ASHVILLE FIRE STATION #2

CITY OF ASHVILLE / 222 7TH AVENUE NORTH

100% CONSTRUCTION DOCUMENT SET

GOODWYN MILLS CAWOOD, LLC	ARCHITECTURE, INTERIORS
SCHOEL	CIVIL ENGINEERING
STRUCTURAL DESIGN GROUP	STRUCTURAL ENGINEERING
ROCKET MEP	MECHANICAL & PLUMBING ENGINEERING
ROCKET MEP	ELECTRICAL ENGINEERING

GMC

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ISSUE | DATE
100% CONSTRUCTION DOCUMENTS | 1/9/2026

DRAWN BY: ED
CHECKED BY: JP

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

TITLE SHEET

T1

1/13/2026 2:29:46 PM TEMPLATE VERSION: 2025.1

GENERAL NOTES BELOW ARE INTENDED TO COMPLEMENT, RATHER THAN REPLACE, REQUIREMENTS PUT FORTH BY THE PROJECT SPECIFICATIONS. SHOULD A DISCREPANCY BE FOUND BETWEEN THESE GENERAL NOTES AND THE PROJECT SPECIFICATIONS THE GC SHALL NOTIFY THE ARCHITECT FOR CLARIFICATION PRIOR TO PROCEEDING.

GENERAL NOTES

1.01. **COMPLETE CONTRACT DOCUMENTS:** COMPLETE DRAWINGS SPECIFICATIONS, ADDENDA, AND CLARIFICATIONS ISSUED BY FIELD ORDER OR SIMILAR INSTRUMENTS CONSTITUTE THE CONTRACT DOCUMENTS AND SHALL REMAIN INTACT. GENERAL CONTRACTOR IS FULLY RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS INCLUDED, OR REASONABLY INFERRED THEREIN. CONSTRUCTION MANAGER OR GENERAL CONTRACTOR (AS APPLICABLE) MUST NOT ISSUE PARTIAL SETS OR OTHERWISE CAUSE IMCOMPLETE CONTRACT INFORMATION TO BE PROVIDED TO PARTIES TO THE CONTRACT, INCLUDING ASSOCIATED SUB-CONTRACTORS, OR SUB-SUB-CONTRACTORS.

1.02. **MULTI-TRADE COORDINATION:** ALL WORK SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES TO AVOID INTERFERENCES AND CONFLICTS. NO ALLOWANCES WILL BE MADE FOR CONTRACTORS FAILURE TO COORDINATE BETWEEN MULTIPLE DISCIPLINES, SYSTEMS OR EQUIPMENT. UNCOORDINATED WORK THAT RESULTS IN THE INEFFICIENT USE OF AVAILABLE SPACE AND/OR ENCROACHES ON THE WORK OF OTHER TRADES WILL BE SUBJECT TO REJECTION AND RE-INSTALLATION.

1.03. **VERIFICATION:** GENERAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, CONSTRUCTION, MATERIALS, METHODS OF CONSTRUCTION, GRADES AND ELEVATIONS. NOTIFY THE ARCHTECT OF ANY DISCREPANCIES OR CONFLICTS WITHIN THE DOCUMENTS PRIOR TO BID, CONSTRUCTION, AND/OR INSTALLATION OF ASSOCIATED WORK. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE THAT THE EXISTING CONDITIONS ARE CONSISTENT WITH THOSE OF THE CONTRACT DOCUMENTS. ANY CHANGE ORDER REQUEST ASSOCIATED WITH AN IDENTIFIABLE EXISTING CONDITION, WHETHER IN CONFLICT OR COMPLIANCE WITH THE CONTRACT DOCUMENTS, WILL NOT BE ACCEPTED. THIS PROVISION SHALL NOT APPLY TO WORK PERFORMED UNDER UNIT PRICE OR ALLOWANCE FEE STRUCTURES.

1.04. **DISCREPANCIES:** GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT PROMPTLY UPON IDENTIFICATION OF ANY DISCREPANCIES OR CONFLICTS IN THE CONTRACT DOCUMENTS, WITH THE OBJECTIVE OF RESOLVING THE CONFLICT OR DISCREPANCY IN A TIMELY MANNER AND PRIOR TO ANY IMPACT TO CONTRACT TIME OR CONTRACT COST. GENERAL CONTRACTOR SHALL INCLUDE THE MORE EXPENSIVE, COMPLEX, AND TIME CONSUMING COMPONENTS OF ANY DISCREPANCIES IN THE BASE BID PRICE. FAILURE TO NOTIFY THE ARCHITECT PROMPTLY OF A KNOWN DISCREPANCY CONSTITUTES ACCEPTANCE OF FULL RESPONSIBILITY FOR THE ASSOCIATED COST AND SCHEDULE IMPACT.

1.05. **DRAWING SCALE:** REPROGRAPHIC TECHNIQUES MAY RENDER DRAWINGS DIFFERENTLY THAN THE INTENDED PRINTED SCALE. THEREFORE, DO NOT RELY UPON THE SCALE OF ANY PRINTED DRAWINGS. CONTACT THE ARCHITECT FOR REQUIRED DIMENSIONS THAT ARE NOT PROVIDED CLEARLY IN NUMERIC FORM HEREIN. FAILURE TO REQUEST CRITICAL DIMENSIONAL INFORMATION FROM THE ARCHITECT MAY RESULT IN THE REJECTION OF INSTALLED WORK.

1.06. **DIMENSIONAL STANDARDS:** STANDARD DIMENSION CONVENTIONS UTILIZED HEREIN CALL FOR DIMENSIONS TO FACE OF STUD (MASONRY) OF FINISHED PARTITION, FACE OF FINISH, OR CENTERLINE OF COLUMN LINE OR OTHER REFERENCE LINE, UNLESS OTHERWISE NOTED FOR GRAPHICALLY ILLUSTRATED. DIMENSIONS NOTED AS "CLEAR", "MIN", OR "MAX" SHALL BE STRICTLY ENFORCED.

1.07. **PERMITTING:** THE GENERAL CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY AND REQUIRED PERMITS AND APPROVALS FROM JURISDICTIONAL AUTHORITIES, PRIOR TO COMMENCING THE WORK. THIS REQUIREMENT SHALL APPLY TO ON-SITE AND OFF-SITE WORK REQUIRED BY THE CONTRACT DOCUMENTS.

1.08. **CODE COMPLIANCE:** THE WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH ALL APPLICABLE LAWS, CODES, AND ORDINACE. THE GENERAL CONTRACTOR AND SUB-CONTRACTORS SHALL PERFORM THEIR WORK IN COMPLIANCE WITH ALL APPLICABLE BUILDING CODES, LAWS, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS SHALL CAREFULLY READ AND FAMILIARIZE THEMSELVES WITH THE CODE COMPLIANCE DATA INCLUDED IN THE DRAWINGS AND SPECIFICATIONS.

1.09. **NON-COMBUSTIBLE CONSTRUCTION TYPES:** THE PROPOSED BUILDING STRUCTURE IS NON-COMBUSTIBLE IN ACCORDANCE WITH APPLICABLE CODES, AND THEREFORE REQUIRES NON-COMBUSTIBLE CONSTRUCTION TECHNIQUES. ALL NEW CONSTRUCTION SHALL BE IN COMPLIANCE WITH APPLICABLE REQUIREMENTS, INCLUDING WOOD BLOCKING, FURRING, FRAMING, SHEATHING, BACK-BOARDS, AND RELATED WORK. FIRE RETARDANT TREATED [FRT] IS PERMITTED WHERE ALLOWED BY CODE. SEE CODE COMPLIANCE DRAWINGS FOR DETAILED INFORMATION AND REQUIREMENTS.

1.10. **TEMPORARY GUARDS:** THE GENERAL CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY GUARDS AT ALL SLAB EDGES, PIT EDGES, ELEVATED PLATFORM EDGES, AND SIMILAR CONDITIONS WHERE REQUIRED BY OSHA, ANY APPLICABLE CODE OR ORDINACE, AND AT MINIMUM ALL CHANGES IN ELEVATION IN EXCESS OF THIRTY INCHES (30") INCLUDING BOTH SIDES OF STAIRS AND LADDERS. TEMPORARY GUARDS MUST BE MAINTAINED UNTIL THE PERMANENT GUARDS ARE INSTALLED.

1.11. **LIFE-SAFETY MEASURES DURING CONSTRUCTION:** THE GENERAL CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS REQUIRED BY OSHA, CODE, AND OTHER APPLICABLE REGULATORY AUTHORITIES.

1.12. **MEANS OF EGRESS:** THE GENERAL CONTRACTOR SHALL MAINTAIN CLEAR AND UNOBSTRUCTED MEANS OF EGRESS AT ALL TIMES DURING CONSTRUCTION, WITHOUT EXCEPTION.

1.13. **CONSTRUCTION LOADS:** THE GENERAL CONTRACTOR SHALL NEVER LOAD NEW OR EXISTING CONSTRUCTION BEYOND ITS DESIGN CAPACITY WITH STORED MATERIAL, CONSTRUCTION EQUIPMENT, TEMPORARY LOADS ASSOCIATED WITH MATERIAL MOVEMENT, HOISTING, STORAGE, OR SIMILAR CONDITIONS.

1.14. **GENERAL CLEAN-UP:** THE GENERAL CONTRACTOR SHALL INCLUDE ONGOING CLEAN-UP OF THE PROPERTY AND BUILDING, INCLUDING REMOVAL OF TRASH AND WASTE MATERIALS, ON A REGULAR BASIS DURING CONSTRUCTION. RECYCLING OF CONSTRUCTION WASTE IS ENCOURAGED.

1.15. **OWNER FURNISHED EQUIPMENT:** LOOSE FURNISHINGS, WORKSTATIONS, OFFICE EQUIPMENT, COPIERS, VENDING MACHINES, KITCHEN EQUIPMENT, AND SIMILAR ITEMS THAT ARE BOTH LABELED "OWNER FURNISHED" OR "OF/OI", AND SHOWN DASHED OR IN GRAY-TONE SHALL BE CONSIDERED OWNER-FURNISHED EQUIPMENT. OWNER-FUNISHED EQUIPMENT IS SHOWN FOR THE GENERAL CONTRACTOR'S KNOWLEDGE AND UNDERSTANDING TO FACILITATE COORDINATION WITH THE OWNER'S WORK. THE GENERAL CONTRACTOR SHALL CAREFULLY REVIEW THE SCOPE OF WORK, AND REQUEST CLARIFICATION FROM THE ARCHITECT IN THE EVENT OF ANY UNCERTAINTY ABOUT THE DEFINITION OF OWNER FURNISHED WORK.

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DRAWN BY: ED
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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

01/09/2026

DRAWING INDEX

G1.01

1/13/2026 3:34:59 PM TEMPLATE VERSION: 2025.1

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A DIVISION 1 - GENERAL REQUIREMENTS

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1.11. **TEMPORARY GUARDS:** THE GENERAL CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY GUARDS AT ALL SLAB EDGES, PIT EDGES, ELEVATED PLATFORM EDGES, AND SIMILAR CONDITIONS WHERE REQUIRED BY OSHA, ANY APPLICABLE CODE OR ORDINANCE, AND AT MINIMUM ALL CHANGES IN ELEVATION IN EXCESS OF THIRTY INCHES (30") INCLUDING BOTH SIDES OF STAIRS AND LADDERS. TEMPORARY GUARDS MUST BE MAINTAINED UNTIL THE PERMANENT GUARDS ARE INSTALLED.

1.12. **LIFE-SAFETY MEASURES DURING CONSTRUCTION:** THE GENERAL CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS REQUIRED BY OSHA, CODE, AND OTHER APPLICABLE REGULATORY AUTHORITIES.

1.13. **MEANS OF EGRESS:** THE GENERAL CONTRACTOR SHALL MAINTAIN CLEAR AND UNOBSTRUCTED MEANS OF EGRESS AT ALL TIMES DURING CONSTRUCTION, WITHOUT EXCEPTION.

1.14. **CONSTRUCTION LOADS:** THE GENERAL CONTRACTOR SHALL NEVER LOAD NEW OR EXISTING CONSTRUCTION BEYOND ITS DESIGN CAPACITY WITH STORED MATERIAL, CONSTRUCTION EQUIPMENT, TEMPORARY LOADS ASSOCIATED WITH MATERIAL MOVEMENT, HOISTING, STORAGE, OR SIMILAR CONDITIONS.

1.15. **GENERAL CLEAN-UP:** THE GENERAL CONTRACTOR SHALL INCLUDE ONGOING CLEAN-UP OF THE PROPERTY AND BUILDING, INCLUDING REMOVAL OF TRASH AND WASTE MATERIALS, ON A REGULAR BASIS DURING CONSTRUCTION. RECYCLING OF CONSTRUCTION WASTE IS ENCOURAGED.

1.16. **OWNER FURNISHED EQUIPMENT:** LOOSE FURNISHINGS, WORKSTATIONS, OFFICE EQUIPMENT, COPIERS, VENDING MACHINES, KITCHEN EQUIPMENT, AND SIMILAR ITEMS THAT ARE BOTH LABELED "OWNER FURNISHED" OR "OFOI", AND SHOWN DASHED OR IN GRAY-TONE SHALL BE CONSIDERED OWNER-FURNISHED EQUIPMENT. OWNER-FURNISHED EQUIPMENT IS SHOWN FOR THE GENERAL CONTRACTOR'S KNOWLEDGE AND UNDERSTANDING TO FACILITATE COORDINATION WITH THE OWNER'S WORK. THE GENERAL CONTRACTOR SHALL CAREFULLY REVIEW THE SCOPE OF WORK, AND REQUEST CLARIFICATION FROM THE ARCHITECT IN THE EVENT OF ANY UNCERTAINTY ABOUT THE DEFINITION OF OWNER FURNISHED WORK.

1.17. **TEMPORARY BRACING:** PRIOR TO REMOVAL OF ANY EXISTING STRUCTURAL ELEMENTS, THE GENERAL CONTRACTOR SHALL TEMPORARILY SHORE AND/OR BRACE EXISTING CONSTRUCTION TO REMAIN AS REQUIRED TO SUPPORT EXISTING LOADS AND/OR LOADS IMPOSED DURING CONSTRUCTION. FURTHER, THE GENERAL CONTRACTOR SHALL DESIGN, INSTALL AND MAINTAIN ANY TEMPORARY BRACING OR SUPPORT FRAMING REQUIRED TO SUPPORT NEW CONSTRUCTION COMPONENTS WHICH ARE NOT FULLY SECURED IN A COMPLETE STRUCTURAL ASSEMBLY, OR ARE OTHERWISE SUBJECTED TO LOADS IN EXCESS OF THE POST-CONSTRUCTION LOADS FOR WHICH THE ELEMENT IS DESIGNED. COST FOR SHORING ENGINEER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

B DIVISION 2 - EXISTING CONDITIONS

2.01. **POSITIVE DRAINAGE AT BUILDING:** SLOPE EXTERIOR GRADE AWAY FROM THE BUILDING IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE.

2.02. **SITE PAVING EXPANSION AND CONTROL JOINTS:** WHETHER SPECIFICALLY INDICATED OR NOT, PROVIDE CONTROL JOINTS IN ALL SITE CONCRETE PAVING FOR PEDESTRIAN TRAFFIC AT AN INTERVAL OF NO MORE THAN FIVE FEET (5') EACH WAY. IN ADDITION, PROVIDE CONTROL JOINTS AT NO MORE THAN THIRTY FOOT (30') INTERVAL, EACH WAY. ALL EXPANSION JOINTS, INCLUDING THOSE BETWEEN HORIZONTAL PAVING AND VERTICAL ABUTMENTS, SHALL RECEIVE SPECIFIED JOINT FILLER, AS SPECIFIED IN SECTION 079000.

C DIVISION 3 - CONCRETE

3.01. **SLAB-ON-GRADE:** SEE SPECIFICATION SECTION 033000 FOR DETAILED REQUIREMENTS OF SLAB-ON-GRADE CONSTRUCTION, INCLUDING REQUIREMENTS FOR REINFORCING, CONCRETE ADMIXTURES, VAPOR BARRIER, AND SURFACE TREATMENTS (IF ANY). ALL SLAB-ON-GRADE CONSTRUCTION SHALL BE INSTALLED OVER MINIMUM FOUR INCH (4") THICK COMPACTED POROUS DRAINAGE LAYER UNLESS NOTED OTHERWISE.

3.02. **SLAB EXPANSION AND CONTROL JOINTS:** SEE STRUCTURAL DRAWINGS FOR REQUIRED SLAB EXPANSION AND CONTROL JOINTS. ALL EXPANSION JOINTS AND CONTROL JOINTS IN FLOOR SLABS, AND BETWEEN FLOOR SLABS AND VERTICAL ABUTMENTS SHALL RECEIVE TRAFFIC BEARING SEALANT JOINT MATERIAL.

3.03. **CORE DRILLING - FLOOR SLABS:** THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING OF THE LOCATION AND DIMENSION OF ANY PROPOSED CORES THROUGH STRUCTURAL FLOOR SLABS, PRIOR TO COMMENCING CORING ACTIVITIES. CORE DRILLING IS STRICTLY PROHIBITED (SLEEVES ONLY) IN ANY POST-TENSIONED STRUCTURED FLOOR SLAB ASSEMBLIES.

3.04. **FLOOR LOADING DURING CONSTRUCTION:** NO LOADS EXCEEDING THE SPECIFIED FLOOR LIVE LOAD INCLUDING CONSTRUCTION EQUIPMENT OR LIFTS SHALL BE PLACED ON THE ELEVATED SLABS WITHOUT REVIEW AND APPROVAL OF THE STRUCTURAL ENGINEER. ANY REQUESTS SHALL BE MADE IN WRITING BY THE GENERAL CONTRACTOR INCLUDING CUT SHEETS AND PROPOSED LOADING CRITERIA. DO NOT PROCEED UNTIL WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER HAS BEEN PROVIDED.

D DIVISION 4 - MASONRY

4.01. **SEAL VENEER ANCHORS:** ALL EXTERIOR VENEER SYSTEM ANCHORS SHALL BE SET IN FULL, FRESH BED OF TROWEL GRADE AIR/MOISTURE BARRIER COATING, OR DOW 795 OR EQUIVALENT AT THE PLANE OF THE AIR/MOISTURE BARRIER.

E DIVISION 5 - METALS

5.01. **EMBEDDED STEEL:** ALL MISCELLANEOUS STEEL ITEMS INCLUDING STEEL EDGE ANGLES, EMBEDDED PLATE, AND SIMILAR WORK SHALL BE HOT-DIPPED GALVANIZED. THIS PROVISION DOES NOT APPLY TO REINFORCING STEEL, WHICH SHALL COMPLY WITH SPECIFICATION DIVISION 033000.

F DIVISION 6 - WOOD,PLASTICS & COMPOSITES

6.01. **WOOD IN CONTACT WITH CONCRETE/ MASONRY:** ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY CONSTRUCTION SHALL BE PRESSURE TREATED (PT) UNLESS OTHERWISE NOTED TO BE FIRE RETARDANT TREATED (FRT).

6.02. **FIELD VERIFICATION:** THE CASEWORK OR MILLWORK CONTRACTOR SHALL OBTAIN AND VERIFY ALL FIELD MEASUREMENTS AND CONDITIONS AFFECTING HIS WORK AND SHALL BE RESPONSIBLE FOR ALL DETAILS AND DIMENSIONS ASSURING PRECISION AND PROPER ASSEMBLY OF HIS PRODUCTS.

6.03. **MILLWORK BASE:** PROVIDE FINISHED BASE TO MATCH MATERIAL AND FINISH OF ADJACENT SCHEDULED WALL BASE, AT TOE-KICK AT ALL EXPOSED FRONT, SIDE, AND REAR FACES OF MILLWORK OR CASEWORK.

6.04. **MILLWORK SPLASH:** PROVIDE BACKSPLASH AT ALL COUNTERTOPS UNLESS OTHERWISE INDICATED ON PLAN. PROVIDE SIDESPLASH OF SAME MATERIAL, DIMENSION, AND FINISH EVERYWHERE A COUNTERTOP BACKSPLASH ABUTS A VERTICAL WALL SURFACE AT ONE OR MORE OF ITS SIDES UNLESS OTHERWISE INDICATED ON PLAN.

G DIVISION 7 - THERMAL & MOISTURE PROTECTION

7.01. **GENERAL SEALANTS:** CONTINUOUSLY SEAL PERIMETER OF ALL DOOR AND WINDOW FRAMES, MILLWORK AND CASEWORK, TRIM, CABINETS, AND SIMILAR FIXED CONSTRUCTION WITH PAINTABLE, SILICONIZED LATEX SEALANT. ALL VERTICAL SURFACE CONTROL AND EXPANSION JOINTS AT MASONRY WALLS SHALL BE CONTINUOUSLY SEALED, BOTH SIDES OF JOINT.

7.02. **SLOPE TO DRAIN:** ALL ROOF SURFACES SHALL BE SLOPED TO DRAIN, WITH MINIMUM PITCH OF ¼" PER LINEAR FOOT. PROVIDE TAPERED INSULATION, CRICKETS AS NECESSARY TO ASSURE THE MINIMUM SLOPE IS ACHIEVED.

7.03. **WALK-PADS:** FURNISH AND INSTALL COMPATIBLE ROOF WALK-PADS AT ALL MEMBRANE ROOF SURFACES THAT ARE TRAVELED TO ACCESS SERVICEABLE ROOFTOP EQUIPMENT SUCH AS HVAC UNITS, FANS, ELECTRICAL EQUIPMENT, AND SIMILAR EQUIPMENT REQUIRING SERVICE ACCESS.

7.04. **EXPANSION JOINTS COVERS:** ALL BUILDING EXPANSION JOINTS EXPOSED TO VIEW IN FLOOR, PARTITION, AND/ OR CEILING ASSEMBLIES SHALL RECEIVE COLOR-COORDINATED PRE-FABRICATED EXPANSION JOINT COVER ASSEMBLY DESIGNED TO ALLOW THE REQUIRED MOVEMENT, AND TO PROVIDE UL APPROVED FIRE RATED ASSEMBLY WHERE REQUIRED.

H DIVISION 8 - OPENINGS

8.01. **LABELED FIRE-RATED DOORS AND FRAMES:** ALL FIRE DOORS AND FRAMES SHALL BE LABELED BY AN APPROVED AGENCY PER NFPA 80, AND SHALL BE PERMANENTLY AFFIXED THERETO, AND THE LIFE OF THE LABEL AND THE ATTACHMENT THEREOF CAN REASONABLY BE EXPECTED TO EQUAL THE LIFE OF THE COMPONENT TO WHICH IT IS ATTACHED. LABELS MUST BE PROVIDED BY A MANUFACTURER THAT HAS BEEN APPROVED BY A LABORATORY OR ORGANIZATION TO PROVIDE TESTING AND FOLLOW-UP SERVICES FOR FIRE-RATED OPENING ASSEMBLIES. ALL LABELS SHALL INCLUDE THE FIRE RESISTANCE RATING IN HOURS AND/OR MINUTES. LABELS ON FRAMES WITH TRANSOMS AND/OR SIDELIGHTS MUST IDENTIFY THAT THE OPENING ASSEMBLY INCLUDES SAME.

(A) LABELS SHALL BE RAISED OR EMBOSSED ON METAL LABELS.
(B) PLASTIC OR PAPER LABELS ARE UNACCEPTABLE.
(C) LABELS MUST BE VISIBLE AND LEGIBLE AT ALL TIMES AND SHALL NOT BE PAINTED.
1. FAILURE TO COMPLY WITH THIS REQUIREMENT WILL REQUIRE PAINTER TO REIMBURSE OWNER FOR COSTS OF RE-LABELING RATED DOORS AND FRAMES.

8.02 **FIRE-RATED CERAMIC GLAZING:** AT FIRE-RATED DOORS, SIDELITES, AND TRANSOMS, PROVIDE FIRE-RATED CERAMIC GLAZING AT ANY VISION PANEL THAT EXCEEDS THE MAXIMUM ALLOWABLE GLASS SIZE PER IBC TABLE 716.5 (IBC 2015) or 716.1(2) (IBC 2018) AS APPLICABLE. SEE SPECIFICATION SECTION 08 8000 GLAZING FOR CERAMIC GLAZING.

8.03. **TEMPERED GLASS:** PROVIDE TEMPERED SAFETY GLASS EVERYWHERE REQUIRED BY APPLICABLE CODE, INCLUDING ANY GLASS IN DOORS, OPERABLE WINDOWS, ADJACENT TO DOORS OR OPERABLE WINDOWS, WITHIN 36" OF THE ADJACENT FLOOR OR GRADE LEVEL, OR OTHERWISE WHERE REQUIRED BY CODE.

8.04. **BLOCKING:** FURNISH AND INSTALL BLOCKING IN METAL STUD FRAMED WALLS AND PARTITIONS THAT ARE SCHEDULED TO RECEIVE DOOR BUMPERS/ STOPS, MAGNETIC LOCK DEVICES, AND SIMILAR DOOR RELATED DEVICES THAT WILL SUBJECT THE PARTITION TO DOOR MOVEMENT LOADS AND IMPACT.

8.05. **HOLLOW METAL FRAMES:** COORDINATE THE THROAT DEPTH OF ALL HOLLOW METAL FRAMES WITH THE DEPTH OF THE PARTITION SCHEDULED TO RECEIVE THE DOOR OR WINDOW FRAME.

8.06 **LEAD-LINED DOORS AND HOLLOW METAL FRAMES:** THESE DOORS ARE VERY HEAVY AND REQUIRE ADDITIONAL STRUCTURAL SUPPORT TO PREVENT SAGGING. TYPICALLY THIS WILL REQUIRE HEAVY GUAGE (16 GA.) BOX-FRAMED AND WELDED STEEL STUD POSTS AT THE HINGE-SIDE JAMB. SEE DRAWING G1.22 AND SPECIFICATION SECTION 09 2216 "NON-STRUCTURAL METAL FRAMING" FOR FURTHER INFORMATION.

I DIVISION 9 - FINISHES

9.01. **INDOOR ENVIRONMENTAL CONDITIONS:** NO INTERIOR SOFT CONSTRUCTION (IE. DRYWALL, CEILINGS, CARPET, MILLWORK, OR SIMILAR WORK THAT IS SUBJECT TO TEMPERATURE AND HUMIDITY INSTABILITY) SHALL COMMENCE, NOR SHALL MATERIALS BE STORED ON SITE, UNTIL STABLE INTERIOR ENVIRONMENTAL CONDITIONS ACCEPTABLE TO THE PRODUCT MANUFACTURER ARE PROVIDED AND IN PLACE FOR A DURATION SUFFICIENT TO ESTABLISH CONSISTENT AND ACCEPTABLE INDOOR TEMPERATURE AND HUMIDITY LEVELS. FAILURE TO PROVIDE AN INDOOR ENVIRONMENT IN STRICT COMPLIANCE WITH THE PRODUCT MANUFACTURERS PRINTED REQUIREMENTS WILL SUBJECT THE INSTALLING CONTRACTOR TO FULL RESPONSIBILITY FOR ANY COSTS ASSOCIATED WITH RE-WORK DUE TO MOLD OR MILDEW GROWTH , WARPING, CUPPING, DE-LAMINATION, OR SIMILAR DETERIORATION OF THE STORED OR INSTALLED CONSTRUCTION.

9.02. **FLOOR & WALL TILE:** INSTALL FLOOR AND WALL TILE IN ALL SCHEDULED AREAS IN ACCORDANCE WITH APPLICABLE TILE COUNCIL OF AMERICA (TCNA) METHOD.

9.03. **FLOOR FINISH TRANSITIONS:** UNLESS OTHERWISE INDICATED, TRANSITION FLOOR FINISHES AT CENTERLINE OF DOOR IN CLOSED LOCATION. TRANSITION FLOOR MATERIAL UNDER CENTER OF DOORS & WHERE NOTED. PROVIDE SCHEDULED TRANSITION MATERIALS AT CHANGES IN FLOOR MATERIAL TYPE.

9.04. **PARTITIONS:** SEE PARTITION NOTES AND SPECIFICATIONS FOR REQUIREMENTS OF PARTITION CONSTRUCTION.

9.05. **EQUIPMENT ACCESS DOORS:** THE GENERAL CONTRACTOR SHALL PROVIDE PROPOSED LOCATION OF CEILING ACCESS DOORS TO THE ARCHITECT FOR APPROVAL. ACCESS DOORS SHALL BE PAINTED TO MATCH ADJACENT FINISH.

9.06. **CASEWORK AND MILLWORK ANCHORAGE:** COORDINATE INSTALLATION OF IN-WALL STEEL ANCHORAGE, GROUNDS, AND REQUIRED BLOCKING WITH OTHER TRADES FOR PRECISE LOCATION.

9.07. **PARTITION COORDINATION WITH OTHER TRADES :**
(A) COORDINATE BETWEEN TRADES BEFORE FRAMING PARTITIONS. PARTITION FRAMING SHALL BE LAID OUT SO AS TO PERMIT THE INSTALLATION OF PIPING, CONDUITS, AND DUCTWORK WITH A MINIMUM OF CUTTING BY OTHER TRADES.
(B) EXCEPT FOR PIPING LOCATED IN EQUIPMENT ROOMS, ALL PIPING INSIDE THE BUILDING SHALL BE CONCEALED WITHIN PARTITIONS AND FURRED SPACES. WHERE IT OCCURS THAT PIPING CANNOT BE EASILY CONCEALED, NOTIFY THE ARCHITECT IN WRITING FOR CLARIFICATION. IN ANY CASE, SUCH PIPING SHALL BE CONCEALED AT NO ADDITIONAL COST.
(C) COORDINATE WITH OTHER TRADES AND OWNERS' SCHEDULED EQUIPMENT VENDORS FOR SUPPORT REQUIREMENTS OF WALL- MOUNTED AND SUSPENDED ITEMS. SIZE STUD GAUGE AND SPACING MUST BE ABLE TO SUPPORT ANY ADDITIONAL LOADS IMPOSED BY THESE ITEMS. MAX. DEFLECTION L/360 @ 5 PSF HORIZ. LOAD.
(D) PROVIDE AND INSTALL ALL BLOCKING, STIFFENERS, BRACES, BACK-UP PLATES, AND SUPPORTING BRACKETS AS REQUIRED FOR THE INSTALLATION OF WALL-MOUNTED OR SUSPENDED MECHANICAL ELECTRICAL, CASEWORK, MILLWORK AND ANY OTHER MISCELLANEOUS EQUIPMENT OR WALL-MOUNTED ACCESSORIES.
(E) ANY ADDITIONAL WORK OR, RE-WORK, AS A RESULT OF A FAILURE TO COMPLY WITH THESE REQUIREMENTS WILL NOT BE GIVEN CONSIDERATION FOR CHANGE ORDER.

9.08 **FIRE-RATED PARTITIONS AND FIRE-RATED SMOKE BARRIER IDENTIFICATION**
(A) FIRE-RATED PARTITIONS AND FIRE-RATED SMOKE BARRIERS SHALL BE PERMANENTLY LABELED IN RED STENCILED LETTERING ABOVE FINISHED CEILING AT 1'-0" ABOVE CEILING.
1. EACH NEW FIRE WALL, FIRE BARRIER, FIRE PARTITION, SMOKE BARRIER, SMOKE PARTITION, OR ANY OTHER NEW WALL REQUIRED TO HAVE PROTECTED OPENINGS SHALL BE PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING ABOVE ANY DECORATIVE CEILING AND IN CONCEALED SPACES WITH THE WORDING, "FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS", OR SIMILAR LANGUAGE. SUCH SIGNS OR STENCILING SHALL BE IN 4 INCH HIGH LETTERS, 1/2 INCH STROKE, AND NOT MORE THAN 15 FEET ON-CENTER.
(B) UNLESS OTHERWISE REQUIRED OTHERWISE BY LOCAL JURISDICTION IDENITIFY RATED PARTITIONS AND WALLS AS FOLLOWS (G.C. MUST CONFIRM VERBIAGE WITH LOCAL AHJ) :
1-HOUR FIRE BARRIER - PROTECT ALL OPENINGS
1-HOUR FIRE & SMOKE BARRIER - PROTECT ALL OPENINGS
2-HOUR FIRE BARRIER - PROTECT ALL OPENINGS
2-HOUR FIRE & SMOKE BARRIER - PROTECT ALL OPENINGS
3-HOUR FIRE WALL - PROTECT ALL OPENINGS
4-HOUR FIRE WALL - PROTECT ALL OPENINGS

J DIVISION 10 - SPECIALTIES

10.01. **SPECIALTIES GENERAL:** WHEN APPLICABLE TO THE PROJECT, OWNER WILL AWARD AND WILL ASSIGN TO THE GENERAL CONTRACTOR THE CONTRACT FOR CERTAIN SPECIALTY ITEMS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROCURING, SCHEDULING, AND COORDINATING THE INSTALLATION OF WORK INSTALLED UNDER THESE CONTRACTS. THE COST OF ASSIGNED CONTRACTS SHALL BE INCLUDED AS PART OF THE WORK OF THIS CONTRACT. SEE SPECIFICATION SECTION 01 1000 - "SUMMARY"; PARA. "1.07 WORK UNDER SEPARATE CONTRACTS"
10.02. **SPECIALTY CONTRACTS:** THE FOLLOWING SPECIALTY CONTRACTS WILL BE ASSIGNED TO THE GENERAL CONTRACTOR:
(A) INTERIOR AND EXTERIOR SIGNAGE PACKAGE.
(B) ROLLER WINDOW SHADE AND CUBICLE CURTAIN PACKAGE.

K DIVISION 11 - EQUIPMENT

11.01. **EQUIPMENT GENERAL:** FOR EQUIPMENT OR SYSTEMS INSTALLED UNDER SEPARATE CONTRACT, GENERAL CONTRACTOR SHALL COOPERATE FULLY WITH SEPARATE CONTRACTORS SO WORK ON THOSE CONTRACTS MAY BE CARRIED OUT SMOOTHLY, WITHOUT INTERFERING WITH OR DELAYING WORK UNDER THIS CONTRACT OR OTHER CONTRACTS. COORDINATE THE WORK OF THIS CONTRACT WITH WORK PERFORMED UNDER SEPARATE CONTRACTS. WORK TO BE PERFORMED UNDER SEPARATE CONTRACT IS AS ITEMIZED UNDER SPECIFICATION SECTION 01 1000 - "SUMMARY"; PARA. "1.07 WORK UNDER SEPARATE CONTRACTS".

L DIVISION 12 - FURNISHINGS

12.01. **CASEWORK BASE:** PROVIDE FINISHED BASE TO MATCH MATERIAL & FINISH OF ADJACENT WALL BASE, AT TOE KICK, AT ALL EXPOSED FRONT, SIDE, & REAR FACES OF CASEWORK.

12.02. **CASEWORK SPLASH:** PROVIDE BACKSPLASH AT ALL COUNTERTOPS UNLESS OTHERWISE INDICATED ON PLAN. PROVIDE SIDESPLASH OF SAME MATERIAL, DIMENSION, AND FINISH EVERYWHERE A COUNTERTOP BACKSPLASH ABUTS A VERTICAL WALL SURFACE AT ONE OR MORE OF ITS SIDES UNLESS OTHERWISE INDICATED ON PLAN.

M DIVISION 14 - CONVEYING SYSTEMS

14.01. **STRUCTURAL FOUNDATION COORDINATION:** COORDINATE EXACT BOTTOM OF ELEVATOR SHAFT WITH PIT DEPTH REQUIREMENTS OF SELECTED ELEVATOR MANUFACTURER. EXACT LOCATION OF SUMP PUMP AS DICTATED BY SELECTED ELEVATOR MANUFACTURER. AREA BETWEEN BOTTOM OF SLAB OF ELEVATOR SHAFT & STRUCTURAL CONCRETE MAT FOOTING TO BE POROUS FILL.

14.02. **STRUCTURAL CONCRETE WALL COORDINATION:** COORDINATE ALL REQUIRED ELEVATOR SHAFT WALL PENETRATIONS, EMBED LOCATIONS, SPECIAL HOISTWAY INFILL BRACKETS (IF REQUIRED FOR INSTALLATION IN SHAFT PROVIDED), WALL MOUNTED LADDERS, ETC. WITH SELECTED ELEVATOR MANUFACTURER.

14.03. **STRUCTURAL CMU WALL COORDINATION:** COORDINATE ALL REQUIRED ELEVATOR SHAFT WALL PENETRATIONS, EMBED LOCATIONS, SPECIAL HOISTWAY INFILL BRACKETS (IF REQUIRED FOR INSTALLATION IN SHAFT PROVIDED), ROUGH OPENINGS FOR DOORS, ETC. WITH SELECTED ELEVATOR MANUFACTURER.

14.04. **ELECTRICAL COORDINATION:** COORDINATE A MINIMUM QUANTITY (2) PER CAB, ELEVATOR DISCONNECTS WITH SELECTED ELEVATOR MANUFACTURER

N DIVISION 21 - FIRE SUPPRESSION

21.01. **FIRE PROTECTION SYSTEMS:** WHERE REQUIRED, INSTALL FIRE PROTECTION SYSTEMS IN STRICT ACCORDANCE WITH APPLICABLE CODES AND ORDINANCES, INCLUDING NFPA. ALL EQUIPMENT UTILIZED IN THE FIRE PROTECTION SYSTEM SHALL BE LISTED BY UNDERWRITER'S LABORATORIES (UL).

21.02. **FIRE PROTECTION SYSTEM DESIGN:** WHERE DESIGN OF THE FIRE PROTECTION SYSTEM IS THE RESPONSIBILITY OF THE CONTRACTOR AS REQUIRED BY A PERFORMANCE SPECIFICATION, THE SYSTEM DESIGN SHALL BE SUPERVISED BY AN INDIVIDUAL WHO IS A REGISTERED FIRE PROTECTION ENGINEER AND/OR IS CERTIFIED AT LEVEL III OR HIGHER IN FIRE PROTECTION ENGINEERING TECHNOLOGY AUTOMATIC SPRINKLER SYSTEM LAYOUT BY THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGY (NICET).

21.03. **FIRE PROTECTION PIPING:** SPRINKLER PIPING SHALL BE UNENCUMBERED BY THE WORK OF ANY OTHER TRADE THROUGHOUT THE ENTIRE BUILDING. UNDER NO CIRCUMSTANCES SHALL ANYTHING BE SUPPORTED BY, DRAPED OVER, TIED-OFF TO, OR SUSPENDED BY, SPRINKLER PIPING. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO CONTINUOUSLY MONITOR ONGOING WORK IN THE VICINITY OF SPRINKLER PIPING AND SHALL DIRECT ANY OTHER CONTRACTOR OR TRADESMAN TO IMMEDIATELY REMOVE AND RE-INSTALL ANY ITEM NOT IN COMPLIANCE WITH THIS REQUIREMENT.

O DIVISION 22 - PLUMBING

22.01. **CONCEALED PIPING:** ALL PIPING, DUCTWORK, ELECTRICAL RACEWAYS & CONDUITS SHALL BE CONCEALED IN THE BUILDING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL INCLUDE, IN THE BASE BID, REQUIRED FURRING TO CONCEAL THESE SYSTEMS WHETHER OR NOT THE FRAMING AND FURRING IS ILLUSTRATED IN THE DRAWINGS.

22.02. **SECURE PIPING:** TIE ALL PIPING "HARD" TO STRUCTURE.

22.03. **GAS PIPING EXPOSED ON ROOF:** WHERE GAS PIPING IS EXPOSED ON THE ROOF, PAINT GAS PIPING "YELLOW".

22.04. **PLUMBING FIXTURES:** CAREFULLY REVIEW THE DIMENSIONAL STANDARDS FOR INSTALLED PLUMBING FIXTURES, AND PLAN THE WORK TO ASSURE FULL COMPLIANCE OF CODE REQUIRED FIXTURE CLEARANCES.

P DIVISION 23 - HVAC

23.01. **MEP DEVICE/ FIXTURE COORDINATION:** COORDINATE LOCATIONS FOR DIFFUSERS, AND RETURN AIR GRILLES TO THE GREATEST EXTENT POSSIBLE IN ORDER TO MAINTAIN LIGHTING LAYOUT INDICATED IN THE DRAWINGS. MEP&FP CONTRACTORS SHALL COORDINATE WORK WITH OTHER TRADES PRIOR TO INSTALLATION.

Q DIVISION 26 - ELECTRICAL

26.01. **MEP DEVICE/ FIXTURE COORDINATION:** COORDINATE LOCATIONS FOR DIFFUSERS, AND RETURN AIR GRILLES TO THE GREATEST EXTENT POSSIBLE IN ORDER TO MAINTAIN LIGHTING LAYOUT INDICATED IN THE DRAWINGS. MEP&FP CONTRACTORS SHALL COORDINATE WORK WITH OTHER DISCIPLINES PRIOR TO INSTALLATION. ALL ELECTRICAL ITEMS INDICATED IN OR ON CABINETRY OR MILLWORK SHALL BE SUPPLIED, INSTALLED AND COORDINATED BY THE EL

ABBREVIATIONS

ACC	ACCESSIBLE
ACI	AMERICAN CONCRETE INSTITUTE
ACT	ACOUSTICAL CEILING TILE
ADD	ADDENDUM
AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
APPROX	APPROXIMATE
ARCH	ARCHITECT (URAL)
ADJ	ADJACENT
B/B	BACK-TO-BACK
BC	BASE OF CURB
BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING
BM	BENCHMARK
BOT	BOTTOM
BRG	BEARING
BSMT	BASEMENT
BUR	BUILT-UP ROOF
BOW	BOTTOM OF WALL
B/W	BETWEEN
CAB	CABINET
CB	CATCH BASIN
C/C	CENTER TO CENTER
CD	CORE DECK
CF	CUBIC FOOT
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
CI	CAST IRON
CIP	CAST IRON PIPE
CJ	CONSTRUCTION OR CONTROL JOINT
CLG	CEILING
CLO	CLOSET
CLR	CLEAR (ANCE)
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS OR CONTINUE
COORD	COORDINATE
CPT	CARPET (ED)
CSMU	CALCIUM SILICATE MASONRY UNIT
CT	CERAMIC TILE
CW	CURTAIN WALL
D	DRYER
DBL	DOUBLE
DEM	DEMOLISH OR DEMOLITION
DET	DETAIL
DH	DOUBLE HUNG
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DL	DEAD LOAD
DS	DOWNSPOUT
DWG	DRAWING
DF	DRINKING FOUNTAIN
EA	EACH
EF	EACH FACE
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
ELEV	ELEVATION / ELEVATOR
ELEC	ELECTRIC (ALL)
ENGR	ENGINEER
EOP	EDGE OF PAVEMENT
EOS	EDGE OF SLAB
EQ	EQUAL
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPOSED
EXPN	EXPANSION
EXT	EXTERIOR
FBO	FURNISHED BY OTHERS
FD	FLOOR DRAIN
FEC	FIRE EXTINGUISHER & CABINET
FFE	FINISH FLOOR ELEVATION
FFW	FINISH FACE OF WALL
FHC	FIRE HOSE & CABINET
F/F	FACE TO FACE
FL	FLOOR
FLG	FLANGE
FND	FOUNDATION
FO	FACE OF
FOB	FACE OF BRICK
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FR	FRAME (ED), (ING)
FRT	FIRE RETARDANT TREATED
FT	FOOT/FEET
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GHM	GALVANIZED HOLLOW METAL
GI	GALVANIZED IRON
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
H	HEIGHT
HC	HANDICAP
HM	HOLLOW METAL
HOD	HIGHEST OPERABLE DEVICE
HORIZ	HORIZONTAL
HP	HIGH POINT/HORSE POWER
HSS	HOLLOW STRUCTURAL STEEL
HT	HEIGHT
HVAC	HEATING / VENTILATION / AIR CONDITIONING
HW	HARDWARE
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IJ	ISOLATION JOINT
IN	INCH / INCHES
INSUL	INSULATION
JAN	JANITOR'S CLOSET
JG	JOIST GIRDER
JT	JOINT
K	THOUSAND
KIP	1000 #
KJ	KEY JOINT
KSI	1000 # PER SQ IN
LAM	LAMINATE (D)
LF	LINEAR FOOT
L	LENGTH, ANGLE
LAB	LABORATORY
LAV	LAVATORY
LH	LEFT HAND
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LP	LOW POINT
LT GA	LIGHT GAUGE
LT	LIGHT
MATL	MATERIAL
MAX	MAXIMUM
MC	MISCELLANEOUS CHANNEL
MECH	MECHANICAL
MEZZ	MEZZANINE
MANUF	MANUFACTURE (R)
MH	MANHOLE
MIN	MINIMUM
MO	MASONRY OPENING
MULL	MULLION
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O/H	OVERHEAD
OC	ON CENTER (S)
OCC	OCCUPANT (S)
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OH	OPPOSITE HAND
OPG	OPENING
OPP	OPPOSITE
PJ	PRECAST JOINT
PL	PROPERTY LINE, PLATE
PLAM	PLASTIC LAMINATE
PNT	PAINT (ED)
PREFAB	PREFABRICATED
PREFIN	PREFINISHED
PREMANUF	PREMANUFACTURED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT / PRESSURE TREATED / POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PWD	PLYWOOD
QT	QUARRY TILE
RA	RETURN AIR
RAD	RADIUS
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REBAR	REINFORCEMENT BAR
REF	REFRIGERATOR / REFERENCE
REINF	REINFORCE (D), (ING)
REQ'D	REQUIRED
RET	RETAINING
REV	REVISION (S), REVISED
RH	RIGHT HAND
RJ	RECESSED JOINT
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RTU	ROOF TOP UNIT
SC	SEALED CONCRETE
SCHED	SCHEDULED
SD	STORM DRAIN
SECT	SECTION
SF	STOREFRONT
SIM	SIMILAR
SPEC	SPECIFICATION (S)
SQ	SQUARE
SS	SOLID SURFACE
SST	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SY	SQUARE YARD
TELE	TELEPHONE
TERM	TERMINATION
T&G	TONGUE AND GROOVE
TH	THICK (NESS)
THK	THICK (NESS)
TO	TOP OF
TOC	TOP OF CURB
TOGB	TOP OF GRAB BAR
TOF	TOP OF FOOTING
TOJ	TOP OF JOIST
TOS	TOP OF SLAB / TOP OF STEEL
TOW	TOP OF WALL
TYP	TYPICAL
TZ	TERRAZZO
UNO	UNLESS NOTED OTHERWISE
VB	VINYL BASE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VWC	VINYL WALL COVERING
W	WASHER / WIDTH / WIDE FLANGE
WB	WOOD BASE
WC	WATER CLOSET
WD	WOOD
WH	WATER HEATER
WIN	WINDOW
WP	WORK POINT / WATERPROOFING
WT	WEIGHT
W/W	WALL TO WALL
WWF	WELDED WIRE FABRIC
W/	WITH
W/O	WITHOUT

ANNOTATION SYMBOLS & TAGS

ROOM NAME
101
ROOM REFERENCE TAG

COLUMN LINES:
CONSECUTIVE NUMBERS ARE USED FOR COLUMN LINES RUNNING NORTH & SOUTH

CONSECUTIVE LETTERS ARE USED FOR COLUMN LINES RUNNING EAST & WEST

FACE OF MASONRY OR FACE OF GIRDER

677.52
ELEVATION TAG:
677.52 - ELEVATION (FT)

A1.01
EXTERIOR ELEVATION TAG:
ELEVATION 1 ON SHEET A101

3 A1.01
INTERIOR ELEVATION TAG:
INTERIOR ELEVATION 3 ON SHEET A101

FF&E:
BY OTHERS

REVISION CLOUD AND TAG:
USED TO INDICATE SCOPE OF CURRENT REVISION

OG
WALL TAG:
INTERIOR WALL TYPE OG
(SEE PARTITION LEGEND)

101
DOOR TAG:
DOOR NUMBER 101
(SEE FLOOR PLANS AND DOOR SCHEDULE)

C-1
CURTAINWALL TAG:
CURTAINWALL TYPE 1
(SEE EXTERIOR ELEVATIONS AND GLAZING SCHEDULE)

S-1
STOREFRONT TAG:
STOREFRONT TYPE 1
(SEE EXTERIOR ELEVATIONS AND GLAZING SCHEDULE)

W-1
WINDOW TAG:
WINDOW TYPE 1
(SEE EXTERIOR ELEVATIONS AND GLAZING SCHEDULE)

L-1
LOUVER TAG:
LOUVER TYPE L1
(SEE LOUVER SCHEDULE)

TA01
SPECIALTY EQUIPMENT TAG:
SEE SPECIALTY EQUIPMENT SCHEDULE

G1
PLAN KEYNOTE TAG:
KEYNOTE NUMBER
SEE PLAN KEYNOTE SCHEDULE

1 A1.01
BUILDING SECTION TAG:
SECTION 1 ON SHEET A101

1 A1.01
WALL SECTION TAG:
SECTION 1 ON SHEET A101

1 A1.01
ENLARGED DETAIL TAG:
DETAIL 1 ON SHEET A101

CDS#
#
HEIGHT #
DEPTH #
WIDTH #
CASEWORK TAG

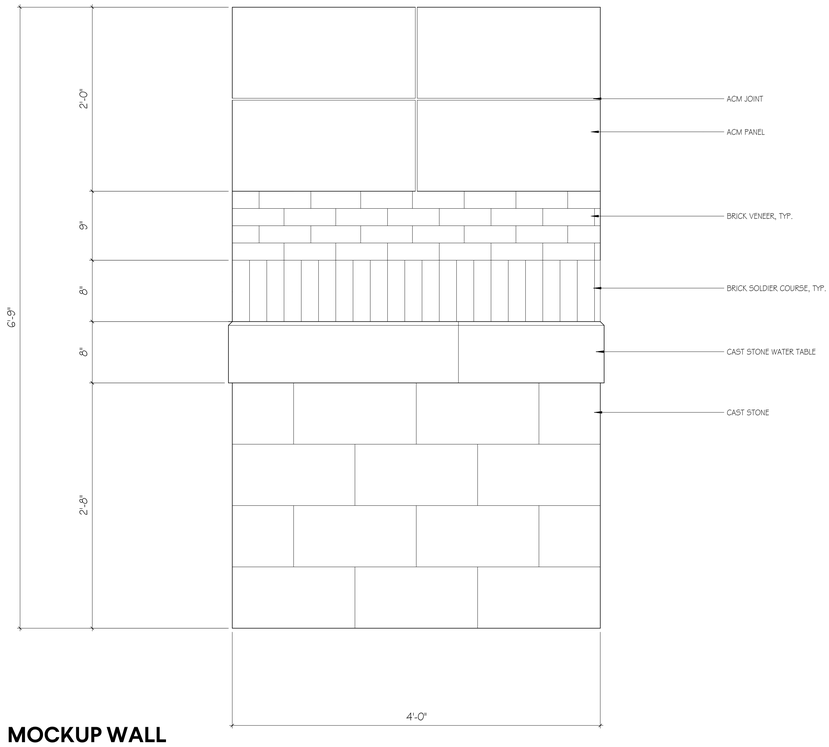
PRIMARY / ACCENT WALL FINISH	PNT-1	PNT-5
BASE FINISH	RB-1	
FLOOR FINISH	LVT-1	
CASEWORK / COUNTERTOP FINISH	PL-3	SS-1

INTERIOR FINISH TAG

PLAN NORTH
NORTH ARROW:
ARCHITECTURAL PLAN ORIENTATION

TRUE NORTH
NORTH ARROW:
CIVIL ORIENTATION

MOCKUP WALL

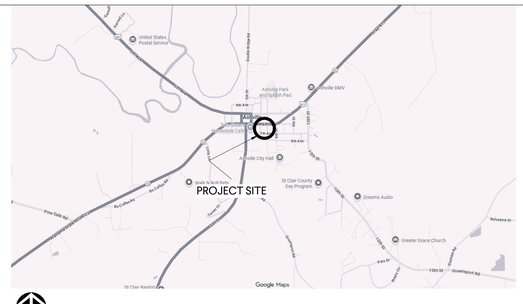


4 **MOCKUP WALL**
SCALE: 1 1/2" = 1'-0"

MOCKUP WALL NOTES

1. MOCKUP MUST BE APPROVED PRIOR TO ORDERING MATERIALS
2. PROVIDE ANY CMU BACKING, BRICK TIES, JOINT REINFORCING, MORTAR STOP AND FLASHING AS REQUIRED

VICINITY MAP



TRUE NORTH

LOCATION MAP

TRUE NORTH

GMC
Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

ISSUE	DATE
100% CONSTRUCTION DOCUMENTS	1/9/2026

DRAWN BY: Author
CHECKED BY: Checker

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953
GMC # AHUN250003

STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

GENERAL INFORMATION & MOCKUP WALL

G1.03

1/13/2026 2:29:48 PM TEMPLATE VERSION: 2025.1

ACCESSIBLE ELEMENTS NOTES

01. **ACCESSIBILITY STANDARDS:** CONTRACTOR MUST BE FAMILIAR WITH AND, SHALL MAINTAIN ON THE JOB SITE, A COPY OF THE CURRENT ADAAG STANDARDS AND IBC CHAPTER 11 ACCESSIBILITY REQUIREMENTS (OR FLORIDA BUILDING CODE ACCESSIBILITY) AS APPLICABLE. DURING CONSTRUCTION THE GENERAL CONTRACTOR SHALL BE MINDFUL OF THESE ACCESSIBILITY REQUIREMENTS INCLUDING MOUNTING HEIGHTS AND FLOOR MANEUVERING CLEARANCES AND, IN THE EVENT THAT FIELD CONDITIONS WILL NOT ALLOW FOR ACCESSIBILITY REQUIREMENTS TO BE MAINTAINED IN A PARTICULAR CONDITION OR INSTALLATION, CONTRACTOR SHALL NOTIFY THE ARCHITECT FOR FURTHER DIRECTION PRIOR TO PROCEEDING.

02. **ADA DEVICES:** ALL DEVICES AND FIXTURES DEPICTED HEREIN AND WHERE NOTED AS "ADA" OR "ACCESSIBLE" SHALL AT MINIMUM BE INSTALLED IN STRICT ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT AND APPLICABLE BUILDING CODES. WHERE ACCESSIBILITY REQUIREMENTS MAY VARY BY JURISDICTION, FOLLOW THE MOST STRINGENT REQUIREMENTS.

03. **ADA MOUNTING HEIGHTS:** ALL MOUNTING HEIGHTS SHOWN ON THIS PAGE ARE TO BE MEASURED FROM THE TOP OF FLOOR FINISH (i.e. NOT FROM SUBFLOOR). THE CONTRACTOR SHALL ACCOUNT FOR THE THICKNESS OF THE SPECIFIED FLOOR FINISH WHEN ESTABLISHING THE MOUNTING HEIGHTS OF ACCESSIBLE ITEMS.

04. **ADA PLAN DIMENSIONS:** ALL PLAN DIMENSIONS SHALL BE MEASURED FROM THE FINISH FACE OF SCHEDULED WALL FINISH. THE CONTRACTOR SHALL ACCOUNT FOR THE THICKNESS OF THE SPECIFIED WALL FINISH e.g., WALL TILE, WHEN ESTABLISHING PLAN DIMENSIONS AND CLEARANCES FOR ACCESSIBLE ELEMENTS.

05. **PLUMBING ELEMENTS AND FIXTURES:** SEE PLUMBING DRAWINGS AND SPECIFICATIONS FOR REQUIRED LOCATIONS AND MOUNTING HEIGHT OF PLUMBING ELEMENTS AND FIXTURES. SHOULD CONFLICT EXIST BETWEEN MOUNTING HEIGHTS AND/OR CLEARANCES INDICATED HEREIN AND THE REQUIREMENTS OF THE PLUMBING ENGINEER, THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT FOR CLARIFICATION PRIOR TO ROUGH-IN.

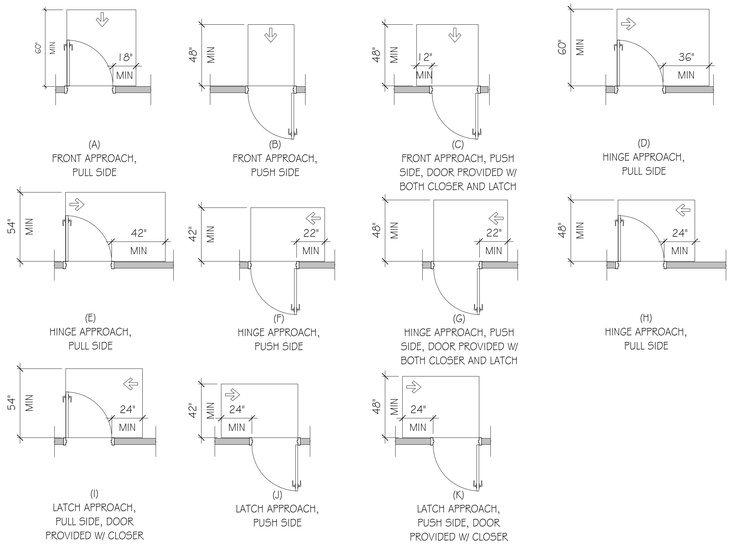
06. **ELECTRICAL DEVICES:** SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR REQUIRED MOUNTING HEIGHT OF ELECTRICAL DEVICES AND FIXTURES. SHOULD CONFLICT EXIST BETWEEN MOUNTING HEIGHTS INDICATED HEREIN AND THE REQUIREMENTS OF THE ELECTRICAL ENGINEER, THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT FOR CLARIFICATION PRIOR TO ROUGH-IN.

ABBREVIATIONS AND ACRONYMS

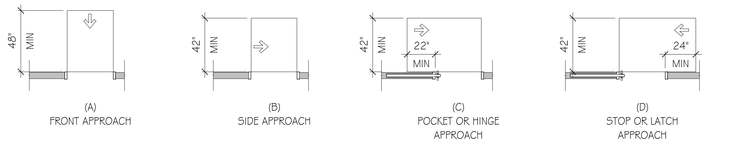
AFF . . . . . ABOVE FINISHED FLOOR	MAX . . . . . MAXIMUM
BOGB . . . . . BOTTOM OF GRAB BAR	MIN . . . . . MINIMUM
FFE . . . . . FINISHED FLOOR ELEVATION	TOGB . . . . . TOP OF GRAB BAR
FFW . . . . . FINISH FACE OF WALL	WC . . . . . WATER CLOSET
FO . . . . . FACE OF	W/ . . . . . WITH
GB . . . . . GRAB BAR	W/O . . . . . WITHOUT
HOD . . . . . HIGHEST OPERABLE DEVICE	

DOOR AND GATE MANEUVERING CLEARANCES

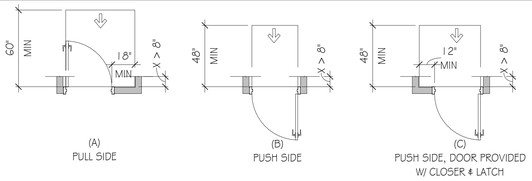
404.2.4.1 MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS AND GATES



404.2.4.2 MANEUVERING CLEARANCES AT DOORWAYS WITHOUT DOORS OR GATES, MANUAL SLIDING DOORS, AND MANUAL FOLDING DOORS

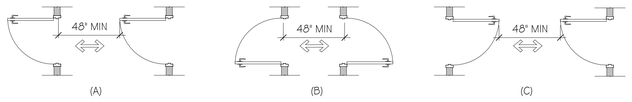


404.2.4.3 RECESSED DOORS AND GATES



404.2.4.3 RECESSED DOORS AND GATES. A DOOR CAN BE RECESSED DUE TO WALL THICKNESS OR BECAUSE OF CASEWORK AND OTHER FIXED ELEMENTS ADJACENT TO THE DOORWAY. THIS PROVISION MUST BE APPLIED WHEREVER DOORS ARE RECESSED.

404.2.4.6 DOORS IN SERIES AND GATES IN SERIES

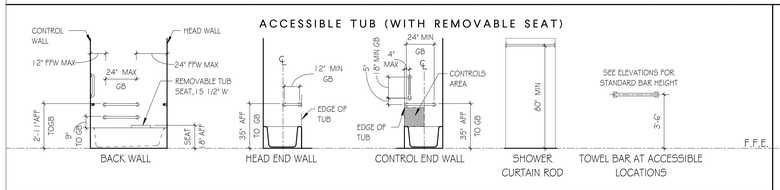


ACCESSIBLE PLUMBING ELEMENTS AND FACILITIES - ELEVATION VIEW

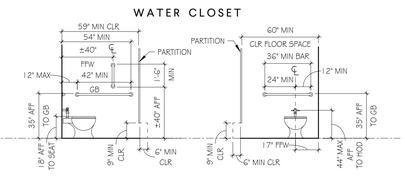
SEE G1.12 FOR PLAN DETAILS

IMPORTANT NOTE: ALL HEIGHTS GIVEN BELOW ARE FROM FACE OF FLOOR FINISH (NOT FROM FINISH SLAB)

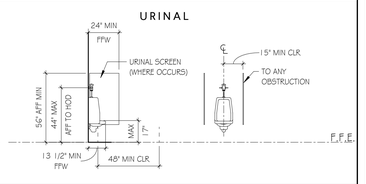
ACCESSIBLE TUB (WITH REMOVABLE SEAT)



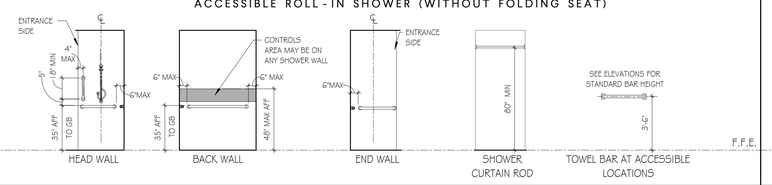
WATER CLOSET



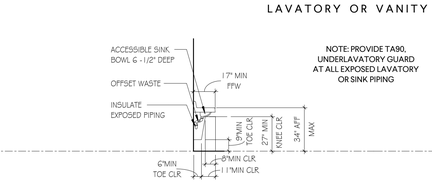
URINAL



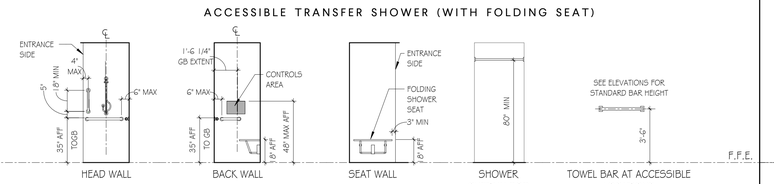
ACCESSIBLE ROLL-IN SHOWER (WITHOUT FOLDING SEAT)



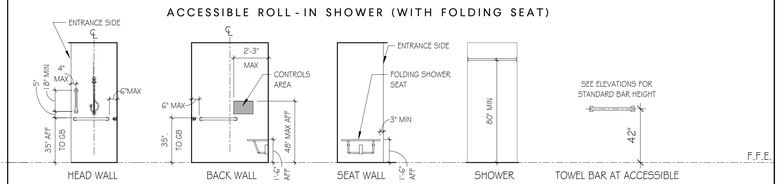
LAVATORY OR VANITY SINK



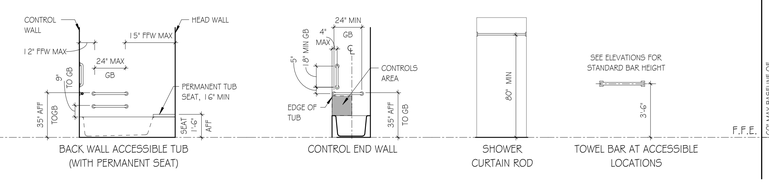
ACCESSIBLE TRANSFER SHOWER (WITH FOLDING SEAT)



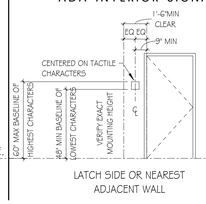
ACCESSIBLE ROLL-IN SHOWER (WITH FOLDING SEAT)



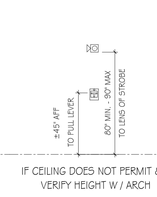
ACCESSIBLE TUB (WITH PERMANENT SEAT)



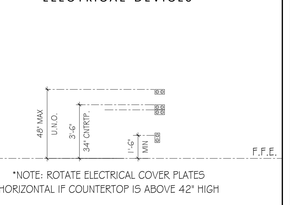
ADA INTERIOR SIGNAGE



FIRE ALARM W/ STROBE

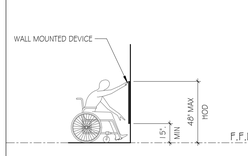


ELECTRICAL DEVICES

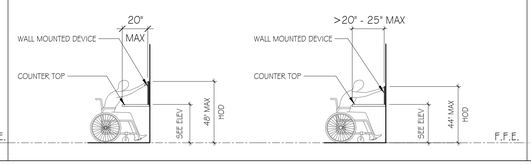


TYPICAL REACH RANGES

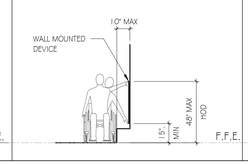
UNOBSTRUCTED FORWARD REACH



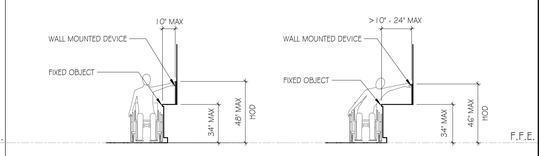
OBSTRUCTED HIGH FORWARD REACH



UNOBSTRUCTED SIDE REACH

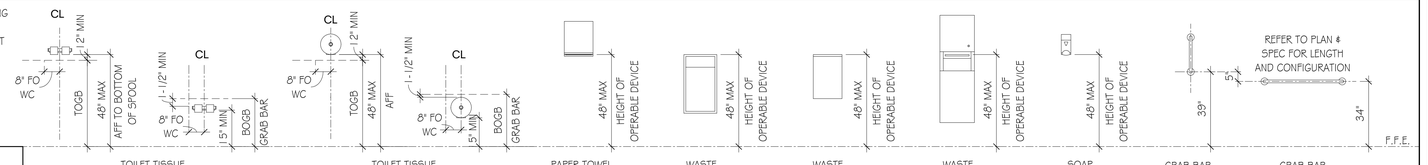


OBSTRUCTED HIGH SIDE REACH

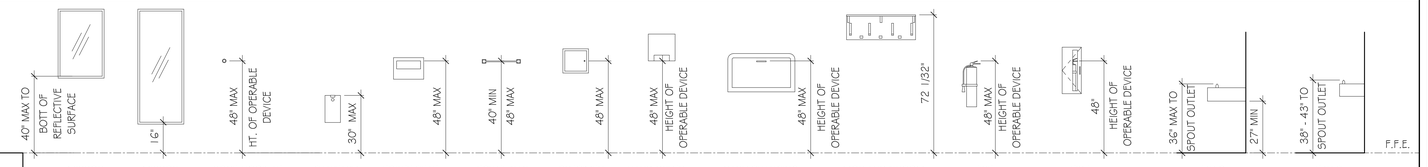


TYPICAL ACCESSIBLE MOUNTING HEIGHTS

VERIFY EXACT MOUNTING HEIGHT OF SUBMITTED DEVICE WITH ARCHITECT



TOILET ACCESSORY TYPE	DRAWING DESIGNATION
TOILET TISSUE HOLDER	TA01, TA50
TOILET TISSUE DISPENSER	TA02
PAPER TOWEL DISPENSER	TA03, TA04, TA05, TA06, TA07, TA08, TA09, TA10
WASTE RECEPTACLE	TA11 RECESSED
WASTE RECEPTACLE	TA12, TA13 SURFACE MOUNTED
WASTE RECEPTACLE	TA14, TA15, TA16 RECESSED
SOAP DISPENSER	TA17, TA18
GRAB BAR VERTICAL	18" TA23 or TA74
GRAB BAR HORIZONTAL	18" TA23 or TA74; 36" TA24 or TA65 or TA75; 42" TA25 or TA66 or TA76; 48" TA26



TOILET ACCESSORY TYPE	DRAWING DESIGNATION
MIRROR ADA	TA30, TA31, TA77
MIRROR FULL LENGTH	TA32
ROBE HOOK AT ACCESSIBLE LOCATIONS (SEE ELEVATIONS FOR STANDARD HOOK HT)	TA33
SANITARY NAPKIN DISPOSAL	TA36
TOILET SEAT COVER DISPENSER	TA38
TOWEL BAR OR TOILETRY SHELF	TA53 T.B., TA54 T.S.
SPECIMEN PASS-THRU CABINET	TA60
HAND DRYER	TA80
BABY CHANGING STATION	TA85
MOP AND BROOM HOLDER	TA95
FIRE EXTINGUISHER	FE
FIRE EXTINGUISHER CABINET	FEC

GMC

Goodwyn Mills Cawood, LLC
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Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

ISSUE | DATE
100% CONSTRUCTION DOCUMENTS | 1/9/2026

DRAWN BY: Author
CHECKED BY: Checker

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

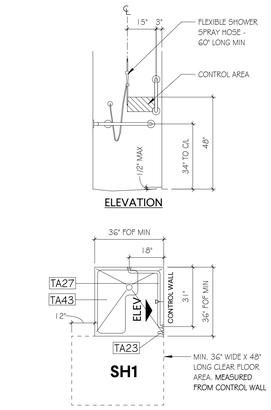
ACCESSIBILITY DATA

G1.11

TEMPLATE VERSION: 2025.1
1/13/2026 2:29:50 PM

ACCESSIBLE PLUMBING LAYOUTS - ADAAG / ANSI

ACCESSIBLE SHOWER STALL LAYOUTS

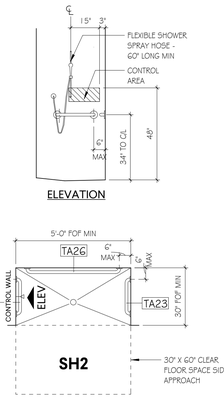


ELEVATION

PLAN

TRANSFER SHOWER STALL

PLAN DESIGNATION **SH1**

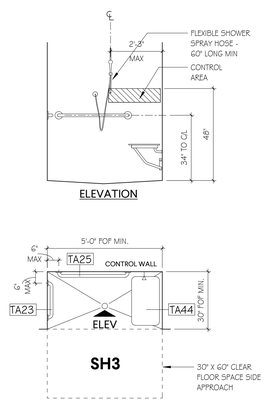


ELEVATION

PLAN

ROLL-IN SHOWER STALL, NO SHOWER SEAT

PLAN DESIGNATION **SH2**

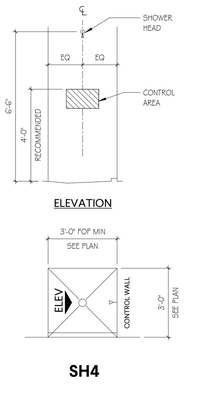


ELEVATION

PLAN

ROLL-IN SHOWER STALL - W/ SHOWER SEAT

PLAN DESIGNATION **SH3**



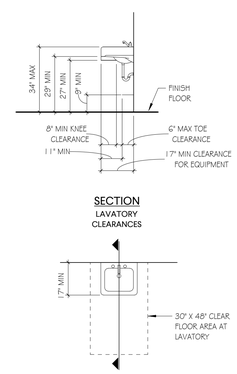
ELEVATION

PLAN

NON-ACCESSIBLE SHOWER

PLAN DESIGNATION **SH4**

ACCESSIBLE LAVATORIES

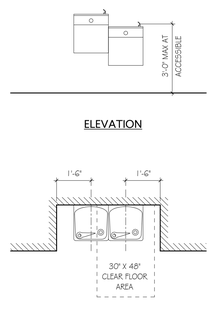


SECTION
LAVATORY CLEARANCES

PLAN

ACCESSIBLE LAVATORY

FRONT APPROACH

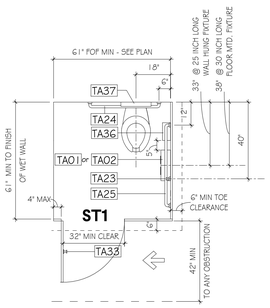


ELEVATION

PLAN

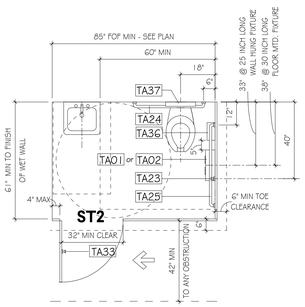
FOUNTAIN / COOLER - HI-LO

ACCESSIBLE TOILET STALL OR COMPARTMENT LAYOUTS



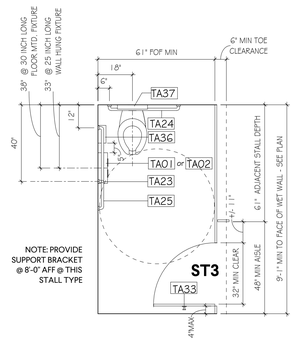
WHEELCHAIR ACCESS. STALL

PLAN DESIGNATION **ST1**



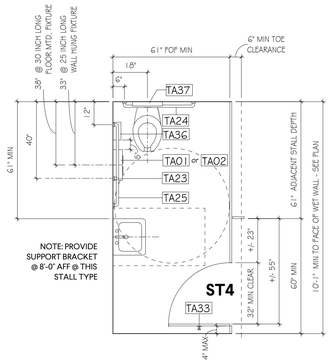
WHEELCHAIR ACCESS. STALL W/LAV.

