CONSULTANTS :

STRUCTURAL
Pi-Tech Structural Engineers
115 Forest Hill Road
Macon, Georgia 31210

MECHANICAL / PLUMBING
Total Engineering
169 New Street
Macon, Georgia 31201

ELECTRICAL
Electrical Design Consultants
175 New Street, Suite 1
Macon, Georgia 31201

BUILDING CODE ANALYSIS :

APPLICABLE CODES

2018 International Building Code with Georgia Amendments
2018 International Fire Code as adopted and amended by the Rules and Regulations of the Safety Fire Code Commissioner Chapter 120-3-3.-04(3)
2018 Life Safety Code as adopted and amended by the Rules and Regulations of the Safety Fire Code Commissioner Chapter 120-3-3.-04(72)
2018 International Mechanical Code with Georgia Amendments
2018 International Plumbing Code with Georgia Amendments
2019 edition of NFPA 72 (National Fire Alarm and Signaling Code), as adopted and amended by the Rules and Regulations of the Safety Fire Code Commissioner Chapter 120-3-3.-04(53)
2020 National Electrical Code
2015 International Energy Conservation Code with Georgia Amendments
2010 Americans with Disabilities Act Standards for Accessible Design as adopted and amended by the Rules and Regulations of the Safety Fire Commissioner Chapter 120-3-20.-02(2)(b)
Rules and Regulations of the Safety Fire Commissioner Chapter 120-3-3

BUILDING DATA

CONSTRUCTION TYPE:	TYPE IIIB UNSPRINKLERED
USE CLASSIFICATION(S): LIFE SAFETY CODE	BUSINESS
OCCUPANCY TYPE: ICB	BUSINESS (B)
TOTAL BUILDING AREA:	
FIRST FLOOR DEVELOPED SPACE =	3,250 SF.

DESIGN OCCUPANT LOAD:

GENERAL SEATING		
TABLES	600 / 15 =	40 People
BAR	30' / 1.5 =	20 People
DUCK BOWLING SEATING	360 / 15 =	24 People
	TOTAL =	84 People

CHANGE OF USE:	NO
AUTO SPRINKLER SYSTEM:	NO
FIRE ALARM SYSTEM:	YES

DEFFERED SUBMITTALS (Separate permit)

- FIRE ALARM SYSTEM

PROJECT TITLE :

RENOVATION AT

476 SECOND STREET BLDG.

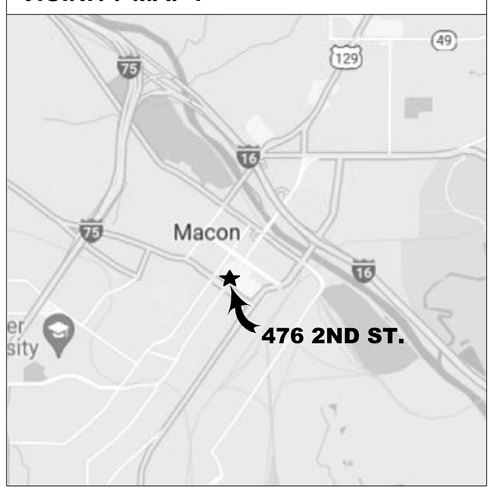
MACON, GEORGIA 31201

Permit Set



SECOND STREET ELEVATION

VICINITY MAP :



PROJECT NARRATIVE:

Renovation of a portion of the 1st floor for a duck bowling venue.

THESE DRAWINGS ARE ISSUED AS LIMITED SERVICE DRAWINGS ONLY. THERE HAS BEEN NO ATTEMPT MADE TO DETAIL OR LABEL EACH AND EVERY MEMBER OR CONDITION. ONLY THE TYPICAL MEMBERS AND DETAILS HAVE BEEN ADDRESSED.

THE FUNCTION OF THESE DRAWINGS IS TO SERVE AS A GUIDE IN ASSISTING THE ESTIMATOR IN THE PREPARATION OF HIS PRICING ESTIMATE. IT IS THEREFORE REQUIRED THAT THE ESTIMATOR MAKE ALLOWANCES TO COVER CONDITIONS NOT SHOWN OR DIRECTLY ADDRESSED. THIS MEANS THE ESTIMATOR CANNOT PREPARE A COMPLETE PRICING ESTIMATE BASED SOLELY ON THE INFORMATION CONTAINED IN THESE DRAWINGS. IT WILL BE REQUIRED OF HIM TO USE HIS EXPERIENCE AND KNOWLEDGE IN ESTIMATING SIMILAR PROJECTS AND TO CONFER WITH THE OWNER ON COMPONENTS TO BE INCORPORATED INTO THE WORK TO SUPPLEMENT THE INFORMATION PROVIDED ON THESE DRAWINGS. IN ADDITION TO THE INFORMATION PROVIDED ON THESE DRAWINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING OTHER TRADES AND FOR COMPLYING WITH APPLICABLE CODES AND REQUIREMENTS.

DRAWING INDEX - 28 TOTAL

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G1.2 General Information
G1.3 Drawing Specifications
LS1.1 Life Safety Plans & Details
LS1.2 1-Hr Wall UL 263 #U305
LS1.3 1-Hr Ceiling UL 263 # L581
LS1.4 1-Hr Ceiling Beam UL 263 #L524

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S1.1 Overall Floor Plans
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EX1.1 Existing Floor Plans
A1.1 Overall Floor Plans
A1.2 Duck Bowling Floor Plan
A2.1 Door Schedule & Details
A3.1 Exterior Elevation & Stair Sections
A8.1 Reflected Ceiling Plan

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P0.1 Plumbing Specifications
P1.1 Plumbing Plans
P2.1 Large Scale Plumbing Plans

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M0.2 Mechanical Schedule
M0.3 Mechanical Details
M1.1 Mechanical Plan

ELECTRICAL - 5

E0.0 Electrical Legend, Schedules & Details
E2.1 Overall Floor Plan - Electrical
E3.1 Partial Large Scale Floor PLan - Electrical
E3.2 Partial Large Scale Floor PLan - Electrical
E4.1 Power Riser Diagram

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ARCHITECTS | PLANNERS
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STATE OF GEORGIA — ROBERT W. BROWN — REGISTERED ARCHITECT

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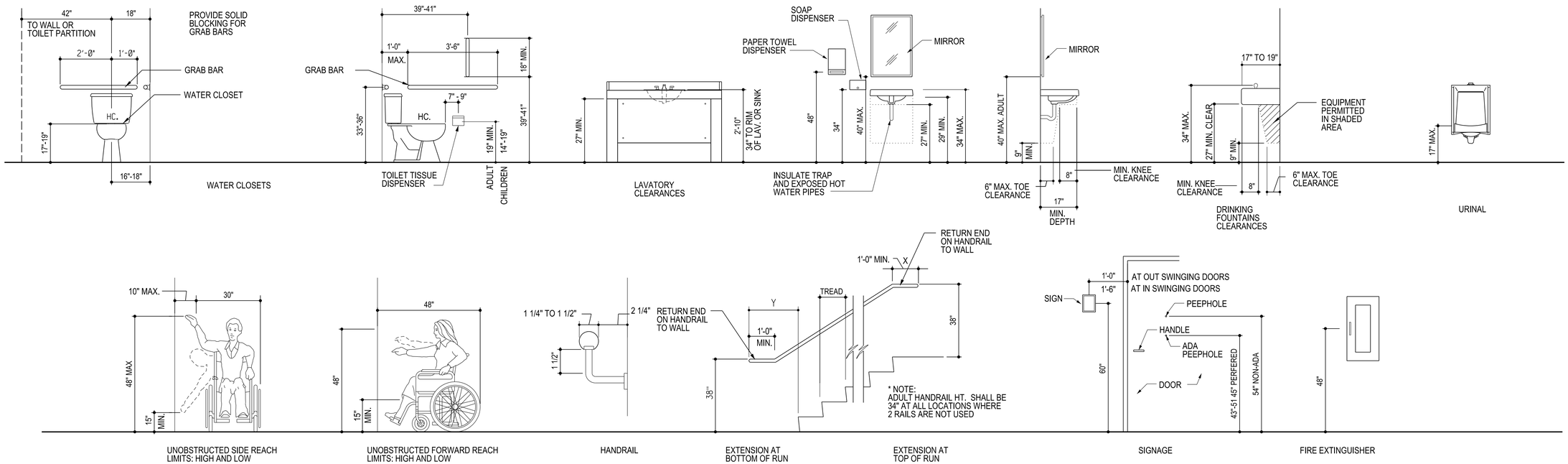
RENOVATIONS AT
476 SECOND STREET BLDG.
MACON, GEORGIA

Drawing Issue Schedule	
10/23/2023	Permit Set
1 12/21/2023	Revision #1
Project No:	2023-25

Title Sheet & Code Summary

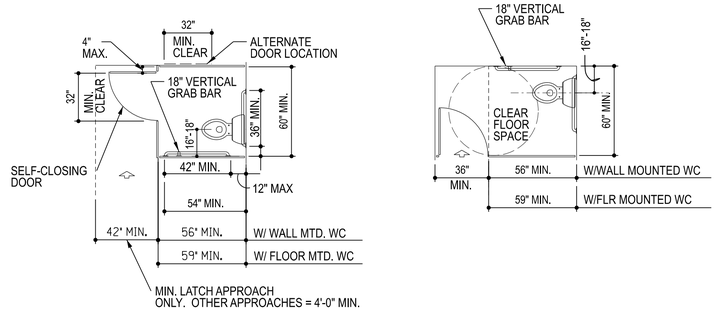
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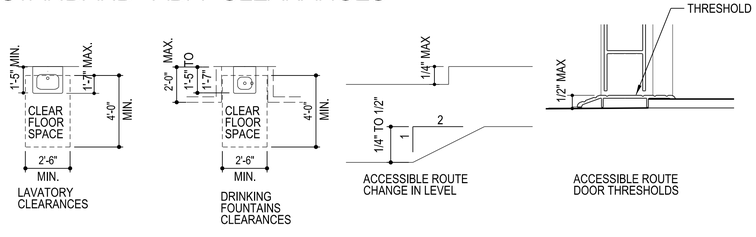


TYPICAL ADA WHEELCHAIR REACH RANGES

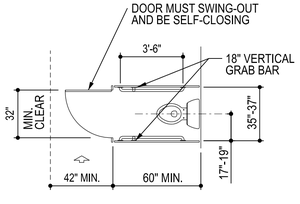
STANDARD WHEELCHAIR ACCESSIBLE STALLS



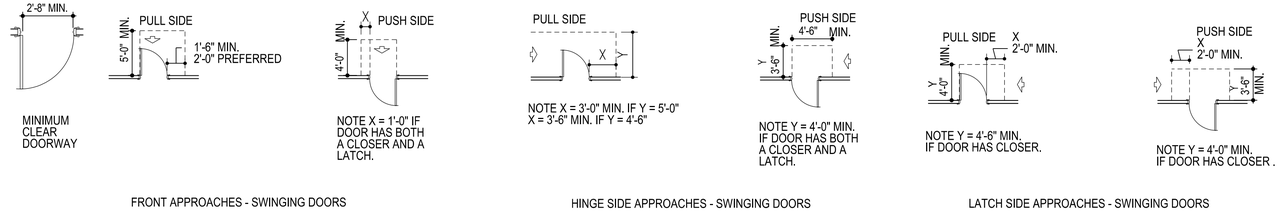
STANDARD ADA CLEARANCES



STANDARD AMBULATORY ACCESSIBLE TOILET COMPARTMENT



STANDARD ADA MANEUVERING CLEARANCES AT DOORS



ADA NOTES :

1. ALL HANDICAPPED ACCESSORIES AND FIXTURES SHALL CONFORM TO THE "AMERICANS WITH DISABILITIES ACT".
2. THE FOLLOWING NOTES FROM THE ADA GUIDELINES SHALL BE USED

4.13.9 DOOR HARDWARE. HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING OR TWISTING OF THE WRIST TO OPERATE. LEVER - OPERATED MECHANISMS, PUSH-TYPE MECHANISMS, AND U-SHAPED HANDLES ARE ACCEPTABLE DESIGNS. WHEN SLIDING DOORS ARE FULLY OPEN, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES. HARDWARE REQUIRED FOR ACCESSIBLE DOOR PASSAGE SHALL BE MOUNTED NO HIGHER THAT 4'-0" ABOVE FINISHED FLOOR.

4.13.10 DOOR CLOSER. IF A DOOR HAS A CLOSER, THEN THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3 IN FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR.

4.13.11 DOOR OPENING FORCE. THE MAXIMUM FORCE FOR PUSHING AND PULLING OPEN A DOOR SHALL BE AS FOLLOW:

(1) FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY.

(2) OTHER DOORS.
(A) EXTERIOR HINGED DOOR: (RESERVED) .

(B) INTERIOR HINGED DOORS: 5 LBS.

(C) SLIDING OR FOLDING DOORS: 5 LBS.

THESE FORCES DO NOT APPLY TO THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT MAY HOLD THE DOOR IN A CLOSED POSITION.

4.15.3 SPOUT LOCATION. THE SPOUTS OF DRINKING FOUNTAINS AND WATER COOLERS SHALL BE AT THE FRONT OF THE UNIT AND SHALL DIRECT THE WATER FLOW IN A TRAJECTORY THAT IS PARALLEL OR NEARLY PARLLEL TO THE FRONT OF THE UNIT. THE SPOUT SHALL PROVIDE A FLOW OF WATER AT LEAST 4" HIGH SO AS TO ALLOW THE INSERTION OF A CUP OR GLASS UNDER THE FLOW OF WATER. ON AN ACCESSIBLE DRINKING FOUNTAIN WITH A ROUND OR OVAL BOWL, THE SPOUT MUST BE POSITIONED SO THE FLOW OF WATER IS WITHIN 3" OF THE FRONT EDGE OF THE FOUNTAIN.

4.16.6 DISPENSERS. TOILET PAPER DISPENSERS SHALL BE INSTALLED WITHIN REACH, AS SHOWN ON WATER CLOSET DRAWING THIS SHEET. DISPENSERS THAT CONTROL DELIVERY, OR THAT DO NOT PERMIT CONTINUOUS PAPER FLOW SHALL NOT BE USED.

4.17.5 DOORS, TOILET STALL DOORS, INCLUDING DOOR HARDWARE, SHALL COMPLY WITH 4.13. IF TOILET STALL APPROACH IS FROM THE LATCH SIDE OF THE STALL DOOR, CLEARANCE BETWEEN THE DOOR SIDE OF THE STALL AND ANY OBSTRUCTION MAY BE REDUCED TO A MINIMUM OF 3'-6"

4.18.3 CLEAR FLOOR SPACE. A CLEAR FLOOR SPACE 2'-6" BY 4'-0" SHALL BE PROVIDED IN FRONT OF URINALS TO ALLOW FORWARD APPROACH. THIS CLEAR SPACE SHALL JOIN OR OVERLAP AN ACCESSIBLE ROUTE. SHIELDS THAT DO NOT EXTEND BEYOND THE FRONT EDGE OF THE URINAL RIM MAY BE PROVIDED WITH 2'-5" CLEARANCE BETWEEN THEM.

4.19.4 EXPOSED PIPES AND SURFACES. HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.

4.27.4 OPERATION. CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBS.

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STATE OF GEORGIA
ROBERT W. BROWN
CERTIFICATE NO. 7429
REGISTERED ARCHITECT

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RENOVATIONS AT 476 SECOND STREET BLDG.

MACON, GEORGIA

Drawing Issue Schedule	
10/23/2023	Permit Set
Project No:	2023-25

General Information

G1.2

F:\PROJECTS\2023-25 Renovations at 476 2nd St Bldg\Working Drawings\2023-25 G1.2 GeneralInformationAdv
02/07/2023

SPECIAL CONDITIONS AND TEMPORARY FACILITIES

A. TESTS:
   1. A RECOGNIZED TESTING AGENCY / GEOTECHNICAL ENGINEER WILL BE SELECTED BY THE CONTRACTOR AND THE COSTS OF ALL TESTING, EXCEPT AS OTHERWISE SPECIFICALLY REQUIRED, WILL BE PAID FOR BY THE CONTRACTOR.

B. PERMITS, LICENSES, AND FEES:
   1. THE CONTRACTOR WILL BE RESPONSIBLE FOR SECURING ALL PERMITS AND LICENSES NECESSARY FOR CONSTRUCTION OF THIS PROJECT AND SHALL PAY ALL APPLICABLE FEES. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PAYING ANY AND ALL INSPECTION FEES DUE TO AUTHORITIES HAVING JURISDICTION DURING CONSTRUCTION.
   2. THE CONTRACTOR SHALL ARRANGE FOR NECESSARY INSPECTIONS REQUIRED BY THE CITY, COUNTY, STATE AND OTHER AUTHORITIES HAVING JURISDICTION.

C. SAFEGUARDS DURING CONSTRUCTION: REFER TO THE CURRENT EDITION OF THE INTERNATIONAL BUILDING CODE.

D. CODES, ORDINANCES, AND REGULATIONS: ALL WORK TO BE PERFORMED AS PART OF THIS SPECIFICATION SHALL COMPLY WITH ALL CODES, ORDINANCES, AND REGULATIONS APPLICABLE TO THE CONTRACT, INCLUDING, BUT NOT LIMITED TO:
   1. ENVIRONMENTAL PROTECTION AGENCY (EPA)
   2. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)
   3. STATE AND LOCAL AIR POLLUTION CONTROL AUTHORITIES/AGENCIES
   4. STATE AND LOCAL SOLID WASTE OR HAZARDOUS WASTE AUTHORITIES/AGENCIES
   5. STATE AND LOCAL HEALTH DEPARTMENTS
   6. STATE AND LOCAL BUILDING CODE AUTHORITIES/AGENCIES
   7. SOUTHERN STANDARD BUILDING CODE
   8. STATE AND LOCAL BUILDING CODE
   9. OTHER FEDERAL, STATE, OR LOCAL CODES

ROUGH CARPENTRY

A. FRAMING LUMBER: REFER TO STRUCTURAL PLAN NOTES FOR FRAMING LUMBER SPECIFICATIONS.
   1. MISCELLANEOUS LUMBER: ALL LUMBER USED FOR BLOCKING, ROOF EDGES AND FURRING SHALL BE SPIB GRADE MARKED NO. 2, SOUTHERN YELLOW PINE, KILN-DRIED WITH MOISTURE CONTENT OF NOT MORE THAN 19 PERCENT; NOMINAL SIZES AS INDICATED, COMPLYING WITH NBS PS 20, EXCEPT WHERE ACTUAL SIZES ARE SPECIFICALLY REQUIRED; SURFACING SHALL BE DRESSED (S4S).

B. PLYWOOD: PLYWOOD SHALL CONTAIN NO UREA-FORMALDEHYDE.
   1. FLOOR SHEATHING: 3/4" THICK T&G.
   2. UNDERLAYMENT: 1/2" THICK PREMIUM ACX SANDED PLYWOOD (EXCEPT UNDER CERAMIC TILE).

C. BLOCKING: PROVIDE SOLID BLOCKING FOR GRAB BARS, TOILET ACCESSORIES, ETC.

FINISH CARPENTRY AND MILLWORK

A. INTERIOR WOOD - OPAQUE FINISH: AWI SECTION 100, GRADE 1, FINGER-JOINT PONDEROSA PINE.

B. CONSTRUCTION ADHESIVE: HEAVY-DUTY CONSTRUCTION ADHESIVE, MEETING SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168 VOC LIMITS.

SEALANTS

A. TYPE 1: ONE-COMPONENT NEUTRAL-CURE, RTV SILICONE SEALANT EQUAL TO DOW CORNING 795 SILICONE BUILDING SEALANT – PERIMETER OF DOORS.

B. TYPE 2: ONE-COMPONENT ACETOXY SILICONE, COMPLYING WITH FS TT-S-001543A, TYPE NON-SAG, CLASS A; WHITE COLOR – MILDEW RESISTANT, EQUAL TO TREMCO PROGLAZE – AROUND PLUMBING FIXTURES, AT WALLS AND FLOORS, AND AT CERAMIC TILE.

C. TYPE 3: ACRYLIC LATEX, EQUAL TO PPG-1417 TOPGUN 240 – WOOD TRIM

D. TYPE 4: OLEO-RESINOUS COMPOUND, EQUAL TO ALUMILASTIC-5911 HZ – UNDER METAL THRESHOLDS.

E. TYPE 5: ONE-PART SILICONE RUBBER, NON-SLUMP, CONFORMING TO ASTM E814-88, UL RATED FOR RATING OF CONSTRUCTION WITH WHICH USED, EQUAL TO 3M FIRE BARRIER 1000 NS – WHERE SEALANT OR CAULK IS REQUIRED IN FIRE RATED WALLS, FLOORS OR CEILINGS TO MAINTAIN INTEGRITY OF RATED CONSTRUCTION.

STEEL FRAMES AND DOORS

A. MATERIALS:
   1. METAL DRYWALL FRAMES: FABRICATED FROM COMMERCIAL GRADE COLD ROLLED STEEL CONFORMING TO ASTM 366 NOT LESS THAN 16 GAUGE.
   2. METAL DOORS: FABRICATED FROM COMMERCIAL GRADE COLD ROLLED STEEL CONFORMING TO ASTM A366, FREE OF SCALE, PITTING OR OTHER SURFACE DEFECTS AND SHALL HAVE FACE SHEETS OF NOT LESS THAN 16 GAUGE AND SHALL BE ZINC-COATED.

B. METAL DRYWALL FRAMES:
   1. HARDWARE REINFORCEMENTS:
      (A) FRAMES SHALL BE MORTISED, REINFORCED, DRILLED AND TAPPED AT THE FACTORY FOR FULLY TEMPLATED HARDWARE ONLY, IN ACCORDANCE WITH APPROVED HARDWARE SCHEDULE AND TEMPLATES PROVIDED BY THE CONTRACTOR; WHERE SURFACE-MOUNTED HARDWARE IS TO BE APPLIED, FRAMES SHALL HAVE REINFORCING PLATES ONLY.

      (B) MINIMUM THICKNESS OF HARDWARE REINFORCING PLATES SHALL BE AS FOLLOWS:

HINGE:	7 GAUGE
STRIKE:	10 GAUGE
FLUSH BOLT:	12 GAUGE
CLOSER:	12 GAUGE
SURFACE MOUNTED HARDWARE:	12 GAUGE

      (C) JAMBS SHALL BE FURTHER STRENGTHENED BY TWO HEAVY GAUGE STIFFENERS TO PROVIDE PROPER GRIPPING ACTION AND BEARING SURFACE AGAINST THE WALL.

C. METAL DOORS:
   1. FACE SHEETS SHALL BE REINFORCED, SOUND DEADENED AND INSULATED WITH IMPREGNATED KRAFT HONEYCOMB CORE COMPLETELY FILLING THE INSIDE OF THE DOORS AND LAMINATED TO BOTH PANELS.
   2. DOOR FACES SHALL BE JOINED AT THEIR VERTICAL EDGES BY MECHANICAL INTERLOCK AND A CONTINUOUS WELD EXTENDING THE FULL HEIGHT OF THE DOOR; ALL SUCH WELDS SHALL BE GROUND, FILLED AND DRESSED SMOOTH TO MAKE THEM INVISIBLE.
   3. TOP AND BOTTOM EDGES SHALL BE CLOSED WITH A CONTINUOUS RECESSED STEEL CHANNEL OF NOT LESS THAN 14 GAUGE EXTENDING THE FULL WIDTH OF THE DOOR AND SPOT WELDED TO BOTH FACES; EXTERIOR DOORS SHALL HAVE AN ADDITIONAL FLUSH CLOSING CHANNEL AT THEIR EDGES AND FOR THE ATTACHMENT OF WEATHER-STRIPPING, A FLUSH CLOSURE ALSO AT THEIR BOTTOM EDGES; OPENING SHALL BE PROVIDED IN THE BOTTOM CLOSURE OF EXTERIOR DOORS TO PERMIT THE ESCAPE OF ENTRAPPED MOISTURE.
   4. BEVELED EDGE PROFILES SHALL BE PROVIDED ON BOTH VERTICAL EDGES OF DOORS AS FOLLOWS:
      (A) SINGLE AND DOUBLE-ACTING SWING DOORS: BEVEL 1/8" IN 2".
   5. HARDWARE REINFORCEMENTS:
      (A) DOORS SHALL BE MORTISED, REINFORCED, DRILLED AND TAPPED AT THE FACTORY FOR FULLY TEMPLATED HARDWARE ONLY, IN ACCORDANCE WITH APPROVED HARDWARE SCHEDULE AND TEMPLATES PROVIDED BY THE CONTRACTOR. WHERE SURFACE-MOUNTED HARDWARE IS TO BE APPLIED, DOORS SHALL HAVE REINFORCING PLATES ONLY.
      (B) MINIMUM THICKNESS OF HARDWARE REINFORCING PLATES SHALL BE AS FOLLOWS:
         (1) HINGE AND PIVOT REINFORCEMENTS - 7 GAUGE (3/16" AT ALL DOORS)
         (2) REINFORCEMENT FOR LOCK FACE, FLUSH BOLTS, CONCEALED HOLDERS, CONCEALED OR SURFACE-MOUNTED CLOSERS - 12 GAUGE.
         (3) REINFORCEMENTS FOR ALL OTHER SURFACE-MOUNTED HARDWARE - 16 GAUGE.

SOLID CORE FLUSH WOOD DOORS

A. DOOR CONSTRUCTION:
   1. WORKMANSHIP: COMPLY WITH WEMA PREMIUM GRADE.
   2. PERFORMANCE STANDARDS: COMPLY WITH WEMA I.S. 1A HEAVY-DUTY PERFORMANCE LEVEL.
   3. FACE VENEERS: 5-PLY SPECIES SELECT WHITE BIRCH
      (A) NON-LABEL DOORS: PARTICLE-BONDED CORE, GRADE LO-2 (AWI SECTION 1300-PC-5)
      (B) LABEL DOORS: MINERAL CORE, NON-COMBUSTIBLE, COMPLYING WITH AWI 1300-S-13, FD-5 FOR FIRE-RATING CALLED FOR ON DRAWINGS.
   4. VERTICAL EDGES: AWI SECTION 1300-S-4, PREMIUM GRADE.
   5. TOP AND BOTTOM EDGES: MANUFACTURER'S STANDARD MILL OPTION HARDWOOD.
   6. CROSS BANDS: MIN. 1/16-HIGH DENSITY HARDBOARD.

B. FACTORY-FINISH: FACTORY-FINISH TO MEET OR EXCEED WDMA I.S. IA TR-6.
   1. TRANSPARENT FINISH:
      (A) STAINING: TO BE SELECTED.
      (B) FINISH: WDMA TR-6 CATALYZED POLYURETHANE.

C. HARDWARE: INCLUDE AN ALLOWANCE OF SEVENTEEN THOUSAND DOLLARS ($17,000) FOR HARDWARE FOR NEW DOORS. ALLOWANCE SHALL INCLUDE MATERIALS, TAXES, AND INSTALLATION.

ALUMINUM STOREFRONT SYSTEMS

A. ALUMINUM ENTRANCE SYSTEMS SHALL BE EQUAL TO YKK-YES45FI FOR INSULATING GLASS.

B. FINISH: ANODIZED PLUS FINISH.

C. DOORS: MEDIUM STILE DOORS; CORNER CONSTRUCTION SHALL CONSIST OF BOTH WELDS AND MECHANICAL FASTENERS. DOOR FRAME JAMBS SHALL BE FLUSH GLAZED SECTIONS WITH TUBULAR TRANSOM BAR AND HEADER.

D. FRAMING: ALL VERTICAL AND HORIZONTAL MEMBERS SHALL HAVE A FACE DIMENSION OF 2" (INSULATING GLASS) AND DEPTH OF 4½". FRAMING MEMBERS SHALL BE OF TWO-PIECE CONSTRUCTION, CONSISTING OF A BASIC WHITE MEMBER AND A SNAP-ON FRONT GLAZING RETAINER SEPARATED BY A RIGID PVC THERMAL BREAK INSERT DESIGNED TO PREVENT HEAT AND AIR TRANSMISSION THROUGH THE MEMBER.

E. GLASS, UNDER GLASS AND GLAZING:
   1. GLASS FOR EXTERIOR STOREFRONT DOORS SHALL BE 1/4" TEMPERED GLASS.
   2. GLASS FOR EXTERIOR STOREFRONT WINDOWS, SIDELIGHTS, AND TRANSOMS SHALL BE 1" INSULATING GLASS. (SEE GLASS AND GLAZING)

F. SHOP ASSEMBLY: FABRICATE AND ASSEMBLE UNITS WITH JOINTS ONLY AT INTERSECTION OF ALUMINUM MEMBERS WITH UNIFORM HAIRLINE JOINTS; RIGIDLY SECURE, AND SEALED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
   1. HARDWARE: DRILL AND CUT TO TEMPLATE FOR HARDWARE. REINFORCE FRAMES AND DOOR STILES TO RECEIVE HARDWARE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
   2. WELDING: CONCEAL WELDS ON ALUMINUM MEMBERS IN ACCORDANCE WITH AWS RECOMMENDATIONS OR METHODS RECOMMENDED BY MANUFACTURER. MEMBERS SHOWING WELDING BLOOM OR DISCOLORATION ON FINISH OR MATERIAL DISTORTION WILL BE REJECTED.

G. INSTALL MANUFACTURER'S SYSTEM IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, WITHIN SPECIFIED TOLERANCES.

GLASS AND GLAZING

A. INSULATING GLASS: FORMED BY TWO PIECES OF 1/4 INCH THICK GLASS, MEETING REQUIREMENTS OF ASTM C1036 SEPARATED BY 1/2 INCH DEHYDRATED HERMETICALLY SEALED AIR SPACE. GLASS SHALL BE TEMPERED. GLASS SHALL BE SOLAR CONTROL LOW EMISSIVITY COATED.

GYPSUM BOARD SYSTEMS

A. FIRE-RATED: 5/8" THICK, TAPERED EDGE, MEETING REQUIREMENTS OF ASTM C-1396 AND ASTM C-473.

B. ALL GYPSUM BOARD SHALL BE 5/8" TYPE "X" GYPSUM BOARD, EXCEPT:
   1. INSTALL MOISTURE-RESISTANT GYPSUM BOARD AT ALL NON-RATED TOILET WALLS.
   2. INSTALL 5/8" TYPE 'X' GYPSUM BOARD AT ALL FIRE-RATED TOILET WALLS.

C. FINISH LEVELS:
   1. WALLS – LEVEL 4
   2. CEILINGS – LEVEL 5
   3. SMOKE/FIRE WALLS ABOVE CEILINGS – LEVEL 3

D. SOUND ATTENUATION BLANKETS
   1. ALL WALLS: EQUAL TO OWENS CORNING SOUND ATTENUATION BATTS, MEETING ASTM C665, TYPE 1, AND ASTM E136, UNFACED, FLAME SPREAD 10, SMOKE DEVELOPED 10, 3-1/2" THICK.

E. SMOKE/FIRE-RATED CONSTRUCTION: APPLICABLE STENCILED NOTATIONS ON WALLS ABOVE CEILINGS.

SIGNAGE

A. INTERIOR SIGNAGE:
   1. EXIT SIGNAGE AND RESTROOM: ADA APPROVED, 1/8" THICK, INJECTED ACRYLIC MOLDED PLAQUES, WITH INTEGRAL FRAME. SIGN TO CONTAIN THE WORD "EXIT", A HANDICAP PICTOGRAM (ACCESSIBLE EXITS ONLY), AND GRADE 2 BRAILLE. LETTERS SHALL BE A MINIMUM 5/8" HIGH INTEGRAL COPY, RAISED 1/32". LETTERS AND PICTOGRAMS SHALL BE OF SAME COLOR ON CONTRASTING BACKGROUND.

FIBERGLASS REINFORCED PLASTIC (FRP) PANELS

A. BASIS OF DESIGN: STRUCTOGLAS FLAT FIBERGLASS REINFORCED PLASTIC COMPOSITE (FRP) PANELS AS MANUFACTURED BY CRANE COMPOSITES, INC.

B. FRP PANELS:
   1. RATING: SURFACE BURNING CLASSIFICATION: CLASS A; FLAMESPREAD (ASTM E84) - 25 OR LESS; SMOKE DEVELOPED (ASTM E84) - 450 OR LESS.
   2. FINISH, THICKNESS: SMOOTH 0.09 INCH.
   3. DIMENSIONAL TOLERANCES
      (A) WIDTH AND LENGTH: 1/8-INCH (3.2 MM).
      (B) THICKNESS: +/- 10%
      (C) SQUARENESS: NOT MORE THAN 1/8-INCH (3.2 MM) OUT OF SQUARE.
   4. PERFORMANCE PROPERTIES:
      (A) MEETS USDA/FSIS REQUIREMENTS.
      (B) BARCOL HARDNESS (ASTM D2583): 20-30
   5. ACCESSORIES: MOULDING, TRIM, ETC., AS REQUIRED FOR COMPLETE FINISHED INSTALLATION; MATCH PANEL COLOR.

PAINTING

A. MANUFACTURERS: SUBSEQUENT TO THE REQUIREMENTS OF THESE SPECIFICATIONS, ACCEPTABLE MANUFACTURERS INCLUDE:

1. GLIDDEN PROFESSIONAL	GP
2. BENJAMIN MOORE	BM
3. DEVOE	D
4. PRATT & LAMBERT	PL
5. PITTSBURG PAINTS	PPG

B. PAINTING SYSTEMS SCHEDULE:
   1. INTERIOR PAINTING: INTERIOR GREEN SEAL STANDARD GS-11 ARCHITECTURAL PAINTS:

FLATS:	50 G/L
NON-FLATS:	100 G/L
COATINGS AND PRIMERS:	100 G/L

      (A) FERROUS METAL:
         (1) PRIMER – WATERBORNE METAL PRIMER
            ONE COAT (IN ADDITION TO SHOP COAT):
            BM HP04 ULTRA SPEC
            D MIRROLAC WB WATERBORNE DTM FLAT PRIMER & FINISH - DP85XX
            PL P1001 MULTI PURPOSE PRIMER
            PPG 4020 PF PITT-TECH PLUS DTM PRIMER
         (2) FINISH, LATEX SEMI-GLOSS
            TWO COATS:
            BM 539 ULTRA SPEC 500 SG
            D WONDER-TONES SEMI-GLOSS INTERIOR LATEX ENAMEL - DR39XXN
            PL Z8380 PRO HIDE SG
            PPG 6-500 SPEEDHIDE S/G INTERIOR LATEX ENAMEL
      (B) GALVANIZED METAL:
         (1) PRIMER – WATERBORNE METAL PRIMER
            ONE COAT (IN ADDITION TO SHOP COAT):
            BM HP04 ULTRA SPEC
            (DIRECT TO METAL) ACRYLIC SEMI-GLOSS P29
            D MIRROLAC WB WATERBORNE DTM FLAT PRIMER & FINISH - DP85XX
            PL P1001 MULTI PURPOSE PRIMER
            PPG 4020 PF PITT-TECH PLUS DTM PRIMER
         (2) LATEX SEMI-GLOSS
            TWO COATS
            BM 539 ULTRA SPEC
            D WONDER-TONES SEMI-GLOSS INTERIOR LATEX ENAMEL - DR39XXN
            PL Z8380 PRO HIDE SG
            PPG 6-500 SPEEDHIDE S/G INTERIOR LATEX ENAMEL
      (A) FERROUS METAL:
         (1) PRIMER – WATERBORNE METAL PRIMER
            ONE COAT (IN ADDITION TO SHOP COAT):
            BM HP04 ULTRA SPEC
            D MIRROLAC WB WATERBORNE DTM FLAT PRIMER & FINISH - DP85XX
            PL P1001 MULTI PURPOSE PRIMER
            PPG 4020 PF PITT-TECH PLUS DTM PRIMER
         (2) FINISH, LATEX SEMI-GLOSS
            TWO COATS:
            BM 539 ULTRA SPEC 500 SG
            D WONDER-TONES SEMI-GLOSS INTERIOR LATEX ENAMEL - DR39XXN
            PL Z8380 PRO HIDE SG
            PPG 6-500 SPEEDHIDE S/G INTERIOR LATEX ENAMEL
      (B) GALVANIZED METAL:
         (1) PRIMER – WATERBORNE METAL PRIMER
            ONE COAT (IN ADDITION TO SHOP COAT):
            BM HP04 ULTRA SPEC
            (DIRECT TO METAL) ACRYLIC SEMI-GLOSS P29
            D MIRROLAC WB WATERBORNE DTM FLAT PRIMER & FINISH - DP85XX
            PL P1001 MULTI PURPOSE PRIMER
            PPG 4020 PF PITT-TECH PLUS DTM PRIMER
         (2) LATEX SEMI-GLOSS
            TWO COATS
            BM 539 ULTRA SPEC
            D WONDER-TONES SEMI-GLOSS INTERIOR LATEX ENAMEL - DR39XXN
            PL Z8380 PRO HIDE SG
            PPG 6-500 SPEEDHIDE S/G INTERIOR LATEX ENAMEL
      (C) WOOD - PAINTED
         (1) PRIMER, ALKYD PRIMER/SEALER
            ONE COAT:
            BM FRESH START® ALL-PURPOSE 100% ACRYLIC PRIMER 023
            PPG 17-941NF SEAL GRIP ALKYD PRIMER
         (2) FINISH - ALKYD SEMI GLOSS:
            TWO COATS:
            BM ADVANCED WB SG 793
            PPG 6-1510 SPEEDHIDE WB ALKYD SG
      (D) GYPSUM BOARD
         (1) PRIMER, LATEX PVA
            ONE COAT:
            BM 534 ULTRA SPEC 500 PRIMER
            D PRIMZ 220 INTERIOR LATEX PVA WALL PRIMER - DR53360
            PL P1000 DRYWALL PRIMER
            PPG 6-2 SPEEDHIDE INTERIOR LATEX PRIMER SEALER
         (2) FINISH, CEILINGS, LATEX FLAT
            TWO COATS:
            BM 536 ULTRA SPEC 500 FLAT
            D WONDER-TONES INTERIOR FLAT LATEX WALL PAINT - DR36XXN
            PL Z8180 PRO HIDE FLAT
            PPG 6-70 SPEEDHIDE INTERIOR FLAT LATEX
         (3) FINISH, WALLS, ACRYLIC EGGSHELL:
            TWO COATS:
            BM 538 ULTRA SPEC 500 EGGSHELL
            D WONDER-TONES FLAT INTERIOR LATEX WALL PAINT - DR36XXN
            PL Z8290 PRO-HIDE® GOLD INTERIOR LATEX EGGSHELL
            PPG 6-411 SPEEDHIDE INTERIOR LATEX EGGSHELL

FIRE EXTINGUISHERS

A. TYPE 1 EXTINGUISHER (SEMI-RECESSED CABINET):
   1. RATING: 4A-80 BC
   2. TYPE: MULTIPURPOSE DRY CHEMICAL (AMMONIUM PHOSPHATE)
   3. MANUFACTURERS AND MODELS: ONE OF THE FOLLOWING:
      (A) COSMIC, MODEL 10E AS MANUFACTURED BY J.L. INDUSTRIES, BLOOMINGTON, MN.
      (B) MP10 AS MANUFACTURED BY LARSEN'S MANUFACTURING COMPANY, MINNEAPOLIS, MN.
      (C) FIGURE NO. 3010 AS MANUFACTURED BY POTTER-ROEMER, CERRITOS, CA.

B. FIRE EXTINGUISHER CABINETS: SEMI-RECESSED CABINETS EQUAL TO AMBASSADOR SERIES NO. 1017 WITH F10 FULL ACRYLIC DOOR AS MANUFACTURED BY J.L. INDUSTRIES, BLOOMINGTON, MN.

1 C. PORTABLE FIRE EXTINGUISHERS SHALL BE TAGGED BY A GEORGIA LICENSED FIRE EXTINGUSHER CONTRACTOR.

TOILET ACCESSORIES

A. SCHEDULE OF TOILET ACCESSORIES: COMMON AREA TOILETS

DESCRIPTION	CATALOG NO.
42" GRAB BAR	3800 SERIES – 42"L
36" GRAB BAR	3800 SERIES - 36"L
18" GRAB BAR	3800 SERIES - 18"L
MIRROR	FRAMED 0620
ROLL PAPER HOLDER	0263-1A
COAT HOOK	7301

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STATE OF GEORGIA
ROBERT WILBROWN
CERTIFICATE NO. 1428
REGISTERED ARCHITECT

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RENOVATIONS AT 476 SECOND STREET BLDG.

