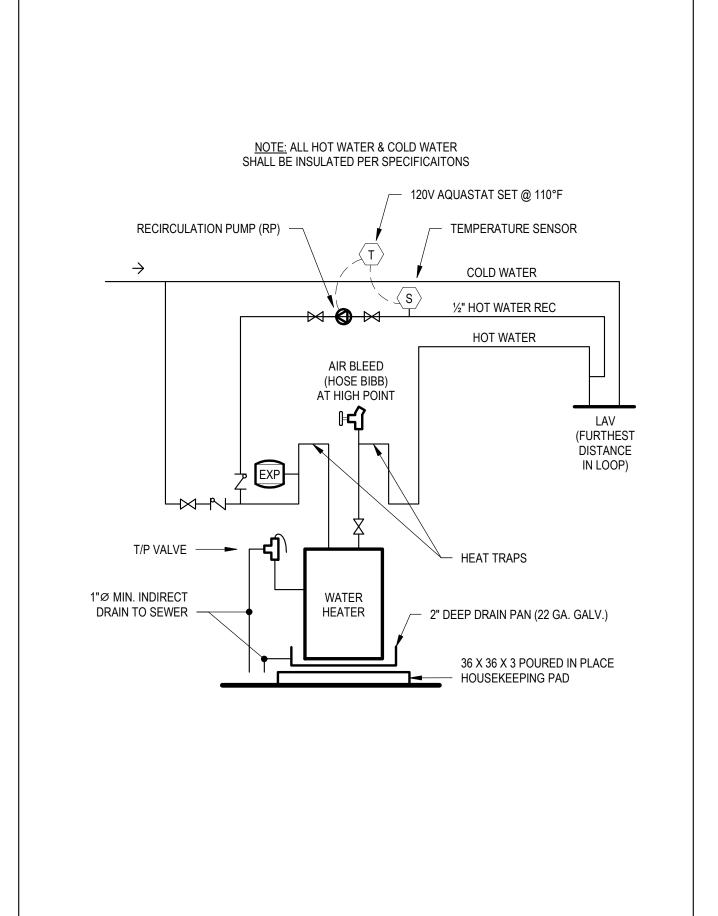
PLUMBING F	IXTU	IRE C	CONNEC	OTION	SCHEDULE
FIXTURE	COLD	НОТ	WASTE	VENT	WATER HAMMER ARRESTOR REQUIRED
LAVATORY	1/2"	1/2"	2"	1 1/2"	YES
WATER CLOSET - FLUSH VALVE	1"	-	4"	2"	YES
WATER CLOSET - TANK	1/2"	-	4"	2"	YES
URINAL	3/4"	-	2"	1 1/2"	YES
MOP SINK	3/4"	3/4"	3"	1 1/2"	NO
HAND SINK	1/2"	1/2"	2"	1 1/2"	NO
HAIR SINK	1/2"	1/2"	2"	1 1/2"	NO
SHOWER	1/2"	1/2"	3"	1 1/2"	NO
FLOOR DRAIN	-	-	PER DWGS	1 1/2"	NO
DRINKING FOLINTAIN	1/2"	1/2"	2"	1 1/2"	NO

* OR EQUAL









3 TYP. HOT WATER RECIRCULATION SCHEMATIC

∖ P000 / NOT TO SCALE



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SECURITY SCIENCES

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909 LESLIE BLVD JEFFERSON CITY, MO 65101

08/02/2023	DATE:
221202	PROJ. NO.:
RV, SLF	DESIGNED BY:
NC	DRAWN BY:
SLF, RV	CHECKED BY:
SLF	APPROVED BY:

SEAL:



SHANE L. FLOYD PE-2019017814

NO. REVISION SUBMISSION

THE PROFESSIONAL ENGINEER'S SEAL ON THIS DRAWING HAS BEEN AFFIXED IN ACCORDANCE WITH
THE REQUIREMENTS OF CHAPTER 327, RSMO. IN AFFIXING THIS SEAL, THE ENGINEER TAKES RESPONSIBILITY FOR THE WORK SHOWN ON THIS DRAWING ONLY, AND HEREBY DISCLAIMS PROJECT DRAWINGS NOT DIRECTLY BEARING THIS SEAL.

AUG. 2, 2023

0 ISSUED FOR BID

PLUMBING NOTES, SPECIFICATIONS, **AND LEGENDS**