PLAN DESIGNATION **ST2**



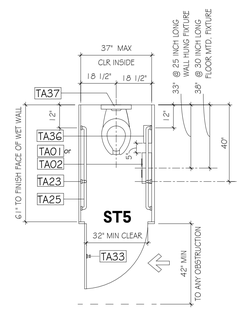
WHEELCHAIR ACCESS. STALL - END OF ROW

PLAN DESIGNATION **ST3**



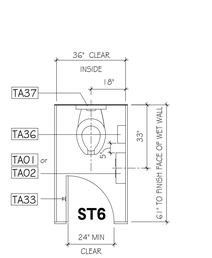
WHEELCHAIR STALL W /LAV - END OF ROW

PLAN DESIGNATION **ST4**



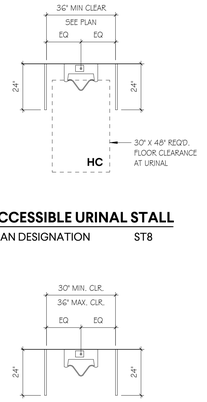
AMBULATORY ACCESSIBLE STALL

PLAN DESIGNATION **ST5**



STANDARD TOILET STALL

PLAN DESIGNATION **ST6**



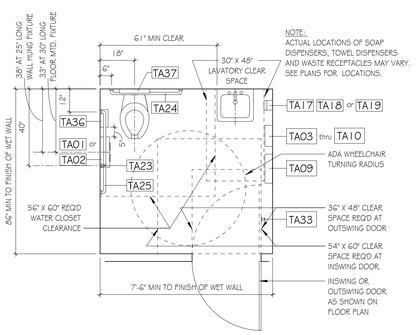
ACCESSIBLE URINAL STALL

PLAN DESIGNATION ST8

STANDARD URINAL STALL

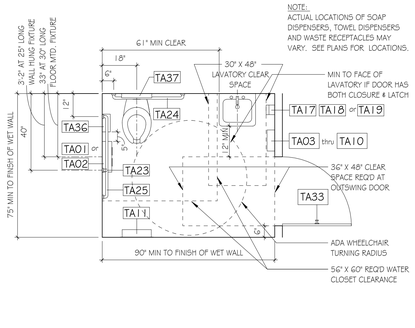
PLAN DESIGNATION ST7

ACCESSIBLE TOILET ROOM LAYOUTS



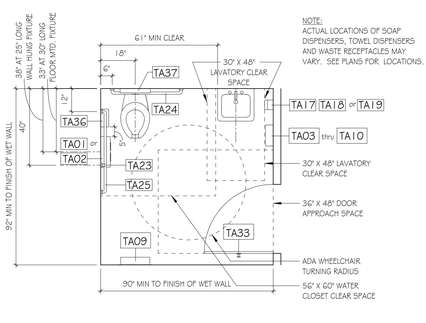
ACCESSIBLE TOILET ROOM TYPE 1

INSWING OR OUTSWING DOOR ON FRONT WALL



ACCESSIBLE TOILET ROOM TYPE 2

OUTSWING DOOR ON SIDE WALL



ACCESSIBLE TOILET ROOM TYPE 3

INSWING DOOR ON SIDE WALL

NOTES:
1. LOCATE FLUSH ACTIVATION ON WIDE SIDE AT ALL TOILETS - LOCATE FLUSH VALVE BENEATH ADJACENT GRAB BARS.
2. SANITARY NAPKIN DISPOSALS TO BE PROVIDED AT ALL FEMALE, UNISEX, & FAMILY TOILETS

GMC

Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

ISSUE	DATE
100% CONSTRUCTION DOCUMENTS	1/9/2026

DRAWN BY: Author
CHECKED BY: Checker

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

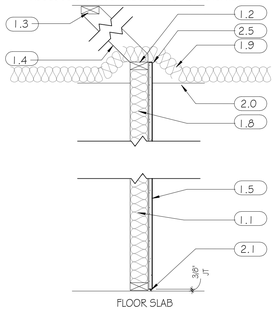
STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

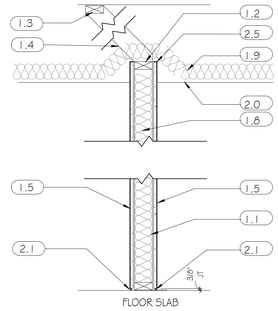
ACCESSIBLE PLUMBING LAYOUTS

G1.12

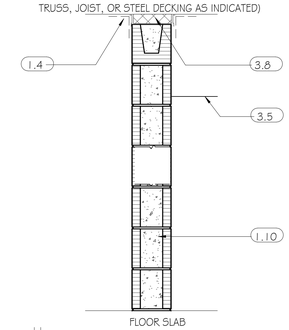
TEMPLATE VERSION: 2025.1
1/13/2026 2:29:52 PM



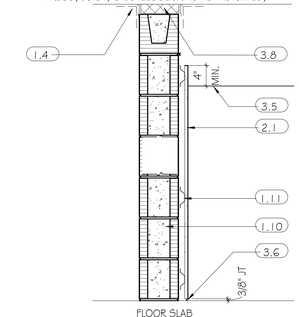
DRAWING MARK	DESCRIPTION	U.L. #	NA
		STC	--
OWG1	0 HR. - GYPSUM - 1 SIDED		



DRAWING MARK	DESCRIPTION	U.L. #	N/A
		STC	52
OWG2	0 HR. - GYPSUM - 2 SIDED		



DRAWING MARK	DESCRIPTION	U.L. #	U905
		STC	50
0M	0 HR. - CMU		
1M	1 HR. - CMU		
2M	2 HR. - CMU		2M ONLY



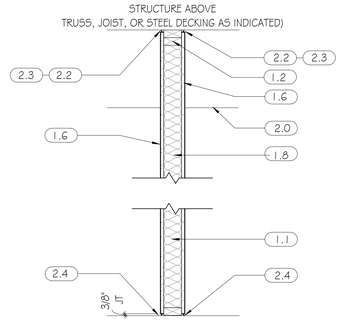
DRAWING MARK	DESCRIPTION	U.L. #	U905
		STC	51
0MG	0 HR. - CMU - GYPSUM FURRED		
1MG	1 HR. - CMU - GYPSUM FURRED		
2MG	2 HR. - CMU - GYPSUM FURRED		

PARTITION KEY

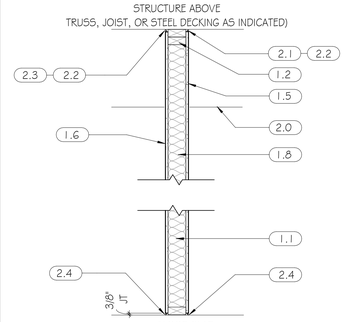
TYPE WG WOOD STUDS	OWG 2X4
TYPE 1WG WOOD STUDS	1WG 2X4
TYPE 2WG WOOD STUDS	2WG 2X4
TYPICAL PARTITION (SHOWN THUS)	

STANDARD FRAMING — WOOD STUDS •

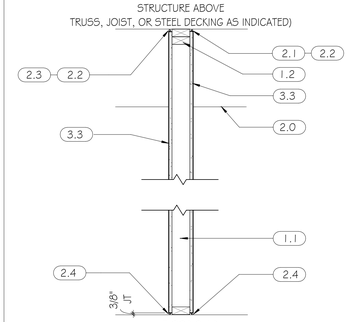
PARTITIONS USE STANDARD FRAMING EXCEPT WHERE VARIANT FRAMING SIZE IS INDICATED



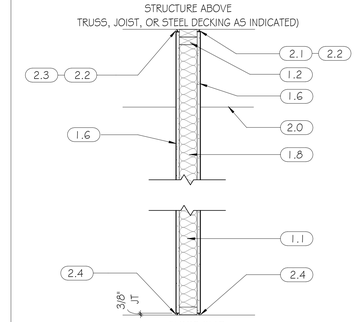
DRAWING MARK	DESCRIPTION	U.L. #	U305
		STC	3.5": 33 5.5": 36
1WG	1 HR. - GYPSUM - WOOD FRAMING		



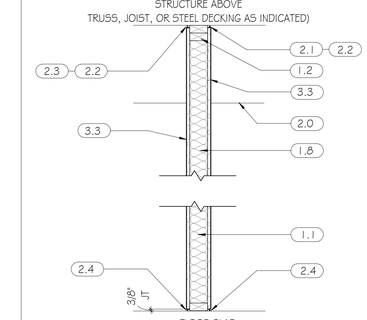
DRAWING MARK	DESCRIPTION	U.L. #	NA
		STC	
OWG	0 HR. - GYPSUM - WOOD FRAMING		



DRAWING MARK	DESCRIPTION	U.L. #	NA
		STC	
OWGSND	0 HR. - GYPSUM - WOOD FRAMING		



DRAWING MARK	DESCRIPTION	U.L. #	NA
		STC	
OWGSND	0 HR. - GYPSUM - WOOD FRAMING		



DRAWING MARK	DESCRIPTION	U.L. #	NA
		STC	
OWGH1SND	0 HR. - GYPSUM - HIGH IMPACT WOOD FRAMING		

NUMBERED NOTES

(NOT ALL NOTES AND CONDITIONS APPLY)

1.1 WOOD STUDS 16" OC DOUBLE-STUD JAMBS FULL HT. AT ALL DOOR OPENINGS

1.2 CONTINUOUS WOOD STUD (NOMINAL THICKNESS)

1.3 2x4 TRACK AS NEEDED TO RECEIVE PARTITION BRACE

1.4 WOOD STUD BRACING MIN. 48 IN. OC (24" OC AT WALL-HUNG CABINETS)

1.5 AT EXTERIOR (PERIMETER) FURRING: 2 IN. METAL Z-FURRING W/ MIN. R-8 BOARD INSUL.

1.6 ONE LAYER 5/8 IN. GYP. BD

1.7 ONE LAYER 5/8 IN. TYPE 'X' GYP. BD

1.8 SOUND ATTENUATION BATT INSULATION. 3.5" THICK

1.9 SOUND ATTENUATION BATT INSULATION. 3.5" THICK. DRAPE OVER & EXTEND 4 FT. EACH SIDE OF PARTITION

2.0 ACOUSTICAL CEILING PANELS. WHERE PANELS W/ COMBINED NRC/CAC RATINGS OF .70/35 (OR BETTER) ARE USED, DRAPED INSULATION MAY BE OMITTED

2.1 ACOUSTICAL SEALANT JOINT. PROVIDE CONT. BEAD UNDER EACH LAYER GYP BD

2.2 ACOUSTICAL SEALANT JOINT. AT WOOD DECKS, COPE GYP. BD, TO UNDERSIDE OF DECK. FILL VOIDS W/ INSULATION. APPLY ACOUSTICAL SEALANT CONT. AT JOINT

2.3 UL LISTED FIRE-RESISTANCE RATED HW (HEAD OF WALL) JOINT (FIRE CAULKING)

2.4 UL LISTED FIRE-RESISTANCE RATED BW (BOTTOM OF WALL) JOINT (FIRE CAULKING)

2.5 EXTEND GYP BOARD TO TOP OF WOOD STUD TO ESTABLISH A DRAFT STOP ASSEMBLY. CONDUIT TURNOUTS AND ELECTRICAL BOXES MUST STAND CLEAR OF WOOD STUDS TO ALLOW FOR APPLICATION OF UNINTERRUPTED GYPSUM MEMBRANE

2.6 1/2" PLYWOOD SHEATHING

2.7 PITCHED OR PARALLEL CHORD WOOD TRUSSES AT 24" OC

2.8 RC-1 CHANNELS: (NO INSULATION) 16" OC; (WITH INSULATION) 12" OC

2.9 5/8" GYPSOM PANELS TYPE C

3.0 WOOD JOIST AT 16" OC

3.1 WOOD STRUCTURAL PANELS, NOMINAL 1"

3.2 FINISH FLOOR OR FLOOR TOPPING MIXTURE

3.3 ONE LAYER 5/8 IN. HIGH IMPACT GYP. BD

GENERAL NOTES - PARTITIONS

1. UL LISTED ASSEMBLIES
A. WHERE UL ASSEMBLY NUMBERS ARE REFERENCED ABOVE, PARTITIONS SHALL BE CONSTRUCTED IN STRICT COMPLIANCE WITH REQUIREMENTS SET FORTH BY THE UL FIRE RESISTANCE DIRECTORY. NO DEVIATION SHALL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY THE ARCHITECT AND/OR BUILDING OFFICIAL.

2. FIRE BARRIERS, FIRE PARTITIONS, & SMOKE BARRIERS (FIRE-RATED)
A. ALL PERIMETER JOINTS MUST BE PROTECTED BY UL LISTED FIRE-RESISTANT JOINT SYSTEMS.
B. ALL PENETRATIONS OF RATED ASSEMBLIES MUST BE PROTECTED BY UL LISTED THROUGH-PENETRATION FIRESTOPPING ASSEMBLIES.
C. FIRE DAMPERS MUST PROTECT HVAC DUCT PENETRATIONS.
D. IDENTIFY FIRE WALLS, SMOKE BARRIERS, ETC., IN ACCESSIBLE CONCEALED FLOOR, FLOOR-CEILING OR ATTIC SPACES, BY STENCILING "X-HOUR FIRE AND /OR SMOKE BARRIER" IN 3-INCH HIGH CONTRASTING LETTERS, 3/8-INCH MINIMUM STROKE. LOCATE WITHIN 15 FEET OF END OF WALL, AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION.

3. SMOKE PARTITIONS (NON-RATED)
A. ALL PERIMETER JOINTS MUST BE SEALED WITH AIRTIGHT SEALANT APPLICATION.
B. ALL PIPING, ELECTRICAL, AND DUCT PENETRATIONS MUST BE SEALED WITH AIRTIGHT SEALANT APPLICATION.

4. SOUND INSULATION
A. INSULATION THICKNESS SHALL MATCH CAVITY DEPTH UNLESS NOTED OTHERWISE.
B. INSULATE BEHIND RECESSED ITEMS IN ANY SCHEDULED ACOUSTIC PARTITIONS.
C. INSULATION MAY BE OMITTED AT CHASES NOT EXCEEDING 10 S.F. IN AREA.

5. ACOUSTICAL SEALANT
A. AT ALL GYP BOARD AND WOOD STUD PARTITIONS: REQUIRED AT BOTTOM AND TOP RUNNERS AND AT WALL ANGLES WHERE DISSIMILAR MATERIALS MEET (SEE DETAILS).
B. AT SCHEDULED ACOUSTIC PARTITIONS: AIRTIGHT SEAL IS REQUIRED AT ALL PENETRATIONS.
C. ELECTRICAL AND OTHER BOXES TO BE WRAP-SEALED (SEE DETAILS).

6. PARTITION COORDINATION
A. COMPLY WITH "9.07 PARTITION COORDINATION WITH OTHER TRADES" REQUIREMENTS LOCATED UNDER "GENERAL NOTES" ON PROJECT INFORMATION DRAWING G1.02

GMC

Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

ISSUE | DATE
100% CONSTRUCTION DOCUMENTS | 1/9/2026

DRAWN BY: Author
CHECKED BY: Checker

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

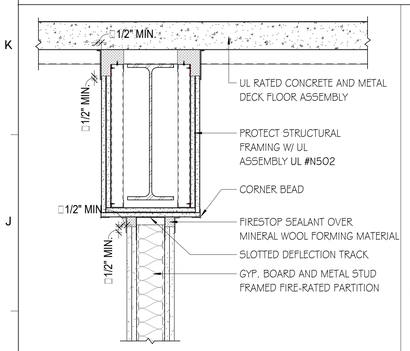
01/09/2026

PARTITION TYPES

G1.21

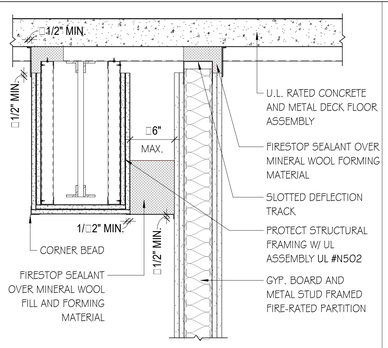
1/13/2026 2:29:53 PM TEMPLATE VERSION: 2025.1

HEAD OF WALL FIRESTOPPING



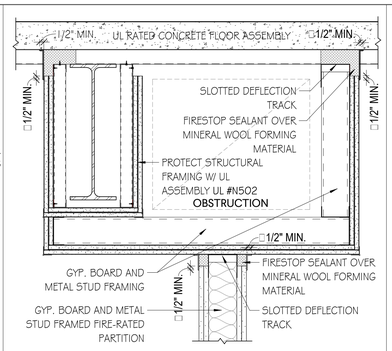
ENGINEERING JUDGEMENT (HILTI) #554953a
(1 & 2 HOUR, 2 1/2" WIDTH, 50% MOVEMENT)

H1 WALL PARALLEL TO BEAM
SCALE: 1 1/2" = 1'-0"



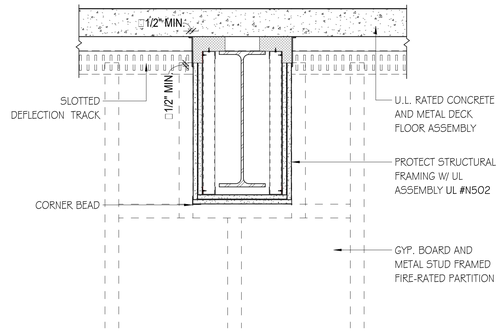
ENGINEERING JUDGEMENT (HILTI) #554890a
(1 & 2 HOUR, 2 1/2" WIDTH, 33% MOVEMENT)

H3 WALL OFFSET @ STL. STRUCT.
SCALE: 1 1/2" = 1'-0"



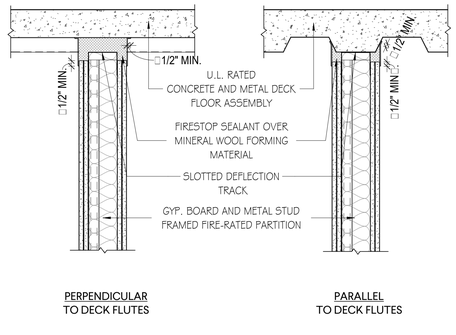
ENGINEERING JUDGEMENT (HILTI) #554946a
(1 & 2 HOUR, 2 1/2" WIDTH, 50% MOVEMENT)

H5 WALL OFFSET@OBSTRUCTION
SCALE: 1 1/2" = 1'-0"



ENGINEERING JUDGEMENT (HILTI) #554951a
(1 & 2 HOUR, 2 1/2" WIDTH, 50% MOVEMENT)

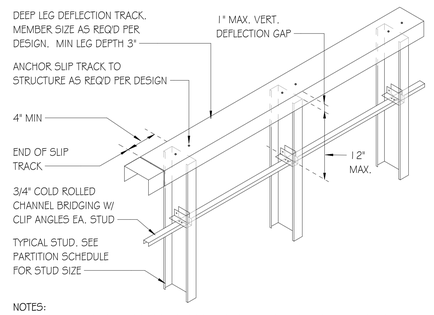
H7 WALL PERPENDICULAR TO BEAM
SCALE: 1 1/2" = 1'-0"



UL# HW-D-0042
(1 & 2 HOUR, 1" WIDTH, 50% MOVEMENT)

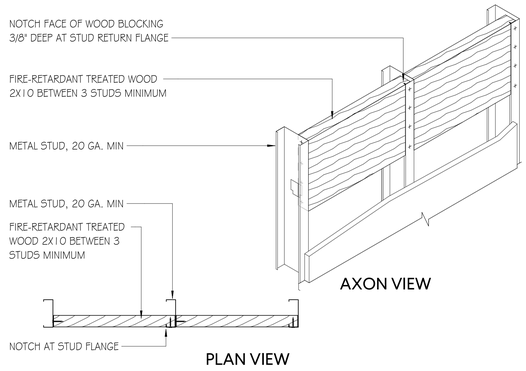
UL# HW-D-0049
(1 & 2 HOUR, 1" WIDTH, 50% MOVEMENT)

H10 RATED PARTITION @ METAL DECK
SCALE: 1 1/2" = 1'-0"



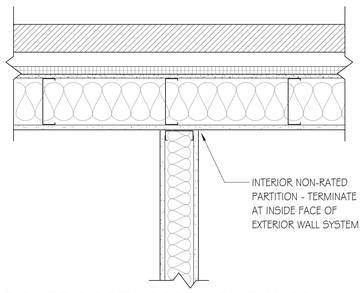
NOTES:
1. COMPLY WITH SPECIFICATION SECTION 092216 - NON-STRUCTURAL METAL FRAMING.
2. PROVIDE 3/4" CR CHANNEL BRIDGING AT 12" MAX. FROM TOP OF WALL.
3. PROVIDE ADDITIONAL 3/4" CR CHANNEL BRIDGING AT 48" OC VERT AT FULL HEIGHT ONE-SIDED PARTITIONS (GYP BOARD ONE SIDE ONLY), OR AS REQ'D PER DESIGN.

E7 SLIP TRACK DETAIL
SCALE: 1 1/2" = 1'-0"

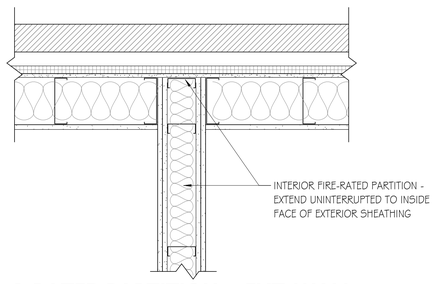


E10 BLOCKING DETAIL
SCALE: 1 1/2" = 1'-0"

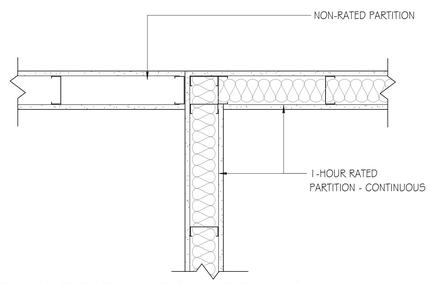
WALL PRIORITY DIAGRAMS



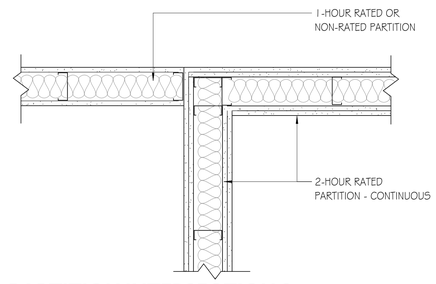
C1 NON-RATED PARTITION @ EXT. WALL
SCALE: 1 1/2" = 1'-0"



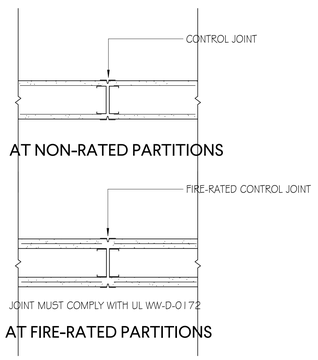
C4 RATED PARTITION @ EXT. WALL
SCALE: 1 1/2" = 1'-0"



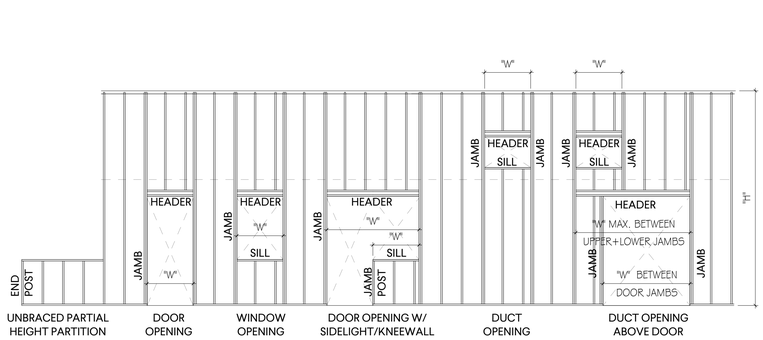
C7 PARTITION INTERSECTION 1
SCALE: 1 1/2" = 1'-0"



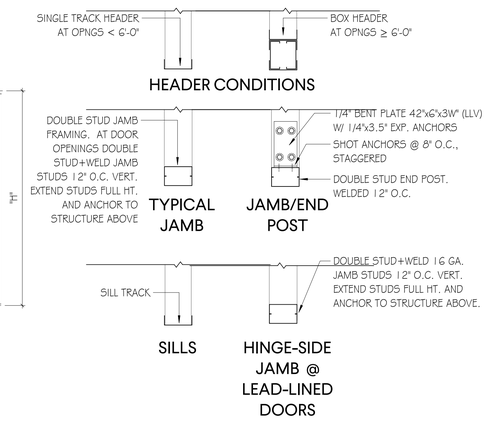
C10 PARTITION INTERSECTION 2
SCALE: 1 1/2" = 1'-0"



A1 CONTROL JOINT DETAILS
SCALE: 1 1/2" = 1'-0"



A4 STUD FRAMING DETAILS
SCALE: 1 1/2" = 1'-0"



NOTES:
1. DESIGN IS BASED ON A DIFFERENTIAL INTERNAL PRESSURE OF 5 POUNDS PER SQUARE FOOT, AND AN ALLOWABLE DEFLECTION OF L/240.
2. THE STEEL STUD GAUGE IS BASED ON STEEL STUD MANUFACTURER'S ASSOCIATION (SSMA) PROPERTIES AND PROCEDURES FOR ENGINEERING INTERIOR NON-STRUCTURAL NON-COMPOSITE FRAMING.
3. WHEN TYPICAL STUD SPANS EXCEED THOSE SHOWN, WHEN LOADING CONDITIONS ARE OTHER THAN STATED, OR FOR OPENING WIDTHS OR HEIGHTS EXCEEDING THOSE SHOWN, CONSULT STRUCTURAL ENGINEER.

STEEL STUD GAUGE FOR 3-5/8" & 6" HEADER, JAMB, AND SILL STUDS AND TRACKS

WIDTH "W"	HEIGHT "H"							
	‹ 8'	8' - 9'	9' - 10'	10' - 11'	11' - 12'	12' - 13'	13' - 14'	14' - 15'
‹ 4'	20	20	20	20	20	18	16	14
4' - 6'	20	20	20	20	18	16	14	
6' - 8'	20	20	20	18	16	14		
8' - 10'	20	20	18	16	14			
10' - 12'	18	18	16	14				

GMC
Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

ISSUE | DATE
100% CONSTRUCTION DOCUMENTS | 1/9/2026

DRAWN BY: Author
CHECKED BY: Checker

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

PARTITION DETAILS

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UL Solutions | Product iQ®

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States
BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

See General Information for Fire-resistance Ratings - CAN/ULC-S101 Certified for Canada
Design Criteria and Allowable Variances

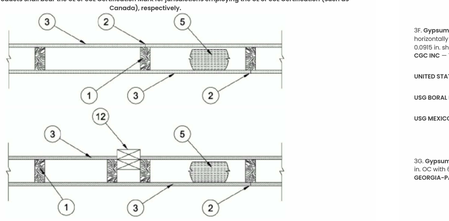
Design No. **U305**

August 8, 2025

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, 6F, 6G, or 6H **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 to 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-1I (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, 5/8 in. Type C.

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 34 min), Type LGFC5A (finish rating 30 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 GPFSI (finish rating 20 min), Type GPFS2 (finish rating 20 min), Type GPFSS (finish rating 25 min.), Type DS, Type DAP, Type DD (finish rating 20 min), Type DA, Type DAFC, 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), Type SCX (finish rating 24 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.), LightRoc (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 SCX (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 SilentX

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-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 0.140 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 RPF - 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 LGFC5A (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.

3X. **Gypsum Board* —** (As an alternate to item 3. For use with Item 5M) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 3 above. Two layers applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Joints in outer layers staggered with joints in inner layers. Inner layer secured to studs with 1-1/4 in. long Type W screws spaced 8 in. OC at perimeter and in the field. Outer layer secured to studs with 1-7/8 in. long Type W screws spaced 8 in. OC at the 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/m^3

ROCKWOOL MALAYSIA SDN BHD — Type Acoustical Fire Batts

ROCK WOOL MANUFACTURING CO — Delta Board

THERMAFIBER/OWENS CORNING — 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/ft^3. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft^3, in accordance with the application instructions supplied with the product. When Item 6B is used, Fiber, Sprayed shall be SANCTUARY.

Applegate Greenfiber Acquisition LLC — Insulmax and SANCTUARY for use with wet or dry application.

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/OWENS CORNING — 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/ft^3.
INTERNATIONAL CELLULOSE CORP — Cellobar-RL

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

5I. **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. To facilitate the installation of the material, any thin, woven or non-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials on either face of the studs. The minimum dry density shall be 5.79 lbs/ft^3.

Applegate Greenfiber Acquisition LLC — Applegate Advanced Stabilized Cellulose Insulation

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 FR65008, 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® Q, E1179†, Sprayrite® 178, Sprayrite® 81206, Walltite® 200, Walltite® US, Walltite® US-N, Walltite® HP+, Walltite® MAX, Walltite® LWP, Walltite® Plus, Walltite® One, and Enertite® Max

5M. **Foamed Plastic* -** (Optional, Not Shown - For use with Item 3X) - Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.
BASF CORP – Type Walltite® v.5

5N. **Loose Fill Material* –** Optional - (As an alternate to Items 5-5M) - Shredded glass fibers bearing the UL Classification Marking as to Surface Burning. Blown into wall cavities through pre-installed fabric stapled or adhered to studs.
CERTAINTEED LLC – Type InsulSafe II, InsulSafe SP, InsulSafe XC, Northern White,or OPTIMA

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 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 are 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. Phillips 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

UL Product iQ™

BXUV.U454

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

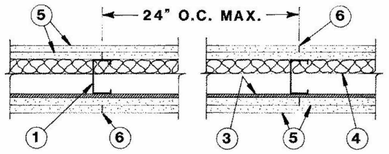
See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada
Design Criteria and Allowable Variances

Design No. U454

May 28, 2020

Nonbearing Wall Rating — 2 HR.



HORIZONTAL SECTION

1. **Studs —** Channel-shaped min 2-1/2 in. wide by 1-1/4 in. deep with 5/16 in. folded back return flange legs. Fabricated from No. 25 MSG galv steel. Max stud spacing 24 in. OC. Studs to be cut 1 in. less than assembly height.

1A. **Framing Members* — Steel Studs —** Not Shown - In lieu of Item 1 — For use with Item 2A, proprietary channel-shaped steel studs, 1-1/4 in. deep by min 2-1/2 in. wide fabricated from min 0.018 in. thick galv steel. Studs cut 1 in. less in length than assembly height. Max stud spacing 24 in. OC.
CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20™

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™

FUSION BUILDING PRODUCTS — Viper20™

IMPERIAL MANUFACTURING GROUP INC — Viper20™

1B. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 1 — For use with Item 2B, channel shaped steel studs, 1-1/4 in. deep by min 2-1/2 in. wide fabricated from min 0.018 in. thick galv steel. Studs cut 1 in. less in length than assembly height. Max stud spacing 24 in. OC.
CLARKDIETRICH BUILDING SYSTEMS — CD ProSTUD

DMFCWBS L L C — ProSTUD

MBA METAL FRAMING — ProSTUD

RAM SALES L L C — Ram ProSTUD

STEEL STRUCTURAL PRODUCTS L L C — Tri-S ProSTUD

1C. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 1 — For use with Item 2C, proprietary channel shaped steel studs, 1-1/4 in. deep by min 2-1/2 in. wide fabricated from min 0.018 in. thick galv steel. Studs cut 1 in. less in length than assembly height. Max stud spacing 24 in. OC.
TELLING INDUSTRIES L L C — Viper20™

1D. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 1 — For use with Item 2D, channel shaped steel studs, 1-1/4 in. deep by min 2-1/2 in. wide fabricated from min 0.018 in. thick galv steel. Studs cut 1 in. less in length than assembly height. Max stud spacing 24 in. OC.
TELLING INDUSTRIES L L C — TRUE-STUD™

1E. **Framing Members* — Steel Studs —** As an alternate to Item 1 — For use with Item 2A (3-5/8 in. wide track), channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 1-1/4 in. wide by 3-5/8 in. deep, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.
MARINO/WARE, DIV OF WARE INDUSTRIES INC — StudRite™

1F. **Framimg Members* — Steel Studs —** Not Shown — In lieu of item 1-For use with item 2E- proprietary channel shaped steel studs, min 2-1/2 in. wide by 1-1/4 in. deep. Fabricated from No. 25 MSG galv steel. Max stud spacing 24 in. OC. Studs to be cut 1 in. less than assembly height.
KIRII (HONG KONG) LTD — Type KIRII

1G. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 1 — For use with Item 2F, channel shaped steel studs, 1-1/4 in. deep by min 3-1/2 in. wide fabricated from min 0.018 in. thick galv steel. Studs cut 1 in. less in length than assembly height. Max stud spacing 24 in. OC.
RESCUE METAL FRAMING, L L C — AlphaSTUD

2. **Floor and Ceiling Runners — (Not Shown) —** Channel-shaped runners, 2-1/2 in. wide by 1-1/4 in. deep, fabricated from No. 25 MSG galv steel. Attached to floor and ceiling with fasteners, 24 in. OC, max.

2A. **Framing Members — Floor and Ceiling Runner* —** Not Shown — In lieu of Item 2 — For use with Item 1A, proprietary channel shaped runners, 1-1/4 in. deep by min 2-1/2 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20™ Track

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track

FUSION BUILDING PRODUCTS — Viper20™ Track

IMPERIAL MANUFACTURING GROUP INC — Viper20™ Track

2B. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Item 2 — For use with Item 1B, channel shaped runners, 1-1/4 in. deep by min 2-1/2 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
CLARKDIETRICH BUILDING SYSTEMS — CD ProTRAK

DMFCWBS L L C — ProTRAK

MBA METAL FRAMING — ProTRAK

RAM SALES L L C — Ram ProTRAK

STEEL STRUCTURAL PRODUCTS L L C — Tri-S ProTRAK

2C. **Framing Members — Floor and Ceiling Runner* —** Not Shown — In lieu of Item 2 — For use with Item 1C, proprietary channel shaped runners, 1-1/4 in. deep by min 2-1/2 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
TELLING INDUSTRIES L L C — Viper20™ Track

2D. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Item 2 — For use with Item 1D, channel shaped runners, 1-1/4 in. deep by min 2-1/2 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
TELLING INDUSTRIES L L C — TRUE-TRACK™

2E. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Item 2 — For use with Item 1E- proprietary channel shaped runners, 2-1/2 in. wide by 1-1/4 in. deep, fabricated from No. 25 MSG galv steel. Attached to floor and ceiling with fasteners, 24 in. OC, max.
KIRII (HONG KONG) LTD — Type KIRII

2F. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Item 2 — For use with Item 1G, channel shaped runners, 1-1/4 in. deep by min 3-1/2 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
RESCUE METAL FRAMING, L L C — AlphaTRAK

3. **Furring Channel —** Resilient 25 MSG galv steel furring channels spaced vertically max 24 in. OC, flange portion attached to each intersecting stud with 1/2 in. long type S-12 pan head steel screws.

4. **Batts and Blankets* —** Min 1 in. thick mineral wool attached to base layer of gypsum board which is directly attached to steel studs. Fasten each batt with min 9/16 in. long staples. Use five staples for each 4 ft long piece. Drive one staple in the center of each piece and a staple at each corner, approx 3 in. from edges.
INDUSTRIAL INSULATION GROUP L L C — Type SAFB

JOHNS MANVILLE — Type SAFB

ROCKWOOL — Type AFB, min. density 1.8 pcf / 28.8 kg/m³

THERMAFIBER INC — Type SAFB, SAFB FF

5. **Gypsum Board —** 1/2 in. thick, 4 ft wide. Attached to furring channels, base layer with 1 in. type S steel screws spaced 24 in. OC, face layer with 1-5/8 in. Type S screws spaced 12 in. OC. Gypsum board on direct attached side, base layer attached with 1 in. long type S-12 steel screws 24 in. OC, face layer attached with 1-5/8 in. type S-12 steel screws spaced 12 in. OC. Gypsum board joints oriented vertically, located over studs and offset between layers.
AMERICAN GYPSUM CO — Types AG-C.

CABOT MANUFACTURING ULC — Type C

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type C.

CGC INC — Type C, IP-X2, IPC-AR or WRC.

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — 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, FSMR-C.

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

PANEL REY S A — Type PRC

SAINT-GOBAIN GYPROC MIDDLE EAST FZE — Type Gyproc FireStop, Gyproc FireStop MR, Gyproc FireStop M2TECH, Gyproc FireStop ACTIV'Air, Gyproc FireStop MR ACTIV'Air, Gyproc FireStop M2TECH ACTIV'Air

THAI GYPSUM PRODUCTS PCL — Type C.

UNITED STATES GYPSUM CO — Type C, IP-X2, IPC-AR or WRC.

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Type C, IP-X2, IPC-AR or WRC.

5A. **Gypsum Board* —** (As an alternate to Item 5) — 5/8 in. thick, 4 ft wide. Attached to furring channels and steel studs as described in Item 5.
CGC INC — Type AR, IP-AR or SCX.

GEORGIA-PACIFIC GYPSUM L L C — Types DAP, DD, DA, DGG, DS, LS, Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, Type LWX, Water Rated-Type LWX, Sheathing Type-LWX, Soffit-Type LWX, Type DGLW, Water Rated-Type DGLW, Sheathing Type- DGLW, Soffit-Type DGLW, Type LW2X, Veneer Plaster Base - Type LW2X, Water Rated - Type LW2X, Sheathing - Type LW2X, Soffit - Type LW2X, Type DGL2W, Water Rated - Type DGL2W, Sheathing - Type DGL2W.

NATIONAL GYPSUM CO — Type FSMR-C.

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

UNITED STATES GYPSUM CO — Type AR, IP-AR, SCX or ULIX.

USG BORAL DRYWALL SFZ LLC — Type SCX

USG MEXICO S A DE C V — Type AR, IP-AR or SCX.

5B. **Gypsum Board* —** (As an alternate to Item 5) — Nom 3/4 in. thick, 4 ft wide, installed as described in Item 5 with screw length increased to 1-1/4 in. for base layer and 2-1/4 in. for face layer.
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.

5C. **Gypsum Board* —** (As an alternate to Item 5A, not for use with Items 1B and 2B) — Nom. 5/8 in. thick, 4 ft. wide gypsum panels with beveled, square or tapered edges installed as described in Item 5A.
CGC INC — Type ULX

UNITED STATES GYPSUM CO — Type ULX

USG MEXICO S A DE C V — Type ULX

6. **Joint Tape and Compound —** Vinyl, dry or premixed joint compound, applied to joints and screw heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced.

7. **Caulking and Sealants* —** (Optional, Not Shown) — A bead of acoustical sealant applied around the partition perimeter for sound control.
UNITED STATES GYPSUM CO — Type AS.

6. **Barrier Mesh —** (Optional, Not Shown) - Attached to steel studs on one or both sides of the wall using Barrier Mesh Clips spaced at maximum 12 inches on center vertically, using a flat head type screw penetrating through the steel at least 3/8 of an inch. For Steel Studs less than 0.033 inches in thickness, use self-piercing screws. For Steel Studs equal to or greater than 0.033 inches in thickness, use steel drill screws (self-tapping). Gypsum Board (Item 5) to be installed directly over the Barrier Mesh using prescribed screw patterns with lengths increased by a minimum 1/8 in. Barrier Mesh may be installed with the long dimension of the diamond pattern positioned vertically or horizontally. Barrier Mesh joints may occur as butt joints at the framing members and secured using the Barrier Mesh Clips or occur in between framing members as overlapping joints secured using 18 SWG wire ties spaced a maximum 12 in. on center.
CLARKDIETRICH BUILDING SYSTEMS — Barrier Mesh, Barrier Mesh Clips

Last Updated on 2020-05-28

A1 **UL DESIGN U454**
SCALE: 3" = 1'-0"

GMC PARTITION TYPE 2GA: COMPLIES WITH UL ASSEMBLY U454

UL Product iQ™

BXUV.U905

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

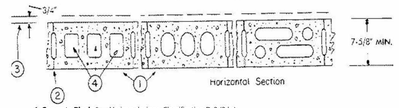
See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada
Design Criteria and Allowable Variances

Design No. U905

March 02, 2020

Bearing Wall Rating — 2 HR.
Nonbearing Wall Rating — 2 HR



1. **Concrete Blocks* —** Various designs. Classification D-2 (2 hr).
See **Concrete Blocks** category for list of eligible manufacturers.

2. **Mortar —** Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.

3. **Portland Cement Stucco or Gypsum Plaster —** Add 1/2 hr to classification if used. Where combustible members are framed in wall, plaster or stucco must be applied on the face opposite framing to achieve a max. Classification of 1-1/2 hr. Attached to concrete blocks (Item 1).

4. **Loose Masonry Fill —** If all core spaces are filled with loose dry expanded slag, expanded clay or shale (Rotary Kiln Process), water repellant vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 2 hr to classification.

5. **Foamed Plastic* —** (Optional-Not Shown) — 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).
ATLAS ROOFING CORP — "EnergyShield Pro Wall Insulation", "EnergyShield Pro 2 Wall Insulation", EnergyShield CGF Pro and EnergyShield Ply Pro

CARLISLE COATINGS & WATERPROOFING INC — Type R2+ SHEATHE

DUPONT DE NEMOURS, INC. — Types Thermax Sheathing, Thermax Light Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax White Finish Insulation, Thermax ci Exterior Insulation, Thermax XARMOR ci Exterior Insulation, Thermax IH Insulation, Thermax Plus Liner Panel, Thermax Heavy Duty Plus (HDP), TUFF-R™ ci Insulation, Thermax Butler Stylwall Insulation Board and Thermax Morton Heavy Duty Insulation Board

FIRESTONE BUILDING PRODUCTS CO L L C — "Enverge™ CI Foil Exterior Wall Insulation" and "Enverge™ CI Glass Exterior Wall Insulation"

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — Types "Xci-Class A", "Xci Foil (Class A)", "Xci 286"

RMAX, A BUSINESS UNIT OF SIKA CORPORATION — Types "TSX-8500", "ECOMAXci FR", "TSX-8510", "ECOMAX xi FR White", "ECOMAXci", "ECOMAXci FR Air Barrier", "Thermasheath", "Duratheath", "Thermasheath-3", "Duratheath-3".

5A. **Building Units —** As an alternate to Items 5, min. 1-in thick polyisocyanurate composite foamed plastic insulation boards, nom. 48 by 48 or 96 in.

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — "Xci NB", "Xci Ply"

RMAX, A BUSINESS UNIT OF SIKA CORPORATION — "Thermasheath- SI", "ECOBASEci", "ThermaBase-CI", "ECOMAXci FR Ply", "ECOMAXci Ply".

Last Updated on 2020-03-02

A10 **UL DESIGN U905**
SCALE: 3" = 1'-0"

GMC PARTITION TYPE 2M: COMPLIES WITH UL ASSEMBLY U905

GMC

Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

ISSUE | DATE
100% CONSTRUCTION DOCUMENTS | 1/9/2026

DRAWN BY: Author
CHECKED BY: Checker

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

UL ASSEMBLY U454 + U905

G1.28

TEMPLATE VERSION: 2025.1
1/13/2026 2:30:07 PM

UL Product iQ®

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States
BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

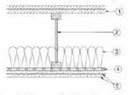
See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada
Design Criteria and Allowable Variances

Design No. **M546**

December 6, 2024

Unrestrained Assembly Rating — 1 Hr.
Finish Rating - 44 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. **Flooring System —** The flooring system shall consist of one of the following:

System No. 1

Subflooring — Nom 19/32 in. thick wood structural panels installed perpendicular to the joists with end joints staggered. Plywood or panels secured to joists with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each joist. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

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

Finish Floor — Min 1 by 4 in. T & G lumber installed perpendicular to the joists, or min 15/32 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.

System No. 2

Subflooring — Nom 19/32 in. thick wood structural panels installed perpendicular to the joists with end joints staggered. Plywood or panels secured to joists with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each joist. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

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 and Gyp-Span Radiant

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.

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 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. (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.

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/8 in. (3 mm) 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, Quiet Qurl 55/025

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, Quiet Qurl 60/040

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, Quiet Qurl 65/075

System No. 3

Subflooring — Nom 19/32 in. thick wood structural panels installed perpendicular to the joists with end joints staggered. Plywood or panels secured to joists with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each joist. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

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 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. 4

Subflooring — Nom 19/32 in. thick wood structural panels installed perpendicular to the joists with end joints staggered. Plywood or panels secured to joists with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each joist. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

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.
Freudenberg Performance Materials LP — 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. **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. **Insulation —** Min 3-1/2 in. fiberglass or mineral wool insulation bearing the UL Classification Marking for Surface Burning Characteristics, applied within the concealed space, over the resilient or furring channel/gypsum panel.

4. **Resilient Channels —** Formed from 25 MSG galv steel installed perpendicular to the joists. Channels spaced 16 in. OC. Two courses of resilient channel positioned 6 in. OC at gypsum panel butt-joints (3 in. from each end of gypsum board). Channels oriented opposite at gypsum panel butt-joints. Channel splices overlapped 4 in. beneath wood joists. Channels secured to each joist with 1-1/4 in. long Type S screws.

4A. **Steel Framing Members* —** (Optional, Not Shown) — As an alternate to Item 4.
a. **Furring Channels —** Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced 24 in. OC, perpendicular to the joists. Channels secured to Cold Rolled Channels at every intersection with a 3/4 in. TEK screw through each furring channel leg. Ends of adjoining channels overlapped 12 in. and fastened together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap, or with two 3/4 in. TEK screws in each leg of the overlap section. Two furring channels used at end joints of gypsum board (Item 5), each extending a min of 6 in. beyond both side edges of the board.

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, friction-fitted into the channel caddy on the Steel Framing Members (Item 4Ac) and secured with two 3/4 in. TEK screws. Adjoining lengths of cold rolled channels lapped min. 12 in. and secured along bottom legs with four 3/4 in. TEK screws and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.

c. **Steel Framing Members* —** Spaced 48 in. OC. max along joist, and secured to the joist on alternating joists with two, #10 x 1-1/2 in. screws through mounting holes on the hanger bracket.
PAC INTERNATIONAL L L C — Type RSIC-SI-CRC EZ Clip

4B. **Steel Framing Members* —** (Optional, Not Shown) — As an alternate to Item 3.
a. **Furring Channels —** Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to joists and friction fit into Steel Framing Members (Item 4Bb). Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap or with two TEK screws along each leg of the 6 in. overlap. Two furring channels used at end joints of gypsum board (Item 5). Butt joint channels held in place by strong back channels placed upside down, on top of, and running perpendicular to primary furring channels, extending 6 in. longer than length of gypsum side joint. Strong back channels spaced maximum 48 in. OC. Strong back channels secured to every intersection of primary furring channels with four 7/16 in. pan head screws, two along each of the legs at intersections. Butt joint channels run perpendicular to strong back channels and shall be minimum 6 in. longer than length of joint, secured to strong back channels with 7/16 in. pan head screws, two along each of the legs at intersection with strong back channels.

b. **Steel Framing Members* —** Used to attach furring channels (Item 4Ba) to joists. Clips spaced 48 in. OC and secured along joist webs at each furring channel intersection with min. 3/4 in. long self-drilling #10 x 1-1/2 in. screws through each of the provided hole locations. Furring channels are friction fitted into clips.
PAC INTERNATIONAL L L C — Type RSIC-S1-1 Ultra

4C. **Alternate Steel Framing Members* —** (Not Shown) — As an alternate to Item 4, 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 16 in. OC, perpendicular to joists. Channels secured to joists as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to the wood joists (Item 2). Clips spaced a max of 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to alternating joists 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 alternating joists 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. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75)

4D. **Alternate Steel Framing Members* —** (Not Shown) — As an alternate to Items 4 and 4C, 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 16 in. OC, perpendicular to joists. Channels secured to joists as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to the wood joists (Item 2). Clips spaced a max of 48 in. OC. Genie Clips secured to alternating joists with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are

friction fitted into clips. Additional clips required to hold furring channel that supports the gypsum board butt joints.
PLITEQ INC — Type Genie Clip

4E. **Alternate Steel Framing Members* —** (Not Shown) — As an alternate to items 4-4D, furring channels and Steel Framing Members as described below.
a. **Furring Channels —** Formed of No. 25 MSG galv steel, 2-1/2 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to joists. Channels secured to joists as described in Item b.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to the wood joists (Item 2). Clips spaced at 48" OC and secured to the bottom of the joists with one 2-1/2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in item 5.
REGUPOL AMERICA — Type SonusClip

4F. **Steel Framing Members* —** (Optional, Not Shown) — Used as an alternate method to attach resilient channels to structural members. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 24 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

5. **Gypsum Board* —** Two layers of 1/2 in. or 5/8 in. thick by 4 ft wide gypsum panels, installed perpendicular to resilient channels (Item 4). The base layer of panels screw-attached to the resilient channels with 1 in. long Type S screws spaced 8 in. OC at the butt joints and 16 in. OC in the field of the panel. At the base layer gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end. The two support furring channels shall be spaced approximately 3 in. in from joint. The face layer screw-attached to the resilient channels with 1-5/8 in. Type S screws spaced 8 in. OC and 1-1/2 in. Type G screws spaced 8 in. OC at the butt joints located mid-span between resilient channels. Gypsum board butted end joints in individual layers shall be staggered minimum 48 in. OC.
When **Steel Framing Members** (Item 4A) are used, Two layers of 1/2 in. or 5/8 in. thick, 4 ft wide gypsum board, installed as described in Item 5. Adjacent butt joints staggered minimum 48 in. OC.

When **Steel Framing Members** (Item 4B) are used, Two layers of 1/2 in. or 5/8 in. thick, 4 ft wide gypsum board, installed as described in Item 5. Butt joints staggered minimum 24 in. OC.

When **Steel Framing Members** (Item 4C) are used, base layer gypsum panels installed with long dimensions perpendicular to furring channels. Panels attached to the furring channels using 1 in. long Type S bugle-head steel screws spaced 8 in. OC along butted end joints and in the field of the panel. Butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. Each end of each gypsum panel shall be supported by a single length of furring channel equal to the width of the gypsum panel plus 6 in. on each end. The two support furring channels shall be spaced approximately 3-1/2 in. OC, and be attached with one clip at each end of the channel. Face layer attached as described in Item 5.
NATIONAL GYPSUM CO — FSW-C, eXP-C, FSLX

6. **Finishing System —** Fiber or paper tape embedded in compound over joints and exposed nail heads, covered with compound with edges of compound feathered out.

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

Last Updated on 2024-12-06

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GMC PARTITION TYPE 2GA: COMPLIES WITH UL ASSEMBLY U454

GMC PARTITION TYPE 2M: COMPLIES WITH UL ASSEMBLY U905

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ISSUE DATE
100% CONSTRUCTION DOCUMENTS 1/9/2026

DRAWN BY: Author
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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

UL ASSEMBLY M546

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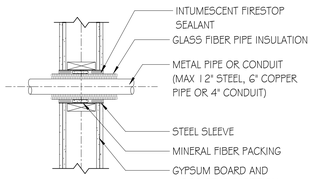

INSULATED METAL PIPE THRU GYPSUM PARTITION		
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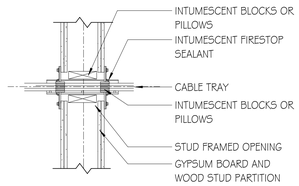
	C	W-L-5014



CABLE TRAY THRU GYPSUM PARTITION		
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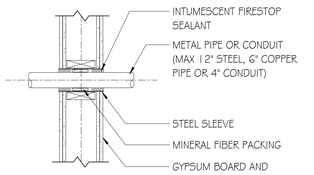
	C	W-L-4008



SINGLE UNINSULATED METAL PIPE THRU GYPSUM BOARD PARTITION		
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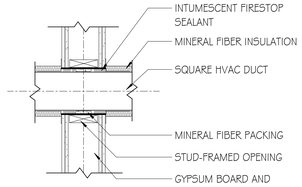
	C	W-L-1088



INSULATED HVAC DUCT THRU GYPSUM BOARD PARTITION		
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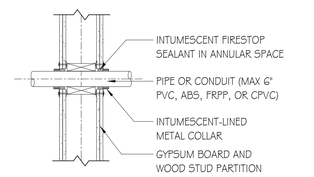

SINGLE NONMETALLIC PIPE THRU GYPSUM BOARD PARTITION		
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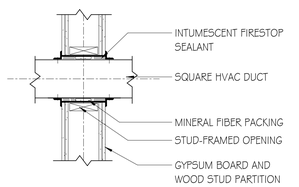
	C	W-L-2029



UNINSULATED HVAC DUCT THRU GYPSUM BOARD PARTITION		
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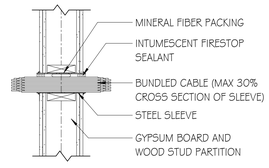

SINGLE OR BUNDLED CABLE THRU GYPSUM BOARD PARTITION		
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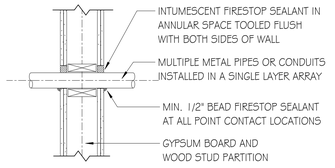
	C	W-L-3133



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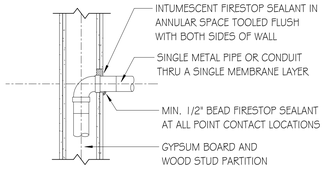

MEMBRANE PENETRATIONS THRU GYPSUM BOARD PARTITION		
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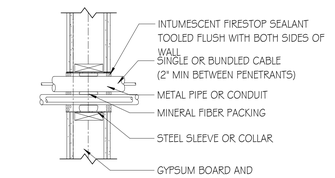
	C	--------



MULTIPLE PENETRATIONS THRU GYPSUM BOARD PARTITION		
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	B	W-L-8010
	C	W-L-8026

GENERAL THRU-PENETRATION NOTES

1. GENERAL

A. ALL THROUGH-PENETRATION FIRESTOP WORK SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 078413 – PENETRATION FIRESTOP SYSTEMS.

B. THE DETAILS SHOWN HEREIN ILLUSTRATE FREQUENTLY ENCOUNTERED THROUGH-PENETRATION FIRESTOP CONDITIONS. THEY ARE GENERIC REPRESENTATIONS OF SYSTEMS AVAILABLE FROM SEVERAL MANUFACTURERS.

C. SELECTION OF APPROPRIATE SYSTEMS SHALL BE THE RESPONSIBILITY OF THE FIRESTOP CONTRACTOR, AND MUST BE SUBMITTED FOR ARCHITECT'S APPROVAL. EACH SELECTION SHALL BE APPROPRIATE FOR THE PENETRATING ITEM AND SUBSTRATE, AND SHALL COMPLY WITH THE SPECIFIC REQUIREMENTS OF A UL LISTED SYSTEM DESIGN.

D. WHERE NO APPLICABLE UL DESIGN IS AVAILABLE FOR A PARTICULAR FIRESTOP CONFIGURATION, SUBMIT AN ENGINEERING JUDGMENT (EJ), OR EQUIVALENT FIRE RESISTANCE RATED ASSEMBLY (EFRRA), PREPARED BY THE FIRESTOP MANUFACTURER.

2. APPLICABILITY

A. PROVIDE THROUGH-PENETRATION FIRESTOP SYSTEMS FOR ALL PENETRATIONS (INCLUDING SINGLE-SIDED MEMBRANE PENETRATIONS) OF FIRE RESISTANCE RATED CONSTRUCTION, WHETHER OR NOT SPECIFICALLY DETAILED ON THE DRAWINGS (APPLICABLE TO BOTH EMPTY OPENINGS AND OPENINGS CONTAINING PENETRATING ITEMS).

B. ALL PIPING AND DUCTWORK SUBJECT TO MOVEMENT SHALL BE FIRESTOPPED WITH FLEXIBLE FIRE RATED SEALANT.

C. TO EXTENT THAT APPROPRIATE UL DESIGNS ARE AVAILABLE FOR SUBSTRATE REQUIRED, USE THE FOLLOWING APPROACH TO SELECTION OF SYSTEMS:
   1. FOR SIMPLE PENETRATIONS: ONE-PART FIRESTOP SEALANT
   2. FOR COMPLEX PENETRATIONS: FOAMED-IN-PLACE FIRESTOP SEALANT
   3. FOR INSULATED METAL PIPE: INTUMESCENT WRAP STRIP AND ONE-PART FIRESTOP SEALANT.
   4. FOR DUCTS OR VENTS:
   5. FOR CABLE TRAYS OR RACEWAYS:

3. SLEEVING

A. THE FOLLOWING PENETRATIONS MUST BE SLEEVED:
   1. INSULATED PIPE PENETRATIONS IN RATED GYPSUM BOARD WALLS
   2. BUNDLED CABLE PENETRATIONS IN RATED GYPSUM BOARD WALLS

B. ALL SLEEVES SHALL BE METAL. PLASTIC IS NOT PERMITTED. THE JUNCTURE OF STEEL SLEEVES AND WALL SHALL BE SEALED WITH FLEXIBLE FIRE RATED SEALANT.

4. QUALITY ASSURANCE

A. COMPLY WITH "INSTALLER QUALIFICATIONS" AND "ON-SITE RESPONSIBLE PARTY" PROVISIONS OF SPECIFICATION SECTION 078413 – THROUGH-PENETRATION FIRESTOP SYSTEMS.

B. OBTAIN THROUGH-PENETRATION FIRESTOP SYSTEMS THROUGH ONE SOURCE FROM A SINGLE MANUFACTURER.

C. COMMENCE FIRESTOPPING WORK ONLY AFTER SUBMITTALS (INCLUDING MOCKUPS WHERE APPLICABLE) ARE APPROVED, AND PRE-INSTALLATION CONFERENCE IS SUCCESSFULLY CONCLUDED.

5. INSTALLATION - GENERAL

A. COMPLY WITH UL SYSTEM REQUIREMENTS AND FIRESTOPPING MANUFACTURERS' PRINTED INSTALLATION INSTRUCTIONS.

B. INSTALL FORMING /DAMMING /BACKING MATERIALS AND OTHER ACCESSORIES OF TYPES REQUIRED TO SUPPORT FILL MATERIALS DURING THEIR APPLICATION AND IN THE POSITION NEEDED TO PRODUCE CROSS-SECTIONAL SHAPES AND DEPTHS REQUIRED TO ACHIEVE FIRE RATINGS INDICATED.

C. INSTALL FILL MATERIALS BY PROVEN TECHNIQUES TO PRODUCE THE FOLLOWING RESULTS:
   1. FILL VOIDS AND CAVITIES FORMED BY OPENINGS, FORMING MATERIALS, ACCESSORIES, AND PENETRATING ITEMS AS REQUIRED TO ACHIEVE FIRE-RESISTANCE RATINGS INDICATED,
   2. APPLY MATERIALS SO THEY CONTACT AND ADHERE TO SUBSTRATES FORMED BY OPENINGS AND PENETRATING ITEMS,

D. FOR FILL MATERIALS THAT WILL REMAIN EXPOSED AFTER COMPLETING WORK, FINISH TO PRODUCE SMOOTH UNIFORM SURFACES THAT ARE FLUSH WITH ADJOINING FINISHES.

E. REMOVE COMBUSTIBLE FORMING MATERIALS, AND OTHER ACCESSORIES, THAT ARE NOT INDICATED AS PERMANENT COMPONENTS OF FIRESTOP SYSTEMS. REMOVE EXCESS SEALANT FROM ADJOINING SURFACES.

F. IDENTIFY THROUGH PENETRATION FIRESTOP SYSTEMS WITH PERMANENTLY ATTACHED,PREPRINTED METAL OR PLASTIC LABELS, AS SPECIFIED.

G. INSPECT FILL MATERIALS AFTER 48 HOURS FOR COMPLETE ADHESION AND SEAL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. CORRECT DEFICIENCIES AND RE-INSPECT.

PRODUCT/MANUFACTURER LEGEND

1. THE ILLUSTRATIONS ON THIS DRAWING REPRESENT FREQUENTLY ENCOUNTERED FIRESTOPPING PENETRATION CONDITIONS THROUGH FIRE-RATED WALL ASSEMBLIES.

2. THE NUMBERS SHOWN BELOW ARE MANUFACTURERS' UL-TEST NUMBERS FOR EACH CONDITION.

3. THE KEY TO MANUFACTURERS (A, B, OR C) IS AS INDICATED BELOW.

KEY TO MANUFACTURERS		
	A	HILTI
	B	3M
	C	STI

GMC
Goodwyn Mills Cawood, LLC
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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

PENETRATION FIRESTOPPING - WOOD STUDS

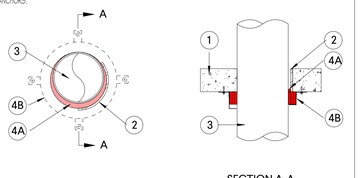
G1.31

1/13/2026 2:30:09 PM TEMPLATE VERSION: 2025.1

SINGLE UNINSULATED METAL PIPE THRU CONC FLOOR/WALL OR CMU WALL

A	C-AJ-1226
B	C-AJ-1044
C	C-AJ-1080

1. 3 HR FLOOR OR WALL ASSEMBLY - MIN. 4-1/2" TH. CONCRETE FLOOR OR WALL. WALLS MAY ALSO BE OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX DIA. OF OPNG IS 12".
2. STEEL SLEEVE (OPTIONAL) - NOM. 12" DIA. OR SMALLER STEEL PIPE, CAST W/ FLOOR OR WALL, FLUSH W/ FLOOR OR WALL, OR EXTEND MAX. 3" ABOVE FLOOR OR, BOTH SIDES OF WALL.
3. SINGLE NONMETALLIC PIPE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN FIRESTOP SYSTEM. PIPE MATL AND SIZE SHALL BE AS TESTED IN THIS ASSEMBLY. ANNULAR SPACE: MIN 0", MAX 1/2" (FOR 6" PIPES), MIN 0"; MAX 1-1/4" (FOR 8-10" PIPES)
4. FIRESTOP SYSTEM TO CONSIST OF: A) FIRESTOP SEALANT MIN. 1/2" TH APPLIED WITHIN ANNULUS FLUSH W/ TOP OR BOTTOM OF FLOOR OR WALL. B) FIRESTOP DEVICE - FIRESTOP COLLAR INSTALLED PER MFGR'S INSTRUCTIONS USING EXPANSION ANCHORS.

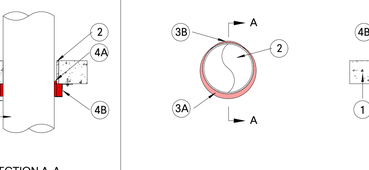


SECTION A-A

SINGLE UNINSULATED METAL PIPE THRU CONC FLOOR/WALL OR CMU WALL

A	C-AJ-1291
B	C-AJ-1428
C	C-AJ-1340

1. 2 HR FLOOR OR WALL ASSEMBLY - MIN. 2-1/2" TH. CONCRETE FLOOR OR WALL. WALLS MAY ALSO BE OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX DIA. OF OPNG IS 30-7/8".
2. SINGLE METALLIC PIPE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN FIRESTOP SYSTEM. PIPE MATL AND MAX DIA. SHALL BE AS TESTED IN THIS ASSEMBLY. ANNULAR SPACE: MIN. 0", MAX. 7/8".
3. FIRESTOP SYSTEM TO CONSIST OF: A) MIN. 4" TH. MINERAL WOOL PACKING, B) FIRESTOP SEALANT MIN. 1/4" TH. WITHIN THE ANNULUS, FLUSH W/ TOP SURFACE OF FLOOR OR BOTH SIDES OF WALL

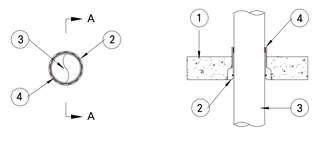


SECTION A-A

SINGLE UNINSULATED METAL PIPE THRU CONC OVER METAL FLOOR

A	F-A-1017
B	F-A-1067
C	F-A-1110

1. 3 HR FLOOR ASSEMBLY - MIN. 4-1/2" TH. CONCRETE FLOOR
2. FIRESTOP DEVICE - CAST-IN-PLACE FIRESTOP DEVICE INSTALLED PER MFGR'S INSTRUCTIONS. DEVICE MAY EXTEND A MAX OF 2" ABOVE TOP OF CONCRETE.
3. SINGLE METALLIC PIPE, CONDUIT, OR TUBING INSTALLED WITHIN FIRESTOP DEVICE. MAX PIPE SIZE 6" DIA.
4. FILL, VOID, OR CAVITY MATERIALS (ONE OF THE FOLLOWING) - A) INTUMESCENT PUTTY 1" DP, B) MINERAL WOOL PACKING 4" TH, OR C) MFGR'S TOP SEAL PLUG

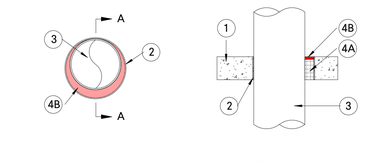


SECTION A-A

SINGLE NONMETALLIC PIPE THRU CONC FLOOR/WALL OR CMU WALL

A	C-AJ-2109
B	C-AJ-2005
C	C-AJ-2038

1. 2 HR FLOOR OR WALL ASSEMBLY - MIN. 4-1/2" TH. CONCRETE FLOOR OR MIN. 5" TH. CONCRETE WALL. WALLS MAY ALSO BE OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX DIA. OF OPNG IS 4".
2. STEEL SLEEVE (OPTIONAL) - NOM. 4" DIA. OR SMALLER STEEL PIPE, CAST W/ FLOOR OR WALL, FLUSH W/ FLOOR OR WALL, OR EXTEND MAX. 3" ABOVE FLOOR OR, BOTH SIDES OF WALL.
3. SINGLE NONMETALLIC PIPE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN FIRESTOP SYSTEM. PIPE MATL AND MAX DIA. SHALL BE AS TESTED IN THIS ASSEMBLY. ANNULAR SPACE: MIN. 0", MAX. 1-7/8".
4. FIRESTOP SYSTEM TO CONSIST OF: A) MIN. 4" TH. MINERAL WOOL PACKING, B) FIRESTOP SEALANT MIN. 1/4" TH. WITHIN THE ANNULUS, FLUSH W/ TOP SURFACE OF FLOOR OR BOTH SIDES OF WALL

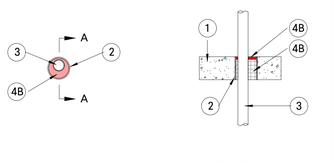


SECTION A-A

SINGLE NONMETALLIC PIPE THRU CONC FLOOR/WALL OR CMU WALL

A	C-AJ-2567
B	C-AJ-2736
C	C-AJ-2290

1. 2 HR FLOOR OR WALL ASSEMBLY - MIN. 4-1/2" TH. CONCRETE FLOOR OR MIN. 5" TH. CONCRETE WALL. WALLS MAY ALSO BE OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX DIA. OF OPNG IS 4".
2. STEEL SLEEVE (OPTIONAL) - NOM. 4" DIA. OR SMALLER STEEL PIPE, CAST W/ FLOOR OR WALL, FLUSH W/ FLOOR OR WALL, OR EXTEND MAX. 3" ABOVE FLOOR OR, BOTH SIDES OF WALL.
3. SINGLE NONMETALLIC PIPE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN FIRESTOP SYSTEM. MAX. DIA. 2".
4. ANNULAR SPACE: MIN. 0", MAX. 1-5/8".
5. FIRESTOP SYSTEM TO CONSIST OF: A) MIN. 4" TH. MINERAL WOOL PACKING, B) FIRESTOP SEALANT MIN. 1/2" TH. WITHIN THE ANNULUS, FLUSH W/ TOP SURFACE OF FLOOR OR BOTH SIDES OF WALL



SECTION A-A

GENERAL THRU-PENETRATION NOTES

1. GENERAL

A. ALL THROUGH-PENETRATION FIRESTOP WORK SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 078413 – PENETRATION FIRESTOP SYSTEMS .
B. THE DETAILS SHOWN HEREIN ILLUSTRATE FREQUENTLY ENCOUNTERED THROUGH-PENETRATION FIRESTOP CONDITIONS. THEY ARE GENERIC REPRESENTATIONS OF SYSTEMS AVAILABLE FROM SEVERAL MANUFACTURERS.
C. SELECTION OF APPROPRIATE SYSTEMS SHALL BE THE RESPONSIBILITY OF THE FIRESTOP CONTRACTOR, AND MUST BE SUBMITTED FOR ARCHITECT'S APPROVAL. EACH SELECTION SHALL BE APPROPRIATE FOR THE PENETRATING ITEM AND SUBSTRATE, AND SHALL COMPLY WITH THE SPECIFIC REQUIREMENTS OF A UL LISTED SYSTEM DESIGN.
D. WHERE NO APPLICABLE UL DESIGN IS AVAILABLE FOR A PARTICULAR FIRESTOP CONFIGURATION, SUBMIT AN ENGINEERING JUDGMENT (EJ), OR EQUIVALENT FIRE RESISTANCE RATED ASSEMBLY (EFRRA), PREPARED BY THE FIRESTOP MANUFACTURER.

2. APPLICABILITY

A. PROVIDE THROUGH-PENETRATION FIRESTOP SYSTEMS FOR ALL PENETRATIONS (INCLUDING SINGLE-SIDED MEMBRANE PENETRATIONS) OF FIRE RESISTANCE RATED CONSTRUCTION, WHETHER OR NOT SPECIFICALLY DETAILED ON THE DRAWINGS (APPLICABLE TO BOTH EMPTY OPENINGS AND OPENINGS CONTAINING PENETRATING ITEMS).
B. ALL PIPING AND DUCTWORK SUBJECT TO MOVEMENT SHALL BE FIRESTOPPED WITH FLEXIBLE FIRE RATED SEALANT.
C. TO EXTENT THAT APPROPRIATE UL DESIGNS ARE AVAILABLE FOR SUBSTRATE REQUIRED, USE THE FOLLOWING APPROACH TO SELECTION OF SYSTEMS:
   1. FOR SIMPLE PENETRATIONS: ONE-PART FIRESTOP SEALANT
   2. FOR COMPLEX PENETRATIONS: FOAMED-IN-PLACE FIRESTOP SEALANT
   3. FOR INSULATED METAL PIPE: INTUMESCENT WRAP STRIP AND ONE-PART FIRESTOP SEALANT.
   4. FOR DUCTS OR VENTS:
   5. FOR CABLE TRAYS OR RACEWAYS:

3. SLEEVING

A. THE FOLLOWING PENETRATIONS MUST BE SLEEVED:
   1. SINGLE ROUND PENETRATIONS IN RATED CMU WALLS
   2. INSULATED PIPE PENETRATIONS IN RATED GYPSUM BOARD WALLS
   3. BUNDLED CABLE PENETRATIONS IN RATED GYPSUM BOARD WALLS
   4. ALL PENETRATIONS IN ELEVATED CONCRETE SLABS.
B. ALL SLEEVES SHALL BE METAL. PLASTIC IS NOT PERMITTED. THE JUNCTURE OF STEEL SLEEVES AND WALL SHALL BE SEALED WITH FLEXIBLE FIRE RATED SEALANT.

4. QUALITY ASSURANCE

A. COMPLY WITH "INSTALLER QUALIFICATIONS" AND "ON-SITE RESPONSIBLE PARTY" PROVISIONS OF SPECIFICATION SECTION 078413 – THROUGH-PENETRATION FIRESTOP SYSTEMS.
B. OBTAIN THROUGH-PENETRATION FIRESTOP SYSTEMS THROUGH ONE SOURCE FROM A SINGLE MANUFACTURER.
C. COMMENCE FIRESTOPPING WORK ONLY AFTER SUBMITTALS (INCLUDING MOCKUPS WHERE APPLICABLE) ARE APPROVED, AND PRE-INSTALLATION CONFERENCE IS SUCCESSFULLY CONCLUDED.

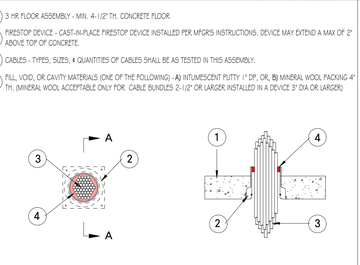
5. INSTALLATION - GENERAL

A. COMPLY WITH UL SYSTEM REQUIREMENTS AND FIRESTOPPING MANUFACTURERS' PRINTED INSTALLATION INSTRUCTIONS.
B. INSTALL FORMING /DAMMING /BACKING MATERIALS AND OTHER ACCESSORIES OF TYPES REQUIRED TO SUPPORT FILL MATERIALS DURING THEIR APPLICATION AND IN THE POSITION NEEDED TO PRODUCE CROSS-SECTIONAL SHAPES AND EPTHS REQUIRED TO ACHIEVE FIRE RATINGS INDICATED.
C. INSTALL FILL MATERIALS BY PROVEN TECHNIQUES TO PRODUCE THE FOLLOWING RESULTS:
   1. FILL VOIDS AND CAVITIES FORMED BY OPENINGS, FORMING MATERIALS, ACCESSORIES, AND PENETRATING ITEMS AS REQUIRED TO ACHIEVE FIRE-RESISTANCE RATINGS INDICATED.
   2. APPLY MATERIALS SO THEY CONTACT AND ADHERE TO SUBSTRATES FORMED BY OPENINGS AND PENETRATING ITEMS,
D. FOR FILL MATERIALS THAT WILL REMAIN EXPOSED AFTER COMPLETING WORK, FINISH TO PRODUCE SMOOTH UNIFORM SURFACES THAT ARE FLUSH WITH ADJOINING FINISHES.
E. REMOVE COMBUSTIBLE FORMING MATERIALS, AND OTHER ACCESSORIES THAT ARE NOT INDICATED AS PERMANENT COMPONENTS OF FIRESTOP SYSTEMS. REMOVE EXCESS SEALANT FROM ADJOINING SURFACES.
F. IDENTIFY THROUGH PENETRATION FIRESTOP SYSTEMS WITH PERMANENTLY ATTACHED,PREPRINTED METAL OR PLASTIC LABELS, AS SPECIFIED.
G. INSPECT FILL MATERIALS AFTER 48 HOURS FOR COMPLETE ADHESION AND SEAL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. CORRECT DEFICIENCIES AND RE-INSPECT.

SINGLE NONMETALLIC PIPE THRU CONC FLOOR/WALL OR CMU WALL

A	C-AJ-2632
B	C-AJ-5022
C	C-AJ-2671

1. 3 HR FLOOR ASSEMBLY - MIN. 4-1/2" TH. CONCRETE FLOOR
2. FIRESTOP DEVICE - CAST-IN-PLACE FIRESTOP DEVICE INSTALLED PER MFGR'S INSTRUCTIONS. DEVICE MAY EXTEND A MAX OF 2" ABOVE TOP OF CONCRETE.
3. CABLES - TYPES, SIZES, & QUANTITIES OF CABLES SHALL BE AS TESTED IN THIS ASSEMBLY.
4. FILL, VOID, OR CAVITY MATERIALS (ONE OF THE FOLLOWING) - A) INTUMESCENT PUTTY 1" DP, OR, B) MINERAL WOOL PACKING 4" TH. (MINERAL WOOL ACCEPTABLE ONLY FOR CABLE BUNDLES 2-1/2" OR LARGER INSTALLED IN A DEVICE 3" DIA OR LARGER)

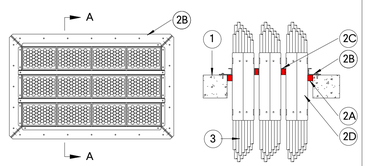


SECTION A-A

SINGLE NONMETALLIC PIPE THRU CONCRETE FLOOR OVER METAL DECK

A	F-A-2025
B	F-A-2055
C	F-A-2210

1. 2 OR 3 HR FLOOR ASSEMBLY, MIN. 2-1/2" TH CONCRETE FLOOR. MAX. OPENING SIZE: 25" X 20".
2. FIRESTOP SYSTEM TO CONSIST OF: A) INTUMESCENT TOP TRACK SEAL ADHESIVE-APPLIED UNDER FLOOR GRID, B) FLOOR GRID FABRICATED OF 4 STEEL RAILS TO FORM A RECTANGLE W/ SEPARATING BARS BETWEEN FIRESTOP DEVICES, C) INTUMESCENT TOP TRACK SEAL GRATED OVER SEPARATING BARS PRIOR TO INSTALLATION OF FIRESTOP DEVICES, D) FIRESTOP DEVICE - MODULAR FIRE SLEEVE CONSISTING OF A 2-PIECE OUTER METAL SLEEVE, ONE OR MORE DEVICES MAY BE GANGED TOGETHER USING GANGING CLIPS AND ANCHORING TO FLOOR GRID. INSTALL PER MFGR'S INSTRUCTIONS.
3. BUNDLED CABLES (0 TO 100% VISUAL FILL)

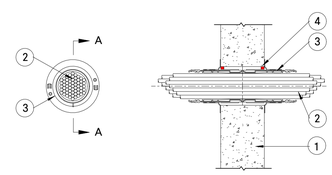


SECTION A-A

SINGLE NONMETALLIC PIPE THRU CONCRETE FLOOR OVER METAL DECK

A	F-A-2058
B	C-A-2299
C	F-A-2186

1. 2, 3, OR 4 HR WALL ASSEMBLY - MIN 5" TH (FOR 2-HR RATING), MIN 5-5/8" TH (FOR 3-HR RATING), MIN 6-1/2" TH (FOR 4-HR RATING) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF UL CLASSIFIED CONCRETE BLOCKS. OPNG SIZE: DIA. OF FIRESTOP DEVICE + 1/2"
2. SINGLE OR BUNDLED CABLES (0 TO 100% VISUAL FILL)
3. FIRESTOP DEVICE - CORRUGATED STEEL TUBE W/ AN INNER PLASTIC HOUSING, INTUMESCENT MATERIAL RINGS & TWISTED FABRIC SMOKE SEAL INSTALLED PER MFGR'S INSTRUCTIONS. SIZE: 2" OR 4" DIA.
4. FIRESTOP SEALANT IN ANNULAR SPACE MIN. 5/8" TH. TOOLED FLUSH W/ BOTH WALL SURFACES.

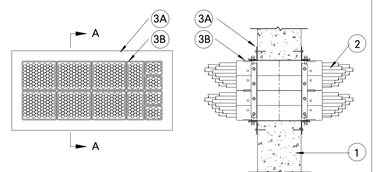


SECTION A-A

NONMETALLIC PIPE THRU CONCRETE FLOOR

A	F-A-2092
B	C-A-2137
C	F-A-2246

1. 2 HR WALL ASSEMBLY, MIN 6" TH CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF UL CLASSIFIED CONCRETE BLOCK. OPNG. SIZE: MAX. 24-1/8" X 8-1/8".
2. BUNDLED CABLES (0 TO 100% VISUAL FILL)
3. FIRESTOP SYSTEM TO CONSIST OF: A) DEVICE FLANGE, RECTANGULAR ADJUSTABLE FLANGE SIZED TO FIT AROUND GANGED SLEEVES. SECURE TO BOTH SIDES OF WALL W/ 1-1/2" MASONRY SCREWS OR ANCHORS ALONG TOP # BOTTOM OF FLANGE. B) MODULAR RECTANGULAR STEEL FIRE SLEEVE DEVICE. ONE OR MORE DEVICES MAY BE GANGED TOGETHER. INSTALL PER MFGR'S INSTRUCTIONS.

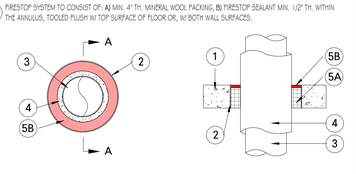


SECTION A-A

BUNDLED CABLE THRU CONC FLOOR/WALL OR CMU WALL

A	C-AJ-3095
B	C-AJ-3021
C	C-AJ-3043

1. 2 HR FLOOR OR WALL ASSEMBLY - MIN. 4-1/2" TH. CONCRETE FLOOR OR WALL. WALLS MAY ALSO BE OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX DIA. OF OPNG IS 29".
2. METALLIC SLEEVE (OPTIONAL) - MAX. 30" DIA OR SMALLER STEEL PIPE SLEEVE, FLUSH W/ FLOOR OR WALL SURFACES OR, EXTENDING MAX. 3" ABOVE FLOOR OR BEYOND BOTH SURFACES OF WALL.
3. SINGLE NONMETALLIC PIPE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN FIRESTOP SYSTEM. MAX. 12" DIA. PIPE (STEEL OR IRON) OR MAX 6" DIA. PIPE (COPPER).
4. PIPE COVERING - MIN. 1/2" TH, MAX 2" TH, HEAVY DENSITY GLASS FIBER, JACKETED. ANNULAR SPACE WITHIN FIRESTOP SYSTEM: MIN. 1/2", MAX. 12".
5. FIRESTOP SYSTEM TO CONSIST OF: A) MIN. 4" TH. MINERAL WOOL PACKING, B) FIRESTOP SEALANT MIN. 1/2" TH. WITHIN THE ANNULUS, TOOLED FLUSH W/ TOP SURFACE OF FLOOR OR, W/ BOTH WALL SURFACES.

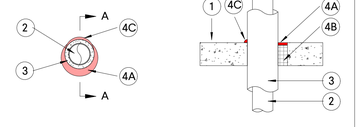


SECTION A-A

SINGLE OR BUNDLED CABLE THRU CONC OVER METAL FLOOR

A	F-A-3007
B	F-A-3017
C	F-A-3055

1. 2 HR FLOOR OR WALL ASSEMBLY - MIN. 2-1/2" TH. CONCRETE FLOOR OR MIN. 3" TH. CONCRETE WALL. WALLS MAY ALSO BE OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX DIA. OF OPNG IS 15".
2. SINGLE METALLIC PIPE, CONDUIT, OR TUBING, INSTALLED WITHIN FIRESTOP SYSTEM. MAX 4" DIA.
3. TUBE INSULATION - MIN 1/2" TH, MAX 3/4" TH, ARMAFLEX FLEXIBLE FOAM TUBE INSULATION. ANNULAR SPACE WITHIN FIRESTOP SYSTEM: MIN. 0", MAX. 1-3/8".
4. FIRESTOP SYSTEM TO CONSIST OF: A) MIN. 4" TH. MINERAL WOOL PACKING, B) FIRESTOP SEALANT MIN. 1/2" TH. WITHIN THE ANNULUS, TOOLED FLUSH W/ TOP SURFACE OF FLOOR OR, W/ BOTH SURFACES OF WALL. C) FIRESTOP SEALANT MIN. 1/2" BEAD APPLIED AT POINT OF CONTACT LOCATION

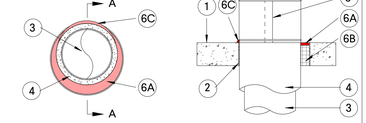


SECTION A-A

SINGLE OR BUNDLED CABLE THRU CONCRETE FLOOR

A	C-AJ-3085
B	C-AJ-3250
C	F-A-3037

1. 2 HR FLOOR OR WALL ASSEMBLY - MIN. 2-1/2" TH. CONCRETE FLOOR OR WALL. WALLS MAY ALSO BE OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX DIA. OF OPNG IS 20-5/8".
2. METAL SLEEVE (OPTIONAL) - MAX. 20" DIA STEEL PIPE, FLUSH W/ FLOOR OR WALL SURFACES.
3. SINGLE METALLIC PIPE OR TUBING, INSTALLED WITHIN FIRESTOP SYSTEM. MAX 12" DIA. (STEEL), MAX 6" DIA. (COPPER).
4. PIPE INSULATION - MIN 1-1/2" TH, MAX 3" TH, CELLULAR GLASS INSULATION. ANNULAR SPACE WITHIN FIRESTOP SYSTEM: MIN. 0", MAX. 1-7/8".
5. METAL JACKET - MIN 1 2" LONG FORMED OF 0.01 0" TH. STEEL OR ALUM SHEET W/ MIN. 2" LAP. SECURE W/ SSTL HOSE CLAMPS
6. FIRESTOP SYSTEM TO CONSIST OF: A) MIN. 4" TH MINERAL WOOL PACKING, B) FIRESTOP SEALANT MIN. 1/2" TH WITHIN THE ANNULUS, TOOLED FLUSH W/ TOP SURFACE OF FLOOR OR, W/ BOTH SURFACES OF WALL.
   C) FIRESTOP SEALANT MIN. 1/2" BEAD APPLIED AT POINT OF CONTACT LOCATION.