MACON, GEORGIA

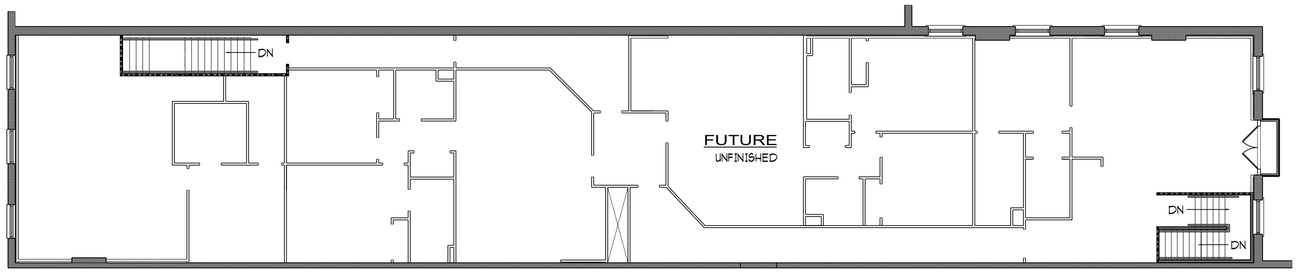
Drawing Issue Schedule	
10/23/2023	Permit Set
1 12/21/2023	Revision #1

Project No: 2023-25

Drawing Specifications

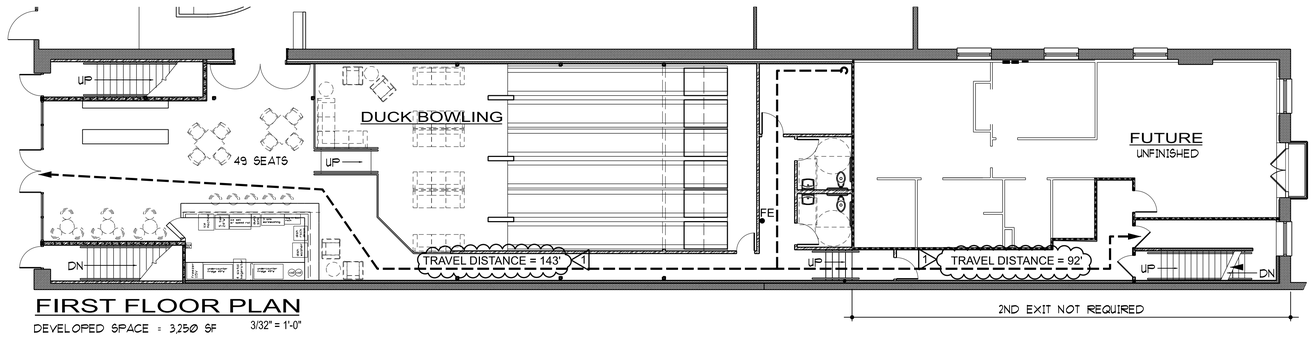
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2/20/2023



SECOND FLOOR PLAN

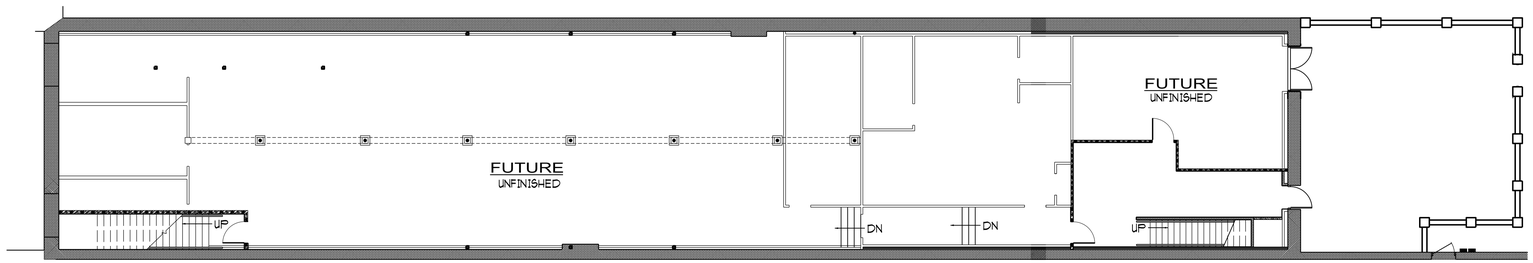
3/32" = 1'-0"



FIRST FLOOR PLAN

DEVELOPED SPACE = 3,250 SF
USABLE SPACE = 2,322 SF

3/32" = 1'-0"

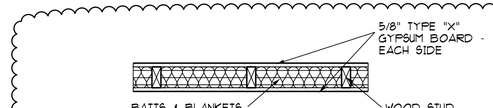


BASEMENT FLOOR PLAN

3/32" = 1'-0"

LEGEND

● FE FIRE EXTINGUISHER

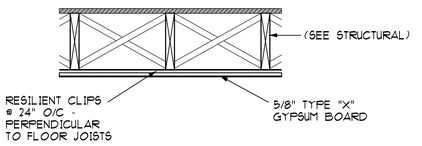


1-HR RATED WALL DETAIL

1" = 1'-0"

ANSI/UL 263 DESIGN No. U305

SEE LS1.2 FOR UL DESIGN DESCRIPTION

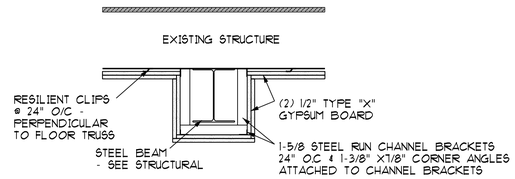


NEW 1-HR FIRE RATED CEILING DETAIL

1" = 1'-0"

ANSI/UL 263 DESIGN No. L581

SEE LS1.3 FOR UL DESIGN DESCRIPTION



1-HR FIRE RATED FURRED BEAM

1" = 1'-0"

ANSI/UL 263 DESIGN No. L524

SEE LS1.4 FOR UL DESIGN DESCRIPTION

Building Height and Area Evaluation

Building	Item	Proposed	Allowed or Required	Governing Code
476 2nd Street.	Occupancy	Assembly (A-3) (See Note 1)	Assembly (A-3) (See Note 1)	2018 Life Safety Code 2018 International Building Code as a supplement
	Type of Construction	Type IIIB Un-sprinklered	Type IIIB Un-sprinklered	2018 International Building Code
	Building Footprint Area	5,354 ft²	A-3 – 9,500 ft² (See Note 2)	2018 International Building Code
	Building Height	Avg roof - ± 37 ft 2 story	55 feet 2 story (See Note 3)	2018 International Building Code

1. The occupancy designation (A-3) is for the 1st Floor based on the IBC. The upper floor is unoccupied at present and not part of this project.
2. The base area allowed is from IBC Table 506.2 for un-sprinklered single-story story Group (A-3) occupancy and Type IIIB construction. No allowable area credit is taken for open space.
3. The building height (stories & feet) allowed is from IBC Tables 504.3 and 504.4 for un-sprinklered multi-story story Group (A-3) occupancy and Type IIIB construction. Group A-3 is only on the 1st Floor and governs building height for this project.

Floor	Space	Item	Proposed		Required
476 2nd Street. 1st Floor	1st Floor	Max. Travel Distance to Exits	Max. Distance - Assembly = 143 ft		Distance allowed - Assembly = 200 ft (See Note 1)
	General Seating	Occupant load	General Seating: Tables 600 sqft ÷ 15 sf/person = 40 people Bar 30-feet ÷ 1.5-ft/person = 20 people Total = 40 + 20 = 60 people	Total occupant load = 60 per. + 24 per. = 84 people Exit capacity required = Doors 84 per. X 0.2 in./person = 16.8 inches. Stair 84 per. X 0.3 in./person = 25.2 inches	2 doors X 34.5 in./dr = 69 in. 69 in > 16.8 in OK 1 stair X 42.5 in./dr = 42.5 in. 42.5 in > 25.2 in OK
	Duck Bowling Seating	Occupant load	Seating: 360 sqft ÷ 15 sf/person = 24 people		Two remote exits provided OK

1. The Life Safety Plan shows the maximum travels distances for this space.

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RENOVATIONS AT 476 SECOND STREET BLDG.

MACON, GEORGIA

Drawing Issue Schedule	
10/23/2023	Permit Set
1 12/21/2023	Revision #1

Project No: 2023-25

Life Safety Plan & Details

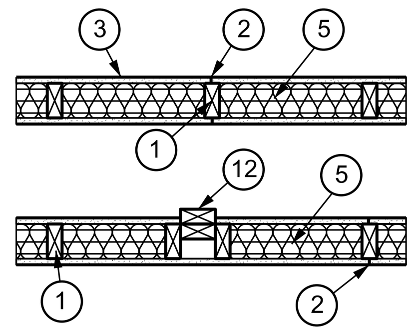
LS1.1

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12/21/2024

Published December 11, 2023

Bearing Wall Rating — 1 Hr
Finish Rating — See Items 3, 3A, 3D, 3E, 3F, 3G, 3H, 3J and 3L.
STC Rating - 56 (See Item 9)
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



1. Wood Studs — Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped.
2. Joints and Nail-Heads — Joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape. Nailheads exposed or covered with joint compound.
3. Gypsum Board* — 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths other than 48 in., gypsum panels are to be installed horizontally. For an alternate method of attachment of gypsum panels, refer to Items 6 through 6F, Steel Framing Members*.
When Items 6, 6B, 6C, 6D, 6E, or 6F, Steel Framing Members*, are used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.

When Item 6A, Steel Framing Members*, is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layers staggered with joints in base layers. One layer of gypsum board attached to opposite side of wood stud without furring channels as described in Item 3.

When Item 7, resilient channels are used, 5/8 in. thick, 4 ft wide gypsum panels applied vertically. Screw attached furring channels with 1 in. long, self-drilling, self-tapping Type S or S-12 steel screws spaced 8 in. OC, vertical joints located midway between studs.

AMERICAN GYPSUM CO — Types AGX-1(finish rating 23 min.), M-Glass (finish rating 23 min.), Type AGX-11 (finish rating 26 min), Type AGX-12 (finish rating 22 min), Type LightRoc (finish rating 23 min.) or Type AG-C

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO — Type DBX-1 (finish rating 24 min)

CABOT MANUFACTURING ULC — Type X (finish rating 22 min), 5/8 Type X, Moisture Resistant Type X, Gypsum Sheathing Type X, Mold & Mildew Resistant Type X and Mold & Mildew Resistant AR Type X, Type Blueglass Exterior Sheathing

CERTAINTEED GYPSUM INC — Type C, Type X-1 (finish rating 26 min); Type EGRG or GlasRoc (finish rating 23 min), GlasRoc-2, Type Habito (finish rating 26 min), Type LWTX (finish rating 18 min), Type LGFC6A (finish rating 34 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX (finish rating 21 min), Type CLLX (finish rating 24 min)

CGC INC — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type ULX (finish rating 22 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min), Type ULIX (finish rating 20 min)

GEORGIA-PACIFIC GYPSUM L L C — Type 5 (finish rating 26 min), Type 6 (finish rating 23 min), Type 9 (finish rating 26 min), Type C (finish rating 26 min), Type DGG (finish rating 20 min), Type GPFS1 (finish rating 20 min), Type GPFS2 (finish rating 20 min), Type GPFS6 (finish rating 26 min), Type DS, Type DAP, Type DD (finish rating 20 min), Type DA, Type DAPC, Type LS (finish rating 23 min), Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, Type LWX (finish rating 22 min), Veneer Plaster Base-Type LWX (finish rating 22 min), Water Rated-Type LWX (finish rating 22 min), Sheathing Type-LWX (finish rating 22 min), Soffit-Type LWX (finish rating 22 min), Type DGLW (finish rating 22 min), Water Rated-Type DGLW (finish rating 22 min), Sheathing Type- DGLW (finish rating 22 min), Soffit-Type DGLW (finish rating 22 min), Type LWX (finish rating 22 min), Type LW2X (finish rating 22 min), Veneer Plaster Base - Type LW2X (finish rating 22 min), Water Rated - Type LW2X (finish rating 22 min), Sheathing - Type LW2X (finish rating 22 min), Soffit - Type LW2X (finish rating 22 min), Type DGL2W (finish rating 22 min), Water Rated - Type DGL2W (finish rating 22 min), Sheathing - Type DGL2W (finish rating 22 min)

NATIONAL GYPSUM CO — Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min), Type FSW-5 (finish rating 22 min), Type FSW-G (finish rating 20 min), Type FSK-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSMR-C, Type FSW-6 (finish rating 20 min), Type FSL (finish rating 24 min), Type FSW-8, Type FSLX (finish rating 21 min), Type RSX (finish rating 26 min).

NATIONAL GYPSUM CO — Riyadh, Saudi Arabia — Type FR, or WR.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types C, PG-2 (finish rating 20 min), PG-3 (finish rating 20 min), Types PG-3W, PG-5W (finish rating 20 min), Type PG-4 (finish rating 20 min), Type PG-6 (finish rating 23 min), Types PG-3WS, PG-5WS, PGS-WRS (finish rating 20 min), Types PG-5, PG-9 (finish rating 26 min), PG-11 PG-13 (Nails increased to 2 in.), Type PG-C or PGI (finish rating 26 min)

PANEL REY S A — Type ARX, GREX, GRIX, PRX, PRC, PRC2; Types RHX, Guard Rey, MDX, ETX (finish rating 22 min), PRX2 (finish rating 21 min)

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1 (finish rating 26 min)

THAI GYPSUM PRODUCTS PCL — Type C, Type X (finish rating 26 min)

UNITED STATES GYPSUM CO — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type FRX-G (finish rating 29 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type SGX (finish rating 24 min), Type ULX (finish rating 22 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type ULIX (finish rating 20 min)

USG BORAL DRYWALL SFZ LLC — Type SGX (finish rating 24 min).

USG MEXICO S A DE C V — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), SCX (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type ULX (finish rating 22 min)

3A. Gypsum Board* — (As an alternate to Item 3) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.

AMERICAN GYPSUM CO — Types AGX-1 (finish rating 25 min.), M-Glass (finish rating 25 min.), AG-C (finish rating 25 min.), LighttRoc (finish rating 25 min.)

CERTAINTEED GYPSUM INC — Type C, Type X-1 (finish rating 26 min), Type EGRG or GlasRoc, LWTX.

CGC INC — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min)

NATIONAL GYPSUM CO — Type FSW (finish rating 24 min)

UNITED STATES GYPSUM CO — Type AR (finish rating 24 min), Type SGX (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type FRX-G (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min)

USG BORAL DRYWALL SFZ LLC — Types C, SCX, SGX (finish rating 24 min).

USG MEXICO S A DE C V — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type SCX, Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min)

3B. Gypsum Board* — (As an alternate to Item 3) — Nom 3/4 in. thick, installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-3/8 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A.
CGC INC — Types AR, IP-AR

UNITED STATES GYPSUM CO — Types AR, IP-AR

USG MEXICO S A DE C V — Types AR, IP-AR

3C. Gypsum Board* — (As an alternate to Items 3, 3A and 3B) — 5/8 in. thick, 2 ft wide, tongue and groove edge, applied horizontally to one side of the assembly. Installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-1/4 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A. Joint covering (Item 2) not required.
CGC INC — Type SHX

UNITED STATES GYPSUM CO — Type SHX

USG MEXICO S A DE C V — Type SHX

3D. Gypsum Board* — (As an alternate to Items 3, 3A, 3B, or 3C — Not Shown) — For Direct Application to Studs Only- Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs or tabs may be used in lieu of or in addition to the lead batten strips or optional at other locations. Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards underneath screw locations prior to the installation of the screws. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".
RAY-BAR ENGINEERING CORP — Type RB-LBG (finish rating 24 min)

3E. Gypsum Board* — (As an alternate to Items 3, 3A, 3B, 3C, and 3D) — 5/8 in. thick gypsum panels, with square edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last 2 screws 1 and 4 in. from edge of board or nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.
GEORGIA-PACIFIC GYPSUM L L C — Type DGG (finish rating 20 min), GreenGlass Type X (finish rating 23 min)

3F. Gypsum Board* — (As an alternate to Items 3, 3A, 3B, 3C, 3D, and 3E) — 5/8 in. glass-mat faced with square edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC around the perimeter and in the field with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Nails shall be placed 1 inch and 3 inch from horizontal joints and 7 inch OC thereafter.
CGC INC — Type USGX (finish rating 22 min)

UNITED STATES GYPSUM CO — Type USGX (finish rating 22 min.)

USG BORAL DRYWALL SFZ LLC — , Type USGX (finish rating 22 min.)

USG MEXICO S A DE C V — Type USGX (finish rating 22 min.)

3G. Gypsum Board* — (As an alternate to Items 3 through 3F) — 5/8 in. thick paper surfaced applied vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads.
GEORGIA-PACIFIC GYPSUM L L C — Type X ComfortGuard Sound Deadening Gypsum Board (finish rating 27 min)

3H. Gypsum Board* — (As an alternate to Items 3) — Not to be used with items 6 or 7. 5/8 in. thick paper surfaced applied vertically only. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads.
NATIONAL GYPSUM CO — Type SBWB

3I. Gypsum Board* — (As an alternate to Items 3 through 3H, Not Shown) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically. Panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Panel joints covered with paper tape and two layers of joint compound. Nailheads covered with two layers of joint compound.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock ES (finish rating 20 min)

3J. Gypsum Board* — (As an alternate to Item 3) — 5/8 in. thick paper surfaced applied vertically or horizontally. Gypsum panels secured with 1-1/4 in. Type W coarse thread gypsum panel steel screws spaced a maximum of 12 in. OC.
CERTAINTEED GYPSUM INC — Type SilentFX

3K. Gypsum Board* — (As an alternate to Item 3) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 8 in. OC with the last screw 1 in. from the edge of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally.
NATIONAL GYPSUM CO — Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min), Type FSW-5 (finish rating 22 min), Type FSW-G (finish rating 20 min), Type FSK-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSMR-C, Type FSW-6 (finish rating 20 min), Type FSL (finish rating 24 min).

3L. Gypsum Board* — (As an alternate to Item 3) — For Direct Application to Studs Only — Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, max 5/16 in. diam by max 0.140 in. thick. compression fitted or adhered over the screw heads. Lead batten strips to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D".
MAYCO INDUSTRIES INC — "X-Ray Shielded Gypsum"

3M. Gypsum Board* — (As an alternate to Items 3) — For Direct Application to Studs Only — For use as the base layer or as the face layer. Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Fasteners for face layer gypsum panels (Items 4, 4A or 4B) when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item 4.
RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

3N. Gypsum Board* — (As an alternate to Item 3) — 5/8 in. thick, 4 ft. wide, applied horizontally or vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Secured as described in Item 3 or 3A.
CERTAINTEED GYPSUM INC — Easi-Lite Type X (finish rating 24 min), Easi-Lite Type X-2 (finish rating 24 min)

3O. Wall and Partition Facings and Accessories* — (As an alternate to Item 3, Not Shown) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically. Panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Panel joints covered with paper tape and two layers of joint compound. Nailheads covered with two layers of joint compound.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527 (finish rating 24 min).

3P. Gypsum Board* — (As an alternate to Item 3, Not Shown) — Two layers nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by wood studs. Horizontal joints on the same side between face and base layers need not be staggered. Base layer gypsum panels fastened to studs with 1-1/4 in. long drywall nails spaced 8 in. OC. Face layer gypsum panels fastened to studs with 1-7/8 in. long drywall nails spaced 8 in. OC starting with a 4" stagger.
NATIONAL GYPSUM CO — Type FSW (finish rating 25 min)

3Q. Gypsum Board* — (As an alternate to Item 3) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 10 in. OC with the last two screws 4 and 1 in. from the edges of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally.
CERTAINTEED GYPSUM INC — Type LGFC6A (finish rating 21 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX

3R. Gypsum Board* — (As an alternate to Item 3. For use with Item 5H) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 3 above. Applied either horizontally or vertically, and screwed to panels with 1-5/8 in. long Type W coarse thread steel screws at 8 in. OC at perimeter and in the field with the last two screws 4 and 3/4 in. from the edges of the board when applied as the base layer. When used in widths other than 48 in., gypsum panels are to be installed horizontally.
3S. Gypsum Board* — 3/4 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels secured as described in Item 3 with nail length increased to 2 in.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-13

3T. Wall and Partition Facings and Accessories* — (As an alternate to 5/8 in. thick board as outlined in Item 3) — Nominal 1-3/8 in. thick, 4 ft wide panels, applied vertically or horizontally. Fastened with #6 x 2 in. long drywall screws spaced 8 in. OC along the perimeter and 12 in. OC in the field.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 545

3U. Gypsum Board* — (As an alternate to Item 3 - For use with Foamed Plastic products, Item 5J) — 5/8 in. thick, 4 ft. wide, applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads.
AMERICAN GYPSUM CO — Types AGX-1

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO — Type DBX-1

CABOT MANUFACTURING ULC — Type X

CERTAINTEED GYPSUM INC — Type X

CGC INC — Type SCX

PANEL REY S A — Type ARX, PRX

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1

THAI GYPSUM PRODUCTS PCL — Type X

UNITED STATES GYPSUM CO — Types SCX and SGX

USG BORAL DRYWALL SFZ LLC — Types SCX and SGX

USG MEXICO S A DE C V — Type SCX

3V. Gypsum Board* — (As an alternate to Item 3. For use with Item 5K) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 3 above. Applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Gypsum panels secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field.
3W. Gypsum Board* — (As an alternate to Item 3. For use with Item 5L) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 3 above. Applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Gypsum panels secured to studs with 1-1/4 in. long Type W screws spaced 8 in. OC at perimeter and in the field.

4. Steel Corner Fasteners — (Optional) — For use at wall corners. Channel shaped, 2 in. long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galv steel. Fasteners applied only to the end or cut edge (not along tapered edges) of the gypsum board, no greater than 2 in. from corner of gypsum board, max spacing 16 in. OC. Nailed to adjacent stud through tab using one No. 6d cement coated nail per fastener. Corners of wall board shall be nailed to top and bottom plate using No. 6d cement coated nails.
5. Batts and Blankets* — (Optional — Required when Item 6A is used (RC-1)) — Glass fiber or mineral wool insulation. Placed to completely or partially fill the stud cavities. When Item 6A is used, glass fiber or mineral wool insulation shall be friction-fitted to completely fill the stud cavities.
CERTAINTEED CORP

JOHNS MANVILLE

KNAUF INSULATION LLC

MANSON INSULATION INC

ROCKWOOL — Types Acoustical Fire Batts and Type AFB, min. density 1.69 pcf / 27.0 kg/m3

ROCKWOOL MALAYSIA SDN BHD — Type Acoustical Fire Batts

ROCK WOOL MANUFACTURING CO — Delta Board

THERMAFIBER INC — Type SAFB, SAFB FF

5A. Fiber, Sprayed* — (Not Shown — Not for use with Item 6) — As an alternate to Batts and Blankets (Item 5) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft3. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft3, in accordance with the application instructions supplied with the product. When Item 6B is used, Fiber, Sprayed shall be INS735, INS745, INS750LD, INS765LD, INS773LD or SANCTUARY.

Applegate Greenfiber Acquisition LLC — Insulmax and SANCTUARY for use with wet or dry application. INS515LD and INS541LD are to be used for dry application only

5B. Fiber, Sprayed* — (Not Shown - Not for use with Item 6) — As an alternate to Batts and Blankets (Item 5) - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft.
NU-WOOL CO INC — Cellulose Insulation

5C. Batts and Blankets* — Required for use with resilient channels, Item 7, 3 in. thick mineral wool batts, friction-fitted to fill interior of wall.
THERMAFIBER INC — Type SAFB, SAFB FF

5D. Glass Fiber Insulation — (As an alternate to Item 5C) — 3 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, friction-fitted to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.
5E. Batts and Blankets* — (Required for use with Wall and Partition Facings and Accessories, Item 3D) — Glass fiber insulation, nom 3-1/2 in. thick, min. density of 0.80 pcf, with a flame spread of 25 or less and a smoke developed of 50 or less, friction-fitted to completely fill the stud cavities. See Batts and Blankets Category (BKNV) for names of manufacturers.
5F. Fiber, Sprayed* — (Optional, Not Shown — Not for use with Items 6, 6A, 6B, 6C, or 6D) — As an alternate to Batts and Blankets (Item 5) and Item 5A - Spray applied granulated mineral fiber material. The fiber is applied with adhesive, at a minimum density of 4.0 pcf, to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. See Fiber, Sprayed (CCAZ).
AMERICAN ROCKWOOL MANUFACTURING, LLC — Type Rockwool Premium Plus

5G. Fiber, Sprayed* — (Optional, Not Shown — Not for use with Items 6, 6A, 6B, 6C, or 6D). — As an alternate to Batts and Blankets (Item 5) and Item 5A - Brown Colored Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed stud cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft3.
INTERNATIONAL CELLULOSE CORP — Celbar-RL

5H. Foamed Plastic* — (Optional -For use with Item 3R) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.
SES FOAM INC — Nexseal™ 2.0 or Nexseal™ 2.0 LE Spray Foam and Sucraseal Spray Foam.

5I. Deleted.
5J. Foamed Plastic* — (Optional, Not Shown - For use with Item 3U) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.
HOLCIM SOLUTIONS AND PRODUCTS US, LLC — Types GacoEZSpray F4500, GacoProFill FR6500R, Gaco 052N, GacoOnePass F1850, GacoOnePass Low GWP F1880, and Gaco WallFoam 183M

5K. Foamed Plastic* — (Optional, Not Shown - For use with Item 3V) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.
CARLISLE SPRAY FOAM INSULATION — Types SealTite ONE, SealTite Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCX, SealTite Pro No Trim 21, SealTite Pro One Zero, Foamsulate Closed Cell, Foamsulate OCX, Foamsulate 70, and Foamsulate HFO.

5L. Foamed Plastic* - (Optional, Not Shown – For use with Item 3W) - Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

BASF CORP – Types Enertite® NM, Enertite® G, FE178®, Spraytite® 178, Spraytite® 81206, Walltite® 200, Walltite® US, Walltite® US-N, Walltite® HP+, Spraytite® Comfort XL, and Walltite® XL.

6. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.
b. Steel Framing Members* — Used to attach furring channels (Item 6a) to studs. Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring channels.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75)

6A. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members on one side of studs as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Batts and Blankets placed in stud cavity as described in Item 5. Two layers of gypsum board attached to furring channels as described in Item 3.
b. Steel Framing Members* — Used to attach furring channels (Item 6Aa) to one side of studs only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips.
KINETICS NOISE CONTROL INC — Type Isomax

6B. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.
b. Steel Framing Members* — Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
PLITEQ INC — Type Genie Clip

6C. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 3.
b. Steel Framing Members* — Used to attach furring channels (Item 6Ca) to studs. Clips spaced 48 in. OC., and secured to studs with No. 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6D. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with a double strand of No. 18 AWG twisted steel wire. Gypsum board attached to furring channels as described in Item 3.
b. Steel Framing Members* — Used to attach furring channels (Item 6Da) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
REGUPOL AMERICA — Type SonusClip

6E. Steel Framing Members* — (Optional, Not Shown) — Resilient channels and Steel Framing Members as described below:
a. Resilient Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 3.
b. Steel Framing Members* — Used to attach resilient channels (Item 6Ea) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling screw.
KEENE BUILDING PRODUCTS CO INC - Type RC+ Assurance Clip

6F. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.
b. Steel Framing Members* — Used to attach furring channels (Item 6Fa) to studs. Clips spaced 48 in. OC. Clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips.
CLARKDIETRICH BUILDING SYSTEMS — Type ClarkDietrich Sound Clip

6G. Steel Framing Members* — (Optional, Not Shown) — Used as an alternate method to attach resilient channels to wall studs. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 16 in. O.C. Channel ends butted and centered under the structural members and attached with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the structural members with the screws supplied with the accessory and per the accessory manufacturer's installation instructions.
PAC INTERNATIONAL L L C — Type RC-1 Boost

7. Furring Channel — Optional — Not Shown — For use on one side of the wall - Resilient channels, 25 MSG galv steel, spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used, insulation, Items 5C or 5D is required.
8. Caulking and Sealants — (Not Shown, Optional) — A bead of acoustical sealant applied around the partition perimeter for sound control.
9. STC Rating — The STC Rating of the wall assembly is 56 when it is constructed as described by Items 1 through 6, except:
A. Item 2, above — Nailheads Shall be covered with joint compound.
B. Item 2, above — Joints As described, shall be covered with fiber tape and joint compound.
C. Item 5, above — Batts and Blankets* The cavities formed by the studs shall be friction fit with R-19 unfaced fiberglass insulation batts measuring 6-1/4 in. thick and 15-1/4 in. wide.
D. Item 6, above — Steel Framing Members* Type RSIC-1 clips shall be used to attach gypsum board to studs on either side of the wall assembly.
E. Item 8, above — Caulking and Sealants (Not Shown) A bead of acoustical sealant shall be applied around the partition perimeter for sound control.
F. Steel Corner Fasteners (Item 4), Fiber, Sprayed (Items 5A and 5B) and Steel Framing Members (Item 6A), not evaluated as alternatives for obtaining STC rating.
10. Wall and Partition Facings and Accessories* — (Optional, Not Shown) — Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-500 and QR-510

11. Cementitious Backer Units* — (Optional Item Not Shown — For Use On Face Of 1 Hr Systems With All Standard Items Required) - 7/16 in., 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, min. 32 in. wide. Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with cement board screws of adequate length to penetrate stud by a minimum of 3/8 in. for steel framing members, and a minimum of 3/4 in. for wood framing members spaced a max of 8 in. OC. When 4 ft. wide boards are used, horizontal joints need not be backed by framing.
NATIONAL GYPSUM CO — Type DuraBacker, PermaBase, DuraBacker Plus, or PermaBase Plus

12. Non-Bearing Wall Partition Intersection — (Optional) —Two nominal 2 by 4 in. studs or nominal 2 by 6 in. studs nailed together with two 3 in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the bearing wall.
13. Mesh Netting — (Not Shown) — Any thin, woven or non-woven fibrous netting material attached with staples to the outer face of one row of studs to facilitate the installation of the sprayed fiber from the opposite row.
14. Mineral and Fiber Board* — (Optional, Not Shown) — For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with 2 in. long Type W steel screws, spaced 12 in. OC. The required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.
HOMASOTE CO — Homasote Type 440-32

14A. Mineral and Fiber Board* — (Optional, Not Shown) — For use with Items 14B-14E) — For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with minimum 1-3/8 in. long ring shanked nails or 1-1/4 in. long Type W steel screws, spaced 12 in. OC along board edges and 24 in. OC in field of board along intermediate framing. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.
HOMASOTE CO — Homasote Type 440-32

14B. Glass Fiber Insulation — (For use with Item 14A) — 3-1/2 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) categories for names of Classified companies.
14C. Batts and Blankets* — (As an alternate to Item 14B, For use with Item 14A), 3 in. thick mineral wool batts, placed to fill interior of wall, attached to the 3-1/2 in. face of the studs with staples placed 24 in. OC.
THERMAFIBER INC — Type SAFB, SAFB FF

14D. Adhesive — (For use with Item 14A) — Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in. wide beads down the length of both vertical edges of Mineral and Fiber Board (Item 14A).
14E. Gypsum Board* — (For use with Item 14A) — 5/8 in. thick, 4 ft wide, applied vertically over Mineral and Fiber Board (Item 14A) with vertical joints located anywhere over stud cavities. Secured to mineral and fiber boards with 1-1/2 in. Type G Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermediate field of the Mineral and Fiber Board (Item 14A). Secured to outermost studs and bearing plates with 2 in. long Type S screws spaced 8 in. OC. Gypsum Board joints covered with paper tape and joint compound. Screw heads covered with joint compound. Finish Rating 30 Min.

AMERICAN GYPSUM CO — Type AG-C
CGC INC — Types C, IP-X2, IPC-AR
CERTAINTEED GYPSUM INC — Type LGFC-C/A
GEORGIA-PACIFIC GYPSUM L L C — Types 5, DAPC, TG-C
NATIONAL GYPSUM CO — Types FSK-C, FSW-C
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-C
PANEL REY S A — Type PRC
THAI GYPSUM PRODUCTS PCL — Type C
UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR
USG BORAL DRYWALL SFZ LLC — Type C
USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR

14F. Mineral and Fiber Board — (Optional, Not Shown) — For optional use as an additional layer on one side of wall - Nom 1/2 in. thick, 4 ft wide, square edge fiber boards applied vertically to studs on one side of the wall in between the wood studs and the UL Classified Gypsum Board (Item 3). Fiber boards installed with 1-1/4 in. long, Type W, bugle head, coarse thread gypsum board screws spaced 12 in. OC max, with the last screws spaced 2 in. and 6 in. from edge of board. Gypsum board (Item 3) installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.
BLUE RIDGE FIBERBOARD INC — SoundStop

14G. Building Units – (Optional Item Not Shown – For use over Gypsum Board, Item 3) 1 in., 2 in. or 3 in. thick, 4 ft. wide – Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with wafer head screws of adequate length to penetrate framing by a minimum of of ¾ in., spaced a max 8 in. o.c.

NATIONAL GYPSUM CO – Type PBCI

bTbB inc.
ARCHITECTS | PLANNERS

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STATE OF GEORGIA
ROBERT W. BROWN
CERTIFICATE No. 7129
REGISTERED ARCHITECT

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RENOVATIONS AT
476 SECOND STREET BLDG.
MACON, GEORGIA

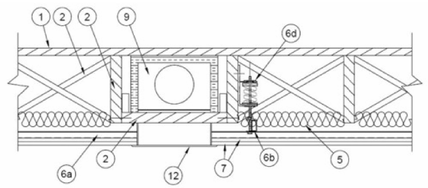
Drawing Issue Schedule	
10/23/2023	Permit Set
12/21/2023	Revision #1
Project No:	2023-25

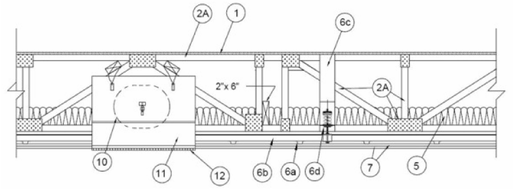
1-Hour Rated Wall
ANSI/UL 263
Design No. U305

LS1.2

Published July 11, 2023
Unrestrained Assembly Rating — 1 Hr
Finish Rating — 42 Min
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.





1. Floor Systems — The flooring system shall consist of the following:
Subflooring — Min 3/4 in. thick T & G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood to be perpendicular to the joists or trusses with end joints staggered 4 ft. Plywood secured to joists or trusses with construction adhesive and No. 8d cement coated nails spaced 12 in. OC along each truss. Adhesive applied as 3/8 in. diam bead to top chord of joists or trusses and grooved edges of plywood.

1A. Floor Topping Systems — (Optional not shown)

System No. 1

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

MAXXON CORP — Type Maxxon Standard and Maxxon High Strength

Floor Mat Materials* — (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

MAXXON CORP — Type Encapsulated Sound Mat.

Floor Mat Reinforcement — (Optional) Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement

Metal Lath — (Optional) — 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material.

Fiber Glass Reinforcement — (Optional) - 0.015 in. thick PVC coated non-woven fiberglass mesh, 0.368 lbs./sq. yd loose laid over the floor mat material.

System No. 2

Vapor Barrier — (Optional) Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

FORMULATED MATERIALS LLC — Types FR-25, FR-30, and SiteMix

Floor Mat Material* — (Optional) Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor.

FORMULATED MATERIALS LLC — Types M1, M2, M3, Elite, Duo, R1, and R2

System No. 3

Vapor Barrier — (Optional) — Nom 0.010 in. thick commercial asphalt saturated felt.

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Types LRK, HSLRK, CSD

USG MEXICO S A DE C V — Types LRK, HSLRK, CSD

Floor Mat Materials* — (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

UNITED STATES GYPSUM CO — Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM-25

System No. 4

Floor Mat Materials* — (Optional) — Floor mat material nom 1/8 in. (3mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 3/4 in. (19 mm).

HACKER INDUSTRIES INC — FIRM-FILL SCM 125

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/4 in. (6 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25 mm).

HACKER INDUSTRIES INC — Type FIRM-FILL SCM 250

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/8 in. (10 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/4 in. (32 mm).

HACKER INDUSTRIES INC — FIRM-FILL SCM 400

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/4 in. (19 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38 mm).

HACKER INDUSTRIES INC — Type FIRM-FILL SCM 750

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 5/64 in. (2 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of floor-topping mixture. Floor topping thickness a min 1 in. over the floor mat.

HACKER INDUSTRIES INC — Type Hacker Sound-Mat.(HSM1.02)

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/4 in. (6 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. (32 mm) of floor-topping mixture.

HACKER INDUSTRIES INC — Type Hacker Sound-Mat II. (HSM2.06)

Metal Lath — (Optional) — For use with 3/8 in. (10 mm) or greater floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness a nom 1-1/4 in. over the floor mat.

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

HACKER INDUSTRIES INC — Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 3310, Firm-Fill 4010, Firm-Fill High Strength, Gyp-Span Radiant

System No. 5

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.
Vapor Barrier — (Optional) — Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance.
See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).

Floor Mat Materials* — (Optional) — Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.
KEENE BUILDING PRODUCTS CO INC — Types Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.
KEENE BUILDING PRODUCTS CO INC — Types Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.
KEENE BUILDING PRODUCTS CO INC — Types Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.
KEENE BUILDING PRODUCTS CO INC — Types Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.
KEENE BUILDING PRODUCTS CO INC — Types Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 6

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.
Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
DEPENDABLE LLC — Types GSL M3.4, GSL K2.6, GSL-CSD and GSL RH

Floor Mat Materials* — (Optional) — Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.
KEENE BUILDING PRODUCTS CO INC — Types Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.
KEENE BUILDING PRODUCTS CO INC — Types Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.
KEENE BUILDING PRODUCTS CO INC — Types Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.
KEENE BUILDING PRODUCTS CO INC — Types Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.
KEENE BUILDING PRODUCTS CO INC — Types Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 7

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.
Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
ARCOSA SPECIALTY MATERIALS — AccuCrete® Types NexGen, Green, Prime and PrePour, AccuRadiant®, AccuLevel® Types G40, G50 and SD30

Floor Mat Material* — (Optional) — Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor.
ARCOSA SPECIALTY MATERIALS — AccuQuiet® Types D13, D-18, D25, DX38, EM.125, EM.125S, EM.250, EM.250S, EM.375, EM.375S, EM.750, and EM.750S.

System No. 8

Finish Flooring - Floor Topping Mixture* — Min 1 in. thickness of floor topping mixture having a min compressive strength of 4500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
SIKA DEUTSCHLAND GMBH — Type SCHONOX AP Rapid Plus

System No. 9

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.
Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).
Floor Mat Materials* — (Optional, Not Shown) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.
LOW & BONAR INC — EnkaSonic® by Colbond a member of the Low & Bonar group Types 125, 250, 250 Plus, 400, 400 Plus, 750 and 750 Plus.

Floor Mat Reinforcement — (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.
Metal Lath — (Optional) — Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.
Fiberglass Mesh Reinforcement — (Optional) — Coated non-woven glass fiber mesh grid loose laid over floor mat material.

2. Wood Joists — Min 2 by 10, spaced max 16 in. OC and effectively fireblocked in accordance with local codes. Cross bridging shall be min 1 by 3 in. or min 2 by 10 solid blocking. When ceiling damper (Item 9) is employed, wood 2 by 4 in. horizontal bridging used in lieu of cross bridging and secured between joists with nails.

2A. Trusses — As an alternate to Item 2, Parallel chord trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Min truss depth is 12 in. Truss members secured together with min 0.0356 in. thick galv steel plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approx. 7/8 in. centers with four rows of teeth per inch of plate width.

2B. Alternate to Item 2: Structural Wood Members — Min 9-1/2 in. deep "I" shaped wood joists spaced at a max of 24 in. OC. Joists shall conform to ICC-ES ESR-1153 Report. Joist top and bottom chords minimum 1-3/8 in. deep by 2.3 in. wide and constructed of either Microllam laminated veneer lumber (LVL) or TimberStrand laminated strand lumber (LSL). Webs constructed of minimum 3/8 in. thick Performance Plus OSB, PS2, Exposure 1. Installation shall be in accordance with manufacturers published literature.

3. Deleted.

4. Deleted

5. Batts and Blankets* — Glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. Nom 3-1/2 in. thick insulation shall be draped over the furring channels (Item 6a) and gypsum board ceiling membrane, and friction-fitted between joists or trusses and Steel Framing Members (Item 6d).