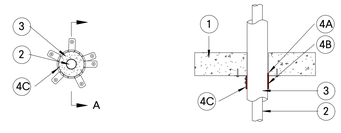


SECTION A-A

SINGLE OR BUNDLED CABLE THRU CONCRETE WALL

A	W-J-3167
B	C-AJ-3250
C	F-A-1110

1. 2 HR FLOOR OR WALL ASSEMBLY - MIN. 4-1/2" TH. CONCRETE FLOOR OR MIN. 5" TH. CONCRETE WALL. WALLS MAY ALSO BE OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX DIA. OF OPNG IS 7".
2. SINGLE NONMETALLIC PIPE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN FIRESTOP SYSTEM. MAX 4" DIA. PIPE.
3. PIPE INSULATION - REED ON PIPES 1" DIA OR SMALLER, NOM. 3/4" TH. ARMAFLEX FLEXIBLE FOAM TUBING. ANNULAR SPACE WITHIN FIRESTOP SYSTEM: MIN. 0", MAX. 3/16".
4. FIRESTOP SYSTEM TO CONSIST OF: A) FIRESTOP SEALANT MIN. 1/2" TH. WITHIN THE ANNULUS, TOOLED FLUSH W/ TOP SURFACE OF FLOOR OR BOTH SIDES OF WALL. B) INTUMESCENT WRAP STRIP NOM. 3/16" TH X 1-3/4" W. C) STEEL COLLAR, MIN. 26 GA GALV STEEL, MIN. 1-3/4" DP W/ 1" X 2" ANCHOR TABS ON 1-3/4" CENTERS ANCORED TO BOTTOM OF FLOOR OR BOTH SURFACES OF WALL W/ MIN 1/4" X 1-1/4" EXP. ANCHORS OR POWDER ACTUATED FASTENERS. OVERLAP COLLAR MIN. 1" AND ANCHOR W/ TWO #10 X 3/16 SHEET METAL SCREWS. ANCHOR

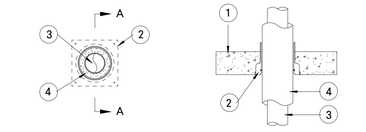


SECTION A-A

SINGLE OR BUNDLED CABLE THRU CONCRETE WALL

A	W-J-3279
B	C-AJ-3250
C	F-A-3158

1. 3 HR FLOOR ASSEMBLY - MIN. 4-1/2" TH. CONCRETE FLOOR
2. FIRESTOP DEVICE - CAST-IN-PLACE FIRESTOP DEVICE INSTALLED PER MFGR'S INSTRUCTIONS. DEVICE MAY EXTEND A MAX OF 2" ABOVE TOP OF CONCRETE.
3. SINGLE METALLIC PIPE, OR TUBING INSTALLED WITHIN FIRESTOP DEVICE. MAX 4" DIA.
4. PIPE COVERING - NOM 1", 1-1/2" OR 2" TH. HEAVY DENSITY GLASS FIBER, JACKETED.
5. PACKING MATERIAL (NOT SHOWN) - WHEN USING 1" DIA PIPE W/ 1-1/2" TH INSUL IN A 4" DEVICE, PROVIDE MIN 2" TH. MINERAL WOOL INSUL PACKED FIRMLY INTO THE DEVICE, FLUSH W/ TOP SURFACE OF DEVICE.

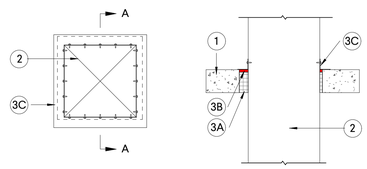


SECTION A-A

INSULATED METAL PIPE THRU CONC FLOOR/WALL OR CMU WALL

A	C-AJ-5091
B	C-AJ-5210
C	C-AJ-5087

1. 3 HR FLOOR OR WALL ASSEMBLY - MIN. 4-1/2" TH. CONCRETE FLOOR OR MIN. 5" TH. CONCRETE WALL. WALLS MAY ALSO BE OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX AREA OF OPNG IS 1024 SQ.IN. W. MAX DIMENSION OF 32".
2. STEEL DUCT, NOM 30" X 30" X 24GA OR HEAVIER, POSITIONED WITHIN FIRESTOP SYSTEM. ANNULAR SPACE MIN 1/2", MAX 1-3/4".
3. FIRESTOP SYSTEM TO CONSIST OF: A) MIN. 3-1/2" TH. MINERAL WOOL PACKING, B) FIRESTOP SEALANT MIN. 1" TH. WITHIN THE ANNULUS, FLUSH W/ TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL. C) STEEL RETAINING ANGLE, NOM. 2" X 2" X 1/ 6A OR HEAVIER, ATTACHED W/ #8 OR LARGER SHEET METAL SCREWS 3" O.C. AT ALL 4 SIDES OF DUCT ON THE TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL.

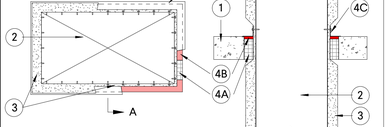


SECTION A-A

INSULATED METAL PIPE THRU CONC FLOOR/WALL OR CMU WALL

A	C-AJ-5198
B	C-AJ-5211
C	C-AJ-5045

1. 2 HR FLOOR OR WALL ASSEMBLY - MIN. 2-1/2" TH. CONCRETE FLOOR OR MIN. 3" TH. CONCRETE WALL. WALLS MAY ALSO BE OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX DIA. OF OPNG IS 15".
2. SINGLE METALLIC PIPE, CONDUIT, OR TUBING, INSTALLED WITHIN FIRESTOP SYSTEM. MAX 4" DIA.
3. TUBE INSULATION - MIN 1/2" TH, MAX 3/4" TH, ARMAFLEX FLEXIBLE FOAM TUBE INSULATION. ANNULAR SPACE WITHIN FIRESTOP SYSTEM: MIN. 0", MAX. 1-3/8".
4. FIRESTOP SYSTEM TO CONSIST OF: A) MIN. 4" TH. MINERAL WOOL PACKING, B) FIRESTOP SEALANT MIN. 1/2" TH. WITHIN THE ANNULUS, TOOLED FLUSH W/ TOP SURFACE OF FLOOR OR BOTH WALL SURFACES.

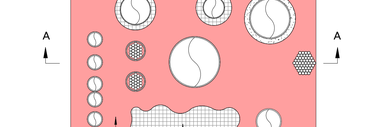


SECTION A-A

INSULATED METAL PIPE THRU CONC FLOOR/WALL OR CMU WALL

A	C-AJ-5277
B	C-AJ-5060
C	C-AJ-5103

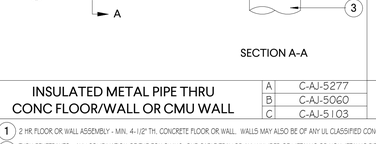
1. 2 HR FLOOR OR WALL ASSEMBLY - MIN. 4-1/2" TH. CONCRETE FLOOR OR WALL. WALLS MAY ALSO BE OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX AREA OF OPNG IS 1440 SQ.IN. W. MAX DIMENSION OF 48".
2. THRU PENETRANTS - ANY COMBINATION OF THE FOLLOWING: ONE CABLE TRAY OR ANY NUMBER OF METALLIC OR NONMETALLIC PIPES OR TUBES, OR CABLES OR CABLE BUNDLES, AS TESTED IN THIS ASSEMBLY, MAY BE INSTALLED WITHIN THE OPNG. TOTAL NUMBER IS DEPENDENT ON THE SIZE OF THE OPNG AND THE TYPES AND SIZES OF PENETRANTS. ANNULAR SPACE: MAINTAIN MINIMUM SPACING FOR VARIOUS TYPES AND SIZES OF PENETRANS ITEMS AS TESTED IN THIS ASSEMBLY.
3. PIPE INSUL (OPTIONAL FOR METALLIC PIPES, TUBING OR CONDUIT ONLY). TYPE AND THICKNESS SHALL BE AS TESTED IN THIS ASSEMBLY.
4. FIRESTOP SYSTEM TO CONSIST OF: A) MIN. 4" TH. MINERAL WOOL PACKING, B) FIRESTOP SEALANT MIN. 1/2" TH. WITHIN THE ANNULUS, FLUSH W/ TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL



INSULATED NONMETALLIC PIPE THRU CONC FLOOR/WALL OR CMU WALL

A	C-AJ-5320
B	C-AJ-5022
C	C-AJ-2145

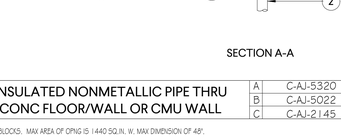
1. 2 HR FLOOR OR WALL ASSEMBLY - MIN. 4-1/2" TH. CONCRETE FLOOR OR MIN. 5" TH. CONCRETE WALL. WALLS MAY ALSO BE OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX DIA. OF OPNG IS 7".
2. SINGLE NONMETALLIC PIPE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN FIRESTOP SYSTEM. PIPE MATL SHALL BE AS TESTED IN THIS ASSEMBLY. ANNULAR SPACE: MIN 0", MAX 1-1/2"
3. METAL PLATE - MIN 1/8 GA STEEL, ANCHORED TO BOTT. OF CONCRETE # METAL FLOOR ASSEMBLY W/ MIN. 1/4" EXP. ANCHORS
4. PACKING MATERIAL - MINERAL WOOL INSULATION PACKED FIRMLY INTO FLUTES OF STEEL DECK.
5. FIRESTOP SYSTEM TO CONSIST OF: A) FIRESTOP SEALANT, MIN 1/2" TH. APPLIED WITHIN ANNULUS TOOLED FLUSH W/ BOTTOM OF FLOOR FOLLOWING CONTOUR OF STEEL DECK. B) MIN 1/4" TH APPLIED TO COMPLETELY COVER MINERAL WOOL PACKING WITHIN FLUTES OF STEEL DECK. C) FIRESTOP DEVICE - FIRESTOP COLLAR INSTALLED PER MFGR'S INSTRUCTIONS USING EXPANSION ANCHORS.



INSULATED NONMETALLIC PIPE THRU CONC FLOOR/WALL OR CMU WALL

A	C-AJ-5022
B	C-AJ-2145
C	C-AJ-5320

1. 2 HR FLOOR OR WALL ASSEMBLY - MIN. 4-1/2" TH. CONCRETE FLOOR OR MIN. 5" TH. CONCRETE WALL. WALLS MAY ALSO BE OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX DIA. OF OPNG IS 7".
2. SINGLE NONMETALLIC PIPE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN FIRESTOP SYSTEM. PIPE MATL SHALL BE AS TESTED IN THIS ASSEMBLY. ANNULAR SPACE: MIN 0", MAX 1-1/2"
3. METAL PLATE - MIN 1/8 GA STEEL, ANCHORED TO BOTT. OF CONCRETE # METAL FLOOR ASSEMBLY W/ MIN. 1/4" EXP. ANCHORS
4. PACKING MATERIAL - MINERAL WOOL INSULATION PACKED FIRMLY INTO FLUTES OF STEEL DECK.
5. FIRESTOP SYSTEM TO CONSIST OF: A) FIRESTOP SEALANT, MIN 1/2" TH. APPLIED WITHIN ANNULUS TOOLED FLUSH W/ BOTTOM OF FLOOR FOLLOWING CONTOUR OF STEEL DECK. B) MIN 1/4" TH APPLIED TO COMPLETELY COVER MINERAL WOOL PACKING WITHIN FLUTES OF STEEL DECK. C) FIRESTOP DEVICE - FIRESTOP COLLAR INSTALLED PER MFGR'S INSTRUCTIONS USING EXPANSION ANCHORS.



SECTION A-A

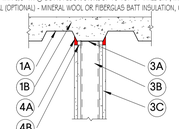
INSULATED METAL PIPE THRU CONCRETE FLOOR

A	F-A-5018
B	F-A-5029
C	F-A-5041

1. 2 OR 3 HR FLOOR OR WALL ASSEMBLY - MIN. 4-1/2" TH. CONCRETE FLOOR OR WALL. WALLS MAY ALSO BE OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX AREA OF OPNG IS 17.8 SQ.FT. W. MAX DIMENSION OF 64".
2. ONE OR MORE METALLIC PIPES, CONDUITS, OR TUBES. MIN 0" ANNULAR SPACE TO EDGE OPNG. MIN 4" ANNULAR SPACE BETWEEN PIPES AND ANY OTH

GYPSUM STUD WALL TO CONCRETE OVER FLUTED METAL DECK FLOOR ASSEMBLY W/APPLIED SEALANT JOINT (OR TO ALTERNATE METAL DECK ROOF ASSY)

1) FLOOR ASSEMBLY - FIRE-RATED FLUTED STEEL DECK/CONCRETE FLOOR ASSEMBLY CONSISTING OF:
   A) STEEL FLOOR AND FORM UNITS, MAX 3" DP GALV STEEL FLUTED DECKING
   B) CONCRETE - MIN 2-1/2" TH REINFORCED STRUCTURAL CONCRETE AS MEASURED FROM THE TOP PLANE OF THE FLUTES.
   C) SPRAY-APPLIED FIRE RESISTIVE MATERIAL (NOT SHOWN, OPTIONAL) SPRAY-APPLIED MIN 5/16" TH, MAX 1 1/16" TH, AT UNDERSIDE OF METAL DECK.
2) ROOF ASSEMBLY - (NOT SHOWN) MAY BE USED AS AN ALTERNATIVE TO THE FLOOR ASSEMBLY CONSISTING OF:
   A) STEEL ROOF DECK, MAX 3" DP GALV STEEL FLUTED DECKING
   B) SPRAY-APPLIED FIRE RESISTIVE MATERIAL AS REQUIRED TO MEET THE INDIVIDUAL P700 SERIES DESIGN.
3) WALL ASSEMBLY - 1 OR 2 HR FIRE-RATED GYPSUM BOARD/STEEL STUD WALL ASSEMBLY INCLUDING:
   A) STEEL FLOOR RUNNERS, MIN 25 GA GALV STEEL CHANNELS, OR, A1) (ALTERNATIVE) SLOTTED DEFLECTION RUNNER.
   B) STEEL STUDS, MIN 3-1/2" W. STUDS CUT 1/2 TO 3/4" LESS IN LENGTH THAN ASSEMBLY HEIGHT. MAX SPACING 24" O.C.
   C) GYPSUM BOARD - ONE OR TWO LAYERS 5/8" TH GYPSUM BOARD AS REQD FOR RATED ASSEMBLY W/ TOP GAP OF MAX 3/4" TO UNDERSIDE OF DECK.
4) A) FIRESTOP SEALANT MIN 5/8" TH @ BOTT. FLOOR OR ROOF TO TOP OF WALL GAP, MAX 3/4" H.
   B) FORMING MATERIAL (OPTIONAL) - MINERAL WOOL OR FIBERGLAS BATT INSULATION, OR POLYURETHANE BACKER ROD

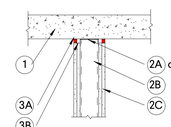


SECTION A-A

GYPSUM STUD WALL TO CONCRETE OVER FLUTED METAL DECK FLOOR ASSEMBLY W/APPLIED SEALANT JOINT (OR TO ALTERNATE METAL DECK ROOF ASSY)	A	HW-D-0184
	B	HW-D-0486
	C	HW-D-0205

GYPSUM STUD WALL TO CONCRETE FLOOR ASSEMBLY W/APPLIED SEALANT JOINT

1) FLOOR ASSEMBLY - MIN 4-1/2" TH REINFORCED STRUCTURAL CONCRETE OR, ANY 6" TH UL CLASSIFIED HOLLOW-CORE PRECAST CONCRETE UNITS.
2) WALL ASSEMBLY - 1, 2, 3 OR 4 HR FIRE-RATED GYPSUM BOARD/STEEL STUD WALL ASSEMBLY INCLUDING:
   A) STEEL FLOOR AND CEILING RUNNERS, MIN 24 GA GALV STEEL J-SHAPED CHANNELS W/ UNEQUAL LEGS MIN 1-1/4" AND 2".
   B) STEEL STUDS, MIN 24 GA GALV C-H SHAPED STUDS, MIN 2-1/2" W. STUDS CUT 3/8 TO 1/2" LESS IN LENGTH THAN ASSEMBLY HEIGHT. MAX SPACING 24" O.C.
   C) GYPSUM BOARD - 1" TH GYPSUM BOARD LINER PANELS AS REQD FOR RATED ASSEMBLY.
   D) GYPSUM BOARD - 1/2 OR 5/8" TH, ON FINISHED SIDE OF WALL W/ BOTTOM FLOOR GAP OF MAX 3/4".
3) FIRESTOP SEALANT@ HEAD-OF-WALL GAP, MAX 1" H, FULL DEPTH. TOOL FLUSH W/ FINISH FACE OF WALL.

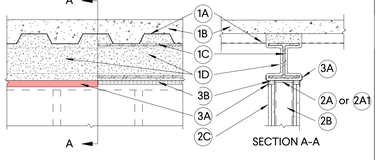


SECTION A-A

GYPSUM STUD WALL TO CONCRETE FLOOR ASSEMBLY W/APPLIED SEALANT JOINT	A	HW-D-0209
	B	HW-D-0134
	C	HW-D-0483

GYPSUM STUD WALL CENTERED & PARALLEL TO STEEL BEAM W/SFRM & APPLIED SEALANT

1) FLOOR ASSEMBLY - FIRE-RATED FLUTED STEEL DECK/CONCRETE FLOOR ASSEMBLY CONSISTING OF:
   A) STEEL FLOOR AND FORM UNITS, MAX 3" DP GALV STEEL FLUTED DECKING
   B) CONCRETE - MIN 2-1/2" TH REINFORCED STRUCTURAL CONCRETE AS MEASURED FROM THE TOP PLANE OF THE FLUTES.
   C) STRUCTURAL STEEL SUPPORT - STEEL BEAM PROTECTED AS PER SPECIFIED D700 OR D900 SERIES UL DESIGN.
   D) SPRAY-APPLIED FIRE RESISTIVE MATERIAL APPLIED MIN 1 1/16" TH (1 HR ASSEMBLY) OR, MIN 1-1/2" TH (2 HR ASSEMBLY)
2) WALL ASSEMBLY - 1 OR 2 HR FIRE-RATED GYPSUM BOARD/STEEL STUD WALL ASSEMBLY INCLUDING:
   A) STEEL FLOOR RUNNERS, MIN 25 GA GALV STEEL CHANNELS, OR, A1) (ALTERNATIVE) SLOTTED DEFLECTION RUNNER.
   B) STEEL STUDS, MIN 3-1/2" W. STUDS CUT 1/2 TO 3/4" LESS IN LENGTH THAN ASSEMBLY HEIGHT. MAX SPACING 24" O.C.
   C) GYPSUM BOARD - ONE OR TWO LAYERS 5/8" TH GYPSUM BOARD AS REQD FOR RATED ASSEMBLY W/ TOP GAP OF MAX 3/4" TO UNDERSIDE OF DECK.
3) A) FIRESTOP SEALANT SPRAY MIN 1/16" TH (DRY THICKNESS) OVER FILL MATERIAL. OVERLAP GYP BOARD MIN 1/2" AND SFRM MIN 2".
   B) FORMING MATERIAL - MINERAL WOOL PACKED FULL DEPTH.

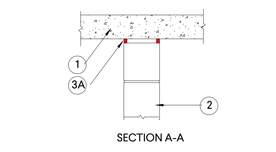


SECTION A-A

GYPSUM STUD WALL CENTERED & PARALLEL TO STEEL BEAM W/SFRM & APPLIED SEALANT	A	HW-D-0259
	B	HW-D-0252
	C	HW-D-0465

CONCRETE OR BLOCK WALL TO CONCRETE FLOOR ASSEMBLY W/APPLIED SEALANT JOINT

1) FLOOR ASSEMBLY - FIRE-RATED FLUTED DECK/CONCRETE ASSEMBLY (PER D700 OR D900 FLOOR-CEILING DESIGN) INCLUDING:
   A) STEEL DECK, MAX 3" DP.
   B) CONCRETE, MIN 2-1/2" TH ABOVE TOP PLANE OF DECK.
   C) STEEL ATTACHMENT CLIPS (OPTIONAL) USED TO SECURE CEILING RUNNER WHEN SFRM IS APPIED TO UNDERSIDE OF DECK. PRIOR TO INSTALLATION OF HEAD OF WALL CEILING RUNNER.
   D) SPRAY-APPLIED FIRE RESISTIVE MATERIAL (OPTIONAL) DECK MAY BE SPRAYED W/ SFRM AS PER D700 SERIES DESIGN
2) WALL ASSEMBLY - 1 OR 2 HR FIRE-RATED GYPSUM BOARD/STEEL STUD WALL ASSEMBLY INCLUDING:
   A) STEEL FLOOR RUNNERS, MIN 25 GA GALV STEEL CHANNELS, OR, A1) (ALTERNATIVE) SLOTTED DEFLECTION RUNNER.
   B) STEEL STUDS, MIN 3-1/2" W. STUDS CUT 1-1/4" TO 1-1/2" LESS IN LENGTH THAN ASSEMBLY HEIGHT. MAX SPACING 24" O.C.
   C) GYPSUM BOARD - ONE OR TWO LAYERS 5/8" TH GYPSUM BOARD AS REQD FOR RATED ASSEMBLY W/ TOP GAP OF MAX 1-1/2" TO UNDERSIDE OF DECK.
3) A) FORMING MATERIAL - MINERAL WOOL BATTS, PLUGS, OR PRECUT STRIPS
   B) FIRESTOP SEALANT MIN 1/16" DRY THICKNESS. OVERLAP GYP BOARD MIN 1/2". OVERLAP DECK MIN 1/2" OR, SFRM MIN 2"

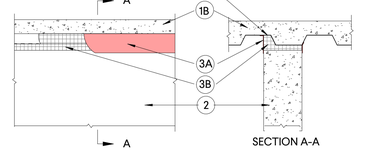


SECTION A-A

CONCRETE OR BLOCK WALL TO CONCRETE FLOOR ASSEMBLY W/APPLIED SEALANT JOINT	A	HW-D-0268
	B	HW-D-0169
	C	HW-D-0041

CONCRETE OR BLOCK WALL TO CONCRETE FLOOR ASSEMBLY W/ APPLIED SEALANT

1) FLOOR ASSEMBLY - FIRE-RATED FLUTED DECK/CONCRETE FLOOR ASSEMBLY CONSISTING OF:
   A) STEEL FLOOR AND FORM UNITS, MAX 3" DP GALV STEEL FLUTED DECKING
   B) CONCRETE - MIN 2-1/2" TH REINFORCED STRUCTURAL CONCRETE AS MEASURED FROM THE TOP PLANE OF THE FLUTES.
2) WALL ASSEMBLY - MIN 8" TH STEEL REINFORCED STRUCTURAL CONCRETE. AS AN OPTION, FOR 1 # 2 HR ASSEMBLY RATINGS, WALL MAY BE MIN 4-1/2" TH. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX SEPARATION BETWEEN BOTTOM OF FLOOR ASSEMBLY AND TOP OF WALL IS MAX 1".
3) A) FIRESTOP SEALANT MIN 1/2" TH TOOLED FLUSH WITH EACH WALL SURFACE.
   B) FORMING MATERIAL (OPTIONAL, NOT SHOWN) - MINERAL WOOL OR FIBERGLAS BATT INSULATION, OR POLYURETHANE BACKER ROD



SECTION A-A

CONCRETE OR BLOCK WALL TO CONCRETE FLOOR ASSEMBLY W/ APPLIED SEALANT	A	HW-D-0296
	B	HW-D-0248
	C	HW-D-0140

JOINT FIRESTOPPING GENERAL NOTES

1. GENERAL

A. ALL THROUGH-PENETRATION FIRESTOP WORK SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 078443 – JOINT FIRESTOPPING .
B. THE DETAILS SHOWN HEREIN ILLUSTRATE FREQUENTLY ENCOUNTERED JOINT FIRESTOPPING CONDITIONS. THEY ARE GENERIC REPRESENTATIONS OF SYSTEMS AVAILABLE FROM SEVERAL MANUFACTURERS.
C. SELECTION OF APPROPRIATE SYSTEMS SHALL BE THE RESPONSIBILITY OF THE FIRESTOP CONTRACTOR, AND MUST BE SUBMITTED FOR ARCHITECT'S APPROVAL. EACH SELECTION SHALL BE APPROPRIATE FOR THE JOINT TYPE AND SUBSTRATE, AND SHALL COMPLY WITH THE SPECIFIC REQUIREMENTS OF A UL LISTED SYSTEM DESIGN.
D. WHERE NO APPLICABLE UL DESIGN IS AVAILABLE FOR A PARTICULAR FIRESTOP CONFIGURATION, SUBMIT AN ENGINEERING JUDGMENT (EJ), OR EQUIVALENT FIRE RESISTANCE RATED ASSEMBLY (EFRRA), PREPARED BY THE FIRESTOP MANUFACTURER.

2. APPLICABILITY

A. PROVIDE JOINT FIRESTOPPING SYSTEMS FOR ALL WALL-TO-WALL, HEAD-OF-WALL, OR BOTTOM-OF-WALL JOINTS OF FIRE RESISTANCE RATED CONSTRUCTION MATCHING WALL RATING, WHETHER OR NOT SPECIFICALLY DETAILED ON THE DRAWINGS.

3. QUALITY ASSURANCE

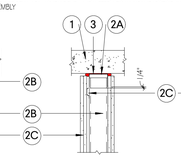
A. COMPLY WITH "INSTALLER QUALIFICATIONS" AND "ON-SITE RESPONSIBLE PARTY" PROVISIONS OF SPECIFICATION SECTION 078443 – JOINT FIRESTOPPING.
B. OBTAIN ALL FIRESTOPPING MATERIALS THROUGH ONE SOURCE FROM A SINGLE MANUFACTURER.
C. COMMENCE FIRESTOPPING WORK ONLY AFTER SUBMITTALS (INCLUDING MOCKUPS WHERE APPLICABLE) ARE APPROVED, AND PRE-INSTALLATION CONFERENCE IS SUCCESSFULLY CONCLUDED.

4. INSTALLATION - GENERAL

A. COMPLY WITH UL SYSTEM REQUIREMENTS AND FIRESTOPPING MANUFACTURERS' PRINTED INSTALLATION INSTRUCTIONS.
B. INSTALL FORMING MATERIALS AND OTHER ACCESSORIES OF TYPES REQUIRED TO SUPPORT FILL MATERIALS DURING THEIR APPLICATION AND IN THE POSITION NEEDED TO PRODUCE CROSS-SECTIONAL SHAPES AND DEPTHS REQUIRED TO ACHIEVE FIRE RATINGS INDICATED.
C. INSTALL FILL MATERIALS BY PROVEN TECHNIQUES TO PRODUCE THE FOLLOWING RESULTS:
   1. FILL VOIDS AND CAVITIES FORMED BY OPENINGS, FORMING MATERIALS, AND ACCESSORIES AS REQUIRED TO ACHIEVE FIRE-RESISTANCE RATINGS INDICATED,
   2. APPLY MATERIALS SO THEY CONTACT AND ADHERE TO SUBSTRATES AS REQUIRED FOR SEAMLESS INSTALLATION,
D. FOR FILL MATERIALS THAT WILL REMAIN EXPOSED AFTER COMPLETING WORK, FINISH TO PRODUCE SMOOTH UNIFORM SURFACES THAT ARE FLUSH WITH ADJOINING FINISHES.
E. REMOVE COMBUSTIBLE FORMING MATERIALS, AND OTHER ACCESSORIES, THAT ARE NOT INDICATED AS PERMANENT COMPONENTS OF FIRESTOPPING SYSTEMS. REMOVE EXCESS SEALANT FROM ADJOINING SURFACES.
F. IDENTIFY JOINT FIRESTOPPING SYSTEMS WITH PERMANENTLY ATTACHED,PREPRINTED METAL OR PLASTIC LABELS, AS SPECIFIED.
G. INSPECT FILL MATERIALS AFTER 48 HOURS FOR COMPLETE ADHESION AND SEAL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. CORRECT DEFICIENCIES AND RE-INSPECT.

GYPSUM STUD WALL PERPENDICULAR TO CONCRETE OVER FLUTED METAL DECK (MAX. JW 3/4")

1) FLOOR ASSEMBLY - FIRE-RATED FLUTED DECK/CONCRETE ASSEMBLY (PER D700 OR D900 FLOOR-CEILING DESIGN) INCLUDING:
   A) STEEL DECK, MAX 3" DP.
   B) CONCRETE, MIN 2-1/2" TH ABOVE TOP PLANE OF DECK.
   C) SPRAY-APPLIED FIRE RESISTIVE MATERIAL (OPTIONAL) DECK MAY BE SPRAYED W/ SFRM AS PER D700 OR D900 SERIES DESIGN
2) WALL ASSEMBLY - 1 OR 2 HR FIRE-RATED GYPSUM BOARD/STEEL STUD WALL ASSEMBLY (PER U400 SERIES DESIGN) INCLUDING:
   A) STEEL FLOOR RUNNERS, MIN 25 GA GALV STEEL CHANNELS, OR, A1) (ALTERNATIVE) SLOTTED DEFLECTION RUNNER.
   B) STEEL STUDS, MIN 3-1/2" W. STUDS CUT 3/4" TO 1" LESS IN LENGTH THAN ASSEMBLY HEIGHT. MAX SPACING 24" O.C.
   C) GYPSUM BOARD - ONE OR TWO LAYERS 5/8" TH GYPSUM BOARD AS REQD FOR RATED ASSEMBLY W/ TOP GAP OF MAX 1-1/2" TO UNDERSIDE OF DECK.
3) A) PAINTABLE SEALANT @ TOP OF WALL GAP, MAX 1/4" H, FULL DEPTH. TOOL FLUSH W/ FINISH FACE OF WALL.
   B) FORMING MATERIAL (OPTIONAL) - MINERAL WOOL OR FIBERGLAS BATT INSULATION, OR POLYURETHANE BACKER ROD

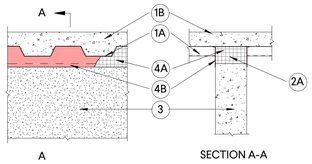


CONFIGURATION A CONFIGURATION B CONFIGURATION C

GYPSUM STUD WALL TO CONCRETE FLOOR W/ INTUMESCENT TOP TRACK SEAL	A	HW-D-0757
	B	HW-D-1059
	C	HW-D-0748

GYPSUM SHAFT WALL TO FLAT CONCRETE FLOOR W/ INTUMESCENT TOP TRACK SEAL

1) FLOOR ASSEMBLY - FIRE-RATED FLUTED DECK/CONCRETE ASSEMBLY (PER D700 OR D900 FLOOR-CEILING DESIGN) INCLUDING:
   A) STEEL DECK, MAX 3" DP.
   B) CONCRETE, MIN 2-1/2" TH ABOVE TOP PLANE OF DECK.
   C) SPRAY-APPLIED FIRE RESISTIVE MATERIAL (OPTIONAL) DECK MAY BE SPRAYED W/ SFRM AS PER D700 SERIES DESIGN
2) ROOF ASSEMBLY - AS AN ALTERNATE TO ITEMS 1A AND 1B, A FIRE-RATED PROTECTED FLUTED STEEK DECK ROOF ASSEMBLY (PER P700 ROOF/CEILING DESIGN) INCLUDING:
   A) STEEL DECK, MAX 3" DP. B) SPRAY-APPLIED FIRE RESISTIVE MATERIALS APPLIED AS PER P700 SERIES DESIGN.
3) WALL ASSEMBLY - MIN 8" TH REINFORCED STRUCTURAL CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS.
4) A) FORMING MATERIAL - MINERAL WOOL BATTS, PLUGS, OR PRECUT STRIPS
   B) FIRESTOP SEALANT MIN 1/8" WET THICKNESS, SPRAYED OR TROWELED. OVERLAP CONCRETE WALL MIN 1/2". OVERLAP STEEL DECK MIN 1/2" OR, OVERLAP SFRM MIN 2", ON BOTH SIDES OF WALL

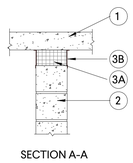


A SECTION A-A

GYPSUM SHAFT WALL TO FLAT CONCRETE FLOOR W/ INTUMESCENT TOP TRACK SEAL	A	HW-D-0824
	B	HW-D-0552
	C	N/A

GYPSUM STUD WALL PERPENDICULAR TO CONCRETE OVER FLUTED METAL DECK W/ INTUMESCENT TOP TRACK SEAL

1) FLOOR ASSEMBLY - MIN 4-1/2" TH REINFORCED STRUCTURAL CONCRETE.
2) WALL ASSEMBLY - MIN 8" TH REINFORCED STRUCTURAL CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS.
3) A) FORMING MATERIAL - MINERAL WOOL BATTS, PLUGS, OR PRECUT STRIPS
   B) FIRESTOP SEALANT MIN 1/8" WET THICKNESS, SPRAYED OR TROWELED. OVERLAP CONCRETE FLOOR AND CONCRETE WALL MIN 1/2".



SECTION A-A

GYPSUM STUD WALL PERPENDICULAR TO CONCRETE OVER FLUTED METAL DECK W/ INTUMESCENT TOP TRACK SEAL	A	HW-D-0871
	B	HW-D-0973
	C	HW-D-0031

GYPSUM STUD WALL PARALLEL TO CONCRETE OVER FLUTED METAL DECK W/ INTUMESCENT TOP TRACK SEAL

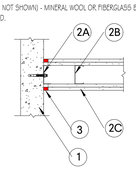
1) WALL ASSEMBLY - MIN 8" TH REINFORCED STRUCTURAL CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS.
2) A) FIRESTOP SEALANT INSTALLED FLUSH WITH EACH SURFACE OF WALL. MIN THICKNESS 1/4" (FOR 1 # 2 HR RATING) OR 1/2" (FOR 3 HR RATING)
   B) FORMING MATERIAL (OPTIONAL) - MINERAL WOOL OR POLYETHYLENE OR POLYURETHANE FOAM BACKER ROD.

SECTION A-A

GYPSUM STUD WALL PARALLEL TO CONCRETE OVER FLUTED METAL DECK W/ INTUMESCENT TOP TRACK SEAL	A	HW-D-0872
	B	HW-D-0972
	C	HW-D-0192

GYPSUM WALL TO BOTTOM OF FIREPROOFED BEAM W/ INTUMESCENT TOP TRACK SEAL (MAX JW 1/2")

1) CONCRETE WALL ASSEMBLY - MIN 4-1/2" TH REINFORCED STRUCTURAL CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS.
2) GYPSUM WALL ASSEMBLY - THE 1, 2, 3, OR 4 HR FIRE RATED GYPSUM BOARD/STEEL STUD WALL ASSEMBLY (PER THE INDIVIDUAL U400 DESIGN) INCLUDING:
   A) STEEL RUNNERS - MIN 25 GA GALV STEEL CHANNELS WITH MIN 1-1/4" FLANGES.
   B) STEEL STUDS, MIN 3-1/2" W CUT 1/2 TO 3/4" LESS IN LENGTH THAN ASSEMBLY HEIGHT. MAX SPACING 24" O.C.
   C) GYPSUM BOARD - ONE, TWO, THREE, OR FOUR LAYERS OF 5/8" TH GYPSUM BOARD FOR 1, 2, 3, OR 4 HR RATED ASSEMBLIES, RESPECIVELY. MAX GAP BETWEEN EDGE OF GYPSUM BOARD AND FACE OF CONCRETE WALL: 1" AT 1 # 2 HR RATED ASSEMBLIES, 3/4" FOR 3 HR ASSEMBLIES, OR 7/8" FOR 4 HR ASSEMBLIES.
3) A) FIRESTOP SEALANT INSTALLED FLUSH WITH EACH SURFACE OF WALL. MIN THICKNESS 5/8" (FOR 1 # 2 HR RATINGS) OR 1" (FOR 3 # 4 HR RATINGS)
   B) FORMING MATERIAL (OPTIONAL, NOT SHOWN) - MINERAL WOOL OR FIBERGLAS BATT INSULATION OR, POLYETHYLENE OR POLYURETHANE FOAM BACKER ROD.

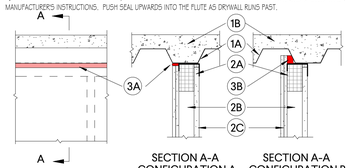


SECTION A-A

GYPSUM STUD WALL TO BOTTOM OF FIREPROOFED BEAM W/ INTUMESCENT TOP TRACK SEAL (MAX JW 1/2")	A	HW-D-0875
	B	N/A
	C	HW-D-0465

GYPSUM SHAFT WALL PARALLEL TO CONCRETE OVER FLUTED METAL DECK W/ INTUMESCENT TOP TRACK SEAL

1) FLOOR ASSEMBLY - FIRE-RATED FLUTED DECK/CONCRETE ASSEMBLY (PER D700 OR D900 FLOOR-CEILING DESIGN) INCLUDING:
   A) STEEL DECK, MAX 3" DP.
   B) CONCRETE, MIN 2-1/2" TH ABOVE TOP PLANE OF DECK.
2) SHAFT WALL ASSEMBLY - 1 OR 2 HR FIRE-RATED GYPSUM BOARD/STEEL STUD SHAFT WALL ASSEMBLY INCLUDING:
   A) STEEL FLOOR, WALL, 4 CEILING RUNNERS, MIN 24 GA GALV STEEL J-SHAPED CHANNELS, MIN 4" W, W/ UNEQUAL LEGS MIN 1" & 2".
   B) STEEL STUDS, MIN 24 GA GALV C-H SHAPED STUDS, MIN 4" W. STUDS CUT 1/2" LESS IN LENGTH THAN ASSEMBLY HEIGHT. MAX SPACING 24" O.C.
   C) GYPSUM BOARD - 1" TH GYPSUM BOARD LINER PANELS AS REQD FOR RATED ASSEMBLY.
   D) GYPSUM BOARD - 5/8" TH TYPE C IN ONE OR TWO LAYERS, ON FINISHED SIDE OF WALL W/ BOTTOM FLOOR GAP OF MAX 1/2".
3) A) FIRESTOP SYSTEM - CONFIGURATION A, TOP TRACK IN LINE W/ FLUTE - INTUMESCENT TOP TRACK SEAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
   B) FIRESTOP SYSTEM - CONFIGURATION B, TOP TRACK OFFSET FROM FLUTE - INTUMESCENT TOP TRACK SEAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS. PUSH SEAL UPWARDS INTO THE FLUTE AS DRYWALL RUNS PAST.



SECTION A-A CONFIGURATION A SECTION A-A CONFIGURATION B

GYPSUM SHAFT WALL PARALLEL TO CONCRETE OVER FLUTED METAL DECK W/ INTUMESCENT TOP TRACK SEAL	A	HW-D-0852
	B	N/A
	C	N/A

CONC. OR BLOCK WALL PERPENDICULAR TO CONCRETE OVER FLUTED METAL DECK (MAX. JW 3-1/2")

1) FLOOR ASSEMBLY - MIN 2-1/2" TH REINFORCED STRUCTURAL CONCRETE
2) WALL ASSEMBLY - 1 OR 2 HR FIRE-RATED GYPSUM BOARD/STEEL STUD SHAFT WALL ASSEMBLY INCLUDING:
   A) STEEL FLOOR AND CEILING RUNNERS, MIN 24 GA GALV STEEL J-SHAPED CHANNELS W/ UNEQUAL LEGS MIN 1-1/4" AND 2".
   B) STEEL STUDS, MIN 24 GA GALV C-H SHAPED STUDS, MIN 2-1/2" W. STUDS CUT 3/8 TO 1/2" LESS IN LENGTH THAN ASSEMBLY HEIGHT. MAX SPACING 24" O.C.
   C) GYPSUM BOARD - 1" TH GYPSUM BOARD LINER PANELS AS REQD FOR RATED ASSEMBLY.
   D) GYPSUM BOARD - 1/2 OR 5/8" TH, ON FINISHED SIDE OF WALL W/ BOTTOM FLOOR GAP OF MAX 3/4".
3) FIRESTOP SEALANT@ FLOOR GAP, MAX 3/4" H, FULL DEPTH. TOOL FLUSH W/ FINISH FACE OF WALL.

SECTION A-A

CONC. OR BLOCK WALL TO CONCRETE FLOOR (MAX. JW 3-1/2")	A	HW-D-1037
	B	HW-D-1123
	C	HW-D-1076

CONC. OR BLOCK WALL TO CONCRETE FLOOR (MAX. JW 3-1/4")

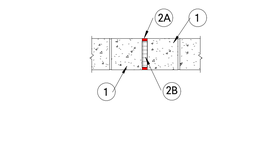
1) FLOOR ASSEMBLY - MIN 4-1/2" TH REINFORCED STRUCTURAL CONCRETE OR, ANY 6" TH UL CLASSIFIED HOLLOW-CORE PRECAST CONCRETE UNITS.
2) WALL ASSEMBLY - 1 OR 2 HR FIRE-RATED GYPSUM BOARD/STEEL STUD WALL ASSEMBLY INCLUDING:
   A) STEEL FLOOR RUNNERS, MIN 25 GA GALV STEEL CHANNELS
   B) STEEL STUDS, MIN 3-1/2" W. STUDS CUT 1/2 TO 3/4" LESS IN LENGTH THAN ASSEMBLY HEIGHT. MAX SPACING 24" O.C.
   C) GYPSUM BOARD - ONE OR 2 LAYERS 5/8" TH GYPSUM BOARD AS REQD FOR RATED ASSEMBLY W/ BOTTOM FLOOR GAP OF MAX 1" (1 # 2 HR RATED ASSEMBLIES) OR 7/8" (3 # 4 HR RATED ASSEMBLIES)
3) INTUMESCENT BOTTOM TRACK SEAL SECURED TO FLOOR RUNNER W/ADHESIVE BACKING, # RESTING TIGHT TO TOP OF CONCRETE. PRODUCT TO BE COMPRESSED TIGHTLY AT SEAM LOCATIONS TO ENSURE NO GAPS.

SECTION A-A

CONC. OR BLOCK WALL TO CONCRETE FLOOR (MAX. JW 3-1/4")	A	HW-D-1058
	B	HW-D-1010
	C	HW-D-1034

CONCRETE WALL TO WALL JOINT (MAX. JW 1")

1) A) FLOOR ASSEMBLY - MIN 4-1/2" TH REINFORCED STRUCTURAL CONCRETE OR, ANY 6" TH UL CLASSIFIED HOLLOW-CORE PRECAST CONCRETE UNITS.
   B) NOT SHOWN, ALTERNATE FIRE-RATED FLUTED STEEL DECK/CONCRETE ASSEMBLY CONSISTING OF MIN 3" DP GALV STEEL FLUTED UNITS AND MIN 2-1/2" TH REINFORCED CONCRETE MEASURED ABOVE TOP PLANE OF THE FLUTES.
2) WALL ASSEMBLY - 1 OR 2 HR FIRE-RATED GYPSUM BOARD/STEEL STUD WALL ASSEMBLY INCLUDING:
   A) STEEL FLOOR AND CEILING RUNNERS, MIN 24 GA GALV STEEL J-SHAPED CHANNELS W/ UNEQUAL LEGS MIN 1-1/4" AND 2".
   B) STEEL STUDS, MIN 24 GA GALV C-H SHAPED STUDS, MIN 2-1/2" W. STUDS CUT 3/8 TO 1/2" LESS IN LENGTH THAN ASSEMBLY HEIGHT. MAX SPACING 24" O.C.
   C) GYPSUM BOARD - 1" TH GYPSUM BOARD LINER PANELS AS REQD FOR RATED ASSEMBLY.
   D) BATT INSULATION (NOT SHOWN, OPTIONAL) ANY GLASS FIBER INSULATION BEARING UL CLASSIFICATION MARK.
3) INTUMESCENT BOTTOM TRACK SEAL SECURED TO FLOOR RUNNER W/ADHESIVE BACKING, # RESTING TIGHT TO TOP OF CONCRETE. PRODUCT TO BE COMPRESSED TIGHTLY AT SEAM LOCATIONS TO ENSURE NO GAPS.



SECTION A-A

CONCRETE WALL TO WALL JOINT (MAX. JW 1")	A	WW-D-0032
	B	WW-D-0021
	C	WW-D-0103

GYPSUM WALL TO CONCRETE OR BLOCK WALL JOINT (MAX. JW 1")

1) CONCRETE WALL ASSEMBLY - MIN 4-1/2" TH REINFORCED STRUCTURAL CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS.
2) GYPSUM WALL ASSEMBLY - THE 1 OR 2 HR FIRE RATED GYPSUM BOARD/STEEL STUD WALL ASSEMBLY (PER THE INDIVIDUAL U400 DESIGN) INCLUDING:
   A) STEEL RUNNERS - MIN 25 GA GALV STEEL CHANNELS WITH MIN 1-1/4" FLANGES.
   B) STEEL STUDS, MIN 3-1/2" W CUT 1/2 TO 3/4" LESS IN LENGTH THAN ASSEMBLY HEIGHT. MAX SPACING 24" O.C.
   C) GYPSUM BOARD - ONE OR TWO LAYERS 5/8" TH GYPSUM BOARD FOR 1 OR 2 HR RATED ASSEMBLIES, RESPECIVELY. MAX GAP BETWEEN EDGE OF GYPSUM BOARD AND FACE OF CONCRETE WALL: 3/4".
   FIRESTOP SYSTEM - INTUMESCENT TRACK SEAL. MAX SEPARATION BETWEEN EDGE OF GYPSUM BOARD AND FACE OF CONCRETE WALL ASSEMBLY: 3/4". FACTORY SUPPLIED FOAM SEAL INSTALLED OVER STEEL RUNNERS PRIOR TO ATTACHMENT TO CONCRETE WALL IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

SECTION A-A

GYPSUM WALL TO CONCRETE OR BLOCK WALL JOINT (MAX. JW 1")	A	WW-D-0040
	B	WW-D-0074
	C	WW-D-0064

PRODUCT / MANUFACTURER LEGEND

1. THE ILLUSTRATIONS ON THIS DRAWING REPRESENT FREQUENTLY ENCOUNTERED JOINT FIRESTOPPING CONDITIONS THROUGH FIRE-RATED FLOOR AND WALL ASSEMBLIES.
2. THE NUMBERS SHOWN BELOW ARE MANUFACTURERS' UL-TEST NUMBERS FOR EACH CONDITION.
3. THE KEY TO MANUFACTURERS (A, B, OR C) IS AS INDICATED BELOW.

GYPSUM STUD WALL TO CONCRETE FLOOR W/APPLIED SEALANT JOINT

1) A) FLOOR ASSEMBLY - MIN 4-1/2" TH REINFORCED STRUCTURAL CONCRETE OR, ANY 6" TH UL CLASSIFIED HOLLOW-CORE PRECAST CONCRETE UNITS.
   B) NOT SHOWN, ALTERNATE FOR 1 AND 2 HR RATINGS ONLY: FIRE-RATED FLUTED STEEL DECK/CONCRETE ASSEMBLY MEETING D700 OR D900 SERIES FLOOR-CEILING DESIGN CONSISTING OF: MIN 3" DP GALV STEEL FLUTED UNITS AND MIN 2-1/2" TH REINFORCED CONCRETE ABOVE TOP PLANE OF THE FLUTES.
2) WALL ASSEMBLY - 1, 2, 3, OR 4 HR FIRE-RATED GYPSUM BOARD/STEEL STUD WALL ASSEMBLY INCLUDING:
   A) STEEL FLOOR RUNNERS, MIN 25 GA GALV STEEL CHANNELS
   B) STEEL STUDS, MIN 3-1/2" W. STUDS CUT 1/2 TO 3/4" LESS IN LENGTH THAN ASSEMBLY HEIGHT. MAX SPACING 24" O.C.
   C) GYPSUM BOARD - ONE, TWO, THREE, OR 4 LA

OCCUPANT LOAD BY ROOM AREA (PER SMOKE COMPARTMENT)

SM. COMP.	ROOM NAME	RM. NO.	Level	ROOM/OCCUPANCY USE	SF/ PERSON	AREA	OCC. LOAD
	LOBBY	100	LEVEL 1	BUSINESS AREAS - IBC 2018	150	154 SF	1.03
	TRIAGE	101	LEVEL 1	INSTITUTIONAL - OUTPATIENT AREAS	100	106 SF	1.06
	UNISEX TOILET	102	LEVEL 1	NON-SIMULTANEOUS OCCUPANCY	0	52 SF	
	OFFICE	103	LEVEL 1	BUSINESS AREAS - IBC 2018	150	138 SF	0.92
	OFFICE	104	LEVEL 1	BUSINESS AREAS - IBC 2018	150	159 SF	1.06
	OFFICE/SAFE ROOM	105	LEVEL 1	BUSINESS AREAS - IBC 2018	150	155 SF	1.03
	RECEPTION	106	LEVEL 1	BUSINESS AREAS - IBC 2018	150	124 SF	0.83
	FIRE RISER	107	LEVEL 1	ACCESSORY STORAGE, MECHANICAL EQUIP ROOM	300	67 SF	0.22
	IT/ELECT.	108	LEVEL 1	ACCESSORY STORAGE, MECHANICAL EQUIP ROOM	300	58 SF	0.19
	CORRIDOR	109	LEVEL 1	NON-SIMULTANEOUS OCCUPANCY	0	849 SF	
	TRAINING	110	LEVEL 1	BUSINESS AREAS - IBC 2018	150	910 SF	6.06
	A/V & STORAGE	111	LEVEL 1	ACCESSORY STORAGE, MECHANICAL EQUIP ROOM	300	107 SF	0.36
	FITNESS	112	LEVEL 1	EXERCISE ROOMS	50	311 SF	6.21
	EMS STORAGE	113	LEVEL 1	ACCESSORY STORAGE, MECHANICAL EQUIP ROOM	300	91 SF	0.30
	GEAR ROOM	114	LEVEL 1	ACCESSORY STORAGE, MECHANICAL EQUIP ROOM	300	125 SF	0.42
	UNISEX TOILET	115	LEVEL 1	NON-SIMULTANEOUS OCCUPANCY	0	70 SF	
	DECON AREA	116	LEVEL 1	BUSINESS AREAS - IBC 2018	150	172 SF	1.15
	SHOWER ROOM	117	LEVEL 1	NON-SIMULTANEOUS OCCUPANCY	0	52 SF	
	APPARATUS BAY	118	LEVEL 1	ACCESSORY STORAGE, MECHANICAL EQUIP ROOM	300	4152 SF	13.84
	JAN.	119	LEVEL 1	ACCESSORY STORAGE, MECHANICAL EQUIP ROOM	300	21 SF	0.07
	PLATFORM	200	LEVEL 2	STAGES AND PLATFORMS	15	75 SF	4.97
	KITCHEN	201	LEVEL 2	KITCHENS - COMMERCIAL	200	207 SF	1.03
	DAY ROOM	202	LEVEL 2	BUSINESS AREAS - IBC 2018	150	475 SF	3.17
	STORAGE W/ LOCKERS	203	LEVEL 2	LOCKER ROOMS	50	101 SF	2.01
	BUNK ROOM 1	204	LEVEL 2	RESIDENTIAL	200	150 SF	0.75
	BUNK ROOM 2	205	LEVEL 2	RESIDENTIAL	200	150 SF	0.75
	BUNK ROOM 3	206	LEVEL 2	RESIDENTIAL	200	226 SF	1.13
	BUNK ROOM 4	207	LEVEL 2	RESIDENTIAL	200	141 SF	0.71
	BUNK ROOM 5	208	LEVEL 2	RESIDENTIAL	200	147 SF	0.73
	BUNK ROOM 6	209	LEVEL 2	RESIDENTIAL	200	147 SF	0.73
	BUNK ROOM 7	210	LEVEL 2	RESIDENTIAL	200	147 SF	0.73
	IT/ELECT. OR STORAGE	211	LEVEL 2	ACCESSORY STORAGE, MECHANICAL EQUIP ROOM	300	116 SF	0.39
	CORRIDOR	212	LEVEL 2	NON-SIMULTANEOUS OCCUPANCY	0	801 SF	
	OFFICE/FLEX SPACE	213	LEVEL 2	BUSINESS AREAS - IBC 2018	150	189 SF	1.26
	STOR.	214	LEVEL 2	ACCESSORY STORAGE, MECHANICAL EQUIP ROOM	300	18 SF	0.06
	PANTRY	215	LEVEL 2	ACCESSORY STORAGE, MECHANICAL EQUIP ROOM	300	16 SF	0.05
	PANTRY	216	LEVEL 2	ACCESSORY STORAGE, MECHANICAL EQUIP ROOM	300	14 SF	0.05
	PANTRY	217	LEVEL 2	ACCESSORY STORAGE, MECHANICAL EQUIP ROOM	300	15 SF	0.05
	STORAGE	218	LEVEL 2	ACCESSORY STORAGE, MECHANICAL EQUIP ROOM	300	56 SF	0.19
	RESTROOM 1	219	LEVEL 2	NON-SIMULTANEOUS OCCUPANCY	0	82 SF	
	RESTROOM 2	220	LEVEL 2	NON-SIMULTANEOUS OCCUPANCY	0	82 SF	
	RESTROOM 3	221	LEVEL 2	NON-SIMULTANEOUS OCCUPANCY	0	82 SF	
	LAUNDRY	222	LEVEL 2	BUSINESS AREAS - IBC 2018	150	136 SF	0.90
	RESTROOM 4	223	LEVEL 2	NON-SIMULTANEOUS OCCUPANCY	0	68 SF	
	STAIRWELL	ST1	LEVEL 1	NON-SIMULTANEOUS OCCUPANCY	0	181 SF	
	STAIRWELL	ST2	LEVEL 1	NON-SIMULTANEOUS OCCUPANCY	0	271 SF	
Grand total: 46						11963 SF	54.42
TOTAL GROSS AREA AND OCCUPANT LOAD						11961 SF	55

CLARIFICATION: NON-SIMULTANEOUS OCCUPANCY:

THE NOTATION "NON-SIMULTANEOUS OCCUPANCY" INDICATES AREAS IN WHICH THE OCCUPANT LOAD HAS ALREADY BEEN ACCOUNTED FOR ELSEWHERE. TYPICALLY THESE ARE AREAS USED ONLY BY STAFF PERSONNEL WHO HAVE BEEN ACCOUNTED FOR IN AT LEAST ONE OTHER ROOM OR AREA WITHIN THE FACILITY.

SINCE STAFF PERSONNEL CAN NOT SIMULTANEOUSLY OCCUPY TWO PLACES AT THE SAME TIME, AREAS CITED AS "NON-SIMULTANEOUS OCCUPANCY" HAVE BEEN CALCULATED AT 0 SQ. FT. PER OCCUPANT IN ORDER TO AVOID DOUBLE-COUNTING.

FIRE AREAS — IBC CH. 5+7

-GENERAL BUILDING HEIGHT AND AREA LIMITATIONS: PER IBC CH. 5. EACH PORTION OF A BUILDING SEPARATED BY ONE OR MORE FIRE WALLS COMPLYING WITH SECTION 706 SHALL BE CONSIDERED TO BE A SEPARATE BUILDING.

- FIRE WALLS : PER TBL. 706.4 FIRE WALLS FOR OCCUPANCY GROUPS B AND I SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 3-HOURS.
  a. IN TYPE II CONSTRUCTION, WALLS SHALL BE PERMITTED TO HAVE A 2-HOUR FIRE-RESISTANCE RATING.
  *EXCEPTIONS:
  1. FIRE WALLS SHALL BE CONTINUOUS FROM EXTERIOR WALL TO EXTERIOR WALL AND SHALL EXTEND NOT LESS THAN 18 INCHES BEYOND THE EXTERIOR SURFACE OF EXTERIOR WALLS.
  2. FIRE WALLS SHALL BE PERMITTED TO TERMINATE AT THE INTERIOR SURFACE OF NONCOMBUSTIBLE EXTERIOR SHEATHING WHERE THE BUILDING ON EACH SIDE OF THE FIRE WALL IS PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH CH 9. FIRE WALLS SHALL BE CONTINUOUS FROM THE FOUNDATION TO A TERMINATION POINT AT LEAST 30 INCHES ABOVE BOTH ADJACENT ROOFS.
  3. WALLS SHALL BE PERMITTED TO TERMINATE AT THE UNDERSIDE OF NONCOMBUSTIBLE ROOF SHEATHING, DECK OR SLABS WHERE BOTH BUILDINGS ARE PROVIDED WITH NOT LESS THAN A CLASS B ROOF COVERING. OPENINGS IN THE ROOF SHALL NOT BE LOCATED WITHIN 4 FEET OF THE FIRE WALL.

AREAS (GROSS BY FLOOR) SEPARATED BY 2 HOUR FIRE WALLS AS PER IBC CH. 7

LEVEL 1		LEVEL 2	
FIRE AREA 1-A	XX,XXX GSF	FIRE AREA 2-A	XX,XXX GSF
FIRE AREA 1-B	XX,XXX GSF	FIRE AREA 2-B	XX,XXX GSF

FIRE AREAS — IBC CH. 5+7

-GENERAL BUILDING HEIGHT AND AREA LIMITATIONS: PER IBC CH. 5. EACH PORTION OF A BUILDING SEPARATED BY ONE OR MORE FIRE WALLS COMPLYING WITH SECTION 706 SHALL BE CONSIDERED TO BE A SEPARATE BUILDING.

- FIRE WALLS : PER TBL. 706.4 FIRE WALLS FOR OCCUPANCY GROUPS B AND I SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 3-HOURS.
  a. IN TYPE II CONSTRUCTION, WALLS SHALL BE PERMITTED TO HAVE A 2-HOUR FIRE-RESISTANCE RATING.
  *EXCEPTIONS:
  1. FIRE WALLS SHALL BE CONTINUOUS FROM EXTERIOR WALL TO EXTERIOR WALL AND SHALL EXTEND NOT LESS THAN 18 INCHES BEYOND THE EXTERIOR SURFACE OF EXTERIOR WALLS.
  2. FIRE WALLS SHALL BE PERMITTED TO TERMINATE AT THE INTERIOR SURFACE OF NONCOMBUSTIBLE EXTERIOR SHEATHING WHERE THE BUILDING ON EACH SIDE OF THE FIRE WALL IS PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH CH 9. FIRE WALLS SHALL BE CONTINUOUS FROM THE FOUNDATION TO A TERMINATION POINT AT LEAST 30 INCHES ABOVE BOTH ADJACENT ROOFS.
  3. WALLS SHALL BE PERMITTED TO TERMINATE AT THE UNDERSIDE OF NONCOMBUSTIBLE ROOF SHEATHING, DECK OR SLABS WHERE BOTH BUILDINGS ARE PROVIDED WITH NOT LESS THAN A CLASS B ROOF COVERING. OPENINGS IN THE ROOF SHALL NOT BE LOCATED WITHIN 4 FEET OF THE FIRE WALL.

AREAS (GROSS BY FLOOR) SEPARATED BY 2 HOUR FIRE WALLS AS PER IBC CH. 7

LEVEL 1		LEVEL 2	
FIRE AREA 1-A	XX,XXX GSF	FIRE AREA 2-A	XX,XXX GSF
FIRE AREA 1-B	XX,XXX GSF	FIRE AREA 2-B	XX,XXX GSF

OVERALL BUILDING AREA

LEVEL	AREA (GROSS SQUARE FEET)
1	8,758 GSF
2	4,456 GSF
TOTAL	13,214 GSF

APPLICABLE CODES & REGULATIONS

2021	INTERNATIONAL BUILDING CODE (IBC)
2021	INTERNATIONAL FUEL GAS CODE (IFGC)
2021	INTERNATIONAL MECHANICAL CODE (IMC)
2021	INTERNATIONAL PLUMBING CODE (IPC)
2021	INTERNATIONAL FIRE CODE (IFC)
2020	NATIONAL ELECTRICAL CODE (NEC)
2021	NFPA 101 LIFE SAFETY CODE
2010	STANDARDS FOR ACCESSIBLE DESIGN

OCCUPANCY CLASSIFICATION — IBC CH 3

OCCUPANCY	PRIMARY : GROUP B, BUSINESS SECONDARY : GROUP R-3, RESIDENTIAL

CONSTRUCTION CLASSIFICATION — IBC CH 5

CONSTRUCTION TYPE	TYPE IIIB - FULLY SPRINKLERED	
HEIGHT	ALLOWABLE: 35 FEET	ACTUAL: 34'-9"
# OF STORIES	ALLOWABLE: 4	ACTUAL: 2
AREA PER FLOOR	ALLOWABLE: 57,000 SF/STORY	ACTUAL: LEVEL 1 - 8,758 SF GROSS LEVEL 2 - 4,456 SF GROSS

FIRE RESISTANCE - STRUCT. ELEMENTS — IBC CH 6

RESISTANCE REQUIRED BY IBC TYPE TABLE 601

CONSTRUCTION TYPE : IIIB

	RESISTANCE REQUIRED	RESISTANCE PROVIDED	
		RATING	ACHIEVED BY
BUILDING ELEMENT - STRUCTURAL			
PRIMARY STRUCTURAL FRAME (PER CH 2 WITH RATING NOT LESS THAN CH 7)			
COLUMNS STRUCTURAL MEMBERS HAVING DIRECT CONNECTION TO COLUMNS - BEAMS, GIRDERS, TRUSSES, AND SPANDRELS	0 HR	0 HR	UL #
BEARING WALLS			
EXTERIOR WALLS (RATING NOT LESS THAN CH 6 OR CH 7)	2 HR	2 HR	UL # U905
INTERIOR WALLS	0 HR	1 HR	UL # U905
NON BEARING WALLS AND PARTITIONS			
EXTERIOR WALLS (BASED ON FIRE SEPARATION DISTANCE PER CH 6)	0 HR	0 HR	UL #
NON BEARING WALLS AND PARTITIONS			
INTERIOR WALLS (RATING NOT LESS THAN REQUIRED BY SECTIONS OTHER THAN SECTION 6)	0 HR	0 HR	UL #
FLOOR CONSTRUCTION AND SECONDARY MEMBERS (PER CH 2)			
FLOOR CONSTRUCTION HAVING DIRECT CONNECTIONS TO THE COLUMNS	1 HR	1 HR	UL M546
ROOF CONSTRUCTION AND SECONDARY MEMBERS (PER CH 2)			
ROOF CONSTRUCTION HAVING DIRECT CONNECTIONS TO THE COLUMNS	0 HR	0 HR	UL #

FIRE RESISTANCE - WALLS / PARTITIONS — IBC CH 7

[SPECIAL PROVISION NOTES FOR FIRE RESISTANCE FOR WALLS AND PARTITIONS IF APPLICABLE]

- FIRE WALLS : PER CH 7 FIRE WALLS FOR OCCUPANCY GROUP E SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 3-HOURS.

EXCEPTION : IN TYPE II, WALL SHALL BE PERMITTED TO HAVE A 2-HOUR FIRE RESISTANCE RATING. FIRE WALLS SHALL BE CONTINUOUS FROM EXTERIOR WALL TO EXTERIOR WALL AND SHALL EXTEND AT LEAST 18 INCHES BEYOND THE EXTERIOR SURFACE OF EXTERIOR WALLS.
EXCEPTION : FIRE WALLS SHALL BE PERMITTED TO TERMINATE AT THE INTERIOR SURFACE OF NONCOMBUSTIBLE EXTERIOR SHEATHING WHERE THE BUILDING ON EACH SIDE OF THE FIRE WALL IS PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH CH 9. FIRE WALLS SHALL BE CONTINUOUS FROM THE FOUNDATION TO A TERMINATION POINT AT LEAST 30 INCHES ABOVE BOTH ADJACENT ROOFS.
EXCEPTION : WALLS SHALL BE PERMITTED TO TERMINATE AT THE UNDERSIDE OF NONCOMBUSTIBLE ROOF SHEATHING, DECK OR SLABS WHERE BOTH BUILDINGS ARE PROVIDED WITH NOT LESS THAN A CLASS B ROOF COVERING. OPENINGS IN THE ROOF SHALL NOT BE LOCATED WITHIN 4 FEET OF THE FIRE WALL.

- SHAFT ENCLOSURES : PER CH 7 SHAFT ENCLOSURES SHALL BE CONSTRUCTED AS FIRE BARRIERS OR HORIZONTAL ASSEMBLIES IN ACCORDANCE WITH CHAPTER 7, OR BOTH.

EXCEPTION : IN OTHER THAN GROUP H OCCUPANCIES, AS SHAFT ENCLOSURE IS NOT REQUIRED FOR FLOOR OPENINGS COMPLYING WITH THE PREVISION FOR ATRIUMS IN CH 4. SHAFT ENCLOSURES SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 1 HOUR WHERE CONNECTING LESS THAN FOUR STORIES, AND NOT LESS THAN THE FLOOR ASSEMBLY PENETRATED, BUT NEED NOT EXCEED 2 HOURS. EXTERIOR WALLS SERVING AS PART OF THE SHAFT ENCLOSURE SHALL COMPLY WITH CH 5 AND THE FIRE-RESISTANCE RATED ENCLOSURE REQUIREMENTS SHALL NOT APPLY

FIRE RESISTANCE - WALLS & PARTITIONS — IBC CH 7

WALLS AND PARTITIONS	IBC TBL. 716.5	OPENING PROTECTION	RESISTANCE PROVIDED RATING	RESISTANCE PROVIDED ACHIEVED BY
SHAFT ENCLOSURES				
* LESS THAN 4 STORIES	1 HR	1 HR	TBD	UL #
* 4 OR MORE STORIES	2 HR	N/A	N/A	UL #
FIRE WALLS	2 HR	90 MIN.	90 MIN.	UL #
HORIZONTAL EXITS	N/A	N/A	N/A	UL #
EXIT PASSAGEWAYS	1 HR	1 HR	TBD	UL #
SMOKE BARRIERS	1 HR	TBD	TBD	UL #
ACCESSORY / INCIDENTAL USE				
* FURNACE RM W/ 400,000 BTU/HR INPUT EQMT	1 HR	TBD	TBD	UL #
* BOILER RM W/ 15 PSI & 10 HP EQMT	1 HR	N/A	N/A	UL #
* REFRIGERANT MACHINERY RM	1 HR	N/A	N/A	UL #
* HYDROGEN CUTOFF RM	1 HR	N/A	N/A	UL #
* INCINERATOR RM	2 HR	N/A	N/A	UL #
* PAINT SHOP	2 HR	N/A	N/A	UL #
* LABS & VOCATIONAL SHOPS	1 HR	TBD	TBD	UL #
* WASTE & LINEN RMS > 100 SF	1 HR	TBD	TBD	UL #
* STATIONARY STORAGE BATTERY SYSTEMS	1 HR	TBD	TBD	UL #
* FIRE PUMP RM	1 HR	TBD	TBD	UL #

MEANS OF EGRESS

MAXIMUM ALLOWABLE	[OCCUPANCY TYPE]
TRAVEL DISTANCE TO EXIT	250 FT EQUIPPED W/ SPRINKLER SYSTEM
COMMON PATH OF TRAVEL	100 FT
DEAD END LENGTH	20 FT

EGRESS OCCUPANTS (DESIGN LOAD)

LEVEL 1:

CALCULATION VALUES	OCCUPANCY COUNT
BUSINESS: 1,814 SF / 150	11.78
INSTITUTIONAL: 106 SF / 100	1.06
ACCESSORY STORAGE E: 4,620 SF / 300	15.4
EXERCISE RM: 310 SF / 50	6.2

LEVEL 1 TOTAL OCCUPANTS = 34.44 OCCUPANTS

LEVEL 2:

CALCULATION VALUES	OCCUPANCY COUNT
STAGES & PLATFORMS: 73 SF / 15	4.87
KITCHENS - COMMERCIAL: 207 SF / 200	1.04
BUSINESS: 800 SF / 150	5.33
LOCKER ROOMS: 100 SF / 50	2
RESIDENTIAL: 1,108 SF / 200	5.54
ACCESSORY STORAGE: 234 SF / 300	0.78

LEVEL 2 TOTAL OCCUPANTS = 19.56 OCCUPANTS

AGGREGATE OCCUPANT LOAD = 54 OCCUPANTS

STAIRWAY WIDTH	REQUIRED: 0.3" PER OCCUPANT X 19.56 OCCUPANTS = 5.868"	PROVIDED: 45"
EGRESS WIDTH	REQUIRED: 0.2" PER OCCUPANT X 54.34 OCCUPANTS = 10.868"	PROVIDED: 272"

PLUMBING FIXTURE TABULATIONS

OCCUPANCY	OCCUPANT LOAD (ACTUAL)	ACTUAL LOAD CALCULATIONS WC M	WC F	WC U5X	LAV M	LAV F	LAV U5X	BATH/ SHOWER	DRINKING FOUNTAIN	SVC SINKS
B BUSINESS	24	.96 (1/25)	-		.6 (1/40)	-		-	.24 (1/100)	1
S (STORAGE)	26	.26 (1/100)	-		.26 (1/100)	-		-	.026 (1/1000)	1
R (RESIDENTIAL)	8	.8 (1/10)	1		.8 (1/10)	-		1 (1/8)	.08 (1/100)	1
TOTAL	REQUIRED	3	-		3	-		1	3	3
	PROVIDED	6	-		9	-		4	4	3

"NOTE" PURSUANT TO ITEMS 3, 4, AND 5 OF ALABAMA BUILDING COMMISSION BULLETIN ISSUED JANUARY 2008, "THE BUILDING COMMISSION WILL PERMIT THE ARCHITECT TO CALCULATE THE ACTUAL OCCUPANT LOAD BASED ON THE PRIMARY DAY-TO-DAY FUNCTION OF THE SPACE FOR DETERMINING MINIMUM PLUMBING FIXTURES AND OTHER CODE REQUIREMENTS. GENERALLY, CAFETERIAS AND GYMNASIUMS SHALL BE BASED ON TABLE 1004.1.1, "ASSEMBLY WITHOUT FIXED SEATS, UNCONCENTRATED".

IF THE ARCHITECT ELECTS TO USE THE EXCEPTION, THE ARCHITECT MUST SHOW BOTH THE DESIGN OCCUPANT LOAD AND THE ACTUAL OCCUPANT LOAD ON THE LIFE SAFETY PLAN SUBMITTED TO THE BUILDING COMMISSION FOR REVIEW.

FOR MULTI-USE SPACES UTILIZED BY THE PUBLIC, THE ARCHITECT MUST USE REASONABLE JUDGMENT IN LOCATING RESTROOM FACILITIES SO THAT THEY ARE ADEQUATE IN NUMBER AND READILY ACCESSIBLE DURING OUTSIDE ACTIVITIES.