6. Steel Framing Members* —
a. Furring Channels — Hat-shaped furring channels, 7/8 in. deep by 2-5/8 in. wide at the base and 1-1/4 in. wide at the face, formed from No. 25 ga. galv steel, spaced max. 16 in. OC perpendicular to joists or trusses and Cold Rolled Channels (Item 6b). Furring channels secured to Cold Rolled Channels at every intersection with a 1/2 in. pan head self-drilling screw through each furring channel leg. Ends of adjoining channels overlapped 4 in. and tied together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap. Supplemental furring channels at base layer and outer layer gypsum board butt joints are not required. Batts and Blankets draped over furring channels as described in Item 5. Two layers of gypsum board attached to furring channels as described in Item 7.
b. Cold Rolled Channels — 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to joists or trusses, friction-fitted into the channel caddy on the Steel Framing Members (Item 6d). Adjoining lengths of cold rolled channels lapped min. 6 in. and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.
c. Blocking — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 6 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the truss or joist (Items 2A) at the top and bottom of the blocking at each Steel Framing Member (Item 6d) location.

d. Steel Framing Members* — Hangers spaced 48 in. OC. max along truss or joist, and secured to the joist or Blocking (Item 6c) on alternating joists or trusses with a single 5/16 in. by 2 in. hex head lag bolt or four #6 1-1/4 in. drywall screws through mounting hole(s) on the hanger bracket. The two 1/4 in. long steel teeth on the hanger are embedded in the side of the blocking. Hanger positioned on blocking and leveling bolt height adjusted such that furring channels are flush with bottom of joists or trusses before gypsum board installation. Spring gauge of hanger chosen per manufacturer's instructions.
KINETICS NOISE CONTROL INC — Type ICW

7. Gypsum Board* — Two layers of nom 5/8 in. thick, 4 ft wide gypsum board panels are installed with long dimensions perpendicular to furring channels (Item 6a). Base layer attached to the furring channels using 1 in. long Type S bugle head steel screws spaced 8 in. OC along butted end joints and 12 in. OC in the field of the board. Butted end joints centered on the continuous furring channels. Butted base layer end joints to be offset a min of 16 in. in adjacent courses. Outer layer attached to the furring channels using 1-5/8 in. long Type S bugle head steel screws spaced 8 in. OC at butted end joints and 12 in. OC in the field. Butted end joints centered on the continuous furring channels and offset a min of 16 in. from butted end joints of base layer. Butted side joints of outer layer to be offset min 16 in. from butted side joints of base layer. Outer layer shall be finished as described in Item 8.
AMERICAN GYPSUM CO — Type AG-C

CGC INC — Types C, IP-X2, IPC-AR

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR

7A. Gypsum Board* (As an alternative to Item 7) — Nom 5/8 in. thick, 48 in. wide gypsum board, installed and secured as described in Item 7 with max screw spacing 8 in. OC.
CGC INC — ULIX

UNITED STATES GYPSUM CO — ULIX

8. Finishing System — (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to outer layer joints and screw-heads. Nom 2 in. wide paper tape embedded in first layer of compound over all outer layer joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board.

9. Ceiling Damper* — (Optional, For use with Item 2 only, Not for use with Item 2A) — Max nom area shall be 198 sq in. Max rectangular size shall be 12 in. wide by 16-1/2 in. long. Max height of damper shall be 8-3/4 in. Aggregate damper openings shall not exceed 99 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 12) shall be installed in accordance with installation instructions.
AIR KING VENTILATION PRODUCTS — Series FRAS, Series FRAK, Series FRAKV

CENTRAL VENTILATION SYSTEMS CO L L C — Models C-S/R-HC(-A), C-RD-HC(-A)

JAMIL ALI NASSER AL-ZADJALI FOR INDUSTRY— Models C-S/R-HC(-A), C-RD-HC(-A)

BADR & ASFOUR COMPANY FOR ENGINEERING AND METAL INDUSTRIES — Models C-S/R-HC(-A), C-RD-HC(-A)

METAL-FAB INC — Models MSCDHC, MRCDHC

METAL INDUSTRIES INC — Models CD-S/R-HC, CD-S/R-HC-A, CD-RD-HC, CD-RD-HC-A

NCA MFG INC — Models CD-S/R-HC, CD-S/R-HC-A, CD-RD-HC, CD-RD-HC-A

BRISK MFG INC — Model BMI-50-CRD-S/R-WT

PRICE INDUSTRIES LTD — Models CD-S/R-HC, CD-RD-HC

RUSKIN COMPANY — Model CFD7

UNITED ENERTECH CORP — Models C-S/R-HC(-A), C-RD-HC(-A)

10. Air Duct* — (Optional, For use with Item 2 and 2A only) — Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer.
11. Ceiling Damper* — (Optional, For use with Item 2A only) — For use with min 18 in. deep trusses. Max nom area shall be 324 sq in. Max square size shall be 18 in. by 18 in. Rectangular sizes not to exceed 324 sq in. with a max width of 18 in. Max height of damper shall be 14 in. Aggregate damper openings shall not exceed 162 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 12) shall be installed in accordance with installation instructions.
C&S AIR PRODUCTS — Model RD-521

POTTORFF — Model CFD-521.

11A. Alternate Ceiling Damper* — (Optional, For use with Item 2A only) — Max nom area shall be 196 sq in. Max square size shall be 14 in. by 14 in. Rectangular sizes not to exceed 196 sq in. with a max width of 26 in. Max height of damper shall be 7 in. Aggregate damper openings shall not exceed 99 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 12) not to exceed 144 in.2 shall be installed in accordance with installation instructions.
C&S AIR PRODUCTS — Model RD-521-BT

POTTORFF — Model CFD-521-BT.

11B. Alternate Ceiling Damper* — (Optional, For use with Item 2A only) — For use with min 18 in. deep trusses. Max nom area shall be 256 sq in. with the length not to exceed 24 in. and the width not to exceed 20 in. Max height of damper shall be 17 in. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 12) shall be installed in accordance with installation instructions.
C&S AIR PRODUCTS — Model RD-521-IP, RD-521-NP

POTTORFF — Models CFD-521-IP, CFD-521-NP

11C. Alternate Ceiling Damper* — (Optional, For use with Item 2A only.) For use with min 18 in. deep trusses. Max nom area shall be 144 sq in. with the length not to exceed 14 in. and the width not to exceed 12 in. Max height of damper shall be 17-7/8 in. Aggregate damper openings shall not exceed 74 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 12) shall be installed in accordance with installation instructions.
C&S AIR PRODUCTS — Model RD-521-90, RD-521-NP90

POTTORFF — Models CFD-521-90, CFD-521-90NP

11D. Alternate Ceiling Damper* — (Optional, For use with Item 2A only) — Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 75 sq in. with the length not to exceed 8-9/16 in. and the width not to exceed 8-3/4 in. Max height of damper shall be 9-7/8 in. Aggregate damper openings shall not exceed 38 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturers installation instructions provided with the damper. A plastic grille (Item 12) shall be installed in accordance with installation instructions.
DELTA ELECTRONICS INC — Models CRD2, GBR-CRD, ITG-CRD

11E. Alternate Ceiling Damper* — (Optional, For use with Item 2A only) — Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 75 sq in. with the length not to exceed 9-1/4 in. and the width not to exceed 9-3/4 in. Max height of damper shall be 9-7/8 in. Aggregate damper openings shall not exceed 45 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 12) shall be installed in accordance with installation instructions.
DELTA ELECTRONICS INC — Model SIG-CRD

11F. Alternate Ceiling Damper* — (Optional, For use with Item 2A only.) Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 131 sq in. with the length not to exceed 11-1/16 in. and the width not to exceed 11-7/8 in. Aggregate damper openings shall not exceed 66 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 12) shall be installed in accordance with installation instructions.
DELTA ELECTRONICS INC — Model SMT-CRD

11G. Alternate Ceiling Damper* — (Optional, For use with Item 2A only) — Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 103 sq in. with the length not to exceed 10-1/8 in. and the width not to exceed 10-1/8 in. Aggregate damper openings shall not exceed 52 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 12) shall be installed in accordance with installation instructions.
PANASONIC CORPORATION, PANASONIC CORPORATION OF NORTH AMERICA — Model PC-RD05C5

11H. Alternate Ceiling Damper* — (Optional, For use with Item 2A only) — Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 113 sq in. with the length not to exceed 10-1/8 in. and the width not to exceed 11-1/8 in. Aggregate damper openings shall not exceed 57 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 12) shall be installed in accordance with installation instructions.
BROAN-NUTONE L L C — Model RDFUWT

11I. Alternate Ceiling Damper* — (Optional, For use with Item 2A only) — Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 79 sq in. with the length not to exceed 10 in. and the width not to exceed 7-15/16 in. Aggregate damper openings shall not exceed 40 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A metallic grille (Item 12) shall be installed in accordance with installation instructions.
BROAN-NUTONE L L C — Models RDJ1 and RDH

11J. Alternate Ceiling Damper* — (Optional, For use with Item 2A only) — Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 87 sq in. with the length not to exceed 9 in. and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 12) shall be installed in accordance with installation instructions.
BROAN-NUTONE L L C — Model RDMWT

11K. Alternate Ceiling Damper* — (Optional, For use with Item 2A only.) Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 87 sq in. with the length not to exceed 9 in. and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 12) shall be installed in accordance with installation instructions.
BROAN-NUTONE L L C — Model RDMWT2

11L. Alternate Ceiling Damper* — (Optional, For use with Item 2A and 10 only) — For use with min 18 in. deep trusses. Max nom 21 in. long by 18 in. wide, fabricated from galvanized steel. Plenum box max size nom 21 in. long by 18 in. wide by 14 in. high (inner dimension) fabricated from either galvanized steel or min 1 in. thick Listed Duct Board bearing the UL Listing Marking having a min R-Value of 4.3. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 180 sq in. per 100 sq ft of ceiling area.
GREENHECK FAN CORP — Model CRD-1WT

11M. Alternate Ceiling Damper* — (Optional, For use with Item 2A and 10 only) — For use with min 18 in. deep trusses. Max nom 12 in. long by 12 in. wide with an 8 in. diameter damper, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 72 sq in. per 100 sq ft of ceiling area.
GREENHECK FAN CORP — Model CRD-2WT

11N. Damper* — (Optional, For use with Item 2A and 10 only) For use with min 18 in. deep trusses. Max nom 11-1/8 in. long by 13-5/8 in. wide, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 76 sq in. per 100 sq ft of ceiling area.
GREENHECK FAN CORP — Model CRD-310WT

11O. Damper* — (Optional, to be used with Item 2A and 10 only) For use with min 18 in. deep trusses. Max nom 12-3/8 in. long by 14-1/2 in. wide, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 90 sq in. per 100 sq ft of ceiling area.
GREENHECK FAN CORP — Model CRD-320WT

11P. Alternate Ceiling Damper* - (Optional, to be used with Item 2A and 10 only) For use with min 18 in. deep trusses. Maximum 20 in. long by 18 in. wide by 2-1/8 in. high, fabricated from galvanized steel. Plenum box maximum size nom. 21 in. long by 18 in. wide by 16 in. high fabricated from either galvanized steel or Classified Air Duct Materials bearing the UL Class 0 or Class 1 rigid air duct material. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 180 sq in. per 100 sq ft of ceiling area.

NAILOR INDUSTRIES INC — Types 0755, 0755A, 0756, 0756D, 0757, 0757D, 0757FP, 0757DFP, 0763

SAFE AIR DOWCO — 0455, 0455A, 0456, 0456D, 0457, 0457D, 0457-DB, 0457-CB, 0463-FB, 0457-EB, 0463-GB, 0463

11Q. Alternate Ceiling Damper* — (Optional, to be used with Item 2A and 10 only) For use with min 18 in. deep trusses. Max nom 10-3/8 in. long by 10-3/8 in. wide, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 54 sq in. per 100 sq ft of ceiling area.

GREENHECK FAN CORP — Model CRD-300WT

12. Grille — Grille installed in accordance with the installation instructions provided with the ceiling damper.

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STATE OF GEORGIA
ROBERT WILLIAM BROWN
CERTIFICATE NO. 1428
REGISTERED ARCHITECT

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RENOVATIONS AT 476 SECOND STREET BLDG.

MACON, GEORGIA

Drawing Issue Schedule	
10/23/2023	Permit Set
1 12/21/2023	Revision #1
Project No:	2023-25

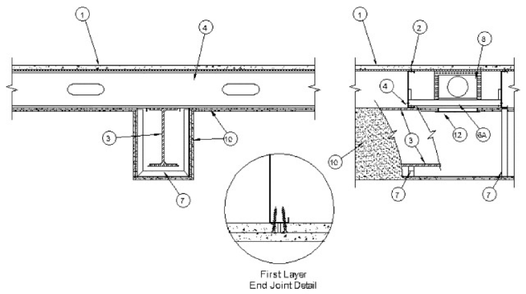
1-Hour Rated Ceiling
ANSI/UL 263
Design No. L581

LS1.3

R:\PROJECTS\2023-25 Renovations at 476 2nd St Bldg\Working Drawings\2023-25 LS1.3 - Rimr Ceiling UL 263 - *.LSBudgn
12/5/2024

Published April 14, 2022
Unrestrained Assembly Rating — 1 Hr.
Unrestrained Beam Rating — 1 Hr.
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



1. Flooring System — The flooring system shall consist of one of the following:

System No. 1

Finish Flooring — Min 19/32 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered. Long edges shall be T & G.

System No. 2

Subflooring — Min 15/32 in. thick plywood or min 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring — Min 19/32 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered. Long edges shall be T & G.

System No. 3

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Types LRK, HSLRK, CSD

USG MEXICO S A DE C V — Types LRK, HSLRK, CSD

Floor Mat Materials* — (Optional) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

UNITED STATES GYPSUM CO — Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials* — (Optional) - Nom 3/8 in. thick floor mat material loose laid over the subfloor. Floor topping thickness shall be as specified under Floor Topping Mixture.
GRASSWORX L L C — Type SC50

System No. 4

Subflooring — Min 19/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) - Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

ELASTIZELL CORP OF AMERICA — Type FF.

System No. 5

Subflooring — Min 19/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) - Nom 0.030 in. thick commercial asphalt saturated felt.

Floor Mat Materials* — (Optional)— Floor mat material nom 5/64 in. (2mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1 in. of floor-topping mixture.

HACKER INDUSTRIES INC — Type Hacker Sound-Mat.

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 1/4 in. (6mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. (32mm) of floor-topping mixture.

HACKER INDUSTRIES INC — Type Hacker Sound-Mat II.

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 1/8 in. (3mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 3/4 in. (19mm)

HACKER INDUSTRIES INC — FIRM-FILL SCM 125

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 1/4 in. (6mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25mm)

HACKER INDUSTRIES INC — Type FIRM-FILL SCM 250, Quiet Qurl 55/025

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 3/8 in. (10mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/4 in. (32mm)

HACKER INDUSTRIES INC — FIRM-FILL SCM 400, Quiet Qurl 60/040

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 3/4 in. (19mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38mm)

HACKER INDUSTRIES INC — Type FIRM-FILL SCM 750, Quiet Qurl 65/075

Metal Lath (Optional) — For use with 3/8 in. (10 mm) floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness a nom 1-1/4 in. over the floor mat.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.
HACKER INDUSTRIES INC — Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 3310, Firm-Fill 4010, Firm-Fill High Strength, Gyp-Span Radiant.

System No. 6

Deleted.

System No. 7

Subflooring — Min 19/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) - Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

MAXXON CORP — Type Maxxon Standard and Maxxon High Strength

Floor Mat Materials* — (Optional) - Floor mat material loose laid over the subfloor.

MAXXON CORP — Type Encapsulated Sound Mat..

Floor Mat Reinforcement — (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath — (Optional) — 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material.

Fiber Glass Reinforcement - (Optional, Not Shown) - 0.015 in. thick PVC coated non-woven fiberglass mesh, 0.368 lbs/sq yd loose laid over the floor mat material.

System No. 9

Subflooring — Min 15/32 in. thick wood structural panels, min grade C-D or Sheathing. Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

FORMULATED MATERIALS LLC — Types FR-25, FR-30, and SiteMix

Alternate Floor Mat Material* — (Optional) Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

FORMULATED MATERIALS LLC — Types M1, M2, M3, Elite, Duo, R1, and R2

System No. 10

Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick plywood or min 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.

Finish Flooring - Mineral and Fiber Board* — Min 1/2 in. thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft. All joints to be staggered a min of 12 in. with adjacent sub-floor joints.

HOMASOTE CO — Type 440-32 Mineral and Fiber Board

System No. 11

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) - Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.2 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

AERIX INDUSTRIES — Floor Topping Mixture

System No. 12

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) - Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

ARCOSA SPECIALTY MATERIALS — AccuCrete® Types NexGen, Green, Prime and PrePour, AccuRadiant®, AccuLevel® Types G40, G50 and SD30

Alternate Floor Mat Material* - (Optional) - Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in. or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively.

ARCOSA SPECIALTY MATERIALS — AccuQuiet® Types D13, D-18, D25, DX38, EM.125, EM.125S, EM.250, EM.250S, EM.375, EM.375S, EM.750, and EM.750S.

System No. 13

Subflooring — 15/32 or 19/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring — Floor Topping Mixture* — Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 2100 psi. Refer to manufacturer's instructions accompanying the material for specific mix design. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).

System No. 14

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).

Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 15

Subflooring — Min 23/32 in. thick T&G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Gypsum Board* — One layer of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists. Gypsum board secured with 1 in. long No. 6 Type W bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. The joints of the gypsum board are to be staggered a minimum of 12 inches from the joints of the subfloor.

GEORGIA-PACIFIC GYPSUM L L C — Type DS

Floor Mat Materials* — (As an alternate to the single layer gypsum board) - Floor mat material loose laid over the subfloor.

MAXXON CORP — Type Encapsulated Sound Mat.

Gypsum Board* — (For use when floor mat is used) Two layers of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists on top of the floor mat material. Gypsum board secured to each other with 1 in. long No. 6 Type G bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. The joints of the gypsum board are to be staggered a minimum of 12 inches in between layers and from the joints of the subfloor.

GEORGIA-PACIFIC GYPSUM L L C — Type DS

System No. 16

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

DEPENDABLE LLC — GSL M3.4, GSL K2.6, GSL-CSD and GSL RH

Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 17

Subflooring — Min 15/32 in. thick plywood or 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
Wall and Partition Facings and Accessories* - Sound Barrier (Optional) — Acoustic Sleeper pads stapled to the top of the subfloor, the bottom of the finish floor, or to 5/16 in. thick by 1-1/2 in. wide wood strips and centered over joists. Acoustic Sleeper pads are to be spaced appropriately so that the finish floor panels are fastened through Acoustic Sleeper pads to the joist.
STC ARCHITECTURAL PRODUCTS L L C DBA STC SOUND CONTROL — Acoustic Sleeper

Finish Floor — Min 19/32 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered. Butt joints of panels have the option of being sealed with any UL Classified caulk or sealant found under - Fill, Void or Cavity Materials* (XHHW).

System No. 18

Subflooring — Min 19/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.
Finish Flooring - Floor Topping Mixture* — Min 1 in. thickness of floor topping mixture having a min compressive strength of 4500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
SIKA DEUTSCHLAND GMBH — Type SCHONOX AP Rapid Plus

System No. 19

Finish Flooring — 15/32 or 19/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).

Floor Mat Materials* — (Optional, Not Shown) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.
LOW & BONAR INC — EnkaSonic® by Colbond a member of the Low & Bonar group Types 125, 250, 250 Plus, 400, 400 Plus, 750, and 750 Plus.

Floor Mat Reinforcement — (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath — (Optional) — Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement — (Optional) — Coated non-woven glass fiber mesh grid loose laid over floor mat material.

2. Flooring Fasteners — (Not Shown) - The subflooring (first layer) of each floor system and finish flooring of System No. 1 are to be fastened to the steel joists with Type S12 by 1-15/16 in. long self-drilling, pilot point, steel screws. The screws are to be spaced 6 in. OC around the perimeter of the floor and at all end (butt) joints of the panels. Spacing in the field to be 10 in. OC. For flooring System No. 2, the finish flooring is to be fastened to the subflooring with Type S12 by 2 in. long steel screws spaced 6 in. OC around the perimeter of the floor and at all end (butt) joints of the finish flooring panels. Spacing in the field to be 10 in. OC with rows of screws spaced 16 in. OC.

3. Structural Steel Member — Min W8 x 15 wide flange steel beam.

4. Steel Joists — The joists are channel-shaped, min 7 in. deep with min 1-5/8 in. wide flanges and 1/2 in. long stiffening flanges. The joists are fabricated from min No. 18 MSG galv steel. Min yield strength of steel is either 33,000 or 40,000 psi with corresponding max working stress of 20,000 and 24,000 psi. Joists spaced max 24 in. OC. At joist splices bearing on supports, joists are overlapped a min of 3 in. When ceiling damper (Item 8) is used, min joist depth is 14 in.

5. Joist Stiffeners — (Not Shown) - Channel-shaped stiffeners, made from min No. 18 MSG galv steel. Stiffeners are 6-13/16 in. long, 3-1/2 in. deep with 1-5/8 in. flanges and 1/2 in. stiffening flanges. The joist stiffeners are used at all bearing locations of the joists.

6. Joist Bridging — (Not Shown) - Installed immediately after joists are erected and before construction loads are applied. The bridging consisting of joist section cut to length and placed between outer supports, adjacent to openings and at mid-span with 8 ft OC max spacing. Bridging channels are screw-attached at each end to joist webs using angle clips. V-bracing of 1-1/2 in. by 20-gal galvanized steel is screw-attached to bottom joist flange between bridging channels.

6A. Horizontal Joist Bridging — Used in lieu of Item 6 in same joist bay as ceiling damper (Item 8), when ceiling damper is employed. Joist section cut to length and secured to joists above bottom flanges with Type S12 screws and 1-1/2 by 1-1/2 in. No. 18 MSG galv steel angles.

7. Beam Cage — The cage used to support the gypsum board beam protection is fabricated from No. 24 MSG electrogalvanized steel angle with 7/8 by 1-3/8 in. legs and No. 25 MSG, electrogalvanized steel channel studs, 2-1/2 in. wide with 1 in. legs. Angles are fastened to the steel joists using 1/2 in. pan head steel sheet metal screws.

8. Ceiling Damper* — (Optional) - Max nom area shall be 198 sq in. Max rectangular size shall be 12 in. wide by 16-1/2 in. long. Max height of damper shall be 8-3/4 in. Aggregate damper openings shall not exceed 99 sq in. per 100 sq ft of ceiling area. Damper Installed in accordance with the manufacturers Installation instructions provided with the damper. A steel grille (Item 13) shall be installed in accordance with installation instructions.
RUSKIN COMPANY — Model CFD7

9. Ceiling Damper Support — (Not Shown) - Provided with ceiling damper. Support secured to ceiling damper and steel joists in accordance with installation instructions provided with ceiling damper.

10. Gypsum Board* — For Ceiling - Two layers of 1/2 in. thick gypsum board installed with long dimensions perpendicular to joists. Base layer attached to steel joists using 1 in. long, Type S12 bugle head steel screws spaced 8 in. OC along butt joints and 12 in. OC in field along the joists. Butt joints to occur beneath joists with screws located 1/2 in. for the butt joints. Outer layer attached to assembly using 1-1/2 in. long, Type G bugle head steel screws spaced 8 in. OC along butt joints and with 1-5/8 in. long, Type S12 bugle head steel screws spaced 12 in. OC in the field along the joists. Butt joints of outer layer to occur between joists with screws located 3/4 in. from the butt joints. Edge joints to be staggered between layers. For Beam - Two layers of 1/2 in. thick gypsum board fastened to beam cage. Inner layer secured using 1 in. long, Type S12 bugle head steel screws spaced 12 in. OC and outer layer fastened to cage using 1-5/8 in. long, Type S12 bugle head steel screws spaced 12 in. OC. Joints are to be staggered between layers.

AMERICAN GYPSUM CO — Type AG-C

CABOT MANUFACTURING ULC — Type C

CERTAINTEED GYPSUM INC — Type C

CGC INC — Type C, IP-X2

CERTAINTEED GYPSUM INC — Type LGFC-C/A

GEORGIA-PACIFIC GYPSUM L L C — Types 5, DAPC, TG-C

NATIONAL GYPSUM CO — Types eXP-C, FSK-C, FSW-C

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-C

PANEL REY S A — Type PRC

THAI GYPSUM PRODUCTS PCL — Type C

THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO — Type C

UNITED STATES GYPSUM CO — Type C, IP-X2

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Type C, IP-X2

10A. Gypsum Board* — (Not Shown)- As an alternate to Item 12. Two layers of nom 5/8 in. thick by 48 in. wide gypsum board installed as described in Item 10.
CGC INC — Type ULIX

UNITED STATES GYPSUM CO — Type ULIX

10B. Gypsum Board* — (Not Shown)- As an alternate to Item 10. Two layers of nom 5/8 in. thick by 48 in. wide gypsum board installed as described in Item 10. Screw lengths increased min. 1/8 in. for each layer.

PANEL REY S A — Type PRX2

11. Steel Framing Members* — As an alternate to the direct attachment of the Gypsum Board* (Item 10), Steel Framing Members* and Gypsum Board* (Item 12) may be installed beneath the bottom flange of the steel beam.

a. Main Runners — Nom 12 ft long, with 15/16 in. or 1-1/2 in. wide face, spaced 4 ft OC, installed perpendicular to steel beam. Main runners hung a min of 2 in. below bottom chord of steel beam and secured to steel joists with No. 12 SWG galv steel wire, spaced a max of 48 in. OC.

b. Cross Tees or Channels — Nom 4 ft long cross tees, with 15/16 in. or 1-1/2 in. wide face, or nom 4 ft long cross channels, with 1-1/2 in. wide face, either spaced 16 in. OC, installed perpendicular to the main runners. Additional cross tees or channels used 8 in. from each side of butted gypsum board end joints. The cross tees or channels may be riveted or screw-attached to the wall angle or channel to facilitate the ceiling installation.

c. Wall Angles or Channels — Used to support steel framing member ends and for screw-attachment of the gypsum board. Painted or galvanized steel angles with 1 in. legs or channels with 1 in. legs and 1-9/16 in. deep, attached to walls at perimeter of ceiling with fasteners 16 in. OC.
CGC INC — Type DGL or RX.

USG INTERIORS LLC — Type DGL or RX.

12. Gypsum Board* — Two layers of nom 1/2 in. thick by 48 in. wide gypsum board for use with Steel Framing Members*. Base layer installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Base layer fastened to cross tees with 1-1/4 in. long Type S bugle-head steel screws spaced 8 in. OC along butted end joints and 12 in. OC in the field of the board. End joints of adjacent gypsum board sheets shall be staggered not less than 4 ft OC. Outer layer attached to the cross tees through inner layer using 1-7/8 in. long Type S bugle-head steel screws spaced 8 in. OC at butted end joints and 12 in. OC in the field. Butted end joints to be centered along cross tees and be offset a min of 32 in. from end joints of inner layer. Rows of screws on both sides of butted end joints of each layer shall be located 3/8 to 1/2 in. from end joints. Butted side joints of outer layer to be offset a min of 18 in. from butted side joints of inner layer.
CGC INC — Type C, IP-X2.

THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO — Type C

UNITED STATES GYPSUM CO — Type C, IP-X2.

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Type C, IP-X2.

13. Grille — Steel grille, installed in accordance with the installation instructions provided with the ceiling damper.

14. Discrete Products Installed in Air-handling Spaces* — Automatic Balancing Valve/Damper — (Not Shown - Optional) — For use with item 8, Ruskin Company's Model CFD7 damper (CABS). Ceiling damper to be provided with plenum box per damper manufacturer's instructions with side outlet only. Entire assembly to be installed into any UL Class 0 or Class 1 flexible air duct in accordance with the instructions provided by the automatic balancing valve/damper manufacturer.
METAL INDUSTRIES INC — Model ABV-4, ABV-5, ABV-6

bTbB inc.
ARCHITECTS | PLANNERS
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STATE OF GEORGIA
ROBERT W. BROWN
CERTIFICATE NO. 7428
REGISTERED ARCHITECT

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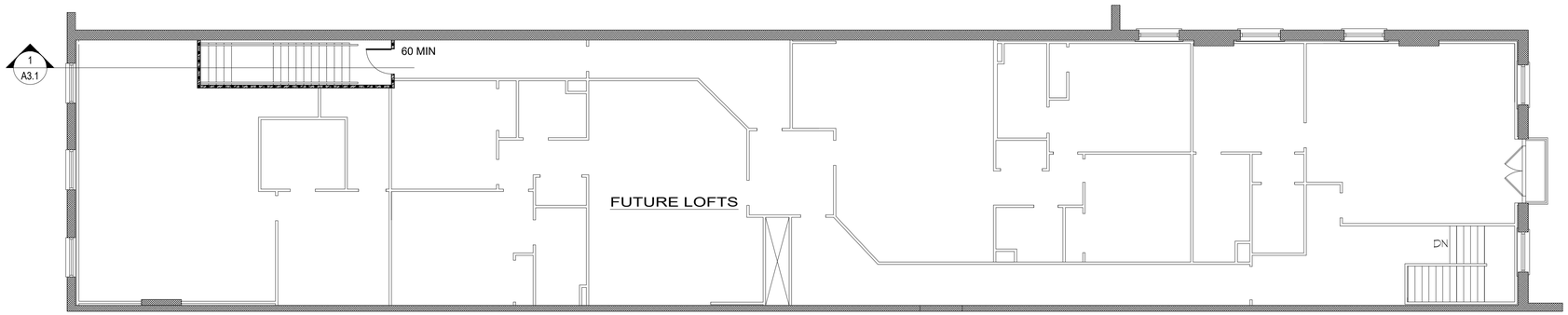
RENOVATIONS AT
476 SECOND STREET BLDG.
MACON, GEORGIA

Drawing Issue Schedule		
	10/23/2023	Permit Set
1	12/21/2023	Revision #1
Project No:	2023-25	

1-Hour Rated
Ceiling / Beam
ANSI/UL 263
Design No. L524

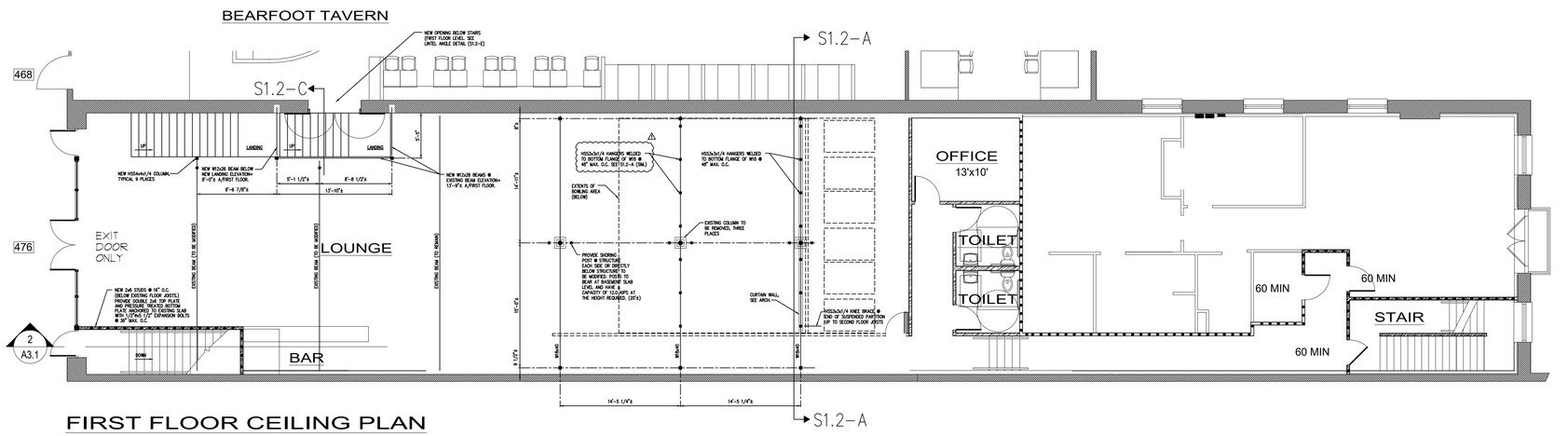
LS1.4

11.1.2023
Pi-Tech, Inc. COA#PEF003000
COA Expiration: 6.30.2024



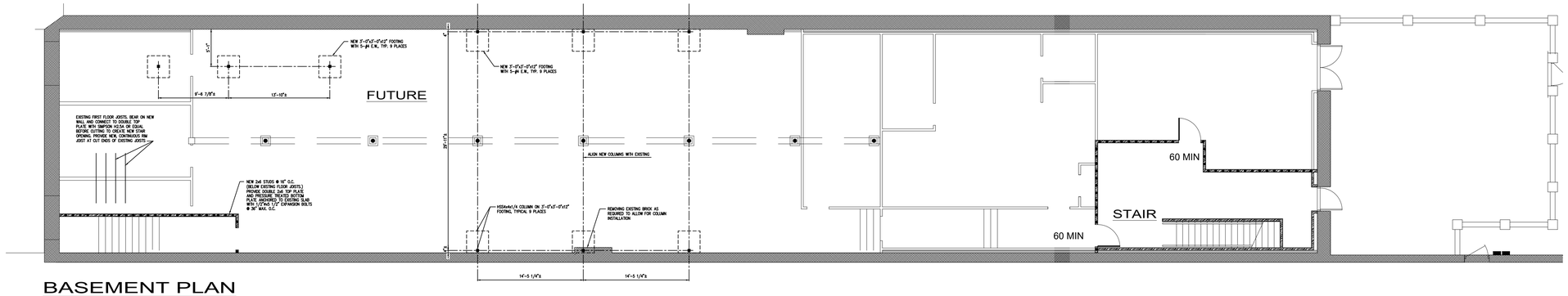
SECOND FLOOR PLAN

5,511 NET SF. 1/8" = 1'-0"



FIRST FLOOR CEILING PLAN

1/8" = 1'-0"



BASEMENT PLAN

GROSS 5,875 SF.
5,354 NET SF. 1/8" = 1'-0"

WALL LEGEND

- EXISTING WALL
- EXISTING WOOD STUD WALL
- NEW WALL - 2X WOOD STUD W/ 5/8" GYPSUM BOARD EACH SIDE
- NEW 1-HR WALL - 2X WOOD STUD W/ 5/8" TYPE "X" GYPSUM BOARD EACH SIDE

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STRUCTURAL DESIGN BY
PI-TECH, INC.

GEORGIA REGISTERED No. PEF003000 STRUCTURAL PROFESSIONAL ENGINEER MATTHEW N. ELLIS

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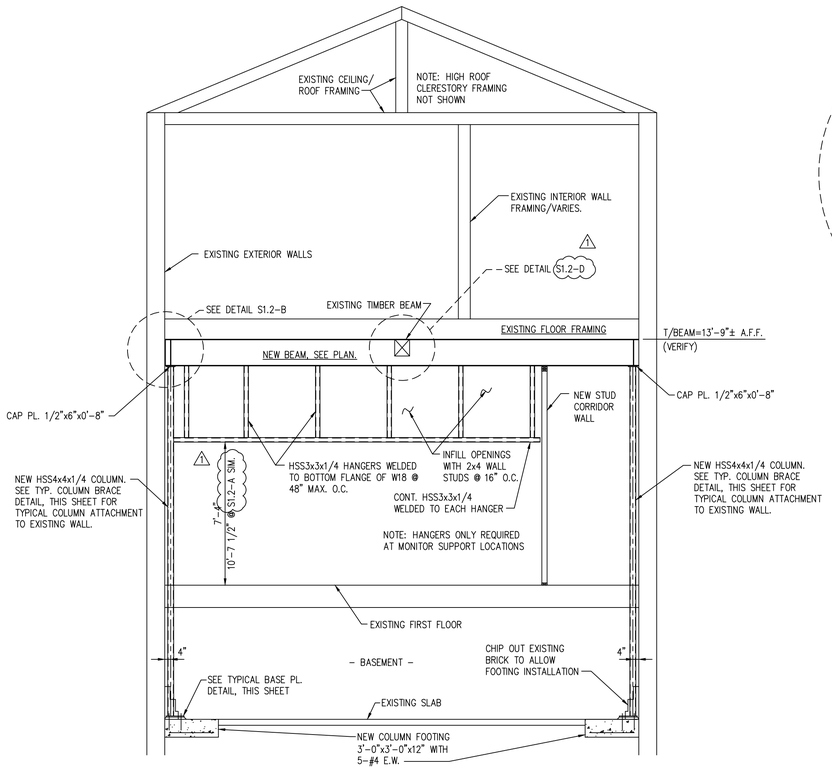
RENOVATIONS AT 476 SECOND STREET BLDG.

MACON, GEORGIA

Drawing Issue Schedule	
⚠ - 12-21-2023	REVISION #1
10-23-2023	PERMIT SET
Project No:	2023-25

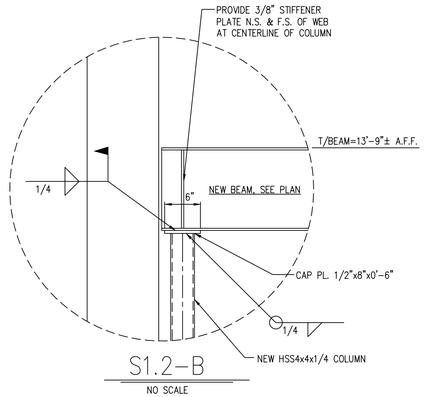
Overall Floor Plans

S1.1



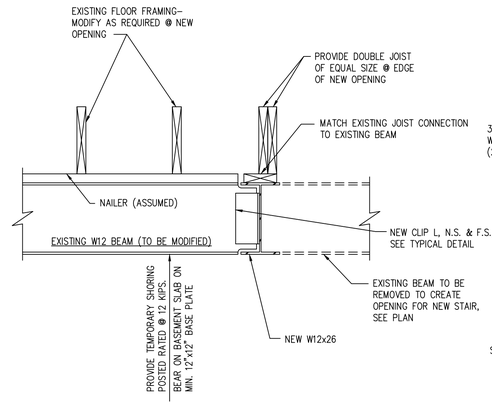
S1.2-A

NO SCALE



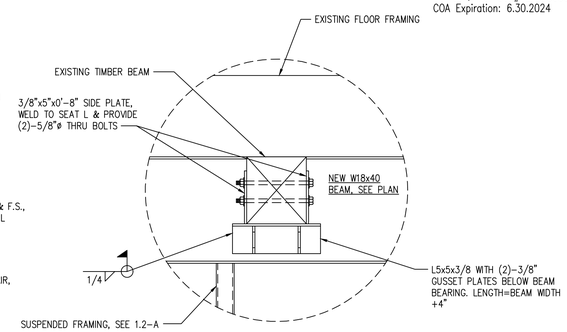
S1.2-B

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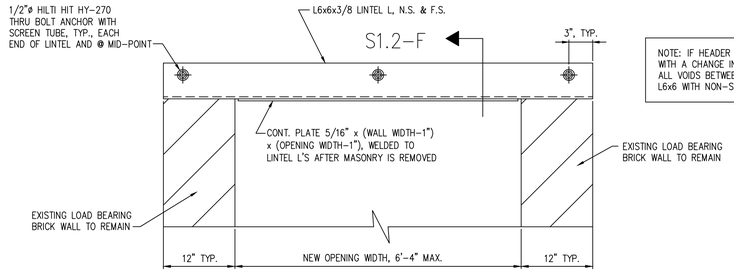
S1.2-C

NO SCALE



S1.2-D

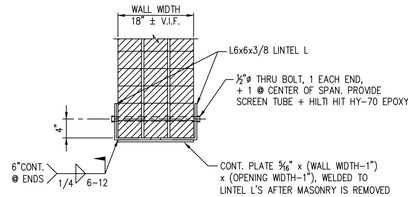
NO SCALE



S1.2-F

NO SCALE

NOTE: IF HEADER OCCURS AT A LOCATION WITH A CHANGE IN WALL THICKNESS, FILL ALL VOIDS BETWEEN BRICK WALL AND NEW L6x6 WITH NON-SHRINK GROUT.



S1.2-F

NO SCALE

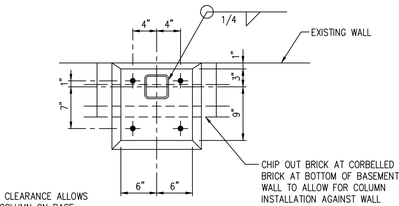
NOTES:
1. LINTEL DESIGN ASSUMES A MAXIMUM MASONRY WALL THICKNESS OF 18"±
2. IF OPENING SIZE EXCEEDS 6'-4", CONTACT EOR

SEQUENCE FOR INSTALLING LINTEL & REMOVING WALL FOR OPENING:
1- CHIP OUT MORTAR JOINT & MASONRY FOR L6x6 ANGLES. DRIVE ANGLES INTO WALL ONE SIDE AT A TIME.
2- INSTALL 1/2" THRU BOLTS AS SHOWN. HOLES MAY BE OVERSIZED TO ACCOMODATE MASONRY DRILL BIT, BUT PROVIDE OVERSIZED WASHERS AS WELL.
3- REMOVE ALL MASONRY FOR SPECIFIED OPENING.
4- INSTALL CONT. PL. 5/16"xWALL WIDTH. WELD TO L6x6 ANGLES
5- ALL WELDS TO BE 1/4" MIN. FILLET WELDS.

S1.2-E

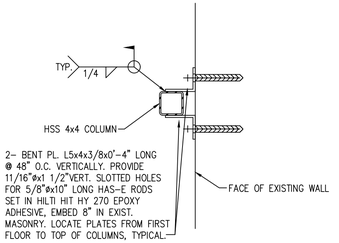
NEW OPENING = 6'-4" MAX.

NO SCALE



TYPICAL BASE PLATE DETAIL

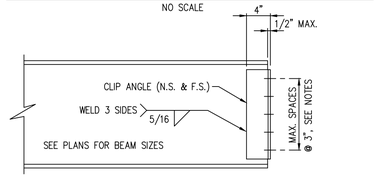
NO SCALE



PLAN VIEW

TYPICAL COLUMN BRACE DETAIL

NO SCALE



NOTE: BOTH LEGS OF CLIP ANGLE CAN BE WELDED RATHER THAN WELDED/BOLTED AS SHOWN

TYPICAL CLIP ANGLE CONNECTION

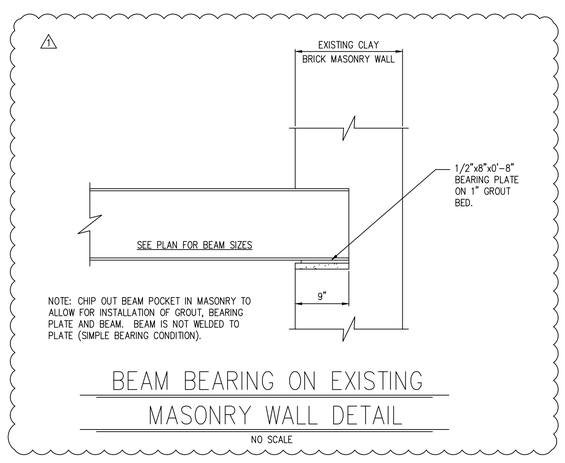
NO SCALE

NOTES:
1. CLIP ANGLES (N.S. & F.S.) TO BE SHOP WELDED. LENGTH OF CLIP ANGLES AND NUMBER OF BOLTS SHALL BE MAXIMUM FOR BEAM OF GIVEN DEPTH. CLIP ANGLES SHALL BE L4x3 1/2x3/8 (S.L.O.), WITH LEG MODIFICATIONS AS REQUIRED FOR DETAILING DIMENSIONS AND CLEARANCES. HOLES SHALL BE 13/16"ø FOR 3/4"ø, A325 BOLTS WITH THREADS EXCLUDED FROM THE SHEAR PLANES.

2. USE AT BEAM TO BEAM CONNECTIONS, UNLESS SHOWN OR NOTED OTHERWISE.

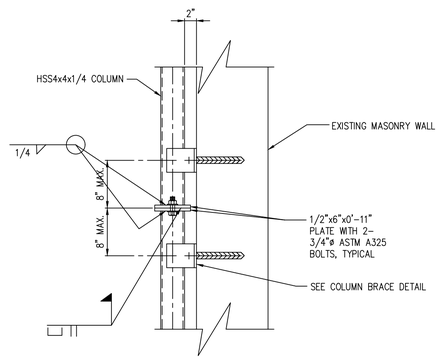
3. WHERE BEAM WEB THICKNESS IS 1/4" OR LESS, CLIP ANGLES MAY BE 5/16" THICK WITH 1/4" FILLET WELDS ON 3 SIDES.

4. WHERE BEAM WEB/FLANGE MUST BE COPED FOR CLEARANCES, PROVIDE 1/2" MAXIMUM CLEARANCE. PROVIDE 1/2" RADIUS ON ALL COPES. RE-ENTRANT CUTS SHALL BE CAUSE FOR REJECTION.



BEAM BEARING ON EXISTING MASONRY WALL DETAIL

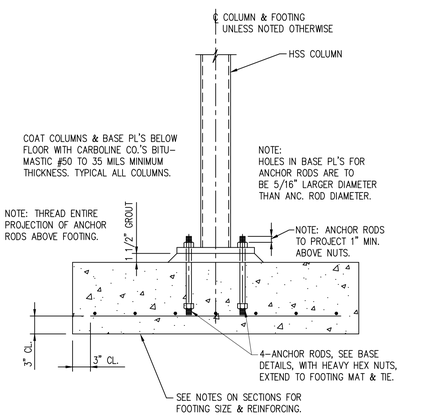
NO SCALE



COLUMN SPLICE DETAIL

NO SCALE

DETAIL MAY BE USED AS REQUIRED TO BRING COLUMN SECTIONS INTO BUILDING



TYPICAL HSS COLUMN & FOOTING

NO SCALE

11.1.2023
Pi-Tech, Inc. COA#PEF003000
COA Expiration: 6.30.2024

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RENOVATIONS AT 476 SECOND STREET BLDG.

MACON, GEORGIA

Drawing Issue Schedule	
⚠ - 12-21-2023	REVISION #1
10-23-2023	PERMIT SET
Project No:	2023-25

Sections and Details

S1.2

$PLOT$
$DATE$

GENERAL NOTES

1. LIVE LOADS
   - A. ROOF (LL_R) ..... 20 PSF
   - B. SECOND FLOOR (L) ..... 40 PSF
   - C. UNINHABITABLE ATTICS (L) ..... 20 PSF
2. DESIGN WIND LOADS
   - A. BASIC WIND SPEED (V_{ult}) ..... 108 MPH
   - B. NOMINAL WIND SPEED (V_{asd}) ..... 83 MPH
   - C. RISK CATEGORY II
   - D. WIND EXPOSURE CATEGORY "B"
   - E. INTERNAL PRESSURE COEFFICIENT ..... "GC_{pi}" = ±0.18
3. SEISMIC
   - A. SEISMIC IMPORTANCE FACTOR ..... I = 1.00
   - B. MAPPED SPECTRAL RESPONSE ACCELERATIONS..... S_s = 0.185, S_1 = 0.071
   - C. SITE CLASS "D" ASSUMED
   - D. SPECTRAL RESPONSE COEFFICIENTS ..... S_{MS}= 0.197, S_{M1}= 0.124
   - E. SEISMIC DESIGN CATEGORY "B"
4. SNOW LOADS
   - A. GROUND SNOW LOAD ..... "P_g" = 5 PSF
6. CODES
   - A. INTERNATIONAL BUILDING CODE, 2018 ED. WITH LATEST GEORGIA AMENDMENTS.
   - B. REINFORCED CONCRETE: ACI 318-14.
   - C. ALL STEEL WORK SHALL COMPLY WITH APPLICABLE STANDARDS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INCLUDING THE SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, LATEST EDITION AND THE AMERICAN WELDING SOCIETY'S STRUCTURAL WELDING CODE, AWS D1.1-LATEST EDITION.
7. PROVIDE TEMPORARY BRACING OF STRUCTURAL FRAMING UNTIL ALL PERMANENT BRACING, SHEAR WALLS, MOMENT CONNECTIONS, AND FLOOR AND ROOF DIAPHRAGMS ARE COMPLETELY INSTALLED. THE STRUCTURAL ELEMENTS ARE UNSTABLE UNTIL THE STRUCTURE IS COMPLETED IN ACCORDANCE WITH THE PLANS.
8. SHOP DRAWINGS GENERAL NOTE: THE PLANS, SECTIONS, AND DETAILS PROVIDED AS PART OF THE CONTRACT DOCUMENTS SHALL NOT BE USED IN A REPRODUCIBLE FORM AS PART OF THE SHOP DRAWINGS.

INSPECTIONS

1. INDEPENDENT STRUCTURAL TESTS AND INSPECTIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE WITH GEORGIA STATE AMENDMENTS. THE INSPECTOR SHALL BE RESPONSIBLE FOR INDICATING COMPLIANCE WITH THE APPROVED STRUCTURAL PLANS AND SHALL SUBMIT PROGRESS REPORTS AND INSPECTION REPORTS TO THE ARCHITECT OF RECORD.
2. SATISFY MINIMUM INSPECTION AND QUALITY CONTROL REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE WITH GEORGIA STATE AMENDMENTS.

STRUCTURAL STEEL GENERAL NOTES

1. ALL STRUCTURAL STEEL CONSTRUCTION SHALL CONFORM TO AISC 360-16 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND THE "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES."
2. UNLESS NOTED OTHERWISE:
   - 2.A. STEEL SHALL CONFORM TO ASTM A36 (36 KSI YIELD STRENGTH), EXCEPTIONS NOTED.
   - 2.B. ALL WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992 (50 KSI YIELD STRENGTH).
   - 2.C. ALL HSS SECTIONS SHALL CONFORM TO ASTM A500 (46 KSI YIELD STRENGTH).
   - 2.D. ELECTRODES SHALL CONFORM TO E70-XX.
   - 2.E. ALL BOLTS TO BE A325X, WITH THREADS EXCLUDED FROM THE SHEAR PLANE.
   - 2.F. ALL ANCHOR RODS SHALL CONFORM TO ASTM F1554 (36 KSI YIELD STRENGTH) WITH HEAVY HEX NUTS AND STANDARD WASHERS. ANCHOR RODS SHALL BE WELDABLE UNLESS NOTED OTHERWISE.
   - 2.G. ALL PL.'S SHALL BE SUPPLIED FREE OF LAMINATIONS & IMPURITIES & SHALL CONFORM TO ASTM A36, U.N.O.
3. SHOP DRAWINGS PREPARED IN ACCORDANCE WITH THE LATEST "STRUCTURAL STEEL DETAILING MANUAL" OF AISC SHALL BE SUBMITTED FOR APPROVAL. NO FABRICATION SHALL BEGIN UNTIL SHOP DRAWINGS ARE COMPLETED AND APPROVED.
4. STEEL FRAMING CONNECTIONS SHALL BE BOLTED OR WELDED, AS INDICATED.
   - 4.A. BOLTED JOINTS SHALL CONFORM TO AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS". BOLTS SHALL CONFORM TO ASTM A325 AND SHALL BE MINIMUM 3/4" DIAMETER, UNLESS NOTED OTHERWISE.
   - 4.B. WELDS SHALL CONFORM TO THE "STRUCTURAL WELDING CODE" OF THE AMERICAN WELDING SOCIETY, AWS D1.1. USE E70XX ELECTRODES. WEDING PROCESSES AND OPERATORS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATIONS PROCEDURES". WELDERS SHALL CARRY PROOF OF QUALIFICATIONS TO JOBSITE.
5. PROVIDE SHOP COAT OF STANDARD PRIMER PAINT. PRIMER TO BE COMPATIBLE WITH FINISH COAT. TOUCH-UP AREAS DAMAGED IN HANDLING AND ERECTION WITH THE SAME PAINT USED FOR SHOP COAT. STEEL SURFACES TO BE WELDED OR ENCASED IN CONCRETE OR FIREPROOFING, OR SURFACES RECEIVING WELDED SHEAR CONNECTORS SHALL NOT BE PAINTED.
6. PROVIDE A NON-SHRINK, NON-METALLIC, SELF-LEVELING GROUT ($F'c$ = 5000 PSI, MIN.) UNDER BASE PLATES, AFTER SETTING AND LEVELING. NO "DRY-PACKING" PERMITTED.
7. PROVIDE TEMPORARY BRACING OF STRUCTURAL FRAMING UNTIL ALL PERMANENT BRACING, MOMENT CONNECTIONS AND FLOOR AND ROOF DECKS (DIAPHRAGMS) ARE COMPLETELY INSTALLED. THE STRUCTURAL ELEMENTS ARE UNSTABLE UNTIL THE STRUCTURE IS COMPLETED IN ACCORDANCE WITH THE PLANS.

WOOD FRAMING GENERAL NOTES

1. ALL WOOD FRAMING SHALL BE S.Y.P. NO. 2 OR BETTER, EXCEPTIONS, NOTED.
2. ALL MEMBERS IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED.
3. ALL LOAD BEARING STUD WALLS SHALL BE CONSTRUCTED OF 2x6'S (S.P.F. #1/#2 OR BETTER E = 1.4E6 PSI, Fb=875 PSI), U.N.O. SEE PLANS & DETAILS FOR SPACING.
4. KING STUDS, JAMB STUDS, JACK/ BEARING STUDS, AND BLOCKING SHALL BE S.P.F. #1/#2 OR BETTER, EXCEPTIONS NOTED.
5. ALL LOAD BEARING STUD WALLS SHALL HAVE A ROW OF FULL-DEPTH HORIZONTAL BLOCKING @ 48" MAXIMUM ON CENTER. BLOCKING SHALL BE SAME SIZE AND GRADE AS WALL STUDS.
6. ALL SILL PLATES IN ALL LOAD BEARING WALLS SHALL BE 2x SOUTHERN YELLOW PINE NO. 2 OR BETTER AND SHALL BE PRESSURE TREATED, TYPICAL.
7. ALL TOP PLATES IN BEARING WALLS SHALL BE DOUBLE 2x PLATES, SOUTHERN YELLOW PINE NO. 2 OR BETTER.
8. INSTALL TOP PLATES TO PROVIDE OVERLAPPING AT CORNERS AND AT INTERSECTIONS WITH OTHER PARTITIONS.
9. END JOINTS IN DOUBLE TOP PLATES SHALL BE OFFSET 48" MIN., LOCATED OVER A STUD, AND SHALL BE NAILED WITH NOT LESS THAN 8-16D FACE NAILS ON EA. SIDE OF THE JOINT.
10. PLATES SHALL BE A NOMINAL 2 INCHES IN DEPTH AND SHALL HAVE A WIDTH AT LEAST EQUAL TO THE WIDTH OF THE STUDS.
11. ALL LVL'S SHALL HAVE PROPERTIES EQUAL TO OR BETTER THAN Fb =2600 PSI, E = 2.0E6 PSI, U.N.O.
12. ALL LVL'S ARE COMPRISED OF 1 3/4" THICK PLIES. U.N.O. SEE MULTI-PLY BEAM ATTACHMENT DETAIL, SHEET S8 FOR ATTACHMENT OF PLIES.
    - 12.1. MULTIPLE PLY 2X HEADERS AND BEAMS SHALL ALSO BE ATTACHED PER MULTI-PLY BEAM ATTACHMENT DETAIL.
13. WOOD CONSTRUCTION CONNECTORS SHALL BE ANCHOR TYPE/SIZE SPECIFIED HEREIN OR EQUIVALENT ANCHOR WITH EQUAL OR BETTER ALLOWABLE CAPACITY FROM USP OR TAMLYN.
    - 13.1. UNLESS NOTED OTHERWISE, PROVIDE MAXIMUM RECOMMENDED NO. OF FASTENERS. FASTENERS TO BE MANUFACTURER'S SPECIFIED FASTENER SIZE/TYPE.
    - 13.2. INSTALL ALL CONNECTORS IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
14. DIMENSIONAL LUMBER CONNECTIONS NOT SPECIFICALLY CALLED OUT ON THESE DRAWINGS SHALL HAVE THE MINIMUM SIZE AND NUMBER OF FASTENERS AS REQUIRED IN CHAPTER 23 OF THE INTERNATIONAL BUILDING CODE, 2018 ED. WITH 2022 GA AMENDMENTS.

SOIL PARAMETERS

1. SOIL PARAMETERS
   - A. FOOTINGS ARE DESIGNED FOR A MINIMUM ALLOWABLE SOIL BEARING PRESSURE OF 2000 POUNDS PER SQUARE FOOT.
2. IF SITE CONDITIONS DIFFER FROM THOSE INDICATED, THE DESIGN PROFESSIONAL SHALL BE NOTIFIED IMMEDIATELY.
3. ALL FOUNDATION WORK SHALL BE DONE 'IN THE DRY'.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING SITE CONDITIONS THROUGH AN INDEPENDENT SITE INVESTIGATION PRIOR TO COMMENCING WORK.

REINFORCED CONCRETE GENERAL NOTES

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS". DESIGN IS BASED ON ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE."
2. CONCRETE SHALL BE NORMAL WEIGHT (145 PCF) AND SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS (EXCEPTIONS NOTED).
3. SUBMIT CONCRETE MIX DESIGNS FOR REVIEW, IN ACCORDANCE WITH ACI 318 TO THE ARCHITECT AND TESTING AGENCY.
4. THE PROPOSED MATERIALS AND MIX DESIGN SHALL BE FULLY DOCUMENTED AND REVIEWED. RESPONSIBILITY FOR OBTAINING THE REQUIRED DESIGN STRENGTH IS THE CONTRACTOR'S.
5. USE OF CALCIUM CHLORIDE, CHLORIDE IONS, OR OTHER SALTS IN CONCRETE IS NOT PERMITTED.
6. THE AIR CONTENT AT THE POINT OF PLACEMENT SHALL BE PER ACI 318 TABLE 19.3.2.1 FOR THE APPROPRIATE EXPOSURE CATEGORY. HARD TROWELED SLABS OR SLABS ON GRADE THAT WILL RECEIVED TOPPINGS SHALL NOT RECEIVE AIR ENTRAINMENT UNLESS PERMITTED BY TOPPING MANUFACTURER.
7. THE TESTING AGENCY SHALL SAMPLE AND TEST EACH 100 CU. YARDS OR FRACTION THEREOF OF EACH CLASS OF CONCRETE PLACED EACH DAY. SAMPLE CONCRETE IN ACCORDANCE WITH ASTM C172. PERFORM THE FOLLOWING TESTS IN ACCORDANCE WITH THE INDICATED STANDARD:

SLUMP:	ASTM C143
AIR CONTENT:	ASTM C231 (NORMAL WEIGHT CONCRETE) ASTM C173 (LIGHT WEIGHT CONCRETE)
COMPRESSIVE STRENGTH:	ASTM C39, WITH ONE CYLINDER AT 7 DAYS, 2 CYLINDERS AT 28 DAYS, AND ONE SPECIMEN HELD IN RESERVE.
CONCRETE TEMPERATURE:	ASTM C1064
UNIT WEIGHT:	ASTM C567

8. MOIST CURE CONCRETE WITH MOISTURE PROTECTIVE COVER FOR A MINIMUM OF 7 DAYS.
9. HORIZONTAL CONSTRUCTION JOINTS ARE PERMITTED ONLY WHERE INDICATED. THE LOCATION OF VERTICAL CONSTRUCTION JOINTS SHALL BE APPROVED BY THE ARCHITECT. CONSTRUCTION JOINTS SHALL BE THOROUGHLY ROUGHENED BY MECHANICAL MEANS, CLEANED, AND CAULKED.
10. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE.
11. TIE ALL REINFORCING STEEL AND EMBEDMENTS SECURELY IN PLACE PRIOR TO PLACING CONCRETE. PROVIDE SUFFICIENT SUPPORTS TO MAINTAIN THE POSITION OF REINFORCEMENT WITHIN SPECIFIED TOLERANCES DURING ALL CONSTRUCTION ACTIVITIES. "STICKING" DOWELS INTO WET CONCRETE IS NOT PERMITTED.
12. REINFORCING STEEL SHALL HAVE THE FOLLOWING CONCRETE COVER UNLESS NOTED OTHERWISE:

CONCRETE CAST AGAINST EARTH (NOT FORMED):	3"
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER	
#6 BARS THROUGH #12 BARS	2"
#5 BARS AND SMALLER	1 1/2"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER	
SLABS AND WALLS	1"

13. DO NOT PLACE PIPES EXCEEDING ONE-THIRD THE SLAB OR WALL THICKNESS WITHIN THE SLAB OR WALL UNLESS SPECIFICALLY SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
14. DO NOT WELD OR TACK WELD REINFORCING STEEL UNLESS APPROVED OR DIRECTED BY THE STRUCTURAL ENGINEER..

11.1.2023
Pi-Tech, Inc. COA#PEF003000
COA Expiration: 6.30.2024

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STRUCTURAL DESIGN BY
PI-TECH, INC.
GEORGIA REGISTERED No. 32000 STRUCTURAL ENGINEER MATTHEW N. ELLIS

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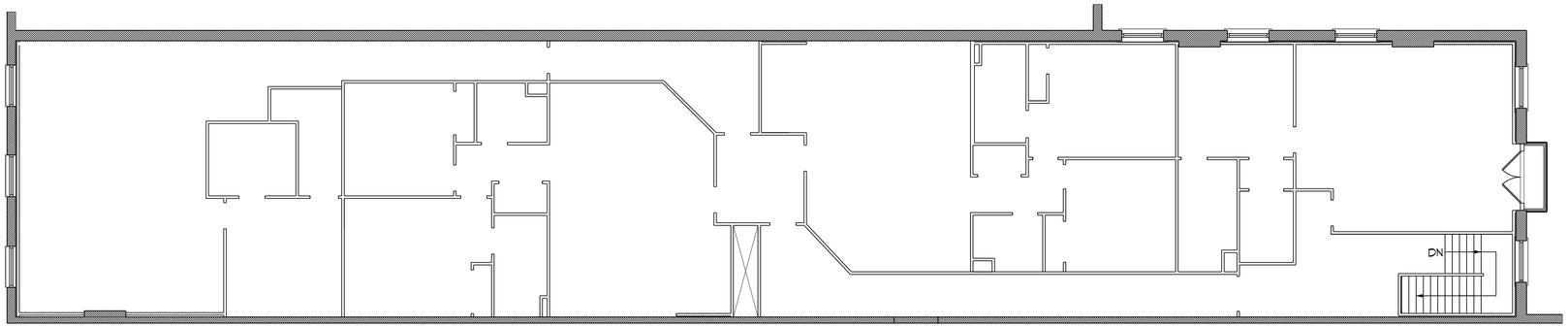
RENOVATIONS AT
476 SECOND STREET BLDG.
MACON, GEORGIA

Drawing Issue Schedule

⚠ - 12-21-2023	REVISION #1
10-23-2023	PERMIT SET
Project No:	2023-25

GENERAL NOTES
S1.3

$FILE$



EXISTING SECOND FLOOR PLAN

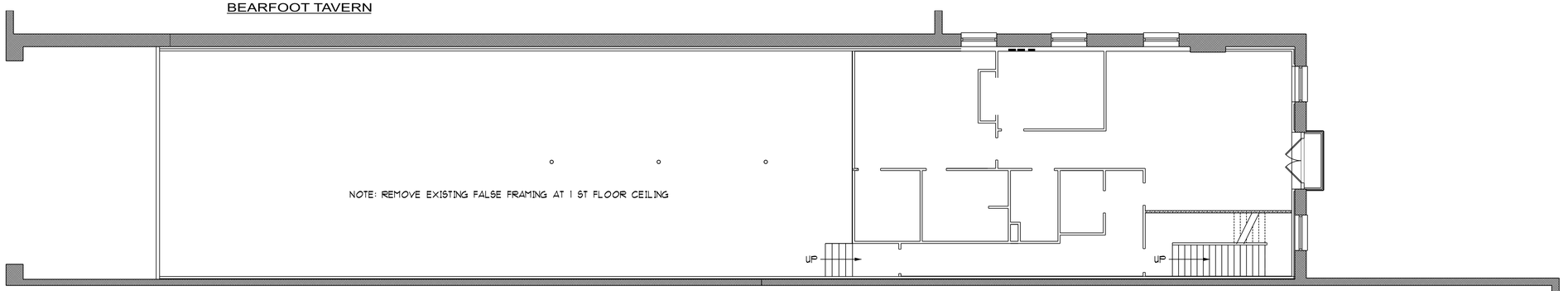
5,511 NET SF. 1/8" = 1'-0"

476

BEARFOOT TAVERN

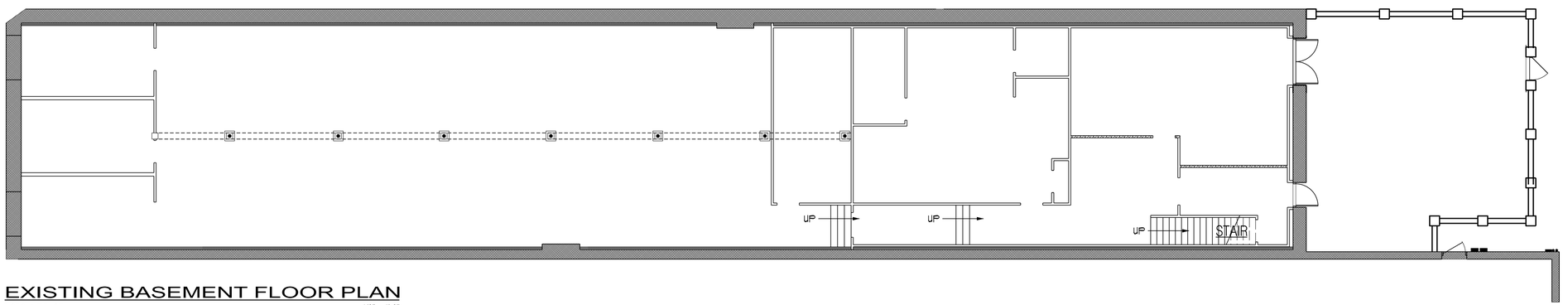
476

NOTE: REMOVE EXISTING FALSE FRAMING AT 1 ST FLOOR CEILING



EXISTING FIRST FLOOR PLAN

GROSS 5,875 SF.
5,354 NET SF. 1/8" = 1'-0"



EXISTING BASEMENT FLOOR PLAN

5,253 NET SF. 1/8" = 1'-0"

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RENOVATIONS AT 476 SECOND STREET BLDG.

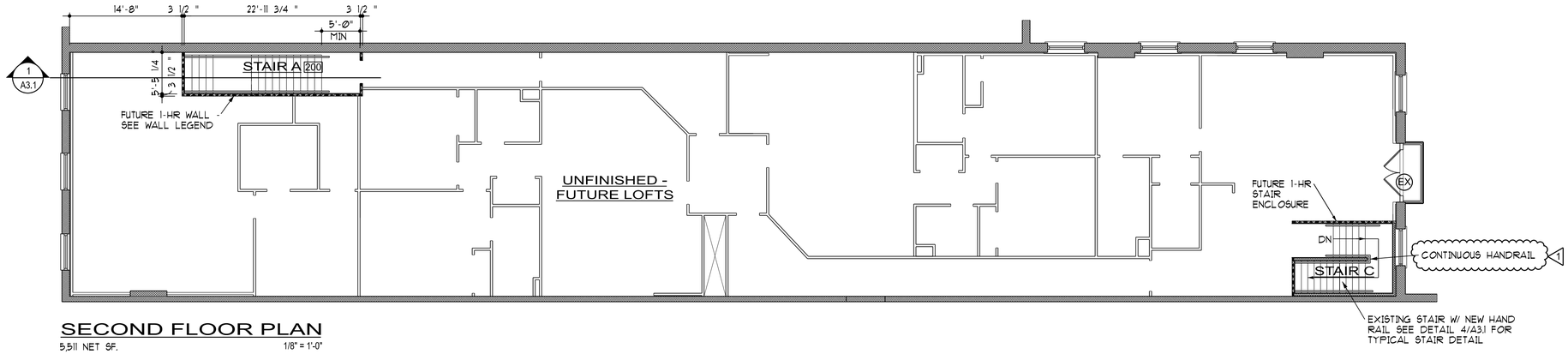
MACON, GEORGIA

Drawing Issue Schedule	
10/23/2023	Permit Set
Project No:	2023-25

Existing Floor Plans

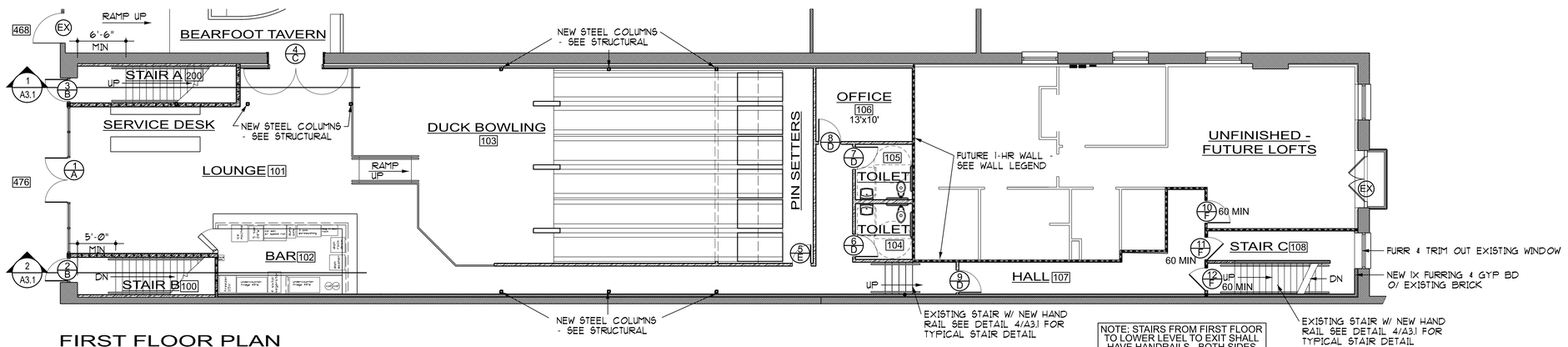
EX1.1

I:\PROJECTS\2023-25 Renovations at 476 2nd St Bldg\Working Drawings\2023-25 EX1.Existing Floor Plans.dgn
10/23/2023



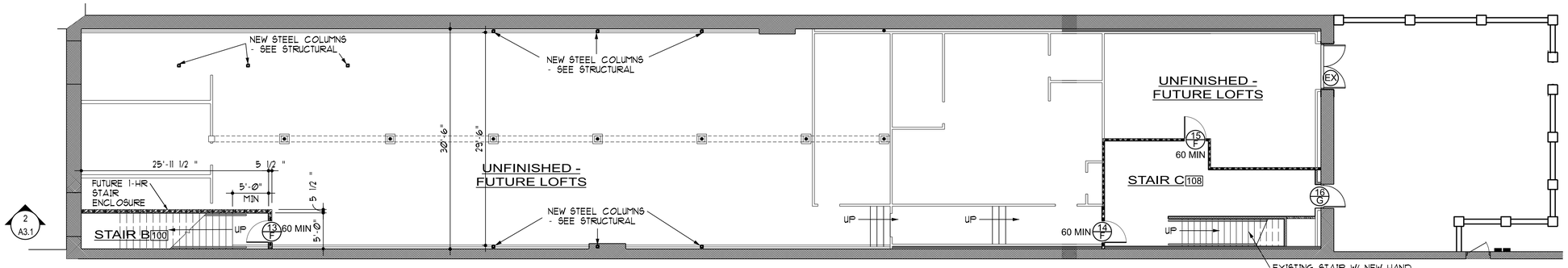
SECOND FLOOR PLAN

5,511 NET SF. 1/8" = 1'-0"



FIRST FLOOR PLAN

GROSS 5,875 SF. 1/8" = 1'-0"
5,354 NET SF.



BASEMENT PLAN

GROSS 5,875 SF. 1/8" = 1'-0"
5,354 NET SF.

WALL LEGEND

- EXISTING WALL
- EXISTING WOOD STUD WALL
- EXISTING WOOD STUD W/ NEW 5/8" GYPSUM BOARD EACH SIDE
- NEW WALL - 2X WOOD STUD W/ 5/8" GYPSUM BOARD EACH SIDE
- FUTURE 1-HR WALL - 2X WOOD STUD W/ 5/8" TYPE "X" GYPSUM BOARD AT FINISH SIDE
- FUTURE 1-HR WALL - EXISTING WOOD STUD W/ NEW 5/8" TYPE "X" GYPSUM BOARD AT FINISH SIDE
- NEW 1-HR WALL - 2X WOOD STUD W/ 5/8" TYPE "X" GYPSUM BOARD EACH SIDE, RUN TO STRUCTURE & SEAL

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RENOVATIONS AT 476 SECOND STREET BLDG.

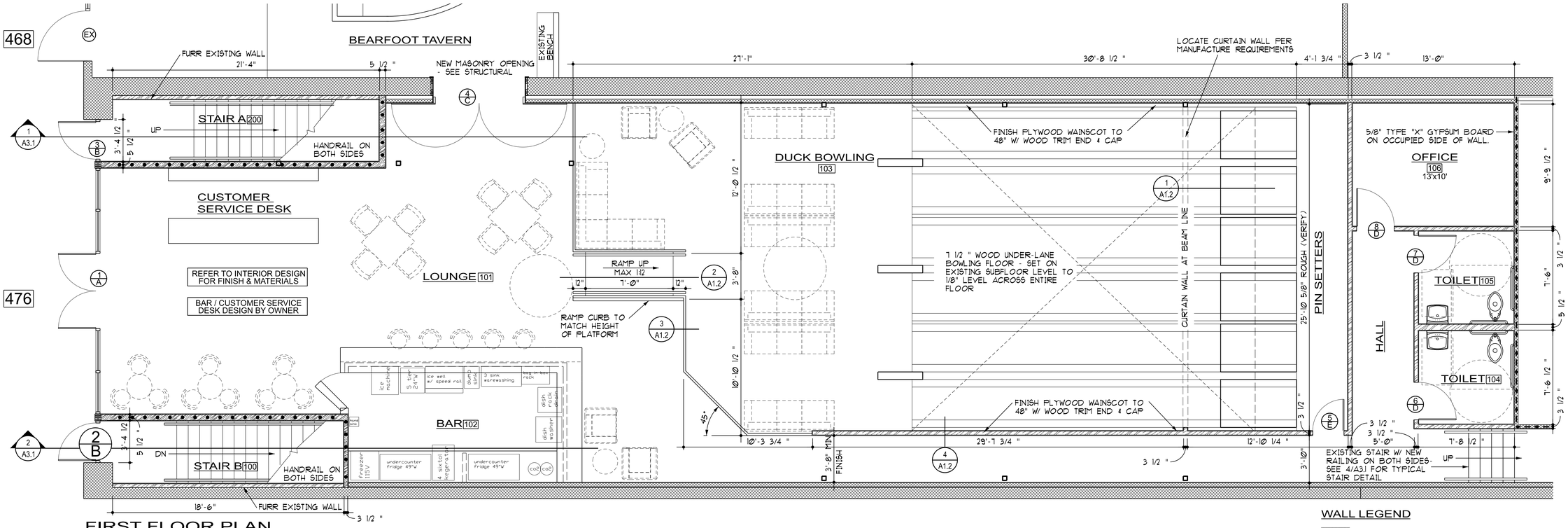
MACON, GEORGIA

Drawing Issue Schedule	
10/23/2023	Permit Set
1 12/21/2023	Revision #1
Project No:	2023-25

Overall Floor Plans

A1.1

F:\PROJECTS\2023-25 Renovations at 476 2nd St Bldg\Working Drawings\2023-25 ALL - R1 Overall Floor Plans.dgn
12/4/2023



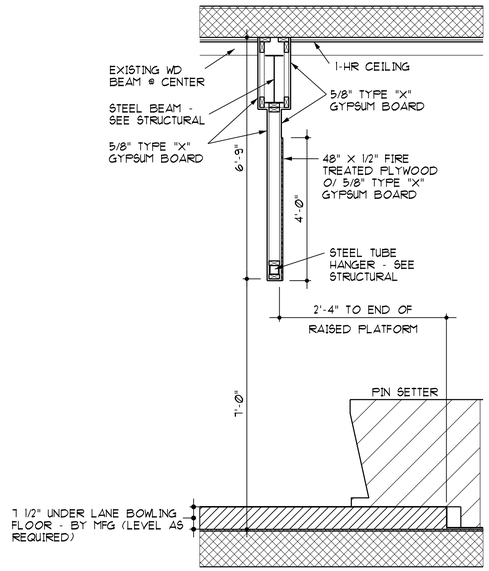
FIRST FLOOR PLAN

GROSS 5,875 SF.
5,354 NET SF.

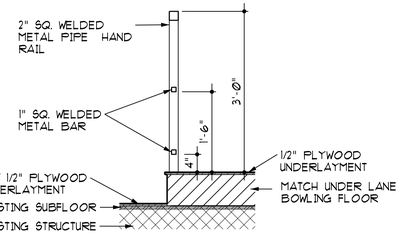
1/4" = 1'-0"

WALL LEGEND

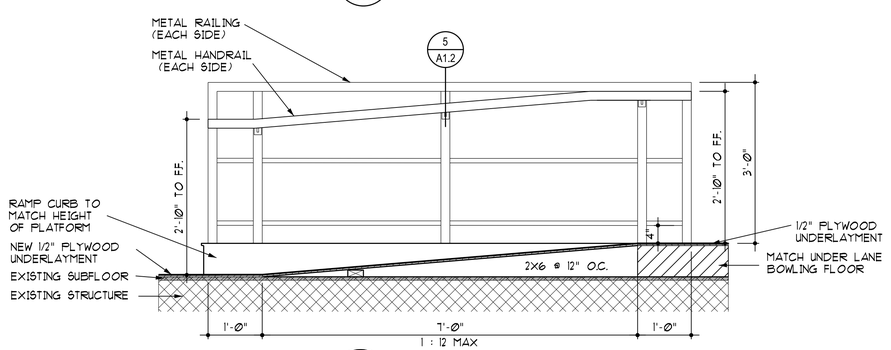
- EXISTING WALL
- EXISTING WOOD STUD WALL
- EXISTING WOOD STUD W/ NEW 5/8" GYPSUM BOARD EACH SIDE
- NEW WALL - 2X WOOD STUD W/ 5/8" GYPSUM BOARD EACH SIDE
- FUTURE 1-HR WALL - 2X WOOD STUD W/ 5/8" TYPE "X" GYPSUM BOARD AT FINISH SIDE
- FUTURE 1-HR WALL - EXISTING WOOD STUD W/ N 5/8" TYPE "X" GYPSUM BOARD AT FINISH SIDE
- NEW 1-HR WALL - 2X WOOD STUD W/ 5/8" TYPE "X" GYPSUM BOARD EACH SIDE, RUN TO STRUCTURE & SEAL



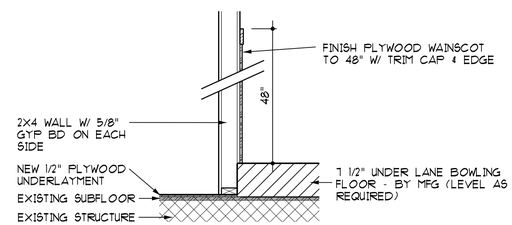
1/A1.2 CURTAIN WALL SECTION 1/2" = 1'-0"



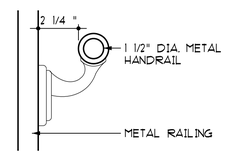
3/A1.2 RAILING / STEP DETAIL 3/4" = 1'-0"



2/A1.2 RAMP SECTION 3/4" = 1'-0"



4/A1.2 WALL DETAIL 3/4" = 1'-0"



5/A1.2 HANDRAIL DETAIL 3" = 1'-0"

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RENOVATIONS AT 476 SECOND STREET BLDG.