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ISSUE | DATE
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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

LIFE SAFETY - CODE ANALYSIS

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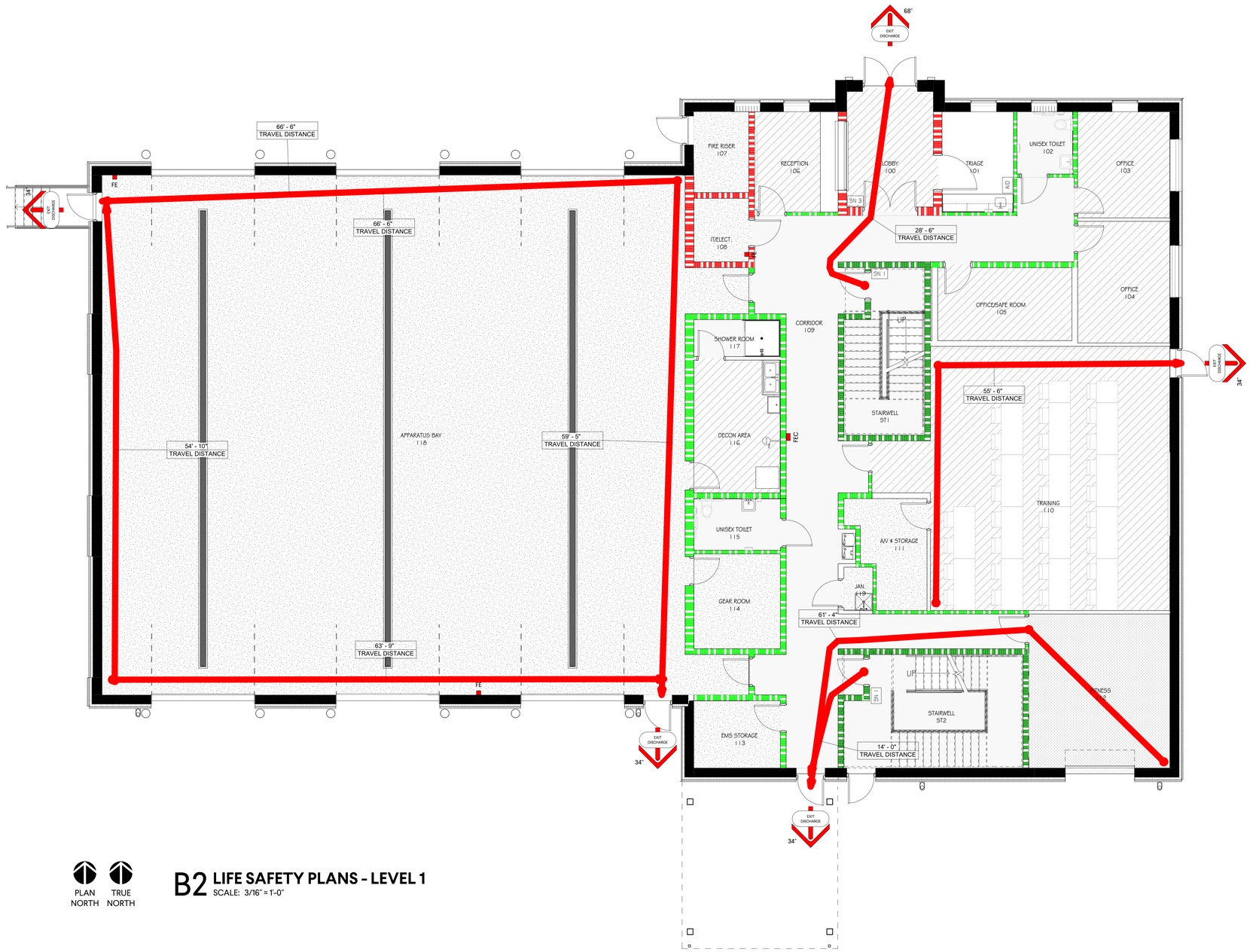

PLAN NORTH TRUE NORTH

B2 LIFE SAFETY PLANS - LEVEL 1

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

OCCUPANCY LEGEND

- ACCESSORY STORAGE, MECHANICAL EQUIP ROOM
- BUSINESS AREAS - IBC 2018
- EXERCISE ROOMS
- INSTITUTIONAL - OUTPATIENT AREAS
- NON-SIMULTANEOUS OCCUPANCY

GENERAL NOTES

1. FIRE ALARM AND EXIT SIGNS ARE LOCATED ONTHE ELECTRICAL PLANS AND THE REFLECTED CEILING PLAN.

OCCUPANCY CLASSIFICATION

OCCUPANCY	I.B.C.	N.F.P.A.
PRIMARY:	GROUP B, BUSINESS	BUSINESS
INCIDENTAL / SECONDARY:	GROUP R-2, RESIDENTIAL	HOTELS AND DORMITORIES

CONSTRUCTION CLASSIFICATION

CONSTRUCTION TYPE	I.B.C.	N.F.P.A.
	TYPE IIIB	TYPE III (111)

MEANS OF EGRESS

MAXIMUM ALLOWABLE	I.B.C.	N.F.P.A.
TRAVEL DISTANCE TO AN EXIT	300 ft	250 ft
TRAVEL DISTANCE TO AN EXIT ACCESS, OR TO A HORIZONTAL EXIT	N/A	N/A
COMMON PATH OF TRAVEL	100 ft	100 ft
DEAD END LENGTH	50 ft	50 ft

OCCUPANT LOAD + EGRESS WIDTH

OCCUPANT LOADS ARE AS DERIVED BY ROOM/AREA BY USE CALCULATIONS. SEE G2.00b

ACCESSORY STORAGE	15.4 OCCUPANTS
BUSINESS:	11.78 OCCUPANTS
EXERCISE ROOMS:	6.2 OCCUPANTS
INSTITUTIONAL - OUTPATIENT:	1.06 OCCUPANTS
TOTAL:	34.44 OCCUPANTS

EGRESS WIDTH REQ'D. (IBC1005.3)	REQUIRED	PROVIDED
*STAIRWAYS (0.3" X 19.56)	5.868"	45"
*EGRESS WIDTH (0.2" X 34.44)	6.888"	204"

LIFE SAFETY SIGNAGE LEGEND

- ACC — ADA ACCESSIBLE ROUTE
- SN1 — EMERGENCY EVACUATION MAP SIGNAGE
- SN2 — DOOR WITH MANUAL CLOSURE SIGNAGE
- SN3 — OCCUPANCY COUNT SIGNAGE
- AID — FIRST AID KIT

PLAN LEGEND (SOME DEVICES SHOWN ON OTHER SHEETS)

- FE — FIRE EXTINGUISHER
- FHC — FIRE HOSE CONNECTION
- FEC — FIRE EXTINGUISHER CABINET
- MS — FIRE ALARM MANUAL PULL STATION
- FH — FIRE ALARM HORN
- FS — FIRE ALARM STROBE
- FHS — FIRE ALARM HORN/STROBE
- FHS — FIRE ALARM HORN/STROBE-CEILING MT
- FACP — FIRE ALARM CONTROL PANEL
- FAAP — FIRE ALARM ANNUNCIATOR PANEL
- FAP — FIRE ALARM PANEL /SUBPANEL
- ILLUMINATED EXIT SIGN
- 60" EXIT DISCHARGE — EXIT DISCHARGE W/ CLEAR EXIT WIDTH (EXIT AND EXIT ACCESS SYMBOLS SIMILAR)
- DISTANCE OF TRAVEL
- 0 - HR SMOKE-RESISTIVE PARTITION
- 1 - HR FIRE BARRIER
- 1 - HR FIRE-SMOKE BARRIER
- 2 - HR FIRE BARRIER
- 2 - HR FIRE-SMOKE BARRIER

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LIFE SAFETY PLAN - LEVEL 1

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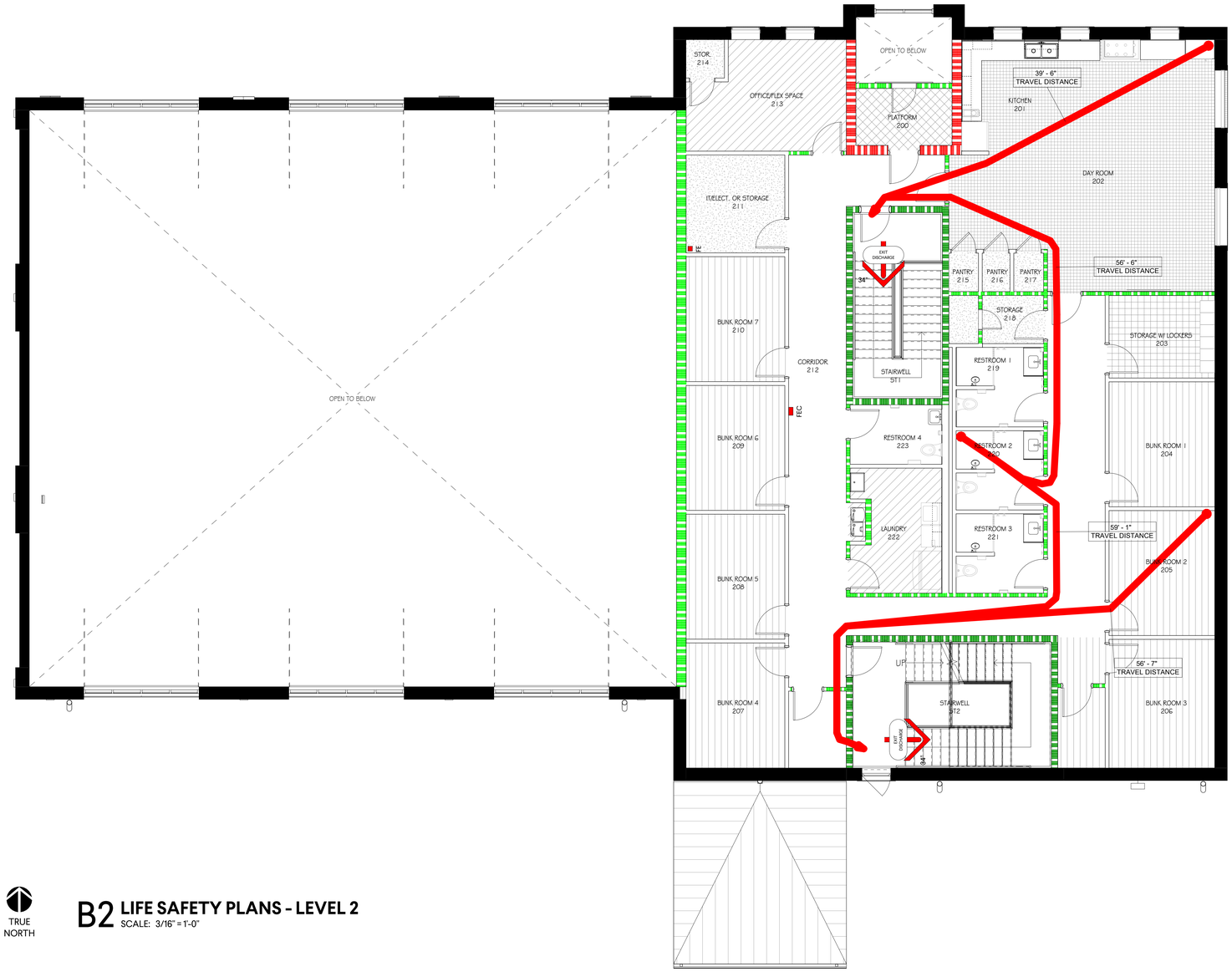

PLAN NORTH / TRUE NORTH

B2 LIFE SAFETY PLANS - LEVEL 2

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

OCCUPANCY LEGEND

- ACCESSORY STORAGE, MECHANICAL EQUIP ROOM
- BUSINESS AREAS - IBC 2018
- DORMITORIES
- KITCHENS - COMMERCIAL
- LOCKER ROOMS
- NON-SIMULTANEOUS OCCUPANCY
- STAGES AND PLATFORMS

GENERAL NOTES

1. UNLESS NOTED, AREA SHOWN IS GROSS SQUARE FOOTAGE. DOES NOT INCLUDE OVERHANGS.
2. WHERE APPLICABLE, AREA OF REFUGE PROVIDED ON EITHER SIDE OF HORIZONTAL EXITS MEET OR EXCEED THE REQUIREMENT OF 30 NET SQ.FT. PER PATIENT.
3. ALL CORRIDORS ARE TO BE AT LEAST 8'-0" CLEAR FOR GROUP I-2 IN AREAS WHERE REQUIRED FOR BED MOVEMENT. ALL DOUBLE-EGRESS DOORS SHALL PROVIDE A CLEAR WIDTH OF NOT LESS THAN 41.5 INCHES PER LEAF.
4. COMPARTMENTS ARE DIVIDED INTO AREAS NO MORE THAN 22,500 SQ. FT. PER SECTION 407.4 IN IBC SECTION 18.3.7.1, AND IN NFPA 101 LIFE SAFETY CODE. MAXIMUM TRAVEL DISTANCE TO A SMOKE BARRIER DOOR IS LESS THAN 200 FEET PER IBC SECTION 407.4 IN THE NFPA 101 SECTION 18.3.7.1.
5. HOSPITAL OCCUPANT LOAD IS BASED ON: A) 120 SQUARE FEET PER PERSON IN INSTITUTIONAL SLEEPING AREAS, B) 240 SQ. FT. PER PERSON IN INSTITUTIONAL IN-PATIENT TREATMENT AND ANCILLARY AREAS AND, C) 100 SQ. FT. PER PERSON IN INSTITUTIONAL OUT-PATIENT AREAS PER IBC TABLE 1004.1.1 & NFPA 101 TABLE 7.3.1.2.
6. ALL EXIT ACCESS CORRIDORS WHICH ARE NOT CONSIDERED AS A SUITE SHALL BE CONSTRUCTED AS A SMOKE PARTITION IN ACCORDANCE TO IBC 407.3 & NFPA 101 SECTION 18.3.6.2

OCCUPANCY CLASSIFICATION

OCCUPANCY	I.B.C.	N.F.P.A.
PRIMARY:	GROUP B, BUSINESS	BUSINESS
INCIDENTAL / SECONDARY:	GROUP R-2, RESIDENTIAL	HOTELS AND DORMITORIES

CONSTRUCTION CLASSIFICATION

CONSTRUCTION TYPE	I.B.C.	N.F.P.A.
	TYPE IIIB	TYPE III (111)

MEANS OF EGRESS

MAXIMUM ALLOWABLE	I.B.C.	N.F.P.A.
TRAVEL DISTANCE TO AN EXIT	300 ft	250 ft
COMMON PATH OF TRAVEL	100 ft	100 ft
DEAD END LENGTH	50 ft	50 ft

OCCUPANT LOAD + EGRESS WIDTH

OCCUPANT LOAD	
LEVEL 1	34.44 OCCUPANTS
LEVEL 2	19.56 OCCUPANTS

EGRESS WIDTH REQ'D. (IBC 1005.3)	REQUIRED	PROVIDED
*STAIRWAYS (0.3" X 19.56)	5.868"	45"
*EGRESS WIDTH (0.2" X 19.56)	3.912"	68"

LIFE SAFETY SIGNAGE LEGEND

- ACC — ADA ACCESSIBLE ROUTE
- SN1 — EMERGENCY EVACUATION MAP SIGNAGE
- SN2 — DOOR WITH MANUAL CLOSURE SIGNAGE
- SN3 — OCCUPANCY COUNT SIGNAGE
- AID — FIRST AID KIT

PLAN LEGEND (SOME DEVICES SHOWN ON OTHER SHEETS)

- FE — FIRE EXTINGUISHER
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- FHS — FIRE ALARM HORN/STROBE-CEILING MT
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- FAP — FIRE ALARM PANEL /SUBPANEL
- ILLUMINATED EXIT SIGN
- 60" EXIT DISCHARGE — EXIT DISCHARGE W/ CLEAR EXIT WIDTH (EXIT AND EXIT ACCESS SYMBOLS SIMILAR)
- DISTANCE OF TRAVEL
- 0 - HR SMOKE-RESISTIVE PARTITION
- 1 - HR FIRE BARRIER
- 1 - HR FIRE-SMOKE BARRIER
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STATE of ALABAMA
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01/09/2026

LIFE SAFETY PLAN - LEVEL 2

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GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR MAKING APPLICATION, AND PAYING FOR ALL NECESSARY PERMITS. ALL PERMITS MUST BE IN HAND BEFORE CONSTRUCTION BEGINS.
2. THE CONTRACTOR SHALL PREVENT THE DESTRUCTION OF ALL SURVEY MONUMENTS, BENCH MARKS, PROPERTY CORNERS AND ALL OTHER SURVEY POINTS. THE CONTRACTOR IS TO INFORM THE CONSULTANT IN WRITING, PRIOR TO THE DISTURBANCE OF ANY MONUMENT, AND IS NOT TO DISTURB THE POINT UNTIL WRITTEN PERMISSION TO DO SO HAS BEEN GRANTED BY THE CONSULTANT.
3. ALL EXISTING TREES AND SHRUBS OUTSIDE OF THE LIMITS OF WORK SHALL BE PROTECTED DURING CONSTRUCTION, AND ARE NOT TO BE DAMAGED IN ANY MANNER.
4. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING IMPROVEMENTS THAT ARE TO REMAIN ON OR OFF SITE DUE TO CONSTRUCTION OF THIS PROJECT. ANY DAMAGES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND PROPER DISPOSAL OF ALL BOULDERS, DEBRIS, EXCESS CONSTRUCTION MATERIALS AND MATERIAL GENERATED FROM ANY DEMOLITION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING EXISTING UTILITIES LOCATED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONSULTANT/SURVEYOR ASSUME NO RESPONSIBILITY AS TO THE ACCURACY OR COMPLETENESS OF THE EXISTING UTILITIES SHOWN ON THE PLANS.
7. UNLESS INDICATED OTHERWISE ON THE PLANS, ALL STORM DRAINAGE PIPES SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76). COMPACTED GRANULAR MATERIAL FOR BEDDING SHALL BE REQUIRED AS SHOWN ON THE PIPE BEDDING DETAIL.
8. UNLESS INDICATED OTHERWISE ON THE PLANS, ALL RIP RAP SHALL BE CLASS II, IN ACCORDANCE WITH SECTION 814, ALDOT, LATEST EDITION, AND SHALL BE GROUTED WHERE INDICATED ON THE PLANS.
9. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
10. THE CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC CONTROL DEVICES AND SAFETY MEASURES FOR THE CONSTRUCTION WORK WITHIN PUBLIC RIGHTS-OF-WAY AND OTHER AREAS WHICH REQUIRE ITS USE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (M.U.T.C.D.) LATEST EDITION.
11. ALL SIDEWALKS SHALL HAVE A 1.8% MAXIMUM CROSS SLOPE. ALL HANDICAP PARKING, RAMPS, SIGNS, AND SYMBOLS SHALL CONFORM TO THE LATEST AMERICANS WITH DISABILITIES ACT (ADA) SPECIFICATIONS. IF DISCREPANCIES ARISE, THE CONTRACTOR SHALL CONTACT THE CONSULTANT AND ENSURE THAT THESE REQUIREMENTS ARE MET.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXTENT, LOCATION, AND ELEVATION OF THE EXISTING IMPROVEMENTS. IF ANY DIFFERENCE IN SITE CONDITION OR ELEVATION IS FOUND, THE CONTRACTOR SHALL NOTIFY THE PROJECT CONSULTANT IMMEDIATELY.
13. THE CONTRACTOR SHALL CHECK THE ARCHITECTURAL AND MEP PLANS WITH THE SITE PLAN FOR ANY DISCREPANCIES BEFORE THE WORK BEGINS. THE CONSULTANT IS NOT RESPONSIBLE FOR ARCHITECTURAL AND MEP CHANGES AFTER PLANS HAVE BEEN SUBMITTED OR CHANGES MADE DURING CONSTRUCTION.
14. ANY MAJOR CHANGES OR REVISIONS MADE TO THE PLANS AFTER INITIAL APPROVAL SHALL BE OFFICIALLY SUBMITTED FOR APPROVAL TO THE CITY (COORDINATE WITH THE CONSULTANT AS REQUIRED), THE AFFECTED UTILITIES, AND ALL OTHER PERTINENT AGENCIES, APPROVAL OF CHANGES MUST BE RECEIVED BEFORE THE CONTRACTOR PERFORMS THE REQUESTED CHANGES/REVISIONS OR THEY WILL BE AT THE CONTRACTOR'S RISK.

EARTHWORK GENERAL NOTES:

1. THE SITE TOPOGRAPHY AND OTHER TOPOGRAPHIC DATA SHOWN ON THE PLANS OR INCLUDED IN THE SPECIFICATIONS ARE FOR THE INFORMATION OF THE CONTRACTOR. THE CONTRACTOR SHALL MAKE SUCH ADDITIONAL INVESTIGATIONS AS REQUIRED TO ACQUAINT HIMSELF ADEQUATELY WITH THE SITE, INCLUDING SUBSURFACE SOIL CONDITIONS, FOR PREPARATION OF HIS BID, AND FOR THE SUCCESSFUL EXECUTION OF THE WORK.
2. UNLESS INDICATED OTHERWISE ON THE PLANS, ALL PROPOSED CONTOURS AND ALL PROPOSED SPOT ELEVATIONS SHOWN ARE TO FINISHED GRADE. THE CONTRACTOR SHALL MAKE SUB-GRADE ADJUSTMENTS FOR TOPSOIL, PAVING, BUILDING PAD, ETC.
3. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE PROTECTION OF HIS WORK. SUCH GRADING AS IS REQUIRED FOR THIS PURPOSE SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER. THE OWNER MAY DIRECT THE CONTRACTOR TO PERFORM SUCH GRADING AND DRAINAGE AS IS NECESSARY TO PREVENT SURFACE RUNOFF FROM DAMAGING THE WORK.
4. ALL EARTH FILL SHALL BE COMPACTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS, GEOTECHNICAL RECOMMENDATIONS, OR GOVERNING MUNICIPALITY STANDARDS, WHICHEVER IS GREATER.
5. ALL EARTH FILL SHALL BE PLACED IN UNIFORM LAYERS OR LIFTS NOT EXCEEDING 6" IN COMPACTED THICKNESS, UNLESS INDICATED OTHERWISE ON THE PLANS.
6. ALL EARTH FILL SHALL BE PLACED IN ACCORDANCE WITH SECTION 210, ALDOT, LATEST EDITION. ALL EARTH FILL UNDER BUILDINGS SHALL ALSO MEET REQUIREMENTS OF THE ARCHITECT'S PLANS AND SPECIFICATIONS.
7. IF A GEOTECHNICAL REPORT HAS BEEN PREPARED FOR THE SITE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING THE SITE PREPARATION RECOMMENDATIONS SPECIFIED WITHIN THIS DOCUMENT, UNLESS MORE STRINGENT REQUIREMENTS ARE GIVEN ON THE PLANS.
8. ANY EXCESS EXCAVATION CREATED BY GRADING OPERATIONS SHALL BE CONSIDERED WASTE AND SHALL BE HAULED OFF AND DISPOSED OF LEGALLY AT THE CONTRACTOR'S EXPENSE OR NEGOTIATED WITH OWNER TO DISPOSE OF ON SITE.
9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING DRAINAGE AWAY FROM THE EXISTING AND PROPOSED BUILDINGS, CONCRETE PAVING, AND SIDEWALKS. THERE SHALL BE NO PONDING OF WATER ON THE SITE.
10. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND CONDITIONS OF ALL UTILITIES TO BE UTILIZED FOR CONSTRUCTION SERVICE HOOK UPS, STORM SEWERS, AND SANITARY SEWERS PRIOR TO PROCEEDING WITH THE LAYING OF PIPE. THE CONTRACTOR SHALL NOTIFY THE PROJECT CONSULTANT IMMEDIATELY OF ANY CONFLICTS OR DISCREPANCIES. ALL SERVICE CONNECTIONS TO UTILITIES SHALL BE APPROVED BY THE RESPECTIVE UTILITY AND SHALL CONFORM TO THE LATEST SPECIFICATIONS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL UTILITY LOCATIONS WITH THE LOCAL UTILITIES. CONTACT WITH EACH UTILITY SHOULD BE MADE BY THE CONTRACTOR BEFORE ANY CONSTRUCTION BEGINS ON THIS PROJECT.
12. CONTRACTOR TO COORDINATE ANY UTILITY SHUTOFFS WITH OWNER 7 DAYS PRIOR TO WORK. ALL EFFORTS SHOULD BE MADE TO MINIMIZE SHUTOFF TO UTILITIES SERVING OTHER FACILITIES.
13. UNSTABLE AND PUMPING SUBGRADE CONDITIONS MAY OCCUR DURING SITE PREPERATION AND UNDERCUTTING OPERATIONS. PROPER PROTECTION OF SUBGRADE, DRAINAGE, AND DEWATERING WILL BE CRITICAL TO SITE CONSTRUCTION EFFORTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MINIMIZE EQUIPMENT TRAFFIC ACROSS THE SITE. EVERY EFFORT SHALL BE MADE TO LOCALIZE EQUIPMENT TAGGING AND TRAFFIC TO SPECIFIC AREAS AND LIMIT THE AMOUNT OF UNDERCUTTING AND SOIL STABILIZATION THAT MAY BE NEEDED.
14. THE CONTRACTOR IS TO COORDINATE ALL EARTHWORK WITH THE GEOTECHNICAL EVALUATION. IF NO GEOTECHNICAL REPORT HAS BEEN PERFORMED, THE CONSULTANT ASSUMES NO LIABILITY IN SITE FEATURES THAT RELY ON GEOTECHNICAL EVALUATIONS SUCH AS PAVEMENT BUILD-UP (DESIGN), WALLS, ETC. SPECIFIC CONSTRUCTION CONCERNS AND ACTUAL CONSTRUCTION MEANS AND METHODS ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND FAMILIARIZING HIMSELF WITH THE SITE AND WITH THE GEOTECHNICAL REPORT IF ONE IS PERFORMED AT A LATER DATE.

SEEDING NOTES:

1. THE CONTRACTOR IS REQUIRED TO FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR THE SEEDING OF ALL DISTURBED AREAS AND OTHER AREAS SPECIFIED ON THE GRADING PLANS. ALL SPECIFIED SURFACE AREAS SHALL BE SEEDED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS.
2. TOPSOIL SHALL BE STRIPPED AND STOCKPILED DURING CONSTRUCTION. A MINIMUM OF 6" OF CONDITIONED AND AMENDED TOPSOIL SHALL BE RESPREAD OVER ALL AREAS SPECIFIED FOR SEEDING. GRADING SHALL CONFORM WITH THE GRADING PLAN.
3. SEEDING SHALL BE AS FOLLOWS: (A) "REBEL" OR "FALCON" FESCUE SEED (UNTIL APRIL 15") WITH 95% GERMINATION. APPLICATION RATE SHALL BE 8 LBS. PER 1,000 SQUARE FEET. (B) BERMUDA SEED (FROM APRIL 15" TO AUGUST 15") WITH 95% GERMINATIONS. APPLICATION RATE SHALL BE 3 LBS. PER 1,000 SQUARE FEET.
4. SOIL AMENDMENT SHALL BE RECOMMENDED USING LIME OR SULFUR TO ACHIEVE A SOIL PH OF 5.5 TO 6.5.
5. "2-4-D ROUNDUP" OR EQUIVALENT POST-EMERGENT HERBICIDE SHALL BE REQUIRED TO KILL EXISTING WEEDS PRIOR TO SEEDING. "TREFLAN", "DACTAL" OR EQUIVALENT PRE-EMERGENT HERBICIDE SHALL BE REQUIRED FOR ALL SEEDED AREAS TO PREVENT WEED GERMINATION.
6. PROTECTION OF SEEDED AREAS ON STEEP SLOPES SHALL BE REQUIRED FOR ALL SEEDED AREAS TO PREVENT WEED GERMINATION.
7. PROTECTION OF SEEDED AREAS ON STEEP SLOPES SHALL BE PROVIDED USING AN EROSION CONTROL BLANKET WHERE INDICATED ON THE PLANS. APPLY BLANKET TO THE SLOPE AFTER PROPER PREPARATION AND SEEDING OF THE GROUND.

EROSION CONTROL NOTES:

1. TEMPORARY EROSION CONTROL DEVICES SHALL BE OBSERVED BY THE OWNER (OR OWNER'S REPRESENTATIVE) ON A PERIODIC BASIS, BUT NOT LESS THAN ONCE PER MONTH, AND THE GRADING CONTRACTOR SHALL MAKE ANY NECESSARY ADJUSTMENTS/REPAIRS AS REQUESTED BY THE OWNER.
2. THE MEASURES SHOWN ON THE PLANS ARE INTENDED FOR CONTROL DURING SITE CLEARING AND GRADING. ADDITIONAL MEASURES MAY BE REQUIRED AS SITE CONDITIONS CHANGE DURING CONSTRUCTION. ADDITIONAL MEASURES REQUIRED FOR COMPLIANCE SHALL BE INCLUDED IN BASE PRICING.
3. COORDINATE SEDIMENTATIONS AND EROSION CONTROL MEASURES WITH THE CLEARING AND GRUBBING OPERATION. THESE ACTIVITIES MUST OCCUR IN THE PROPER SEQUENCE IN RELATION TO ONE ANOTHER.
4. THE CONTRACTOR WILL INSTALL AND MAINTAIN THE EROSION AND SEDIMENT CONTROL MEASURES (BOTH TEMPORARY AND PERMANENT) AS A CONTINUING PROGRAM UNTIL THE SITE WORK IS COMPLETE AND THE SITE IS STABILIZED. THIS INCLUDES, BUT IS NOT LIMITED TO, REPAIRS OF DAMAGE FROM STORMS, REGULAR MAINTENANCE, AND REMOVAL / DISPOSAL OF ACCUMULATED SILT, SILT FENCES AND OTHER EROSION CONTROL DEVICES SHOULD BE INSPECTED AFTER EVERY SIGNIFICANT RAIN EVENT.
5. ALL EROSION CONTROL MEASURES COMPROMISED BY SEDIMENT BUILDUP, INCLUDING RIP RAP, SILT FENCE, HAY DAMS, CHECKS, OR OTHER DEVICES WILL BE REPAIRED OR REPLACED AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER.
6. ANY PIPE, CREEK, OR OTHER STORM DRAINAGE FEATURE SHOWING EVIDENCE OF SEDIMENT ACCUMULATION SHALL BE CLEANED OUT. THE SEDIMENT REMOVED SHALL BE DISPOSED OF IN A LOCATION APPROVED BY THE OWNER OR HIS REPRESENTATIVE.
7. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL OF SILT/SEDIMENT (IF NOT REUSABLE ON-SITE) AND SHALL REMOVE ANY SILT/SEDIMENT BEYOND THE PROPERTY RESULTING FROM CONSTRUCTION OPERATIONS.
8. DO NOT DEPOSIT WASTE, LOOSE SOIL OR OTHER MATERIALS IN LIVE STREAMS, SWALES OR DRAINAGE WAYS, EXCEPT AS APPROPRIATE FOR EROSION CONTROL (E.G. LOG AND BRUSH CHECKS).
9. AFTER THE EROSION ACTIVITY HAS STABILIZED, THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION CONTROL DEVICES AT THE DIRECTION OF THE OWNER AND CLEANING UP AND DRESSING THE AREA TO THE SATISFACTION OF THE OWNER.
10. SILT FENCES ARE TEMPORARY EROSION CONTROL DEVICES THAT SHALL BE ERECTED OPPOSITE ERODABLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STREAMS AND CHANNELS.
11. IN FLAT AREAS, SILT FENCES SHOULD BE CONSTRUCTED IN THE SHAPE OF A HORSESHOE, WHENEVER POSSIBLE, SO AS TO AID IN PONDING AND TO FACILITATE SEDIMENTATION.
12. SILT FENCING OR OTHER APPROPRIATE EROSION CONTROL MEASURES AS DIRECTED ON THE PLANS SHALL BE PLACED AT THE DOWNSTREAM EDGE OF ALL DISTURBED AREAS.
13. HAY BALES ARE TEMPORARY EROSION CONTROL DEVICES THAT SHALL BE USED IN CONJUNCTION WITH OTHER EROSION CONTROL DEVICES. BALES MAY BE EITHER HAY OR STRAW CONTAINING FIVE (5) CUBIC FEET OF MATERIAL WEIGHING NOT LESS THAN 35 POUNDS AND SECURED WITH TWO STAKES AS SHOWN IN THE HAY BALE DETAIL.
14. ALL STORM SEWER INLETS IN DISTURBED AREAS OR IN OTHER AREAS SUBJECT TO POTENTIAL INFLOW OF SEDIMENT SHALL BE PROTECTED AT A MINIMUM WITH WATTLES AND SILT FENCE.
15. ADDITIONAL SILT FENCES, WATTLES OR CHECK DAMS MAY BE REQUIRED TO CONTROL SILTING OR EROSION AS CONSTRUCTION PROGRESSES AND SHALL BE INCLUDED IN PRICING.
16. ALL DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR MORE THAN 13 DAYS MUST BE SEEDED AND MULCHED.
17. AS NECESSARY, ON-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL PREVENT SILT FROM LEAVING THE PROJECT CONFINES DUE TO EXTREME WEATHER CONDITIONS OR ACCIDENTS.
18. ANY DISTURBANCE OF SOIL AND VEGETATION OUTSIDE THE LIMITS OF THE CLEARING LINE WILL NOT BE PERMITTED UNDER ANY CONDITION. IF DISTURBANCE OCCURS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMEDIATE THE AREA AT NO ADDITIONAL COST TO THE OWNER.
19. PREVENT RUN-ON AND RUN-OFF FROM SOIL PILES BY SURROUNDING PILE WITH WATTLES AND/OR SILT FENCE.
20. PREVENT AND CONTROL SOIL EROSION AND GULLYING WITHIN THE PROPERTY COVERED BY CONTRACT AND THE ADJACENT PROPERTIES AS A RESULT OF CONSTRUCTION.
21. CONSTRUCT ROADSIDE DITCHES AS REQUIRED DURING ROAD CONSTRUCTION TO ALLOW STORM RUNOFF TO DRAIN.
22. ALL CONSTRUCTION STREAM CROSSINGS SHALL HAVE A 24" DIAMETER PIPE (OR LARGER, AS SUGGESTED BY THE CONSULTANT) INSTALLED TO CONVEY RUNOFF. THE AREA WHERE THE ROAD CROSSES THE STREAM SHALL BE RIP-RAPPED AS REQUIRED TO PREVENT SEDIMENT WASH-OFF FROM THE ROAD.
23. AN ACCESS ROUTE SUFFICIENT TO ALLOW THE USE OF APPROPRIATE MAINTENANCE EQUIPMENT SHALL BE EXTENDED TO EACH STRUCTURAL EROSION CONTROL DEVICE.
24. THE CONTRACTOR IS RESPONSIBLE FOR PROPER COLLECTION, STORAGE, AND DISPOSAL OF SOLID AND SANITARY WASTES. DISPOSAL OF THESE WASTES SHALL BE OFF-SITE IN AN APPROPRIATELY PERMITTED FACILITY.
25. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER ON-SITE HANDLING USE, STORAGE AND DISPOSAL OF PAINTS, SOLVENTS, CHEMICALS, PESTICIDES, HERBICIDES, FERTILIZERS, OILS, GREASE, FUEL, AND OTHER HAZARDOUS MATERIAL TO REDUCE EXPOSURE AND CONTAMINATION OF SOILS, STREAMS, CHANNELS, AND STORM WATER RUNOFF.
26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
27. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE NPDES PERMIT COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST.
28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ON SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.

EROSION & SEDIMENT CONTROL CONSTRUCTION SEQUENCE:

1. INSTALL CONSTRUCTION ENTRANCES WITH CRUSHED AGGREGATE BASE COURSE AT ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC WILL BE ENTERING AND EXITING THE SITE. CONSTRUCTION ENTRANCE USED FOR REMOVAL OF ONSITE MATERIALS SHALL EXTEND TO THE LOADING AREA, BUT IN NO CASE SHALL ANY CONSTRUCTION ENTRANCE BE LESS THAN 50 FEET IN LENGTH OR 6" IN DEPTH. WIDTH SHALL NOT BE LESS THAN 15 FEET.
2. INSTALL SEDIMENT TRAPS (IF ANY ARE INDICATED ON THE PLANS).
3. GRADE IN DRAINAGE SWALES AS NECESSARY TO DIRECT DRAINAGE FROM DISTURBED AREAS TO SEDIMENT TRAPS OR PROTECTED INLETS.
4. INSTALL SILT FENCES AT INDICATED LOCATIONS. INSTALL STRAW WATTLES AND GRAVEL BAG FILTERS AT STORM SEWER STRUCTURES AS THEY ARE CONSTRUCTED.
5. MULCH, LIME, FERTILIZE, SEED, SOD AND/OR STRAW ALL DISTURBED AREAS IMMEDIATELY FOLLOWING FINAL GRADING. CONTRACTOR SHALL COORDINATE BETWEEN THE EROSION CONTROL PLAN AND LANDSCAPE PLAN AS NECESSARY.
6. WASH DOWN CONSTRUCTION ENTRANCES AS NECESSARY TO LIMIT MUD AND DEBRIS BEING CARRIED ONTO ADJACENT ROADS. DRAINAGE FROM CONSTRUCTION ENTRANCE SHALL BE GRADED TO DRAIN TO SILT FENCES OR OTHER EROSION CONTROL MEASURES.
7. FOLLOWING COMPLETION OF PAVEMENT, STORM SYSTEM, AND MULCHING AND SEEDING ACTIVITIES: FLUSH OR CLEAN ALL SEDIMENT FROM STORM PIPE SYSTEM.
8. WHEN CONSTRUCTION IS COMPLETE AND UPON APPROVAL OF THE LOCAL GOVERNING AGENCY: REMOVE SILT FENCES AND GRAVEL BAG FILTERS, SPREAD AND GRADE COLLECTED MATERIALS, AND MULCH, LIME, FERTILIZE, SEED AND STRAW.
9. REMOVE SEDIMENT FROM DITCHES (PROPERLY DISPOSE OF IF OFFSITE) AND REGRADE TO DEPTH AND SIZE SHOWN ON THE GRADING PLAN. SPREAD AND GRADE COLLECTED MATERIALS, AND SEED.
10. REMOVE SEDIMENT TRAPS, AND SEED DISTURBED AREA.
11. SEE ADEM CONSTRUCTION BEST MANAGEMENT PRACTICES (CBMPP) PLANS FOR ADDITIONAL INFORMATION RELATED TO ADEM PERMITTED SITES. THE REQUIREMENTS AND RECOMMENDATIONS IN THE CBMPP ARE TO BE FOLLOWED TO KEEP THE PROJECT CONFORMANCE WITH THE SITE'S ADEM NPDES PERMIT.
12. ALL EROSION CONTROL DEVICES USED BY THE CONTRACTOR MUST MEET OR EXCEED REQUIREMENTS FOUND IN THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL, AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS.

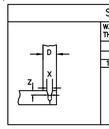
PAVEMENT CONSTRUCTION GENERAL NOTES

1. ALDOT, LATEST EDITION, SHALL MEAN ALABAMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
2. CRUSHED AGGREGATE BASE COURSE PLANT MIXED SHALL BE PLACED IN ACCORDANCE WITH SECTION 301, ALDOT, LATEST EDITION. ALL MATERIALS SHALL BE IN ACCORDANCE WITH SECTION 825, TYPE B. 100% COMPACTION.
3. PORTLAND CEMENT CONCRETE PAVEMENT SHALL BE PLACED IN ACCORDANCE WITH SECTION 450, ALDOT, LATEST EDITION.
4. BITUMINOUS CONCRETE BINDER LAYER SHALL BE PLACED IN ACCORDANCE WITH SECTION 424-B, ALDOT, LATEST EDITION.
5. BITUMINOUS CONCRETE WEARING SURFACE LAYER SHALL BE PLACED IN ACCORDANCE WITH SECTION 424-A, ALDOT, LATEST EDITION.
6. THE SITE SHALL BE CLEARED AND ALL UNSUITABLE MATERIALS REMOVED PRIOR TO PLACING AND COMPACTING ENGINEERED FILL.
7. ALL SUBGRADES SHALL BE CLEARED AND GRUBBED, SCARIFIED TO A DEPTH OF 6", AND THEN RECOMPACTED TO 100% OF THE MAXIMUM DRY DENSITY, PLUS OR MINUS 2% OF OPTIMUM MOISTURE (ASTM-D6798).
8. IN ROCK EXCAVATION, A MINIMUM OF 1 FOOT OF SOIL SHALL BE PLACED OVER ROCK PRIOR TO PLACEMENT OF BASE MATERIAL.
9. CONCRETE WHEEL STOPS ARE TO BE PRECAST 2500 PSI MIN. COMPRESSIVE STRENGTH CONCRETE, 5"HX9"WX72"L. WHEEL STOPS ARE TO BE SECURELY ATTACHED TO PAVEMENT WITH A MINIMUM OF 2-3/8"X18" GALVANIZED STEEL DOWELS EMBEDDED IN WHEEL STOPS 11" FROM ENDS, AND FIRMLY BONDED TO WHEEL STOPS AND PAVEMENT.
10. PAVEMENT MARKING PAINT SHALL BE ALKYD-RESIN TYPE, READY-MIXED, COMPLYING WITH FS TT-P-115, TYPE I, AASHTO M-248, TYPE N, OR LATEX WATER-BASE EMULSION, READY-MIXED, COMPLYING WITH FS TT-P-1952. APPLY PAVEMENT MARKING PAINT WITH MECHANICAL EQUIPMENT, PER THE MANUFACTURES RECOMMENDATIONS TO PRODUCE PAVEMENT MARKINGS OF DIMENSIONS INDICATED ON THE PLANS WITH UNIFORM, STRAIGHT EDGES, AND A MINIMUM WET FILM THICKNESS OF 15 MILS (0.4MM).
11. PAINTING OF PAVEMENT MARKINGS SHALL NOT BEGIN UNTIL PAVEMENT HAS ENDURED ADEQUATE CURING TIME AND UNTIL THE PAVEMENT SURFACE HAS BEEN POWER BROOMED AND HAND SWEPT AS NECESSARY TO REMOVE LOOSE MATERIAL AND SOIL.
12. THE CONTRACTOR WILL BE RESPONSIBLE FOR CLEANING DIRT AND DEBRIS FROM ADJOINING STREETS DURING CONSTRUCTION, ANY DAMAGE TO ADJOINING AND EXISTING STREETS MUST BE REPAIRED BY THE CONTRACTOR DURING CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER.
13. UNLESS NOTED OTHERWISE, ALL PAVEMENT CUTS SHALL BE REPAIRED WITH MATERIAL AND DEPTHS IN KIND TO THAT REMOVED AND SHALL MEET PATCHING REQUIREMENTS OF THE MUNICIPALITY.
14. TEMPORARY AND PERMANENT PATCHING SHALL MEET THE REQUIREMENTS OF THE GOVERNING ENTITY.

REINFORCED CONCRETE NOTES

1. ALL CONCRETE SHALL BE AIR ENTRAINED 4000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS, (CLASS "A."), UNLESS NOTED OTHERWISE ON THE PLANS OR REQUIRED OTHERWISE BY GOVERNING ENTITY.
2. ALL CONSTRUCTION JOINTS SHALL BE CONSTRUCTED WITH CONTINUOUS SHEAR KEYS IN ACCORDANCE WITH THE SHEAR KEY DETAIL ON THE PLANS.
3. ALL REINFORCING STEEL GOVERNED BY THE CIVIL ENGINEERING DRAWINGS, SHALL BE GRADE 60 DEFORMED BARS, AND SHALL CONFORM TO STM A615, FOR BILLET STEEL (UNLESS NOTED OTHERWISE).
4. LAP SPLICES AND BAR EMBEDMENT SHALL BE IN ACCORDANCE WITH THE TABLE ON THE PLANS.
5. CONCRETE AIR CONTENT AND SLUMP SHALL BE IN ACCORDANCE WITH THE TABLE ON THE PLANS.
6. ALL REINFORCING BARS SHALL BE SHOP BENT IN ACCORDANCE WITH THE TABLE ON THE PLANS. HEATING OF REINFORCING BARS TO BEND THEM, OR STRAIGHTEN THEM WILL NOT BE ALLOWED.
7. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185, SMOOTH FABRIC WITH AN ASTM YIELD STRENGTH OF 65,000 PSI.

SHEAR KEY DETAIL



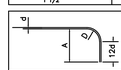
WALL (D) THICKNESS	NOMINAL KEY SIZE	X	Y	Z
4" – 7"	2" X 2"	1 1/2"	1"	1 1/2"
8" – 13"	2" X 4"	3 1/2"	3"	1 1/2"
14" – 20"	2" X 6"	5 1/2"	5"	1 1/2"
SEE DRAWINGS	2" X 8"	7 1/4"	6 3/4"	1 1/2"
	2" X 10"	9 1/4"	8 3/4"	1 1/2"
	4" X 4"	3 1/2"	3"	3 1/2"
	4" X 6"	5 1/2"	5"	3 1/2"
	4" X 8"	7 1/4"	6 3/4"	3 1/2"
	4" X 10"	9 1/4"	8 3/4"	3 1/2"
	4" X 12"	11 1/4"	10 3/4"	3 1/2"

SLUMP TABLE

TYPE OF CONSTRUCTION	SLUMP (INCHES) MAX.	MIN.
REINFORCED FOOTINGS AND SLABS	3	1
REINFORCED WALLS AND PAVEMENTS	4	1
BACKFILL CONCRETE	6	3

CONCRETE AIR CONTENT TABLE

NOMINAL MAXIMUM SIZE COARSE AGGREGATE (INCHES)	TOTAL AIR CONTENT PERCENT BY VOLUME
3/4	4 TO 8
1	3.5 TO 6.5
1 1/2	3 TO 6



BAR BEND TABLE AND EMBEDMENT TABLE

BAR SIZE(d)	#3	#4	#5	#6	#7	#8	#9	#10
DIAMETER	0.375"	0.5"	0.625"	0.75"	0.875"	1.0"	1.128"	1.27"
A	2.25"	3.0"	3.75"	4.50"	5.25"	6.0"	6.77"	10.16"
D	6"	8"	10"	12"	14"	16"	18"	24"
X	3"	4"	5"	6"	7"	8"	11.25"	12.75"
LAP SPACE LENGTH	18"	25"	28"	35"	40"	57"	73"	
EMBEDMENT LENGTH	13"	17"	14"	20"	27"	35"	44"	56"

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ISSUE DATE
100% CONSTRUCTION DOCUMENTS 1/9/2026

DRAWN BY: J. GARNER
CHECKED BY: B. WISEMAN

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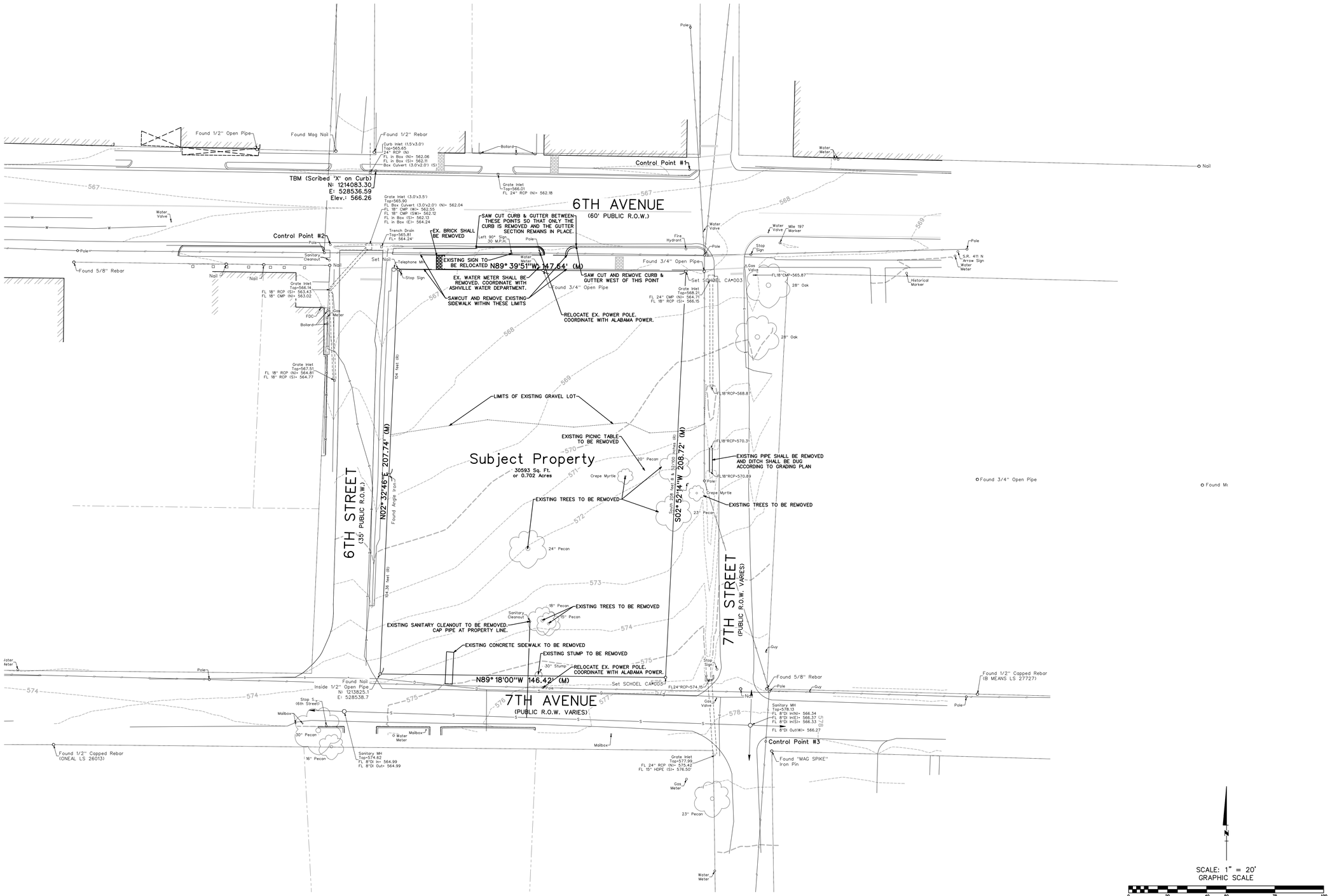
Ashville, AL 35953

GMC # AHUN250003

BRENT WAYNE WISEMAN
No. 23333
PROFESSIONAL ENGINEER
1-9-2026
ALABAMA

GENERAL NOTES

C1



UNDERGROUND UTILITIES SHOWN ON THIS MAP ARE FROM LOCAL UTILITY COMPANY RECORDS AND SHOULD BE FIELD VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.

JOB SAFETY IS NOT THE RESPONSIBILITY OF THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION SITE SAFETY.

SCHOEL

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ISSUE DATE
100% CONSTRUCTION DOCUMENTS 1/9/2026

DRAWN BY: J. GARNER
CHECKED BY: B. WISEMAN

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA LICENSED No. 23333 PROFESSIONAL ENGINEER JUSTIN WAYNE WISEMAN 1-9-2026

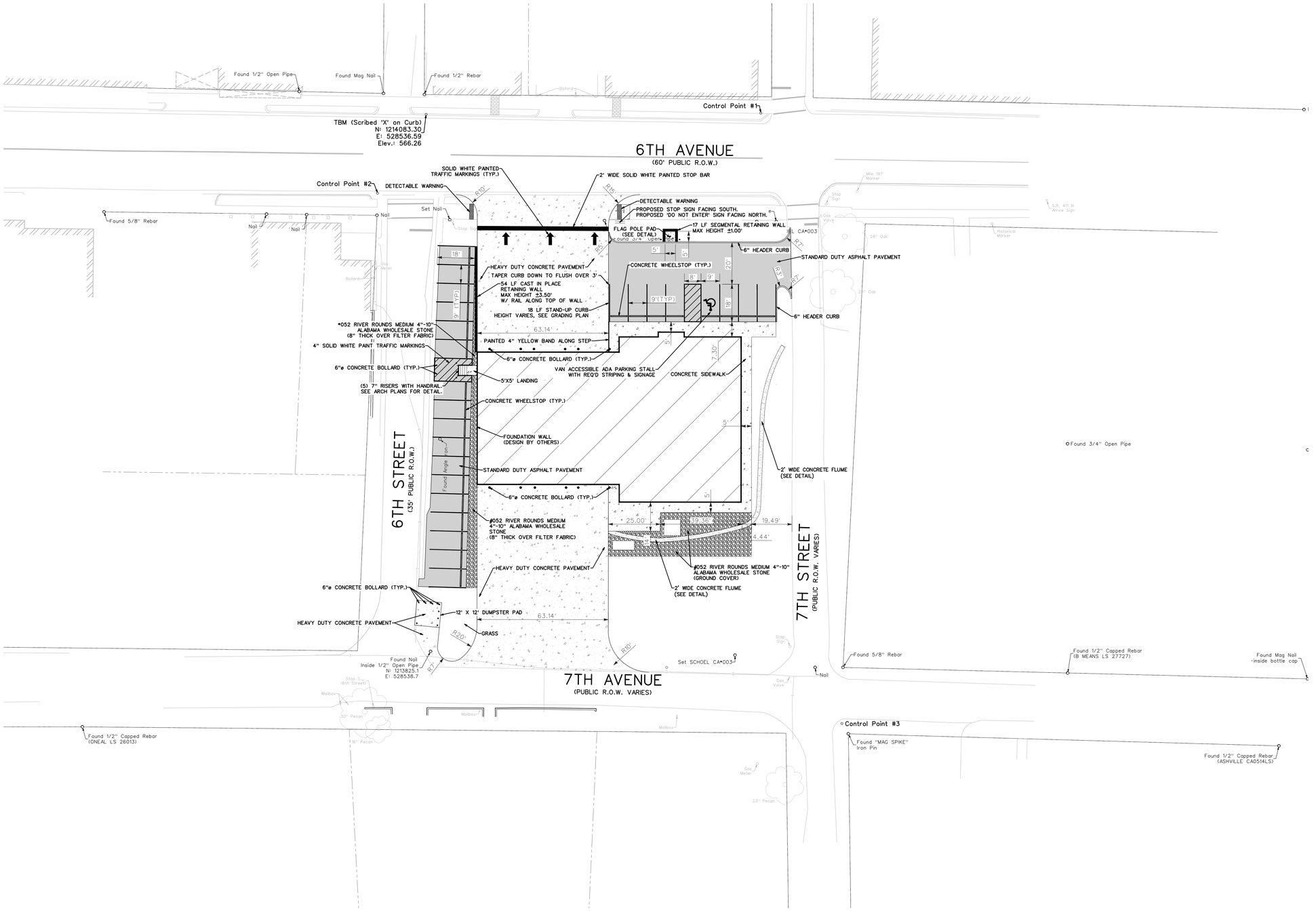
DEMOLITION PLAN

C2

SCHOEL
BIRMINGHAM
1001 22nd Street South
Birmingham, Alabama 35205
205.323.5160
HUNTSVILLE
101 Washington Street SE
Huntsville, Alabama 35801
256.539.1220
TUSCALOOSA
3600 Watermelon Road, Ste 202
Northport, Alabama 35473
205.323.6166
SCHOEL.COM

GMC

PROVIDED PARKING: 25 SPACES
ADA PARKING REQUIRED: 1 SPACE
ADA PARKING PROVIDED: 1 SPACE



UNDERGROUND UTILITIES SHOWN ON THIS MAP ARE FROM LOCAL UTILITY COMPANY RECORDS AND SHOULD BE FIELD VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.

JOB SAFETY IS NOT THE RESPONSIBILITY OF THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION SITE SAFETY.

SCALE: 1" = 20'
GRAPHIC SCALE
0 20 40 50 75 100

Goodwyn Mills Cawood, LLC
117 Jefferson Street North
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ISSUE DATE
100% CONSTRUCTION DOCUMENTS 1/9/2026

DRAWN BY: J. GARNER
CHECKED BY: B. WISEMAN

BRANDON A. WISEMAN
LICENSED
No. 23333
PROFESSIONAL
1-9-2026
ENGINEER
BRANDON WAYNE WISEMAN

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

SITE PLAN

C3

SCHOEL
BIRMINGHAM
1001 22nd Street South
Birmingham, Alabama 35205
205.323.6160
HUNTSVILLE
101 Washington Street SE
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256.539.1220
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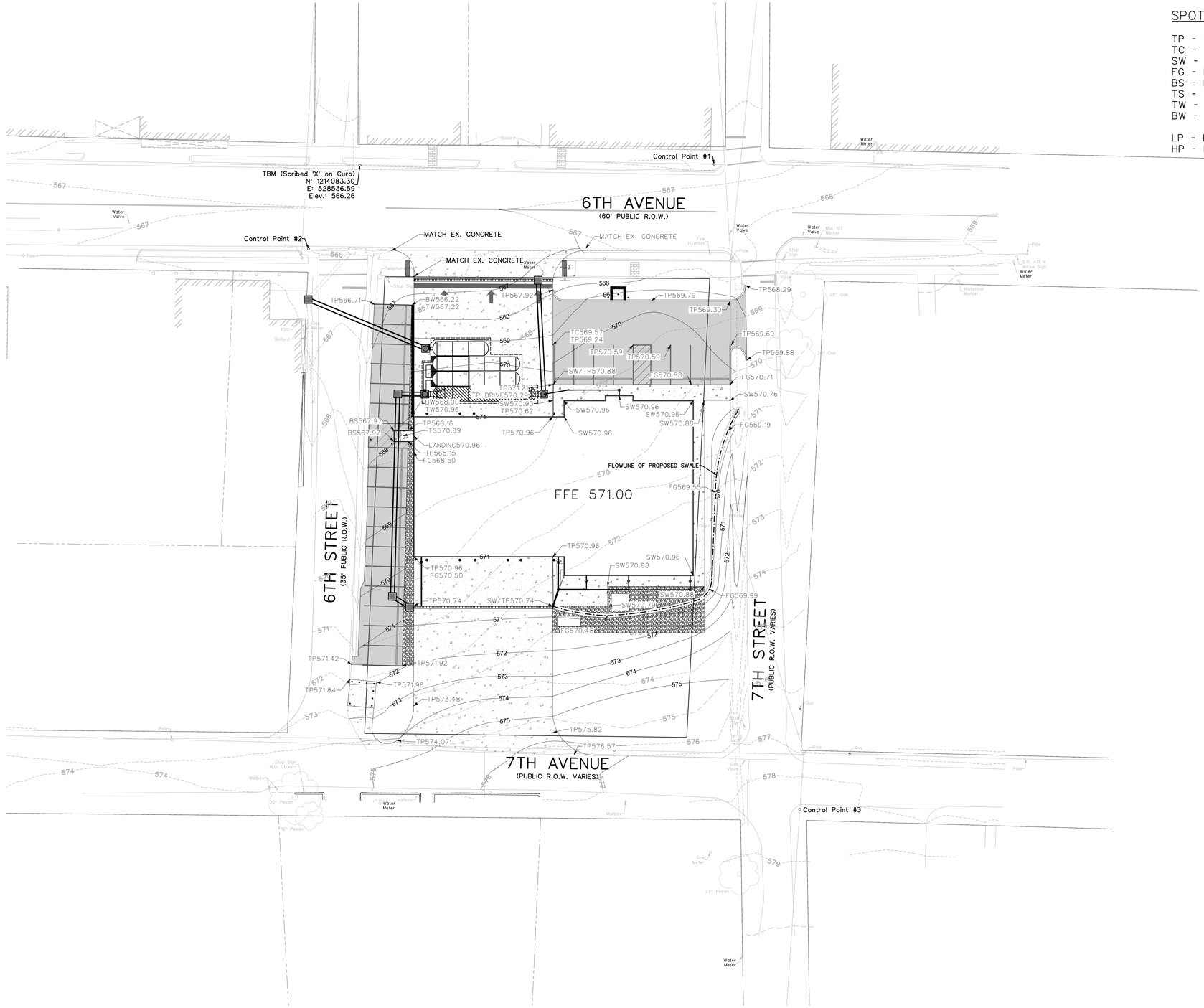
SPOT ELEVATION LEGEND

TP - TOP OF PAVEMENT
TC - TOP OF CURB
SW - SIDEWALK
FG - FINISHED GRADE
BS - BOTTOM OF STAIRS
TS - TOP OF STAIRS
TW - TOP OF RETAINING WALL
BW - BOTTOM OF RETAINING WALL (AT TOP OF FOOTING)
LP - LOW POINT
HP - HIGH POINT



SCALE: 1" = 20'
GRAPHIC SCALE
0 20 40 50 75 100

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ASHVILLE FIRE STATION #2
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Ashville, AL 35953

GMC # AHUN250003

ALABAMA LICENSED No. 23333 PROFESSIONAL ENGINEER BRYNG WISEMAN 1-9-2026

GRADING PLAN

C4

SCHOEL
BIRMINGHAM
1001 22nd Street South
Birmingham, Alabama 35205
205.323.9100
HUNTSVILLE
101 Washington Street SE
Huntsville, Alabama 35801
256.539.1220
TUSCALOOSA
3600 Watermelon Road, Ste 202
Northport, Alabama 35473
205.323.6166
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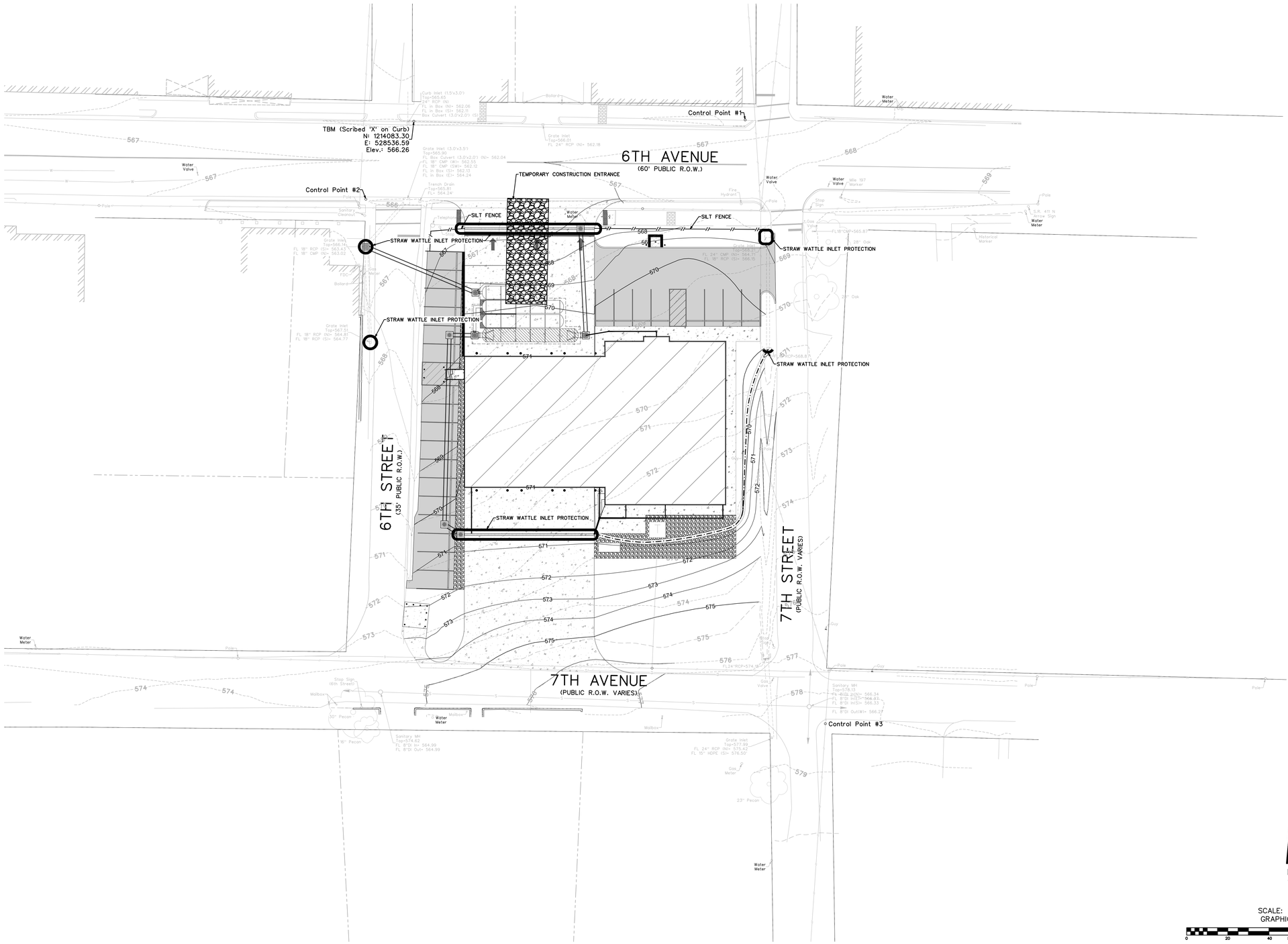

SCALE: 1" = 20'
GRAPHIC SCALE
0 20 40 50 75 100

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GMC

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117 Jefferson Street North
Huntsville, AL 35801
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G M C N E T W O R K . C O M

ISSUE DATE
100% CONSTRUCTION DOCUMENTS 1/9/2026

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CHECKED BY: B. WISEMAN

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA LICENSED No. 23333 PROFESSIONAL ENGINEER BRYNG WISEMAN 1-9-2026

EROSION CONTROL PLAN

C5

SCHOEL
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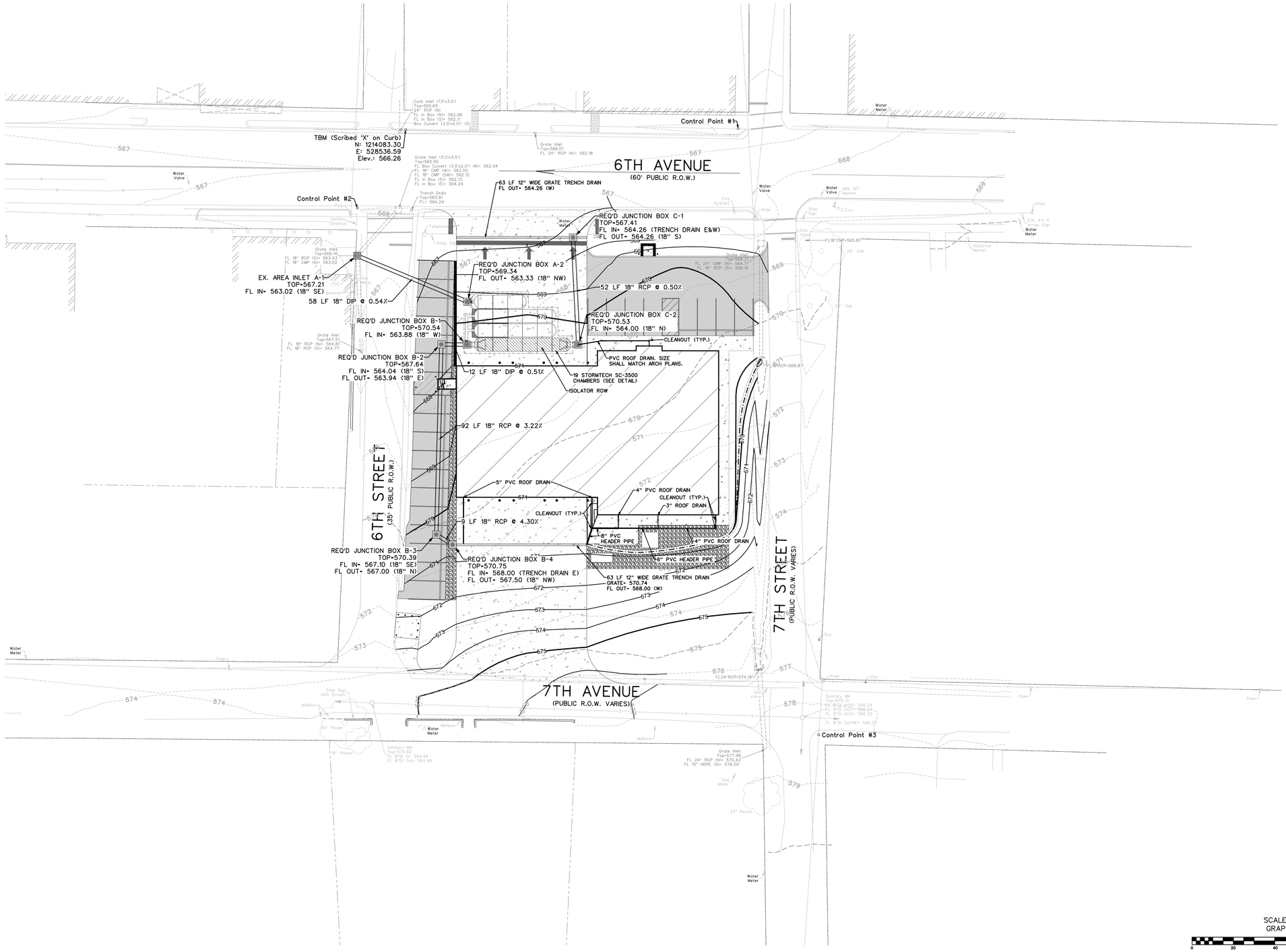
1001 22nd Street South
Birmingham, Alabama 35205
205.323.6160
HUNTSVILLE
101 Washington Street SE
Huntsville, Alabama 35801
256.539.1220
TUSCALOOSA
3600 Watermelon Road, Ste 202
Northport, Alabama 35473
205.323.6166
SCHOEL.COM



SCALE: 1" = 20'
GRAPHIC SCALE
0 20 40 50 75 100

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GMC

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ISSUE DATE
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DRAWN BY: J. GARNER
CHECKED BY: B. WISEMAN

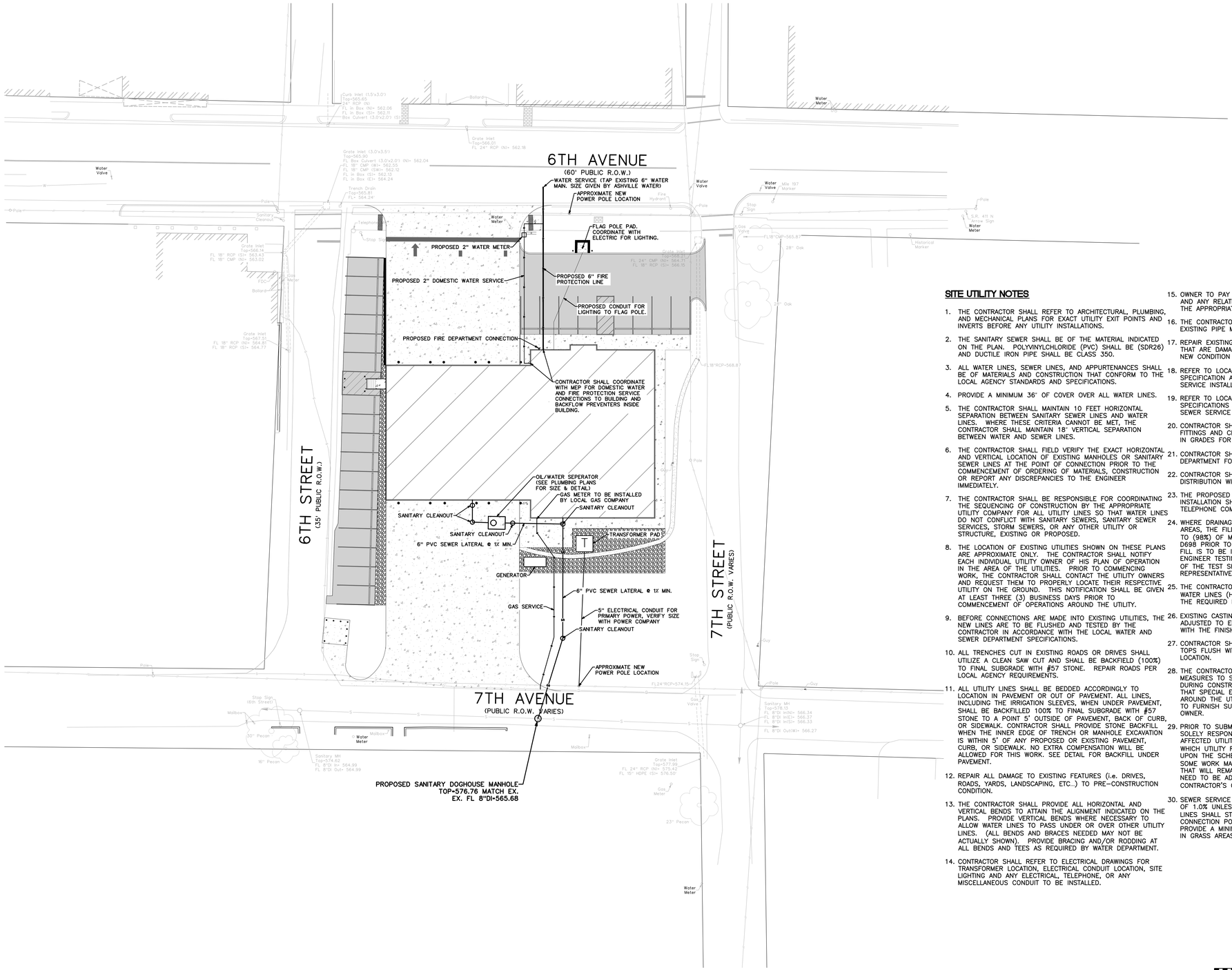
ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

BRANDON ALLEN WISEMAN
LICENSED
No. 23333
PROFESSIONAL
ENGINEER
STATE OF ALABAMA

STORM PLAN

C6



SITE UTILITY NOTES

1. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL, PLUMBING, AND MECHANICAL PLANS FOR EXACT UTILITY EXIT POINTS AND INVERTS BEFORE ANY UTILITY INSTALLATIONS.
2. THE SANITARY SEWER SHALL BE OF THE MATERIAL INDICATED ON THE PLAN. POLYVINYLCHLORIDE (PVC) SHALL BE (SDR26) AND DUCTILE IRON PIPE SHALL BE CLASS 350.
3. ALL WATER LINES, SEWER LINES, AND APPURTENANCES SHALL BE OF MATERIALS AND CONSTRUCTION THAT CONFORM TO THE LOCAL AGENCY STANDARDS AND SPECIFICATIONS.
4. PROVIDE A MINIMUM 36" OF COVER OVER ALL WATER LINES.
5. THE CONTRACTOR SHALL MAINTAIN 10 FEET HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER LINES. WHERE THESE CRITERIA CANNOT BE MET, THE CONTRACTOR SHALL MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER AND SEWER LINES.
6. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT HORIZONTAL AND VERTICAL LOCATION OF EXISTING MANHOLES OR SANITARY SEWER LINES AT THE POINT OF CONNECTION PRIOR TO THE COMMENCEMENT OF ORDERING OF MATERIALS, CONSTRUCTION OR REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SEQUENCING OF CONSTRUCTION BY THE APPROPRIATE UTILITY COMPANY FOR ALL UTILITY LINES SO THAT WATER LINES DO NOT CONFLICT WITH SANITARY SEWERS, SANITARY SEWER SERVICES, STORM SEWERS, OR ANY OTHER UTILITY OR STRUCTURE, EXISTING OR PROPOSED.
8. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.
9. BEFORE CONNECTIONS ARE MADE INTO EXISTING UTILITIES, THE NEW LINES ARE TO BE FLUSHED AND TESTED BY THE CONTRACTOR IN ACCORDANCE WITH THE LOCAL WATER AND SEWER DEPARTMENT SPECIFICATIONS.
10. ALL TRENCHES CUT IN EXISTING ROADS OR DRIVES SHALL UTILIZE A CLEAN SAW CUT AND SHALL BE BACKFIELD (100%) TO FINAL SUBGRADE WITH #57 STONE. REPAIR ROADS PER LOCAL AGENCY REQUIREMENTS.
11. ALL UTILITY LINES SHALL BE BEDDED ACCORDINGLY TO LOCATION IN PAVEMENT OR OUT OF PAVEMENT. ALL LINES, INCLUDING THE IRRIGATION SLEEVES, WHEN UNDER PAVEMENT, SHALL BE BACKFILLED 100% TO FINAL SUBGRADE WITH #57 STONE TO A POINT 5' OUTSIDE OF PAVEMENT, BACK OF CURB, OR SIDEWALK. CONTRACTOR SHALL PROVIDE STONE BACKFILL WHEN THE INNER EDGE OF TRENCH OR MANHOLE EXCAVATION IS WITHIN 5' OF ANY PROPOSED OR EXISTING PAVEMENT, CURB, OR SIDEWALK. NO EXTRA COMPENSATION WILL BE ALLOWED FOR THIS WORK. SEE DETAIL FOR BACKFILL UNDER PAVEMENT.
12. REPAIR ALL DAMAGE TO EXISTING FEATURES (i.e. DRIVES, ROADS, YARDS, LANDSCAPING, ETC..) TO PRE-CONSTRUCTION CONDITION.
13. THE CONTRACTOR SHALL PROVIDE ALL HORIZONTAL AND VERTICAL BENDS TO ATTAIN THE ALIGNMENT INDICATED ON THE PLANS. PROVIDE VERTICAL BENDS WHERE NECESSARY TO ALLOW WATER LINES TO PASS UNDER OR OVER OTHER UTILITY LINES. (ALL BENDS AND BRACES NEEDED MAY NOT BE ACTUALLY SHOWN). PROVIDE BRACING AND/OR RODDING AT ALL BENDS AND TEES AS REQUIRED BY WATER DEPARTMENT.
14. CONTRACTOR SHALL REFER TO ELECTRICAL DRAWINGS FOR TRANSFORMER LOCATION, ELECTRICAL CONDUIT LOCATION, SITE LIGHTING AND ANY ELECTRICAL, TELEPHONE, OR ANY MISCELLANEOUS CONDUIT TO BE INSTALLED.
15. OWNER TO PAY FOR ANY AID-TO-CONSTRUCTION FOR UTILITIES AND ANY RELATED INSPECTION FEES FOR THESE SERVICES TO THE APPROPRIATE UTILITY AUTHORITY.
16. THE CONTRACTOR SHALL VERIFY REQUIRED PIPE LENGTHS. EXISTING PIPE MATERIAL AND SIZES AS SHOWN ON PLANS.
17. REPAIR EXISTING PAVEMENT, CURBS, WALKS, LANDSCAPING, ETC. THAT ARE DAMAGED BY CONSTRUCTION ACTIVITIES TO A LIKE NEW CONDITION AT NO ADDITIONAL COST TO THE OWNER.
18. REFER TO LOCAL AGENCY'S WATER DEPARTMENT FOR SPECIFICATION AND ILLUSTRATIONS OF TYPICAL DOMESTIC WATER SERVICE INSTALLATION.
19. REFER TO LOCAL AGENCY SANITARY SEWER DEPARTMENT FOR SPECIFICATIONS AND ILLUSTRATIONS OF TYPICAL SANITARY SEWER SERVICE INSTALLATION.
20. CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY FITTINGS AND CLEANOUTS AT BENDS, JUNCTIONS, AND CHANGE IN GRADES FOR THE SANITARY SEWER SERVICE LINES.
21. CONTRACTOR SHALL COORDINATE LOCAL AGENCY'S GAS DEPARTMENT FOR GAS SERVICE LINE INSTALLATION.
22. CONTRACTOR SHALL COORDINATE ALL SITE PRIMARY POWER DISTRIBUTION WITH ALABAMA POWER PRIOR TO INSTALLATION.
23. THE PROPOSED TELEPHONE LINE CONSTRUCTION AND INSTALLATION SHALL BE COORDINATED WITH THE LOCAL TELEPHONE COMPANY BY THE CONTRACTOR.
24. WHERE DRAINAGE OR UTILITY LINES OCCUR IN PROPOSED FILL AREAS, THE FILL MATERIAL IS TO BE PLACED AND COMPACTED TO (98%) OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D698 PRIOR TO INSTALLATION OF DRAINAGE OR UTILITY LINES. FILL IS TO BE INSPECTED BY A PROFESSIONAL GEOTECHNICAL ENGINEER TESTING FIRM EMPLOYED BY THE OWNER. RESULTS OF THE TEST SHALL BE FURNISHED TO THE OWNER'S REPRESENTATIVE. CONTRACTOR TO PAY FOR ANY RETESTING.
25. THE CONTRACTOR SHALL ADJUST THE ALIGNMENT OF THE WATER LINES (HORIZONTALLY AND/OR VERTICALLY) TO ALLOW THE REQUIRED BRACING AT BENDS AND TEES.
26. EXISTING CASTINGS LOCATED IN FILL/CUT AREAS SHALL BE ADJUSTED TO ENSURE THAT THE TOP OF CASTING IS FLUSH WITH THE FINISHED GRADE.
27. CONTRACTOR SHALL INSTALL ALL SANITARY SEWER CLEANOUT TOPS FLUSH WITH FINISHED GRADE AT THE CLEANOUT LOCATION.
28. THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER.
29. PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS.
30. SEWER SERVICE TO BE 6" DIAMETER PVC AT A MINIMUM SLOPE OF 1.0% UNLESS SHOWN OTHERWISE ON THE DRAWINGS. LINES SHALL START 5' BEYOND THE BUILDINGS. COORDINATE CONNECTION POINTS WITH THE BUILDING PLUMBING DRAWINGS. PROVIDE A MINIMUM 30" OF COVER OVER ALL SEWER SERVICES IN GRASS AREAS AND 36" OF COVER IN PAVED AREAS.

SCALE: 1" = 20'
GRAPHIC SCALE
0 20 40 50 75 100

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SCHOEL
BIRMINGHAM 1001 22nd Street South Birmingham, Alabama 35205 205.323.9100
HUNTSVILLE 101 Washington Street SE Huntsville, Alabama 35801 256.539.1225
TUSCALOOSA 3600 Watermelon Road, Ste 202 Northport, Alabama 35473 205.323.6166
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GMC
Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
G M C N E T W O R K . C O M

ISSUE DATE
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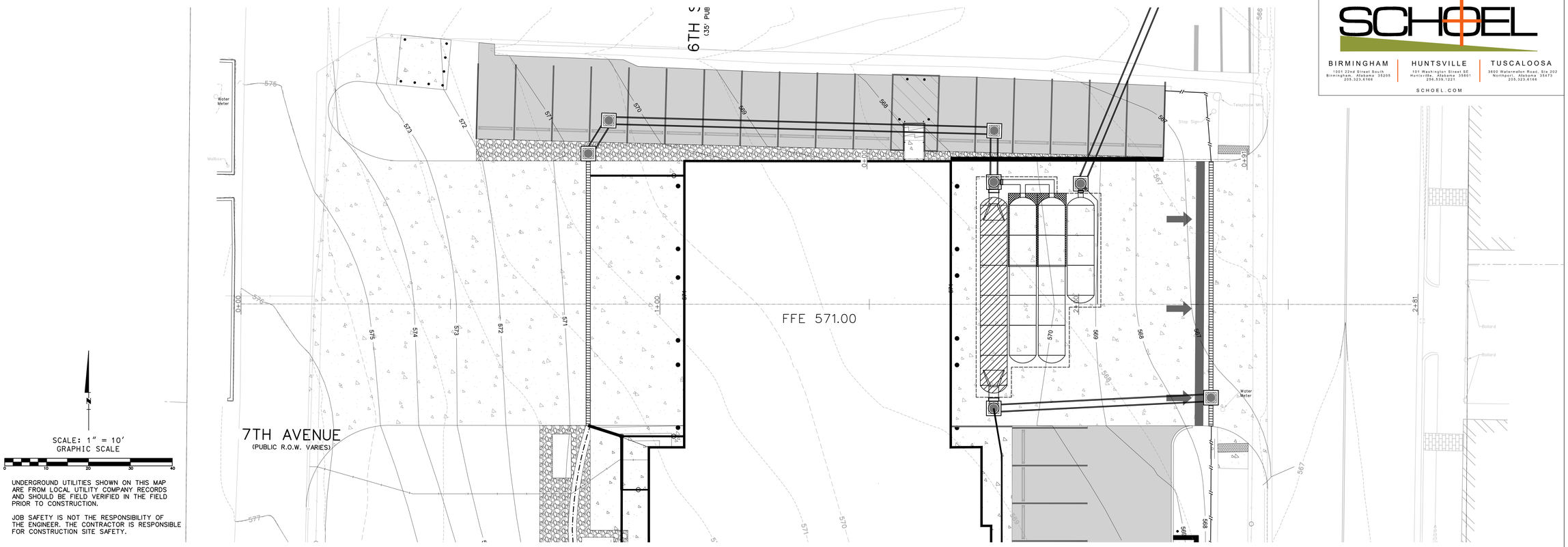
DRAWN BY: J. GARNER
CHECKED BY: B. WISEMAN

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

UTILITY PLAN

C7



N

SCALE: 1" = 10'
GRAPHIC SCALE

0 10 20 30 40

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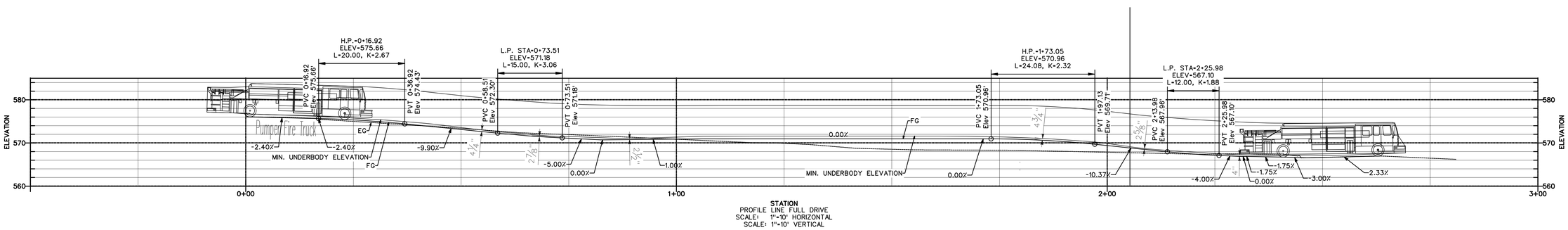

STATION
PROFILE LINE FULL DRIVE
SCALE: 1"=10' HORIZONTAL
SCALE: 1"=10' VERTICAL

SCHOEL

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1001 22nd Street South
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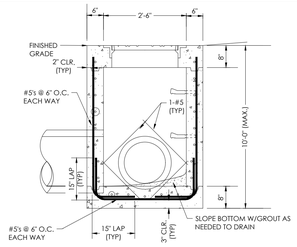
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

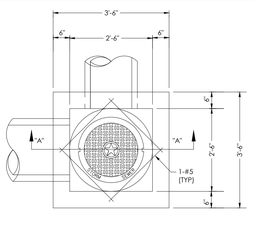
ALABAMA
LICENSED
No. 23333
PROFESSIONAL
1-9-2026
ENGINEER
BRYNE WISEMAN

DRIVE PLAN & PROFILE

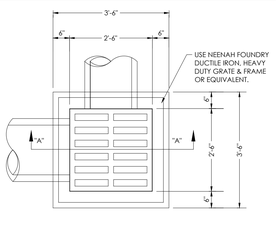
C8



SECTION "A"-"A"



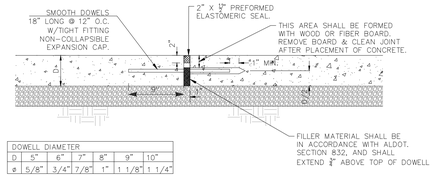
PLAN - JUNCTION BOX



PLAN - AREA INLET

NOTES:
1. ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS (CLASS "A").
2. ALL REINFORCING SHALL BE GRADE 60 DEFORMED BARS, AND SHALL CONFORM TO THE REQTS OF THE STANDARD SPECIFICATIONS FOR BILLET STEEL (ASTM A-15). WITH DEFORMATIONS CONFORMING TO ASTM A-305.