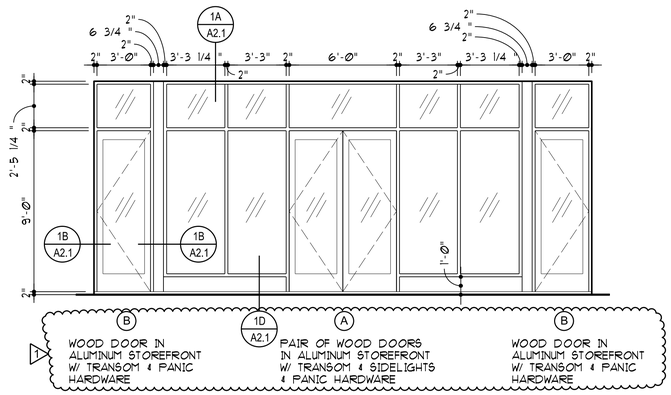
MACON, GEORGIA

Drawing Issue Schedule	
10/23/2023	Permit Set
Project No:	2023-25

Duck Bowling Floor Plan

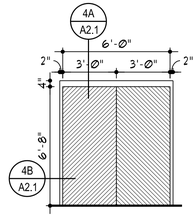
A1.2

F:\PROJECTS\2023-25 Renovations at 476 2nd St Bldg\Working Drawings\2023-25 A1.2 Duck bowling Floor Plan.dgn
2/27/2024



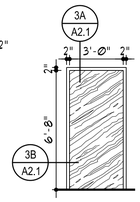
DOOR TYPES

1/4" = 1'-0"



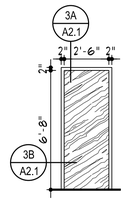
C

90 MIN RATED PAIR OF HOLLOW METAL DOORS W/ RATED HOLLOW METAL FRAME WITH HOLD OPEN & FUSEABLE LINKS FOR AUTOMATIC CLOSING



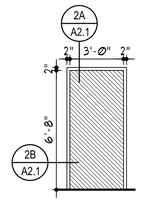
D

SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME



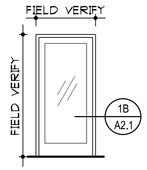
E

SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME



F

60 MIN RATED HOLLOW METAL DOORS W/ RATED HOLLOW METAL FRAME W/ PANIC HARDWARE



G

NEW ALUMINUM STORE FRONT DOOR IN EXISTING MASONRY OPENING W/ PANIC HARDWARE

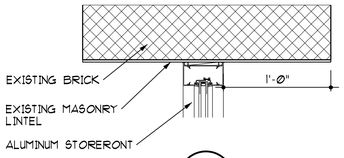
SCHEDULE OF TOILET ACCESSORIES

ITEMS										
NO.	DESCRIPTION	36" GRAB BAR	42" GRAB BAR	18" GRAB BAR	FRAMED MIRROR 20" X 36"	ROLL PAPER HOLDER	COAT / ROBE HOOK	NOT USED	NOT USED	NOT USED
		1	2	3	4	5	6	7	8	9

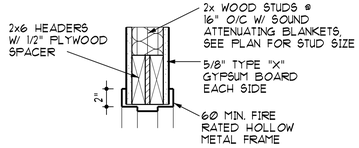
ROOM NAME	QUANTITY								NOTES
TOILET 104	1	1	1		1	1			
TOILET 105	1	1	1		1	1			

TOILET ACCESSORIES NOTES:

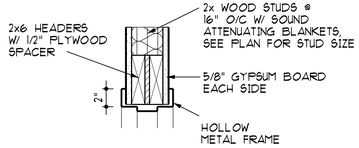
1. PROVIDE BLOCKING AT ALL TOILET ACCESSORIES, AS REQUIRED. BLOCKING SHALL BE 2x8 @ HORIZONTAL GRAB BARS. - (SEE G1.2)
2. MIRRORS SHALL BE MOUNTED SO THAT REFLECTIVE EDGE IS 40" ABOVE FINISHED FLOOR MAX.
3. ANY ACCESSORIES NOT SHOWN SHALL BE LOCATED AS DIRECTED BY ARCHITECT.



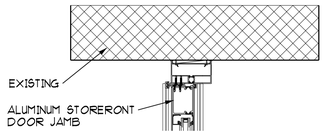
1A A2.1 HEAD JAMB SIM.



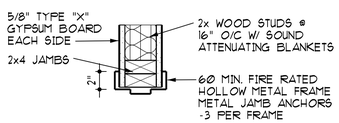
2A A2.1 HEAD



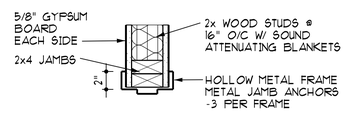
3A A2.1 HEAD



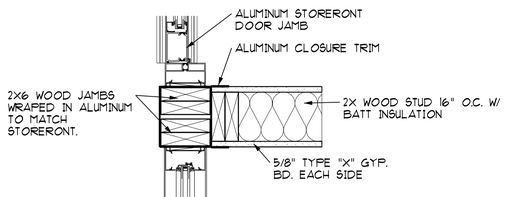
1B A2.1 JAMB



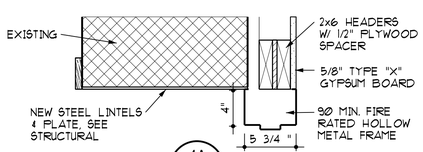
2B A2.1 JAMB



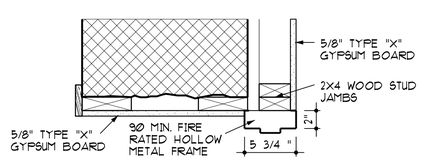
3B A2.1 JAMB



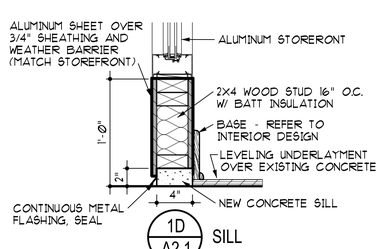
1C A2.1 JAMB



4A A2.1 HEAD



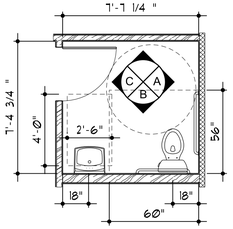
4B A2.1 JAMB



1D A2.1 SILL

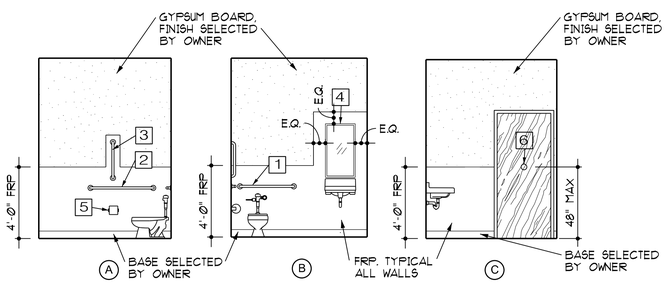
DOOR DETAILS

1 1/2" = 1'-0"



TYPICAL TOILET PLAN

1/4" = 1'-0"



TOILET ELEVATIONS

1/4" = 1'-0"

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RENOVATIONS AT 476 SECOND STREET BLDG.

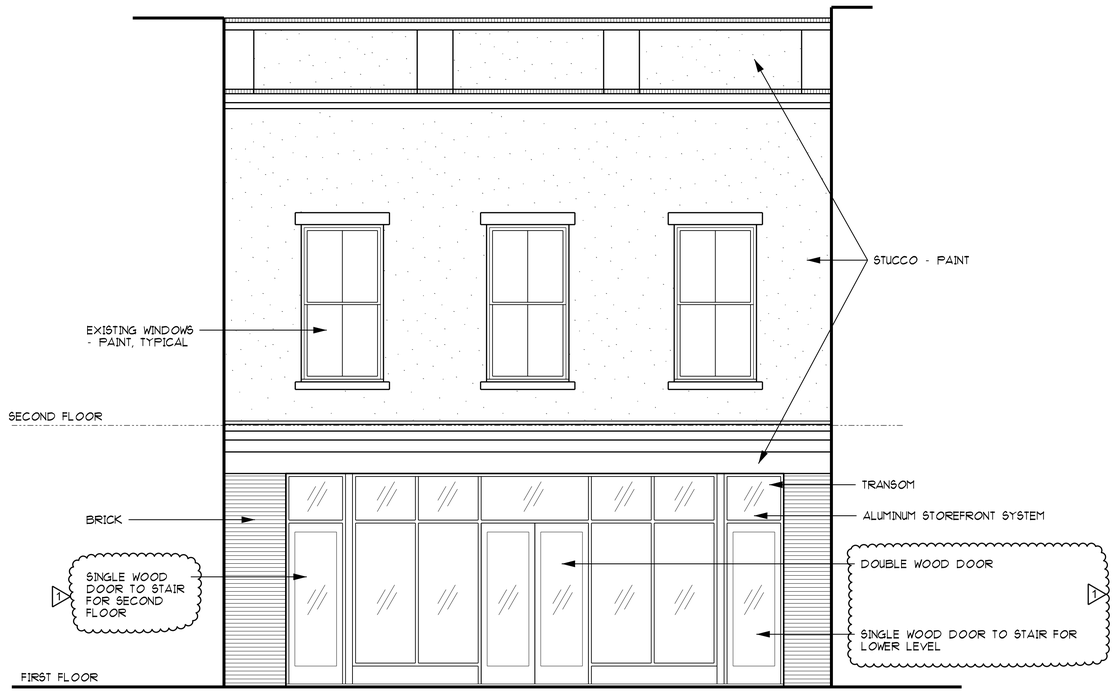
MACON, GEORGIA

Drawing Issue Schedule	
10/23/2023	Permit Set
1 12/21/2023	Revision #1
Project No:	2023-25

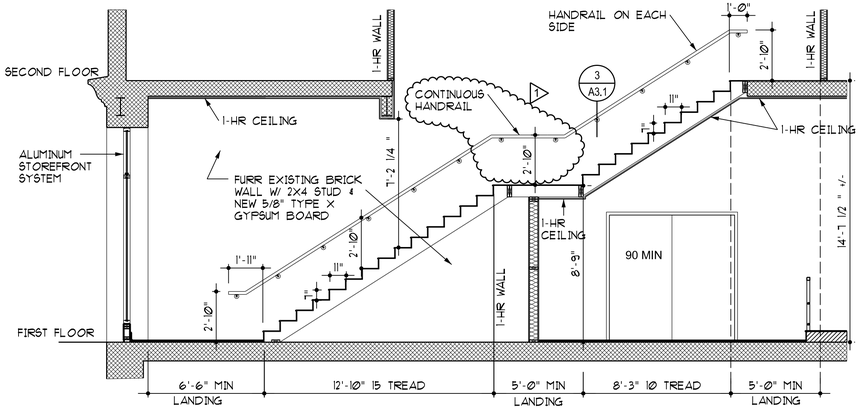
Door Schedule & Toilet Interior Elevations

A2.1

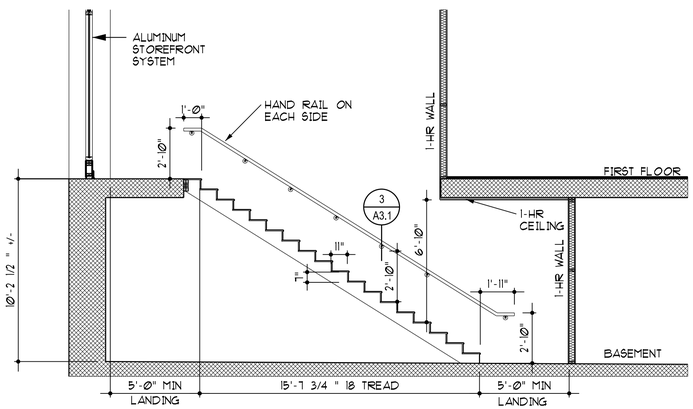
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2/5/2024



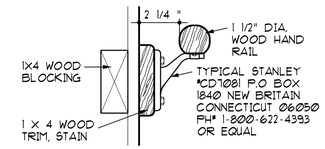
SECOND STREET ELEVATION
1/4" = 1'-0"



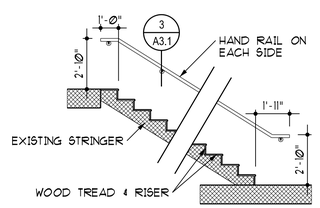
1 A3.1 STAIR SECTION
1/4" = 1'-0"



2 A3.1 STAIR SECTION
1/4" = 1'-0"



3 A3.1 HANDRAIL DETAIL INTERIOR
3" = 1'-0"



4 A3.1 TYPICAL EXISTING STAIR DETAIL
1/4" = 1'-0"

NOTE: EXISTING FRAMED STAIRS TO HAVE NEW 3/4" STAINED OAK TREADS & 3/4 STAINED OAK RISERS

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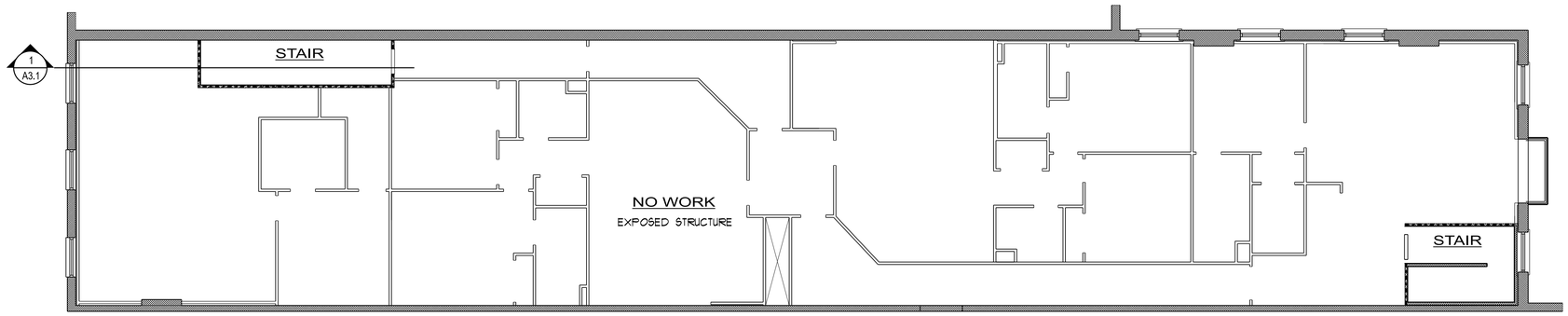
RENOVATIONS AT 476 SECOND STREET BLDG.
MACON, GEORGIA

Drawing Issue Schedule	
10/23/2023	Permit Set
12/21/2023	Revision #1
Project No:	2023-25

Exterior Elevation & Stair Sections

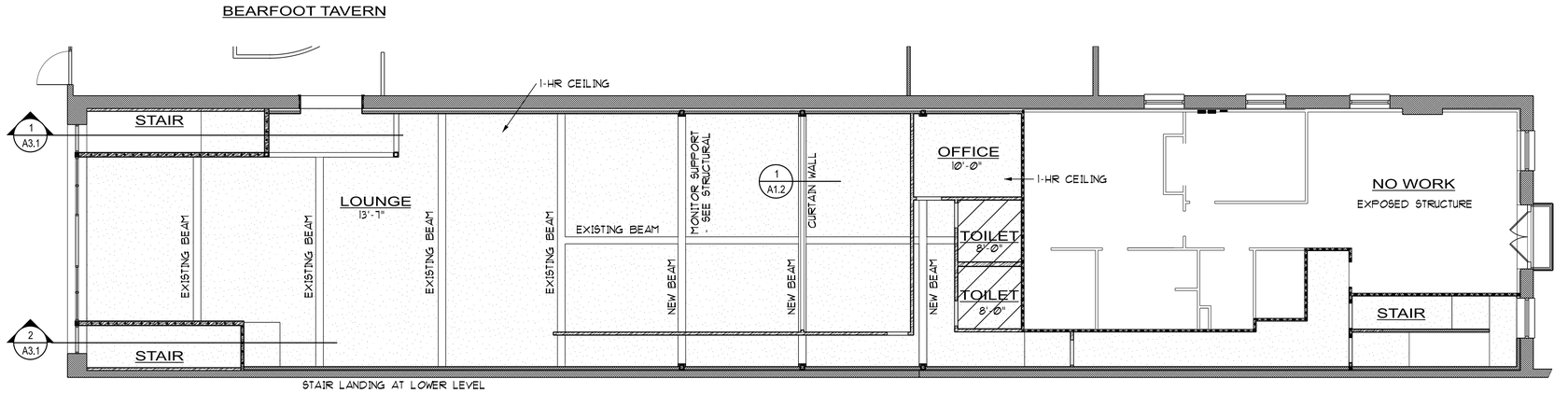
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2/27/2024



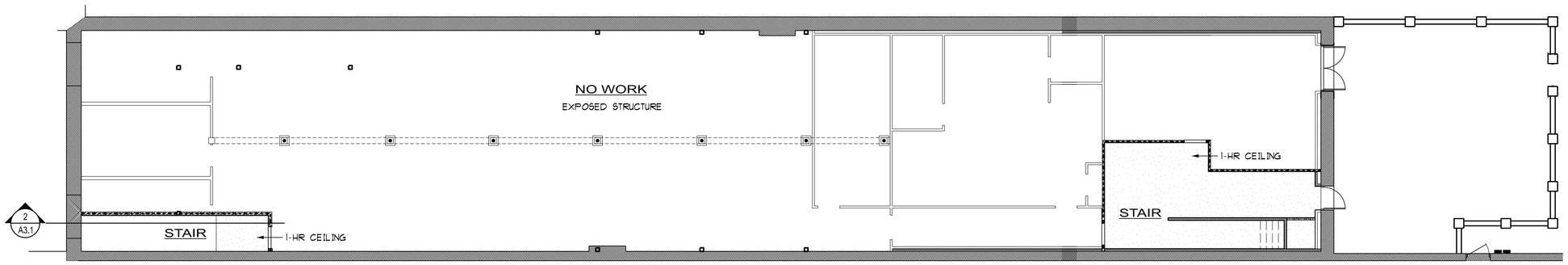
SECOND FLOOR REFLECTED CEILING PLAN

1/8" = 1'-0"



FIRST FLOOR REFLECTED CEILING PLAN

1/8" = 1'-0"



BASEMENT REFLECTED CEILING PLAN

1/8" = 1'-0"

LEGEND

- 1-HR RATED CEILING
- CEILING HEIGHT 8'-0" W/ MECHANICAL MEZZANINE ABOVE

WALL LEGEND

- EXISTING WALL
- EXISTING WOOD STUD WALL
- EXISTING WOOD STUD W/ NEW 5/8" GYPSUM BOARD EACH SIDE
- NEW WALL - 2X WOOD STUD W/ 5/8" GYPSUM BOARD EACH SIDE
- FUTURE 1-HR WALL - 2X WOOD STUD W/ 5/8" TYPE "X" GYPSUM BOARD AT FINISH SIDE
- FUTURE 1-HR WALL - EXISTING WOOD STUD W/ N 5/8" TYPE "X" GYPSUM BOARD AT FINISH SIDE
- NEW 1-HR WALL - 2X WOOD STUD W/ 5/8" TYPE "X" GYPSUM BOARD EACH SIDE, RUN TO STRUCTURE & SEAL

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RENOVATIONS AT 476 SECOND STREET BLDG.

MACON, GEORGIA

Drawing Issue Schedule	
10/23/2023	Permit Set
Project No:	2023-25

Reflected Ceiling Plans

A8.1

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10/20/2023

PLUMBING SPECIFICATIONS

Provide all plumbing items indicated on the drawings, described herein or otherwise required for a complete and proper installation, including:
A. Plumbing fixtures, fittings and equipment.
B. Hot and cold water systems.
C. Drain waste and vent piping systems.
D. Indirect waste piping, including all valves, traps, piping and accessories for all equipment. Size per equipment requirements.

Comply with all applicable codes, standards and ordinances, including requirements of the Georgia State Minimum Standard Plumbing Code (2018 International Plumbing Code with all Georgia State Amendments), Georgia State Minimum Standard Gas Code (2018 International Gas Code with all Georgia State Amendments), Georgia State Minimum Standard Energy Code (2015 International Energy Conservation Code with all Georgia State supplements and Amendments), and the DOJ 2010 ADA Standards for Accessible Design with Georgia Amendments of Rule 120-3-20.

The contractor should not attempt to precisely scale dimensions from these drawings to obtain construction dimensions and clearance. The contractor shall verify all actual dimensions and clearances. Although these plans are diagrammatic in nature, they shall be followed as closely as site conditions, new construction, and work by other trades shall permit. Deviations from these drawings, which are required to conform to the available space or to actual building construction, shall be made at no additional cost to the owner.

The submission of a bid or proposal will be construed as evidence that the contractor has familiarized himself with the plans and building site. Claims made subsequent to the proposal for materials and/or labor due to difficulties encountered will not be recognized unless these difficulties could not have been foreseen, even though proper examination had been made.

Fabrication or ordering of any material or equipment prior to verification of site conditions shall be done at the contractor's risk.

All equipment and material shall be new and of first quality. Equipment and material shall be the same or equal to the basis of design listed on these drawings.

Coordinate with all trades and verify all equipment rough-in items and locations with the equipment supplier or contractor. All re-work and corrections required due to lack of coordination shall be the contractor's responsibility, and done at no cost to the owner.

Submit shop drawings and material data submittals to the engineer for approval before installation. No substitutions shall be allowed without prior approval by the engineer. Product data for piping, insulation, valves, specialties and all fixtures and equipment scheduled and specified here. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.

All equipment and flue materials shall be U.L. listed.

Installation shall comply with manufacturer requirements including all clearances recommended for proper operation of service. All serviceable parts shall be readily accessible.

Below ground sanitary drain and vent piping shall be solid-wall ASTM D2665 schedule 40 PVC. Install underground, PVC plastic drainage piping according to ASTM D2321. Above ground sanitary drain and vent piping shall be cellular-core ASTM F891 schedule 40 PVC. Install aboveground PVC piping according to ASTM D 2665. All aboveground piping shall be adequately supported. Sanitary drain and vent piping shall have PVC Socket Fittings (ASTM D 2665, made to ASTM D 3311, drain, waste, and vent patterns and to fit Schedule 40 pipe). Slope at 1/8 inch per foot continuously toward public sewer.

Insulate aboveground floor drains, traps, and sanitary drain piping within 10 feet of drain receiving condensate and equipment drain water below 60° with 1" thick type i performed glass-fiber pipe insulation, 1-1/2" cellular glass, or 1" flexible elestomeric.

All above ground domestic water distribution piping shall be ASTM D 2846, SDR11, schedule 40 CPVC with socket fittings. All piping shall be adequately supported. Disinfect all domestic water piping after installation. All underground domestic water distribution piping 1" and smaller shall be ASTM D 876 & ASTM F 877 PEX with no fittings underground. All underground domestic water distribution piping 1-1/4" and larger shall be ASTM D 1785 schedule 40 PVC with ASTM D 2466 PVC socket fittings. Wrap piping larger than 2" in return air plenums with fire barrier plenum rated wrap.

DOMESTIC WATER PIPING CLEANING

A. Clean and disinfect potable domestic water piping as follows:
   1. Purge new piping and parts of existing piping that have been altered, extended, or repaired before using.
   2. Use purging and disinfecting procedures prescribed by authorities having jurisdiction; if methods are not prescribed, use procedures described in either AWWA C651 or AWWA C652 or follow procedures described below:
      a. Flush piping system with clean, potable water until dirty water does not appear at outlets.
      b. Fill and isolate system according to either of the following:
         1) Fill system or part thereof with water/chlorine solution with at least 50 ppm (50 mg/L) of chlorine. Isolate with valves and allow to stand for 24 hours.
         2) Fill system or part thereof with water/chlorine solution with at least 200 ppm (200 mg/L) of chlorine. Isolate and allow to stand for three hours.
      c. Flush system with clean, potable water until no chlorine is in water coming from system after the standing time.
      d. Repeat procedures if biological examination shows contamination.
      e. Submit water samples in sterile bottles to authorities having jurisdiction.
B. Prepare and submit reports of purging and disinfecting activities. Include copies of water-sample approvals from authorities having jurisdiction.
C. Clean interior of domestic water piping system. Remove dirt and debris as work progresses.

Domestic water piping shall be insulated with Owens Corning type ASJ/SSL-II heavy density fiber glass with all service jacket. Insulation shall have a flame spread rating not to exceed 25 and a smoke density not to exceed 50 when tested in accordance with U.B.C. standard 42-1. Provide mastic on all joints and exposed ends of insulation. Insulate domestic Cold water piping in unconditioned spaces such as exterior corridors, attic, basements, etc with 1/2" thick insulation for piping 1-1/4" & smaller and 1" thick insulation for piping 1-1/2" & larger. Insulate all domestic Hot water supply and return piping with 1" thick insulation for piping 1-1/4" & smaller and 1-1/2" thick insulation for piping 1-1/2" & larger.

HW & CW Valves: Use pipe size valves, as shown below:
A. Ball: Watts LFFBV-3C.
B. Check: Watts #600 or #601S.

Fixture tailpieces, wall escutcheon, and traps for lavatories and sinks shall be brass tubing, semi-cast, or cast iron: All brass tubing shall be 17 gage, chrome plated. Exception: If the fixture tailpieces and traps are located in cabinets, the tailpiece & trap shall be PVC. Grid drains for public lavatories.

Water Hammer Arresters shall comply with standard ASSE 1010, metal bellows type or copper piston type.

Lavatory Supports shall be type II, lavatory carrier with concealed arms and tie rod for wall-mounting, lavatory-type fixture. Include steel uprights with feet. For accessible-fixture support include rectangular steel uprights.

Lavatory/ Sink supply fittings: NSF Standard: Comply with NSF/ANSI 61 Annex G, "Drinking Water System Components – Health Effects," for supply-fitting materials that will be in contact with potable water. Standard: ASME A112.18.1/CSA B125.1. Supply Stops: Chrome-plated-brass, one-quarter-turn, ball-type valve with inlet connection matching supply piping. Wheel handle operation. Risers: Chrome-plated, soft-copper flexible tube for exposed applications and ASME A112.18.6, braided- or corrugated-stainless-steel, flexible hose for conceal behind cabinet applications.

Provide ADA Supply and Drain Protective Shielding Guards on ADA fixtures that piping is exposed. Supply and Drain Protective Shielding Guards shall comply with ICC A117.1 and Americans with Disabilities Act (ADA) requirements. Manufactured plastic wraps shall cover hot and cold water supplies, trap, and drain piping.

All pipe hangers, clamps and channels shall be adequately sized to carry pipe loads and prevent sagging.

All other materials not specifically described but required for a complete and proper installation of work of this section, shall be new, first quality of their respective kinds, and as selected by the contractor subject to acceptance by the engineer.

Lay out the plumbing system in careful coordination with the drawings, determining proper elevations for all components of the system and using only the minimum number of bends to produce a satisfactorily functioning system. Follow the general layout shown on the drawings in all cases except where other work may interfere. Unless shown otherwise, lay out all pipes to fall within partition, wall floor, or roof cavities, and to not require furring other than as shown on the drawings.

Do not cut into or reduce the size of any load-carrying member without the prior approval of the architect. Install all pipes to clear all beams and obstructions.

Extend all plumbing vents above roof to parapet height.

Permanently close and make weatherproof any openings or penetrations of the building envelope made for plumbing systems. All wall and floor penetrations shall be sleeved. All exterior wall or foundation wall penetrations shall use a mechanical seal.

Coordinate all roof penetrations with architectural plans and building and roofing trades.

Provide shut-off balls valves and unions at all water connections to equipment and appliances.

Isolate all dissimilar metals with "EPCO" dielectric unions, except for brass or bronze valves with steel pipe.

Protect the potable water supply against backflow and siphonage from equipment, fixtures, etc., using approved backflow and anti-siphon devices.

Thoroughly clean all piping and equipment. Removing all dirt, rust, oil, and plaster.

Test Sanitary drainage piping by plugging all openings and filling with water to a height equal to a 10 foot head. Allow to stand one hour or longer as required. Repair leaking joints and then re-test.

No work shall be covered until it has been inspected and accepted by the local authority and the engineer.

Domestic water piping tests: Fill domestic water piping. Check components to determine that they are not air bound and that piping is full of water. Test for leaks and defects in new piping and parts of existing piping that have been altered, extended, or repaired. Leave new, altered, extended, or replaced domestic water piping uncovered and unconcealed until it has been tested and approved. Expose work that was covered or concealed before it was tested. Cap and subject piping to static water pressure of 50 psig (345 kPa) above operating pressure, without exceeding pressure rating of piping system materials. Isolate test source and allow it to stand for four hours. Leaks and loss in test pressure constitute defects that must be repaired. Repair leaks and defects with new materials, and retest piping or portion thereof until satisfactory results are obtained.

The entire system shall be warranted for a period of one (1) year beginning with Owner's acceptance of the work. All labor and materials necessary to repair or replace the system, or portions thereof, during that time shall be warranted for a period of one (1) year from the repair or replacement.

Install piping in concealed locations, unless otherwise indicated and except in equipment rooms, and service areas. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise. Install piping above accessible ceilings to allow sufficient space for ceiling panel removal. Install piping to permit valve servicing. Install piping at indicated slopes. Install piping free of sags and bends. Install fittings for changes in direction and branch connections. Install piping to allow application of insulation. Select system components with pressure rating equal to or greater than system operating pressure. Install escutcheons for penetrations of walls, ceilings, and floors. Verify final equipment locations for roughing-in.

Confirm that millwork is constructed with adequate provision for the installation of counter top lavatories and sinks.

Seal fixtures to wall and floor surfaces with sealant, color to match fixture.

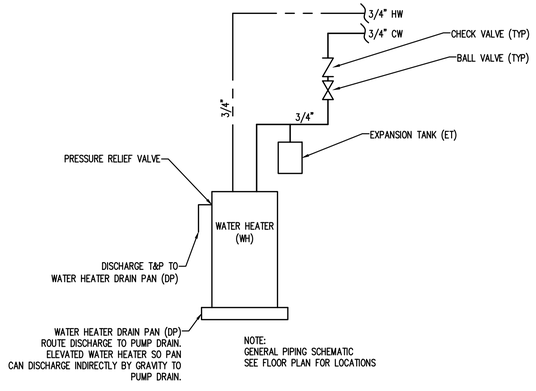
All vents thru roof (VTR) shall be offset a minimum of 10'-0" from all outside air intakes.

Provide Plastic Pipe Markers on all aboveground plumbing piping that Comply with ASME A13.1. Minimum information indicating flow direction arrow and identification of fluid being conveyed. Install labeling on pipe at intervals of not more than 20 feet and at least once in each room.

Provide a complete through penetration fire stopping assembly for fire resistance rated wall assemblies. The through penetration assembly must be listed by an approved third-party test agency (UL), and include the entire listed assembly with all notations. Refer to architectural drawings for fire wall locations.

Approved manufactures: (Items submitted shall be approved by architect and engineer. Architect and engineer reserve the right to reject any item substituted for basis of design item for any reason.)

China Fixtures: American Standard, Kohler, Toto, Zurn, Sloan
Faucets: Delta, T&S Brass, Chicago Faucets, Zurn, Kohler, Grohe, Moen, Speakman, Symmons
Supplies & Traps: Engineered Brass CO., Mcguire, Charlotte Pipe, Brasscraft, IPS, Watts, Zurn
Floor Drains & Cleanouts: Zurn, Jay R Smith, Proset, Watts, Mifab, Wade, Josam, Sioux Chief, Oatey
Water Heaters: A.O. Smith, Lochinar, Bradford White, State, Rheem
Tankless Electric Water Heaters: A.O. Smith, Rheem, EEmax, Chronomite
Toilet Seats: Bemis, Centoco, Church Seats, Olsonite, Beneke, Zurn, Mainline
Stainless Steel Sinks: Dayton, Elkay, Just, Kohler, Moen, Sterling, Franke
ADA Protective Shielding Pipe Covers: Engineered Brass, McGuire, Plumberex, TRUEBRO, Zurn, Oatey
Fixture Supports: MIFAB, Jay R. Smith, Wade, Watts, Zurn
Mixing Valves: Armstrong, Leonard, Powers, Symmons, Lawler
Water Hammer Arresters: AMTROL, Josam, MIFAB, PPP, Sioux Chief, Jay R. Smith, Wade, Watts, Zurn
Brass Valves: American, Crane, Watts, Apollo
Sump Pumps: Myers, Zoeller, Blue Angel, Liberty



WATER HEATER (WH1) PIPING SCHEMATIC
SCALE: N.T.S.

FIXTURE AND EQUIPMENT SCHEDULE

#	FIXTURE TYPE	WASTE		WATER SUPPLY		WATER FIX. CONN.		MANUFACTURE AND NOTES
		BELOW FLOOR	FIXTURE CONN.	COLD	HOT	COLD	HOT	
WC1	ADA WATER CLOSET 1.28 GPF	3"	3"	1/2"		1/2"		MANSFIELD 137-3173 WATER CLOSET. BEMIS 170 SEAT.
WC2	ADA WATER CLOSET 1.28 GPF W/ RIGHT-HAND TRIP LEVER	3"	3"	1/2"		1/2"		FLUSH HANDLE SHALL BE ON WIDE SIDE OF STALL. MANSFIELD 137-3173 WATER CLOSET. BEMIS 170 SEAT.
LAV	ADA WALL-HUNG LAVATORY 0.5 GPM	2"	1-1/4"	1/2"	1/2"	1/2"	1/2"	AMERICAN STANDARD 0355.012 LAVATORY. MOEN 8430F05 FAUCET.
MV	THERMOSTATIC MIXING VALVE ASSE 1070-2015			1/2"	1/2"	1/2"	1/2"	LEONARD 170-LF-BRKT.
FD	FLOOR DRAIN WITH WATERLESS TRAP PRIMER	2"	2"					WATTS FD-190-PR-60 FLOOR DRAIN. RECTORSEAL "SURESEAL PLUS" WATERLESS TRAP PRIMER.
HD1	HUB DRAIN	3"	3"					WATTS FD-100-DD-60
HD2	HUB DRAIN WITH WATERLESS TRAP PRIMER	2"	2"					PROSET TG24HD.
FS	FLOOR SINK	4"	4"					WATTS FS-740-150 FLOOR SINK.
CO	INLINE CLEANOUT	SEE DWG.	SEE DWG.					PVC INLINE CLEANOUT.
DP	APARTMENT WATER HEATER DRAIN PAN		1"	3/4"		3/4"		WATER TITE HP2224C.
PRV	PRESSURE REDUCING CONTROL VALVE			3/4"		3/4"		WATTS LF223.
RPZ	REDUCED PRESSURE ZONE ASSEMBLIES			3/4"		3/4"		WATTS 009.
AAV	AIR ADMITTANCE VALVE	2"	2"					STUDOR VENT.

GENERAL PLUMBING NOTES:

THE WORK INDICATED IS INTENDED TO SHOW THE GENERAL SCOPE OF DEMOLITION/NEW WORK AND IN NO WAY RELIEVES THE CONTRACTOR FROM PROVIDING ANY AND ALL WORK REQUIRED TO COMPLETE THE DEMOLITION/NEW WORK.

WHERE SURFACES ARE DAMAGED BY DEMOLITION, SHALL BE REPAIRED TO MATCH EXISTING (IN MATERIAL, SIZE, ALIGNMENT, JOINT WORK, FINISHES, COLOR, TEXTURE, QUALITY, ETC.) SUCH SURFACES IT DOES NOT INTERFERE WITH NEW WORK OF OTHER TRADES.

WATER HEATER & TANK SCHEDULE

MARK	MANUFACTURER	MODEL NUMBER	TYPE	GALLON	KW	SERVES	MIN. UEF	*ELECTRICAL	
								VOLTS	PHASE
WH1	A.O. SMITH	ENT-50	RESIDENTIAL TALL ELECTRIC	50	4.5	BAR	0.92	240	1
WH2	CHRONOMITE	CMI-30L/208	ELECTRIC TANKLESS	–	6.240	RESTROOM LAVATORIES	0.92	208	1
EV	WATTS	LFBRVM1	COMBINATION BALL VALVE AND RELIEF VALVE			TANK TYPE WH'S			

CONTRACTOR SHALL CONSULT THE ELECTRICAL DOCUMENTS FOR VOLTAGE AND PHASE.

PUMP SCHEDULE

MARK	PUMP TYPE	BASIS OF DESIGN MANUFACTURER	MODEL NUMBER	RPM	HP/ WATTS	GPM	FEET HEAD	*ELECTRICAL	
								VOLTS	PHASE
SP	SUMP PUMP	LIBERTY	406	–	1/6 HP	10	10	120	1

CONTRACTOR SHALL CONSULT THE ELECTRICAL DOCUMENTS FOR VOLTAGE AND PHASE

LEGEND

	SHUTOFF VALVE		COLD WATER	(TYP)	TYPICAL	VTR	VENT THRU ROOF
	CHECK VALVE		HOT WATER	C.T.	COUNTER-TOP	AFF	ABOVE FINISHED FLOOR
	PIPE UP		HOT WATER RETURN	DN	DOWN	CW	COLD WATER
	PIPE DOWN		SEWER VENT	CONN.	CONNECTION	HW	HOT WATER
PDI–B	PDI UNIT WATER HAMMER ARRESTOR		SEWER	NTS	NOT TO SCALE	B.F.F.	BELOW FINISH FLOOR
DWGS.	DRAWINGS	F	FIRE SPRINKLER	VT	VENT	FLR	FLR
GREASE	GREASE LADEN SEWER	G	GAS			FFE	FINISHED FLOOR ELEVATION
O	OVERFLOW ROOF DRAINAGE	S	STORM				

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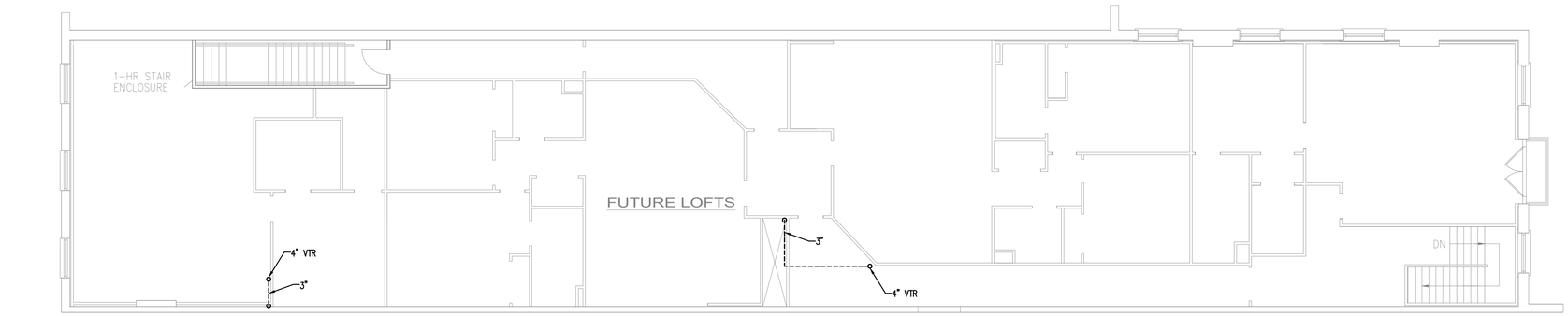
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RENOVATIONS AT
476 SECOND STREET BLDG.
MACON, GEORGIA

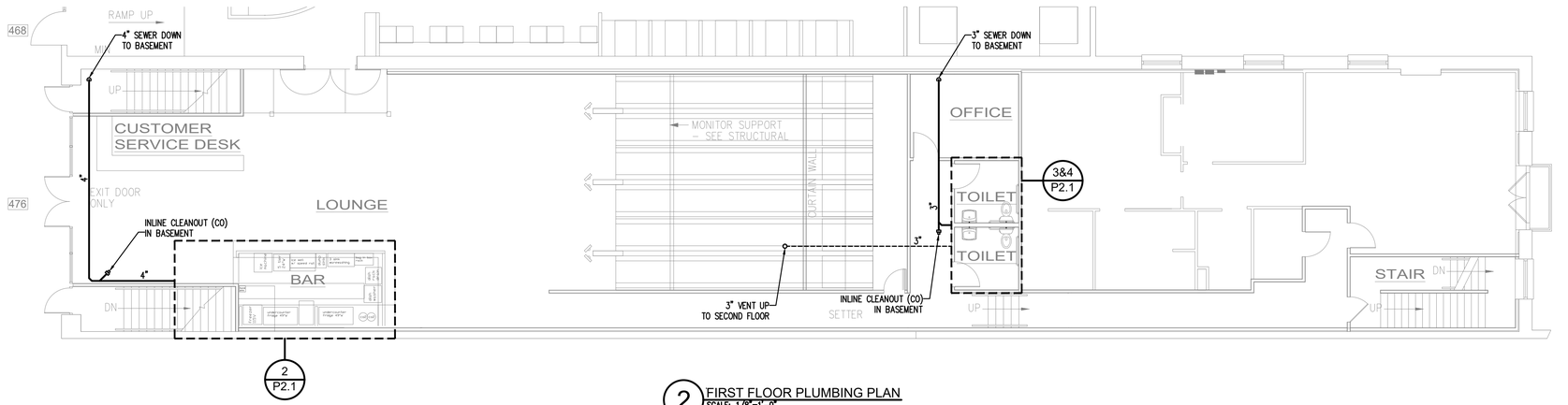
Drawing Issue Schedule	
23 Oct 2023	Permit Set
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PLUMBING SPECIFICAITONS

P0.1



3 SECOND FLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"



2 FIRST FLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

1 PLUMBING BASEMENT PLAN
SCALE: 1/8"=1'-0"

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RENOVATIONS AT 476 SECOND STREET BLDG.

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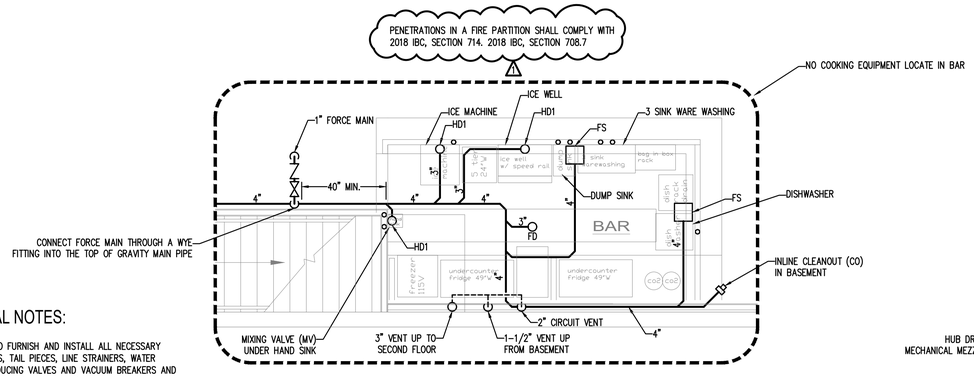
PLUMBING PLANS

P1.1

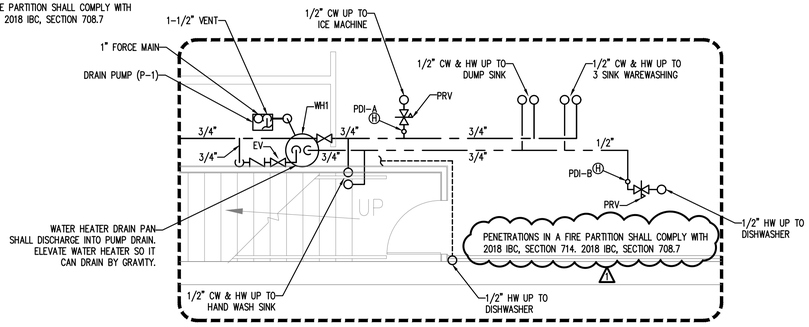
GENERAL NOTES:

PLUMBER IS TO FURNISH AND INSTALL ALL NECESSARY VALVES, TRAPS, TAIL PIECES, LINE STRAINERS, WATER PRESSURE REDUCING VALVES AND VACUUM BREAKERS AND CONNECT ALL WATER, WASTE, AND VENT LINES TO BAR EQUIPMENT. CONNECT TO BAR EQUIPMENT THROUGH INDIVIDUAL WATER FILTERS WHEN REQUIRED BY EQUIPMENT MANUFACTURER. USE FLEXIBLE STAINLESS STEEL LINES WITH QUICK DISCONNECT CONNECTIONS. VERIFY WITH EQUIPMENT SUPPLIER EXACT LOCATION OF EQUIPMENT AND PLUMBING ROUGH IN SIZES, LOCATIONS, AND REQUIREMENTS.

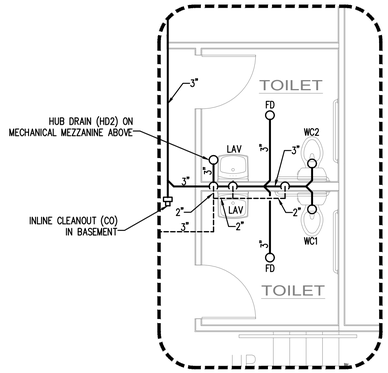
PENETRATIONS IN A FIRE PARTITION SHALL COMPLY WITH 2018 IBC, SECTION 714. 2018 IBC, SECTION 708.7



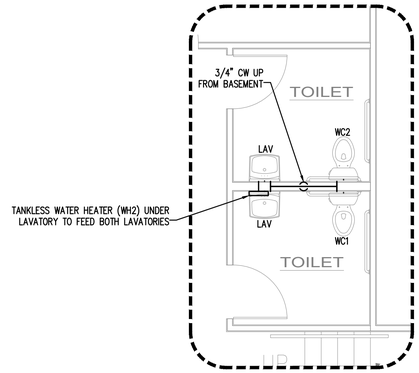
2 BAR PLUMBING PLAN
SCALE: 1/4"=1'-0"



1 UNDER BAR BASEMENT PLUMBING PLAN
SCALE: 1/4"=1'-0"



3 RESTROOMS PLUMBING PLAN - SEWER
SCALE: 1/4"=1'-0"



4 RESTROOMS PLUMBING PLAN - WATER
SCALE: 1/4"=1'-0"

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GEORGIA REGISTERED NO. 036864 PROFESSIONAL ENGINEER KRUNAL M. PATEL

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RENOVATIONS AT 476 SECOND STREET BLDG.

MACON, GEORGIA

Drawing Issue Schedule	
23 Oct 2023	Permit Set
⚠1 21 DEC 2023	REVISION 1
Project No:	2023-25

TOTAL ENGINEERS
169 New Street, Macon, GA 31201
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LARGE SCALE PLUMBING PLANS

P2.1

MECHANICAL SPECIFICATIONS

1) Provide all heating, ventilation and air conditioning items indicated on the drawings, described in this specification or required for a complete and proper installation.

2) Comply with all pertinent codes, ordinances and regulations. Refer to website for Dept. of Community Affairs for current Codes Editions.

3) The contractor shall not attempt to precisely scale dimensions from these drawings to obtain construction dimensions and clearances. The contractor shall verify all actual dimensions and clearances. Although these plans are diagrammatic in nature, they shall be followed as closely as site conditions, new construction, and work by other trades shall permit. Deviations from these drawings, which are required to conform to the available space or the actual building construction, shall be made at no additional cost to the owner.

4) Furnish without extra charge, any additional material and labor required to comply with the above codes and standards, even though the work may not be described in the contract documents. Where the requirements of the contract documents exceed the requirements of the above codes and standards, the contract documents shall take precedence.

5) All equipment and material shall be new and of first quality. Equipment and material shall be the same or equal to the basis of design listed on these drawings and shall be UL listed.

6) Cooperate and coordinate with other trades in order that all systems in the work may be installed in the best arrangement.

7) Examine the areas and conditions under which work of this section will be installed. Correct conditions detrimental to the proper and timely completion of the work. Notify Architect of any discrepancies. Do not proceed until unsatisfactory conditions have been corrected.

8) Avoid interference with structure, and with work of other trades. Install all equipment per manufacturer's instructions. Install accessible parts, including equipment, coils, valves, dampers, controls, and filters with adequate clearance for inspection, adjustments, repair and replacement.

9) All other materials not specifically described but required for a complete and proper installation shall be as selected by the contractor subject to acceptance by the Engineer.

10) All ductwork shall be fabricated from galvanized sheet metal duct and conform to SMACNA "HVAC Duct Construction Standards–Metal and Flexible. Seal all joints in ductwork with mastic sealant.

11) Outside duct insulation: Insulate ducts and fittings with two, staggered layers of 1½-inch foamed plastic sheet insulation, (Armo-Flex sheets) 6-pound density, having a thermal conductivity of not more than 0.28 at 75ºF. Apply insulation with smooth side out of coating both surfaces to be joined completely with a thin coat of waterproof instant bonding adhesive. Adjacent sheets shall fit under compression. Apply a 16-mil embossed aluminum jacket with a 2-inch overlap at longitudinal and transverse joints, secured in place with 1-inch by .015-inch aluminum bands on 18-inch centers. Overall insulation value must be R-8 for exterior duct as per ASHRAE 90.1 & IECC.

12) Duct Liner: Owens Corning Aeroflex Plus, or equivalent. Incombustible glass fiber complying with ASTM C 1071; flexible blanket; impregnated surface and edges coated with acrylic polymer shown to be fungus and bacteria resistant by testing to ASTM G 21. Apparent Thermal Conductivity: Maximum of 0.31 at 75 degrees F. Service Temperature: 250 degrees F. Density: 1.5 pounds/cubic foot. Install using adhesive (50% coverage) and galvanized steel fasteners with welded press-on head Thickness: 1-inch.

13) Condensate drain piping shall be ASTM D2665 PVC with solvent welded fittings. Drain piping shall be no smaller than the drain connection size on equipment. Slope at 1/8 inch per foot continuously toward drains. All indoor condensate drain piping shall be insulated with preformed flexible plastic cellular foam. All outdoor condensate drain piping shall be primed and painted with a coating system recommended by the piping manufacturer for protection against deterioration from weather and UV-light exposure. All piping shall be adequately supported to maintain proper slope and avoid sagging.

14) Refrigerant piping shall conform to manufacturer's recommendations and installation instructions. Refrigerant piping shall be ASTM B280 Type ACR or ASTM B88 Type L drawn copper tubing with wrought copper fittings. Insulate suction line with ½? thick flexible foamed plastic cellular foam (Armaflex or equivalent). All piping shall be adequately supported. Insulation installed outdoors shall be painted with two coats of Armacell WB coating or equivalent.

15) Thermostats: Provide 24 volt, programmable 24-hour, 7-day thermostat to control heating stages in sequence with delay between stages and supply fan to maintain temperature setting. For Heat Pumps include system selection switch heat-off-cool and fan control switch (auto-on), emergency heat switch (auxiliary/emergency heat indicator lights).

16) Provide fire and smoke rated flexible connections between fans and ducts. Material shall comply with NFPA 90A requirements for material in supply air stream.

17) Install all equipment in accordance with manufacturer's instructions and recommendations including clearances recommended for proper operation or service. All filters and serviceable parts shall be readily accessible.

18) Indoor duct insulation: Foil-faced fiberglass, Owens Corning type 75 or equal, 2.2" thick(R-6), unless the insulated duct is outside building insulation envelope (attic, crawlspace or unconditioned space) in which case the duct insulation thickness shall be 3? thick(R-8). Duct shall have a flame spread rating of not more than 25 and smoke developed rating of not more than 50. Glass-Fiber Insulation: All service duct wraps with foil scrim and having backing and a k-value of 0.30 at 75° F mean temperature and an average maximum density of 0.75 lb./cu. ft.

19) All supply, return and outside air ducts shall be insulated. Install acoustical duct liner on the interior surface of the last five (5) linear feet of return duct upstream of all air handlers and rooftop units. Insulate the concealed tops of all ceiling mounted supply air diffusers with foil-faced fiberglass, 1.5#/cubic foot density, 2? thick. Seal edges to ceiling grid with foil faced tape to provide vapor tight seal.

20) All low-pressure duct branches shall contain manual balancing dampers. Manual balancing dampers shall also be installed in the continuation of the main, if the main duct is smaller or the same size as the branch duct, or if the continuation of the main serves only one device.

21) Make all duct elbows right angle type with single -thickness turning vanes or construct with centerline radius 1-1/2 times the duct width.

22) Duct sizes shown on plans are clear, interior dimensions. Duct sizes shown shall be enlarge to allow for liner at locations of interior liner.

23) Do not cut into or reduce the size of any structural member without the permission of the Architect.

24) Provide weather-proof flashing at all duct and pipe penetrations through the building walls and roof. As a minimum, flashings shall be designed and installed in accordance with SMACNA standards. Flashings shall be guaranteed weatherproof.

25) Support all HVAC units, ductwork, piping and other appurtenances from structure, provide vibration isolation at all fans which are not internally isolated. Provide hanger rod with built in rubber-in-shear isolator. Between drain pan and unit provide 4 each rubber-in-shear isolator. Do not attach vibration isolator to drain pan. Do not screw or drive fasteners into non-structural components such as roof decks or non-load bearing walls.

26) Thoroughly clean all components and remove all dirt, scale, oil, and other foreign substances. Provide clean air filters for all equipment.

27) Perform all tests necessary to demonstrate the integrity of the complete installation to the approval of the Engineer and all other authorities having jurisdiction. Make all adjustments necessary and balance the completed system in accordance with the data shown. Balance the systems in accordance with NEBB or AABC standards. Acceptable tolerances shall be minus ten percent to plus five percent of all measurements. Balancing shall be done by an independent licensed (by NEBB or AABC) TAB contractor. Make the following tests and submit reports to the Architect:
   a) Airflow rate at each supply, return and exhaust outlet or inlet.
   b) Total airflow rate and total static pressure for each supply and exhaust fan. Test exhaust fans with room doors closed.
   c) Motor speed, for multiple speed fans (e.g., high, medium, low).
   d) For direct drive fans, provide speed settings and actual rpm, including ECM motor driven fans
   e) Provide fan and motor rpm for belt driven fans. Provide sheave sizes.
   f) Outside airflow rate to each HVAC unit and supply fan.
   g) Motor current (and compare with nameplate data) at all motors.
   h) Entering and leaving air dry-bulb and wet-bulb conditions at all cooling coils.
   i) Heat output capacity for unit heaters, heating devices and coils (kW or MBH).
   j) Manufacturer, model and serial number for each piece of HVAC equipment scheduled on drawings.
   k) Calibrate thermostats to be within one degree of actual temperature at thermostat.
   l) Verify that all HVAC devices operate as scheduled or indicated (i.e., ON-OFF, 2-stage, variable output (SCR heaters), etc.

28) The entire system shall be warranted for a period of one (1) year beginning with Owner's acceptance of the work. Compressors shall include a minimum of five (5) year parts only warranty from the manufacturer. All labor and materials necessary to repair or replace the system or portions thereof, during that time shall be warranted for a period of one (1) year from the repair of replacement.

29) SUBMITTALS AND SUBMITTAL PROCEDURES:
   a. Contractor shall review the submittal data and check for the purpose of compliance with safety requirements, verification of dimensions, contract documents and methods and means prior to submitting to design professional. Contractor shall indicate approval by indicating such on the submittal.
   b. Transmit each submittal electronically in PDF format.
   c. Sequentially number submittal files and transmittal form. Revise submittals with original number and a sequential alphabetic suffix. File names shall describe item included in file.
   d. Identify Project, the Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy. Each file shall include an index of items included in file.
   e. Apply the Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
   f. Submittal data for all items in project shall be submitted at one time. Submittal shall be divided into groups with file sizes not exceeding 6 MB. If there is unavailable data such as control submittal, etc., these may be submitted later if not doing so would delay project progress. Data shall include capacities, complete installation instructions, dimensional data and electrical data, BHP, motor HP, operating weights and load distribution at mounting points.
   g. Deliver submittals electronically to the Design Professional.
   h. Schedule submittals to expedite the Project, and coordinate submission of related items.
   i. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
   j. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
   k. Provide space for the Contractor and the Architect/ review stamps.
   l. When revised for resubmission, identify all changes made since previous submission.
   m. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
   n. Submittals not requested will not be recognized or processed.
   a. Provide files containing only related items (such as piping, equipment, air distribution, etc.)

30) Instruct Owner's representative in the operation of the systems, using the operation and maintenance manual as a teaching aid.

31) Provide an operation and maintenance manual. As a minimum, the manual shall contain:
   a. A complete list of all equipment and appurtenances with equipment designations (per Drawings), manufacturers, and catalog numbers.
   b. Copies of manufacturers' brochures and instructions for operation and maintenance of all mechanical equipment, including replacement parts lists.
   c. Typed system operation and maintenance instructions, including inspection, lubrication, and service instructions and schedules.
   d. List of names, addresses and phone numbers of distributors of all equipment and appurtenances.
   e. Manufacturers' warranties.

32) Horizontal Air Handler unit: Indoor fan-coil unit shall be direct-expansion horizontal heat pump air handler with electric strip heat suspended from structure with auxiliary drip pan and condensate drain. Provide float switch in drip pan to shut down unit if pan begins to fill. Unit shall be complete with cooling coil, fan, fan motor, piping connectors, electrical controls, microprocessor control system, and integral temperature sensing. Cabinet shall be fully insulated for improved thermal and acoustic performance. Condensate pan shall have internal trap and auxiliary drip pan under coil header. Provide condensate trap recommended by manufacturer. Air filters shall be 1-inch-thick glass fiber, disposable type arranged for easy replacement. Provide number of stages as scheduled. Provide condensate overflow switch (Rectorseal Safe-T-Switch Model SS1 or equivalent) wired to shut unit down in case of condensate overflow.

33) Air Source Heat Pumps (HP-1): outdoor-mounted, air-cooled split system outdoor section suitable for rooftop installation, consisting of a hermetic compressor, an air-cooled coil, propeller-type blow-thru outdoor fans, accumulator, full refrigerant charge (R-410A), and control box. Unit shall function as the outdoor component of an air-to air cooling system and used in a refrigeration circuit matched to the indoor unit. Unit construction shall comply with ANSI/ASHRAE 15, latest revision, the NEC, and UL standards. Provide rail support system compatible with roofing system. Refer to Schedule on Drawings for additional specifications.

34) Provide a duct smoke detector on the supply duct of each air handling unit or rooftop unit with design airflows exceeding 2,000 CFM, and where smaller air handling units have common return ductwork or plenum and total air flow exceeds 2,000 CFM. Install detector in accordance with the International Mechanical Code section 606 Smoke Detection Control System with Georgia Amendments 2018. Detectors shall be provided by the electrical/fire alarm subcontractor and shall be installed by the mechanical subcontractor. For other fans, such as exhaust fans with design airflows exceeding 2,000 CFM, coordinate with the electrical/fire alarm subcontractor to provide room or duct smoke detectors. Where no fire alarm system is installed in building provide smoke detector, audio visual annunciator and trouble indicator in an approved location. Duct smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble. Provide contacts to automatically shut down all such fan motors when smoke is detected, to indicate detector status to the fire alarm system, and to require a manual reset of the shut-down relay.

35) Fire damper; curtain type with blades outside air stream except when located behind grilles when blades may be in air stream. Provide 1-1/2 hr class unless noted otherwise, vertical or horizontal mounting as shown on drawings with re-placeable, rated, fusible link. Duct-Mounted Access Doors: Provide access doors for access to fire or smoke dampers having fusible links, access shall be pressure relief access doors; and shall be outward operation for access doors installed upstream from dampers and inward operation for access doors installed downstream from dampers adjacent to and close enough to fire or smoke dampers, to reset or reinstall fusible links. Fabricate access panels according to SMACNA's "HVAC Duct Construction Standards – Metal and Flexible"; Figures 2-10, "Duct Access Doors and Panels," and 2-11, "Access Panels – Round Duct."

36) Grilles, Registers and Diffusers: Refer to schedule.

37) Bi-Polar Ionization System: Refer to schedule. Interlock with evaporator fan such that system turns off when evaporator is off.

38) Basic motor requirements: basic requirements apply to mechanical equipment motors, unless otherwise indicated. Motors 1/2 hp and larger: Polyphase, unless otherwise scheduled. Motors smaller than 1/2 hp: single phase. Frequency rating: 60 Hz. Service factor: according to NEMA MG 1, general purpose continuous duty, design type "B." Enclosure: open drip-proof, unless otherwise indicated. Efficiency: motors shall have a higher efficiency rating than industry standard average motor as delineated in IEEE Standard 112, test method 13. Thermal protection: where indicated or required, internal protection automatically opens power supply circuit to motor when winding temperature exceeds a safe value calibrated to temperature rating of motor insulation. Thermal protection device automatically resets when motor temperature returns to normal range, unless otherwise indicated.

39) Hangers and supports: Building attachments: concrete inserts or structural-steel fasteners appropriate for building materials, and beam clamps. Hanger materials: galvanized, sheet steel or round, threaded steel rod. Hangers installed in corrosive atmospheres: electrogalvanized, all-thread rod or galvanized rods with threads painted after installation. Straps and rod sizes: comply with SMACNA's "HVAC Duct Construction Standards--Metal and Flexible" for sheet steel width and thickness and for steel rod diameters. Duct attachments: sheet metal screws, blind rivets, or self-tapping metal screws; compatible with duct materials. Trapeze and riser support galvanized steel shapes and plates: steel shapes complying with ASTM A 36/A 36M.

40) Sealant materials: joint and seam sealants, general: the term "sealant" is not limited to materials of adhesive or mastic nature but includes tapes and combinations of open-weave fabric strips and mastics. Joint and seam tape: 2 inches wide; glass-fiber fabric reinforced. Joint and seam sealant: one-part, nonsag, solvent-release-curing, polymerized butyl sealant, formulated with a minimum of 75 percent solids. Flanged joint mastics: one-part, acid-curing, silicone, elastomeric joint sealants, complying with ASTM C 920, type S, grade NS, class 25, use O.

41) Gravity Ventilators: Heavy gauge arched sheet aluminum with interlocking seams or spun aluminum with base for curb mounting. Provide matching pre-fabricated roof curb and bird screen. Provide normally closed gravity backdraft damper.

42) All HVAC equipment such as AH, CU, EF, AC, HP, and RTU shall have visible nameplates with their associated marks on them.

43) Ceiling Ventilator shall have corrosion resistant galvanized steel housing with four-point mounting capability. It shall be ducted to a cap on wall or roof using round ductwork. Blower assembly shall be removable, have a centrifugal-type blower wheel and a permanently lubricated motor designed for continuous operation. Non-metallic damper/duct connector shall be included. Air delivery shall be no less than scheduled and sound level no greater than scheduled. All air and sound ratings shall be certified by HVI. Ceiling ventilator shall be Energy Star? qualified and have an energy efficient permanent split capacitor motor.

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RENOVATIONS AT 476 SECOND STREET BLDG.

MACON, GEORGIA

Drawing Issue Schedule	
23 Oct 2023	Permit Set
Project No:	2023-25

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MECHANICAL SPECIFICATIONS

M0.1

AH-1 OUTSIDE AIR CALCULATIONS

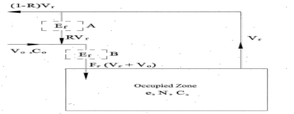
OUTSIDE AIR CALCULATIONS PER FBC M TABLE 403.3.1.1												
SPACE NAME	SUPPLY CFM	SPACE FLOOR AREA	SPACE CEILING HEIGHT FT	OCCUPANCY CLASSIFICATION PER FBC M TABLE 403.3.1.1	OCCUPANCY /1000SF	TIME AVERAGE NUMBER OF OCCUPANT	CFM/PERSON PER FBC TABLE 403.3.1.1	CFM/SF PER TABLE 403.3.1.1	OUTSIDE AIR PER 403.3.1.1	EXHAUST AIR PER 403.3.1.1	REDUCED OUTSIDE AIR PER GPS SYSTEM	PROVIDED OUTSIDE AIR PER DRAWINGS
LOUNGE	1850	1125	12	BOWLING ALLEYS	40	45	10	0.12	585	0	225	250
TOTAL									**585**		**225**	250

Note: Refer to supplement calculations for reduced outside air.

Global Plasma Solutions, Inc.
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www.globalplasmasolutions.com
VERSION 2.1 running ASHRAE 62.1-2016

Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft) Az	Zone Max Occupancy Pz	Table 6.1 OA per Occupant Rp	Table 6.1 cfm/ft2 Ra	Pz * Rp Pz * Rp	Az * Ra Az * Ra	Table 6.2 Ventilation Effectiveness Ez	Outdoor Air to Zone (CFM) with Ez correction (Vbz/Ez)
AH-1	Public Assembly Spaces	Bowling alley (seating)	1,125.0	45.0	10.0	0.12	450	135	0.8	731 OA required per VRP

Zone Height (feet)	12.0
Desired Outside Air (Vo) IAQP (CF	225
Supply Air (Vs) (CFM)	1,850
Return Air (Vr)	1625
Recirc. Flow Factor (R)	0.88
Ventilation Effectiveness (Ez)	0.8
Level of Physical Activity	Standing (desk work)
Filter Location	B
HVAC Flow Type	Constant
Outdoor Air Flow Type	Constant

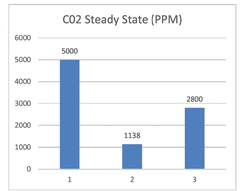


Air Changes Per Hour	8.2	VRP OA CFM per person	16.3
Outside Air Per VRP	731 CFM	IAQ OA CFM per person	5.0
Outside Air Per IAQ	225 CFM		
Outside Air Savings	506 CFM	Winter Heating Savings	
OA Summer Drybulb	95.0	OA Winter Design DB (F)	10
OA Summer Wetbulb	76.0	Supply Air DB Setpoint (F)	68
Coil Leaving Air Drybulb (F	55.0	MBH Saved Winter	31.9
Coil Leaving Air Wetbulb (F	55.0	KW Saved Winter	9.3
OA MBH Saved Summer*	37.0		
OA Tons Saved Summer*	3.1		

*OA = Outside Air
***OSHA, NIOSH & WHO most conservative values used

http://www.cdc.gov/niosh/npg/npgsyn-a.html

Indoor Contaminants Generated By People & From Outdoors	Maximum Threshold Value Based on OSHA or NIOSH (PPM)	Steady State (lb/ft3) Using the VRP* (Prescribed OA) Plasma Off	Steady State (lb/ft3) Using the IAQ Method (Reduced OA) Plasma On	Is Steady State Level Acceptable at Reduced OA Levels?	Contaminant Generation Rate lb/person/min	Filtration Effectiveness	Cognizant Authority***
Acetaldehyde	100.0	2.7480E-09	1.3174E-09	Yes	1.9486E-08	50%	OSHA
Acetone	250.0	1.5281E-08	1.1781E-08	Yes	1.9622E-07	50%	NIOSH
Ammonia	25.00	3.5465E-07	2.7623E-07	Yes	4.6095E-06	50%	NIOSH
Benzene	1.0	1.7463E-08	1.3274E-08	Yes	2.2052E-07	50%	OSHA
2- Butanone (MEK)	200.0	1.0269E-06	7.9997E-07	Yes	1.3350E-05	50%	NIOSH
Carbon dioxide**	5000	4.7824E-05	5.4278E-05	Yes	3.7290E-05	0%	NIOSH
Chloroform	2.0	3.1826E-08	2.4751E-08	Yes	4.1292E-07	50%	NIOSH
Dioxane	100.0	0.0000E+00	0.0000E+00	Yes	0.0000E+00	50%	OSHA
Hydrogen Sulfide	10.0	0.0000E+00	0.0000E+00	Yes	0.0000E+00	50%	NIOSH
Methane	NA	6.8698E-08	6.8698E-08	Yes	0.0000E+00	0%	NA
Methanol	200.0	1.2968E-08	4.2145E-08	Yes	1.6858E-07	0%	NIOSH
Methylene Chloride	25.0	9.3255E-07	7.2637E-07	Yes	1.2121E-05	50%	OSHA
Propane	1000.0	1.1242E-09	1.1242E-09	Yes	0.0000E+00	0%	NIOSH
Tetrachloroethane	5.0	0.0000E+00	0.0000E+00	Yes	0.0000E+00	50%	OSHA
Tetrachloroethylene	100.0	1.0589E-06	8.2482E-07	Yes	1.3764E-05	50%	OSHA
Toluene	100.0	3.8984E-09	2.2136E-09	Yes	3.4441E-08	50%	NIOSH
1,1,1 - Trichloroethane	350.0	4.4514E-05	3.4677E-05	Yes	5.7868E-04	50%	NIOSH
Xylene	100.0	6.2453E-10	7.4849E-11	Yes	0.0000E+00	50%	OSHA



1 = NIOSH C02 Limit
2 = C02 Level at Ventilation Rate OA Flow Rate
3 = C02 Level at IAQ Procedure OA Flow Rate

**Carbon dioxide has been provided for reference only for gathering demand control ventilation (DCV) setpoints. The National Research Council was commissioned by the US Navy to prove C02 is not a contaminant of concern when using air purification to control the other contaminants of concern, as found on submarines.

The University of Denmark conducted a study to confirm C02 levels at 5,000 PPM had no impact on cognitive function. Zhang X, Wargocki P, Lian Z, Human Responses to Carbon Dioxide, a Follow-up Study at Recommended Exposure Limits in

Building materials and furnishings assumed to have no VOCs and off-gassing is complete
All yellow shaded boxes require user input or review

Is IAQ acceptable at reduced outside air levels? Yes

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Date	1/16/2024
Job Name	RENOVATIONS 476 2ND ST BLDG
Representative	MINGLEDORFF'S INC
Engineer	TOTAL ENGINEERS
Contractor	-

IMC 2006 & later allows for ASHRAE 62 IAQP through the engineered exception found in Section 403.2
Exhaust flow rates may differ from Table 6.5 based on ASHRAE 62 IAQP via Section 6.5.2

1

HEAT PUMP AIR HANDLING UNIT SCHEDULE

MARK	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. SP. IN. W.G.	EVAP. FAN HP	EVAP. COIL ENTERING AIR DESIGN CONDITIONS DB °F	EVAP. COIL ENTERING AIR DESIGN CONDITIONS WB °F	EVAP. COIL LEAVING AIR DESIGN CONDITIONS DB °F	EVAP. COIL LEAVING AIR DESIGN CONDITIONS WB °F	SYSTEM COOLING MAX. REQUIREMENTS (MBH) TOTAL	SYSTEM COOLING MAX. REQUIREMENTS (MBH) SENSIBLE	SUPPL. HEAT KW	WEIGHT (LBS)	POWER VAC/PH	BASIS OF DESIGN CARRIER	NOTES
AH-1	1850	250	0.60	3/4	77.6	64.7	55.0	54.0	54.0	40.0	11.3	250	208/1ø	FV4CNB006LOO	1:2:4:5:6:7:8

1. VERIFY ELECTRIC POWER REQUIREMENTS WITH ELECTRICAL PLANS, WHICH TAKE PRECEDENCE OVER THIS INFORMATION.
2. PROVIDE AIR FILTERS. FLEXIBLE DUCT CONNECTIONS AND VIBRATION ISOLATION. PROVIDE PROGRAMMABLE THERMOSTAT AND SUPP. ELEC. HEAT MODULE CONNECTED TO UNIT FOR SINGLE POINT OF CONNECTION.
3. PROVIDE CONDENSATE TRAP(S) AS RECOMMENDED BY MANUFACTURER AND ROUTE CONDENSATE PIPING TO HUB DRAIN. COORDINATE WITH PLUMBING.
4. PROVIDE AUXILIARY DRAIN PAN UNDER THE AIR HANDLERS WITH FLOAT ACTIVATED SWITCH TO SHUT THE UNIT DOWN INCASE OF CONDENSATE OVERFLOW. REFER TO DETAIL PROVIDED.
5. AIR HANDLING UNIT WITH ECM MOTOR. PROVIDE COIL OUTLET SWITCH. COIL OUTLET SWITCH SHALL BE WIRE IN SERIES WITH FLOAT ACTIVATED SWITCH LOCATED AT DRAIN PAN. REFER TO CONDENSATE DETAIL PROVIDED.
6. FLOAT ACTIVATED CONDENSATE SWITCH AND COIL OUTLET SWITCH SHALL BE PROVIDED AND INSTALLED BY HVAC CONTRACTOR.
7. UNIT AT 208/1ø AUXILIARY HEAT AT 208/1ø. UNIT SHALL HAVE SINGLE POINT CONNECTION.
8. PROVIDE SMOKE DETECTOR IN SUPPLY AIR DUCT. DETECTOR SHALL BE PROVIDED BY ELECTRICAL AND INSTALLED BY MECHANICAL.

AIR COOLED HEATPUMP UNIT SCHEDULE

MARK	AHU SERVED	HEAT PUMP HEATING CAP (MBH)	SEER2	HSPF2	NOM. CAP. (TONS)	REFRIG	OA TEMP SUMMER (DB)	OA TEMP WINTER (DB)	WEIGHT (LBS)	POWER VAC/PH	BASIS OF DESIGN CARRIER	NOTES
HP-1	AH-1	32.6	16.0	8.1	5.0	R410A	96	23	350	208/1ø	25TPA760A003	1:2:3:4:5:6

1. PROVIDE WITH DEFROST CONTROLS, LOW AMBIENT HEAD PRESSURE CONTROLS, AND ANTI-SHORT CYCLE TIMER. PROVIDE COIL GUARD. CONDENSER UNITS SHALL BE SPACED 2 FEET APART.
2. VERIFY ELECTRIC POWER REQUIREMENTS WITH ELECTRICAL PLANS, WHICH TAKE PRECEDENCE OVER THIS INFORMATION. UNIT SHALL BE ENERGY STAR RATED.
3. PROVIDE LIQUID LINE SOLENOID, CRANKCASE HEATER, TXV, START CAPACITOR AND RELAY AS RECOMMENDED BY MANUFACTURER FOR LONG LINE APPLICATIONS.
4. PROVIDE ROOF SUPPORT AS PER DETAIL PROVIDED.
5. LONG LINE ACCESSORIES PER NOTE 3 SHALL BE PROVIDED WHERE REFRIGERANT LINE LENGTH EXCEEDS 80 EQUIVALENT FEET.
6. 2-STAGE COMPRESSOR UNIT.

DUCTED DEHUMIDIFICATION UNIT

MARK	CFM	POWER AMPS	CONDENSATION PPD080F/600RH	REFRIGERANT	POWER/ PHASE	BASIS OF DESIGN	NOTES
DH-1	310	8.3A	130	R410A	120/1	APRILAIRE 1870	1:2:3:4:5:6:7:8

1. PROVIDE CORD AND PLUG FOR DISCONNECT. PROVIDE MODEL 76 WALL MOUNTED ELECTRONIC HUMIDISTAT/CONTROLLER. MOUNT AT 4'-0" AFF. PROVIDE BUILT IN DIGITAL CONTROL WITH DISPLAY.
2. VERIFY ELECTRIC POWER REQUIREMENTS WITH ELECTRICAL PLANS, WHICH TAKE PRECEDENCE OVER THIS INFORMATION.
3. INLET AIR OPERATING CONDITIONS(DEHUMIDIFICATION) : 50F-90F.
4. DUCTED DEHUMIDIFIER. UNIT WEIGHT 120 LBS.
5. ROUTE CONDENSATE TO BASEMENT DRAIN.
6. PROVIDE INLET GRILLE WITH FREE FLOW DISCHARGE. SUSPEND UNIT AT 7'-0" AFF.
7. PROVIDE COIL OUTLET SWITCH WIRED IN SERIES WITH FLOAT ACTIVATED SWITCH LOCATED AT DRAIN PAN. REFER TO DETAIL PROVIDED.
8. FLOAT ACTIVATED AND COIL OUTLET CONDENSATE SWITCHES SHALL BE PROVIDED AND INSTALLED BY HVAC CONTRACTOR.

SELF-CLEANING IONIZATION SYSTEM SCHEDULE

AIRFLOW CAPACITY MIN-MAX CFM	BASIS OF DESIGN GLOBAL PLASMA SOLUTIONS	NOTES
0-2400	GPS-FC24-AC	1:2:3:4:5

1. ONE SELF CLEANING IONIZATION SYSTEM SHALL BE INSTALLED PER SYSTEM. INTERLOCK UNIT TO TURN ON WITH EVAPORATOR FAN.
2. UNIT SHALL BE EQUIPPED WITH UNIVERSAL VOLTAGE INPUT, IN-LINE ON-OFF SWITCH, PROGRAMMABLE AUTO-CLEANING CYCLE.
3. UNIT SHALL BE EQUIPPED WITH PLASMA ON INDICATION LIGHT, ALARM CONTACTS, MAGNETS, AND CARBON FIBER BRUSH EMITTERS.
4. SYSTEM SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
5. USE THIS SYSTEM FOR UP TO 4-TON UNIT AH-1.

FAN SCHEDULE

MARK	CFM	EXT. SP IN W.G.	DRIVE TYPE	MOTOR AMP/WATTS	MAX SONES	POWER/ PHASE	SERVES	BASIS OF DESIGN	NOTES
EF-1	80	0.30	DIRECT	0.3A	0.7	115/1	FIRST FLOOR-TOILET	BROAN QTXE110	2:3:6:7
EF-2	80	0.30	DIRECT	0.3A	0.7	115/1	FIRST FLOOR-TOILET	BROAN QTXE110	2:3:6:7

1. CEILING MOUNTED CENTRIFUGAL FAN. PROVIDE FACTORY SUPPLIED DISCONNECT SWITCH, BACKDRAFT DAMPER, VIBRATION ISOLATION, FAN SPEED CONTROLLER, GRILLE AND MOTOR WITH THERMAL OVERLOAD.
2. PROVIDE ROUND DUCT CONNECTION.
3. VERIFY ELECTRIC POWER REQUIREMENTS WITH ELECTRICAL PLANS, WHICH TAKE PRECEDENCE OVER THIS INFORMATION.
4. FAN SHALL BE INTERLOCKED WITH LIGHTS IN THE ROOM IT SERVES. PROVIDE 10 MINUTE TIME DELAY.

GRAVITY VENTILATOR SCHEDULE

UNIT MARK	SERVICE	SUPPLY CFM	MIN THROAT AREA (SF)	THROAT	GREENHECK MODEL#	NOTES
GV-1	INTAKE	250	0.82	10"ø	GRSI 10	1

1. SPUN ALUMINUM GRAVITY VENTILATOR.

AIR DEVICE SCHEDULE

MARK	SERVICE	NECK SIZE	FACE SIZE	MATERIAL	TYPE	PATTERN	MOUNTING TYPE	LAYOUT BASIS	NOTES
S1	SUPPLY	SEE PLANS	NECK + 1-3/4"	STEEL	DOUBLE DEFLECTION REGISTER	2-WAY	DUCT MOUNT	TITUS-300RS	3:4:5
S2	SUPPLY	SEE PLANS	NECK SIZE + 1-1/4"	STEEL	STAMPED FACE REGISTER	3-WAY	SURFACE	METAL-FAB MFSCRW3	1:2:3:4
R1	RETURN	SEE PLANS	NECK + 1-3/4"	ALUMINUM	FULL LOUVERED FACE	---	SURFACE	TITUS-350R	5

1. PROVIDE WHITE ENAMEL FINISH.
2. INSULATE BACK OF DEVICE.
3. BALANCE AIRFLOW TO QUANTITY SHOWN.
4. PROVIDE ALUMINIZED FACE OPERATED DAMPER THAT IS ACCESSIBLE FROM THE FACE OF REGISTER.
5. GRILLE SHALL BE SAME COLOR AS THE WALL/DUCT IT IS MOUNTED ON. COORDINATE WITH GC/OWNER.

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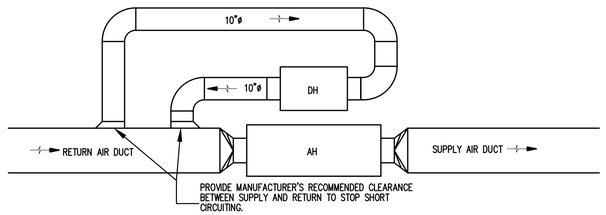
RENOVATIONS AT 476 SECOND STREET
MACON, GEORGIA

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23 Oct 2023	Permit Set
21 Dec 2023	REVISION 1
Project No:	2023-25

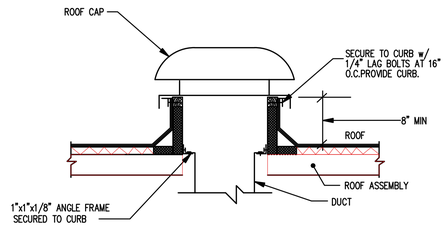
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MECHANICAL SCHEDULE

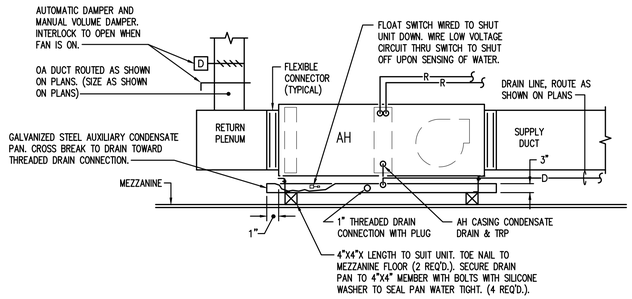
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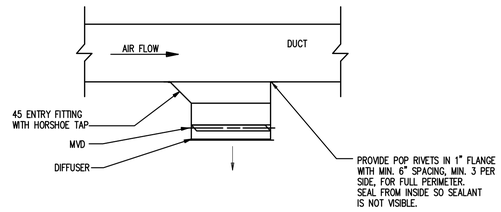
1 DUCTED DEHUMIDIFIER INSTALLATION DETAIL
SCALE: N.T.S.