JUNCTION BOX / AREA INLET (15"-24" PIPES)
NOT TO SCALE

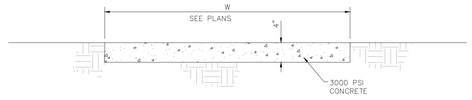


DOWELL DIAMETER					
D	5"	6"	7"	8"	9"	10"
ø	5/8"	3/4"	7/8"	1"	1 1/8"	1 1/4"

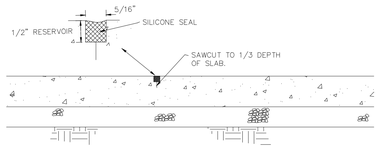
EXPASION JOINT DETAIL
NOT TO SCALE

UNLESS EXPLICITLY INDICATED OTHERWISE:
1. CROSS SLOPE ON SIDEWALKS SHALL NOT EXCEED 2%
2. HAND RAILING IS REQUIRED WHERE THE RUNNING SLOPE EXCEEDS 5% (SEE ARCHITECTURAL FOR DETAILS)
3. LANDINGS ARE REQUIRED AT THE END OF SECTIONS EQUAL TO OR EXCEEDING 5%. THESE LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.
4. RUNNING SLOPE SHALL NOT EXCEED 5% FOR ACCESSIBLE ROUTES.

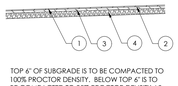
NOTE: CONTRACTION JOINTS SHALL BE SPACED AT "W" (MAX) CENTER TO CENTER, AND SHALL BE FORMED USING PLASTIC OR HARDBOARD PREFORMED STRIPS (1/3 DEPTH OF SLAB) PLACED IN THE SIDEWALK AND CURB AT THE TIME OF CONSTRUCTION, OR BY SAWCUTTING THE SIDEWALK AND CURB TO 1/3 DEPTH WITHIN 12 HOURS AFTER CONSTRUCTION.



SIDEWALK DETAIL
NOT TO SCALE



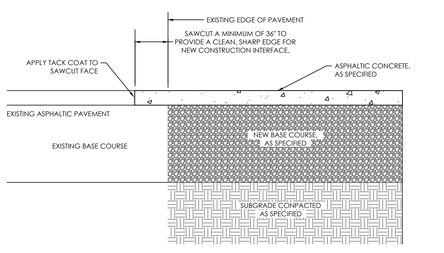
CONTRACTION JOINT DETAIL
NOT TO SCALE



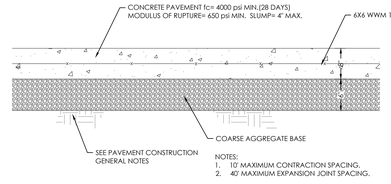
1. 112 LBS./S.Y. (1") HOT BITUMINOUS CONCRETE WEARING COURSE, ALDOT, REF. 424-A OF THE SPECIFICATIONS.
2. TACK COAT (ALDOT SECTION 405)
3. 224 LBS./S.Y. (2") HOT BITUMINOUS CONCRETE BINDER COURSE, ALDOT, REF. 424-B OF SPECIFICATIONS.
4. 6" LAYER OF DENSE GRADED LIMESTONE BASE COURSE ALDOT REF. 301 OF SPECIFICATIONS. ALL MATERIALS SHALL BE IN ACCORDANCE WITH SECTION 825, TYPE "B". COMPACTION TO 100% PROCTOR DENSITY.

TOP 6" OF SUBGRADE IS TO BE COMPACTED TO 100% PROCTOR DENSITY. BELOW TOP 6" IS TO BE COMPACTED TO 95% PROCTOR DENSITY AS DETERMINED BY AASHTO T-99 COMPACTION TEST. SEE PAVEMENT NOTES FOR ADDITIONAL INFORMATION.

STANDARD PAVEMENT SECTION
NOT TO SCALE

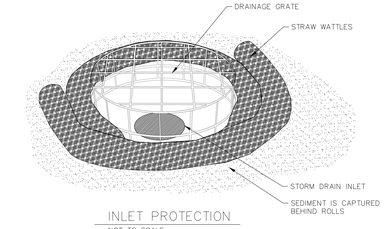


NEW TO EXISTING INTERFACE
NOT TO SCALE



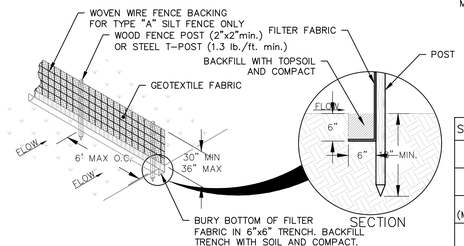
NOTES:
1. 10' MAXIMUM CONTRACTION SPACING.
2. 40' MAXIMUM EXPANSION JOINT SPACING.

HEAVY-DUTY CONCRETE PAVEMENT DETAIL
NOT TO SCALE

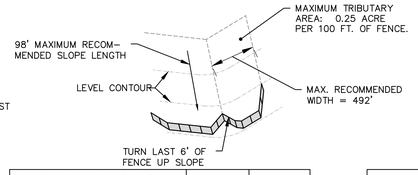


INLET PROTECTION
NOT TO SCALE

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. FIBER ROLLS SHOULD BE INSPECTED AFTER EVERY SIGNIFICANT STORM EVENT TO CLEAR AND DISPOSE OF SEDIMENT AND DEBRIS.



NOTES:
1. INSTALL SILT FENCE ALONG A LEVEL CONTOUR.
2. THE WOVEN WIRE FENCING SHALL BE FASTENED TO THE UPSTREAM SIDE OF THE POST BY WIRE TIES.
3. GEOTEXTILE FABRIC SHALL BE SECURELY FASTENED TO THE WOVEN WIRE FENCING.

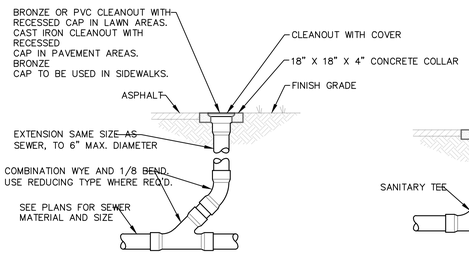


Specifications for Silt Fence	TYPE A	TYPE B
Tensile Strength (Lbs. Min.) (1) (ASTM D-4632)	Warp-260 Fill -100	Warp-120 Fill -100
Elongation (%Max.) (ASTM D-4632)	40	40
AOS (Apparent Opening Size) (Max. Sieve Size) (ASTM D-4751)	#30	#30
Flow Rate (Gal/Min/Sq. Ft.) (GDT-87)	70	25
Ultraviolet Stability (2) (ASTM D-4632 after 300 hours weathering in accordance with ASTM D-4355)	80	80
Bursting Strength (PSI Min.) (ASTM D-3786 Diaphragm Bursting Strength Tester)	175	175
Minimum Fabric Width (Inches)	36	36

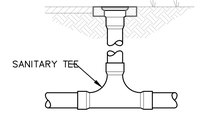
POST SIZE for SILT FENCE			
Silt Fence Type	Minimum Length	Type of Post	Size of Post
Type A	Steel	Steel	1.3lb./ft. min.
Type B	Soft Wood Oak Steel	Soft Wood Oak Steel	3" diameter or 2x4 1.5" x 1.5" 1.3lb./ft. min.

Wood Post Fasteners for Silt Fence				
	Gauge	Crown	Legs	Staples/Post
Wire Staples	17 min.	¾" wide	½" long	5 min.
	Gauge	Length	Button Heads	Nails/Post
Nails	14 min.	1"	3/4" long	4 min.

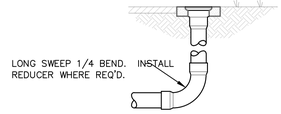
SILT FENCE - TYPES A AND B
NOT TO SCALE



ONE-WAY

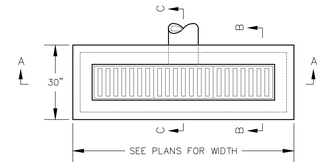


TWO-WAY

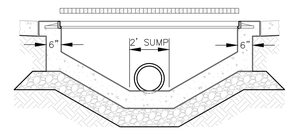


END-OF-LINE

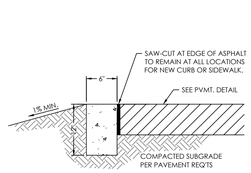
CLEANOUTS
NO SCALE



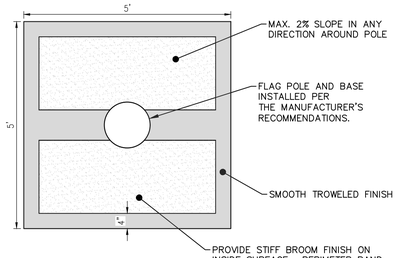
PLAN



SECTION "A-A"



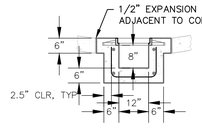
HEADER CURB (6 X 12)"
NOT TO SCALE



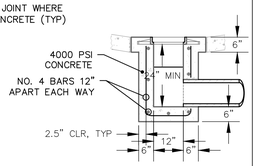
NOTE:

FLAGPOLE PAD CONSTRUCTION SHALL BE SIMILAR TO CONCRETE SIDEWALK DETAILED ELSEWHERE.

FLAG POLE PAD
NO SCALE



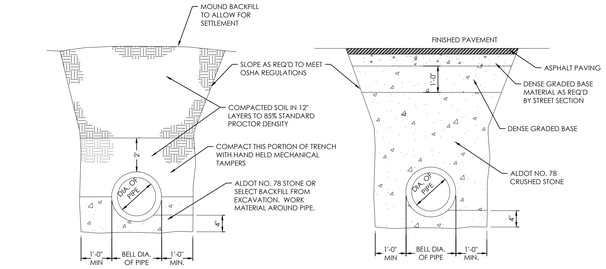
SECTION "B-B"



SECTION "C-C"

NOTES:
1. SEE PLANS FOR CASTING AND INVERT ELEVATIONS.
2. COVER AND RAILS SHALL BE JOHN BOUCHARD No. 5849, TYPE "A" WITH No. 2 RAILS, OR APPROVED EQUAL.

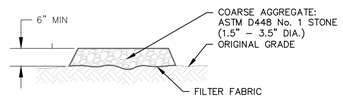
TRENCH DRAIN
NO SCALE



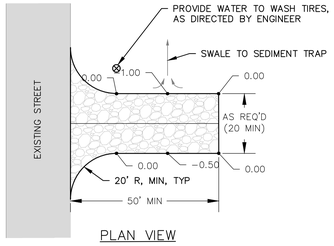
STORM SEWER "NON TRAFFIC AREAS"

METHOD "B" STORM SEWERS IN PROPOSED TRAFFIC ARES OR WITHIN STREET RIGHTS-OF-WAY

STORM SEWER PIPE BEDDING
NOT TO SCALE

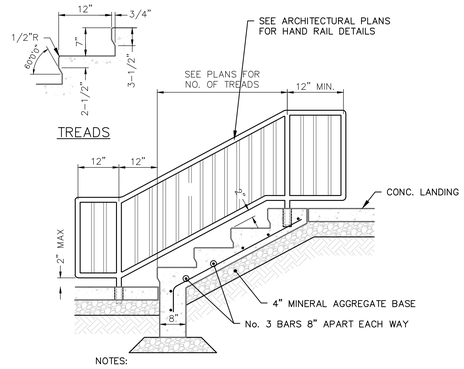


SECTION



PLAN VIEW

TEMPORARY CONSTRUCTION ENTRANCE
NO SCALE



NOTES:
1. THIS DETAIL IS TYPICALLY FOR SLAB ON GRADE CONDITION ONLY. SEE STRUCTURAL FOR KNEE WALL AND FOOTING DETAILS WHERE REQUIRED.
2. SLOPE STEPS 1/8" TO FRONT FOR DRAINAGE.
3. USE 3500 PSI CONCRETE AND ASTM GRADE 60 STEEL.
4. CONCRETE SHALL BE RUBBED FINISHED.

STEPS WITH HAND RAIL
NO SCALE

SCHOEL
BIRMINGHAM 1001 22nd Street South Birmingham, Alabama 35205 205.323.9100
HUNTSVILLE 101 Washington Street SE Huntsville, Alabama 35801 256.539.1225
TUSCALOOSA 3600 Watermelon Road, Ste 202 Northport, Alabama 35473 205.323.6166
SCHOEL.COM

GMC
Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
G M C N E T W O R K . C O M

ISSUE DATE
100% CONSTRUCTION DOCUMENTS 1/9/2026
DRAWN BY: J. GARNER
CHECKED BY: B. WISEMAN

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953
GMC # AHUN250003

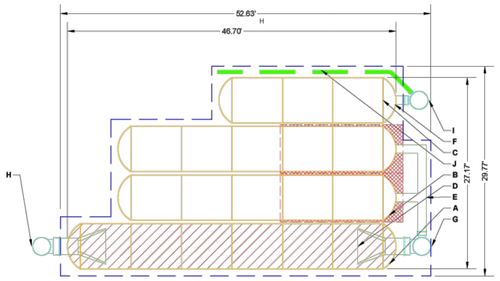
BRIAN K. WISEMAN
LICENSED
No. 23333
PROFESSIONAL
1-9-2026
ENGINEER
ALABAMA, U.S.A.

CONSTRUCTION DETAILS
C9.0

PROPOSED LAYOUT			PROPOSED ELEVATIONS	
19	STORMTECH MC-3500 CHAMBERS		MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	575.50
8	STORMTECH MC-3500 END CAPS		MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	569.50
12	STONE ABOVE (in)		MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	569.00
9	STONE BELOW (in)		MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	569.00
40	STONE VOID		MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	569.00
4108	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)		TOP OF STONE:	568.50
			TOP OF MC-3500 CHAMBER:	567.50
1265	SYSTEM AREA (SF)		12" x 12" TOP MANIFOLD INVERT:	565.95
164.8	SYSTEM PERIMETER (ft)		24" ISOLATOR ROW PLUS INVERT:	563.92
			24" ISOLATOR ROW PLUS INVERT:	563.92
			12" BOTTOM CONNECTION INVERT:	563.86
			BOTTOM OF MC-3500 CHAMBER:	563.78
			UNDERDRAIN INVERT:	563.00
			BOTTOM OF STONE:	563.00

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED END CAP	A	24" BOTTOM PRE-CORED END CAP, PART#: MC3500IEPP24BC / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.06"	
PREFABRICATED END CAP	B	12" TOP PRE-CORED END CAP, PART#: MC3500IEPP12T / TYP OF ALL 12" TOP CONNECTIONS	26.36"	
PREFABRICATED END CAP	C	12" BOTTOM PRE-CORED END CAP, PART#: MC3500IEPP12B / TYP OF ALL 12" BOTTOM CONNECTIONS	1.35"	
FLAMP	D	INSTALL FLAMP ON 24" ACCESS PIPE / PART#: MCFLAMP (TYP 2 PLACES)		
MANIFOLD	E	12" x 12" TOP MANIFOLD, ADS N-12	26.36"	
PIPE CONNECTION	F	12" BOTTOM CONNECTION	1.35"	
NYLOPLAST (INLET W/ ISO PLUS ROW)	G	30" DIAMETER (24.00" SUMP MIN)		5.0 CFS IN
NYLOPLAST (INLET W/ ISO PLUS ROW)	H	30" DIAMETER (24.00" SUMP MIN)		
NYLOPLAST (OUTLET)	I	30" DIAMETER (DESIGN BY ENGINEER)		2.0 CFS OUT
UNDERDRAIN	J	6" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN		



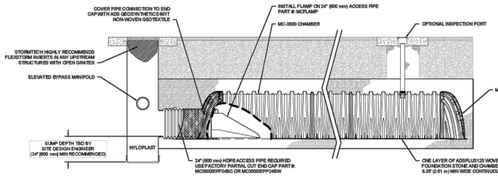
ISOLATOR ROW PLUS (SEE DETAIL)

PLACE MINIMUM 17.50' OF ADSPLUS125 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

BED LIMITS

NOTES
- THE SITE DESIGN ENGINEER MUST REVIEW/ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- **NOT FOR CONSTRUCTION**: THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

3 MC-3500 ISOLATOR ROW PLUS DETAIL



MC-3500 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

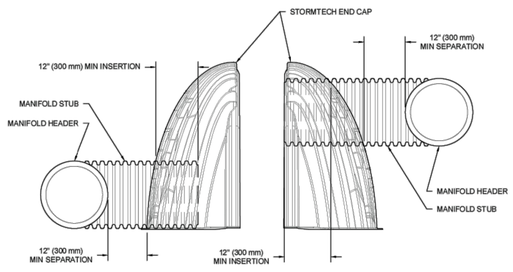
STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

SPACE INTENTIONALLY LEFT BLANK

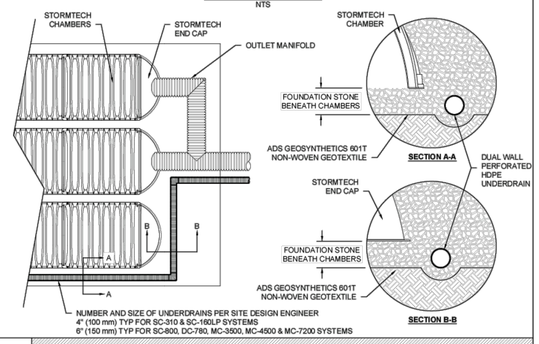
MC-SERIES END CAP INSERTION DETAIL
NTS



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

5 MC-SERIES END CAP INSERTION DETAIL

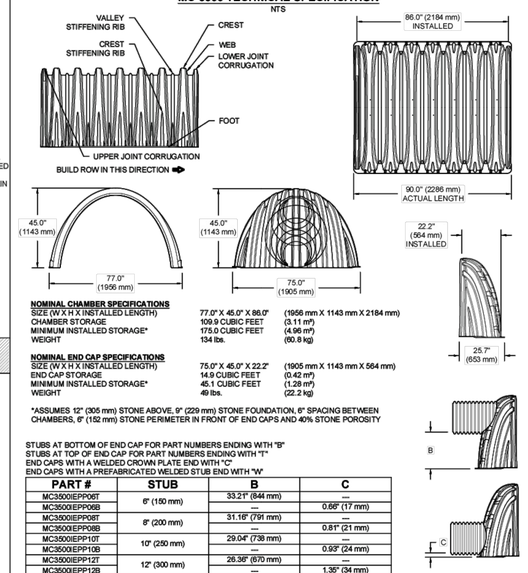
UNDERDRAIN DETAIL
NTS



4 UNDERDRAIN DETAIL

SPACE INTENTIONALLY LEFT BLANK

MC-3500 TECHNICAL SPECIFICATION
NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET	(4.96 m³)
WEIGHT	134 lbs.	(60.8 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	75.0" X 45.0" X 22.2"	(1905 mm X 1143 mm X 564 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET	(1.28 m³)
WEIGHT	49 lbs.	(22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" SPACING BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.65" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.60" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW			
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.46" (368 mm)	---
MC3500IEPP24TW			
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

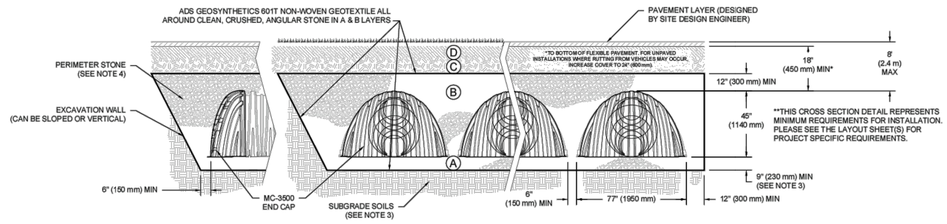
CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'E' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

2 MC-3500 TECHNICAL SPECIFICATION

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[4] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/% . THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 MC-3500 CROSS SECTION DETAIL

SCHOEL
BIRMINGHAM 1001 22nd Street South Birmingham, Alabama 35205 205.323.6160
HUNTSVILLE 101 Washington Street SE Huntsville, Alabama 35801 256.539.1225
TUSCALOOSA 3600 Watermelon Road, Ste 202 Northport, Alabama 35473 205.323.6160
SCHOEL.COM

DRAWN: JG | DATE: 12/16/2025
CHECKED: N/A | PROJECT #:
REV: | NOT TO SCALE

ASHVILLE FIRE STATION COPY 2
ASHVILLE, AL, USA

StormTech® Chamber System

4640 TRUEMAN BLVD
HILLIARD, OH 43026
1-800-733-7473

ADS

SHEET 1 OF 1

THIS DRAWING IS NOT INTENDED FOR USE IN BIDDING OR CONSTRUCTION WITHOUT THE EOR'S PRIOR APPROVAL. EOR SHALL REVIEW THIS DRAWING PRIOR TO BIDDING AND/OR CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE EOR TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.
THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS/STORMTECH UNDER THE DIRECTION OF THE PROJECT'S ENGINEER OF RECORD (EOR)/OTHER PROJECT REPRESENTATIVE. THIS DRAWING IS NOT INTENDED FOR USE IN BIDDING OR CONSTRUCTION WITHOUT THE EOR'S PRIOR APPROVAL. EOR SHALL REVIEW THIS DRAWING PRIOR TO BIDDING AND/OR CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE EOR TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

GMC

Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

ISSUE DATE
100% CONSTRUCTION DOCUMENTS 1/9/2026

DRAWN BY: J. GARNER
CHECKED BY: B. WISEMAN

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

BRIAN WAYNE WISEMAN LICENSED PROFESSIONAL ENGINEER No. 23333 09-2026 ALABAMA

CONSTRUCTION DETAILS

C9.1

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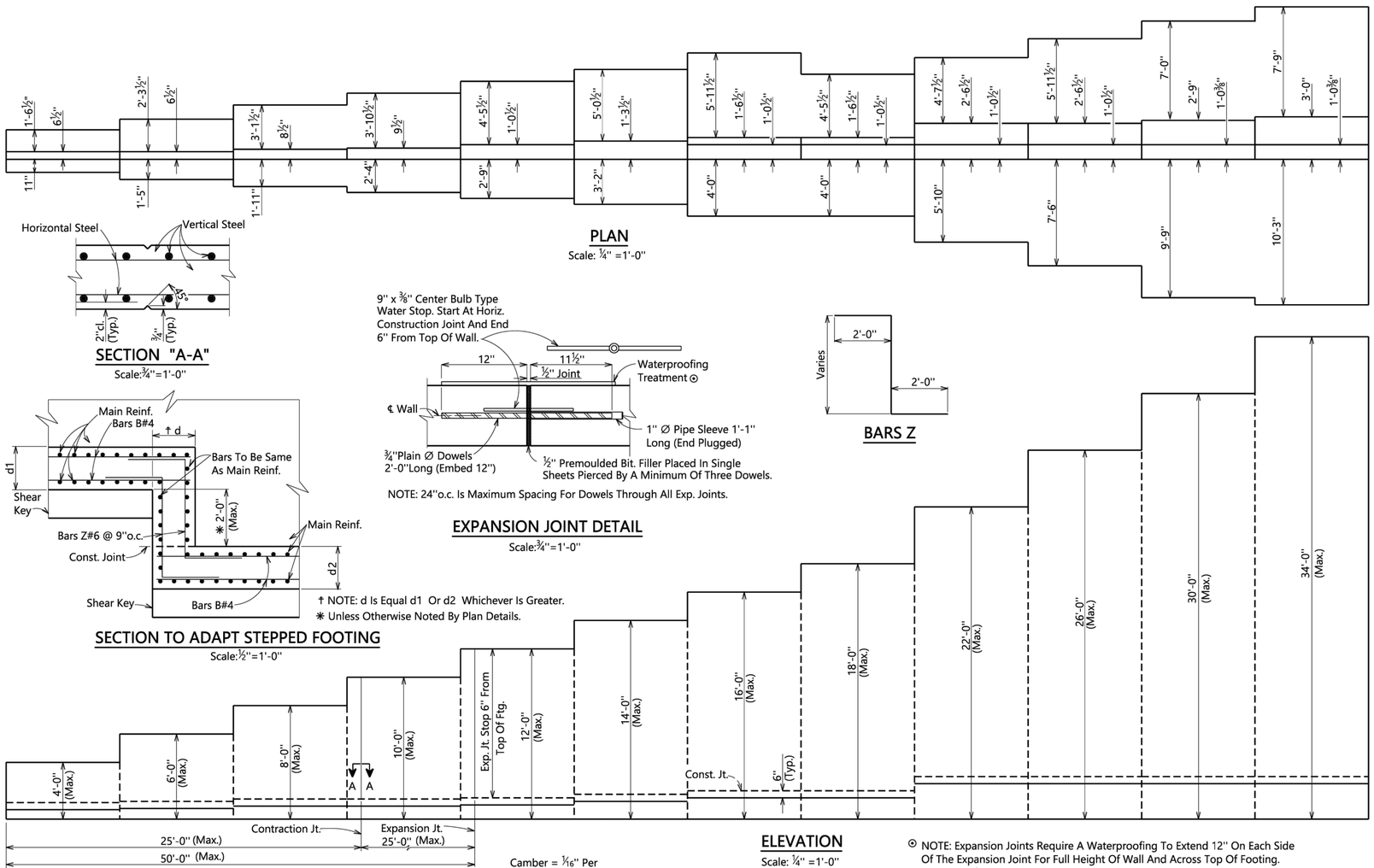
REFERENCE PROJECT NUMBER	FISCAL YEAR	SHEET NUMBER



◇ NOTE: Quantities Are Based On Maximum Height For Each Wall.

◇ ESTIMATED QUANTITIES

Wall Height	Cu. Yds. Concrete (Per Lin. Ft. Of Wall)	Lbs. Steel Reinf. (Per Lin Ft. Of Wall)
0' To 4'	0.16	6.4
4' To 6'	0.23	19.8
6' To 8'	0.40	44.7
8' To 10'	0.53	76.2
10' To 12'	0.75	108.8
12' To 14'	1.08	147.2
14' To 16'	1.37	185.1
16' To 18' (Level Fill)	1.38	156.8
16' To 18' (Slope Fill)	2.09	251.2
18' To 22' (Level Fill)	2.60	197.6
18' To 22' (Slope Fill)	2.92	310.8
22' To 26' (level Fill)	3.14	344.8
22' To 26' (Slope Fill)	3.51	556.7
26' To 30' (Level Fill)	3.88	488.6
26' To 30' (Slope Fill)	4.06	428.8
30' To 34' (Level Fill)	4.44	630.1
30' To 34' (Slope Fill)	5.15	820.0

GENERAL NOTES

SPECIFICATIONS: Alabama Department Of Transportation

CONCRETE: Shall Be Retaining Wall Concrete.

WEEP HOLES: Three Inch Round Weep Holes Spaced Not Over Ten Feet On Centers Shall Be Placed At Elevations As Shown On Retaining Wall Sections w/Backfill As Per Subarticle 214.02 (b).

CONSTRUCTION JOINTS: All Construction Joints Shall Be Carefully Made, Well Bonded And Waterproof.

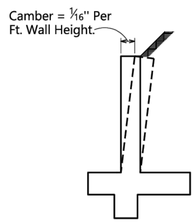
STEEL REINFORCEMENT: All Reinforcement Shall Be In Accordance With Section 835.

WALL CAP: The Top Of All Walls Shall Be Provided With A Cap As Detailed Below Unless Otherwise Noted By Plan Details.

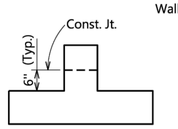
NOTE: Plans And Elevations For 16'-0'' To 34'-0'' Retaining Wall With Sloping Backfill Not Shown.

NOTE: Expansion Joints Shall Be Placed At a Maximum Distance Of 50'-0'' o.c. Place Contraction Joints Midway Between Expansion Joints. See Details Below.

NOTE: Elevation View Shown Is Diagrammatic For Wall Heights Only.Top Of Wall Shall Be Level Or Sloped To Fit Ajacent Ground Condition. See "Detail At Top Of Wall" Where Different Wall Thicknesses Are Used.

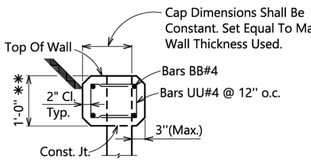


CAMBER DETAILS
(N.T.S.)



CONSTRUCTION JOINT DETAILS
(N.T.S.)

⊙ NOTE: Expansion Joints Require A Waterproofing To Extend 12'' On Each Side Of The Expansion Joint For Full Height Of Wall And Across Top Of Footing. Waterproofing Shall Be Class A Or Class D In Accordance With Section 515. Cost Of Waterproofing To Be Included In The Unit Price Bid For Retaining Wall Concrete.



✱✱ Cap Shall Be Poured As The Top 1'-0'' Of Wall After The Backfill Has Been Placed.

DETAIL AT TOP OF WALL
Scale:$^{6}/_{64}$''=1'-0''

ISSUE DATE
100% CONSTRUCTION DOCUMENTS 1/9/2026

DRAWN BY: J. GARNER
CHECKED BY: B. WISEMAN

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953
GMC # AHUN250003

BRANDON A. WISEMAN LICENSED PROFESSIONAL ENGINEER No. 23333 PROFESSIONAL 9-9-2026 ENGINEER STATE OF ALABAMA

CONSTRUCTION DETAILS
C9.2

ALABAMA DEPARTMENT OF TRANSPORTATION	THESE DRAWINGS REPRESENT DESIGNS PREPARED FOR USE BY THE ALABAMA DEPARTMENT OF TRANSPORTATION AND ARE NOT TO BE COPIED, REPRODUCED, ALTERED, OR USED BY ANYONE, OR ANY ORGANIZATION, WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE ALABAMA DEPARTMENT OF TRANSPORTATION REPRESENTATIVE AUTHORIZED TO APPROVE SUCH USE. ANYONE MAKING UNAUTHORIZED USE OF THESE DRAWINGS MAY BE PROSECUTED TO THE FULLEST EXTENT OF THE LAW.	REVISIONS	RETAINING WALLS 0' TO 34' HEIGHTS	BRIDGE STANDARD DRAWING			INDEX NO.
				FHWA APPROVED 8-25-10	RW 10-4	SHEET 1 OF 4	52901

PLOTTED: 11-SEP-2019
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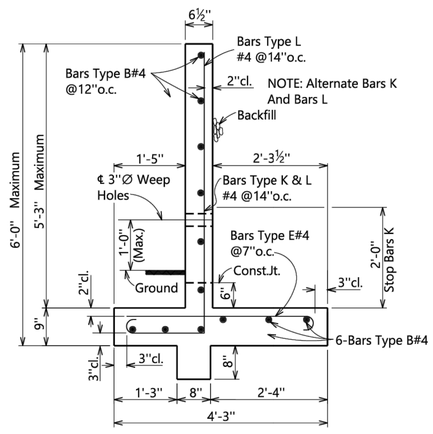
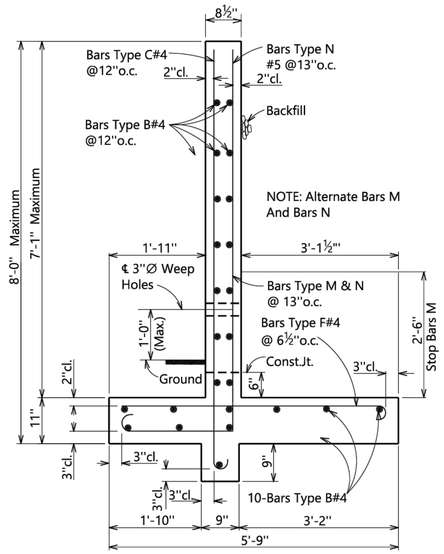
ISSUE DATE
100% CONSTRUCTION DOCUMENTS 1/9/2026
DRAWN BY: J. GARNER
CHECKED BY: B. WISEMAN

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953
GMC # AHUN250003

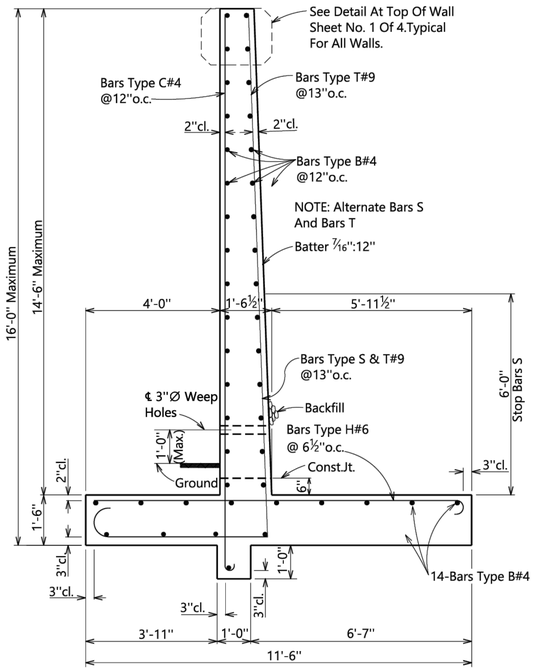
0' To 4'-0" RETAINING WALL
Scale: ¾" =1'-0"



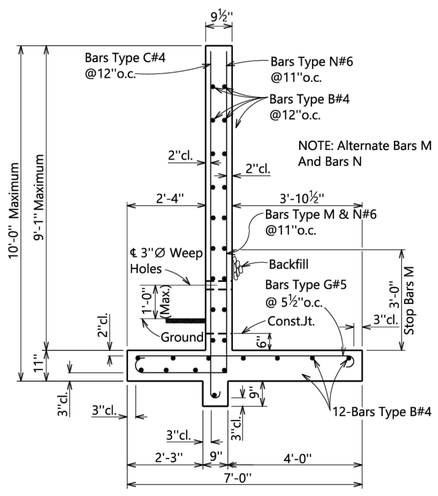
4'-0" To 6'-0" RETAINING WALL
Scale: ¾" =1'-0"



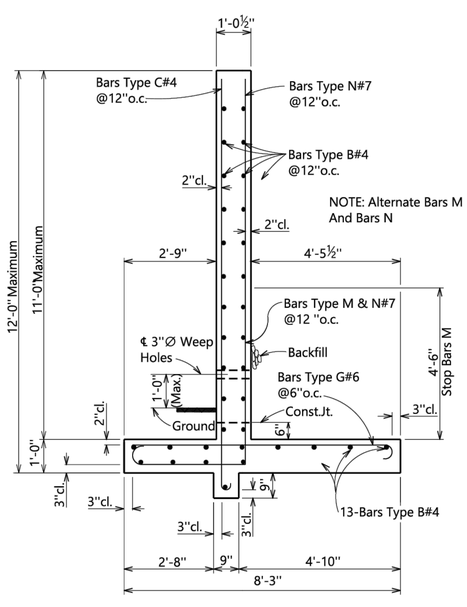
6'-0" To 8'-0" RETAINING WALL
Scale: ¾" =1'-0"



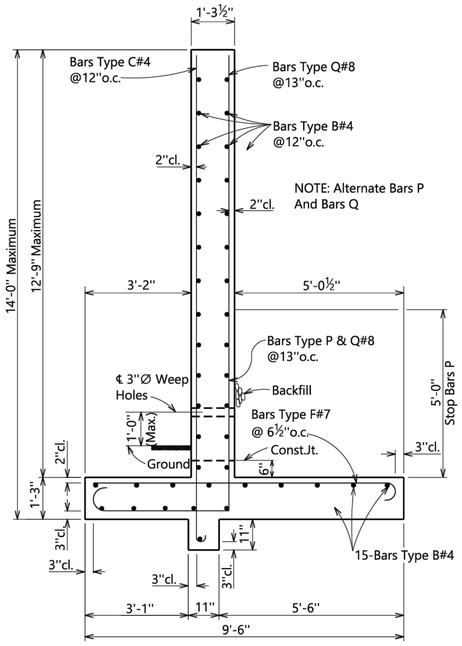
14'-0" To 16'-0" RETAINING WALL
Scale: ½" =1'-0"



8'-0" To 10'-0" RETAINING WALL
Scale: ½" =1'-0"



10'-0" To 12'-0" RETAINING WALL
Scale: ½" =1'-0"



12'-0" To 14'-0" RETAINING WALL
Scale: ½" =1'-0"

NOTE:The Retaining Wall Designs On Sheets 2 Thru 4 Are Based On A 3000 psf Minimum Allowable Soil Bearing Pressure.

NOTE:Retaining Walls Shown 0'To 16'In Height May Be Used For Level Or Sloping Backfill.

ALABAMA BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS
No. 23333
PROFESSIONAL
1-9-2026
ENGINEER
BRIAN WAYNE WISEMAN

CONSTRUCTION DETAILS
C9.3

SHEET REFERENCE

REFERENCE PROJECT NUMBER	FISCAL YEAR	SHEET NUMBER

PLOTTED: 11-SEP-2019
\\brvms002\BridgeStandardandSpecial\Bridge Standard DGN Files\StandardsBooks\Bridge\2020 StandardsBook\rw104.dgn

ALABAMA DEPARTMENT OF TRANSPORTATION	THESE DRAWINGS REPRESENT DESIGNS PREPARED FOR USE BY THE ALABAMA DEPARTMENT OF TRANSPORTATION AND ARE NOT TO BE COPIED, REPRODUCED, ALTERED, OR USED BY ANYONE, OR ANY ORGANIZATION, WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE ALABAMA DEPARTMENT OF TRANSPORTATION REPRESENTATIVE AUTHORIZED TO APPROVE SUCH USE. ANYONE MAKING UNAUTHORIZED USE OF THESE DRAWINGS MAY BE PROSECUTED TO THE FULLEST EXTENT OF THE LAW.	REVISIONS	RETAINING WALLS 0' TO 34' HEIGHTS	BRIDGE STANDARD DRAWING			INDEX NO.
				FHWA APPROVED 8-25-10	RW 10-4	SHEET 2 OF 4	52902

GENERAL NOTES

1.0 DESIGN CRITERIA

1.1 CODES AND SPECIFICATIONS:

A. GENERAL BUILDING CODE:
INTERNATIONAL BUILDING CODE, 2021 EDITION

B. CONCRETE:
BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-19)

C. STRUCTURAL STEEL:
SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION (ANSI/AISC 360-16)

D. STEEL DECK:
STEEL DECK INSTITUTE DESIGN MANUALS FOR COMPOSITE DECKS, NON-COMPOSITE DECKS, AND ROOF DECKS, LATEST EDITIONS

E. MASONRY:
SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 602-16)

BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (TMS 402-16)

NATIONAL CONCRETE MASONRY ASSOCIATION'S STANDARD PRACTICES AND "SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF LOAD BEARING CONCRETE MASONRY", LATEST EDITION

F. TIMBER:
NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, AMERICAN FOREST AND PAPER ASSOCIATION (AWC NDS 2018 & AWC SDPWS 2021)

G. (PREFABRICATED) METAL BUILDING
MBMA'S (METAL BUILDING MANUFACTURERS ASSOCIATION'S) METAL BUILDING SYSTEMS MANUAL, LATEST EDITION

MBMA'S METAL ROOFING SYSTEMS DESIGN MANUAL, LATEST EDITION

1.2 DESIGN GRAVITY LOADS (PSF):

A. DEAD LOADS:
ANY CHANGES IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS SHALL BE REPORTED BY THE GENERAL CONTRACTOR TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOAD-CARRYING CAPACITY OF THE STRUCTURE.

B. FLOOR LIVE LOADS:
NON-REDUCIBLE PARTITION LIVE LOAD OF 20 PSF HAS BEEN INCLUDED PER IBC SECTION 1607.5.

LIVE LOAD REDUCTIONS AS DETERMINED BY IBC SECTION 1607.12 HAVE BEEN TAKEN WHERE PERMITTED.

FLOORS (REDUCIBLE)----------100
CORRIDORS ABOVE 1ST FLOOR----------80
PRIVATE ROOMS----------40
STORAGE----------125
STAIRS & WALTWAYS----------100

C. ROOF LIVE LOADS:
WHERE PERMITTED ROOF LIVE LOADS ARE REDUCED FROM THE BASE VALUE SHOWN BELOW IN ACCORDANCE WITH IBC SECTION 1607.14.

ROOF----------20

D. ROOF SNOW LOADS:
GROUND SNOW LOAD (Pg)----------5.0
IMPORTANCE FACTOR (I)----------1.2
EXPOSURE FACTOR (Ce)----------1.0
THERMAL FACTOR (Ct)----------1.0

1.3 DESIGN LATERAL LOADS:

A. WIND LOADS:
ULTIMATE DESIGN WIND SPEED (3-SECOND GUST)----------118MPH
NOMINAL WIND SPEED (3-SECOND GUST)----------90MPH
RISK CATEGORY----------IV
WIND IMPORTANCE FACTOR (I)----------1.00
WIND EXPOSURE CATEGORY----------C
ENCLOSURE CATEGORY----------ENCLOSED
INTERNAL PRESSURE COEFFICIENTS----------+/- 0.18
SEE TYPICAL DETAILS FOR COMPONENT AND CLADDING LOADS

B. SEISMIC LOADS:
OCCUPANCY CATEGORY IV (FIRE AND EMERGENCY RESPONSE SERVICES)
SEISMIC IMPORTANCE FACTOR----------1.50
MAPPED SPECTRAL RESPONSE ACCELERATIONS:
SS----------0.263
S1----------0.099
SITE CLASS----------D
SPECTRAL RESPONSE COEFFICIENTS:
SDS----------0.279
SD1----------0.158
SEISMIC DESIGN CATEGORY----------D
BASIC SEISMIC-FORCE-RESISTING SYSTEM:
SPECIAL REINFORCED MASONRY SHEAR WALLS
DESIGN BASE SHEAR:
APPARATUS BAYS ----------70 KIPS
DORMS, HOUSING, ETC. ----------85 KIPS
SEISMIC RESPONSE COEFFICIENT,
REINFORCED WALLS: CS----------0.0978
RESPONSE MODIFICATION FACTOR,
REINFORCED WALLS: R----------5.0
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

2.0 GENERAL CONDITIONS

2.1 THE STRUCTURAL DRAWINGS AND SPECIFICATIONS ARE A PORTION OF THE CONSTRUCTION DOCUMENTS. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL REFERENCE AND COORDINATE WITH OTHER DISCIPLINE'S DRAWINGS. ANY DISCREPANCIES OR OMISSIONS SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT AND STRUCTURAL DESIGN GROUP.

2.2 ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES, AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY STRUCTURAL DESIGN GROUP AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF STRUCTURAL DESIGN GROUP. STRUCTURAL DESIGN GROUP SHALL RETAIN ALL COMMON LAW, STATUTORY, AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THERETO.

2.3 CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND SITE CONDITIONS PRIOR TO FABRICATION/CONSTRUCTION. NOTIFY STRUCTURAL ENGINEER AND ARCHITECT OF ANY DISCREPANCIES PRIOR TO FABRICATION/CONSTRUCTION.

2.4 WHERE SHOP DRAWINGS, CALCULATIONS, OR SUBMITTALS ARE CALLED FOR IN THE PROJECT DOCUMENTS (DRAWINGS AND SPECIFICATIONS) AND ARE NOT PROVIDED BY THE CONTRACTOR, THE CONTRACTOR ASSUMES TOTAL RESPONSIBILITY FOR THE DESIGN AND ASSOCIATED WORK.

2.5 ENGINEER'S SHOP DRAWING REVIEW IS LIMITED TO REVIEW FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT REFLECTED IN THE STRUCTURAL PORTION OF THE CONTRACT DOCUMENTS. THIS REVIEW DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE DRAWINGS, SPECIFICATIONS OR OTHER PROJECT CONTRACT DOCUMENTS. NO RESPONSIBILITY IS ASSUMED OR IMPLIED FOR THE CORRECTNESS OF DIMENSIONS OR DETAILS. THIS REVIEW DOES NOT AUTHORIZE CHANGES TO THE CONTRACT SUM UNLESS STATED IN A SEPARATE WRITTEN FORM OR CHANGE ORDER. CONTRACTOR SHALL CONFIRM AND CORRELATE ALL QUANTITIES AND DIMENSIONS, SELECT FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATE HIS WORK WITH THAT OF OTHER TRADES, AND PERFORM HIS WORK IN A SAFE AND SATISFACTORY MANNER. CONTRACTOR SHALL ALSO REFER TO THE REQUIREMENTS OF THE GENERAL AND SUPPLEMENTARY GENERAL CONDITIONS.

2.6 ALL DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS, UNLESS NOTED.

2.7 VERIFY ALL DIMENSIONS AND DETAILS SHOWN ON THESE DRAWINGS. ANY DISCREPANCIES OR OMISSIONS FOUND SHALL BE REPORTED TO THE ENGINEER AND OTHER DESIGN PROFESSIONALS AS APPROPRIATE FOR RESOLUTION PRIOR TO PROCEEDING WITH ANY RELATED WORK.

2.8 THESE DRAWINGS DO NOT INCLUDE PROVISIONS TO SATISFY JOB SITE SAFETY REQUIREMENTS. CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING SAFETY DURING CONSTRUCTION AND FOR CONFORMANCE TO ALL APPLICABLE OSHA STANDARDS. JOBSITE VISITS BY ENGINEER SHALL NOT CONSTITUTE APPROVAL, AWARENESS OR LIABILITY FOR ANY HAZARDOUS CONDITIONS.

2.9 STRUCTURAL DESIGN GROUP IS NOT RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, SAFETY PROCEDURES, CONSTRUCTION SUPERVISION OR SITE SAFETY, AND DOES NOT HAVE THE AUTHORITY TO STOP WORK FOR THESE ITEMS. DRAWINGS FURTHER DO NOT PROVIDE ENGINEERING CONTROLS FOR SILICA STANDARD OR ANY OTHER SAFETY STANDARD.

2.10 THE CONTRACTOR IS SOLELY RESPONSIBLE FOR BRACING AND SHORING ALL EXCAVATIONS, DEWATERING OF EXCAVATION FROM EITHER SURFACE WATER, GROUND WATER OR SEEPAGE, TEMPORARY AND EXISTING STRUCTURES, AND PARTIALLY COMPLETED PORTIONS OF THE WORK TO ASSURE THE SAFETY OF ANY PERSON COMING IN CONTACT WITH THE WORK.

2.11 THE STRUCTURAL INTEGRITY OF THE BUILDING IS DEPENDENT UPON COMPLETION ACCORDING TO THE PLANS AND SPECIFICATIONS. THE STRUCTURAL ENGINEER OF RECORD ASSUMES NO LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION. THE METHOD OF CONSTRUCTION AND SEQUENCE OF OPERATIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUPPLY ANY NECESSARY BRACING, GUYS, ETC. TO PROPERLY BRACE THE STRUCTURE AGAINST WIND, DEAD AND LIVE LOADS UNTIL THE BUILDING IS COMPLETED ACCORDING TO THE PLANS AND SPECIFICATIONS. ANY QUESTIONS REGARDING TEMPORARY BRACING REQUIREMENTS SHOULD BE FORWARDED TO A STRUCTURAL ENGINEER FOR REVIEW.

2.12 MECHANICAL UNITS AND ANY OTHER EQUIPMENT SUPPORTED BY THE STRUCTURE WITH WEIGHTS IN EXCESS OF 200 LBS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION.

2.13 WHERE NOTED IN DRAWINGS AND SPECIFICATIONS TO INSTALL PRODUCTS PER THE MANUFACTURER'S RECOMMENDATIONS, IT SHALL BE REQUIRED THAT THE CONTRACTOR FOLLOWS THE MANUFACTURER'S RECOMMENDATIONS.

2.14 STRUCTURAL OBSERVATION IS VISUAL OBSERVATION OF THE IN PLACE STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS AT THE TIME OF THE OBSERVATION AND SHALL NOT BE CONSTRUED AS INSPECTION OR APPROVAL OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING TESTING AND SPECIAL INSPECTIONS PER THE REQUIREMENTS IN THE PROJECT DOCUMENTS.

2.15 OBSERVATION BY THE STRUCTURAL ENGINEER OF RECORD'S OFFICE DOES NOT REPLACE INSPECTIONS AND TESTING BY THE TESTING AGENCY OR SPECIAL INSPECTOR.

3.0 FOUNDATIONS

3.1 GEOTECHNICAL REPORT: FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT BY GOODWYN MILLS CAWOOD, TITLED "REPORT OF GEOTECHNICAL EXPLORATION DATED AUGUST 6, 2025" ALONG WITH ANY SUPPLEMENTAL CORRESPONDENCE. THE GENERAL CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT FROM THE OWNER AND FOLLOW ALL REQUIREMENTS AND RECOMMENDATIONS. GEOTECHNICAL RECOMMENDATIONS SHALL TAKE PRECEDENCE OVER THE ITEMS THAT FOLLOW IN THIS SECTION OF THE STRUCTURAL GENERAL NOTES.

3.2 MAXIMUM ALLOWABLE BEARING PRESSURES (PSF) PER GEOTECHNICAL REPORT:
BUILDING FOUNDATIONS----------2500

NOTE: ALL FOOTING BEARING ELEVATIONS SHALL BE BEARING IN SIMILAR MATERIAL(NATIVE SOILS OR WEATHERED BEDROCK), EXTEND FOOTINGS AS NECESSARY WITH LEAN CONCRETE OR FLOWABLE FILL.

3.3 ALL FOUNDATION BEARING SURFACES SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE TO ENSURE THEIR COMPLIANCE WITH PRESSURES NOTED. ALL FOOTING ELEVATIONS ARE ESTIMATED AND MAY BE ADJUSTED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.

3.4 COMPACTED FILL WITHIN THE BUILDING AREA (AND EXTENDING 10'-0" OUTSIDE THE EXTERIOR BUILDING LINE) SHALL MEET THE REQUIREMENTS NOTED IN THE GEOTECHNICAL REPORT.

3.5 BACKFILL FOR FOUNDATION AND RETAINING WALLS SHALL BE A FREE DRAINING GRANULAR MATERIAL, SUCH AS SIZE #57 STONE. BACKFILL SHALL BE COMPACTED SUFFICIENTLY TO PREVENT SUBSIDENCE OF SURFACE ADJACENT TO WALL. THE GRANULAR MATERIAL SHALL BE PLACED IN A 45 DEGREE WEDGE EXTENDING FROM THE BASE OF THE FOOTING TO WITHIN 18" OF FINISH GRADE ON EXTERIOR AND TO UNDERSIDE OF SLAB ON INTERIOR. AT EXTERIOR, CAP GRANULAR BACKFILL WITH 18" OF SOIL.

3.6 GRANULAR BACKFILL SUPPORTING A FOOTING SHALL BE COMPACTED UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER OR HIS APPROVED REPRESENTATIVE. PROVIDE A 12" THICK CAP OF PROPERLY COMPACTED CRUSHER RUN STONE BETWEEN THE FOOTING AND THE PROPERLY COMPACTED GRANULAR BACKFILL. EXTEND CRUSHER RUN CAP TWO FEET BEYOND THE PERIMETER OF THE FOOTING OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.

3.7 FOUNDATION AND RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL CONCRETE HAS ATTAINED THE REQUIRED 28-DAY COMPRESSIVE STRENGTH.

3.8 DO NOT PLACE BACKFILL AGAINST FOUNDATION WALLS UNTIL UPPER BRACING FLOORS ARE IN PLACE FOR AT LEAST SEVEN DAYS AND HAVE ATTAINED 75% OF DESIGN STRENGTH.

3.9 REINFORCING STEEL IN CONTINUOUS WALL FOOTINGS SHALL EXTEND THRU SPREAD FOOTINGS AT THE SAME ELEVATION AS WALL FOOTING. STEP WALL FOOTING DOWN ON SPREAD FOOTING WHERE SPREAD FOOTING IS BELOW CONTINUOUS WALL FOOTINGS.

3.10 SUBGRADE AND GRANULAR FILL SUPPORTING SLABS ON GRADE SHALL BE AS RECOMMENDED BY THE GEOTECHNICAL REPORT AND COMPACTED UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER OR HIS APPROVED REPRESENTATIVE. SEE SPECIFICATIONS FOR VAPOR RETARDER BENEATH SLABS ON GRADE

3.11 GRANULAR FILL BENEATH SLABS, UNLESS NOTED OTHERWISE, SHALL BE 4" COMPACTED #57 STONE.

3.12 VAPOR RETARDER BENEATH SLABS ON GRADE, UNLESS NOTED, SHALL MEET ASTM E 1745, CLASS A, 15 MIL MINIMUM THICKNESS WITH MANUFACTURER'S RECOMMENDED ADHESIVE OR PRESSURE-SENSITIVE TAPE AND PIPE BOOTS, SUCH AS W.R. MEADOWS INC. PRODUCT PERMINATOR 15.

3.13 NO EXCAVATION SHALL BE CLOSER THAN AT A SLOPE OF 2:1 (TWO HORIZONTAL TO ONE VERTICAL) TO A FOOTING.

4.0 CONCRETE

4.1 CONCRETING OPERATIONS SHALL COMPLY WITH ACI STANDARDS.

4.2 CONCRETE STRENGTH AND DURABILITY REQUIREMENTS: MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS (PSI), TYPE OF CONCRETE, MAXIMUM WATER/CEMENTITIOUS RATIO, AIR CONTENT, SLUMP, CONCRETE USE, AND EXPOSURE CATEGORY:

STRENGTH	TYPE	MAX W/C	AIR	SLUMP	USE	EXPOSURE CATEGORY
3000	NORMAL WT.	0.57	----	3" TO 5"	FOOTINGS	C1
3500	NORMAL WT.	0.50	----	3" TO 5"	SLAB ON GRADE (TYPICAL)	F0
4000	NORMAL WT.	0.50	----	3" TO 5"	CONCRETE ON STEEL DECK	F0
4000	NORMAL WT.	0.45	----	3" TO 5"	SLAB ON GRADE (ENGINE BAY)	F0
4000	NORMAL WT.	0.45	----	3" TO 5"	CONCRETE BEAM	F0
4000	NORMAL WT.	0.45	4-6%	3" TO 5"	UNLESS NOTED	C0

A. CONCRETE MIX DESIGN SHALL BE WORKABLE WITH THE LOWEST TOTAL WATER PER CUBIC YARD USING LARGEST PRACTICAL MAXIMUM SIZE OF COURSE AGGREGATE.
B. AIR CONTENT FOR CONCRETE FOR SLABS WITH HARD TROWELED FINISHES SHALL NOT EXCEED 3%.
C. CONCRETE FOR BELOW GRADE WALLS SHALL INCLUDE XYPEX ADMIXTURE.
D. CONCRETE USED FOR POLISHED CONCRETE FLOORS SHALL HAVE #78 STONE SIZE MAX COARSE AGGREGATE, HAVE 4000 PSI MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS, AND BE LOW SHRINKAGE CONCRETE MIX WITH 28 DAY MAXIMUM SHRINKAGE OF 0.015% PER ASTM C157 WHEN WET CURED 3 DAYS.
E. EXPOSED CONCRETE COLUMNS AND SLABS, EPXOSURE CATEGORY TO BE F2.
F. EXPOSURE CLASS DESCRIPTIONS:

F0: CONCRETE NOT EXPOSED TO FREEZING AND THAWING CYCLES AND PROTECTED FROM MOISTURE.
C0: CONCRETE DRY AND PROTECTED FROM MOISTURE.
C1: CONCRETE EXPOSED TO MOISTURE BUT NOT TO DEICING CHEMICALS.

4.3 REINFORCING BARS: ASTM A615 GRADE 60.

4.4 WATERSTOPS: FLEXIBLE PVC WATERSTOPS, CE CRD-C 572, UNLESS NOTED OTHERWISE, WITH FACTORY-INSTALLED METAL EYELETS, FOR EMBEDDING IN CONCRETE TO PREVENT PASSAGE OF FLUIDS THROUGH JOINTS. FACTORY FABRICATE CORNERS, INTERSECTIONS, AND DIRECTIONAL CHANGES. ACCEPTABLE MANUFACTURER IS THE GREENSTREAK GROUP, INC, 800-325-9504, OR EQUAL. PROFILE SHALL BE FLAT, DUMBBELL WITH CENTER BULB WITH DIMENSIONS OF 6 INCHES BY 3/8 INCH THICK.

A. FLEXIBLE WATERSTOP INSTALLATION: INSTALL IN CONSTRUCTION JOINTS AND AT OTHER JOINTS INDICATED TO FORM A CONTINUOUS DIAPHRAGM. INSTALL IN LONGEST LENGTHS PRACTICABLE. SUPPORT AND PROTECT EXPOSED WATERSTOPS DURING PROGRESS OF THE WORK.

4.5 REINFORCING STEEL SHOWN IN SECTIONS AND DETAILS ARE A SCHEMATIC INDICATION THAT REINFORCING EXISTS. SEE SCHEDULES, SECTION NOTES AND GENERAL NOTES FOR ACTUAL REINFORCING REQUIRED.

4.6 REINFORCING BAR PLACING ACCESSORIES IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE. WHERE CONCRETE IS EXPOSED IN FINISHED BUILDING, PROVIDE ACCESSORIES WITH RUSTPROOF LEGS. WHERE CONCRETE IS SAND-BLASTED OR BUSH-HAMMERED, PROVIDE ACCESSORIES OF STAINLESS STEEL.

4.7 DETAIL REINFORCEMENT IN ACCORDANCE WITH ACI 315. REINFORCEMENT SHALL NOT BE WELDED, UNLESS NOTED OR APPROVED BY THE ENGINEER.

4.8 ALL SPLICES SHALL BE CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.

4.9 ALL REINFORCING MARKED "CONT." INDICATES REINFORCING SHALL BE "CONTINUOUS" AND SHALL BE SPLICED WITH CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.

4.10 PROVIDE CORNER BARS AT ALL CORNERS OF CONTINUOUS REINFORCING IN FOOTINGS, SLABS, OR WALLS. CORNER BARS SHALL BE LONG ENOUGH TO PROVIDE A CLASS "B" LAP SPLICE OF REINFORCING BARS.

4.11 CONCRETE COVERAGE OF REINFORCEMENT, UNLESS NOTED:

FOOTINGS----------2" TOP & 3" BOTTOM & SIDES
COLUMNS AND PEDESTALS----------1-1/2" CLEAR OF TIES
FOUNDATION RETAINING WALLS----------2" BOTH FACES
SLAB FACES NOT EXPOSED TO WEATHER OR EARTH----------3/4"
SLAB FACES EXPOSED TO WEATHER
A. #5 AND LESS----------1-1/2"
B. #6 AND GREATER----------2"
BEAMS----------1-1/2" CLEAR OF STIRRUPS

NOTE: SLAB ON GRADE WWR OR REINFORCEMENT EACH WAY SHALL BE 2" CLEAR FROM TOP OF SLAB. SEE EARTH SUPPORTED SLABS SECTION BELOW.

4.12 PEDESTAL, COLUMN AND WALL VERTICAL REINFORCING: DOWEL TO FOUNDATION WITH HOOKED BARS OF SAME SIZE AND SPACING AS VERTICAL REINFORCING.

4.13 WELDED WIRE REINFORCEMENT (WWR): ASTM A1064, MINIMUM LAP AND EMBEDMENT TO BE THE GREATER OF ONE CROSS WIRE SPACING PLUS 2 INCHES OR 6 INCHES.

4.14 EARTH SUPPORTED SLABS:

TYPICAL, 4" THICK, REINFORCED WITH 6X6 W2.9/W2.9 WWR FLAT SHEETS SUPPORTED 2" CLEAR OF TOP OF SLAB, UNLESS NOTED. WWR TO BE CHAIRED AT 36 INCHES EACH WAY MINIMUM. SEE FOUNDATION NOTES FOR SUBGRADE REQUIREMENTS.

WHERE NOTED AS 8" THICK (SEE PLAN): REINFORCE WITH #4@12 EW IN THE TOP OF THE SLAB. REBAR TO BE SUPPORTED 2" CLEAR OF THE TOP OF THE SLAB AND CHAIRED AT 36 INCHES EACH WAY MINIMUM. SEE FOUNDATION NOTES FOR SUBGRADE REQUIREMENTS.

PROVIDE CONTROL AND CONSTRUCTION JOINTS AT 3-4 TIMES SLAB THICKNESS IN FEET MAXIMUM OR AS REQUIRED TO PREVENT UNCONTROLLED CRACKING PER ACI RECOMMENDATIONS. AS AN EXAMPLE, FOR A 4" THICK SLAB PROVIDE JOINTS SPACED 12 – 16 FEET MAXIMUM. PANELS TO BE RECTANGULAR WITH LONG SIDE NOT TO EXCEED 1-1/2 TIMES SHORT SIDE. CUTTING SHOULD BE STARTED AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT AGGREGATE FROM BEING DISLODGE. CONTRACTOR SUBMIT PLAN SHOWING LOCATION OF CONSTRUCTION AND CONTROL JOINTS.

FLOOR DESIGN AND CONSTRUCTION BASIS IS ACI 302 AND 360, AND IT IS UNREALISTIC TO EXPECT CRACK-FREE OR CURL-FREE FLOORS. IT IS NORMAL TO EXPECT SOME AMOUNT OF CRACKING AND CURLING IN THE SLAB ON GRADE, AND SUCH OCCURRENCE DOES NOT NECESSARILY REFLECT ADVERSELY ON EITHER THE ADEQUENCY OF THE FLOOR DESIGN OR THE QUALITY OF ITS CONSTRUCTION.

EARTH SUPPORTED SLABS SHALL BE MOIST CURED FOR A MINIMUM OF SEVEN DAYS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. CURING COMPOUNDS, UNLESS NOTED, SHALL BE A MINIMUM OF CLEAR, WATERBORNE, MEMBRANE-FORMING CURING COMPOUND MEETING ASTM C 309, TYPE 1, CLASS B, SELF-DISSIPATING, CERTIFIED BY CURING COMPOUND MANUFACTURER TO NOT INTERFERE WITH BONDING OF FLOOR COVERING.

WHERE CONTROL JOINTS TERMINATE INTO NON-PARALLEL CONTROL JOINTS, PROVIDE 2# 4 X 6'-0" BARS MID DEPTH OF SLAB PERPENDICULAR TO TERMINAL CONTROL JOINT.

PROVIDE 2#4 X 6'-0" BARS MID DEPTH OF SLAB AT REENTRANT CORNERS.

WHERE CONTROL JOINTS TERMINATE AT EMBEDDED STEEL ELEMENTS (SUCH AS EDGE REINFORCEMENT AT LOADING DOCKS), PROVIDE JOINT IN STEEL ELEMENT.

4.15 PLATE DOWELS AND DOWEL BASKETS:

A. CONSTRUCTION JOINTS:
1. PLATE DOWELS SHALL CONSIST OF SMOOTH STEEL GALVANIZED PLATE BARS, ASTM A36 STEEL BY ONE OF THE FOLLOWING:
a. GREENSTREAK GROUP, INC., ST. LOUIS, MO (800) 325-9504 – "SPEED PLATE"
b. PNA – "DIAMOND DOWEL"

B. CONTRACTION JOINTS:
1. PLATE DOWEL BASKET ASSEMBLY SHALL CONSIST OF SMOOTH STEEL GALVANIZED PLATE BARS, ASTM A36, AND WIRE SIDE FRAME SUPPORTS BY ONE OF THE FOLLOWING:
a. GREENSTREAK GROUP, INC., ST. LOUIS, MO (800) 325-9504 – DOUBLE TAPERED BASKET"
b. PNA – "PD3 BASKET"

C. DOWELED JOINT INSTALLATION: INSTALL DOWEL BARS AND SUPPORT ASSEMBLIES AT JOINTS WHERE INDICATED. LUBRICATE OR ASPHALT COAT ONE-HALF OF DOWEL LENGTH TO PREVENT CONCRETE BONDING TO ONE SIDE OF JOINT. FOLLOW MANUFACTURERS INSTALLATION INSTRUCTIONS FOR PLACEMENT OF PLATE TYPE DOWELS AND DOWEL BASKETS.

4.16 CONTRACTION JOINTS IN WALLS: WALL JOINTS SHALL NOT BE SPACED FARTHER THAN 15 FEET FOR 8" WALLS, 20 FEET FOR 10" WALLS AND 30 FEET FOR 12" WALLS. WALL JOINTS SHALL ADDITIONALLY NOT BE LOCATED WITHIN 4'-0" OF EMBED PLATES OR CORNERS OF THE WALL. DISCONTINUE 50% OF THE WALL HORIZONTAL REINFORCING THROUGH JOINTS; TRIMMING BACK THE REINFORCING BARS 2" FROM THE CONTROL JOINT LOCATION. LOCATE CONTROL JOINTS EACH SIDE OF THE WALL. SEAL JOINTS WITH ELASTOMERIC SEALANT. SEE WALL CONTRACTION JOINT TYPICAL DETAIL.

4.17 WALL AND SLAB OPENINGS AND SLEEVES SMALLER THAN 12" (IN LARGER DIMENSION) ARE NOT SHOWN ON PLANS. CONTRACTOR SHALL SUBMIT ALL OPENINGS (SIZE AND LOCATIONS) AS A SINGLE COORDINATED SLEEVE PLAN FOR REVIEW AND APPROVAL.

4.18 CAST IN PLACE ALL SLEEVES AND INSERTS.

4.19 SLAB CRACKS THAT DEVELOP ON EXPOSED LEVELS SHOULD BE INJECTED WITH EPOXY TO LIMIT DETERIORATION OF THE REBAR.

4.20 FOR ALL CONCRETE EXPOSED TO VIEW IN THE FINISHED CONFIGURATION OF THE STRUCTURE, PROVIDE RUBBED FINISH AT A MINIMUM. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

5.0 PREFABRICATED METAL BUILDING

5.1 METAL BUILDING MANUFACTURER SHALL BE A MEMBER OF MBMA (METAL BUILDING MANUFACTURERS ASSOCIATION) AND BE AISC CERTIFIED FOR CATEGORY MB.

5.2 METAL BUILDING SHALL BE DESIGNED IN ACCORDANCE WITH THE METAL BUILDING MANUFACTURERS ASSOCIATION'S (MBMA)'S 2018 METAL BUILDING SYSTEMS MANUAL. METAL BUILDING LIVE LOADS AND LATERAL LOADS TO MEET THE GENERAL BUILDING CODE NOTED ABOVE.

5.3 ANCHOR ROD SIZE, TOTAL LENGTH, AND LOCATION BY METAL BUILDING SUPPLIER. FOR ANCHOR ROD EMBEDMENT LENGTH, SEE SHEET S101. ANCHOR RODS PURCHASED AND INSTALLED BY GENERAL CONTRACTOR.

5.4 BEFORE FOOTING INSTALLATION, THE ANCHOR ROD EMBEDMENT LENGTHS MUST BE VERIFIED. THE FOOTING DEPTH SHALL BE THE SCHEDULED DEPTH OR THE ANCHOR ROD EMBEDMENT LENGTH PLUS 3 INCHES, WHICHEVER IS GREATER.

5.5 HORIZONTAL FORCE TRANSFER FROM METAL BUILDING COLUMN BASE TO CONCRETE SHALL BE BY THE METAL BUILDING SUPPLIER.

5.6 METAL BUILDING SUPPLIER TO VERIFY COLUMN LAYOUT. ANY CHANGES MUST BE SUBMITTED FOR REVIEW OF FOUNDATION DESIGN BEFORE CONSTRUCTION STARTS.

5.7 GRAVITY DESIGN LOADS:
1. LIVE LOAD: 20 PSF (REDUCIBLE AT RIGID FRAME RAFTERS AND COLUMNS ONLY)

2. DEAD LOAD: WEIGHT OF STRUCTURE

3. COLLATERAL LOAD: 10 PSF AND INCLUDE ADDITIONAL DEAD LOADS SUCH AS SPRINKLERS, MECHANICAL AND ELECTRICAL SYSTEMS, ETC.

5.8 DEFLECTION LIMITS FOR MEMBERS:
1. PURLINS AND RAFTERS: DL L/120 LL L/180 TL L/180
2. GIRTS: HORIZONTAL DEFLECTION OF L/90
3. OVERALL BUILDING DRIFT: H/300, WHERE "H" IS THE BUILDING EAVE HEIGHT.

5.9 ROOF PURLINS MUST BE CAPABLE OF RESISTING NET WIND PRESSURES (IN OR OUT) ASSUMING INTERIOR FLANGE UNBRACED EXCEPT WHERE FLANGE BRACING IS PROVIDED.

5.10 THE METAL BUILDING MANUFACTURER WILL BE RESPONSIBLE FOR COMPLETE DESIGN OF THE BUILDING STRUCTURAL FRAME (INCLUDING LATERAL LOADS) DOWN TO THE FOUNDATION. THE DESIGN SHALL BE PERFORMED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

5.11 BEFORE FABRICATION AND INSTALLATION OF FOUNDATIONS, METAL BUILDING SUPPLIER SHALL SUBMIT DESIGN LOADS AND COLUMN REACTIONS TO THE ARCHITECT/ENGINEER FOR REVIEW. THE CURRENT FOUNDATION DESIGN HAS BEEN BASED ON ASSUMED VALUES. THE FOOTING SIZES ARE NOT FINAL UNTIL METAL BUILDING REACTIONS HAVE BEEN PROVIDED AND REVIEWED. DO NOT FABRICATE REINFORCING STEEL OR INSTALL FOOTINGS PRIOR TO REVIEW OF METAL BUILDING SHOP DRAWINGS BY THIS OFFICE.

5.12 METAL BUILDING DESIGN CALCULATIONS' COVER SHEET AND ALL METAL BUILDING SHOP DRAWINGS AND ERECTION DRAWINGS SHALL BE SEALED AND SIGNED BY THE MANUFACTURER'S PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

5.13 ALL CONNECTIONS OF STRUCTURAL STEEL MEMBERS TO THE METAL BUILDING SHALL BE DESIGNED BY THE METAL BUILDING SUPPLIER TO RESIST THE FORCES INDICATED ON THE DRAWINGS. CALCULATIONS FOR THESE CONNECTIONS STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW.

5.14 ALL COLUMNS SHALL BE ANALYZED AND DESIGNED AS HAVING PINNED BASES.

5.15 EXCEPT AS OTHERWISE APPROVED BY ARCHITECT, STRUCTURAL CLEARANCES SHALL BE MAINTAINED AS CURRENTLY INDICATED IN THE CONTRACT DOCUMENTS.

5.16 STANDING SEAM STEEL DECK SHALL NOT BE CONSIDERED AS PROVIDING DIAPHRAGM RESISTANCE FOR LATERAL WIND LOADS.

5.17 METAL BUILDING ENGINEER SHALL VISIT THE JOB SITE AT LEAST ONCE EVERY TWO WEEKS DURING ERECTION TO OBSERVE INSTALLATION OF METAL BUILDING FRAMING AND ISSUE REPORTS TO ARCHITECT/ENGINEER.

5.18 ALL DEVIATIONS FROM THE CONTRACT DOCUMENTS ARE SUBJECT TO APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD. ALL DEVIATIONS SHALL BE EXPRESSLY LISTED AND DEFINED IN THE SHOP DRAWING SUBMITTAL. ARCHITECT AND STRUCTURAL ENGINEER ARE NOT RESPONSIBLE FOR DISCOVERY OF DEVIATIONS NOT LISTED, AND APPROVAL OF UNLISTED DEVIATIONS SHALL NOT BE IMPLIED.

5.19 THE CONTRACTOR SHALL INCLUDE A QUANTITY ALLOWANCE UNDER BASE BID FOR PROVIDING 100CY OF IN-PLACE CONCRETE SPREAD OR CONTINUOUS FOOTINGS, NOT OTHERWISE INDICATED ON CONTRACT DRAWINGS, AND AT THE DIRECTION OF THE ARCHITECT. THE FOOTING ALLOWANCE SHALL INCLUDE ALL INSTALLATION COSTS INCLUDING CONCRETE, REBAR, EXCAVATION, DETAILING, COORDINATION, AND PLACEMENT AND MAY BE USED THROUGHOUT PROJECT TO INCREASE EXISTING FOOTING SIZE OR ADD NEW FOOTINGS.

6.0 STRUCTURAL STEEL

GENERAL NOTES

7.5 COLD-FORMED STEEL FRAMING, SUSPENDED CEILINGS, LIGHT FIXTURES, DUCTS, PIPING, AND/OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE STEEL ROOF DECK.

7.6 ROOF DECK:

A. DESIGNED BY PREENGINEERED METAL BUILDING MANUFACTURER

8.0 MASONRY

8.1 MASONRY CONSTRUCTION SHALL CONFORM TO TMS 602-16 SPECIFICATION.

8.2 ALL MASONRY MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE RECOMMENDATIONS OF BRICK INSTITUTE OF AMERICA (BIA) AND NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA) AND MINIMUM REQUIREMENTS ESTABLISHED BY THE LOCAL BUILDING CODE.

8.3 MINIMUM COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNIT ($f'm$) SHALL BE 2000 PSI AT 28 DAYS.

8.4 NET COMPRESSIVE STRENGTH FOR EACH CMU UNIT SHALL MEET OR EXCEED 2000 PSI AT 28 DAYS. FOR TYPE N MORTAR, NET COMPRESSIVE STRENGTH FOR BLOCK SHALL BE GREATER THAN 2650 PSI.

8.5 GROUT COMPRESSIVE STRENGTH SHALL BE 2500 PSI AT 28 DAYS. GROUT SHALL ADDITIONALLY COMPLY WITH TABLE 6 OF TMS 602 FOR DIMENSIONS OF GROUT SPACES AND POUR HEIGHTS. COURSE GROUT SHALL BE USED WHERE POSSIBLE.

8.6 ALL MASONRY SHALL BE NORMAL WEIGHT IN ACCORDANCE WITH ASTM C90.

8.7 MORTAR: EXCEPT OTHERWISE SET FORTH HERIN ALL MORTARS AND THE MATERIALS THERIN SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR MORTAR OF MASONRY UNITS, ASTM C270.

A. THE TYPE OF MORTAR BASED ON CONSIDERATION OF THE LOCATION OF THE UNIT MASONRY CONSTRUCTION SHALL BE AS FOLLOWS:

USE OF LOCATION	TYPE OF MORTAR
BELOW GRADE FOUNDATION AND WALLS	M
RETAINING WALLS	M
FIRE RESISTIVE WALLS RATED 2 HOURS OR MORE	M OR S
EXTERIOR WALLS AND LOAD BEARING WALLS	M OR S
PARTITIONS	M, S OR N
SOLID MASONRY UNITS	ONE CLASSIFICATION LESS THAN THE ABOVE
MORTAR OR GROUT UNDER CONCENTRATED LOADS	M
FENCES OR SITE WALLS	M OR S

8.8 ALL MASONRY SHALL BE STACK BOND, UNLESS NOTED.

8.9 ALL BLOCK CELLS AND CAVITIES BELOW GRADE SHALL BE FILLED WITH CONCRETE OR GROUT.

8.10 MASONRY REINFORCING LAP SPLICE LENGTHS PER SCHEDULE, SEE MASONRY LAP SPLICE LENGTHS TYPICAL DETAIL.

8.11 THE CONTRACTOR SHALL PROVIDE DETAILED SHOP DRAWINGS OF THE CMU REINFORCEMENT.

A. SHOP DRAWINGS SHALL INCLUDE AN ELEVATION VIEW OF EACH REINFORCED (LOAD BEARING OR NON-LOAD BEARING) WALL WITH ALL VERTICAL AND HORIZONTAL REINFORCING AS WELL AS WALL OPENINGS/PENETRATIONS SHOWN. REINFORCING SHOP DRAWINGS NOT CONTAINING THESE ELEVATION DRAWINGS WILL BE RETURNED AS AN INCOMPLETE SUBMITTAL.