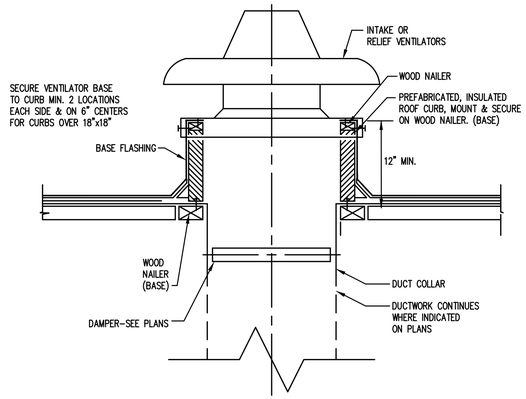
2 ROOF CAP DETAIL
SCALE: N.T.S.



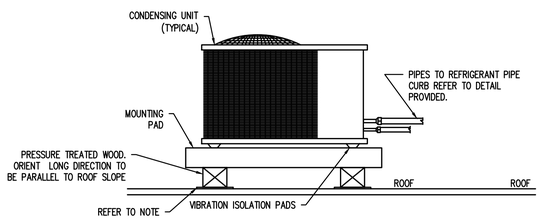
3 AHU ON MEZZANINE WITH AUXILIARY CONDENSATE PAN
SCALE: N.T.S.



4 DUCT MOUNTED DIFFUSER DETAIL
SCALE: N.T.S.

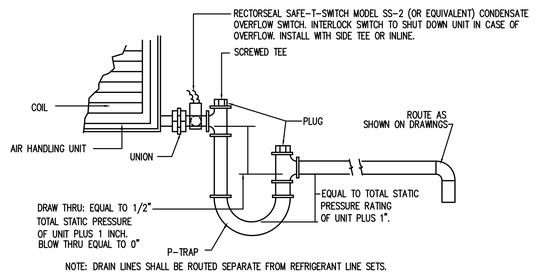


5 ROOF INTAKE VENTILATOR DETAIL
SCALE: N.T.S.



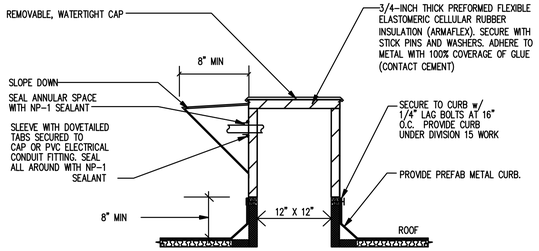
NOTE: 1) THIS DETAIL IS FOR HEAT PUMP/CONDENSING UNIT UNIT 5 TONS AND UNDER
2) MOUNTING PAD SHALL BE TYPICAL DIVERSITECH ULTRALITE EQUIPMENT PAD OR EQUIVALENT.
3) PROVIDE ADDITIONAL ROOFING TO PROTECT MEMBRANE TO MAINTAIN ROOFING WARRANTY.
4) INSTALL CONDENSING UNITS ON VIBRATION ISOLATION PAD MOUNTED ON TOP OF 3" PAD. PADS MOUNTED ON TOP OF (2) 4x4 WOOD POSTS. MAINTAIN MINIMUM CLEARANCES BETWEEN UNITS IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES. EXTRA TPO ROOFING TO BE BELOW 4x4 AS PER NOTE 3.
5) SECURE SMALL SPLIT SYSTEM UNITS TO MOUNTING PAD

6 TYPICAL CONDENSING UNIT INST
SCALE: N.T.S.



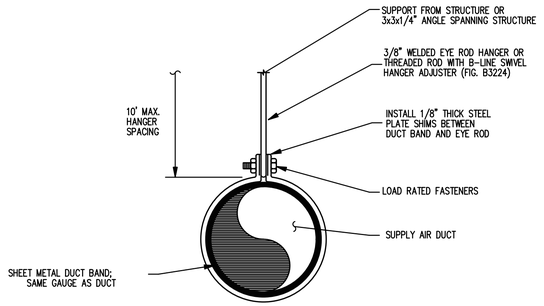
NOTE: DRAIN LINES SHALL BE ROUTED SEPARATE FROM REFRIGERANT LINE SETS.

7 CONDENSATE DRAIN DETAIL
SCALE: N.T.S.



CAP AND HOOD SHALL BE FABRICATED FROM 20 GAUGE GALVANIZED STEEL

8 ROOF CURB CAP FOR PIPING DETAIL
SCALE: N.T.S.



9 DUCT SUPPORT IN EXPOSED AREA
SCALE: N.T.S.

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RENOVATIONS AT 476 SECOND STREET BLDG.

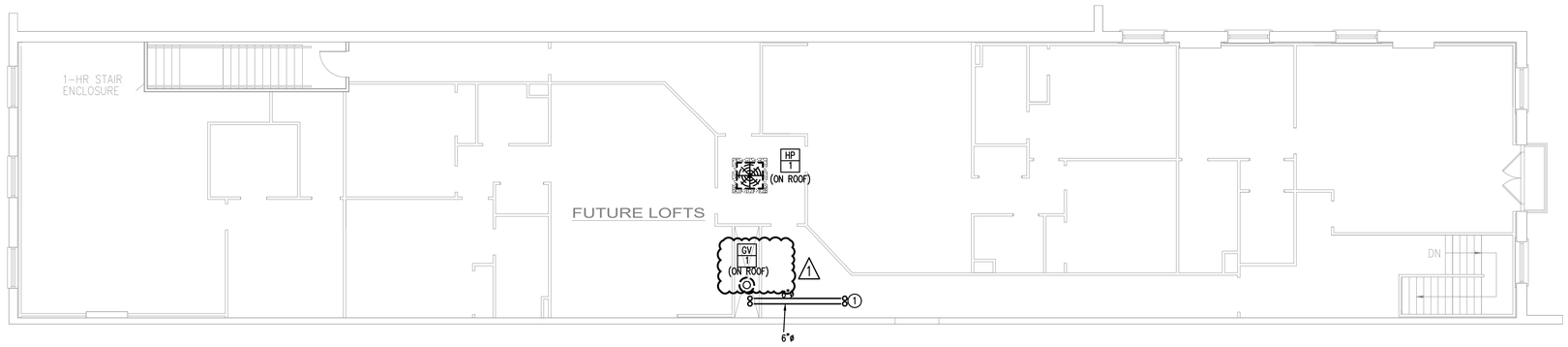
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MECHANICAL DETAILS

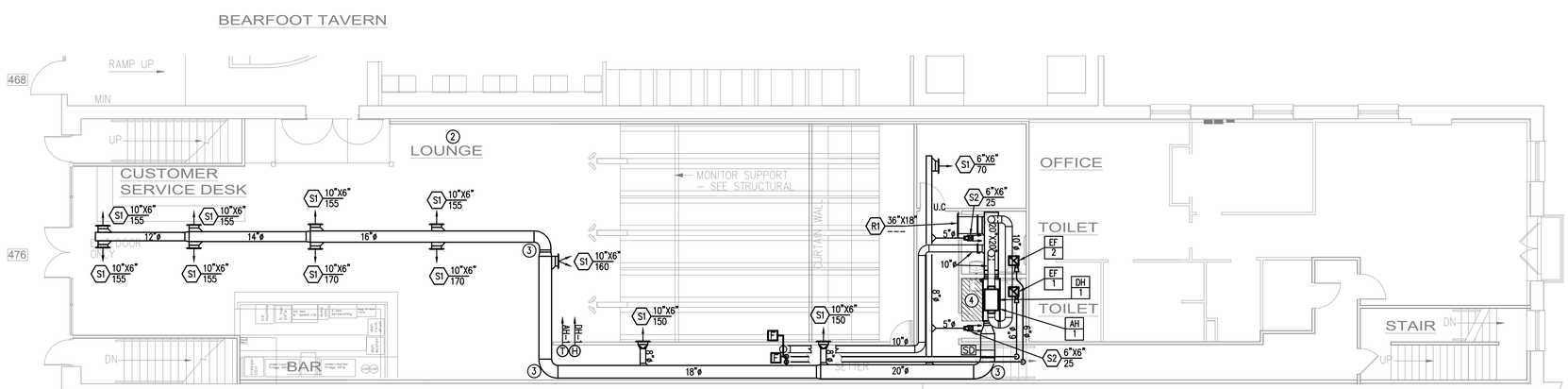
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KEY NOTES(THIS SHEET ONLY):

1. EXHAUST DUCT UP TO CAP ON ROOF.
2. ALL VISIBLE EXPOSED DUCTWORK SHALL BE SPIRAL DUCTWORK.
3. PROVIDE DOUBLE WALL SPIRAL DUCT ELBOW.
4. UNIT ACCESS SPACE.

2 MECHANICAL 2ND FLOOR PLAN
SCALE: 1/8"=1'-0"



1 MECHANICAL PLAN FIRST FLOOR
SCALE: 1/8"=1'-0"

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MECHANICAL PLAN FIRST FLOOR

M1.1

ELECTRICAL SPECIFICATIONS

DIVISION 26

ELECTRICAL

SECTION A: GENERAL ELECTRICAL REQUIREMENTS

1. THESE PLANS AND SPECIFICATIONS APPLY TO THE BUILDING RENOVATIONS AT 476 SECOND STREET IN MACON, GEORGIA. THE WORK DESCRIBED BY THESE PLANS AND SPECIFICATIONS APPLY TO THE INDICATED PROJECT AND MAY NOT BE MODIFIED OR REUSED WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
2. ALL WORK SHALL BE PERFORMED BY LICENSED ELECTRICAL CONTRACTOR WITH MINIMUM OF TWO YEARS OF EXPERIENCE. LIST OF PREVIOUS JOBS AND REFERENCES SHALL BE MADE AVAILABLE UPON REQUEST. CONTRACTOR SHALL PROVIDE ADEQUATE INSURANCE FOR PERSONNEL AND SHALL REPAIR ANY DAMAGE OCCURRING AS THE RESULT OF THIS PROJECT TO THE PROJECT SITE AND RELATED PROPERTY.
3. ALL WORK SHALL BE PERFORMED IN A PROFESSIONAL MANNER IN ACCORDANCE WITH THE 2020 NATIONAL ELECTRICAL CODE, LIFE SAFETY CODE NFPA 101, ADA CODE, GA ACCESSIBILITY CODE, STATE OF GEORGIA ENERGY CODE AND ALL OTHER APPLICABLE CODES AND ORDINANCES.
4. ALL PERMITS AND FEES SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR.
5. ALL EQUIPMENT, MATERIAL, AND DEVICES SHALL BE LISTED OR RECOGNIZED BY UNDERWRITER'S LABORATORY OR ELECTRICAL TESTING LABORATORY AND USED AND INSTALLED IN ACCORDANCE WITH IT'S LISTING.
6. ALL WORK PERFORMED SHALL BE WARRANTED FOR A PERIOD OF ONE YEAR FROM THE FINAL COMPLETION DATE EXCEPT FOR FUSES AND LAMPS IN LIGHT FIXTURES. UPON NOTIFICATION OF A PROBLEM, THE CONTRACTOR SHALL INVESTIGATE THE PROBLEM WITHIN 48 HOURS UNLESS A DIFFERENT TIME PERIOD IS AGREED TO. THE CONTRACTOR SHALL INVESTIGATE, REPAIR OR REPLACE ALL FAULTY EQUIPMENT WITHIN A REASONABLE TIME PERIOD WITHOUT CHARGE TO THE OWNER.
7. THE TERM "PROVIDE" SHALL BE UNDERSTOOD TO MEAN, OBTAIN THE ITEM DESCRIBED, INSTALL ITEM IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS, AND MANUFACTURER'S RECOMMENDATIONS.
8. ALL PENETRATIONS MADE IN FIRE RATED BUILDING PORTIONS SHALL BE SEALED WITH A LISTED FIRE RESISTANT MATERIAL SUITABLE FOR THE APPLICATION.
9. ALL INSTALLATIONS OF ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE COORDINATED WITH OTHER TRADES PRIOR TO INSTALLATION.
10. PLANS ARE DIAGRAMMATIC AND SHOW THE LOCATION OF THE EQUIPMENT, RACEWAY AND FIXTURES, AND ARE NOT TO BE SCALED. ALL DIMENSIONS SHALL BE VERIFIED AT THE BUILDING SITE.
11. CONTRACTOR SHALL VERIFY AND COORDINATE ALL EQUIPMENT AND DEVICE LOCATIONS WITH OWNER'S PROJECT MANAGER PRIOR TO INSTALLATION.
12. EQUIPMENT POWER SUPPLY AND WIRING REQUIREMENTS: THE CONTRACTOR SHALL SUBMIT FOR REVIEW A TABULATED SHEET OF EQUIPMENT POWER SUPPLY AND WIRING REQUIREMENTS FOR ALL MECHANICAL EQUIPMENT REQUIRING POWER AS SPECIFIED IN DIVISION 23. REQUIREMENTS SHALL BE IDENTIFIED BY HORSEPOWER OR KW, OPERATING AMPERAGE, REQUIRED VOLTAGE AND PHASE REQUIREMENTS, AND MANUFACTURERS SUGGESTED OVERCURRENT CIRCUIT PROTECTION DEVICE SIZE AND MINIMUM CIRCUIT AMPACITY SIZE. WHERE THE ELECTRICAL REQUIREMENTS SUBMITTED FOR MECHANICAL EQUIPMENT DIFFERS FROM THE BRANCH CIRCUITRY SHOWN ON THE ELECTRICAL DRAWINGS (WHEN USING THE BASIS OF DESIGN UNIT LISTED IN THE MECHANICAL SCHEDULES/SPECIFICATIONS OR A SIMILAR UNIT OF THE SAME SIZE FROM LISTED ALTERNATE MANUFACTURERS), THE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS TO THE BRANCH CIRCUITRY PER THE 2020 NEC AT NO ADDITIONAL COST TO THE OWNER. WHEN CHANGES ARE MADE TO POWER REQUIREMENTS FOR EQUIPMENT DUE TO OWNER/ARCHITECT/ENGINEER APPROVED VALUE ENGINEERING CHANGES TO EQUIPMENT, THE COST MUST BE INCLUDED IN THE VALUE ENGINEERING OVERALL CHANGE ORDER COST. COSTS DUE TO ADJUSTMENTS IN BRANCH CIRCUITRY TO EQUIPMENT DUE TO VALUE ENGINEERING CHANGES WILL NOT BE ALLOWED AFTER THE OVERALL VALUE ENGINEERING CHANGE ORDER HAS BEEN APPROVED. IN ALL CASES, POWER WIRING REQUIREMENTS FOR MECHANICAL EQUIPMENT MUST BE PROVIDED TO THE ENGINEER BEFORE OR AT THE SAME TIME AS THE SHOP DRAWINGS FOR THE ELECTRICAL DISTRIBUTION GEAR OR EQUIPMENT. IN NO CASE SHALL THE ELECTRICAL DISTRIBUTION GEAR OR EQUIPMENT BE ORDERED OR BRANCH CIRCUITRY ROUGHED IN PRIOR TO ENGINEER REVIEW AND COMMENT ON THIS DOCUMENT. ANY EQUIPMENT ORDERED OR BRANCH CIRCUITRY ROUGHED IN ON THE JOBSITE WITHOUT THIS REVIEW AND COMMENT WILL BE TOTALLY AT THE CONTRACTORS RISK.

SECTION B: BASIC MATERIALS

1. ALL CONDUCTORS USED FOR 600 VOLTS OR LESS SHALL BE HIGH GRADE COPPER (ALUMINUM AS NOTED) CONDUCTORS WITH 75 DEGREE C, THHN OR THWN THERMOPLASTIC INSULATION. ALL CONDUCTORS ROUTED IN UNDERGROUND CONDUIT SHALL BE RATED FOR WET LOCATIONS. SERVICE ENTRANCE CONDUCTORS AND FEEDERS TO PANELBOARDS ANDUNIT PANELS SHALL BE SUPPLIED IN ALUMINUM AS SHOWN ON RISER DIAGRAM.
2. ALL APARTMENT UNIT INTERIOR 120 VOLT, 20 AMP POWER AND LIGHTING CIRCUIT WIRING SHALL BE INSTALLED IN NM SHEATHED CABLE PER 2020 NEC. UNLESS OTHERWISE NOTED. POWER CIRCUITS FOR HVAC EQUIPMENT SHALL BE IN ELECTRICAL METALIC TUBING. ALL CONDUIT SHALL BE SUPPORTED FROM BUILDING STRUCTURE. IT SHALL NOT BE SUPPORTED FROM DUCTWORK, PIPING, CEILING GRID OR CEILING GRID SUPPORTS, OR ANY OTHER NON-STRUCTURAL ITEM. CONDUIT SHALL BE SUPPORTED IN ACCORDANCE WITH THE NEC. CONDUIT IN EXPOSED AREAS SHALL BE IN EMT. ALL INTERIOR BRANCH CIRCUITRY IN COMMONS AREAS AND ON FIRST/SECOND FLOORS SHALL BE INSTALLED IN EMT CONDUIT. CONDUIT EXPOSED TO WEATHER (ROOF AND OTHER AREAS) SHALL BE GALVANIZED RIGID METAL OR IMC CONDUIT.
3. CONDUIT UNDERGROUND SHALL BE SCHEDULE 40 PVC. IF MORE THAN ONE CONDUIT IS PROVIDED IN A SINGLE TRENCH, THE CONDUIT SHALL BE RACKED WITH SPACERS EVERY FOUR FEET TO MAINTAIN A MINIMUM SPACING BETWEEN CONDUIT OF TWO INCHES. BACKFILL USED FOR UNDERGROUND INSTALLATIONS SHALL BE FREE OF FOREIGN MATTER. WHERE EXPOSED TO WEATHER, CONDUIT SHALL BE GALVANIZED RIGID STEEL OR INTERMEDIATE METALLIC CONDUIT. THE CONDUIT SHALL BE TERMINATED WITH LISTED FITTINGS AND ALL CONDUIT ENDS SHALL BE REAMED AND SMOOTH. ALL CONDUIT ENDS IN BOXES SHALL BE PROVIDED WITH INSULATED BUSHINGS.
4. A #12 INSULATED COPPER GROUND (OR EQUIVALENT ALUMINUM) CONDUCTOR SHALL BE INCLUDED IN ALL BRANCH CIRCUITS RATED 20 AMPERES. ALL OTHER CIRCUITS AND FEEDERS WILLBE PROVIDED WITH AN INSULATED COPPER (OR EQUIVALENT ALUMINUM) GROUND CONDUCTOR SIZED AS NOTED OR IN ACCORDANCE WITH THE NEC, WHICHEVER IS GREATER.
5. THE MINIMUM SIZE OF ALL CONDUCTORS NOT OTHERWISE INDICATED IS #12 AND THE MINIMUM SIZE OF ALL CONDUIT UNLESS OTHERWISE INDICATED IS 1/2 IN.
6. ALL JUNCTION BOXES SHALL BE PROVIDED WITH COVERS AND ALL UNUSED OPENINGS SHALL BE PLUGGED. ALL JUNCTION BOXES SHALL BE INDEPENDENTLY SUPPORTED FROM STRUCTURE. COVERS OF BOXES SHALL BE LABELED WITH THE CIRCUIT NUMBER WITH A BLACK PERMANENT MARKER IN 3/4 IN. HIGH LETTERS (LEGIBLE HANDWRITTEN LETTERING IS ACCEPTABLE).
7. ALL OUTLET BOXES SHALL BE SQUARE METAL BOXES. PROVIDE PLASTER RINGS FOR ALL OUTLET BOXES CONTAINING DEVICES TO PROVIDE A FIRM MOUNTING SUPPORT FOR THE DEVICE.
8. ALL CONVENIENCE RECEPTACLES SHALL BE 20 AMP TAMPER RESISTANT "TR" TYPE RECEPTACLES, COORDINATE COLOR WITH OWNER. (15 AMP "TR" TYPE WHERE ALLOWED BY 2020 NEC)
9. ALL LIGHT SWITCHES SHALL BE 20 AMP TOGGLE SWITCHES FULL LOAD RATED FOR TUNGSTEN-HALOGEN LAMPS, COORDINATE COLOR WITH OWNER.
10. PROVIDE FACEPLATES FOR ALL RECEPTACLES AND SWITCHES. COORDINATE STYLE AND COLOR WITH OWNER/ARCHITECT.
11. PROVIDE BETWEEN 12 AND 24 INCHES OF LIQUID TIGHT FLEXIBLE CONDUIT BETWEEN RIGID CONDUIT AND ANY EQUIPMENT CONTAINING MOTORS. THE FLEXIBLE CONDUIT SHALL BE SUPPORTED TO PREVENT THE CONDUIT FROM RESTING ON THE GROUND OR CONCRETE PAD.
12. PROVIDE WEATHERPROOF RECEPTACLE WITHIN 25 FEET OF EACH PIECE OF EXTERIOR EQUIPMENT. THIS RECEPTACLE SHALL BE MOUNTED HORIZONTALLY WITH METAL HINGED "IN USE" COVER MOUNTED TO OPEN UP. THIS OUTLET SHALL BE A GFCI RECEPTACLE.
13. WHEN OUTLETS OR BOXES ARE INDICATED INSTALLED ON OPPOSITE SIDES OF THE SAME WALL, THE CONTRACTOR SHALL ADJUST THE LOCATION TO OFFSET THE OUTLETS WITH A WALL STUD PROVIDING SEPARATION. OUTLETS CANNOT BE LOCATED ON BOTH SIDES OF WALL BETWEEN THE SAME TWO STUDS, THEY MUST BE ON OPPOSITE SIDES OF STUDS (STUD BETWEEN THEM).

SECTION C: DISTRIBUTION EQUIPMENT

1. CONTRACTOR SHALL PROVIDE CONDUCTORS AND CONDUIT FOR ALL FEEDERS IN ACCORDANCE WITH THE PLANS.
2. SEPARATELY MOUNTED CIRCUIT BREAKERS SHALL BE MOUNTED IN NEMA TYPE I ENCLOSURES IN INDOOR APPLICATIONS AND IN NEMA 3R ENCLOSURES IN EXTERIOR OR WET LOCATIONS. ALL CIRCUIT BREAKER ENCLOSURES SHALL BE PROVIDED WITH HINGED COVERS AND PROVISIONS FOR PADLOCKING THE COVERS.
3. ALL EQUIPMENT CONTAINING MOTORS SHALL BE PROVIDED WITH A DISCONNECTING MEANS WITHIN TEN FEET OF THE UNIT UNLESS OTHERWISE NOTED. THIS DISCONNECTING MEANS SHALL AS A MINIMUM BE A NON-FUSED SWITCH OR TOGGLE STARTER SIZED TO MATCH THE EQUIPMENT. PROVIDE OTHER DEVICES AS NOTED ON THE PLANS. PROVIDE NEMA TYPE I ENCLOSURES INDOORS AND NEMA 3R OUTDOORS.
4. PROVIDE GFCI CIRCUIT BREAKERS AND RECEPTACLES AS INDICATED ON THE PLANS AND IN THESE SPECIFICATIONS.
5. PROVIDE PANELS AS SCHEDULED ON PLANS. CIRCUIT BREAKERS SHALL BE THERMAL-MAGNETIC BREAKERS WITH A MINIMUM INTERRUPTING RATING OF 10,000 AIC OR AS INDICATED ON THE PLANS. BREAKERS SHALL HAVE 65/75 DEGREE C RATED TERMINATIONS. PANELS NOTED SHALL BE SERVICE ENTRANCE RATED. MOUNT PANELS WITH TOP OF PANEL 6FT. ABOVE FLOOR, PROVIDE 3/4IN., GREY PAINTED PLYWOOD BACKBOARD FOR ALL PANELS SECURED TO WALL WITH 1/4IN. TOGGLE BOLTS. PANEL MANUFACTURERS: SCHNEIDER, ABB, EATON, AND SEIMENS. ALL CURRENT CARRYING PARTS SHALL BE ALUMINUM.
6. SYSTEM COORDINATION: THE MANUFACTURER OF THE PANELBOARDS SHALL PROVIDE SERIES RATED EQUIPMENT BASED ON U.L. LISTED TEST RESULTS. THE CONTRACTOR SHALL VERIFY THE AVAILABLE SHORT CIRCUIT CURRENT AT THE SERVING TRANSFORMER.
7. PROVIDE EACH PANELBOARD WITH A TYPEWRITTEN CIRCUIT BREAKER DIRECTORY CARD INSIDE A PLASTIC COVERING (EVERY CIRCUIT AND CIRCUIT MODIFICATION SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE. THE INDETIFICATION SHALL INCLUDE SUFFICIENT DETAIL TO ALLOW EACH CIRCUIT TO BE DISTINGUISHED FROM ALL OTHERS). THE DIRECTORY AND COVERING SHALL BE LOCATED INSIDE A STEEL FRAME PROVIDED INSIDE THE DOOR OF EACH PANELBOARD. THE DIRECTORY SHALL BE TYPED TO IDENTIFY THE LOAD FED BY EACH CIRCUIT BREAKER AND THE AREAS SERVED.
8. PROVIDE NAMEPLATES FOR ALL PANELBOARDS, DISCONNECT SWITCHES, ENCLOSED CIRCUIT BRAKERS, COMBINATION STARTERS, CONTACTORS, AND ALL OTHER ELECTRICAL DISTRIBUTION EQUIPMENT PANELS. MOUNT NAMEPLATES ON EXTERIOR OF THE DOOR OF ALL SURFACE MOUNTED PANELS AND EQUIPMENT. NAME PLATES SHALL BE LAMINATED PLASTIC PLATES WITH 3/16 IN. HIGH WHITE LETTERS ETCHED ON BLACK BACKGROUND. NAME PLATES SHALL BE INSTALLED PARALLEL TO EQUIPMENT LINES. THE NAME OR USEAGE OF EACH DEVICE OR BRANCH CIRCUIT SHALL BE ETCHED IN THE NAMEPLATE. CONTRACTOR TO COORDINATE EXACT EQUIPMENT IDENTIFICATION WITH THE OWNER. SECURE NAMEPLATES VIA EPOXY GLUE.

SECTION E: LIGHTING

1. TYPES AND SPECIFIC REQUIREMENTS ARE PROVIDED ON THE LIGHTING FIXTURE SCHEDULE ON THE PLANS. ALL LIGHT FIXTURES SHALL BE PROVIDED WITH LAMPS, DRIVERS, BALLASTS, AND FULLY FUNCTIONING AT COMPLETION OF PROJECT.
2. ALL LED FIXTURES SHALL BE U.L. LISTED AND HAVE A MINIMUM OF 5 YEAR ON-SITE REPLACEMENT WARRANTY FOR DEFECTIVE OR NON-STARTING LED SOURCE ASSEMBLIES, DRIVERS, AND FOR LUMINAIRES EXHIBITING INADEQUATE LUMEN OUTPUT. IT SHALL COVER MATERIAL, FIXTURE FINISH, WORKMANSHIP, AND SHIPPING. ON-SITE REPLACEMENT SHALL INCLUDE TRANSPORTATION, REMOVAL, AND INSTALLATION OF NEW FIXTURE.
3. RATED LUMINAIRE WATTAGE SHALL BE ACTUAL, ACCOUNTING FOR ANY REDUCTION IN EFFICIENCY DUE TO SUB-OPTIMAL LOADING OF DRIVERS.
4. DRIVERS SHALL BE CAPABLE OF ACCEPTING THE VOLTAGE INDICATED ON THE LIGHTING FIXTURE SCHEDULE AND CAPABLE OF DIMMING IF REQUIRED. DRIVERS SHALL HAVE A CLASS A RATING, TOTAL HARMONIC DISTORTION OF LESS THAN 20%, AND SHALL NOT CONTAIN ANY POLYCHLORINATED BIPHENYL (PCB).
5. ALL LED FIXTURES SHALL BE TESTED TO IES LM-79 AND IES LM-80 STANDARDS. OUTDOOR FIXTURES SHALL BE IP65 RATED. LED'S, DRIVERS AND ALL COMPONENTS SHALL HAVE A SYSTEM LIFETIME OF 50,000 HOURS OR MORE AT 25 DEGREES CELSIUS AND SHALL MAINTAIN A MINIMUM OF 85% OF INITIAL LUMEN OUTPUT AFTER 55,000 HOURS OF OPERATION. LED'S SHALL HAVE COLOR RENDERING INDEX (CRI) OF 80 OR GREATER.
6. ALL SURFACE MOUNTED FIXTURES SHALL BE INDEPENDENTLY SUPPORTED FROM STRUCTURE. ALL CEILING MOUNTED FIXTURES SHALL BE SUPPORTED FROM STRUCTURE AND BRACED TO PREVENT MOVEMENT IF IMPACTED.
7. ALL RECESSED FIXTURES IN LAY IN TYPE CEILINGS SHALL BE PROVIDED WITH GRID CLIPS TO FASTEN FIRMLY TO CEILING SUPPORT GRID. THE CEILING GRID SHALL BE SUPPORTED AT EACH CORNER OF A FIXTURE.
8. CONNECTION TO ALL FIXTURES IN LAYIN CEILING SHALL BE BY FLEXIBLE CONDUIT OF FOUR TO SIX FEET IN LENGTH. A GROUND CONDUCTOR WILL BE INCLUDED WITH THIS CONNECTION.
9. ALL LENSES ON FIXTURES SHALL BE 0.125 INCH THICK MINIMUM. ALL HOUSINGS SHALL BE 22 GAUGE STEEL MIN. AND HAVE A POST FABRICATION HIGH REFLECTIVE WHITE FINISH.

SECTION E: FIRE ALARM SYSTEM

1. ACCEPTABLE MANUFACTURERS: NOTIFIER, FIRE LITE, EDWARDS, SIMPLEX, OR SILENT KNIGHT.
2. PROVIDE A COMPLETE OPERABLE FIRE ALARM SYSTEM FOR THIS PROJECT. THE MAIN PANEL SHALL BE LOCATED AS SHOWN. THE FIRE ALARM SYSTEM SHALL BE DESIGNED FOR CLASS B OPERATION. THE WIRING FOR THE FIRE ALARM SYSTEM SHALL BE INSTALLED IN 1/2 IN. ELECTRICAL METALLIC TUBING. PROVIDE INSULATED FITTINGS ON ALL CONDUIT ENDS. THE FIRE ALARM SHALL BE MADE IN THE USA AND BE UL LISTED. ALL WIRING AND DEVICES FOR THE SYSTEM SHALL BE SUPERVISED. COLOR CODE THE CONDUIT EVERY 24 IN. WITH RED MARKINGS (EXCEPT WHERE EXPOSED).
3. THE MAIN PANEL SHALL HAVE A BATTERY BACKUP AND BE SURGE PROTECTED. THE BATTERY SHALL BE CAPABLE OF PROVIDING NORMAL OPERATION FOR A PERIOD OF 24 HOURS WITH ENOUGH RESERVE TO ANNUCIATE A BUILDING ALARM FOR 90 MINUTES.
4. NEW DEVICES SHALL BE PROVIDED WITH RECESSED METAL BOXES. ALL DEVICES SHALL BE MOUNTED FLUSH WITH WALL EXCEPT FOR PULL STATIONS WHICH SHALL BE SEMI-FLUSH.
5. NEW SPEAKER/STROBE DEVICES SHALL MEET THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT. THE SPEAKER SHALL PRODUCE A SOUND LEVEL OF 90 DECIBELS AND THE STROBE SHALL PRODUCE A FLASHING PULSE OF LIGHT OF 75 CANDELA.
6. STROBE DEVICES SHALL PRODUCE A FLASHING PULSE OF LIGHT OF 75 CANDELLA.
7. NEW PULL STATIONS SHALL BE NON-GLASS-BREAK TYPE AND KEYED THE SAME AS THE FIRE ALARM PANEL.
8. THE SMOKE DETECTORS SHALL BE THE PHOTOELECTRIC TYPE POWERED FROM THE MAIN FIRE ALARM PANEL.
9. PROVIDE PHOTOELECTRIC TYPE DUCT MOUNTED SMOKE DETECTORS WHERE SHOWN. UNIT SHALL HAVE SAMPLING TUBES THAT EXTEND THE WIDTH OF THE DUCT. PROVIDE REMOTE INDICATOR IN CEILING FOR EACH DETECTOR WHICH WILL INDICATE WHICH DETECTOR IS ACTIVATED. COORDINATE WITH MECHANICAL FOR LOCATIONS.
10. THE GENERAL BUILDING ALARM WILL SOUND WHEN ACTIVATED AT THE CONTROL PANEL, BY SMOKE OR HEAT DETECTORS, OR BY A PULL STATION. ALARM WILL ALSO SOUND WHEN ACTIVATED BY A DUCT SMOKE DETECTOR OR SPRINKLER CONTROL VALVE FLOW SWITCH.
11. THE MAIN PANEL SHALL PROVIDE INDICATION OF EACH INITIATING DEVICE LOCATION FOR ALARM, TROUBLE AND SUPERVISORY CONDITIONS. THE PANEL SHALL HAVE LAMP TEST, ALARM SILENCE, TROUBLE AND SUPERVISORY SILENCE, SYSTEM RESET, AND ALARM INITIATE CONTROLS. THE PANEL SHALL ALSO INDICATE VOLTAGE AND BATTERY TEST. THE PANEL SHALL ALSO INCLUDE AN LCD DISPLAY AND MICROPHONE. PANEL SHALL BE IN A SURFACE MOUNTED ENCLOSURE WITH LOCKABLE, SEE THROUGH, HINGED FRONT COVER.
12. THE FIRE ALARM PANEL SHALL BE EQUIPPED WITH A DIGITAL TRANSMITTER AND CELLULAR TRANSMITTER FOR OFF PREMISES REMOTE MONITORING (FIRE DEPARTMENT) DURING ALARM CONDITION. PROVIDE 3/4 IN. CONDUIT FROM FIRE ALARM PANEL TO TELEPHONE BACKBOARD. FIELD COORDINATE.
13. PROVIDE (1) REMOTE ANNUNCIATOR PANEL AS SHOWN ON PLANS. THE ANNUNCIATOR PANEL SHALL BE PROVIDED WITH AN LCD DISPLAY AND COMPLETE CONTROL PUSH BUTTONS INCLUDING, BUT NOT LIMITED TO, ALARM ACKNOWLEDGE, ALARM SILENCE, RESET, ETC.

SECTION F: TELEPHONE/DATA/CABLE TV SYSTEMS

1. PROVIDE 1 IN. ELECTRICAL METALLIC CONDUIT FROM EACH OUTLET TO NEAREST DEMARC ON FIRST FLOOR.PROVIDE 4 IN. SQUARE BACKBOX WITH SINGLE GANG PLASTER RING FOR EACH TELEPHONE/DATA/TV OUTLET. ALL CONDUIT SHALL BE CONCEALED. PROVIDE FACEPLATE WITH MODULAR JACKS. PROVIDE PULL STRING IN ALL EMPTY CONDUITS. CONCEAL CONDUIT WHERE POSSIBLE. EXPOSED RACEWAY SHALL BE SURFACE EMT WITH TWO HOLE STRAPS.

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER
A	ROUND SURFACE MOUNTED PANEL; SLEEK ULTRA LOW PROFILE; DIFFUSING LENS PROVIDING LIGHT UNIFORMITY. LAMPS: LED, 1089 LUMENS MINIMUM, 14 WATTS, 3500 DEGREE K DRIVER: UNV. VOLT	JUNO "JSF" SER., HALO "SMD6R" ELITE RL5/7/9
B	4 FT LED STRIPLIGHT, WITH FROSTED DIFFUSE LENS, SURFACE/PENDANT MOUNTED, STANDARD 0-10 DIMMING. LAMPS: LED, 5000 LUMENS, 42 WATTS, 3500 DEGREE K DRIVER: UNV. VOLT DRIVER	LITHONIA "CLX" SER., COLUMBIA "MPS" SER., METALUX "SNL" SER., LUMAX "CNLED" SER.
C	2' SQUARE LINEAR VANITY FIXTURE; ACRYLIC DIFFUSER PROVIDING SOFT EVEN ILLUMINATION; BRUSHED NICKEL FINISH LAMPS: LED, 1600 LUMENS, 34 WATTS, 3500 DEGREE K DRIVER: UNV. VOLT	ACUITY "FMVTSL" SER., TERON "CAPRI" SER. COLUMBIA CWM SERIES
D	2 FT. X 4 FT. RECESSED EDGE LIT FLAT PANEL; ALUMINUM FRAME CONSTRUCTION; SATIN WHITE LENS FOR FULLY LUMINOUS APPEARANCE LAMPS: LED, 4000 LUMENS MINIMUM, 41 WATTS, 3500 DEGREE K DRIVER: UNV. VOLT	LITHONIA "EPANL" SER., METALUX "FP" SER. ORACLE FPL SERIES
E	ENTRY PENDANT; TO BE SELECTED BY OWNER. LAMPS: LED, 60 WATT MAX DRIVER: UNV. VOLT	SELECTED BY OWNER
F	BAR PENDANT; TO BE SELECTED BY OWNER. LAMPS: LED, 60 WATT MAX DRIVER: UNV. VOLT	SELECTED BY OWNER
G	HALLWAY SCONCE; TO BE SELECTED BY OWNER. LAMPS: LED, 60 WATT MAX DRIVER: UNV. VOLT	SELECTED BY OWNER
S	4 FT LED STAIRWELL FIXTURE, SURFACE MOUNTED HORIZONTAL OR VERTICAL, IMPACT LINEAR FACETED REFRACTOR AND DIECAST END CAPS FOR ADDED DURABILITY LAMPS: LED, MIN 4000 LUMENS, 40 WATTS, 3500 DEGREE K DRIVER: UNV. VOLT DRIVER	LITHONIA "WL" SER., COLUMBIA "LBIL" SER., METALUX "SW" SERIES, LAMAR "VOYAGER" SERIES
T	TRADITIONAL STYLE LED TRACK HEAD, 350 DEGREE HORIZONTAL AIMING AND 90 DEGREE VERTICAL AIMING, INTERCHANGEABLE THERMOPLASTIC LENSES. COORDINATE DIRECTIONAL AIM WITH OWNER/ARCHITECT. LAMPS: LED, 850 LUMENS, 10 WATTS, 3500 DEGREE K DRIVER: 120 VOLT DRIVER	JUNO "R600L" SER., HALO "STASIS" SER., SPECTRUM "MUSEO" SER.
	LED COMMODITY GRADE COMBO THERMOPLASTIC UNIT, IMPACT RESISTANT HOUSING; TOP OR BACK MOUNTING STANDARD.(PROVIDE 90 MIN. BACK-UP BATTERY). LAMPS: LED (2) 1.5W BALLAST: UNV. VOLT	COMPASS "CC" SER., LITHONIA "ECR LED" SER., SURELITES "AP" SER.,
	LED 2 HEAD EMERGENCY UNIT, LOW PROFILE CONTEMPORARY DESIGN WITH THERMOPLASTIC HOUSING, IMPACT RESISTANT.(PROVIDE 90 MIN. BACK-UP BATTERY). LAMPS: LED (2) 1.5W BALLAST: UNV. VOLT	COMPASS "CU2" SER., LITHONIA "ELM2L" SER., LIGHT ALARMS "LCA" SER., SURELITES "SEL17" SER., EVENLITE
	ARCHITECURAL LOW PROFILE OUTDOOR LED AC/EMERGENCY UNIT, SELF DIAGNOSTICS STANDARD.(PROVIDE 90 MIN. BACK-UP BATTERY). LAMPS: LED (2) 3W BALLAST: UNV. VOLT	EMERGENCY "DBEL ACEM" SER., COMPASS "CUW" SER., LITHONIA, LIGHTALARMS CAMRAY

NOTES:
1. CONTRACTOR TO VERIFY ALL VOLTAGES, GRID AND CEILING TYPES WITH THE ARCHITECT AND COORDINATE FIXTURE DIMENSION SIZE TO ENSURE A PROPER FIT IN ALL CEILING TYPES PRIOR TO ORDERING.