B. SHOP DRAWINGS SHALL UNDERGO A QUALITY REVIEW BY THE REBAR DETAILER & SUPERVISOR, AS WELL AS THE CONTRACTOR. SUBMITTALS SHALL INCLUDE ALL OPENINGS, REINFORCING, AND ELEVATIONS NOTED. SUBMITTALS REVIEWED MORE THAN A 2ND TIME MAY RESULT IN DELAYS TO THE CONTRACTOR. ANY ADDITIONAL TIME REQUIRED TO REVIEW A SUBMITTAL FOR A 3RD OR MORE TIME WILL BE BILLED TO THE CONTRACTOR AS ADDITIONAL SERVICES.

C. THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A REBAR DETAILER CAPABLE OF HAVING THE SAME TEAM OF DETAILERS THROUGHOUT THE PROJECT. A LETTER WITH A LIST OF THE DETAILERS AND THE QUALITY SUPERVISOR AND THEIR INITALS SHALL BE SUBMITTED BEFORE ANY SHOP DRAWINGS HAVE BEEN SUBMITTED. THE INTIALS OF THE DETAILS AND THE QUALITY SUPERVISOR SHALL BE NOTED ON EACH SHOP DRAWINGS.

8.12 MODIFY CMU BLOCKS AS REQUIRED TO INSTALL REINFORCING AS NOTED/SHOWN.

8.13 CONTROLJOINTS IN CMU WALLS SHALL BE DISCONTINUOUS AT MASONRY BOND BEAMS. BOND BEAM REINFORCING SHALL EXTEND CONTINUOUS WITH MASONRY LAP SPLICES AND CORNER BARS. SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

8.14 WHEN REINFORCING IS SPECIFIED, PROVIDE REINFORCING AT EACH SIDE OF CONTROL JOINTS, OPENINGS AND WALL ENDS.

8.15 EXTEND REBAR AT WALL OPENINGS A MINIMUM OF 2'-0" PAST THE OPENING AT ALL CORNERS, UNLESS NOTED OTHERWISE. AT WINDOWS, PROVIDE A MINIMUM OF 2#4 BARS AT THE SILLS OF THE WINDOWS, UNLESS NOTED OTHERWISE.

8.16 AT CMU PARTITIONS OVER 8'-0" TALL, SUPPORTED BY SLAB ON GRADE, PROVIDE THICKENED SLAB PER TYPICAL DETAILS.

8.17 WHERE ANY CMU WALL IS NOT SUPPORTED AT THE TOP, PROVIDE MINIMUM #5@16 VERTICAL REINFORCING, UNLESS NOTED OTHERWISE.

8.18 PROVIDE WALL TOP SUPPORT AT 8'-0" O.C. FOR ALL INTERIOR NON-LOAD BEARING CMU WALLS WHERE CONTINUOUS WALL SPAN BETWEEN PERPENDICULAR BRACING WALLS EXCEEDS 20'-0". SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

8.19 PROVIDE HORIZONTAL JOINT REINFORCING IN REINFORCED MASONRY WALLS AS DIRECTED BY THE ARCHITECT. AT WALL CORNERS AND INTERSECTIONS, PROVIDE PREFABRICATED T AND L SHAPES, FIELD BENDING IS NOT PREMITTED. MINIMUM OF LADDER TYPE ZINC COATED CONFORMING TO ASTM A82 HOHMANN & BARNARD 220 LADDER-MESH OR EQUIVALENT AT EVERY OTHER BLOCK COURSE ABOVE FOOTING. REINFORCEMENT SHOULD CONSIST OF TWO OR MORE LONGITUDINAL WIRES, NO. 9 GAUGE OR LARGER, WELDED WITH NO. 9 GAUGE OR LARGER CROSS WIRES. LAP SPLICE HORIZONTAL JOINT REINFORCING A MINIMUM OF 12".

8.20 PROVIDE DOVETAIL ANCHORS AT 16" O.C., UNLESS NOTED OTHERWISE, WHERE MASONRY WALLS ABUT CONCRETE SURFACES.

8.21 PROVIDE GROUT FILLED LINTEL BLOCKS AT TOP OF ALL CMU WALLS REINFORCED WITH 2#4 BARS CONTINUOUS, UNLESS NOTED OTHERWISE.

8.22 CONDUITS, REFRIGERANT PIPING (WITH ANY REQUIRED INSULATION INCLUDED), CONDENSATE DRAIN LINES, ETC. UP TO 2" IN OUTSIDE DIAMETER MAY EXTEND CONTINUOUS THRU MASONRY WALLS & BOND BEAMS. COORDINATE WITH MECHANICAL, ELECTRICAL, PLUMBING, ETC. DRAWINGS FOR SIZE AND LOCATION. DO NOT INTERRUPT CONTINUOUS REINFORCING STEEL IN PLACEMENT OF CONDUITS, PIPING, DRAIN LINES, ETC.

8.23 WHERE MASONRY WALLS SUPPORT EARTH ON BOTH SIDES, BACKFILL EACH SIDE SIMULTANEOUSLY.

8.24 WHERE TOP OF FOOTING SUPPORTING MASONRY WALLS IS MORE THAN 2'-8" BELOW FINISH FLOOR, PROVIDE #6 AT 16" O.C., UP TO THE FIRST COURSE ABOVE FINISH FLOOR ELEVATION, IN ADDITION TO THE SPECIFIED REINFORCEMENT, UNLESS NOTED OTHERWISE.

8.25 THE MASONRY WALLS ARE "NON-SELF-SUPPORTING". ADEQUATE TEMPORARY SUPPORT MUST BE PROVIDED BY THE CONTRACTOR UNTIL REQUIRED CONNECTIONS OR ELEMENTS ARE IN PLACE. BRACING SHALL BE PER THE FOLLOWING, AND CONTRACTOR SHALL PROVIDE ADDED REINFORCING AND GROUT IF REQUIRED BY THE BRACING.

A. THE "2012 STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION".
B. THE "MASONRY WALL BRACING HANDBOOK" AS PUBLISHED BY THE MASON CONTRACTORS ASSOCIATION OF AMERICA (MCAA) SHOULD BE USED IN CONJUNCTION WITH THE "STANDARD PRACTICE".

8.26 PROVIDE 2 COURSES OF GROUT FILLED OPEN BOTTOM BOND BEAM BLOCKS REINFORCED WITH 2#5 BARS CONTINUOUS AT ALL STEEL STAIR ATTACHMENT LOCATIONS, UNLESS NOTED OTHERWISE. CONTRACTOR COORDINATE EXACT LOCATIONS WITH STEEL STAIR DESIGNER.

8.27 PROVIDE 8" DEEP FORM BLOCK BOND BEAM AT 48" ON CENTER FOR FULL HEIGHT OF WALL IN ADDITION TO OTHER BOND BEAMS AND LINTELS INDICATED IN DRAWINGS. REINFORCE BOND BEAM WITH (2)#5 CONTINUOUS BARS.

9.0 WOOD CONSTRUCTION

9.1 ALL SAWN LUMBER IN CONTACT WITH SOIL, MASONRY OR CONCRETE, OR EXPOSED TO WEATHER TO HAVE A PRESERVATIVE PRESSURE TREATMENT IN ACCORDANCE WITH AMERICAN WOOD PROTECTION ASSOCIATIONS (AWPA) STANDARD U1 (CURRENT EDITION).

9.2 CUT ENDS OR ALL TREATED LUMBER SHALL BE FIELD TREATED WITH AN APPROVED PRESERVATIVE IN ACCORDANCE WITH THE TREATMENT MANUFACTURERS INSTRUCTIONS AND AWPA STANDARD M4-08.

9.3 ALL LUMBER SHALL BE KILN DRIED TO A MAXIMUM MOISTURE CONTENT OF 19 PERCENT, INCLUDING PRESERVATIVE TREATED LUMBER.

9.4 ALL SCREWS, BOLTS, AND NAILS FOR USE WITH PRESERVATIVE TREATED WOOD SHALL BE HOT-DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL. FASTENERS TO BE HOT-DIPPED GALVANIZED SHALL MEET THE REQUIREMENTS OF ASTM A 153, CLASS D FOR 3/8" DIAMETER OR SMALLER AND CLASS C FOR FASTENERS WITH DAIMETERS OVER 3/8".

9.5 FASTENERS OTHER THAN NAILS AND TIMBER RIVETS SHALL BE PERMITTED TO BE OF MECHANICALLY DEPOSITED ZINC-COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B 695, CLASS 55, MINIMUM.

9.6 METAL CONNECTORS SHOWN IN DOCUMENTS ARE SIMPSON STRONG TIE CONNECTORS. SUBSTITUTION WITH EQUAL CONNECTORS BY OTHER MANUFACTURERS IS ACCEPTABLE.

9.7 ALL HARDWARE (JOIST HANGERS, ETC.) SHALL BE GALVANIZED OR SHALL BE STAINLESS STEEL. HARDWARE TO BE HOT-DIPPED PRIOR TO FABRICATION SHALL MEET ASTM A 653, G-185 COATING. HARDWARE TO BE HOT-DIPPED AFTER FABRICATION SHALL MEET ASTM A 123.

9.8 FASTENER AND HARDWARE SELECTION: HOT-DIPPED GALVANIZED MATERIAL SHALL NOT BE USED IN CONTACT WITH STAINLESS STEEL MATERIAL.

9.9 ALL NAIL SIZES INDICATED IN DOCUMENTS ARE BASED ON COMMON WIRE NAILS. SUBSTITUTION OF DIFFERENT STYLE NAILS IS ACCEPTABLE BASED ON ACTUAL DIAMETER ONLY.

9.10 AT A MINIMUM, ALL WOOD FRAMING CONNECTIONS TO COMPLY WITH "**TABLE 2304.10.2** - FASTENING SCHEDULE" OF THE INTERNATIONAL BUILDING CODE.

9.11 ALL TEMPORARY AND PERMANENT BRACING MEMBERS AND CONNECTIONS REQUIRED FOR WOOD I-JOISTS SHALL BE DESIGNED AND DETAILED ON THE WOOD JOIST MANUFACTURER'S ERECTION PLANS. BRACING MEMBERS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR ACCORDING TO THE JOIST MANUFACTURER'S ERECTION PLANS.

9.12 TEMPORARY BRACING SHALL NOT IMPOSE ANY FORCE ON THE SUPPORTING STRUCTURE. PERMANENT BRACING FORCES SHALL BE TRANSFERRED TO THE ROOF DIAPHRAGM BY THE BRACING DESIGN PROVIDED BY THE JOIST MANUFACTURER.

9.13 ROOF SHEATHING: 3/4" PLYWOOD, APA RATED SHEATHING EXPOSURE 1, WITH PLY CLIPS AT ALL UNSUPPORTED EDGES. PANEL IDENTIFICATION INDEX 48/24.LONG DIMENSION OF PANEL PERPENDICULAR TO SUPPORTS.

9.14 ROOF SHEATHING NAILING, UNLESS NOTED: 10d NAILS AT 6 INCHES AT ALL FOUR PANEL EDGES AND 12 INCHES AT INTERMEDIATE SUPPORTS

9.15 FLOOR SHEATHING: 3/4" PLYWOOD APA STRUCTURAL I RATED SHEATHING EXPOSURE I, TONGUE AND GROOVE EDGES. PANEL IDENTIFICATION INDEX 48/24. LONG DIMENSION OF PANEL PERPENDICULAR TO SUPPORTS. GLUE AND NAIL TO SUPPORTING MEMBERS, 16d NAILS AT 6 INCHES AT ALL FOUR PANEL EDGES AND 12 INCHES AT INTERMEDIATE SUPPORTS.

9.16 WOOD I-JOISTS TO BE AS MANUFACTURED BY GEORGIA PACIFIC, OR APPROVED EQUAL. CONTRACTOR SHALL OBTAIN THE TECHNICAL DATA FROM THE MANUFACTURER AND FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION, BRACING, WEB HOLES, BLOCKING, WEB STIFFENERS, ETC. CONTAINED IN THE TECHNICAL DATA. TECHNICAL DATA SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER PRIOR TO START OF FRAMING.

9.17 FLOOR JOISTS AND BEAMS SHALL BE LATERALLY BRACED AT MAXIMUM INTERVALS OF 8'-0" BY SOLID BRIDGING OR TRANSVERSE BEAMS AND THE ENDS AT POINTS OF BEARING SHALL BE LATERALLY SUPPORTED TO PREVENT ROTATION.

9.18 BUILT UP BEAMS (DIMENSIONED LUMBER): NAIL INDIVIDUAL PLIES TOGETHER WITH TWO ROWS OF 10d NAILS AT 16" STAGGERED.

9.19 WOOD FRAMING MEMBERS: #2 SOUTHERN PINE UNLESS NOTED.

10.0 POST-INSTALLED REINFORCING, ANCHORS AND FASTENERS

10.1 POST-INSTALLED ANCHORS AND/OR REINFORCING SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER-OF-RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS AND/OR REINFORCING IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS AND/OR REINFORCING.

10.2 THE BELOW PRODUCTS ARE THE DESIGN BASIS FOR THIS PROJECT. PRODUCT DIAMETER AND EMBEDMENT SHALL BE SHOWN IN THE DETAILS.

10.3 FOR ANCHORING INTO CONCRETE:

A. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.2 AND ICC-ES AC193 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. PRE-APPROVED PRODUCTS INCLUDE:

1. SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-2713 & IAPMO-UES ER-493)
2. SIMPSON STRONG-TIE "STRONG-BOLT 2" (ICC-ES ESR-3037)
3. SIMPSON STRONG-TIE "TITEN-HD ROD HANGER" (ICC-ES ESR-2713)
4. SIMPSON STRONG-TIE "TITEN TURBO" (IAPMO-UES ER-712) - FOR UNCRACKED CONCRETE ONLY
5. HILTI KWIK HUS-EZ (KH-EZ), KH-EZ CRC, KH-EZ SS316, KH-EZ C, KH-EZ E, KH-EZ-I, AND KH-EZ P SCREW ANCHOR SAFE SET SYSTEM WITH HOLLOW DRILL BIT AND VACUUM (ICC ESR-3027)
6. HILTI KWIK BOLT-TZ2 EXPANSION ANCHOR SAFE SET SYSTEM WITH HOLLOW DRILL BIT AND VACUUM AND SI-AT-A22 TOOL WITH ADAPTIVE TORQUE FOR APPLICABLE SIZES (ICC ESR-4266)
7. HILTI KWIK BOLT 1 EXPANSION ANCHOR SAFE SET SYSTEM WITH HOLLOW DRILL BIT AND VACUUM AND SI-AT-A22 TOOL WITH ADAPTIVE TORQUE FOR APPLICABLE SIZES (ICC ESR-678)
8. HILTI HDA UNDERCUT ANCHORS (ICC ESR 1546)
9. HILTI HSL-4 EXPANSION ANCHORS (ICC ESR 4386)
10. DEWALT SCREW-BOLT+ (ICC-ES ESR-3889)
11. DEWALT POWER-STUD+ SD2 (ICC-ES ESR-2502)
12. DEWALT POWER-STUD SD1 (ICC-ES ESR-2818)
13. DEWALT HANGERMATE+ (ICC-ES ESR-3889)
14. DEWALT CCU+ UNDERCUT (ICC-ES ESR-4810)
15. DEWALT POWER-BOLT+ (ICC-ES ESR-3260)

B. MECHANICAL ANCHORS FOR USE IN THE UNDER SIDE OF NORMAL WEIGHT HOLLOW CORE AND POST TENSION SLAB WHERE EMBEDMENT DEPTH MUST NOT EXCEED ¾". PRE-APPROVED PRODUCTS INCLUDE:

1. DEWALT MINI-UNDERCUT+ (ICC-ES ESR-3912)
2. HILTI HDP-P TZ DROP-IN ANCHOR (ICC ESR-4236)

C. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH HAS BEEN BASED ON ACI 355.4 TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE DRILL BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS, SUCH AS HORIZONTAL TO UPWARD INCLINED ORIENTATION UNDER SUSTAINED TENSION LOADING, SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318-19 26.7.2 & 26.7.2(e). INSTALLATIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318-19 26.7.2 & 26.7.2(e). PRE-APPROVED PRODUCTS INCLUDE:

1. SIMPSON STRONG-TIE "SET-3G" (ICC-ES ESR-4057)
2. SIMPSON STRONG-TIE "AT-XP" (IAPMO-UES ER-263)
3. SIMPSON STRONG-TIE "SET-XP" (ICC-ES ESR-2508)
4. HILTI HIT-HY 200 V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM WITH CONTINUOUSLY DEFORMED REBAR (ICC ESR-4868)
5. HILTI HIT-RE 500 V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM WITH CONTINUOUSLY DEFORMED REBAR (ICC ESR-3814)
6. HILTI KWIK-X DUAL ACTION ANCHOR SAFESET SYSTEM WITH KHC CAPSULE ADHESIVE AND KWIK-HUS EZ (ICC ESR-5065)
7. DEWALT PURE110+ FOR WARM WEATHER/SLOW CURE (ICC-ES ESR-3298); FOR ANCHORS AND REBAR: WHEN DEWALT DUSTX+ EXTRACTION SYSTEM IS USED, TRADITIONAL HOLE CLEANING METHODS USING STEEL BRUSHES AND COMPRESSED DRY AIR MAY BE COMPLETELY OMITTED PER ICC-ES ESR-3298
8. DEWALT AC200+ FOR COLD WEATHER/RAPID CURE (ICC-ES ESR-4027); FOR ANCHORS AND REBAR: WHEN DEWALT DUSTX+ EXTRACTION SYSTEM IS USED, TRADITIONAL HOLE CLEANING METHODS USING STEEL BRUSHES AND COMPRESSED DRY AIR MAY BE COMPLETELY OMITTED PER ICC-ES ESR-4027

D. POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:

1. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
2. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
3. HILTI "UNIVERSAL KNURLED SHANK FASTENERS" X-U (ICC ESR-2269)
4. DEWALT "POWER DRIVEN FASTENERS", POWDER ACTUATED (ICC-ES-ESR 2024)
5. DEWALT "TRAK-IT C5", GAS ACTUATED (ICC-ES-ESR 3275)

10.4 FOR ANCHORING INTO MASONRY:

A. SOLID-GROUTED CONCRETE MASONRY

1. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC01 OR ICC-ES AC106. PRE-APPROVED PRODUCTS INCLUDE:

a. SIMPSON STRONG-TIE "TITEN-HD" & "STAINLESS STEEL TITEN HD" (ICC-ES ESR-1056)
b. SIMPSON STRONG-TIE "STRONG-BOLT 2" (IAPMO-UES ER-240)
c. SIMPSON STRONG-TIE "WEDGE-ALL" (ICC-ES ESR-1396)
d. SIMPSON STRONG-TIE "TITEN TURBO" (IAMPO-UES ER-716)
e. HILTI KH-EZ, KH-EZ CRC, KH-EZ SS316, KH-EZ C, AND KH-EZ P SCREW ANCHORS (ICC ESR-3056)
f. HILTI KWIK BOLT-1 EXPANSION ANCHOR (ICC ER-677)
g. HILTI KWIK BOLT-TZ2 EXPANSION ANCHOR (ICC ESR-4561)
h. DEWALT "SCREW-BOLT+" (ICC-ES ESR 4042)
i. DEWALT "POWER-STUD+ SD1" (ICC-ES ESR 2966)

2. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC58. PRE-APPROVED PRODUCTS INCLUDE:

a. SIMPSON STRONG-TIE "AT-XP" (IAPMO-UES ER-281)
b. SIMPSON STRONG-TIE "SET-XP" (IAPMO-UES ER-265)
c. HILTI HIT-HY 270 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4143); STEEL ANCHOR ELEMENT SHALL BE HILTI-HAS CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR
d. HILTI HIT-HY 200 V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4878)
e. DEWALT AC100+ GOLD (ICC-ES ESR-3200)

3. POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:

a. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
b. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
c. HILTI "UNIVERSAL KNURLED SHANK FASTENERS" X-U (ICC ESR-2269)
d. DEWALT "TRAK-IT C5", GAS ACTUATED (ICC-ES-ESR 3275)

B. HOLLOW CONCRETE MASONRY

1. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC106. PRE-APPROVED PRODUCTS INCLUDE:

a. SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-1056)
b. SIMPSON STRONG-TIE "TITEN TURBO" (IAPMO-UES ER-716)

2. ADHESIVE FOR REBAR AND ANCHORS WITH SCREEN TUBES SHALL HAVE BEEN TESTED FOR USE IN ACCORDANCE WITH ICC-ES AC58. THE APPROPRIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE MANUFACTURER. PRE-APPROVED PRODUCTS INCLUDE:

a. SIMPSON STRONG-TIE "SET-XP" (IAPMO-UES ER-265)
b. HILTI HIT-HY 270 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4143); STEEL ANCHOR ELEMENT SHALL BE HILTI-HAS CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR. THE APPROPRIATE SIZE SCREEN TUBE SHALL BE USED PER ADHESIVE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
c. DEWALT AC100+ GOLD (ICC-ES ESR-3200)

3. POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:

a. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
b. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
c. HILTI "DRYWALL TRACK FASTENERS" X-DW (ICC ESR-1663)

C. UNREINFORCED BRICK MASONRY (URM): ADHESIVE FOR REBAR AND ANCHORS WITH SCREEN TUBES SHALL HAVE BEEN TESTED FOR USE IN ACCORDANCE WITH ICC-ES AC60. THE APPROPRIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE MANUFACTURER. PRE-APPROVED PRODUCTS INCLUDE:

1. SIMPSON STRONG-TIE "ET-HP" (ICC-ES ESR-3638)
2. HILTI HIT-HY 270 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4143); STEEL ANCHOR ELEMENT SHALL BE HILTI-HAS CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR. THE APPROPRIATE SIZE SCREEN TUBE SHALL BE USED PER ADHESIVE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
3. DEWALT "AC100+ GOLD" (ICC-ES ESR-4105)

10.5 FOR FASTENING INTO STEEL: POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:

A. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
B. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
C. HILTI FASTENERS IN LIEU OF #12 TEK SCREWS:

1. HILTI S-MD 12-24X1-5/8 HWH5 SCREWS FOR STUDS, JOISTS AND BEAMS 16 GA ≤ TF ≤ 1/4"
2. HILTI X-HSN 24 PINS FOR JOISTS AND BEAM 1/8" ≤ TF ≤ 3/8"
3. HILTI X-ENP 19 L15 PINS FOR BEAMS TF ≥ 1/4".

D. DEWALT "POWER DRIVEN FASTENERS", POWDER ACTUATED (ICC-ES-ESR 2024)
E. DEWALT "TRAK-IT C5", GAS ACTUATED (ICC-ES-ESR 3275)

10.6 REFER TO THE PROJECT BUILDING CODE AND/OR EVALUATION REPORT FOR SPECIAL INSPECTIONS AND PROOF LOAD REQUIREMENTS.

10.7 SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE LISTED MAY BE SUBMITTED BY THE CONTRACTOR TO THE EOR FOR REVIEW NO LESS THAN TWO WEEKS PRIOR TO BID. SUBSTITUTIONS WILL ONLY BE CONSIDERED FOR PRODUCTS HAVING A RESEARCH REPORT RECOGNIZING THE PRODUCT FOR THE APPROPRIATE APPLICATION UNDER THE PROJECT BUILDING CODE. SUBSTITUTION REQUESTS SHALL INCLUDE CALCULATIONS PREPARED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATE THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE EQUIVALENT. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE, AND INSTALLATION TEMPERATURE.

10.8 INSTALL ANCHORS PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII), OR AS INCLUDED IN THE ANCHOR PACKAGING.

10.9 THERE IS TO BE NO GAP BETWEEN CONNECTED PARTS, UNLESS SHIMS ARE PROVIDED. ANCHORS ARE TO SECURE CONNECTED PARTS TOGETHER SNUGLY AND SECURELY.

10.10 OVERHEAD ADHESIVE ANCHORS MUST BE INSTALLED USING THE MANUFACTURER'S INSTRUCTIONS AND INSTALLER MUST BE ACI CERTIFIED.

10.11 THE CONTRACTOR SHALL ARRANGE FOR AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.

10.12 THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S SPECIAL INSPECTION AGENCY FOR CONTINUOUS SPECIAL INSPECTION OF ADHESIVE ANCHORS AND PERIODIC INSPECTION OF MECHANICAL ANCHORS, SEE SPECIAL INSPECTION SCHEDULE FOR ADDITIONAL INFORMATION.

10.13 ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.

10.14 EXISTING REINFORCING BARS AND/OR CONDUIT IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS AND/OR REINFORCING TO AVOID CONFLICTS WITH EXISTING REBAR AND/OR CONDUIT. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TO LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE CONCRETE ANCHORS BY GPR, X-RAY, HILTI PS 1000 X-SCAN, CHIPPING, OR OTHER MEANS.

11.0 PREFABRICATED CANOPY

11.1 PREFABRICATED CANOPIES SHALL BE CONSIDERED A DEFERRED SUBMITTAL TO THE BUILDING INSPECTION AGENCY.

11.2 PREFABRICATED CANOPIES SHALL BE FULLY ENGINEERED BY THE CANOPY MANUFACTURER AND CONTRACTOR UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

11.3 CALCULATIONS SHALL ACCOMPANY THE SHOP DRAWINGS AND SHALL INCLUDE DESIGN OF ALL CANOPY SYSTEM COMPONENTS INCLUDING, BUT NOT LIMITED TO, FOOTINGS, MEMBERS, CONNECTIONS AND ATTACHMENT TO STRUCTURE.

11.4 PREFABRICATED CANOPY SHOP DRAWINGS SHALL BE SUBMITTED TO INCLUDE A FULL DESCRIPTION OF ALL CANOPY MEMBERS, INCLUDING COLUMNS, BEAMS, FOOTINGS, FACIA, ETC. SHOP DRAWINGS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

11.5 IF PREFABRICATED CANOPIES SHALL BE ATTACHED TO BUILDING, MINIMUM 16" DEEP BOND BEAM IS TO BE PROVIDED WITHIN THE LOAD-BEARING MASONRY WALL FOR WALKWAY AND CANOPY ANCHORAGE AS REQUIRED. MINIMUM 16" DEEP BOND BEAM IS TO BE CONSTRUCTED ON (2) 8" DEEP FORM BLOCKS WITH 2#5 CONTINUOUS IN EACH COURSE. CONNECTIONS TO BUILDING BY CANOPY MANUFACTURER, CONTRACTOR COORDINATE. DO NOT ANCHOR WALKWAY AND CANOPY TO VENEER. ANCHOR WALKWAY AND CANOPY INTO LOAD-BEARING MASONRY WALL WITH THREADED RODS IN PIPE SLEEVES. FOR ADDITIONAL INFORMATION, SEE ARCHITECTURAL DRAWINGS.

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Job Number **25-085**

GMC

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ISSUE	DATE
CONSTRUCTION DOCUMENTS	01/09/26

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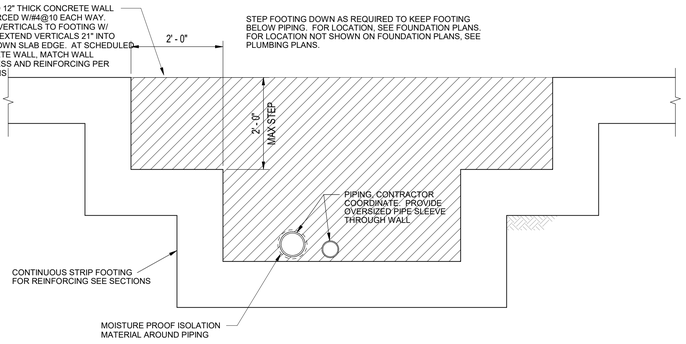
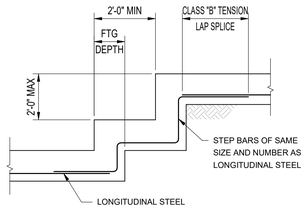
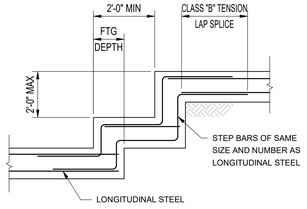
Job Number **25-085**



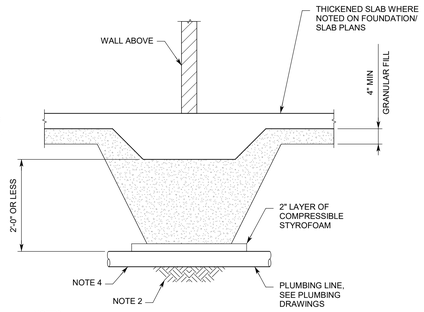
FOOTING/FOUNDATION WALL AT PIPING (1 S1.2)
TYPICAL



FOOTING STEP DETAIL
TYPICAL

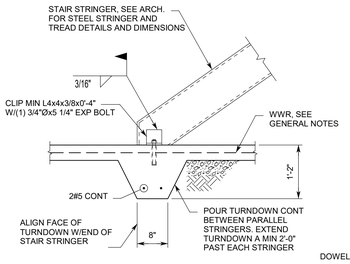


FOOTING STEP DETAIL
TYPICAL



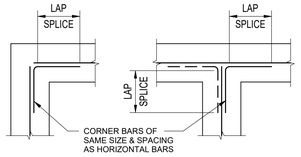
NOTES:
1. DO NOT RUN PLUMBING LINE BELOW AND PARALLEL TO FOOTING. OFFSET PARALLEL PLUMBING LINE MINIMUM 1'-0" BEYOND EDGE OF FOOTING.
2. SOIL UNDER UTILITY TRENCHES SHALL BE COMPACTED AS REQUIRED TO PROVIDE ALLOWABLE BEARING PRESSURE NOTED IN GENERAL NOTES.
3. IF A PLUMBING LINE IS REQUIRED TO EXTEND VERTICALLY THROUGH THE FOOTING, CONTRACTOR TO PROVIDE A PVC SLEEVE (1" LARGER IN DIAMETER THAN PLUMBING LINE) TO ALLOW FOR FOOTING MOVEMENT.
4. IF PIPE WITHIN 1'-0" OF CONCRETE, SLEEVE PIPE WITH SCH40 CAST IRON PIPE 1" LARGER IN DIAMETER THAN PLUMBING LINE.

PLUMBING LINE BELOW INTERIOR FOOTING (IF LESS THAN 2'-0")
TYPICAL

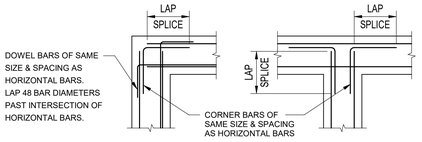


NOTES:
1. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF STAIR STRINGER LOCATIONS WITH ARCHITECTURAL DRAWINGS AND PROVIDE TURNDOWNS WHERE REQUIRED WHETHER SHOWN ON STRUCTURAL DRAWINGS OR NOT.
2. CLIP ANGLE TO BE HIDDEN BENEATH FIRST TREAD. WHERE OPEN RISERS ARE USED, COORDINATE THE LOCATION WITH THE ARCHITECT.

INTERIOR TURNDOWN AT STAIR
3/4"=1'-0" TYPICAL



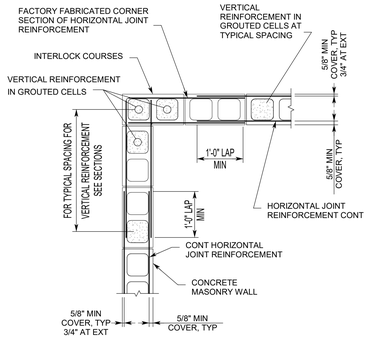
SINGLE LAYER REINFORCEMENT



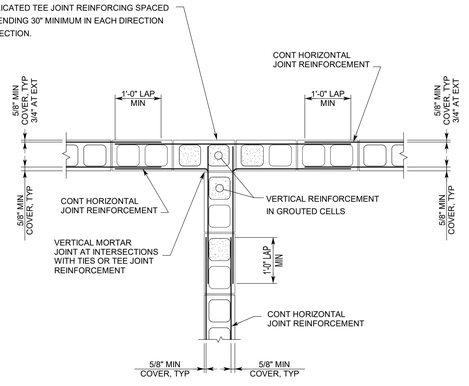
DOUBLE LAYER REINFORCEMENT
NOTE: ALL LAP SPLICES CLASS "B" TENSION

WALL CORNER REINFORCING DETAIL
TYPICAL

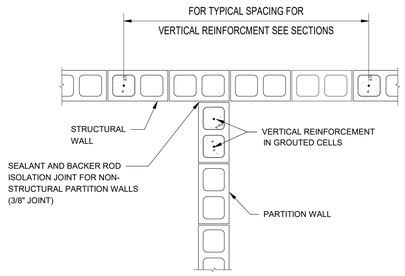
ANCHOR WALLS BY:
1. INTERSECTING 50% OF UNITS OVERLAPPING WITH ALTERNATE UNITS BEARING 3" MINIMUM ON THE UNIT BELOW.
2. GALV PL 1/4x1 1/2x2'-4" TIE @ 4'-0" OC WITH ENDS BENT 2", ALTERNATING ENDS UP AND DOWN.
3. FACTORY FABRICATED TEE JOINT REINFORCING SPACED 8" OC AND EXTENDING 30" MINIMUM IN EACH DIRECTION AT THE INTERSECTION.



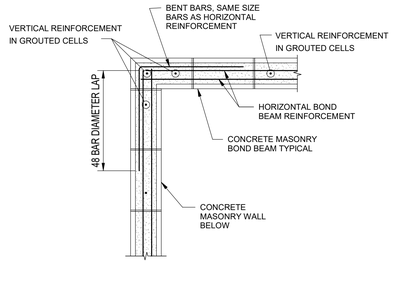
PLAN SHOWING JOINT REINFORCEMENT AT WALL CORNER
TYPICAL



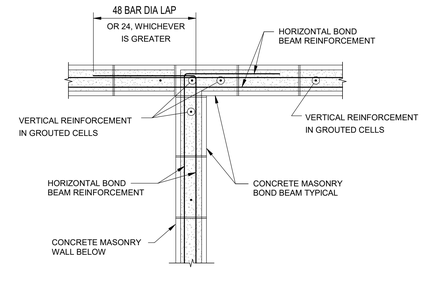
PLAN SHOWING JOINT REINFORCING AT STRUCTURAL WALL INTERSECTION
TYPICAL



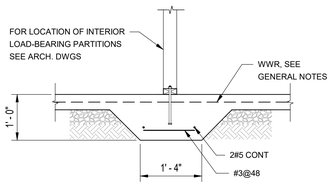
PARTITION WALLS ABUTTING STRUCTURAL WALLS
TYPICAL



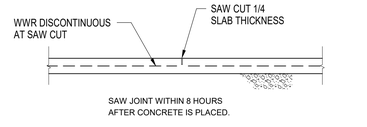
PLAN SHOWING BOND BEAM REINFORCEMENT AT WALL CORNER
TYPICAL



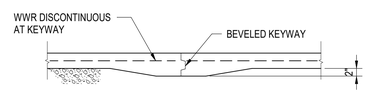
PLAN SHOWING BOND BEAM AT STRUCTURAL WALL INTERSECTION
TYPICAL



THICKENED SLAB ON GRADE DETAIL
TYPICAL

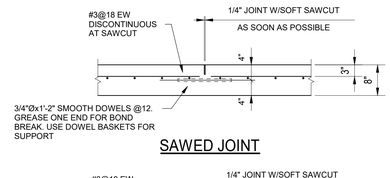


SAWED JOINT

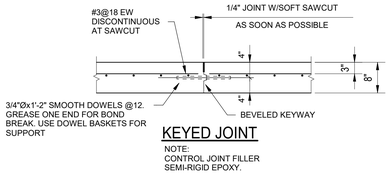


KEYED JOINT

SLAB CONTROL JOINT DETAILS
TYPICAL
JOINT TYPE IS OPTIONAL

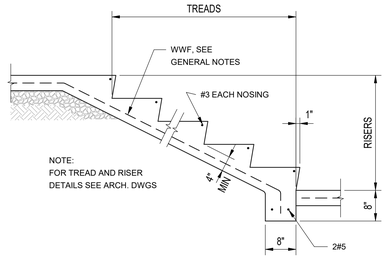


SAWED JOINT



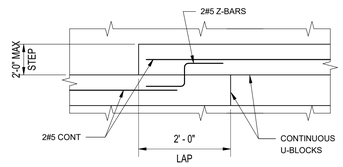
KEYED JOINT
NOTE:
CONTROL JOINT FILLER SEMI-RIGID EPOXY.

8" SLAB CONTROL JOINT DETAILS
TYPICAL
JOINT TYPE IS OPTIONAL

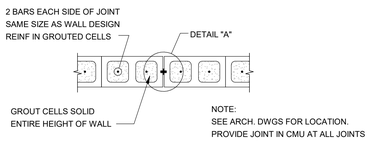


NOTE:
FOR TREAD AND RISER DETAILS SEE ARCH. DWGS

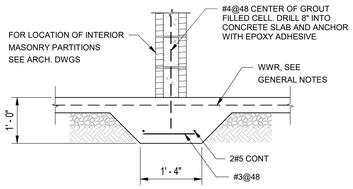
STAIR ON GRADE DETAIL
TYPICAL



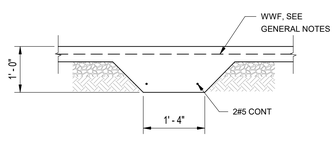
MASONRY BOND BEAM STEP DETAIL
TYPICAL



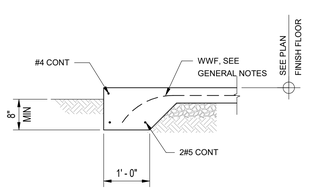
PLAN
MASONRY CONTROL JOINT
3/4"=1'-0"



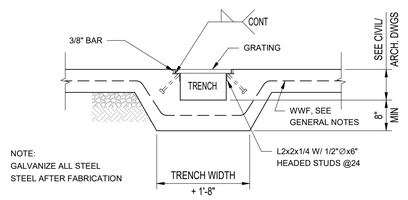
THICKENED SLAB ON GRADE DETAIL
TYPICAL



THICKENED SLAB ON GRADE DETAIL
TYPICAL

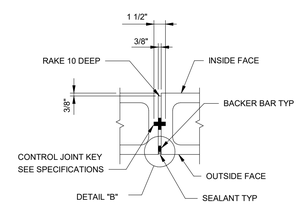


SLAB EDGE DETAIL
TYPICAL

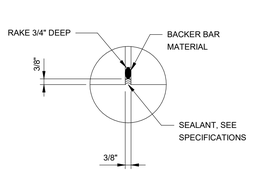


NOTE:
GALVANIZE ALL STEEL STEEL AFTER FABRICATION

TRENCH DETAIL
TYPICAL
VERIFY SIZE, TYPE, AND LOCATION WITH CIVIL AND ARCHITECTURAL DRAWINGS



DETAIL "A"
MASONRY CONTROL JOINT
1 1/2"=1'-0"



DETAIL "B"
MASONRY CONTROL JOINT
3"=1'-0"

1/9/2026 9:27:17 AM TEMPLATE VERSION: 2025.1

GMC

Goodwyn Mills Cawood, LLC
417 Jefferson Street
Huntsville, AL 35801
256.539.3431 tel
256.539.3434 fax
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ISSUE	DATE
CONSTRUCTION DOCUMENTS	01/09/26

DRAWN BY: TRM
CHECKED BY: HCW

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA REGISTERED No. 22506 PROFESSIONAL ENGINEER
HOWARD C. WAIG, P.E.
01/09/2026

TYPICAL DETAILS

S1.02

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5200
fax 205-824-5280
Job Number **25-085**

MASONRY LINTEL SCHEDULE

MAXIMUM OPENING WIDTH	STEEL FOR EACH 4" OF WALL THICKNESS
2'-0"	L3 1/2x3 1/2x3/8
4'-0"	L3 1/2x3 1/2x3/8
6'-0"	L3 1/2x3 1/2x3/8
8'-0"	L5x3 1/2x3/8 (LONG LEG VERTICAL)
10'-0"	L6x3 1/2x3/8 (LONG LEG VERTICAL)
12'-0"	L6x4x7/16 (LONG LEG VERTICAL)

1. PROVIDE 8" MINIMUM BEARING FOR ALL LINTELS.
2. ALL EXPOSED LINTEL ANGLES TO BE HOT DIP GALVANIZED.

LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE

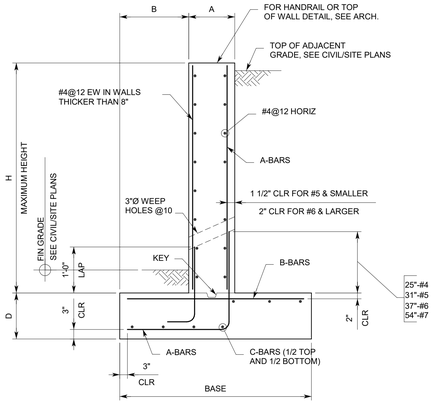
MAXIMUM OPENING WIDTH	LINTEL DIMENSIONS AND REINFORCING		
	DEPTH	8" WALL	12" WALL
4'-0"	32	2#4 BOT & 2#4 TOP	2#4 BOT & 2#4 TOP
6'-0"	32	2#4 BOT & 2#4 TOP	2#5 BOT & 2#5 TOP
8'-0"	32	2#5 BOT & 2#5 TOP	2#5 BOT & 2#5 TOP

1. PROVIDE 24" MINIMUM BEARING FOR ALL LINTELS. FILL CELLS SOLID AT EACH SIDE OF OPENING AND REINFORCE WITH 1#5 BAR CONTINUOUS.
2. SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED.
3. PROVIDE 8" DEEP BOND BEAM REINFORCED WITH 1#4 CONT AT BOTTOM OF WALL WINDOW OPENINGS. EXTEND 24" PAST OPENING ON EACH SIDE OF WINDOW OPENING.

SITE CANTILEVER RETAINING WALLS

CONCRETE DIMENSIONS					REINFORCEMENT		
H	A	B	BASE	D	A-BARS	B-BARS	C-BARS
3'-0"	8"	6"	2'-7"	1'-0"	#4@12	#4@18	4#5
4'-0"	8"	6"	3'-3"	1'-0"	#4@12	#4@18	4#5
5'-0"	8"	7"	4'-3"	1'-0"	#4@12	#4@18	4#5

NOTE:
DIMENSION "A" GIVEN (WALL THICKNESS) IS MINIMUM. FOR REQD THICKNESS, SEE PLAN.



SITE RETAINING WALL SECTION

FOR BACKFILL MATERIAL, SEE GENERAL NOTES.

TENSION LAP SPLICE LENGTHS

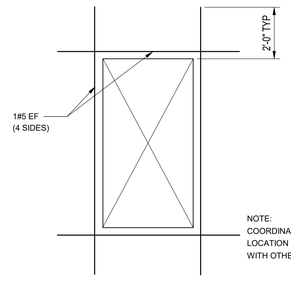
BAR SIZE	f_C = 3000 PSI				f_C = 4000 PSI			
	TOP BARS		OTHER BARS		TOP BARS		OTHER BARS	
	A	B	A	B	A	B	A	B
#3	22"	28"	17"	22"	19"	24"	15"	19"
#4	29"	37"	22"	29"	25"	32"	19"	25"
#5	36"	47"	28"	36"	31"	40"	24"	31"
#6	43"	56"	33"	43"	37"	48"	29"	37"
#7	63"	81"	48"	63"	54"	70"	42"	54"
#8	72"	93"	55"	72"	62"	80"	48"	62"
#9	81"	105"	62"	81"	70"	91"	54"	70"
#10	91"	118"	70"	91"	79"	102"	61"	79"
#11	101"	131"	78"	101"	87"	113"	67"	87"

TOP BARS ARE HORIZONTAL REINFORCEMENT WITH MORE THAN 12" OF CONCRETE CAST BELOW THE REINFORCEMENT.

PIPING WEIGHTS

PIPE DIAMETER	PIPE WT PER/FOOT (PLF)	FLUID WT PER/FOOT (PLF)	INSULATION & HANGERS (PLF)	TOTAL WT PER/FOOT (PLF)
4"	10.80	6.10	2.00	18.90
6"	19.00	13.80	3.00	35.80
8"	28.60	23.90	4.00	56.50
10"	40.50	37.50	4.00	82.00
12"	49.60	54.00	5.00	108.60
14"	54.60	65.70	5.00	125.30
16"	62.60	87.10	5.00	154.70

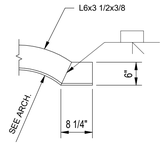
NOTES:
1. FROM ANVIL INTERNATIONAL PIPE FITTERS HANDBOOK.
2. ALL PIPES ASSUMED TO BE SCHEDULE 40.
3. FLUID WEIGHT INCLUDES ALLOWANCE FOR GLYCOL CONCENTRATION.
4. PIPING SUPPORT AND THRUST BRACING REQUIREMENTS SHALL BE COORDINATED BY THE GENERAL CONTRACTOR WITH THE STEEL/JOIST FABRICATOR. SEE MECHANICAL/PLUMBING DRAWINGS FOR PIPING SUPPORT AND THRUST BRACING REQUIREMENTS.
5. FOR PIPE SIZES NOT LISTED, CONTACT STRUCTURAL ENGINEER.



NOTE:
COORDINATE SIZE & LOCATION OF OPENINGS WITH OTHER DISCIPLINES.

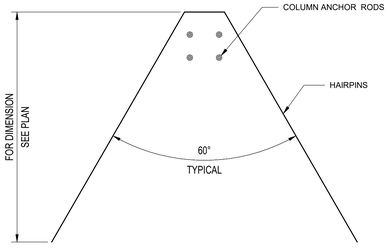
WALL OPENING REINFORCMENT DETAIL

TYPICAL



CURVED LINTEL DETAIL

TYPICAL



NOTE: HAIRPIN TO BE ONE CONTINUOUS PIECE

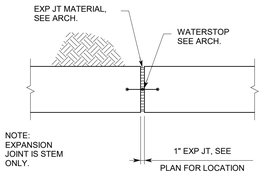
COLUMN HAIRPIN DETAIL

TYPICAL

ANCHOR ROD EMBEDMENT LENGTHS

BOLT DIA	MIN EMBEDMENT
3/4"	9"
1"	12"
1 1/4"	15"
1 1/2"	18"

NOTE:
ANCHOR ROD SIZE AND MATERIAL TO BE PROVIDED BY METAL BUILDING MANUFACTURER. THE ABOVE TABLE IS MINIMUM EMBEDMENT TO FULLY DEVELOP ASTM F1554 GRADE 36 HEADED ANCHOR RODS. FINAL ANCHOR ROD EMBEDMENT DEPTH SHALL BE DETERMINED BY STRUCTURAL ENGINEER AFTER SUBMITTAL OF COLUMN BASE AND ANCHOR ROD INFORMATION FROM METAL BUILDING MANUFACTURER PRIOR TO MATERIAL ORDER AND FABRICATION.



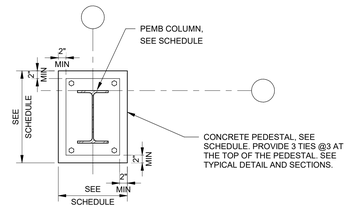
NOTE:
PROVIDE WALL EXPANSION JOINTS AT 25'-0" MAXIMUM.

SITE WALL EXPANSION JOINT DETAIL

METAL BUILDING COLUMN REACTIONS (KIPS)

COLUMN DESIGNATION	DEAD		COLLATERAL		ROOF LIVE		WIND 1		WIND 2	
	H	V	H	V	H	V	H	V	H	V
A1,A4,D1, D4	±0.1	1.4	±2.1	6.3	±2.1	6.3	±3.5	±2.6	±0.6	-6.0
A2,A3,D2,D3	±0.6	2.4	±5.3	12.5	±5.3	12.5	±10.9	±8.9	±16.8	-39.6
B1,B4,C1,C4	0.0	1.3	0.0	4.4	0.0	4.4	±2.4	±3.7	±3.5	-13.8

NOTES:
1. BEFORE INSTALLATION OF THE FOUNDATIONS, METAL BUILDING SUPPLIER SHALL SUBMIT DESIGN LOADS AND COLUMN REACTIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW. THE CURRENT FOUNDATION DESIGN HAS BEEN BASED ON PRELIMINARY BUILDING REACTIONS DETERMINED BY STRUCTURAL DESIGN GROUP. THIS MAY REQUIRE ADJUSTMENTS TO THE FOUNDATION SIZES AFTER REVIEW OF THE FINAL METAL BUILDING COLUMN REACTIONS.
2. POSITIVE AND NEGATIVE AXIAL (V) FORCES INDICATE FORCES ACTING TOWARDS AND AWAY FROM THE STRUCTURE, RESPECTIVELY, POSITIVE AND NEGATIVESHEAR (H) INDICATE FORCES ACTING TOWARDS AND AWAY FROM THE CENTER OF THE BUILDING.
3. WIND 1 INDICATES MWFRS WIND SHEAR AND UPLIFT. WIND 2 INDICATES C&C UPLIFT FROM WIND ONLY.
4. "DEAD" INDICATES THE ASSUMED SELF-WEIGHT OF THE BUILDING STRUCTURE, "COLLATERAL" INDICATES AN ASSUMED SUPERIMPOSED WEIGHT OF 20 PSF TO THE STRUCTURE. SEE GENERAL NOTES AND WIND TABLES FOR OTHER VALUES.



COLUMN BASE PLATE DETAIL

TYPICAL

COMPONENTS AND CLADDING WIND LOADS FOR WALLS (PSF)

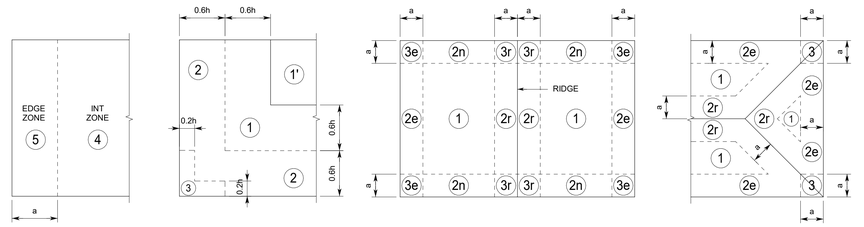
118 MPH VELOCITY (3-SEC. GUST)	EFFECTIVE WIND AREA (FT²)	ZONES 4 & 5	ZONES 4 (Int.)	ZONES 5 (Edge)
	10	31.2	-33.8	-41.6
	20	29.8	-32.4	-38.9
	50	28.0	-30.6	-35.2
	100	26.6	-29.2	-32.5
	200	25.2	-27.8	-29.7
	500	23.4	-26.0	-26.0

NOTES:
1. WIDTH OF EDGE STRIP 'a' = 7'-10".
2. VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE 7-16 STANDARD TABLE 30.3-1. VALUES SHOWN ARE ULTIMATE.
3. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
4. EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH.
5. WIND PRESSURES IN THESE TABLES SHALL BE MULTIPLIED BY 0.6 TO OBTAIN NOMINAL WIND PRESSURES.

COMPONENTS AND CLADDING WIND LOADS FOR ROOF (PSF)

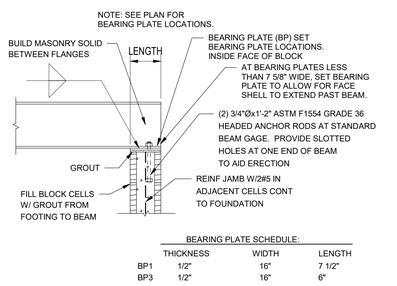
		ROOF					OVERHANG			
118 MPH VELOCITY (3-SEC. GUST)	EFFECTIVE WIND AREA (FT²)	Positive Max. Net Pressure 'p' (PSF)	Zone 1' (Int.)	Zone 1 (Int.)	Zone 2 (Edge)	Zone 3 (Corner)	Zone 1' & 1 (Int.) - Max. Net Pressure 'p' (PSF)	Zone 2 (Edge) - Max. Net Pressure 'p' (PSF)	Zone 3 (Corner) - Max. Net Pressure 'p' (PSF)	
	10	16.0	-31.2	-54.3	-71.7	-97.7	-49.1	-66.5	-92.5	
	20	16.0	-31.2	-50.8	-67.1	-88.5	-48.3	-60.3	-81.7	
	50	16.0	-31.2	-46.0	-61.0	-76.3	-47.1	-52.2	-67.5	
	100	16.0	-31.2	-42.4	-56.4	-67.1	-46.2	-46.1	-56.8	
	200	16.0	-26.9	-38.8	-51.8	-57.9	-38.8	-39.9	-46.0	
	500	16.0	-21.1	-34.1	-45.7	-45.7	-28.9	-31.8	-31.8	

NOTES:
1. WIDTH OF EDGE STRIP 'a' = 7'-10".
2. VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE 7-16 STANDARD TABLE 30.3-1. VALUES SHOWN ARE ULTIMATE.
3. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
4. EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH.
5. CONSIDER 5 PSF MINIMUM DEAD LOAD FOR UPLIFT CALCULATIONS FOR ROOF TRUSSES AND 2 PSF MINIMUM DEAD LOAD FOR UPLIFT CALCULATIONS FOR ROOF DECK.
6. WIND PRESSURES IN THESE TABLES SHALL BE MULTIPLIED BY 0.6 TO OBTAIN NOMINAL WIND PRESSURES.



WALL AND ROOF WIND PRESSURE ZONE DIAGRAMS

TYPICAL

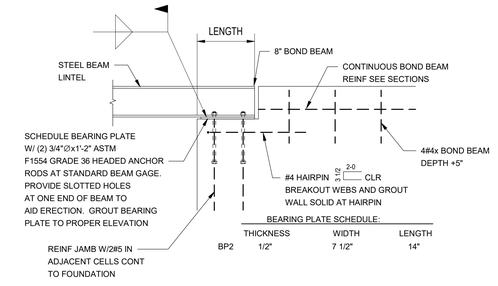


BEARING PLATE SCHEDULE:

	THICKNESS	WIDTH	LENGTH
BP1	1/2"	16"	7 1/2"
BP3	1/2"	16"	6"

BEAM BEARING DETAIL

TYPICAL



BEARING PLATE SCHEDULE:

	THICKNESS	WIDTH	LENGTH
BP2	1/2"	7 1/2"	14"

BEAM BEARING DETAIL IN LINE WITH CMU WALL

TYPICAL

FOOTING SCHEDULE

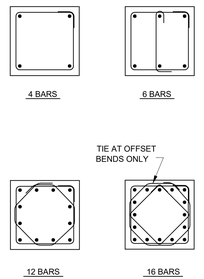
FOOTING DESIGNATION		F3.0	F5.0	F6.0	F6.0A	F9.0
FOOTING	SIZE (LxW)	3'-0"x3'-0"	5'-0"x5'-0"	6'-0"x6'-0"	6'-0"x6'-0"	9'-0"x9'-0"
	DEPTH (D)	1'-0"	1'-0"	1'-0"	1'-6"	1'-6"
	REINF EW (BOT)	4#4	6#5	6#5	6#5	9#6
	NOTES	1	1,2	1,2	1,2	1,2

NOTES:
1. PROVIDE SCHEDULED REINFORCEMENT ON TOP AND BOTTOM OF FOOTING.
2. EXTEND CONTINUOUS FOOTING INTO SPREAD FOOTING.

PEDESTAL SCHEDULE

PEDESTAL DESIGNATION		P1	P2	
PEDESTAL	SIZE	24x30	24x36	
	VERTICALS	12#8	14#8	
	TIES	#3@16	#3@16	
	NOTES	1	1	

NOTES:
1. PEDESTAL IS PRELIMINARY. PEDESTAL SIZE MAY REQUIRE ADJUSTING AFTER ENGINEER REVIEW OF METAL BUILDING COLUMN REACTIONS.
2. DOWEL VERTICALS INTO FOOTING BELOW. PROVIDE STANDARD 10" HOOK.



NOTE: ALTERNATE POSITION OF TIE HOOKS IN PLACING SUCCESSIVE SETS OF TIES

COLUMN TIE DETAILS

TYPICAL

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER CRAIG WILLIAMS
Craig Williams, P.E.
01/09/2026

TYPICAL DETAILS

S1.03

1/9/2026 9:27:18 AM TEMPLATE VERSION: 2025.1

SDG
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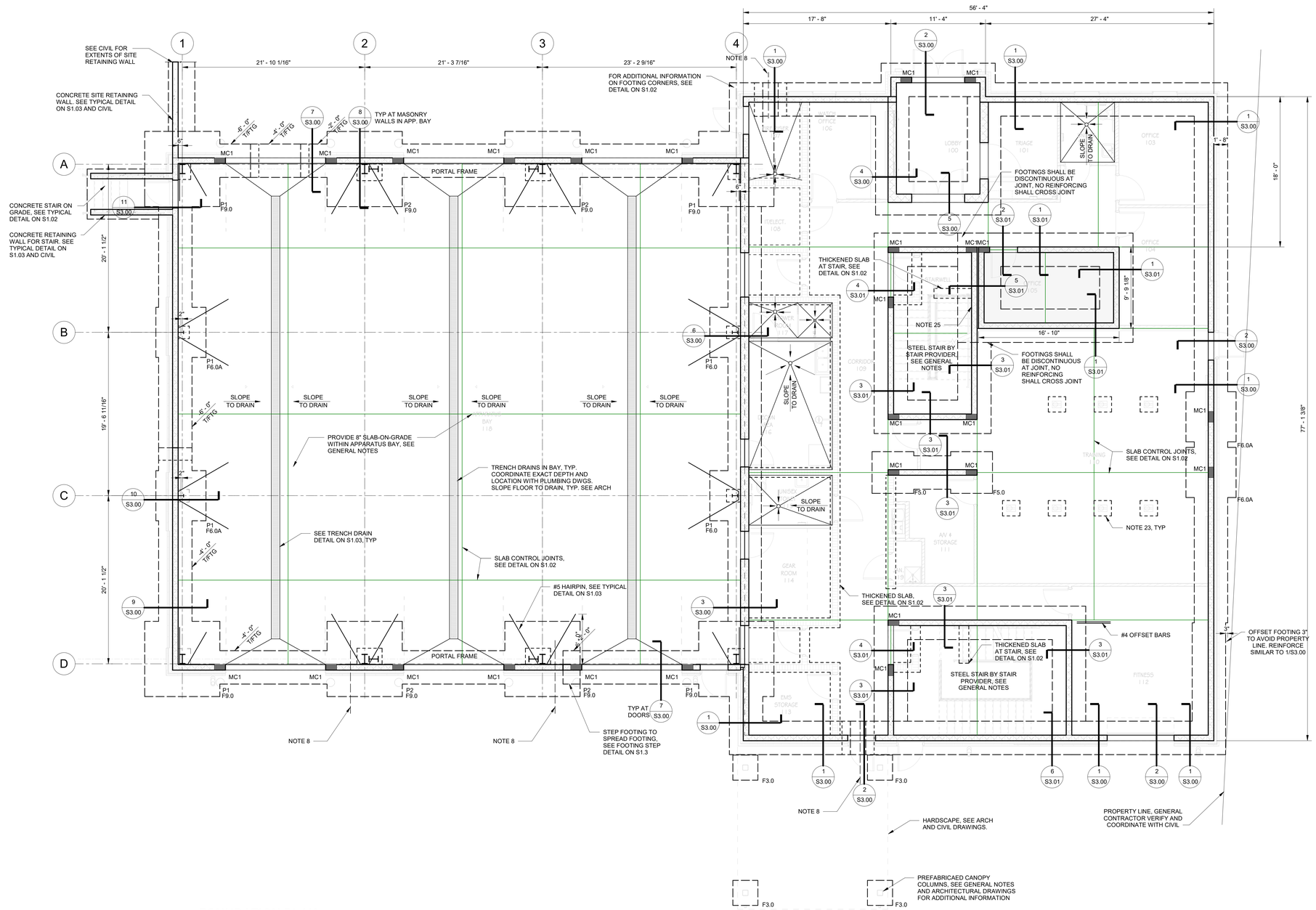
Job Number **25-085**



FOUNDATION PLAN

3/16" = 1'-0"

1. FINISH FLOOR (TOP OF SLAB) ELEVATION 0'-0", UNLESS NOTED.
2. TOP OF INTERIOR AND EXTERIOR FOOTING -2'-0" BELOW FINISH FLOOR, UNLESS NOTED.
3. FOR SLAB ON GRADE CONSTRUCTION, SEE GENERAL NOTES AND TYPICAL DETAILS. PROVIDE 4" SLAB-ON-GRADE UNLESS NOTED. PROVIDE 8" SLAB-ON-GRADE IN APPARATUS BAY.
4. FOR SLAB RECESS, SLOPES TO DRAINS AND RAMP LOCATIONS, SEE ARCHITECTURAL DRAWINGS AND DETAIL ON S1.02.
5. SLAB ON GRADE CONTROL JOINTS IN APPARATUS BAY TO BE FILLED WITH SEMI-RIGID EPOXY, SEE TYPICAL DETAIL ON S1.02.
6. SLAB ON GRADE IN APPARATUS BAY TO BE TROWEL FINISHED, CURED, AND SEALED. SEE CONCRETE SPECIFICATIONS.
7. GENERAL CONTRACTOR SHALL COORDINATE TILE JOINT LOCATIONS WITH CONTROL JOINTS.
8. FOOTING STEP ELEVATIONS AND LOCATIONS ARE APPROXIMATE. GENERAL CONTRACTOR SHALL COORDINATE ALL FOOTING STEPS WITH THE LATEST CIVIL, PLUMBING AND UTILITY DRAWINGS. FOR FOOTING STEP AT UTILITIES PIPING, SEE DETAIL ON S1.02.
9. FOOTING WIDTHS INDICATED ON PLAN MAY OR MAY NOT BE TO SCALE. COORDINATE WITH SECTION CUTS FOR FOOTING WIDTHS AND ADDITIONAL INFORMATION.
10. FOR PAVEMENT AND HARDSCAPE INFORMATION, SEE ARCHITECTURAL AND CIVIL DRAWINGS.
11. "MC" INDICATES 8"x16" MASONRY COLUMN, PROVIDE #5 VERTICALS (2 PER CELL) AND #3 TIES AT 8" ON CENTER FOR FULL HEIGHT OF WALL, UNLESS NOTED. DOWEL VERTICAL INTO FOOTING.
12. "F.X.X" INDICATES SPREAD FOOTING. SEE SCHEDULE ON S1.03 FOR REINFORMCENT AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION.
13. METAL BUILDING SPREAD FOUNDATIONS ARE PLELIMINARY SHALL BE COORDINATED WITH METAL BUILDING PROVIDER REACTIONS IN SHOP DRAINGS. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.
14. FOR PRE-FABRICATED METAL BUILDING, SEE GENERAL NOTES ON S1.00.
15. DO NOT PROVIDE CMU CONTROL JOINTS IN WALLS SUPPORTING CONCRETE ROOF. PROVIDE CONTROL JOINTS IN ALL OTHER WALLS. SEE GENERAL NOTS AND ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
16. FOR LOAD BEARING AND NON-LOAD BEARING WALL PLAN DIMENSIONS, AS WELL AS OTHER PLAN DIMENSIONS, SEE ARCHTIECTURAL DRAWINGS.
17. COLUMN FOOTING ARE CENTERED UNLESS NOTED ON PLAN.
18. COORDINATE ALL BUILDING OFFSETS AND SLAB EDGES WITH ACHITECTURAL DRAWINGS.
19. PROVIDE 8" BOND BEAM @48" O.C FOR FULL HEIGHT OF WALL. REINFORCE W/ 2#4 CONT, UNLESS NOTED.
20. GENERAL CONTRACTOR SHALL OBTAIN AND LAYOUT COLUMN ANCHOR RODS FROM ANCHOR ROD SETTING PLAN PROVIDED BY THE METAL BUILDING PROVIDER.
21. METAL BUILDING MANUFACTURER TO USE FRAME LINES AS INDICATED. WHERE THIS IS NOT FEASABLE, THE METAL BUILDING SHOP DRAWINGS SHOULD CLEARLY DESIGNATE ANY DEVIATIONS. ARCHITECT MUST APPROVE ANY CHANGES MADE TO THE FRAME LAYOUTS PRIOR TO FABRICATION.
22. LOCATIONS OF THE PORTAL FRAMES AND BRACED FRAMES FOR LATERAL STABILITY OF THE STRUCTURE TO BE AS DIRECTED BY THE METAL BUILDING MANUFACTURER. EVERY EFFORT SHOULD BE MADE TO COORDINATE FRAMES WITH ARCHITECTURAL CONTRACT DOCUMENTS.LOCATIONS AND SIZE OF FRAMES ELEMENTS SHOULD BE CLEARLY DEFINED ON SHOP DRAWINGS SUBMITTED FOR APPROVAL.
23. ELECTRICAL FLOOR BOX. PROVIDE THICKENED SLAB. CONTRACTOR TO COORDINATE WITH ELECTRICAL AND ARCHITECTURAL DRAWINGS FOR LOCATIONS.
24. "PX" INDICATES CONCRETE PEDESTAL UNDER COLUMN. SEE SCHEDULE ON S1.03 FOR ADDITIONAL INFORMATION. PEDESTAL SUBJECT TO CHANGE.
25. PROVIDE 1'-0" MAXIMUM LAP FROM FOOTING TO WALL OVER SAFE ROOM FOOTING.
26. PROVIDE 16" DEEP BOND BEAM @48" O.C. REINFORCED WITH 2#5 TOP AND BOTTOM CONTINUOUS IN ALL STAIR WALLS FOR FULL HEIGHT OF WALL.

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01/09/2026

FOUNDATION PLAN

S2.00

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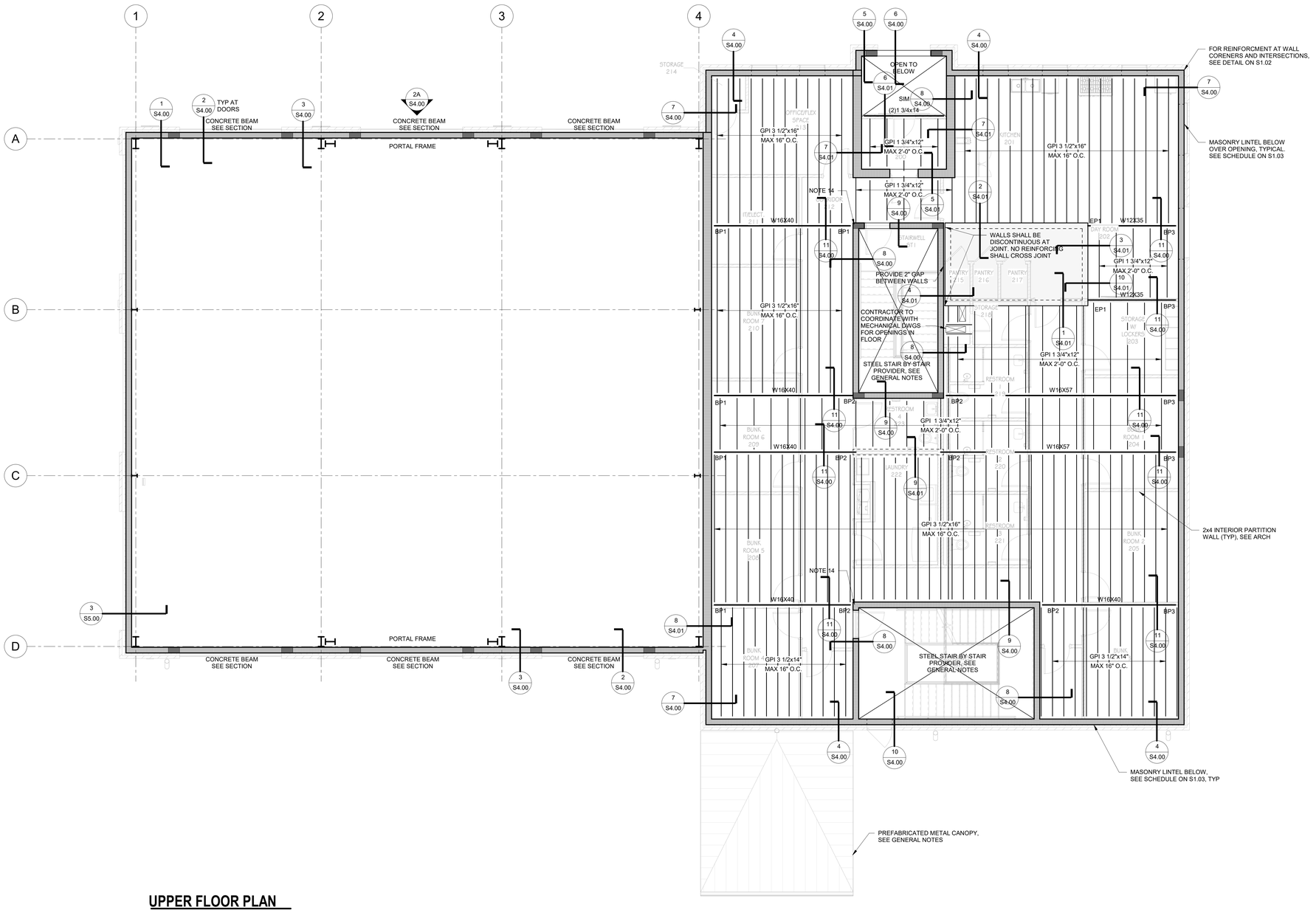

UPPER FLOOR PLAN

3/16" = 1'-0"

1. FINISH FLOOR (TOP OF SLAB) ELEVATION 13'-4", UNLESS NOTED.
2. TOP OF STEEL ELEVATION -3 1/4" BFF, UNLESS NOTED.
3. FLOOR SYSTEM:
   WOOD FLOORING: 3/4" PLYWOOD SHEATHING WITH 1" GYPCRETE TOPPING ON WOOD I-JOISTS. GLUE FLOOR TO JOISTS AND ANCHOR WITH 16d NAILS AT 6" AT ALL FOUR PANEL EDGES AND 12" AT INTERMEDIATE SUPPORTS. SEE GENERAL NOTES
   SAFE ROOM ROOF: 12" THICK FORMED CAST-IN PLACE CONCRETE. REINFORCE WITH #5 AT 8" TOP AND BOTTOM, EACH WAY ON CENTER.
4. SPACE WOOD I-JOISTS EQUALLY BETWEEN FACE OF WALLS OR STEEL, UNLESS NOTED.
5. "BP" INDICATES BEARING PLATE. REFER TO TYPICAL DETAIL ON S1.03 FOR ADDITIONAL INFORMATION. OFFSET BEARING PLATE AS REQUIRED.
6. "EP" INDICATES EMBED PLATE WITH HEADED ANCHOR RODS. PROVIDE FULL DEPTH CLIP ANGLE TO EMBED WITH MAXIMUM (2) 3/4"ø BOLTS. SEE DETAIL FOR ADDITIONAL INFORMATION.
7. PROVIDE 8" BOND BEAM @48" O.C FOR FULL HEIGHT OF WALL. REINFORCE W/ 2#4 CONT. UNLESS NOTED.
8. HANGER LOCATION FOR PIPING LARGER THAN 3 INCHES IN DIAMETER MUST BE COORDINATED BY GENERAL CONTRACTOR WITH WOOD I-JOIST PROVIDER.
9. METAL BUILDING MANUFACTURER TO USE FRAME LINES AS INDICATED. WHERE THIS IS NOT FEASABLE, THE METAL BUILDING SHOP DRAWINGS SHOULD CLEARLY DESIGNATE ANY DEVIATIONS. ARCHITECT MUST APPROVE ANY CHANGES MADE TO THE FRAME LAYOUTS PRIOR TO FABRICATION.
10. LOCATIONS OF THE PORTAL FRAMES AND BRACED FRAMES FOR LATERAL STABILITY OF THE STRUCTURE TO BE AS DIRECTED BY THE METAL BUILDING MANUFACTURER. EVERY EFFORT SHOULD BE MADE TO COORDINATE FRAMES WITH ARCHITECTURAL CONTRACT DOCUMENTS. LOCATIONS AND SIZE OF FRAME ELEMENTS SHOULD BE CLEARLY DEFINED ON SHOP DRAWINGS SUBMITTED FOR APPROVAL.
11. METAL BUILDING PROVIDER TO LIMIT THE DEPTH OF PORTAL FRAME MEMBERS AS TO AVOID OPENINGS. SEE ARCH DRAWINGS FOR ADDITIONAL INFORMATION.
12. SHADED REGION INDICATES CONCRETE ROOF/FLOOR SYSTEM. SEE PLAN, SECTIONS, AND GENERAL NOTES.
13. WHERE MASONRY COLUMNS ARE SHOWN ON PLAN, REINFORCING TO CONTINUE TO ROOF LEVEL. IF MASONRY COLUMNS ARE NOT SHOWN, TERMINATE MASONRY COLUMN AT TOP OF MASONRY LINTEL.
14. PROVIDE HOOK IN MASONRY LINTEL BELOW AT MASONRY COLUMN. FOR ADDITIONAL INFORMATION, SEE SCHEDULE ON 1.02.
15. PROVIDE BLOCKING BETWEEN EACH WOOD I-JOIST AT BEARING. SEE SECTIONS FOR ADDITIONAL INFORMATION.

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ALABAMA REGISTERED No. 22596 PROFESSIONAL CRAIG WINN
01/09/2026

UPPER FLOOR PLAN

S2.01

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ROOF FRAMING PLAN

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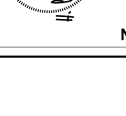

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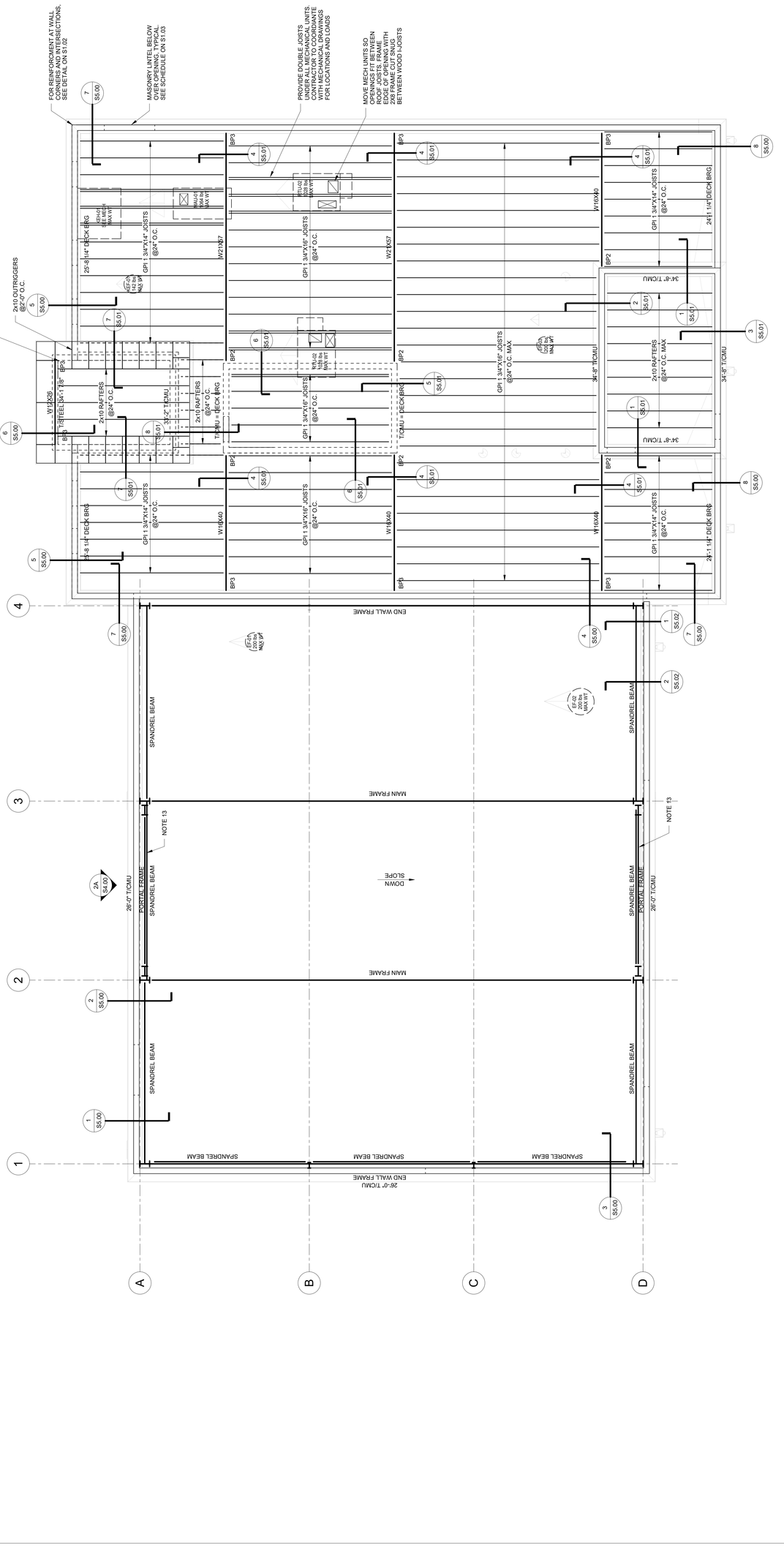

ROOF PLAN

3/16" = 1'-0"

1. TOP OF CMU ELEVATION 29'-4", UNLESS NOTED.
2. TOP OF WOOD I-JOISTS VARIES. SEE PLAN.
3. ROOF SLOPE IN ENTRY VARIES AND SLOPES. SEE PLAN.
4. ROOF FRAMING:
   - PREFABRICATED METAL BUILDING. PREFABRICATED METAL BUILDING FRAMES WITH PURLINS SUPPORTING STANDING SEAM METAL ROOFING.
   - WOOD I-JOISTS AT ROOF. SEE PLAN. WOOD I-JOISTS SUPPORTED BY METAL BUILDING FRAMES AT ROOF TO JOISTS AND ANCHOR WITH 16d NAILS AT 6" AT ALL FOUR PANEL EDGES AND 12" AT INTERMEDIATE SUPPORTS. SEE GENERAL NOTES.
   - TOP OF STEEL VARIES. STEEL IS LOCATED 3" BELOW T/DECK. SEE SECTIONS FOR ADDITIONAL INFORMATION.
5. CONCRETE / MASONRY WALLS: BEARING ON CONCRETE OR MASONRY WALLS AT 4" MIN.
6. HANGER LOCATION FOR PIPING LARGER THAN 3 INCHES IN DIAMETER MUST BE COORDINATED BY GENERAL CONTRACTOR WITH THE WOOD I-JOIST PROVIDER AND METAL BUILDING MANUFACTURER. FOR PIPING WEIGHTS, SEE TYPICAL DETAIL ON S1.03.
7. ROOF OPENINGS: SEE ARCH DRAWINGS FOR ALL WOOD I-JOISTS, CONSULT THE WOOD I-JOIST PROVIDER FOR ADDITIONAL REQUIREMENTS.
8. PROVIDE 8" BOND BEAM @48" O.C FOR FULL HEIGHT OF WALL. REINFORCE W/ 2#4 CONT, UNLESS NOTED.
9. AT SPANDREL BEAMS, SEE PLAN. METAL BUILDING PROVIDER TO PROVIDE FRAMING FOR THE CONNECTION OF THE SPANDREL BEAMS TO THE METAL BUILDING FRAMES. SPANDREL BEAMS ARE METAL BUILDING PROVIDER TO DESIGN SPANDREL BEAM FOR 600 PLF (SERVICE WIND LOAD) AND LIMIT DEFLECTION THE LESSER OF L/600, H/600, OR 0.3 INCHES.
10. EQUIPMENT LOCATIONS AND WEIGHTS SHOWN ARE APPROXIMATE. THE GENERAL CONTRACTOR SHALL COORDINATE AND VERIFY THE SIZE, WEIGHT, AND LOCATION OF ALL MECHANICAL UNITS WITH THE I-JOIST PROVIDER. CONTRACTOR TO PROVIDE ROOF EQUIPMENT FRAMING AT ALL MECHANICAL UNITS.
11. METAL BUILDING MANUFACTURER TO USE FRAME LINES AS INDICATED. WHERE THIS IS NOT FEASABLE, THE METAL BUILDING SHOP DRAWINGS SHALL CLEARLY DESIGNATE ANY DEVIATIONS. ARCHITECT MUST APPROVE ANY CHANGES MADE TO THE FRAME LAYOUTS PRIOR TO FABRICATION.
12. LOCATIONS OF THE PORTAL FRAMES AND BRACED FRAMES FOR LATERAL STABILITY OF THE STRUCTURE TO BE AS DIRECTED BY THE METAL BUILDING PROVIDER AND SHALL BE SHOWN ON THE METAL BUILDING SHOP DRAWINGS SUBMITTED FOR APPROVAL. THE FINAL LOCATIONS AND SIZE OF FRAME ELEMENTS SHOULD BE CLEARLY DEFINED ON SHOP DRAWINGS SUBMITTED FOR APPROVAL.
13. METAL BUILDING PROVIDER TO LIMIT THE DEPTH OF PORTAL FRAME MEMBERS AS TO AVOID OPENINGS. SEE ARCH DRAWINGS FOR ADDITIONAL INFORMATION.
14. WHERE ROOF SUPPORTED/SUSPENDED MECHANICAL UNITS ARE LOCATED, THE CONTRACTOR SHALL COORDINATE ALL LOADING, CURB SUPPORTS, OPENING FRAMING, AND ANY ADDITIONAL SUPPORT REQUIREMENTS WITH THE METAL BUILDING PROVIDER. THE METAL BUILDING PROVIDER SHALL PROVIDE ALL FRAMING AS REQUIRED TO SUPPORT THE MECHANICAL UNITS, CURBS, AND ADDITIONAL MECHANICAL LOADS.