PROVIDE ALL BRANCH CIRCUIT CONDUIT/CONDUCTORS AS NECESSARY TO CONNECT ALL DEVICES SHOWN ON THE CIRCUIT. PROVIDE DEDICATED NEUTRALS FOR ALL CIRCUITS. (STRIPED NEUTRAL WITH PHASE COLOR STRIPING)

LIGHT FIXTURE DESIGNATION DESCRIPTION
EXAMPLE: B/HA1-1/b

PANEL DESIGNATION:
CIRCUIT NUMBER
FIXTURE TYPE: TYPE "A" IF NO CAPITAL LETTER SHOWN
SWITCH LEG DESIGNATION WHEN MULTIPLE SWITCHES ARE IN SAME SPACE/AREA

B/ HA1-1/b

ELECTRICAL LEGEND

Symbol	Description
LIGHTING AND POWER	
	CONDUIT RUN CONCEALED ABOVE CEILING OR IN WALL, HASH MARKS INDICATE NUMBER OF CONDUCTORS. (3 WIRE UNLESS SHOWN)
	CONDUIT RUN CONCEALED BELOW FLOOR SLAB, OR UNDERGROUND.
A-2,4	HOMERUN TO PANELBOARD, LETTER OR LETTERS INDICATE PANELBOARD. NUMBERS INDICATES CIRCUIT NUMBERS.
	CEILING OR SURFACE MOUNTED LIGHTING FIXTURE.
	LIGHT FIXTURE, SEE SCHEDULE FOR MOUNTING AND TYPE.
	LIGHTING FIXTURE, WALL BRACKET MOUNTED. (SEE ARCHITECTURAL FOR MOUNTING HEIGHT.)
	DUPLEX CONVENIENCE OUTLET, 18 IN. ABOVE FLOOR UNLESS OTHERWISE NOTED.
WP	DUPLEX CONVENIENCE OUTLET, GFI TYPE. 18 IN. MOUNTING HEIGHT. "WP" WHERE SHOWN INDICATES WEATHERPROOF. PROVIDE METAL IN-USE WEATHERPROOF COVERPLATE.
	DUPLEX CONVENIENCE OUTLET, GFI TYPE. 8 IN. ABOVE COUNTER OR 42 IN. A.F.F.
	QUADRUPLEX CONVENIENCE OUTLET, 18 IN. ABOVE FLOOR UNLESS OTHERWISE NOTED.
	SPECIAL RECEPTACLE TO SUIT EQUIPMENT BEING FURNISHED.
	SIMPLEX OUTLET TO SERVE MICROWAVE.
$	SINGLE POLE TOGGLE SWITCH, 42 IN. MOUNTING HEIGHT.
$3	THREE OR FOUR WAY SWITCH AS INDICATED, 42 IN. MOUNTING HEIGHT.
	0-10 VOLT SLIDE TYPE DIMMER, 42 IN. ABOVE FLOOR. (MANUAL ON TO 50%, DIM 1-100%, AUTO OFF PER 2011ECC. MUST BE COMPATIBLE WITH VAC SENSOR AND POWER PACK).
	PANELBOARD, SEE SCHEDULE.
	DISCONNECT SWITCH, SIZE AS NOTED ON DRAWINGS.
PE	PHOTO ELECTRIC CELL.
TELEPHONE/DATA/CATV SYSTEMS (RACEWAY AND BOXES ONLY)	
	COMBINATION COMPUTER AND TELEPHONE OUTLET, 18 IN. TO CENTER LINE OF OUTLET UNLESS NOTED OTHERWISE. (2 DATA, 1 TEL).
TV	TELEVISION OUTLET, 18 IN. TO CENTER LINE OF OUTLET UNLESS NOTED OTHERWISE.
TB	PLYWOOD BACKBOARD, "TB" INDICATES TELEPHONE BOARD.
LIGHTING CONTROL SENSORS	
3 V	COMBINATION 360 DEGREE, ULTRASONIC AND PASSIVE INFRARED SENSOR (WATT STOPPER "DT-300", GREENGATE, NOVITAS, HUBBELL, LEVITON, SENSOR SWITCH.) ("V" INDICATES VACANCY SENSOR. MUST COMPLY WITH 2015 IECC REQUIREMENTS AND BE COMPATIBLE WITH DIMMER).
	PASSIVE INFRARED SENSOR (WATT STOPPER "WPIR", GREENGATE, NOVITAS, HUBBELL, LEVITON, SENSOR SWITCH).
FIRE ALARM SYSTEM	
FACP	FIRE ALARM CONTROL PANEL, SURFACE MOUNTED.
FAA	FIRE ALARM ANNUNCIATOR, FLUSH MOUNTED.
	HORN AND FLASHING LIGHT. 80 IN. ABOVE FLOOR TO THE BOTTOM OF THE LENS.
	STROBE LIGHT, 80 IN. ABOVE FLOOR TO THE BOTTOM OF THE LENS.
F	FIRE ALARM PULL STATION. WALL MOUNTED 42 IN. ABOVE FLOOR.
2 P	SMOKE DETECTOR, PHOTOELECTRIC TYPE.
2	FIRE ALARM DUCT SMOKE DETECTOR LOCATED IN HVAC SUPPLY DUCT. PROVIDE IN UNITS 2000 CFM AND GREATER. DETECTOR SHALL SHUT DOWN UNIT UPON ACTIVATION.
	FIRE ALARM HEAT DETECTOR, 135 DEG. OPERATION.

NOTES:
1. ALL MOUNTING HEIGHTS ARE FROM FINISHED FLOOR TO CENTERLINE OF OUTLET OR DEVICE.
2. ALL RECEPTACLES SHALL BE TAMPER RESISTANT (TYPE "TR").

GENERAL NOTES:

A. ALL FLUSH RECESSED OUTLET BOXES SHALL BE INSTALLED SUCH THAT FRONT EDGE OF THE BOX WILL NOT BE SET BACK OF THE FINISHED SURFACE MORE THAN 1/4IN. IN ORDER TO COMPLY WITH N.E.C. 314-20. SUPPORT OF OUTLET BOX BY RECEPTACLE AND COVERPLATE IS NOT ACCEPTABLE. CAREFULLY COORDINATE ROUGH-IN WITH BLOCK MASONS AND GROUT-IN CELL CONTAINING OUTLET BOX.

B. DO NOT SCALE DRAWINGS TO LOCATE EQUIPMENT OR OUTLETS. MOUNTING HEIGHTS AS INDICATED ON THE DRAWINGS SHALL BE FROM THE FINISHED FLOOR TO THE CENTER LINE OF THE OUTLET BOX.

C. THE ELECTRICAL DRAWINGS ARE ONLY A PART OF THE CONTRACT DOCUMENTS. ALL OF THE DRAWINGS AND SPECIFICATIONS MUST BE REVIEWED FOR THEIR INTERRELATIONSHIP AND REQUIRED COORDINATION BETWEEN DISCIPLINES.

ELECTRICAL DESIGN
EDC
CONSULTANTS, INC.
175 NEW ST.,STE.1
MACON, GA 31201
EDC# M23099

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GEORGIA REGISTERED NO. 23139 PROFESSIONAL ENGINEER JEFFREY H. McGEE

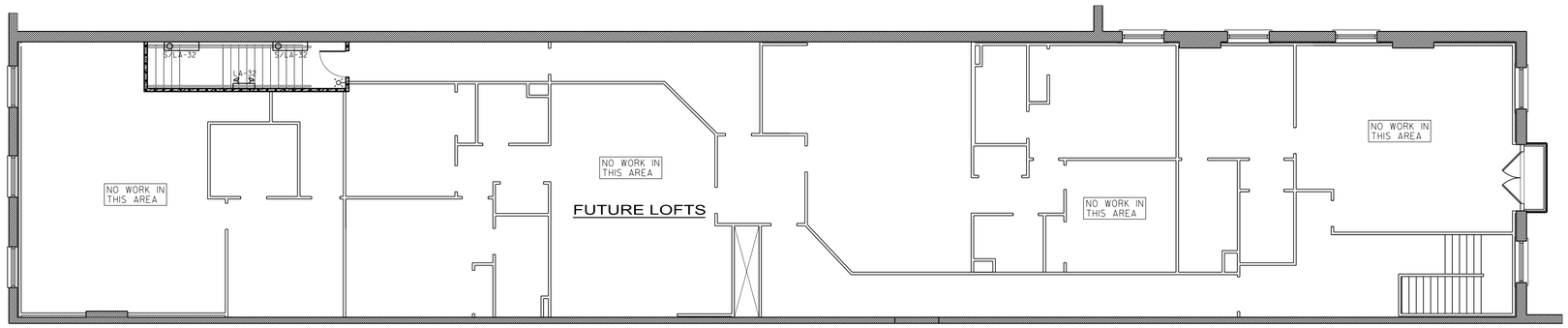
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RENOVATIONS AT
476 SECOND STREET BLDG.
MACON, GEORGIA

Drawing Issue Schedule	
10/23/23	Permit Set
Project No:	2023-25

Electrical Legend, Schedules & Details
E0.0

$FILE$
$DATE$



3 E2.1 SECOND FLOOR PLAN - ELECTRICAL

SCALE: 1/8"=1'-0"

0 4' 8'

PROVIDE ALL BRANCH CIRCUIT CONDUIT/CONDUCTORS AS NECESSARY TO CONNECT ALL DEVICES SHOWN ON THE CIRCUIT. PROVIDE DEDICATED NEUTRALS FOR ALL CIRCUITS. (STRIPED NEUTRAL WITH PHASE COLOR STRIPING)

LIGHT FIXTURE DESIGNATION DESCRIPTION

EXAMPLE: B/HAI-1/b

PANEL DESIGNATION:

FIXTURE TYPE: TYPE "A" IF NO CAPITAL LETTER SHOWN

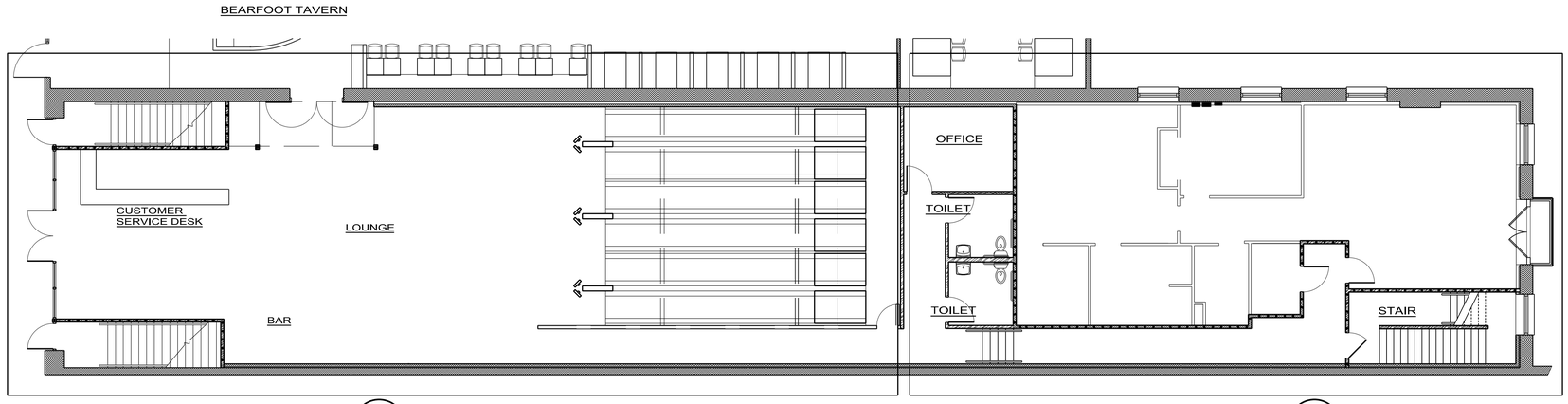
CIRCUIT NUMBER

SWITCH LEG DESIGNATION WHEN MULTIPLE SWITCHES ARE IN SAME SPACE/AREA

B/ HAI-1/b

KEYED NOTES: (THIS SHEET ONLY)

1. SEE POWER RISER DIAGRAM, DETAIL 1/E4.1.
2. LABEL FIRE ALARM BREAKER PER 2020 NEC.



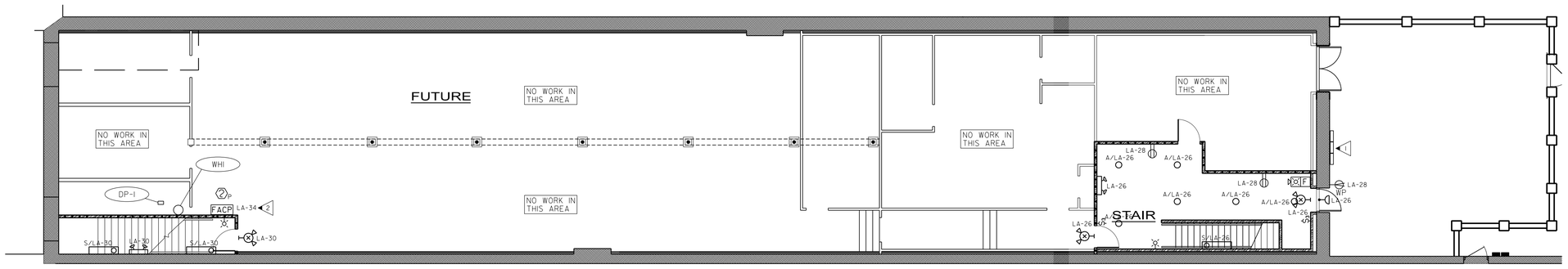
1 E3.1

2 E2.1 FIRST FLOOR PLAN - ELECTRICAL

SCALE: 1/8"=1'-0"

0 4' 8'

1 E3.2



1 E2.1 BASEMENT FLOOR PLAN - ELECTRICAL

SCALE: 1/8"=1'-0"

0 4' 8'

ELECTRICAL DESIGN
EDC CONSULTANTS, INC.
175 NEW ST.,STE.1
MACON, GA 31201
EDC• M23099

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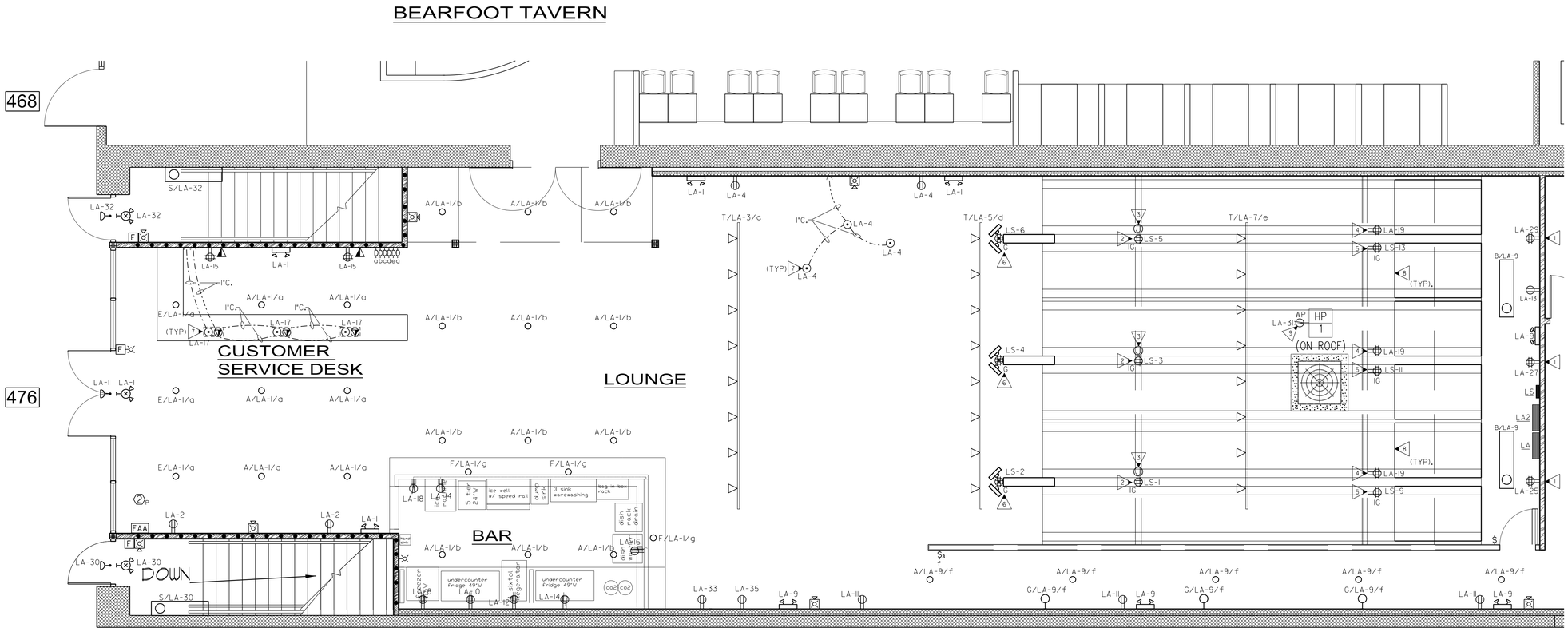
RENOVATIONS AT 476 SECOND STREET BLDG.

MACON, GEORGIA

Drawing Issue Schedule	
10/23/23	Permit Set
Project No:	2023-25

Overall Floor Plans - Electrical

E2.1



PARTIAL LARGE SCALE FIRST FLOOR PLAN - ELECTRICAL

1 / E3.1

SCALE: 1/4"=1'-0"

0 2' 4'

GENERAL NOTES: (THIS SHEET ONLY)

A. ALL SCORING POWER MUST HAVE AN ISOLATED, INSULATED, DEDICATED CIRCUIT FROM A DEICATED PANEL. NO SHARING OF GROUNDS OR NEUTRALS. (SCORING CONSOLE, SCORING MONITORS AND SCORING INTERFACE).

B. USE ONLY HUBBELL IG 5261OR IG 5262 RECEPTACLES (OR EQUIVALENT) FOR ALL SCORING EQUIPMENT.

C. ALL PLUG-IN RECEPTACLES FOR SCORING EQUIPMENT MUST BE ISOLATED FROM THE CONDUIT. CONDUIT CANNOT BE USED AS A GROUND.

D. EACH CIRCUIT TO THE SCORING EQUIPMENT MUST HAVE A COMMON INSULATED/ ISLOATED GROUND (NO SHARING OF GROUND WIRES BETWEEN CIRCUITS).

E. EACH CIRCUIT TO THE SCORING EQUIPMENT MUST HAVE A COMMON INSULATED ISOLATED NEUTRAL.

F. COORDINATE ALL US BOWLING INSTALLATION WITH US BOWLING DRAWINGS AND SPECIFICATIONS.

PROVIDE ALL BRANCH CIRCUIT CONDUIT/CONDUCTORS AS NECESSARY TO CONNECT ALL DEVICES SHOWN ON THE CIRCUIT. PROVIDE DEDICATED NEUTRALS FOR ALL CIRCUITS. (STRIPED NEUTRAL WITH PHASE COLOR STRIPING)

LIGHT FIXTURE DESIGNATION DESCRIPTION
EXAMPLE: B/HAI-1/b

PANEL DESIGNATION:
CIRCUIT NUMBER
FIXTURE TYPE: TYPE "A" IF NO CAPITAL LETTER SHOWN
SWITCH LEG DESIGNATION WHEN MULTIPLE SWITCHES ARE IN SAME SPACE/AREA

B/ HAI-1/b

KEYED NOTES: (THIS SHEET ONLY)

1. POWER TO AIR COMPRESSORS, 1QUAD OUTLET PER PAIR OF LANES. SEE US BOWLING SPECIFICATIONS FOR ANY ADDITIONAL INFORMATION OR REQUIREMENTS. COORDINATE EXACT LOCATIONS WITH US BOWLING.
2. POWER TO SCORING MONITORS, 1QUAD OUTLET PER PAID OF LANES. SEE US BOWLING SPECIFICATIONS FOR ANY ADDITIONAL INFORMATION OR REQUIREMENTS. COORDINATE EXACT LOCATIONS WITH US BOWLING.
3. FLUSH MOUNTED SINGLE BOX WITH "O" RING FOR LOW VOLTAGE CABLING. ROUTE 3/4 IN.C, FROM BOX BACK TO MACHINE SIDE OF CURTAIN WALL, PROVIDE FLASH STUB OUT. SEE US BOWLING SPECIFICATIONS FOR ANY ADDITIONAL INFORMATION OR REQUIREMENTS. COORDINATE EXACT LOCATIONS WITH US BOWLING.
4. POWER TO PINSETTER, 1QUAD OUTLET PER PAIR OF LANES. ONE CIRCUIT PER PAIR OF STRING MACHINES. SEE US BOWLING SPECIFCATIONS FOR ANY ADDITINAL INFORMARTION OR REQUIREMENTS. COORDINATE EXACT LOCATIONS WITH US BOWLING.
5. POWER TO SCORING INTERFACE, 1QUAD OUTLET PER PAIR OF LANES. SEE US BOWLING SPECIFICATIONS FOR ANY ADDITIONAL INFORMATION OR REQUIREMENTS. COORDINATE EXACT LOCATIONS WITH US BOWLING.
6. POWER TO OPTIONAL ACCESSORIES POWER FOR CREDIT CARD READERS OR BILL VALIDATIONS. COORDINATE WITH OWNER IF DESIRED. OUTLET INSTALLED IN LANE AT TIME OF INSTALLTION. SEE US BOWLING SPECIFICATIONS FOR ANY ADDITIONAL INFORMATION OR REQUIREMENTS. COORDINATE EXACT LOCATIONS WITH US BOWLING.
7. COORDINATE EXACT LOCATION WITH OWNER/ARCHITECT.
8. PROVIDE STATIC GROUND DISCHARGE LINE STARTING AT LINE 1AND ENDING ON LANE 6. STATIC LINE TO BE #10 AWG STANDARD GREEN COPPER WIRE, CONNECTED TO A SEPERATE ISOLATED GROUND ROD. GROUND ROD TO BE 5/8IN ROUND AND 8FT. LONG. LOCATE ROD CLOSET TO THE 1ST LANE SO IT IS EASILY ACCESSIBLE. SEE US BOWLING SPECIFICATIONS FOR EXACT INSTALLATION REQUIREMENTS.
9. MOUNT HARD TO UNIT CLEAR OF ACCESS PANELS. ROUTE THROUGH CURB OF UNIT, NOT THROUGH DRIP PAN.

ELECTRICAL DESIGN
EDC CONSULTANTS, INC.
175 NEW ST., STE.1
MACON, GA 31201
EDC# M23099

btbb inc. ARCHITECTS | PLANNERS
609 Cherry Street, Macon, GA 31201
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GEORGIA REGISTERED NO. 034777 PROFESSIONAL ENGINEER JEFFREY H. McGEE

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RENOVATIONS AT 476 SECOND STREET BLDG.

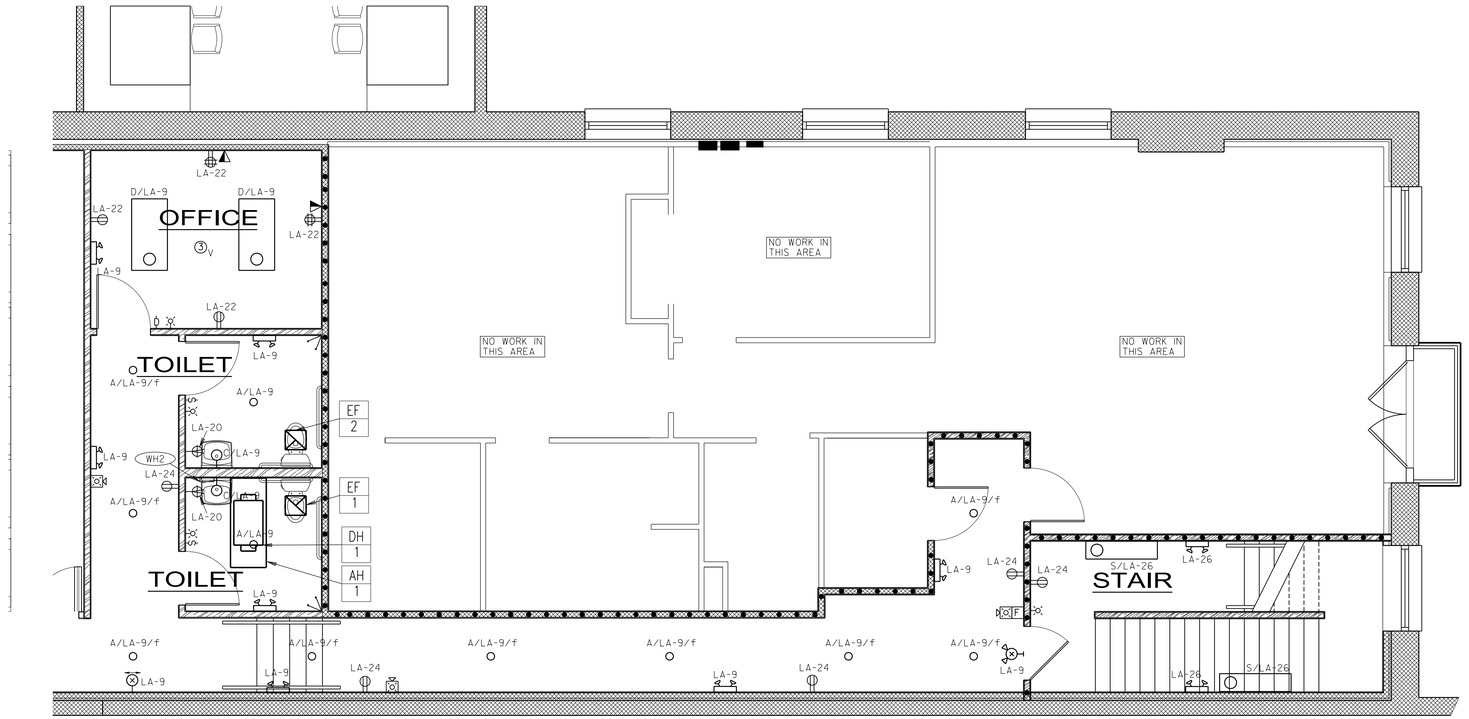
MACON, GEORGIA

Drawing Issue Schedule	
10/23/23	Permit Set
Project No:	2023-25

Partial Large Scale First Floor Plan - Electrical

E3.1

#FILE# #DATE#



1 E3.2 PARTIAL LARGE SCALE FIRST FLOOR PLAN - ELECTRICAL

SCALE: 1/4"=1'-0"

0 2' 4'

PROVIDE ALL BRANCH CIRCUIT CONDUIT/CONDUCTORS AS NECESSARY TO CONNECT ALL DEVICES SHOWN ON THE CIRCUIT. PROVIDE DEDICATED NEUTRALS FOR ALL CIRCUITS. (STRIPED NEUTRAL WITH PHASE COLOR STRIPING)

LIGHT FIXTURE DESIGNATION DESCRIPTION

EXAMPLE: B/HAI-1/b

PANEL DESIGNATION:

FIXTURE TYPE: TYPE "A" IF NO CAPITAL LETTER SHOWN

CIRCUIT NUMBER

SWITCH LEG DESIGNATION WHEN MULTIPLE SWITCHES ARE IN SAME SPACE/AREA

B/ HAI-1/b

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RENOVATIONS AT 476 SECOND STREET BLDG.

MACON, GEORGIA

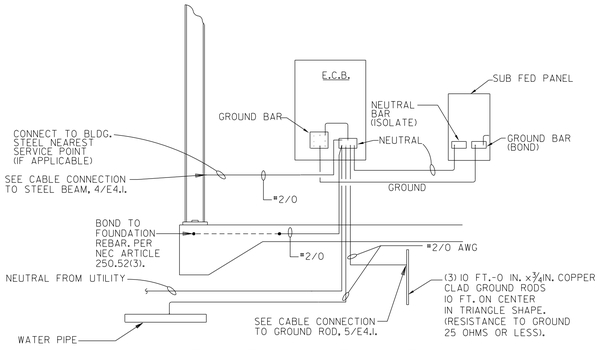
Drawing Issue Schedule	
10/23/23	Permit Set
Project No:	2023-25

ELECTRICAL DESIGN
EDC CONSULTANTS, INC.
175 NEW ST.,STE.1
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EDC• M23099

Partial Large Scale First Floor Plan - Electrical

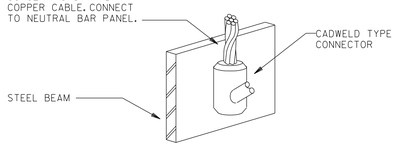
E3.2

FILES
ASSIGNED



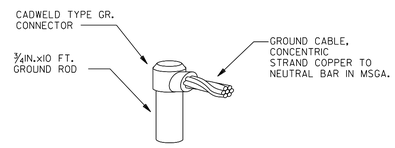
3 / E4.1 BUILDING GROUNDING

NOT TO SCALE



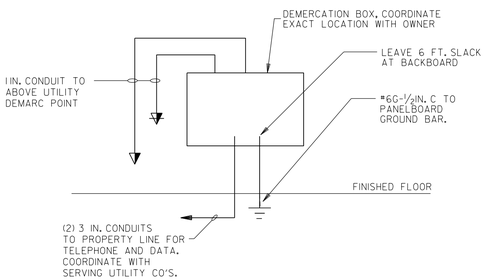
4 / E4.1 CABLE CONNECTION TO STEEL BEAM

NOT TO SCALE



5 / E4.1 CABLE CONNECTION TO GROUND ROD

NOT TO SCALE



2 / E4.1 TELEPHONE/DATA RISER

NOT TO SCALE

VOLTAGE	120	208									LOCATION	BASEMENT			
PHASE 3 WIRE 4					PANEL		LA				MOUNTING	SURFACE			
BUS AMPS	400				MAIN AMPS		400				MAIN	LUGS			

DESCRIPTION	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	BRKR AMP	BRKR P	CKT NO	BUS CONN	CKT NO	BRKR P	BRKR AMP	VOLT AMPS C	VOLT AMPS B	VOLT AMPS A	DESCRIPTION
SERVICE/BAR LIGHTS	620			20	1	1	A	2	1	20			400	GEN RECEP
TRACK LIGHTS		500		20	1	3	B	4	1	20		1000		GEN RECEP
TRACK LIGHTS			500	20	1	5	C	6	1	20	1500			*FREEZER
TRACK LIGHTS	500			20	1	7	A	8	1	20			1500	*UC REFRIGERATOR
CORRIDOR/BATH LTS		650		20	1	9	B	10	1	20		1500		*REFRIGERATOR
CORRIDOR RECEP.			600	20	1	11	C	12	1	20	1500			*UC REFRIGERATOR
SERVICE RECEP.	400			20	1	13	A	14	1	20			1500	*ICE MACHINE
DESK RECEP.		800		20	1	15	B	16	1	20		1500		*DISH WASHER
DESK RECEP.			1200	20	1	17	C	18	1	20	200			BAR RECEP.
PINSETTER	400			20	1	19	A	20	1	20			400	BATH RECEPT.
PINSETTER		400		20	1	21	B	22	1	20		1200		OFFICE RECEP
PINSETTER			400	20	1	23	C	24	1	20	1000			CORRIDOR RECEP.
AIR COMPRESSOR	400			20	1	25	A	26	1	20			650	BASEMENT LOBBY LTS
AIR COMPRESSOR		400		20	1	27	B	28	1	20		600		BASEMENT LOBBY REC
AIR COMPRESSOR			400	20	1	29	C	30	1	20	500			STAIRWELL
ROOF RECEP.	200			20	1	31	A	32	1	20			500	STAIRWELL
RECEP.		200		20	1	33	B	34	1	20		500		FACP
RECEP.			200	20	1	35	C	36	1					SPACE
PANEL LS	1200			100	3	37	A	38	3	60				TVSS
		1200				39	B	40						
			1200			41	C	42						
TOTALS	3720	4150	4500								4700	6300	4950	

VOLT AMPS — BUS A 24744; BUS B 19470; BUS C 22494; TOTAL 66708

REMARKS: *PROVIDE GFCI BREAKER SECTION 1 OF 2 PROVIDE FEED THRU LUGS 32.2 KAIC MIN.

VOLTAGE	120	208									LOCATION	BASEMENT			
PHASE 3 WIRE 4					PANEL		LA2				MOUNTING	SURFACE			
BUS AMPS	400				MAIN AMPS		400				MAIN	LUGS			

DESCRIPTION	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	BRKR AMP	BRKR P	CKT NO	BUS CONN	CKT NO	BRKR P	BRKR AMP	VOLT AMPS C	VOLT AMPS B	VOLT AMPS A	DESCRIPTION
HP-1	3650			60	2	1	A	2	2	30			2250	WH1
		3650				3	B	4				2250		
AH-1			8674	90	2	5	C	6	1	20	1500			DH-1
	8674					7	A	8	1	20			1500	DP-1
SPACE					1	9	B	10	2	35		3120		WH2
SPACE					1	11	C	12			3120			
SPACE					1	13	A	14	1					SPACE
SPACE					1	15	B	16	1					SPACE
SPACE					1	17	C	18	1					SPACE
SPACE					1	19	A	20	1					SPACE
SPACE					1	21	B	22	1					SPACE
SPACE					1	23	C	24	1					SPACE
SPACE					1	25	A	26	1					SPACE
SPACE					1	27	B	28	1					SPACE
SPACE					1	29	C	30	1					SPACE
SPACE					1	31	A	32	1					SPACE
SPARE				20	1	33	B	34	1	20				SPARE
SPARE				20	1	35	C	36	1	20				SPARE
SPARE				20	1	37	A	38	1	20				SPARE
SPARE				20	1	39	B	40	1	20				SPARE
SPARE				20	1	41	C	42	1	20				SPARE
TOTALS	12324	3650	8674								4620	5370	3750	

VOLT AMPS — BUS A 16074; BUS B 9020; BUS C 13294; TOTAL 38388

REMARKS: *PROBIDE GFCI BREAKER SECTION 2 OF 2 32.2 KAIC MIN.

MECHANICAL EQUIPMENT POWER SCHEDULE

UNIT NAME	VOLTAGE/ PHASE	CIRCUIT BREAKER	PANEL NAME/ CIRCUIT NUMBER	FEEDER	DISCONNECT SWITCH	NOTES
HP-1	208V/1PH	60A/2P	LA2-1	3#6, #8G., 1 IN.C.	60A/2P/3R	1
AH-1	208V/1PH	90A/2P	LA2-5	3#3, #8G., 1 1/4 IN.C.	90A/2P	1,2
EF-1	120V	--	--	3#12, 1/2 IN.C.	MOTOR RATED SWITCH	1,3
EF-2	120V	--	--	3#12, 1/2 IN.C.	MOTOR RATED SWITCH	1,3
DH-1	120V	20A/1P	LA2-6	3#12, 1/2 IN.C.	MOTOR RATED SWITCH	1
WH-1	208V/1PH	30A/2P	LA2-2	4#10, 3/4 IN.C.	30A/2P	1
WH-2	208V/1PH	35A/2P	LA2-2	4#10, 3/4 IN.C.	60A/2P	1
DP-1	120V	20A/1P	LA2-8	3#12, 1/2 IN.C.	MOTOR RATED SWITCH	1

NOTES:
1. SEE MECHANICAL FOR EXACT CONTROL REQUIREMENTS.
2. PROVIDE DUCT SMOKE DETECTOR IN SUPPLY AIR DUCT.
3. INTERLOCK AND POWER FAN VIA LIGHTING CIRCUIT IN AREA SERVED. PROVIDE 10 MINUTE TIME DELAY RELAY.

VOLTAGE	120	208									LOCATION	BASEMENT			
PHASE 3 WIRE 4					PANEL		LS				MOUNTING	SURFACE			
BUS AMPS	100				MAIN AMPS		100				MAIN	LUGS			

DESCRIPTION	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	BRKR AMP	BRKR P	CKT NO	BUS CONN	CKT NO	BRKR P	BRKR AMP	VOLT AMPS C	VOLT AMPS B	VOLT AMPS A	DESCRIPTION
MONITORS 1-2	400			20	1	1	A	2	1	20			400	SCORING CONSOLE
MONITORS 3-4		400		20	1	3	B	4	1	20		400		SCORING CONSOLE
MONITORS 5-6			400	20	1	5	C	6	1	20	400			SCORING CONSOLE
SPACE					1	7	A	8	1					SPACE
SCORING INTERFACE		400		20	1	9	B	10	1					SPACE
SCORING INTERFACE			400	20	1	11	C	12	1					SPACE
SCORING INTERFACE	400			20	1	13	A	14	1					SPACE
SPACE					1	15	B	16	1					SPACE
SPACE					1	17	C	18	1					SPACE
SPACE					1	19	A	20	1					SPACE
SPACE					1	21	B	22	1					SPACE
SPACE					1	23	C	24	1					SPACE
TOTALS	800	800	800								400	400	400	

VOLT AMPS — BUS A 1200; BUS B 1200; BUS C 1200; TOTAL 3600

REMARKS: SCORING EQUIPMENT FOR BOWLING SYSTEM ONLY, NO OTHER CIRCUITS TO BE ADDED TO THIS PANEL

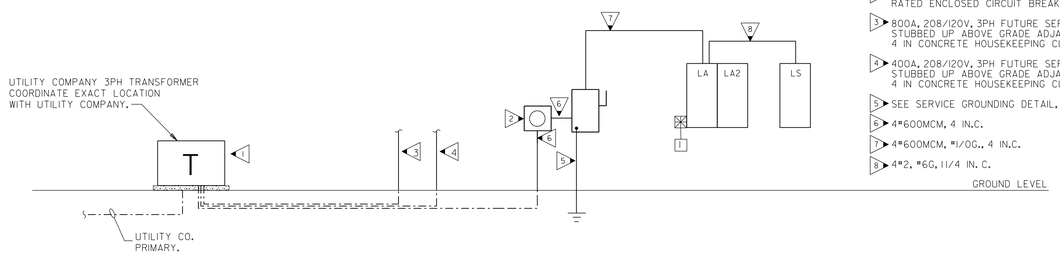
GENERAL NOTES - LOCATION OF UTILITY COMPANY PAD MOUNTED TRANSFORMER:

1. TRANSFORMER PAD LOCATIONS SHALL BE A MINIMUM OF 10 FT.-0 IN. FROM ANY BUILDING OVERHANGS, CANOPIES, EXTERIOR WALLS, BALCONY, EXTERIOR STAIRS AND OR WALKWAYS CONNECTED TO THE BUILDING.
2. TRANSFORMER PAD EDGE SHALL BE NO LESS THAN 14 FT.-0 IN. FROM ANY DOOR WAY.
3. TRANSFORMER PAD EDGE SHALL BE NO LESS THAN 10 FT.-0 IN. FROM ANY WINDOWS OR OTHER OPENINGS.
4. IF THE BUILDING HAS ON OVERHANG THE 10 FT.-0 IN. CLEARANCE SHALL BE MEASURED FROM A POINT BELOW THE EDGE OF THE OVERHANG ONLY IF THE BUILDING IS 3 STORIES OR LESS. IF THE BUILDING IS 4 STORIES OR MORE 10 FT.-0 IN. SHALL BE MEASURED FROM THE OUTSIDE BUILDING WALL.
5. FIRE ESCAPES, OUTSIDE STAIRS, AND COVERED WALKWAYS ATTACHED TO OR BETWEEN BUILDINGS, SHALL BE CONSIDERED PART OF THE BUILDING.

NOTE: THIS INFORMATION HAS BEEN OBTAINED FROM THE NFPA SECTION 450-27 AND THE OFFICE OF INSURANCE AND SAFETY FIRE COMMISSIONER CHAPTER 120-3-3.

T.V.S.S.

1 DISTRIBUTION PANELS, PROVIDE 5-#6 CONDUCTORS IN 1" C FROM 60A/3P BREAKER IN SUPPLYING PANEL. PROVIDE BREAKER.



1 / E4.1 POWER RISER DIAGRAM

NOT TO SCALE

KEYED NOTES: (THIS SHEET ONLY)

1. UTILITY CO. PAD MOUNTED TRANSFORMER. COORDINATE EXACT LOCATION ON SITE WITH OWNER AND SERVING UTILITY CO. SEE NOTES ON THIS DRAWING WITH CLEARANCE REQUIREMENTS.
2. 400A, 208/120V, 3PH, FEED THRU METER WITH 400A/3P/3R S.E. RATED ENCLOSED CIRCUIT BREAKER BELOW. 32.2 KAIC MINIMUM.
3. 800A, 208/120V, 3PH FUTURE SERVICE, PROVDE (2) 4 INCH CONDUITS STUBBED UP ABOVE GRADE ADJACENT WALL AND CAPPED. PROVIDE 4 IN CONCRETE HOUSEKEEPING CURB. (FOR FUTURE TENANT LOFTS).
4. 400A, 208/120V, 3PH FUTURE SERVICE. PROVIDE A 4 INCH CONDUIT STUBBED UP ABOVE GRADE ADJACENT WALL AND CAPPED. PROVIDE 4 IN CONCRETE HOUSEKEEPING CURB. (FOR FUTURE TENANT SPACE).
5. SEE SERVICE GROUNDING DETAIL, 3/E4.1.
6. 4#600MCM, 4 IN.C.
7. 4#600MCM, #1/0G., 4 IN.C.
8. 4#2, #6G, 11/4 IN. C.

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RENOVATIONS AT 476 SECOND STREET BLDG.

MACON, GEORGIA

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Power Riser Diagram

E4.1

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