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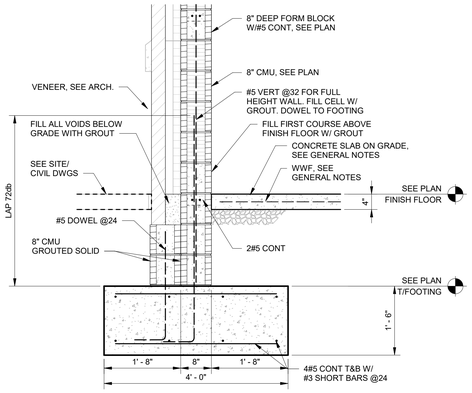
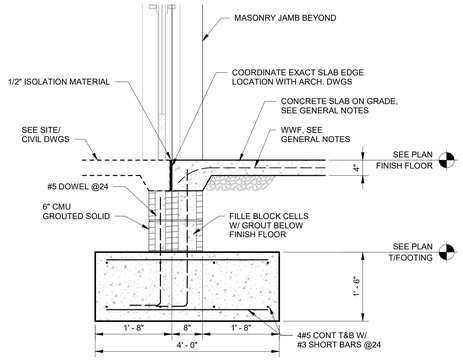


SECTION 1 S3.00
3/4" = 1'-0"



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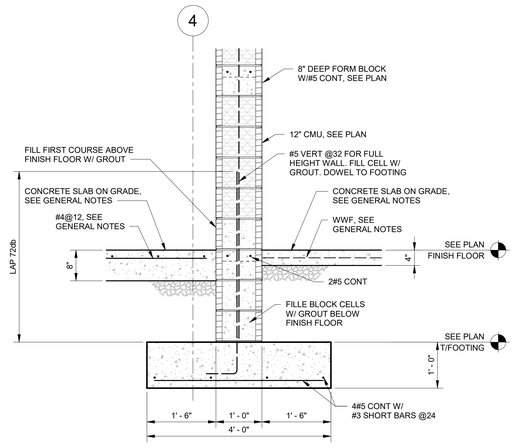

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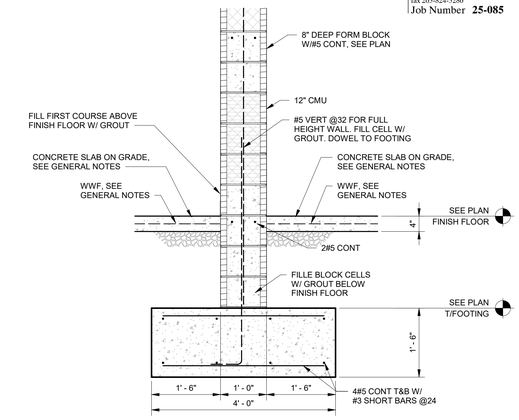

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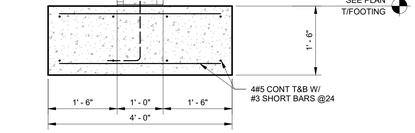

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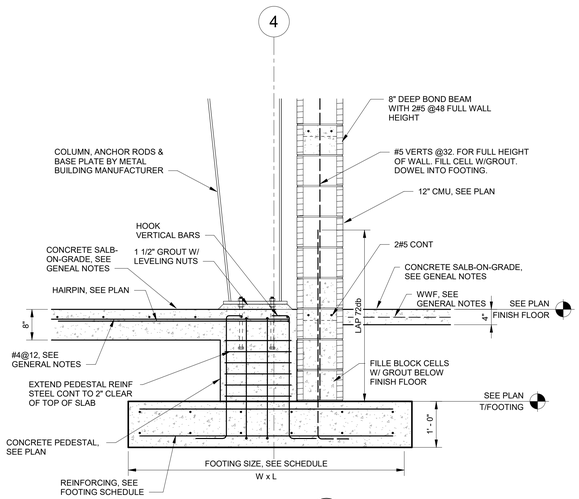

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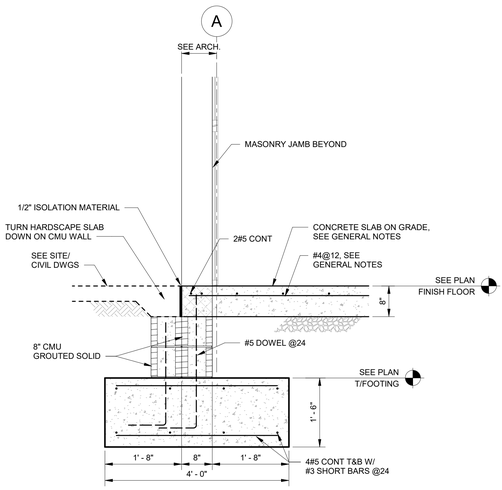

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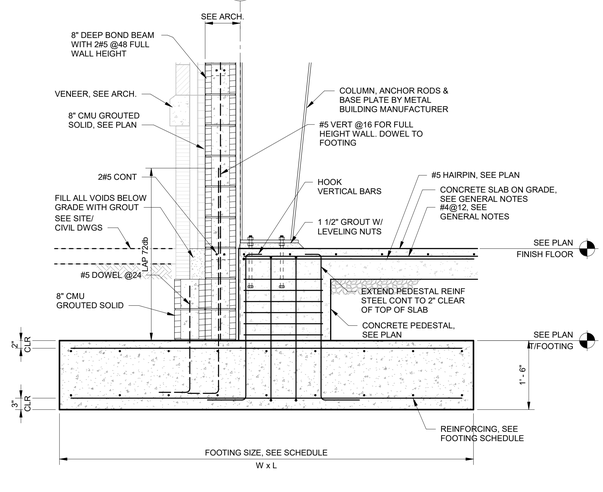

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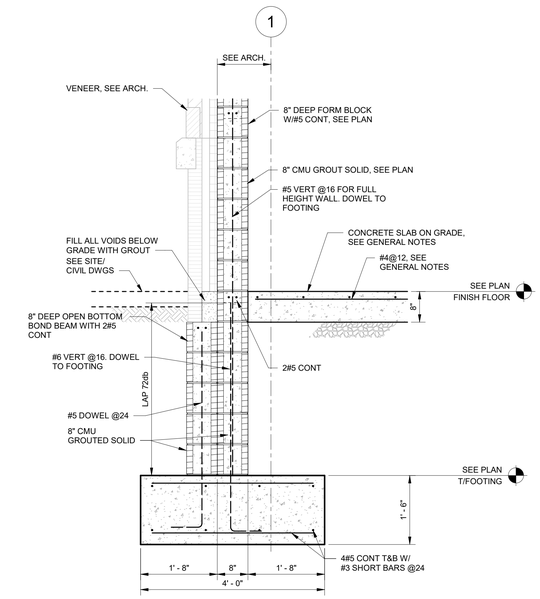
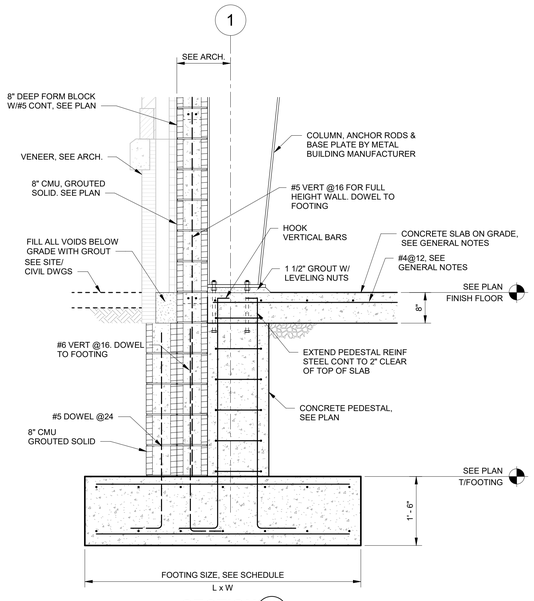
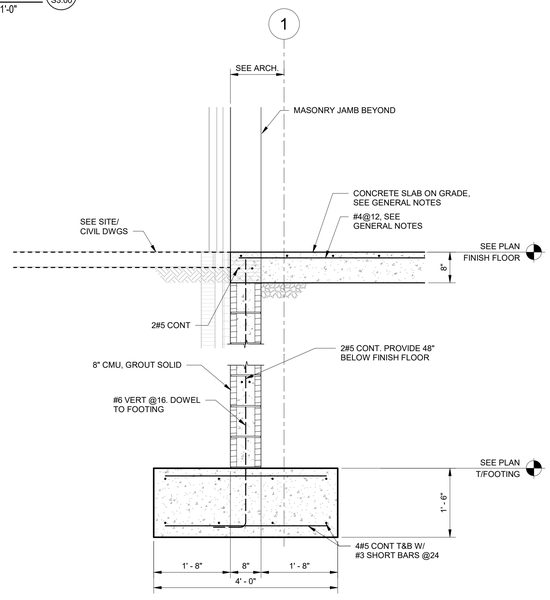


SECTION 9 S3.00
3/4" = 1'-0"



SECTION 10 S3.00
3/4" = 1'-0"



SECTION 11 S3.00
3/4" = 1'-0"

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA REGISTERED No. 22506 PROFESSIONAL CRAIG WINN P.E.
01/09/2026

SECTIONS AND DETAILS

S3.00

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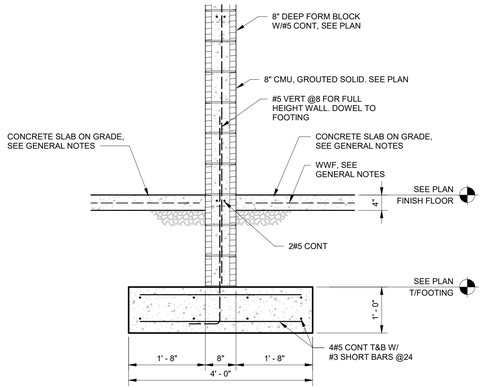
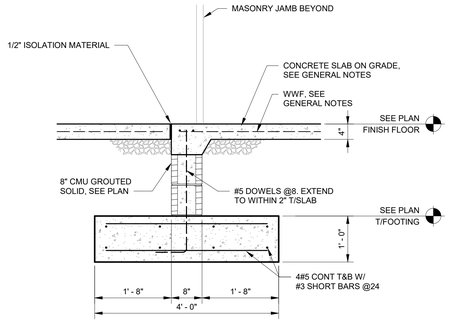
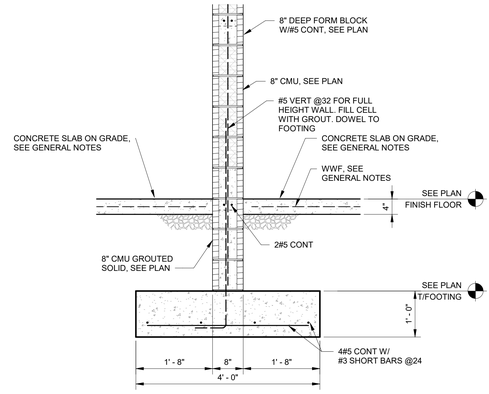


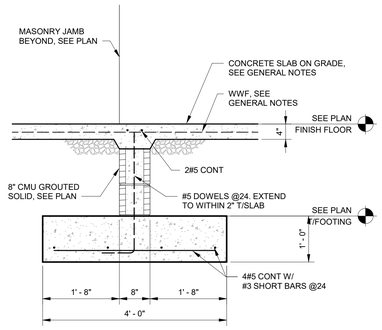
SECTION 1 S3.01
3/4" = 1'-0"



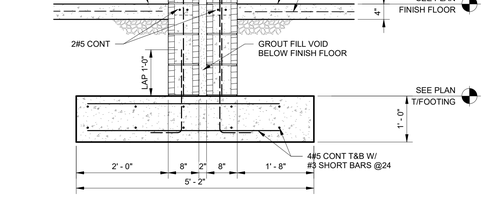
SECTION 2 S3.01
3/4" = 1'-0"



SECTION 3 S3.01
3/4" = 1'-0"



SECTION 4 S3.01
3/4" = 1'-0"



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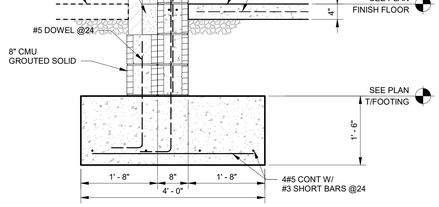
3/4" = 1'-0"



SECTION 6 S3.01
3/4" = 1'-0"

GMC

Goodwyn Mills Cawood, LLC
117 Jefferson Street
North
Huntsville, AL
35801
256.539.3431
www.gmcnet.com

ISSUE	DATE
CONSTRUCTION DOCUMENTS	01/09/26

DRAWN BY: TRM
CHECKED BY: HCW

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

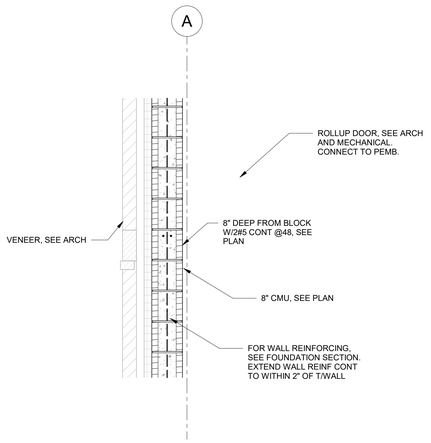
ALABAMA REGISTERED No. 22586 PROFESSIONAL CRAIG WILLIAMS
H. Craig Williams, P.E.
01/09/2026

SECTIONS AND DETAILS

S3.01

1/9/2026 9:27:22 AM TEMPLATE VERSION: 2025.1

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5200
fax 205-824-5280
Job Number **25-085**



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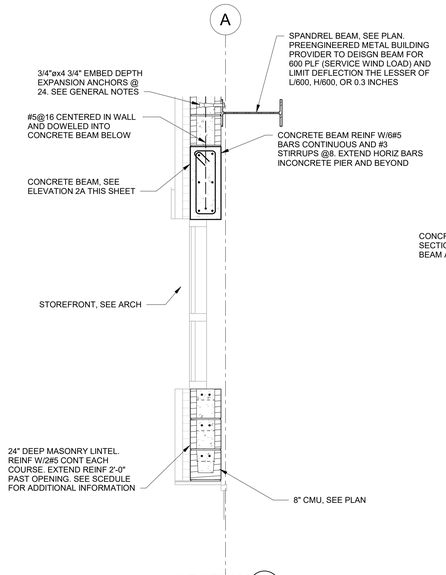

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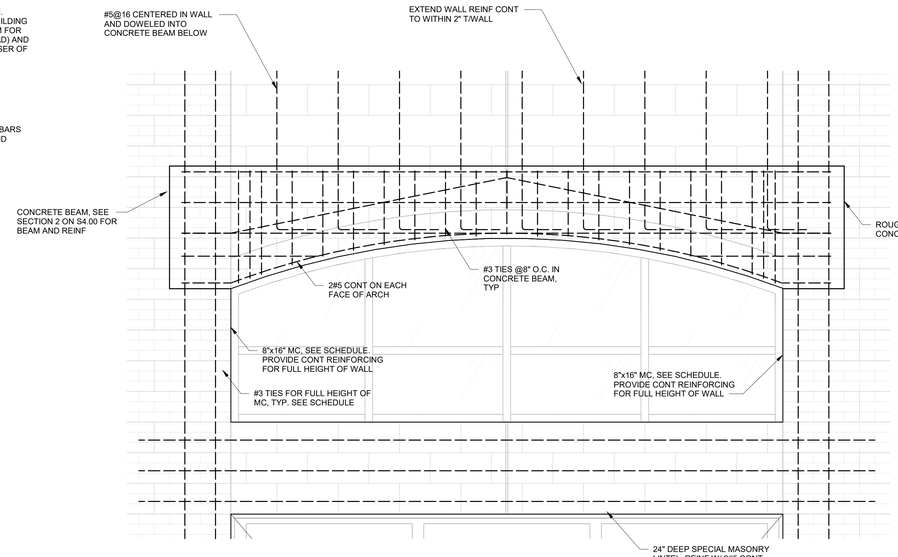

ELEVATION 2A/S4.00
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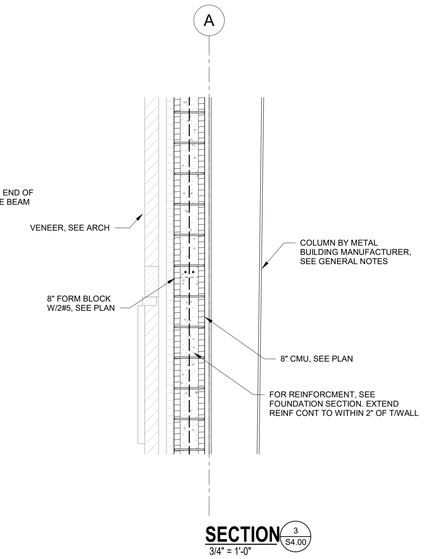

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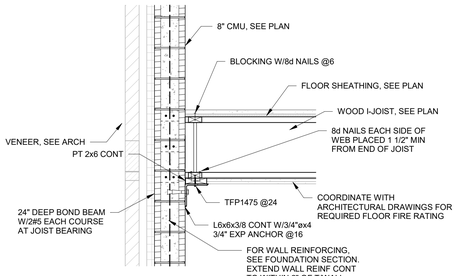

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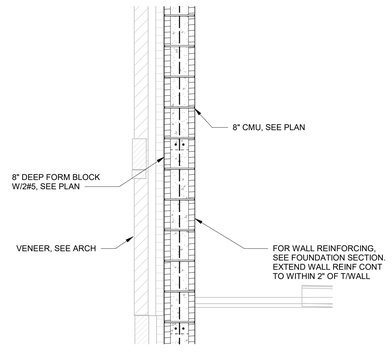

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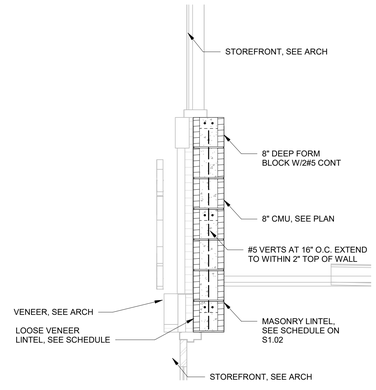

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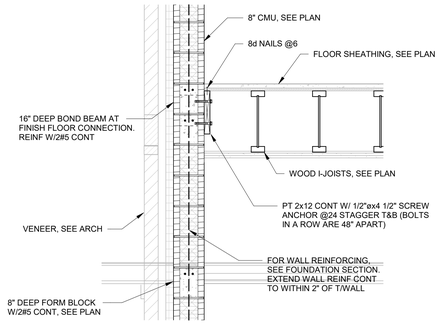

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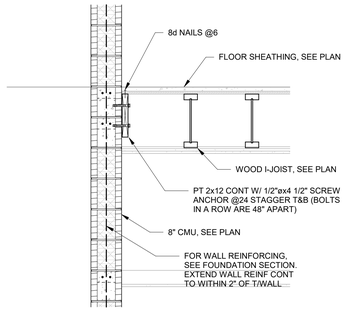

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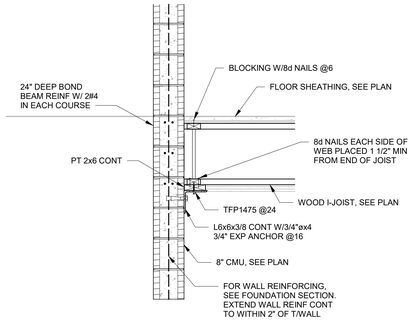

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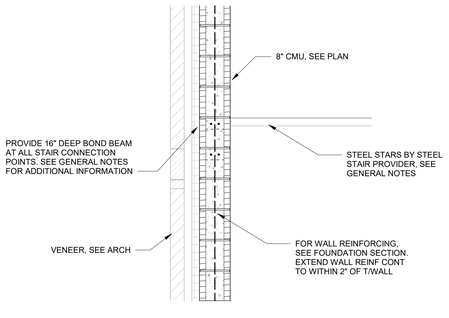

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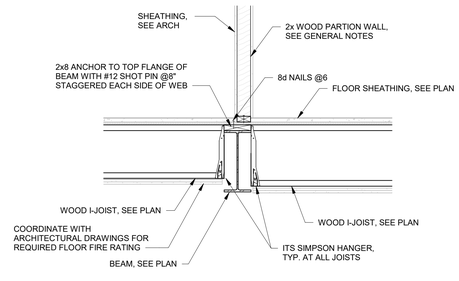

SECTION 11/S4.00
3/4" = 1'-0"

GMC

Goodwyn Mills Cawood, LLC
417 Jefferson Street
Huntsville, AL 35801
256.539.3431 www.gmcnet.com

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CHECKED BY: HCW

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

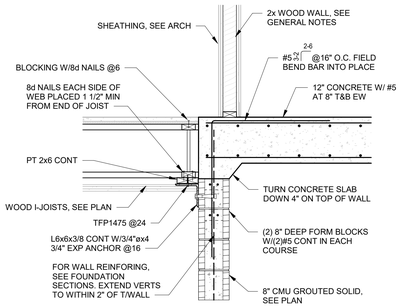
ALABAMA REGISTERED No. 22596 PROFESSIONAL CRAIG WILLIAMS P.E.
01/09/2026

SECTIONS AND DETAILS

S4.00

1/9/2026 9:27:23 AM TEMPLATE VERSION: 2025.1

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5200
fax 205-824-5280
Job Number **25-085**



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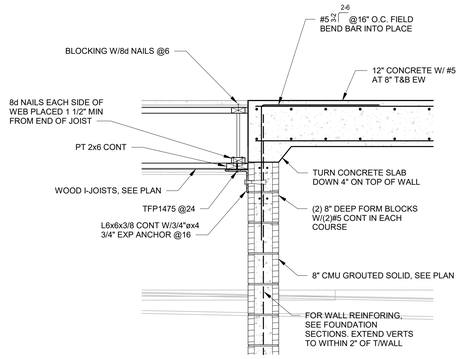
3/4" = 1'-0"



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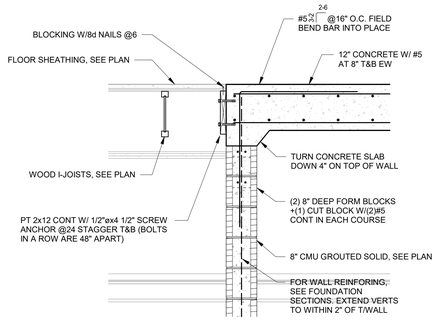

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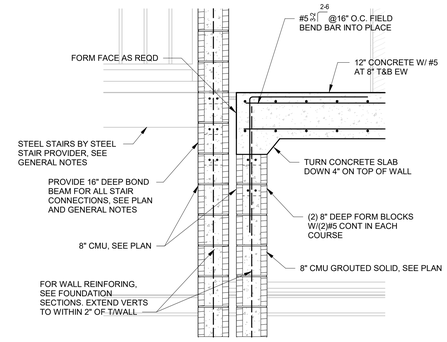

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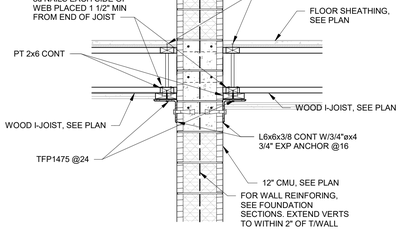

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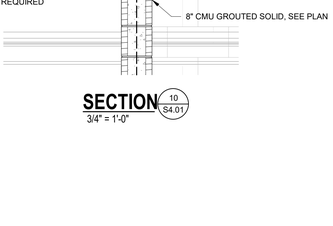
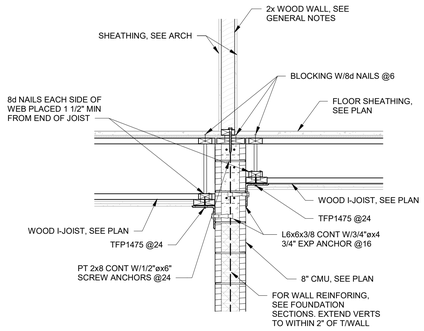


SECTION 6 S4.01
3/4" = 1'-0"

SECTION 7 S4.01
3/4" = 1'-0"

SECTION 8 S4.01
3/4" = 1'-0"



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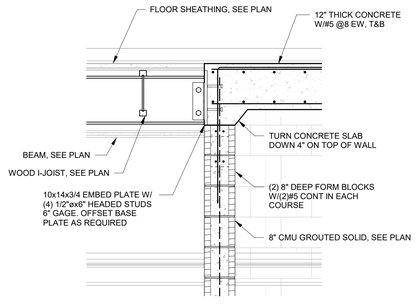

SECTION 10 S4.01
3/4" = 1'-0"

GMC

Goodwyn Mills Cawood, LLC
417 Jefferson Street
North
Huntsville, AL 35801
256.539.3431 tel
www.gmcnetwork.com

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DRAWN BY: TRM
CHECKED BY: HCW

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

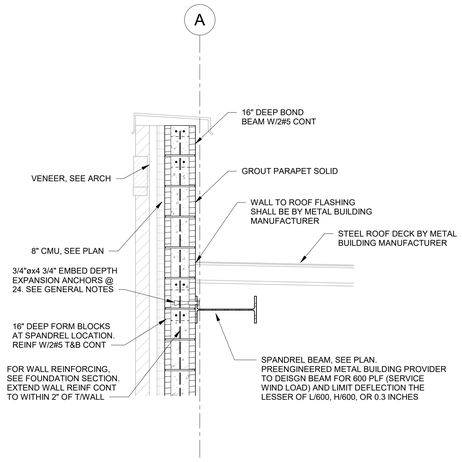
ALABAMA REGISTERED No. 22596 PROFESSIONAL CRAIG WILLIAMS
CRAIG WILLIAMS, P.E.
01/09/2026

SECTIONS AND DETAILS

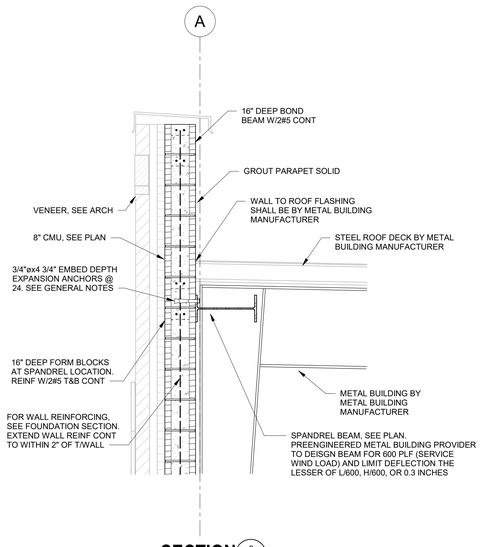
S4.01

1/9/2026 9:27:24 AM TEMPLATE VERSION: 2025.1

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5200
fax 205-824-5280
Job Number **25-085**



SECTION 1/S5.00
3/4" = 1'-0"



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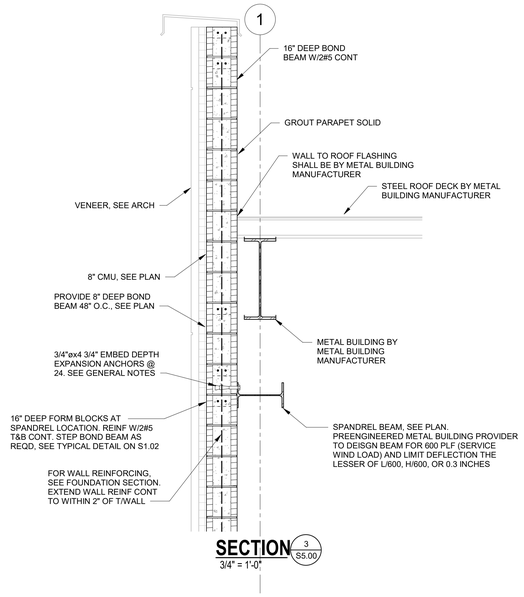

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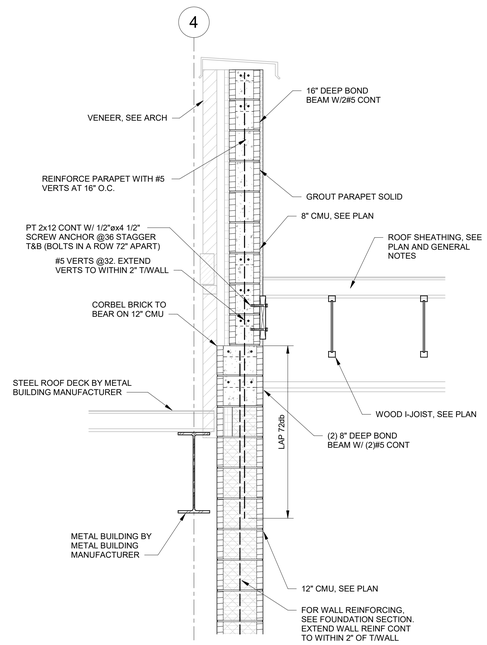

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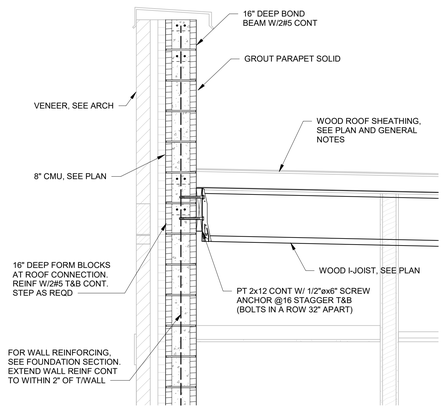

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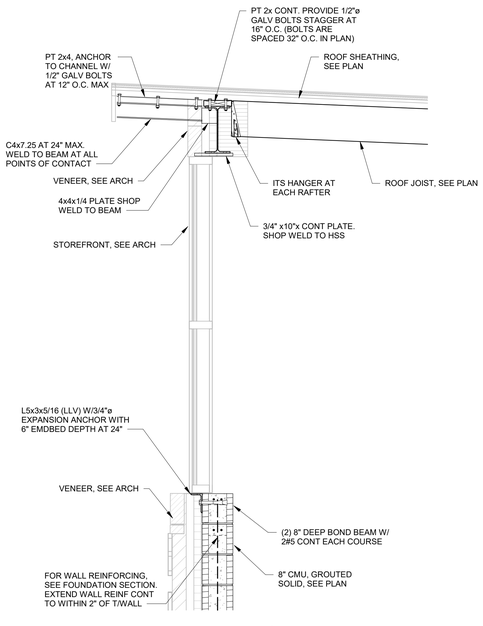

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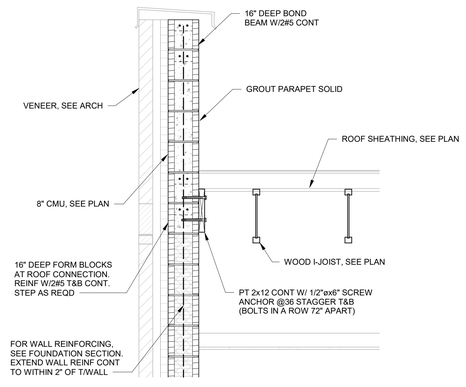

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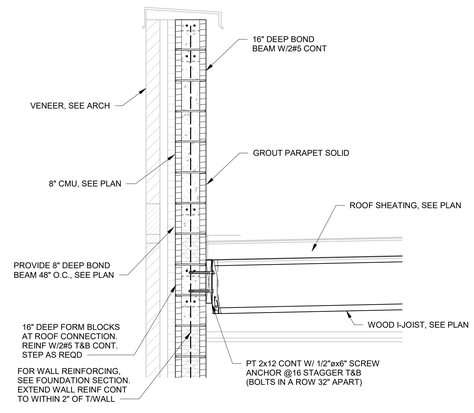


SECTION 8/S5.00
3/4" = 1'-0"

GMC

Goodwyn Mills Cawood, LLC
417 Jefferson Street
Suite 400
Huntsville, AL
35801
256.539.3431
www.gmcnetwork.com

ISSUE	DATE
CONSTRUCTION DOCUMENTS	01/09/26

DRAWN BY: TRM
CHECKED BY: HCW

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

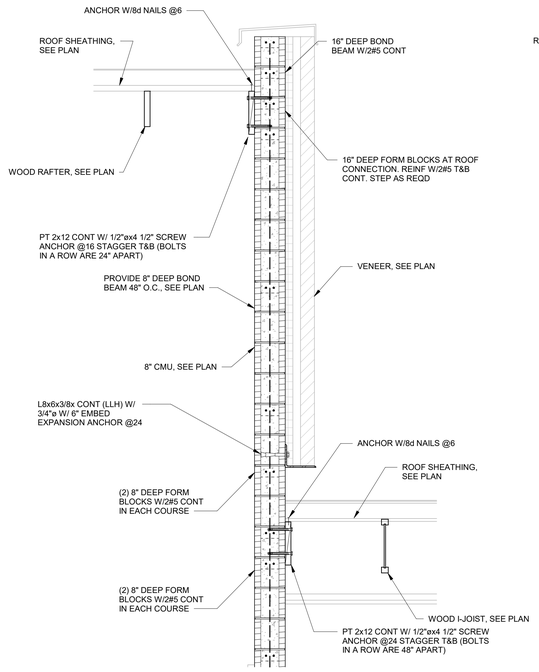
ALABAMA REGISTERED
No. 22596
PROFESSIONAL
CRAIG WILLIAMS
ENGINEER
H. Craig Williams, P.E.
01/09/2026

SECTIONS AND DETAILS

S5.00

1/9/2026 9:27:25 AM TEMPLATE VERSION: 2025.1

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5200
fax 205-824-5200
Job Number **25-085**



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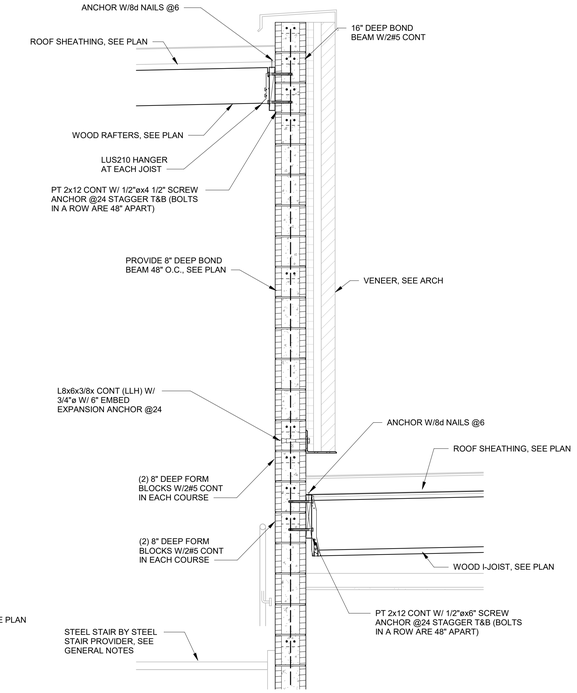

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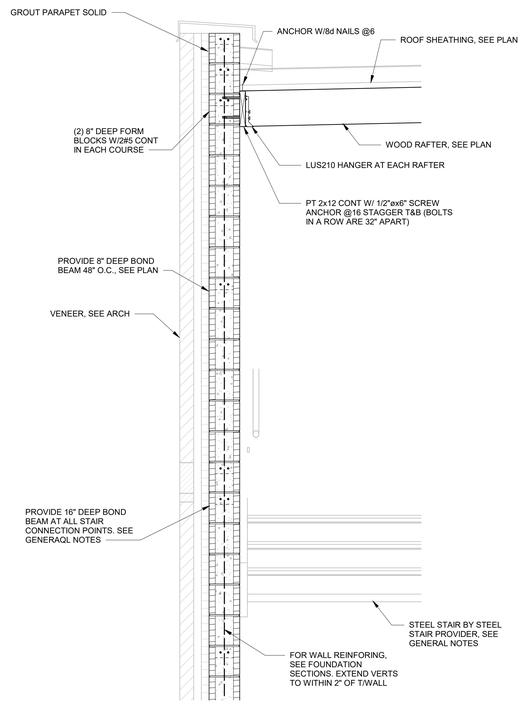

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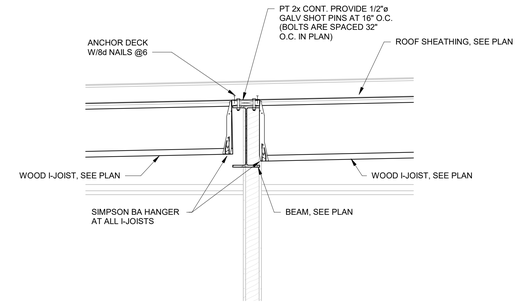

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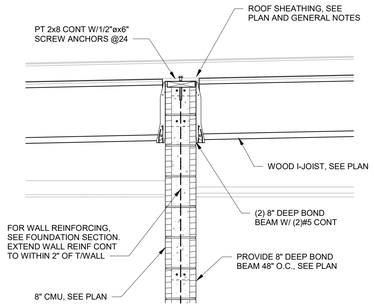

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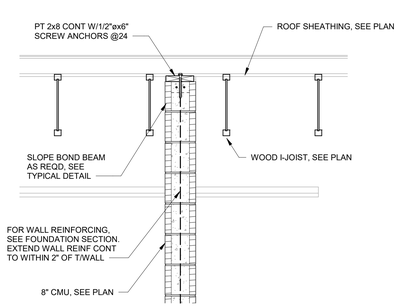

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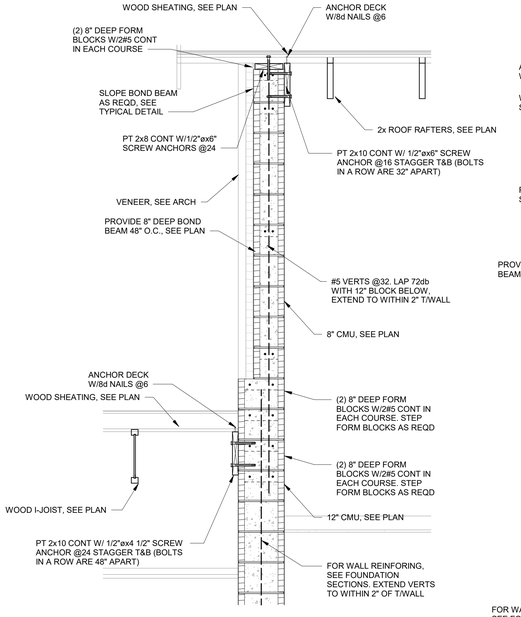

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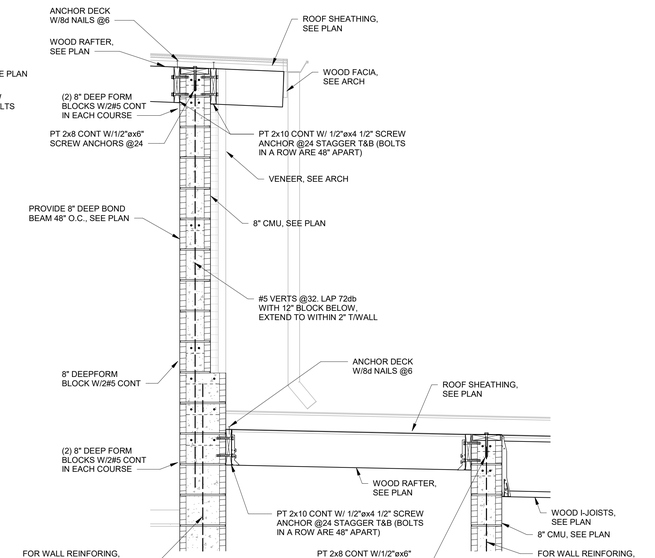

SECTION 8 S5.01
3/4" = 1'-0"

GMC

Goodwyn Mills Cawood, LLC
417 Jefferson Street
Huntsville, AL 35801
256.539.3431 www.gmcnet.com

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

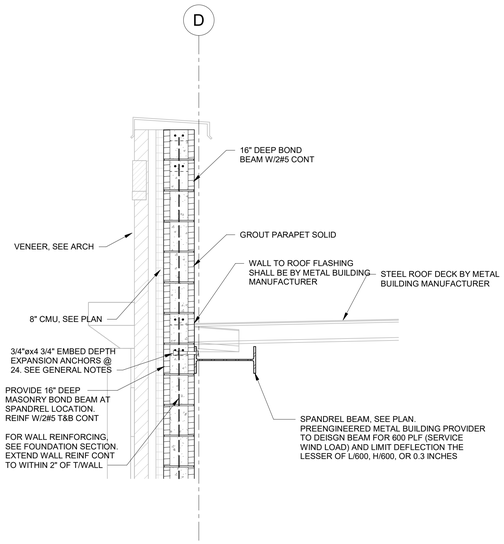
GMC # AHUN250003

ALABAMA REGISTERED No. 22596 PROFESSIONAL CRAIG WILLIAMSON ENGINEER
Craig Williamson, P.E.
01/09/2026

SECTIONS AND DETAILS

S5.01

1/9/2026 9:27:26 AM TEMPLATE VERSION: 2025.1



SECTION 1 / S5.02
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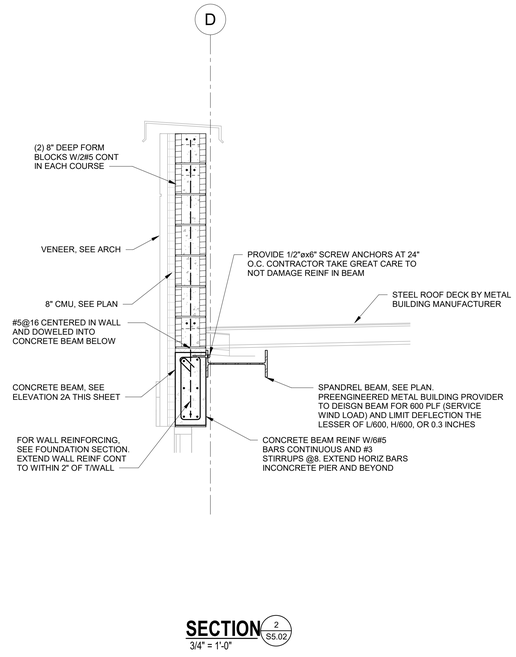

SECTION 2 / S5.02
3/4" = 1'-0"

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5200
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Job Number **25-085**

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

ALABAMA REGISTERED No. 22506 PROFESSIONAL ENGINEER CRAIG WILLIS
H. Craig Willis P.E.
01/09/2026

GMC # AHUN250003

SECTIONS AND DETAILS

S5.02

1/9/2026 9:27:26 AM TEMPLATE VERSION: 2025.1

ARCHITECTURAL SITE PLAN

01/09/2026

A0.01

GMC # AHUN250003

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

STATE of ALABAMA — REGISTERED ARCHITECT
Jay W Purkey
9063
Owens Cross Roads
Alabama

ISSUE	DATE
100% CONSTRUCTION DOCUMENTS	1/9/2026

DRAWN BY: ED
CHECKED BY: JP

Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

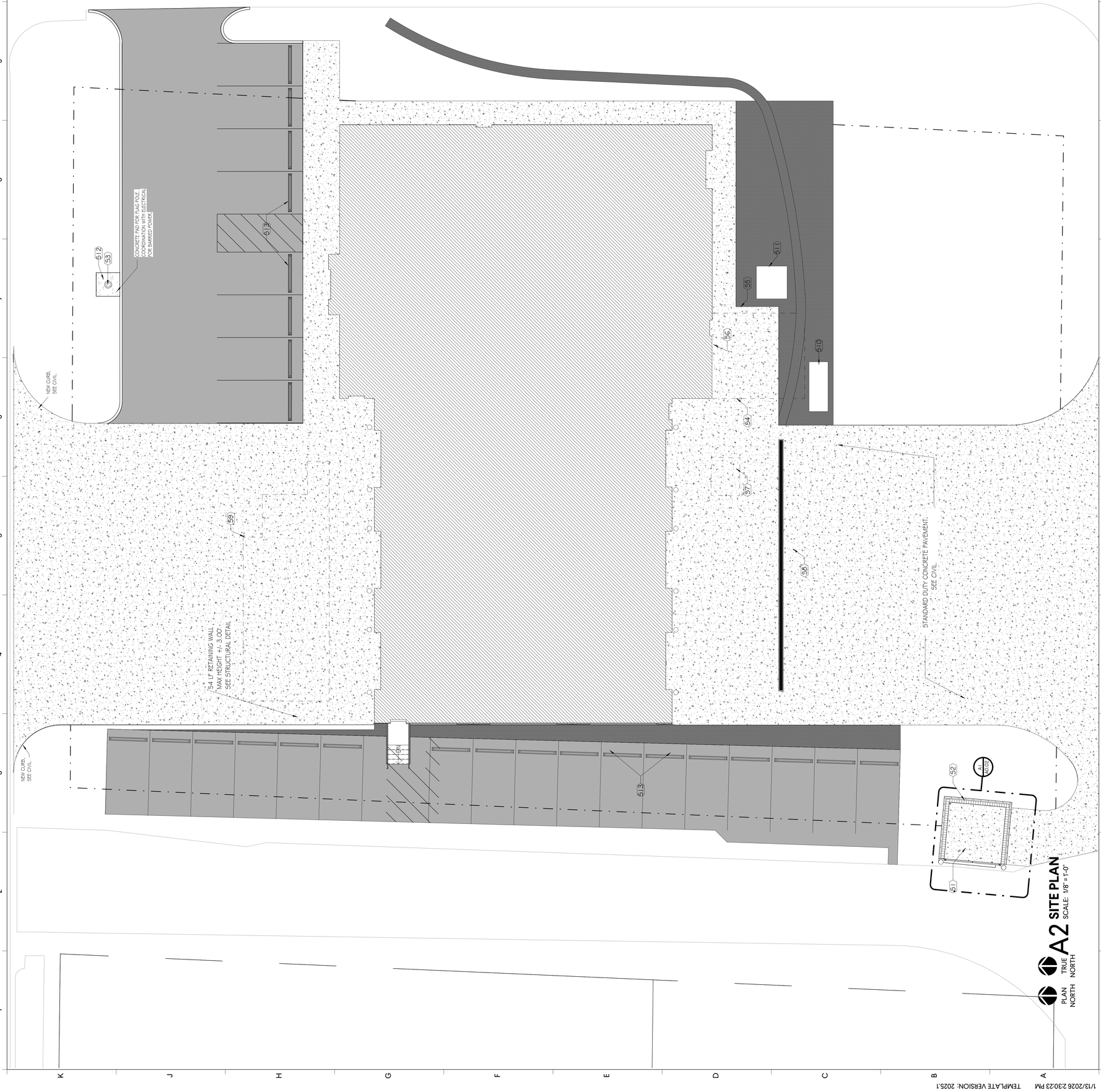
GMC

GENERAL NOTES - SITE PLAN

1. CONNECT ALL DOWN SPOUTS TO SUBGRADE STORM. SEE CIVIL.

KEY NOTES - SITE PLAN

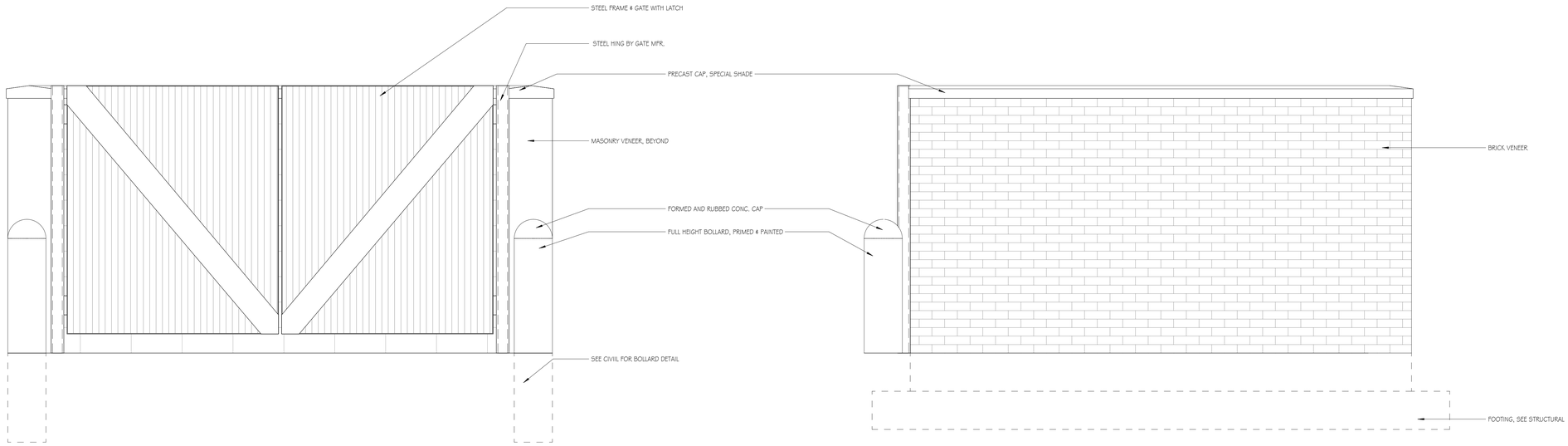
KEY	KEYNOTE
51	CONCRETE DUMPSTER PAD. SEE CIVIL.
52	6-9" BRICK SCUPPER WALL W/ PRECAST CAP. SEE DETAILS.
53	40' FLAG POLE.
54	PREFABRICATED COVERED PATIO CANOPY. SEE DETAILS.
55	CONCRETE PATIO. SEE CIVIL.
56	GAS GRILL PROVIDED BY OWNER. PROVIDE CONNECTION TO NATURAL GAS LINE. SEE MECHANICAL.
57	OIL INTERCEPTOR (UNDERGROUND) SEE PLUMBING/CIVIL
58	TRENCH DRAIN. SEE PLUMBING
59	UNDERGROUND DETENTION. SEE CIVIL.
510	GENERATOR PAD
511	TRANSFORMER PAD
512	5' X 5' CONCRETE FLAGPOLE PAD. SEE CIVIL.
513	CONCRETE WHEEL STOP.



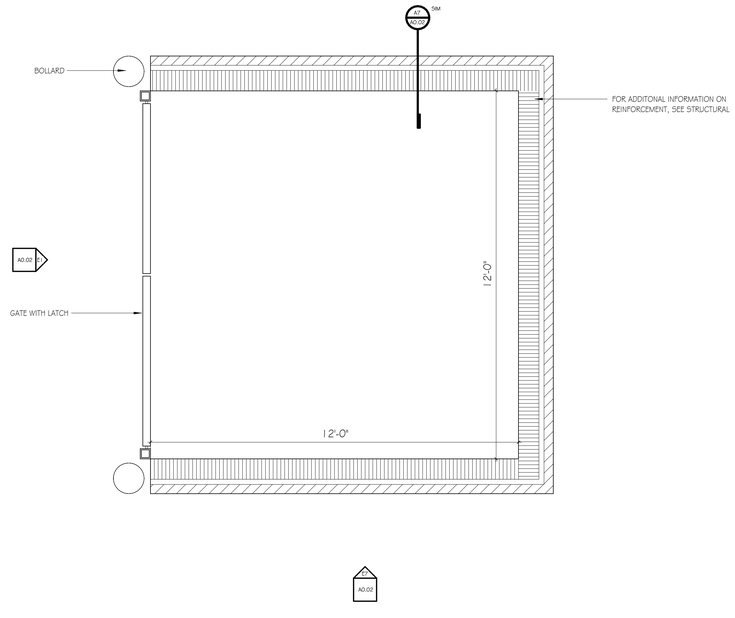
A2 SITE PLAN

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

PLAN NORTH
TRUE NORTH

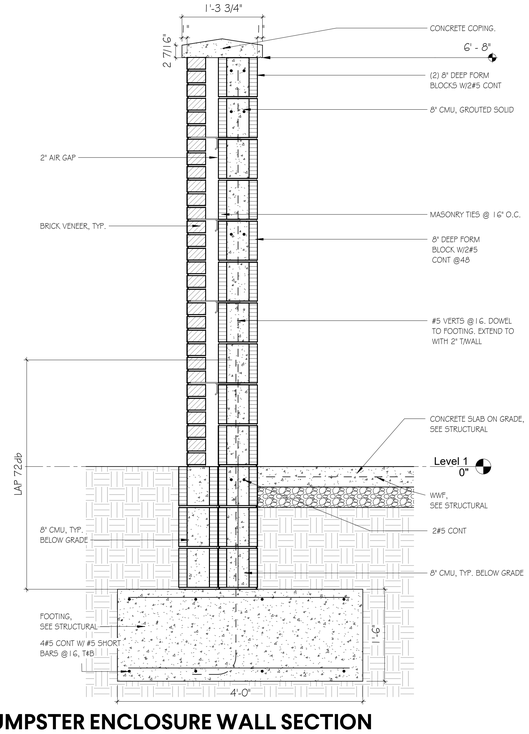


E1 DUMPSTER ENCLOSURE WEST ELEVATION
SCALE: 3/4" = 1'-0"



A1 SITE PLAN - DUMPSTER ENCLOSURE
SCALE: 1/2" = 1'-0"

E7 DUMPSTER ENCLOSURE SOUTH ELEVATION
SCALE: 3/4" = 1'-0"



A7 DUMPSTER ENCLOSURE WALL SECTION
SCALE: 1" = 1'-0"

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

ENLARGED DUMPSTER

A0.02

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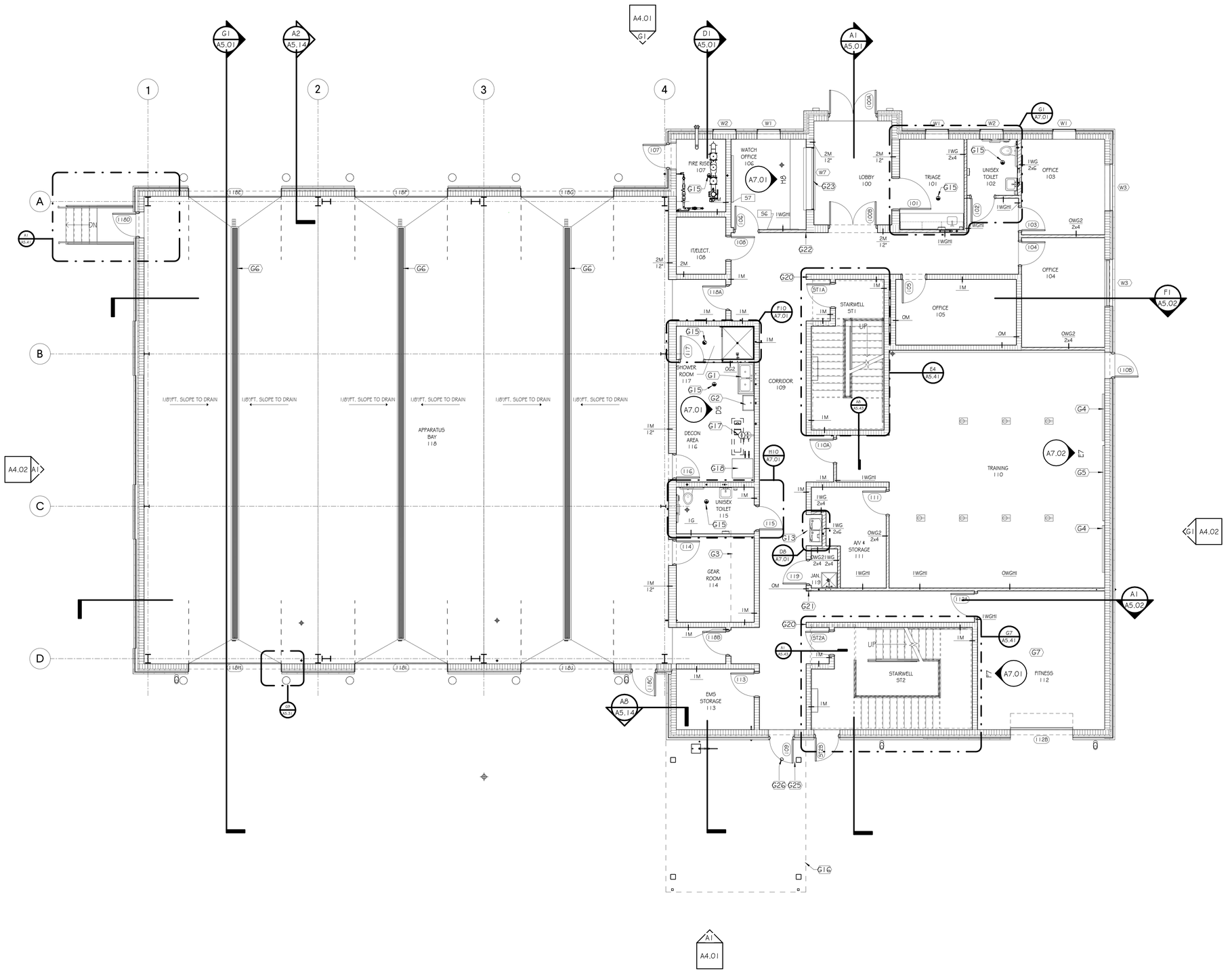
A4.01
G1
D1
A5.01
A1
A5.01
G1
A7.01
A2
A5.14
G1
A5.01
1
2
3
4
A
B
C
D
A4.02 A1
A1
A5.01
A1
A5.02
F1
A5.02
A8
A5.14
G1
A4.02
A1
A4.01
FIRE RISER 107
WATCH OFFICE 106
LOBBY 100
TRIAGE 101
UNISEX TOILET 102
OFFICE 103
OFFICE 104
OFFICE 105
IT/ELECT. 106
STAIRWELL ST1
STAIRWELL ST2
CORRIDOR 109
SHOWER ROOM 117
DECON AREA 116
APPARATUS BAY 118
UNISEX TOILET 115
GEAR ROOM 114
EMS STORAGE 113
A/V & STORAGE 111
JAN. 119
TRAINING 110
FITNESS 112
118C
118F
118G
118H
118I
118J
118K
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118O
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118Q
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118S
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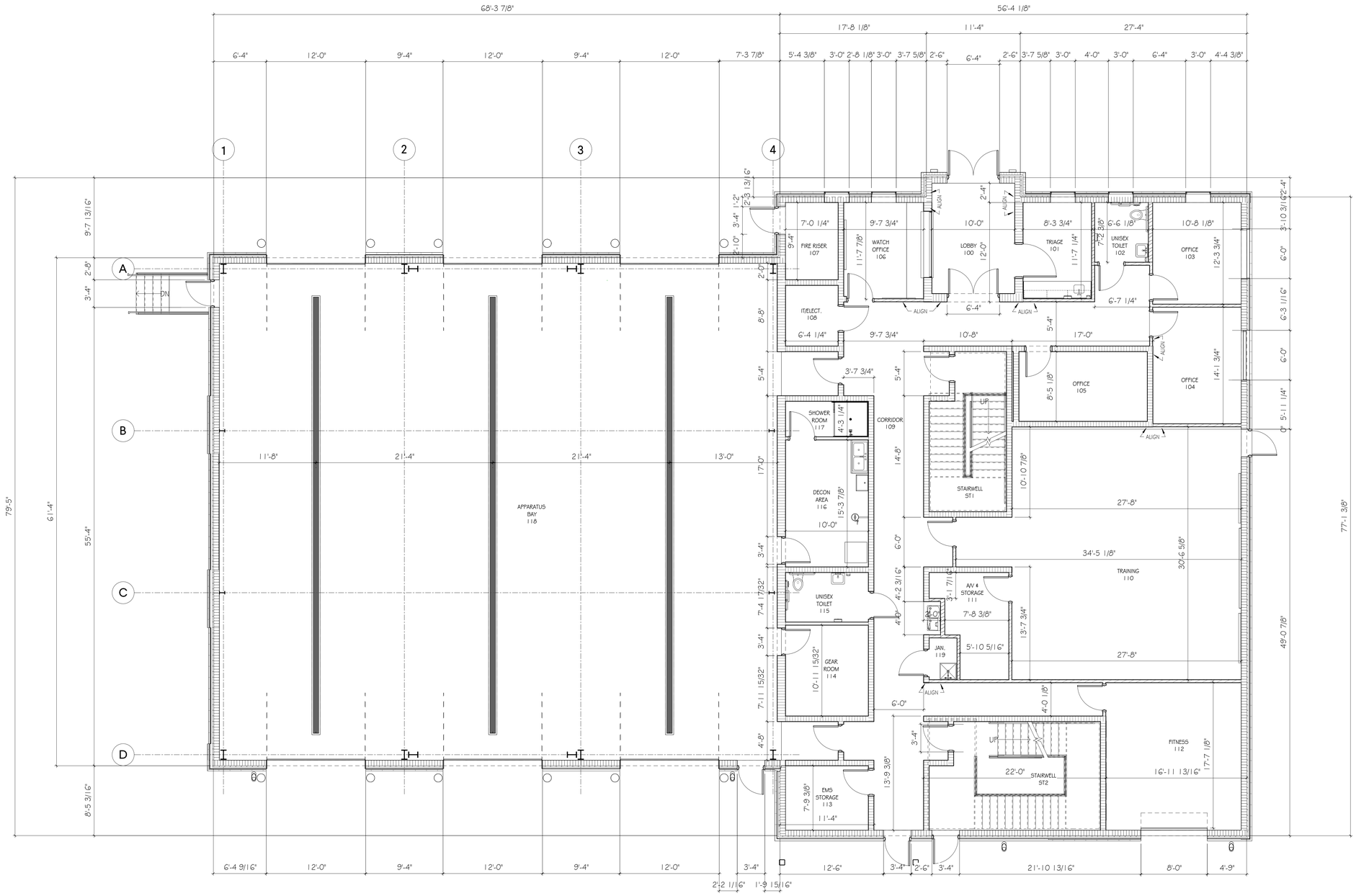
118W
118X
118Y
118Z
1.8%/FT. SLOPE TO DRAIN
DN
UP
W1
W2
W3
G1
G2
G3
G4
G5
G6
G7
G13
G15
G16
G17
G18
G20
G21
G22
G23
G25
G26
E4 A5.41
E7 A7.02
F7 A7.01
G7 A5.41
H3 A7.01
H10 A7.01
D8 A7.01
F10 A7.01
A6 A5.41
A1 A5.41
A1 A5.41
A1



PLAN NORTH TRUE NORTH

A2 DIMENSION PLAN - LEVEL 1

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

GENERAL NOTES - FLOOR PLAN

1.

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DIMENSION PLAN - LEVEL 1

A1.11

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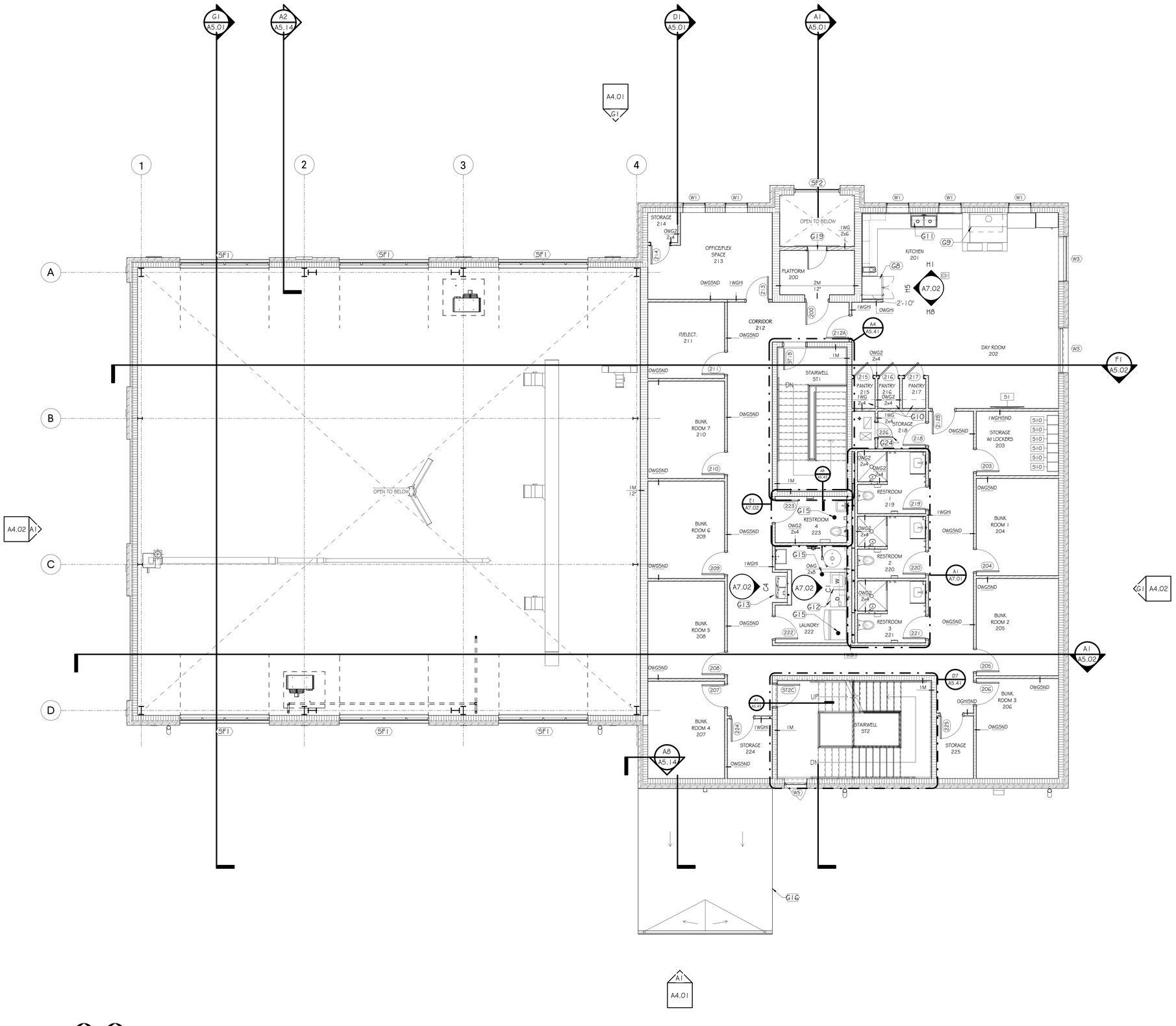

KEY NOTES - GENERAL CONSTRUCTION

KEY	KEYNOTE
G1	2 COMPARTMENT SINK. SEE PLUMBING.
G2	UTILITY SINK. SEE PLUMBING.
G3	GEAR STORAGE UNIT. N.I.C O.F.O.I
G4	MARKER BOARD. SEE INTERIORS.
G5	MOTORIZED DROP SCREEN.
G6	TRENCH DRAIN. SEE PLUMBING.
G7	COORDINATE WITH ELECTRICAL FOR DEDICATED CIRCUITS FOR EXERCISE EQUIPMENT.
G8	REFRIGERATOR O.F.C.I. COORDINATE WITH PLUMBING FOR UNDERLINE AND ELECTRICAL FOR POWER.
G9	GAS RANGE AND HOOD. SEE MECHANICAL. O.F.C.I.
G10	ADJUSTABLE SHELVING. SEE DETAIL B7 ON A7.11.
G11	DBL BOWL 5.5. SINK. SEE PLUMBING.
G12	WASHER AND DRYER BY OTHERS. COORDINATE WITH MECHANICAL AND ELECTRICAL FOR POWER, HOT AND COLD WATER HOOKUP AND DRYER VENT
G13	DRINKING FOUNTAIN WITH BOTTLE FILLER.
G15	AREA FLOOR DRAIN. SEE PLUMBING.
G16	PREFABRICATED COVERED PATIO CANOPY. SEE DETAILS.
G17	EYE WASH STATION.
G18	INDUSTRIAL TURNOUT GEAR WASHER EXTRACTOR. SEE SPECIFICATIONS.
G19	30" X 30" FIRE RATED ACCESS PANEL. SEE SPECS. SILL HEIGHT WITH ARCHITECT,INCLUDE INTERIOR SIGNAGE. SEE SHEET A9.01.
G20	END CMU SPECIAL SHAPE
G21	END CMU SPECIAL SHAPE. ALIGN AND FLUSH GYP WITH CMU FACE
G22	ALIGN FLUSH ITH CAULK JOINT
G23	RATED PASS THROUGH WINDOW. SEE SPECS.
G24	24" X 24" ACCESS PANEL. SEE SPECS. COORDINATE SILL HEIGHT WITH ARCHITECT.
G25	PROVIDE DOOR STOP MOUNTED INTO SLAB
G26	CLEANOUT FLUSH WITH CONCRETE. SEE PLUMNBING.

GENERAL NOTES - FLOOR PLAN

1.

PLAN NORTH TRUE NORTH

A2 FLOOR PLAN - LEVEL 2

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

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ASHVILLE FIRE STATION #2
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FLOOR PLAN - LEVEL 2

A1.20

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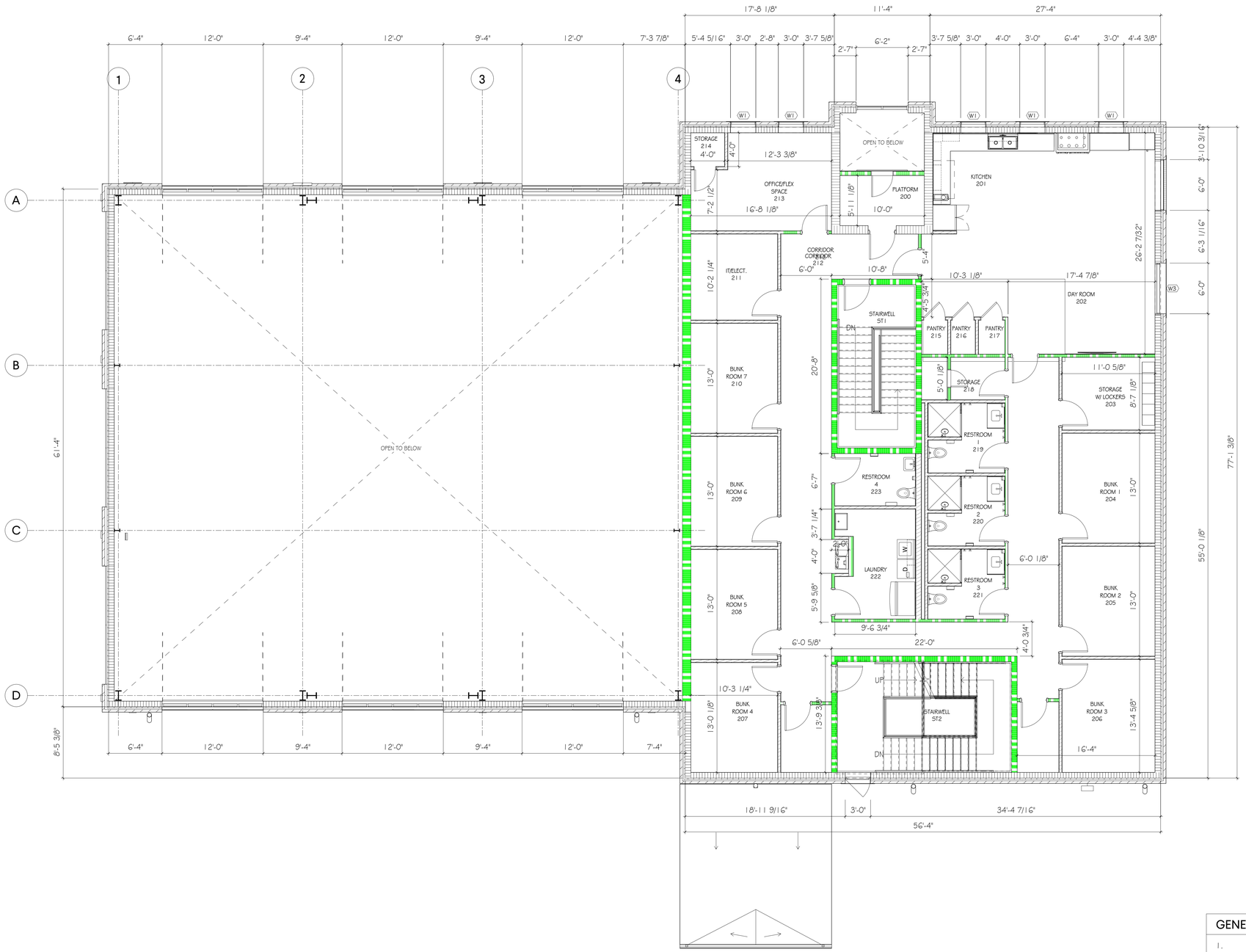

PLAN NORTH

TRUE NORTH

A2 DIMENSION PLAN - LEVEL 2

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

GENERAL NOTES - FLOOR PLAN

1.

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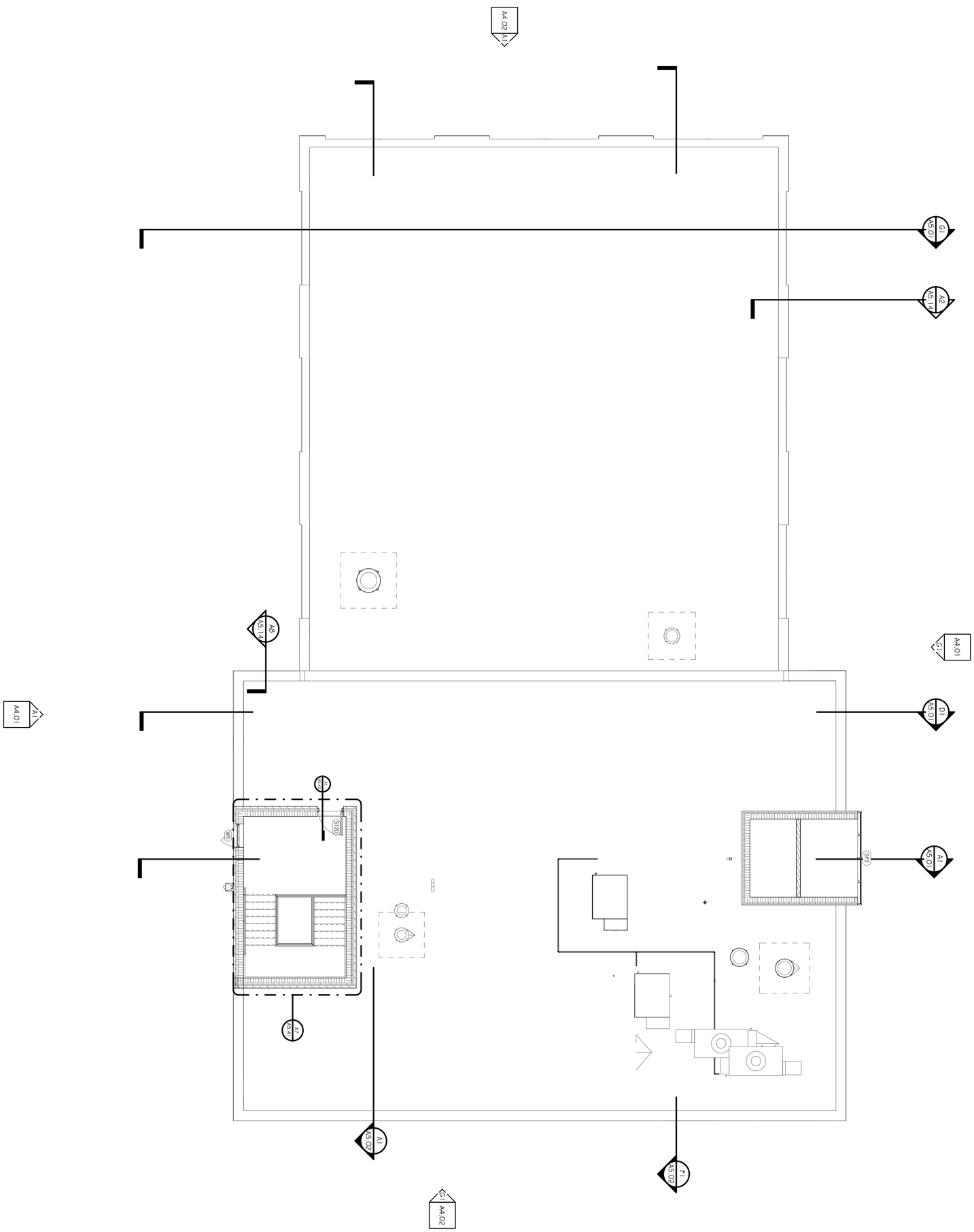
DIMENSION PLAN - LEVEL 2

A1.21

1/13/2026 2:30:32 PM TEMPLATE VERSION: 2025.1

A1 FLOOR PLAN - ROOF

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



FLOOR PLAN - ROOF

A1.30

01/09/2026

STATE of ALABAMA REGISTERED ARCHITECT
Jay W Parkey
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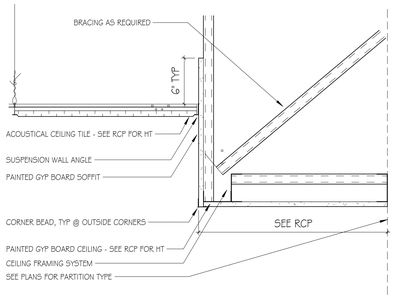
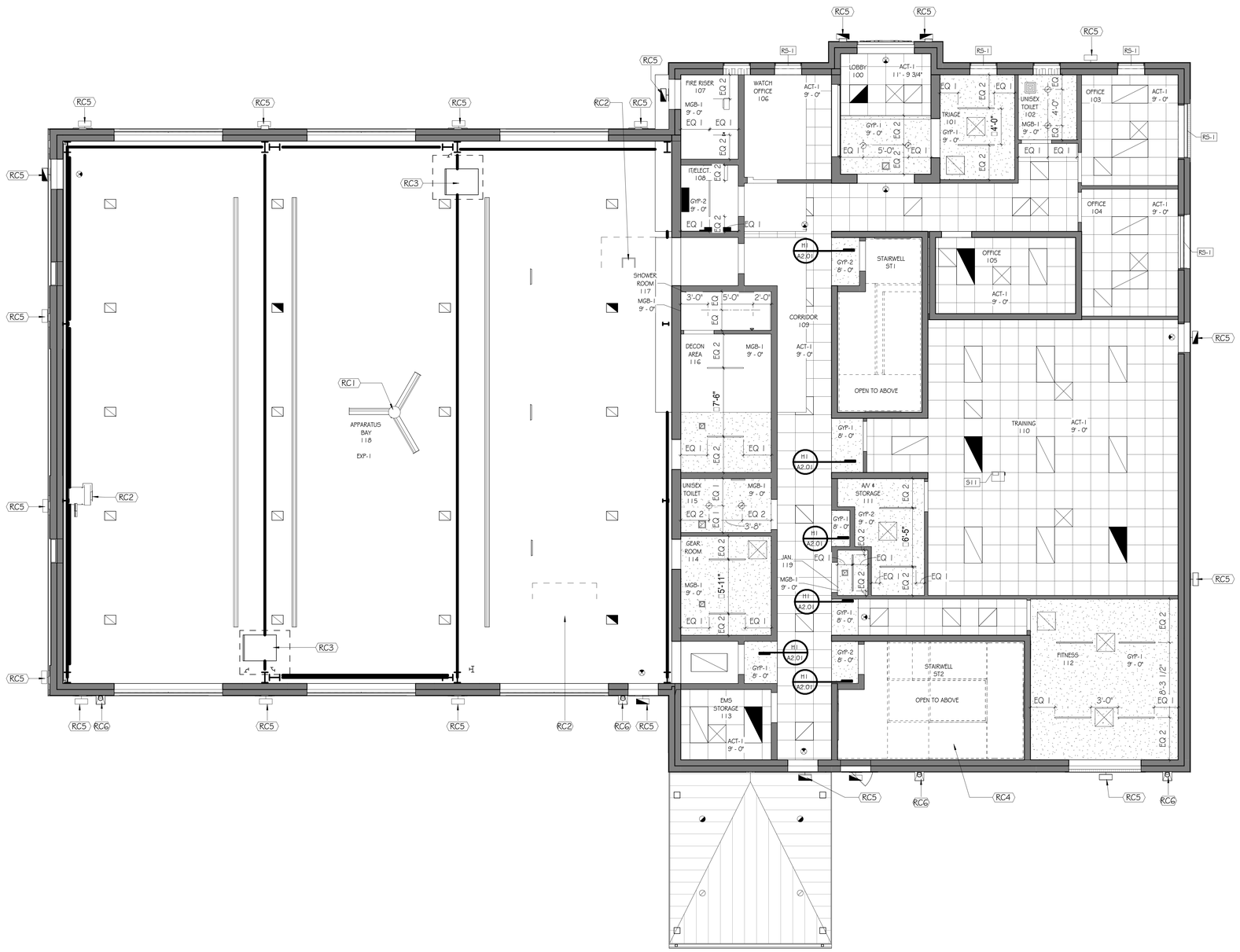


H1 GYP TO ACT SOFFIT
SCALE: 1 1/2" = 1'-0"



PLAN NORTH TRUE NORTH

A2 REFLECTED CEILING PLAN - LEVEL 1
SCALE: 3/16" = 1'-0"

REFLECTED CEILING PLAN LEGEND

CEILING FINISHES:
- LAY-IN ACOUSTICAL CEILING SYSTEM - 2X2'
- LAY-IN ACOUSTICAL CEILING SYSTEM - 2X4'
- GYP BOARD - INTERIOR. EIFS SOFFIT - EXTERIOR
- EXPOSED STRUCTURE
- 2X2 LAY-IN METAL CEILING SYSTEM
- 2X2 LAY-IN WOOD CEILING SYSTEM
- RECESSED LIGHT POCKET

MECHANICAL:
- SUPPLY DIFFUSER
- RETURN AIR GRILLE
- EXHAUST FAN

LIGHTING:
- 2X2 LAY-IN FIXTURE
- 2X4 LAY-IN FIXTURE
- LINEAR SUSPENDED FIXTURE
- LINEAR RECESSED FIXTURE
- LINEAR WALL MT. FIXTURE
- CIRCULAR SURF. MT. FIXTURE
- CIRCULAR PENDANT FIXTURE
- CIRCULAR RECESSED FIXTURE
- CIRCULAR WALL MT.FIXTURE
- EXIT LIGHT

CEILING FINISH LEGEND

NUMBER	TYPE	DETAIL DESCRIPTION
ACT-1	ACOUSTICAL CEILING TILE SYSTEM	MANUFACTURER: ARMSTRONG CEILINGS STYLE: ULTIMA HIGH NRC - SQUARE LAY-IN 15/16" 1940 COLOR: WHITE SIZE: 24" X 24" X 7/8" SUSPENSION SYSTEM: 15/16" PRELUDE - WHITE
GYP-1	GYP BOARD CEILING	PAINTED GYP BOARD CEILING COLOR: PNT-3 (U.N.O. ON RCP)
GYP-2	GYP BOARD CEILING	TYPE X GYP BOARD CEILING - 1 HOUR FIRE RATED COLOR: PNT-3 (U.N.O. ON RCP)
MGB-1	MOISTURE RESISTANT GYP BOARD CEILING	PAINTED GYP BOARD CEILING - MOISTURE RESISTANT COLOR: PNT-3 (U.N.O. ON RCP)
EXP-1	EXPOSED TO STRUCTURE	EXPOSED TO STRUCTURE - WITH NO FINISH

KEY NOTES - REFLECTED CEILING PLAN

KEY	KEYNOTE
RC1	SEE ELECTRICAL AND SPEC. FOR FAN
RC2	EXHAUST FAN SEE MECH.
RC3	GAS FIRED HEATER, SEE MECHANICAL AND ELECTRICAL
RC4	SEE ELECTRICAL FOR LIGHTING IN STAIRWELL
RC5	EXTERIOR WALL SCONCE, TYP. SEE ELECTRICAL
RC6	PREFINISHED SCUPPER BOX & DOWN SPOUT.
RC7	LOCATION OF ACCESS PANEL TO BE COORDINATED IN FIELD.

GENERAL NOTES - REFLECTED CEILING PLAN

1. CEILING HEIGHTS SHALL BE AS NOTED ON REFLECTED CEILING PLANS.
2. WHEREVER POSSIBLE NO CEILING TILE SHOULD BE LESS THAN 6" IN ANY DIRECTION.
3. SEE ELECTRICAL FOR ALL LIGHT FIXTURE TYPES AND SIZES.
4. SEE MECHANICAL FOR ALL DIFFUSER TYPES AND SIZES.
5. SEE INTERIOR ELEVATIONS FOR WALL MOUNTED LIGHT FIXTURE HEIGHT AND LOCATIONS.
6. COORDINATE LOCATIONS OF ALL LIGHTS, DIFFUSERS, AND DEVICES BETWEEN THIS RCP AND MECHANICAL, FIRE PROTECTION, AND ELECTRICAL. NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND BEFORE PROCEEDING.
7. WHERE EXIT SIGNS ARE LOCATED ABOVE DOORWAYS, CENTER FIXTURE OVER DOOR BUT MAINTAIN MINIMUM OVERHEAD CLEARANCE.
8. ALL SPRINKLER HEADS IN ACOUSTIC CEILINGS SHALL BE CENTERED IN CEILING TILE.
9. ALL BULKHEADS TO BE 4" BELOW ADJACENT ACT CEILING UNLESS NOTED OTHERWISE.
10. SEE ELECTRICAL FOR EMERGENCY LIGHTS.
11. PROVIDE CEILING ACCESS PANEL IN ALL RESTROOMS. COORDINATE LOCATION IN FIELD TO BEST ACCESS ABOVE CEILING MECHANICAL EQUIPMENT.

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Jay W Purkey
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Alabama
REGISTERED ARCHITECT

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REFLECTED CEILING PLAN - LEVEL 1

A2.01

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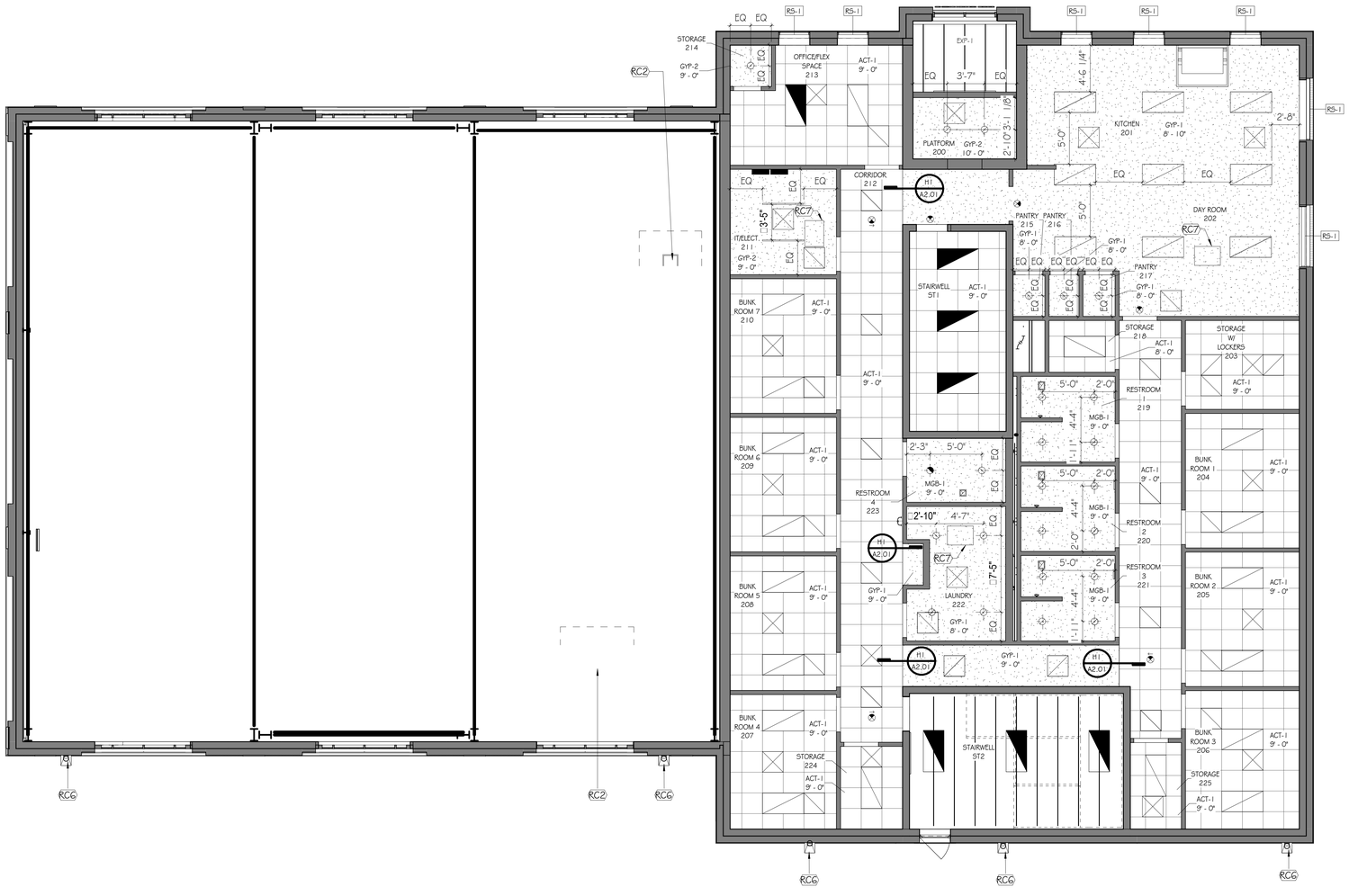

A1 REFLECTED CEILING PLAN - LEVEL 2

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

REFLECTED CEILING PLAN LEGEND

CEILING FINISHES:

- LAY-IN ACOUSTICAL CEILING SYSTEM - 2X2'
- LAY-IN ACOUSTICAL CEILING SYSTEM - 2X4'
- GYP BOARD - INTERIOR EIFS SOFFIT - EXTERIOR
- EXPOSED STRUCTURE
- 2X2 LAY-IN METAL CEILING SYSTEM
- 2X2 LAY-IN WOOD CEILING SYSTEM
- RECESSED LIGHT POCKET

LIGHTING:

- 2X2 LAY-IN FIXTURE
- 2X4 LAY-IN FIXTURE
- LINEAR SUSPENDED FIXTURE
- LINEAR RECESSED FIXTURE
- LINEAR WALL MT. FIXTURE
- CIRCULAR SURF. MT. FIXTURE
- CIRCULAR PENDANT FIXTURE
- CIRCULAR RECESSED FIXTURE
- CIRCULAR WALL MT.FIXTURE
- EXIT LIGHT

MECHANICAL:

- SUPPLY DIFFUSER
- RETURN AIR GRILLE
- EXHAUST FAN

CEILING FINISH LEGEND

NUMBER	TYPE	DETAIL DESCRIPTION
ACT-1	ACOUSTICAL CEILING TILE SYSTEM	MANUFACTURER: ARMSTRONG CEILINGS STYLE: ULTIMA HIGH NRC - SQUARE LAY-IN 15/16" 1940 COLOR: WHITE SIZE: 24" X 24" X 7/8" SUSPENSION SYSTEM: 15/16" PRELUDE - WHITE
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GYP-2	GYP BOARD CEILING	TYPE X GYP BOARD CEILING - 1 HOUR FIRE RATED COLOR: PNT-3 (U.N.O. ON RCP)
MGB-1	MOISTURE RESISTANT GYP BOARD CEILING	PAINTED GYP BOARD CEILING - MOISTURE RESISTANT COLOR: PNT-3 (U.N.O. ON RCP)
EXP-1	EXPOSED TO STRUCTURE	EXPOSED TO STRUCTURE - WITH NO FINISH

KEY NOTES - REFLECTED CEILING PLAN

KEY	KEYNOTE
RC1	SEE ELECTRICAL AND SPEC. FOR FAN
RC2	EXHAUST FAN SEE MECH.
RC3	GAS FIRED HEATER, SEE MECHANICAL AND ELECTRICAL
RC4	SEE ELECTRICAL FOR LIGHTING IN STAIRWELL
RC5	EXTERIOR WALL SCONCE, TYP. SEE ELECTRICAL
RC6	PREFINISHED SCUPPER BOX & DOWN SPOUT.
RC7	LOCATION OF ACCESS PANEL TO BE COORDINATED IN FIELD.

GENERAL NOTES - REFLECTED CEILING PLAN

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9. ALL BULKHEADS TO BE 4" BELOW ADJACENT ACT CEILING UNLESS NOTED OTHERWISE.
10. SEE ELECTRICAL FOR EMERGENCY LIGHTS.
11. PROVIDE CEILING ACCESS PANEL IN ALL RESTROOMS. COORDINATE LOCATION IN FIELD TO BEST ACCESS ABOVE CEILING MECHANICAL EQUIPMENT.

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REFLECTED CEILING PLAN - LEVEL 2

A2.02

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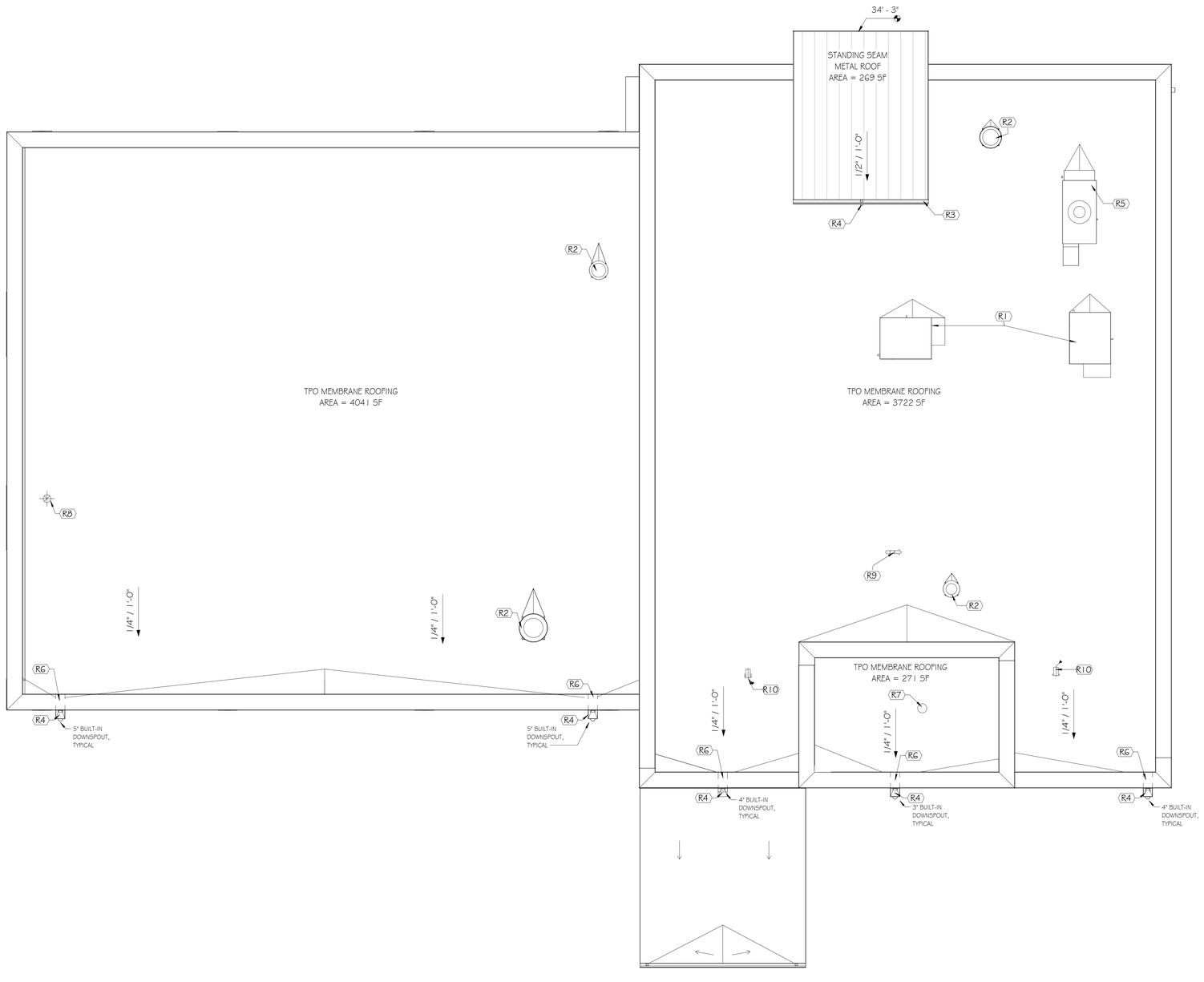

KEY NOTES - ROOF PLAN

KEY	KEYNOTE
R1	ROOFTOP AIR-HANDELING UNIT. SEE MECH.
R2	FAN. SEE MECH.
R3	PREFINISHED BUILT-IN 6X6 METAL GUTTERS.
R4	DOWNSPOUT.
R5	SUPPLY AIR UNIT. SEE MECH.
R6	THROUGH-WALL SCUPPER WITH OVERFLOW.
R7	OWNER PROVIDED COMMUNICATION ANTENNA. INSTALLED BY OTHER. COORDINATE WITH ELECTRICAL.
R8	PIPE VENT
R9	CLOTHES DRYER EXHAUST. SEE MECH.
R10	RETURN AIR. SEE MECH.
RC1	SEE ELECTRICAL AND SPEC. FOR FAN
RC2	EXHAUST FAN SEE MECH.
RC3	GAS FIRED HEATER, SEE MECHANICAL AND ELECTRICAL
RC4	SEE ELECTRICAL FOR LIGHTING IN STAIRWELL
RC5	EXTERIOR WALL SCONCE, TYP. SEE ELECTRICAL
RC6	PREFINISHED SCUPPER BOX & DOWN SPOUT.
RC7	LOCATION OF ACCESS PANEL TO BE COORDINATED IN FIELD.

GENERAL NOTES - ROOF PLAN

1. ENTER GENERAL NOTES HERE

PLAN NORTH TRUE NORTH

A2 ROOF PLAN
SCALE: 3/16" = 1'-0"

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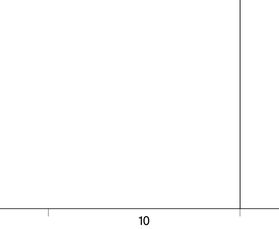

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ROOF PLAN
A3.01

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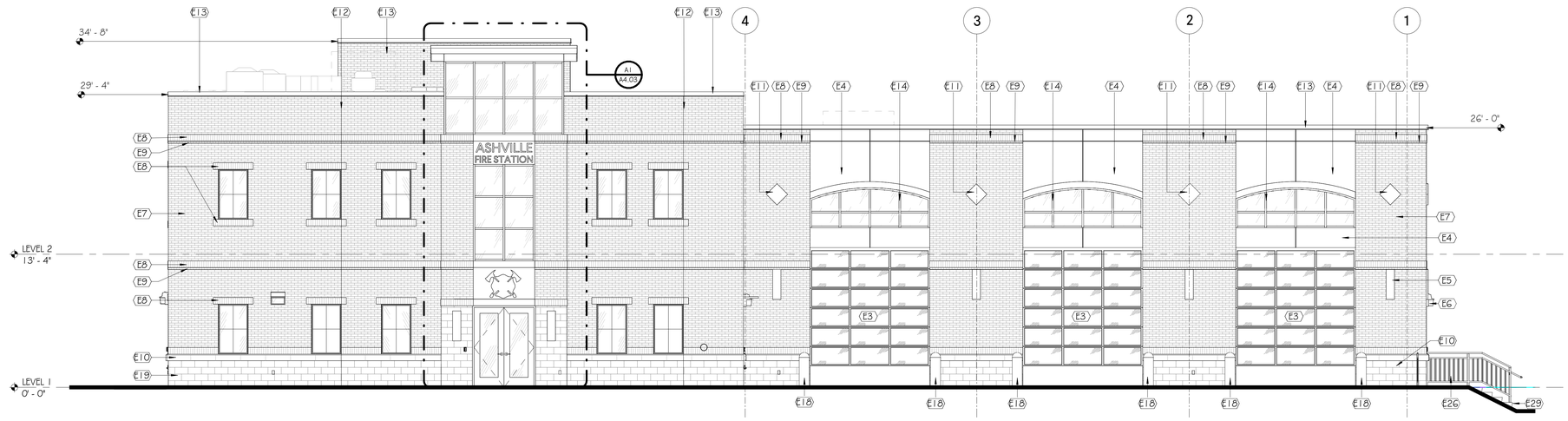
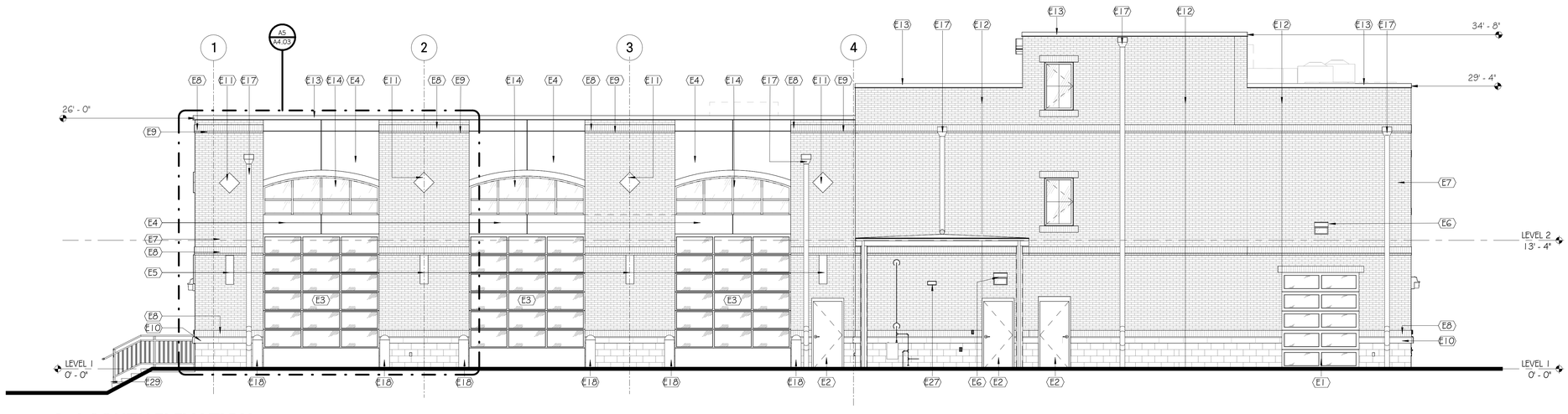


G1 NORTH ELEVATION
SCALE: 3/16" = 1'-0"



A1 SOUTH ELEVATION
SCALE: 3/16" = 1'-0"

KEY NOTES - EXTERIOR ELEVATIONS

KEY	KEYNOTE
E1	OVERHEAD ROLLING DOOR.
E2	HOLLOW METAL EXTERIOR DOOR. SEE DOOR SCHEDULE.
E3	OVERHEAD DOOR
E4	ACM PANELING.
E5	UP/DOWN WALL SCONCE. SEE ELEC.
E6	WALL PACK SECURITY. SEE ELEC.
E7	FIELD BRICK.
E8	BRICK SOLDIER COURSE.
E9	BRICK HEADER COURSE.
E10	CAST STONE WATER TABLE.
E11	CAST STONE MEDALLION
E12	MASONRY CONTROL JOINT.
E13	PRE-FINISHED METAL COPING.
E14	ALUMINUM FRAMED STOREFRONT SYSTEM.
E15	PRE-FINISHED METAL LOUVER.
E16	10" FASCIA
E17	PREFINISHED SCUPPER BOX & DOWN SPOUT.
E18	DECORATIVE BOLLARD, METAL. SEE SPECS.
E19	CAST STONE.
E20	CARD READER. SEE ELEC.
E21	EXT. WALL OUTLET. SEE ELEC.
E22	MTL. LOGO. SEE SPECIFICATIONS.
E23	PREFABRICATED MTL. CANOPY
E24	STEEL PIPE, SEE PLUMB.
E25	GAS METER. SEE MECH.
E26	PAINTED STEEL GUARDRAIL (WITH HANDRAIL WHERE REQUIRED).
E27	SPEAKER. SEE ELEC.
E28	40' FLAG POLE.
E29	COORDINATE STAIR GRADES WITH CIVIL.
E30	PREFINISHED GUTTER & DOWN SPOUT.

GENERAL NOTES - EXTERIOR ELEVATIONS

1. EXTERIOR ELEVATIONS ARE TO EXPRESS DESIGN INTENT. REFER TO SECTIONS FOR FURTHER DETAIL.

2. DO NOT SCALE ELEVATIONS. IF DIMENSIONS OR PLACEMENT OF ANY ITEM IS IN QUESTION, CONTACT THE ARCHITECT.

GMC

Goodwyn Mills Cawood, LLC
117 Jefferson Street North
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CHECKED BY: JP

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

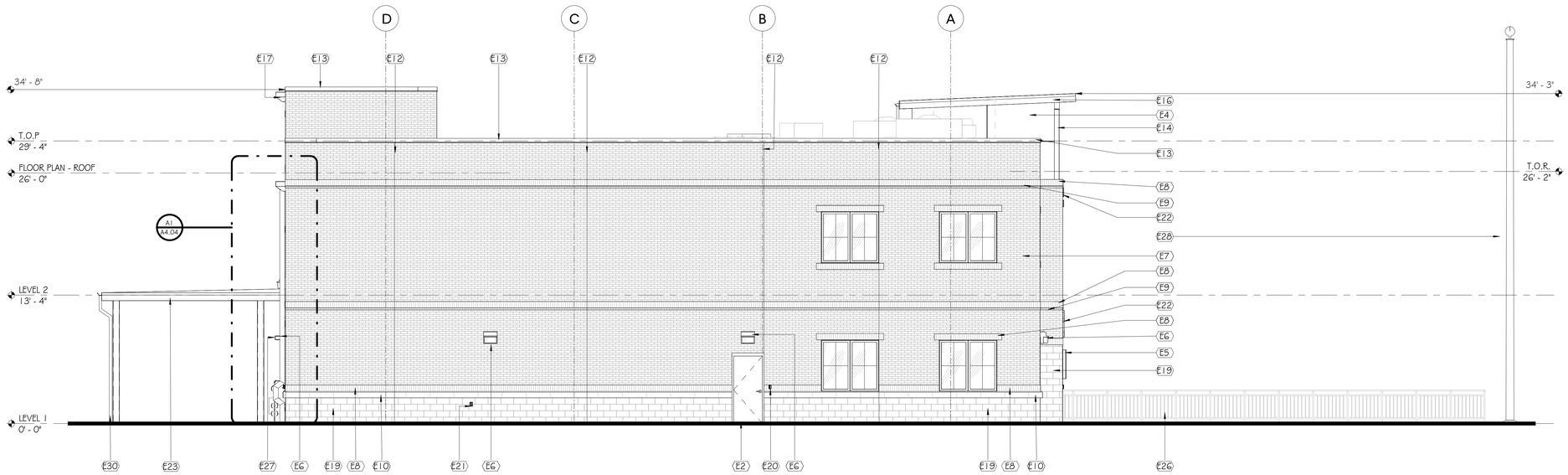
STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

EXTERIOR ELEVATIONS

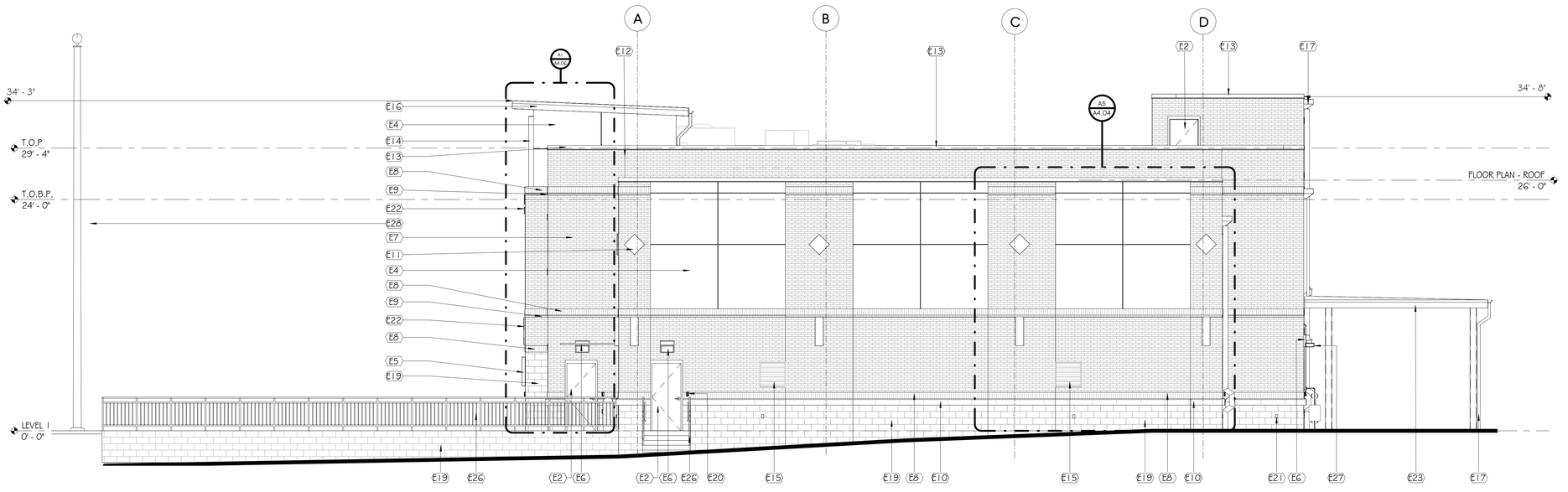
A4.01

1/13/2026 2:30:43 PM TEMPLATE VERSION: 2025.1



G1 EAST ELEVATION

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



A1 WEST ELEVATION

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

KEY NOTES - EXTERIOR ELEVATIONS

KEY	KEYNOTE
E1	OVERHEAD ROLLING DOOR.
E2	HOLLOW METAL EXTERIOR DOOR. SEE DOOR SCHEDULE.
E3	OVERHEAD DOOR
E4	ACM PANELING.
E5	UP/DOWN WALL SCONCE. SEE ELEC.
E6	WALL PACK SECURITY. SEE ELEC.
E7	FIELD BRICK.
E8	BRICK SOLDIER COURSE.
E9	BRICK HEADER COURSE.
E10	CAST STONE WATER TABLE.
E11	CAST STONE MEDALLION
E12	MASONRY CONTROL JOINT.
E13	PRE-FINISHED METAL COPING.
E14	ALUMINUM FRAMED STOREFRONT SYSTEM.
E15	PRE-FINISHED METAL LOUVER.
E16	10" FASCIA
E17	PREFINISHED SCUPPER BOX & DOWN SPOUT.
E18	DECORATIVE BOLLARD, METAL. SEE SPECS.
E19	CAST STONE.
E20	CARD READER. SEE ELEC.
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E25	GAS METER. SEE MECH.
E26	PAINTED STEEL GUARDRAIL (WITH HANDRAIL WHERE REQUIRED).
E27	SPEAKER. SEE ELEC.
E28	40' FLAG POLE.
E29	COORDINATE STAIR GRADES WITH CIVIL.
E30	PREFINISHED GUTTER & DOWN SPOUT.

GENERAL NOTES - EXTERIOR ELEVATIONS

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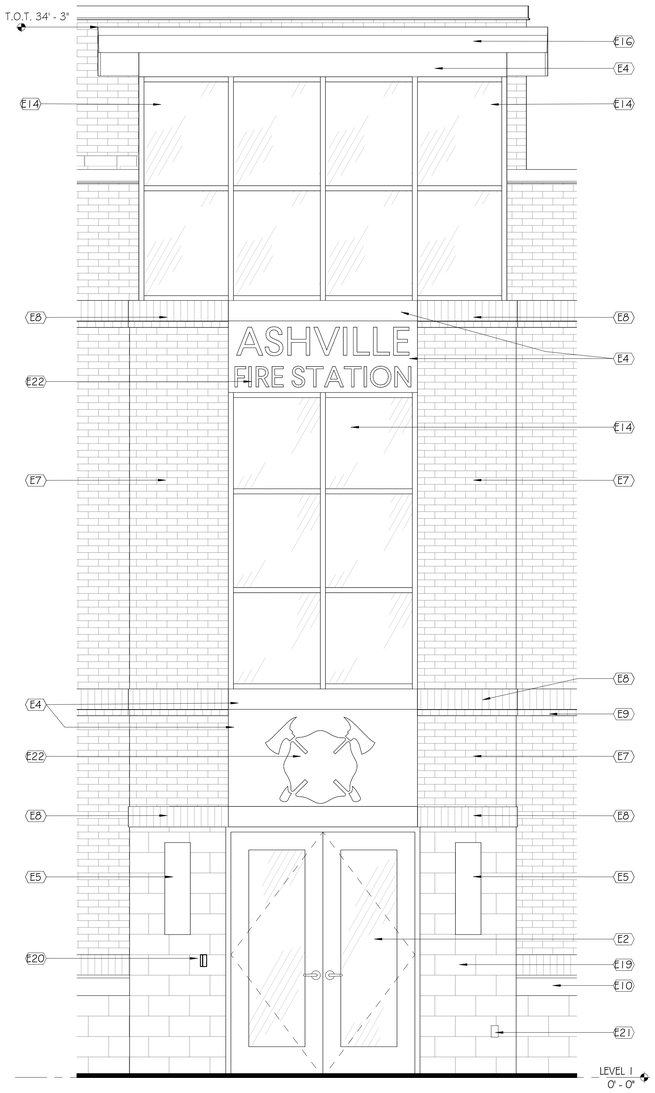
STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

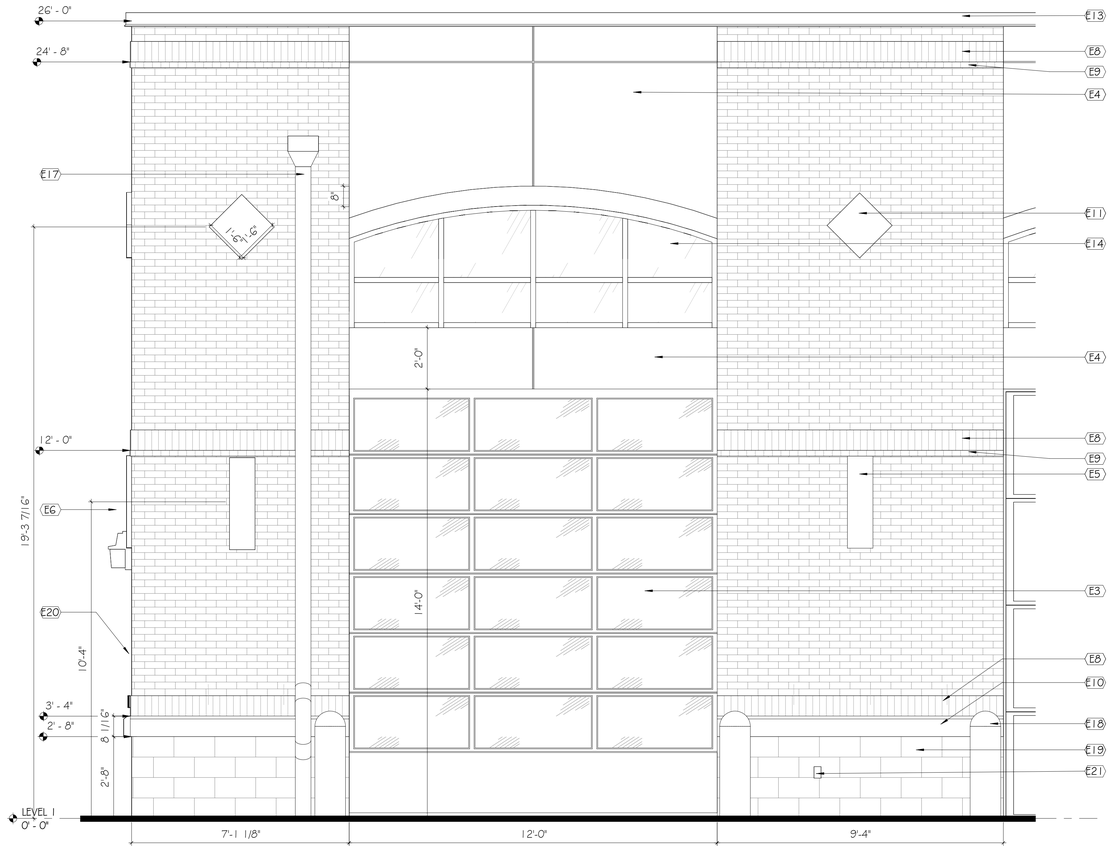
01/09/2026

EXTERIOR ELEVATIONS

A4.02

1/13/2026 2:30:47 PM TEMPLATE VERSION: 2025.1





KEY NOTES - EXTERIOR ELEVATIONS

KEY	KEYNOTE
E1	OVERHEAD ROLLING DOOR.
E2	HOLLOW METAL EXTERIOR DOOR. SEE DOOR SCHEDULE.
E3	OVERHEAD DOOR
E4	ACM PANELING.
E5	UP/DOWN WALL SCONCE. SEE ELEC.
E6	WALL PACK SECURITY. SEE ELEC.
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E8	BRICK SOLDIER COURSE.
E9	BRICK HEADER COURSE.
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E28	40' FLAG POLE.
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E30	PREFINISHED GUTTER & DOWN SPOUT.

GENERAL NOTES - EXTERIOR ELEVATIONS

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A1 TOWER
SCALE: 1/2" = 1'-0"

A5 APPARATUS BAY - SOUTH
SCALE: 1/2" = 1'-0"

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ENLARGED EXTERIOR ELEVATIONS

A4.03

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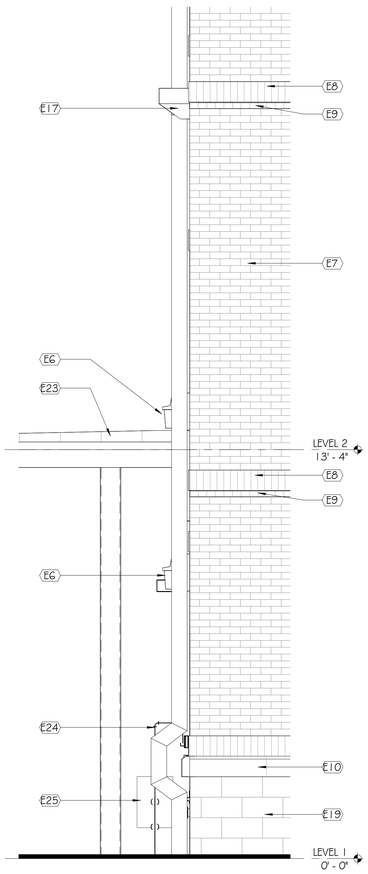
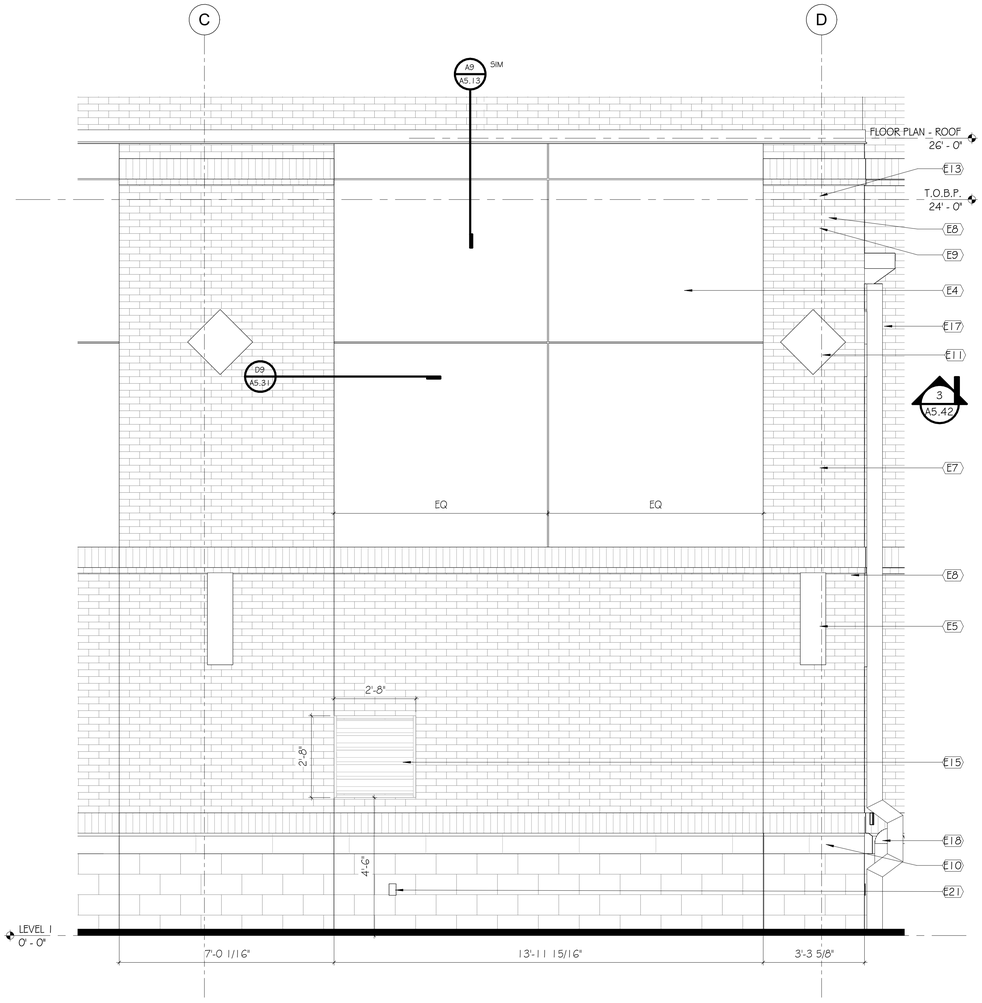


A1 EAST - Callout 1

SCALE: 1/2" = 1'-0"



A5 WEST - Callout 1

SCALE: 1/2" = 1'-0"

KEY NOTES - EXTERIOR ELEVATIONS

KEY	KEYNOTE
E1	OVERHEAD ROLLING DOOR.
E2	HOLLOW METAL EXTERIOR DOOR. SEE DOOR SCHEDULE.
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ASHVILLE FIRE STATION #2
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Owens Cross Roads, Alabama
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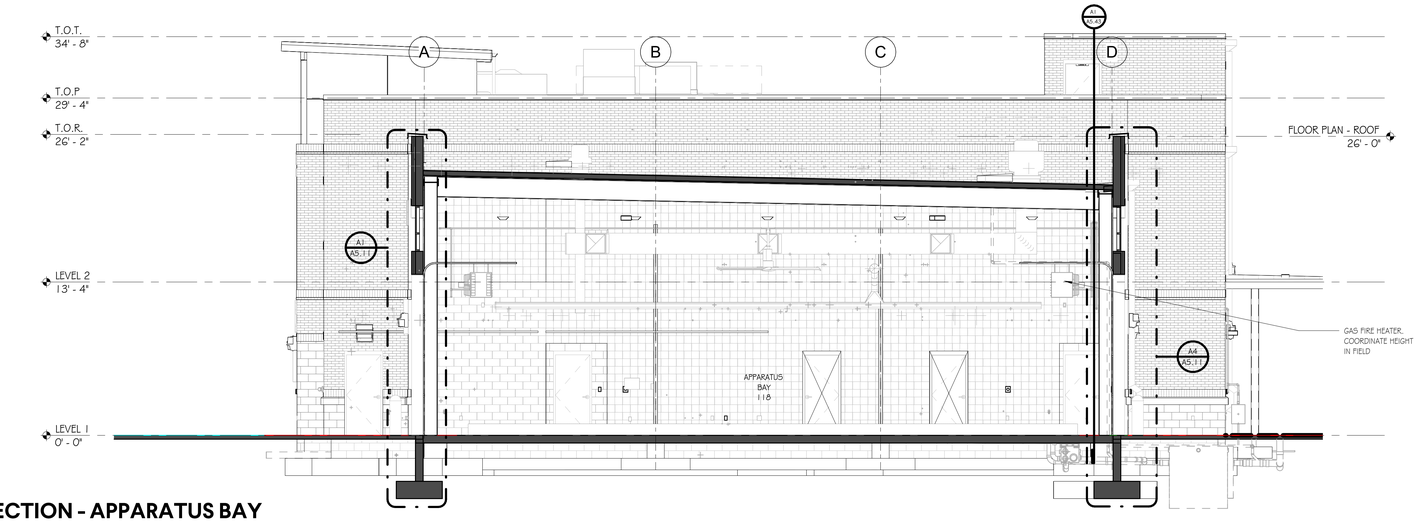
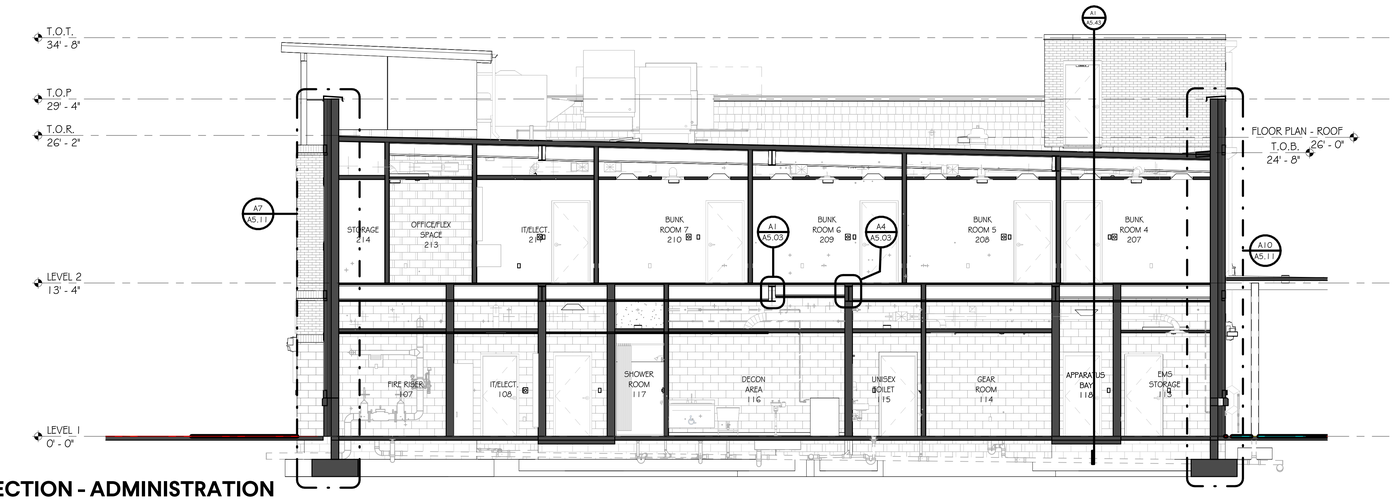
ENLARGED EXTERIOR ELEVATIONS

A4.04

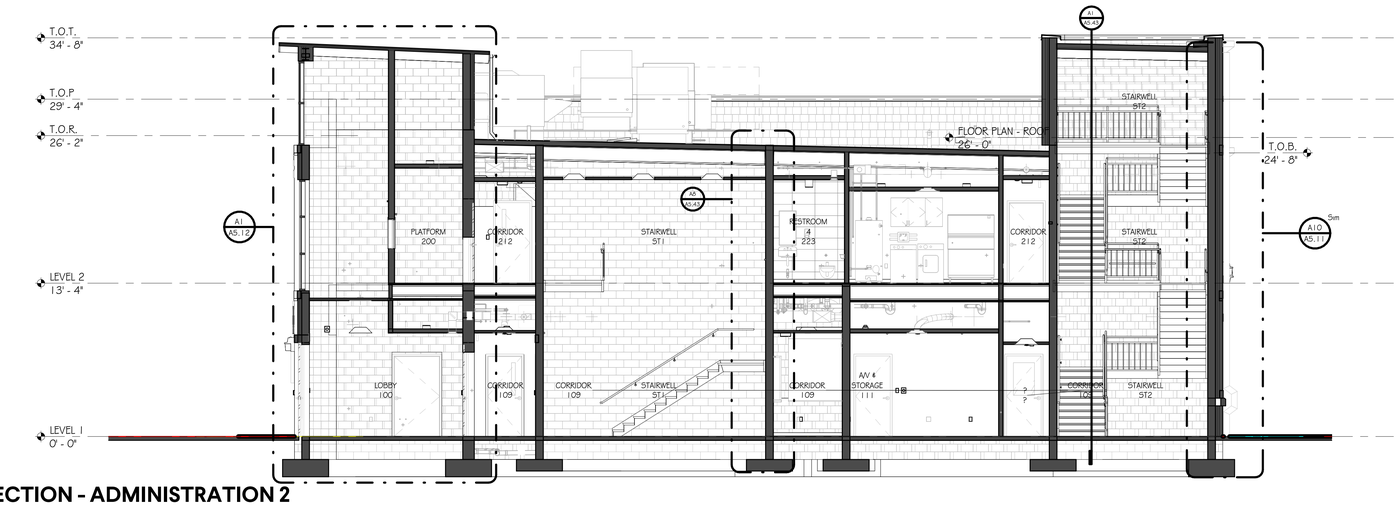
1/13/2026 2:30:51 PM TEMPLATE VERSION: 2025.1



G1 BUILDING SECTION - APPARATUS BAY
SCALE: 3/16" = 1'-0"



D1 BUILDING SECTION - ADMINISTRATION
SCALE: 3/16" = 1'-0"



A1 BUILDING SECTION - ADMINISTRATION 2
SCALE: 3/16" = 1'-0"

GENERAL NOTES - BUILDING SECTIONS
1. ENTER GENERAL NOTES HERE

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Owens Cross Roads, Alabama
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BUILDING SECTIONS

A5.01

1/13/2026 2:30:58 PM TEMPLATE VERSION: 2025.1

BUILDING SECTIONS

ASHVILLE FIRE STATION #2
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GMC # AHUN250003

STATE of ALABAMA — ARCHITECT — REGISTERED
Jay W Purkey
9063
Owens Cross Roads
Alabama

01/09/2026

A5.02

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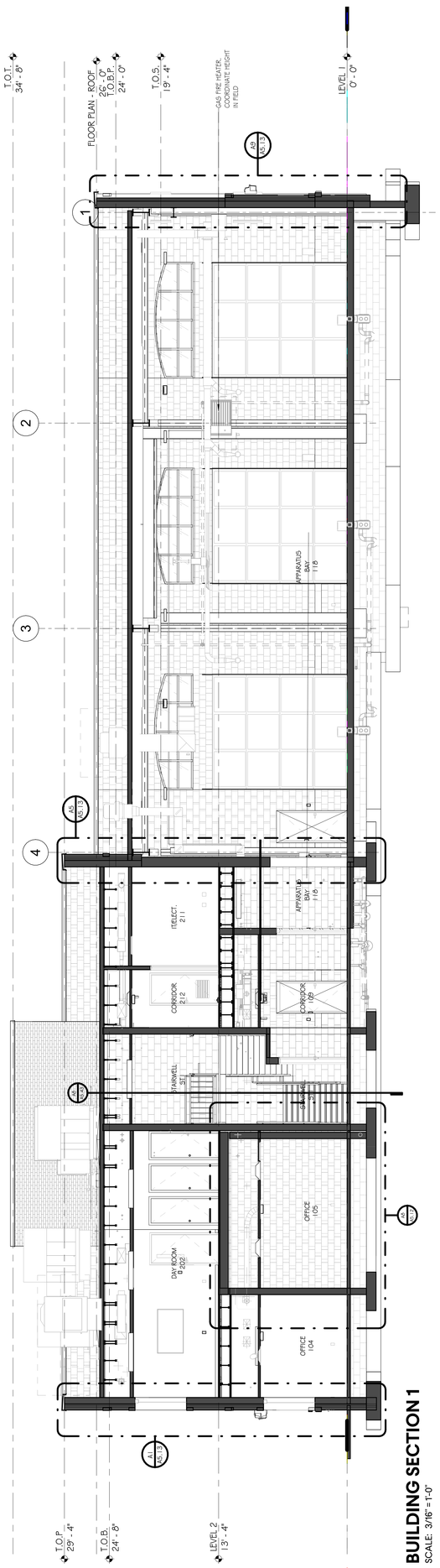
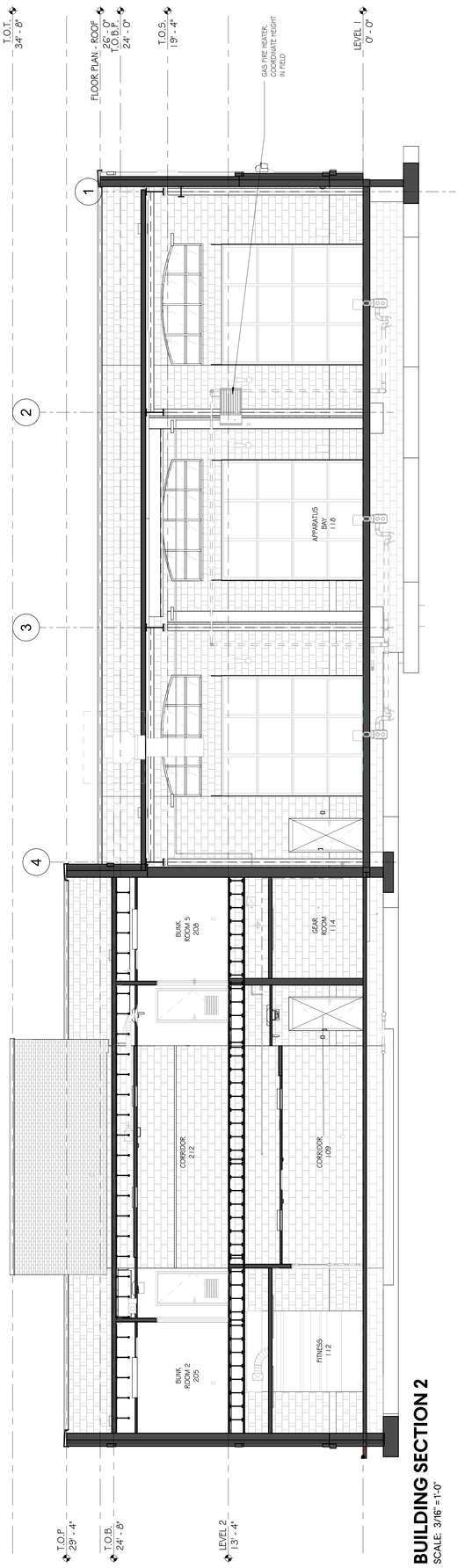
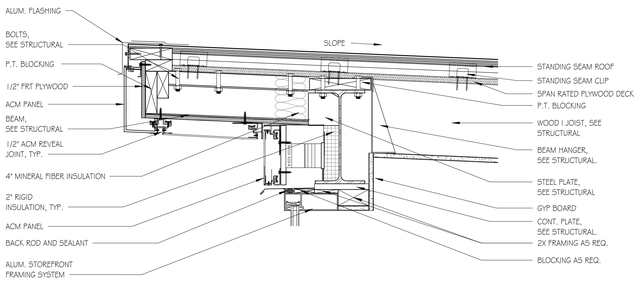


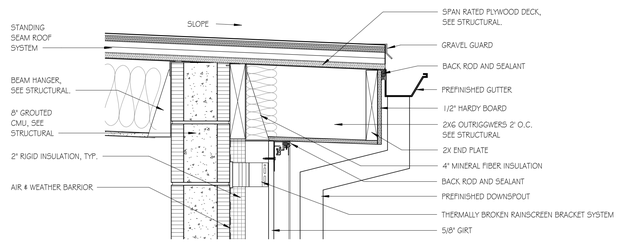
F1 BUILDING SECTION 1
SCALE: 3/16" = 1'-0"



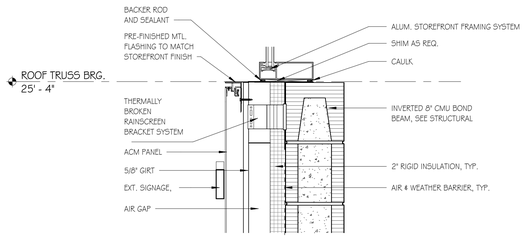
A1 BUILDING SECTION 2
SCALE: 3/16" = 1'-0"



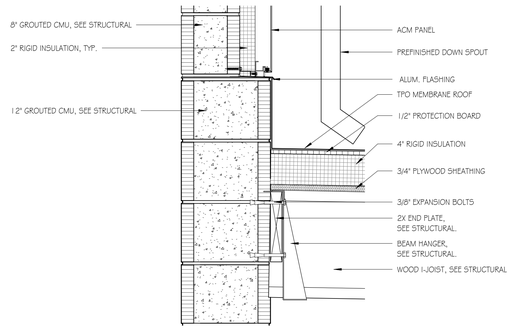
H1 DETAIL - FRONT TOWER ROOF
SCALE: 1 1/2" = 1'-0"



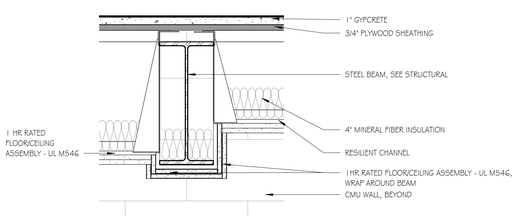
H5 DETAIL - BACK TOWER ROOF
SCALE: 1 1/2" = 1'-0"



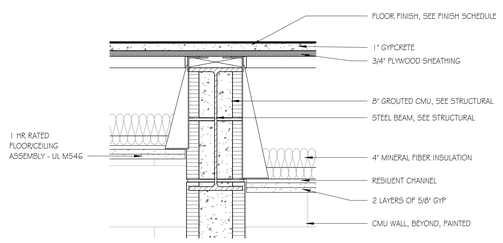
E1 DETAIL - TOWER STOREFRONT CONNECTION
SCALE: 1 1/2" = 1'-0"



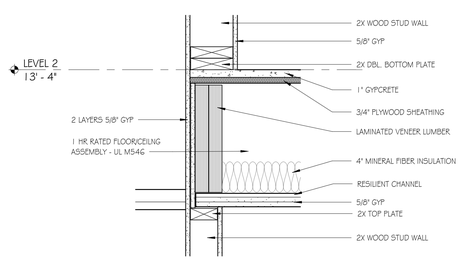
E5 DETAIL - TOWER TO ROOF CONNECTION
SCALE: 1 1/2" = 1'-0"



A1 DETAIL - STEEL BEAM
SCALE: 1 1/2" = 1'-0"



A4 DETAIL - AT CMU & STEEL BEAM
SCALE: 1 1/2" = 1'-0"



A7 DETAIL - AT STUD WALL & WOOD JOIST
SCALE: 1 1/2" = 1'-0"

GMC

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7 Town Center Drive, Suite 201
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STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

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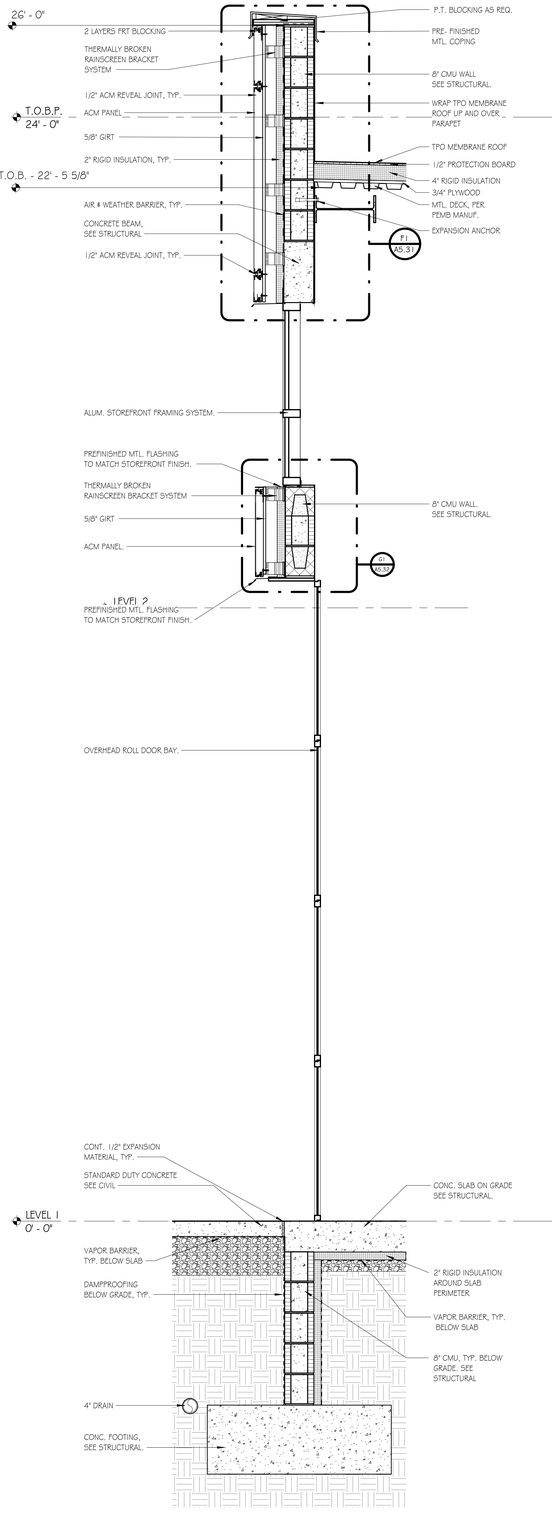
BUILDING SECTION DETAILS

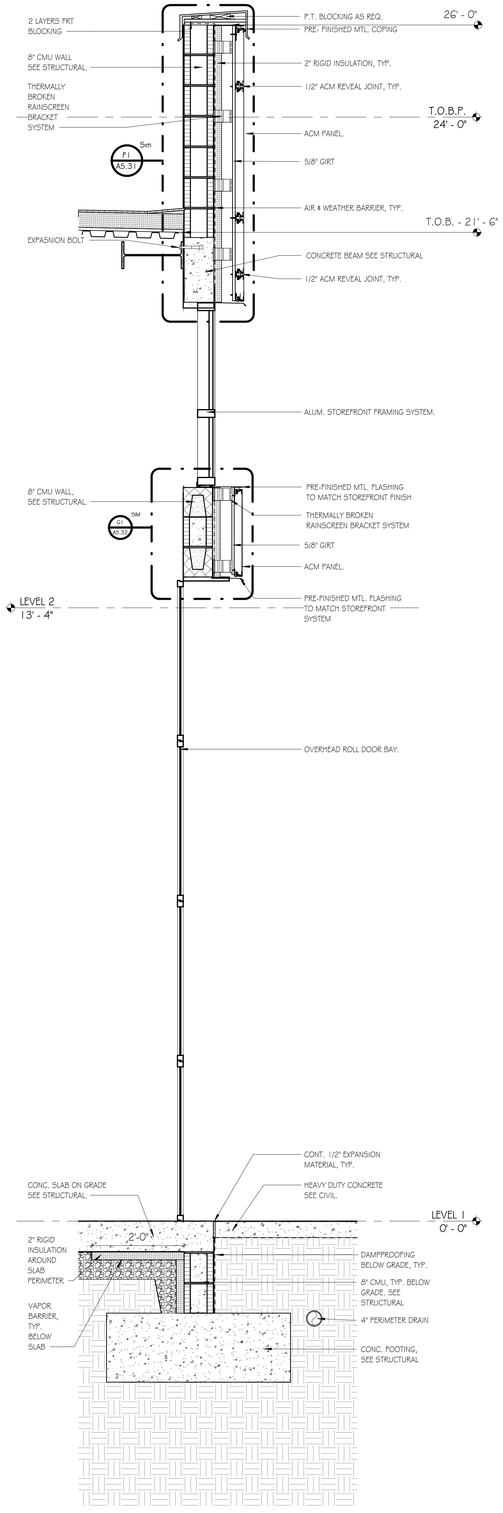
A5.03

TEMPLATE VERSION: 2025.1
1/13/2026 2:43:41 PM

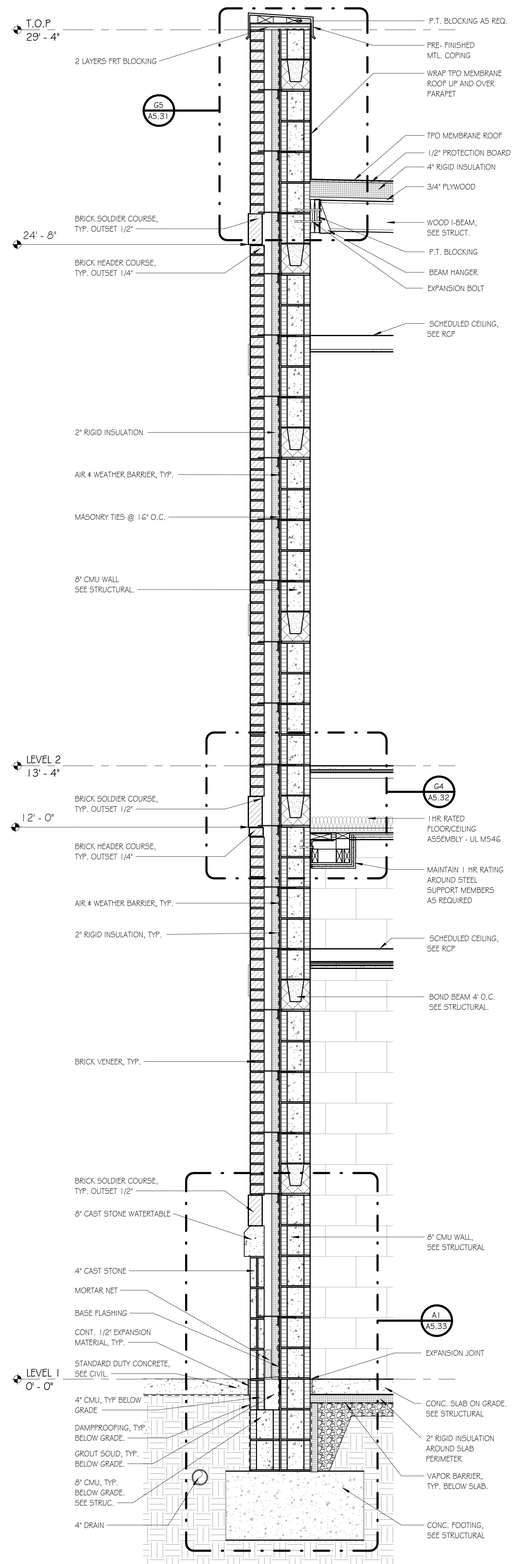


A1 APPARATUS BAY DOORS NORTH
SCALE: 3/4" = 1'-0"

NOTE:
REFER TO DRAWING A1/A5.11 FOR SIMILAR NOTES AND DIMENSIONS U.N.O.

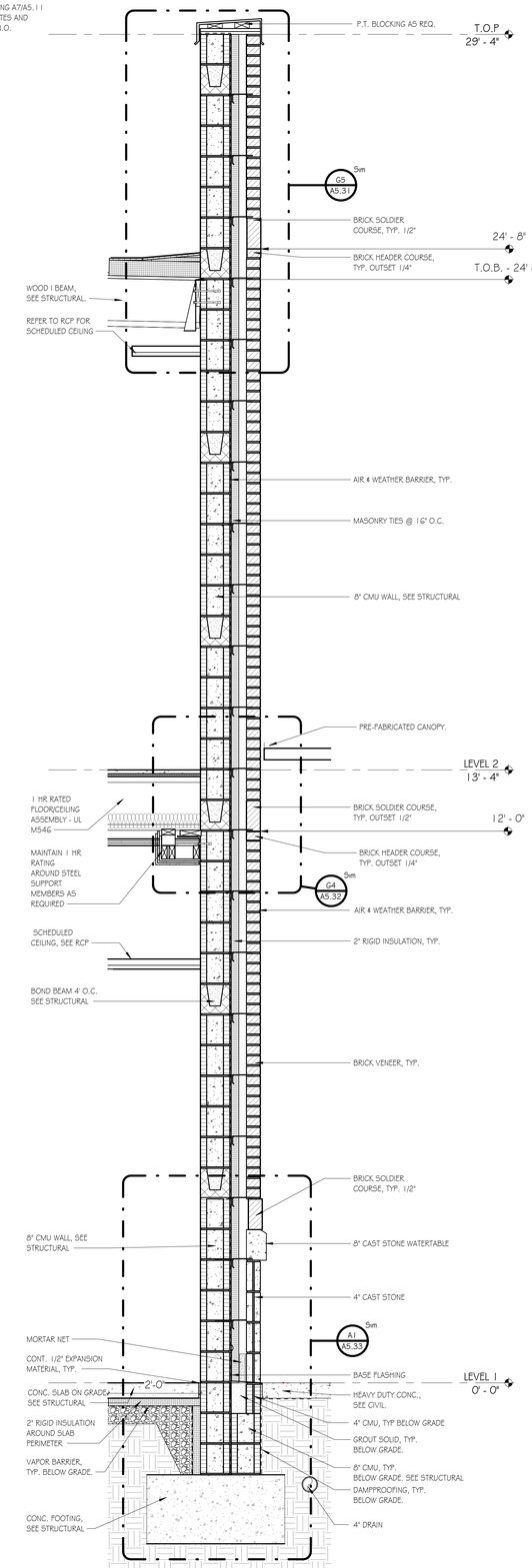


A4 APPARATUS BAY DOORS SOUTH
SCALE: 3/4" = 1'-0"



A7 FIRE RISER- NORTH WALL
SCALE: 3/4" = 1'-0"

NOTE:
REFER TO DRAWING A7/A5.11 FOR SIMILAR NOTES AND DIMENSIONS U.N.O.



A10 EMS STORAGE - SOUTH WALL
SCALE: 3/4" = 1'-0"

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WALL SECTIONS

A5.11

TEMPLATE VERSION: 2025.1
1/13/2026 2:31:04 PM

WALL SECTIONS

ASHVILLE FIRE STATION #2

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A5.12

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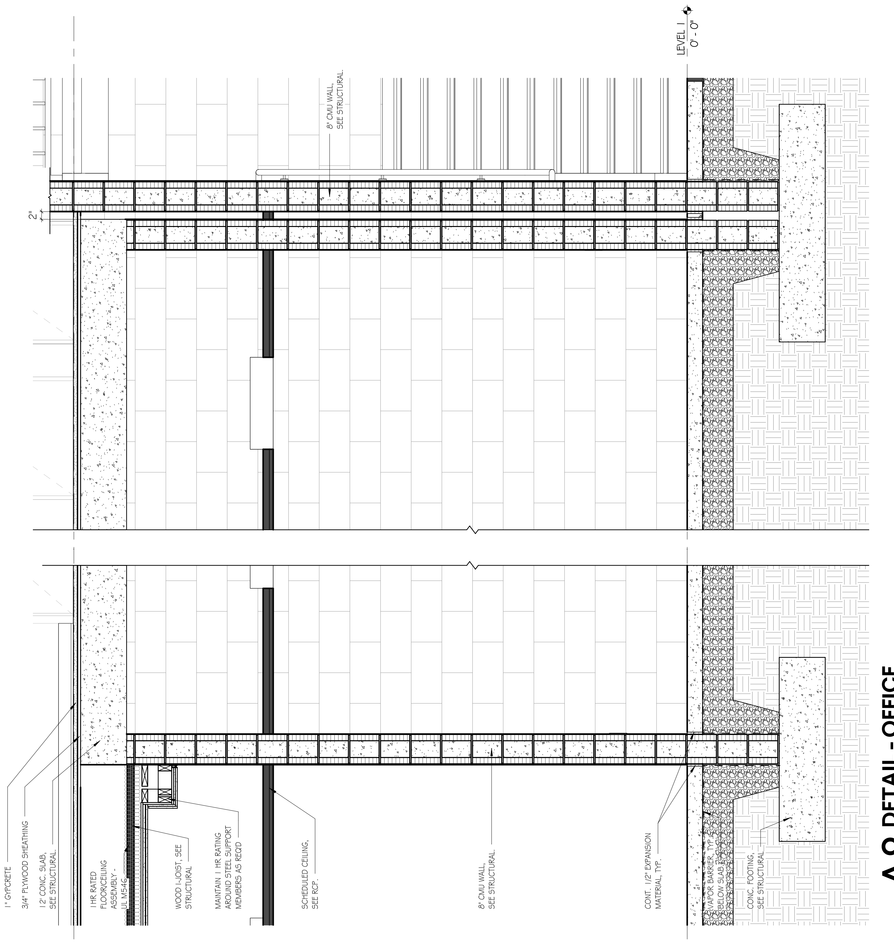
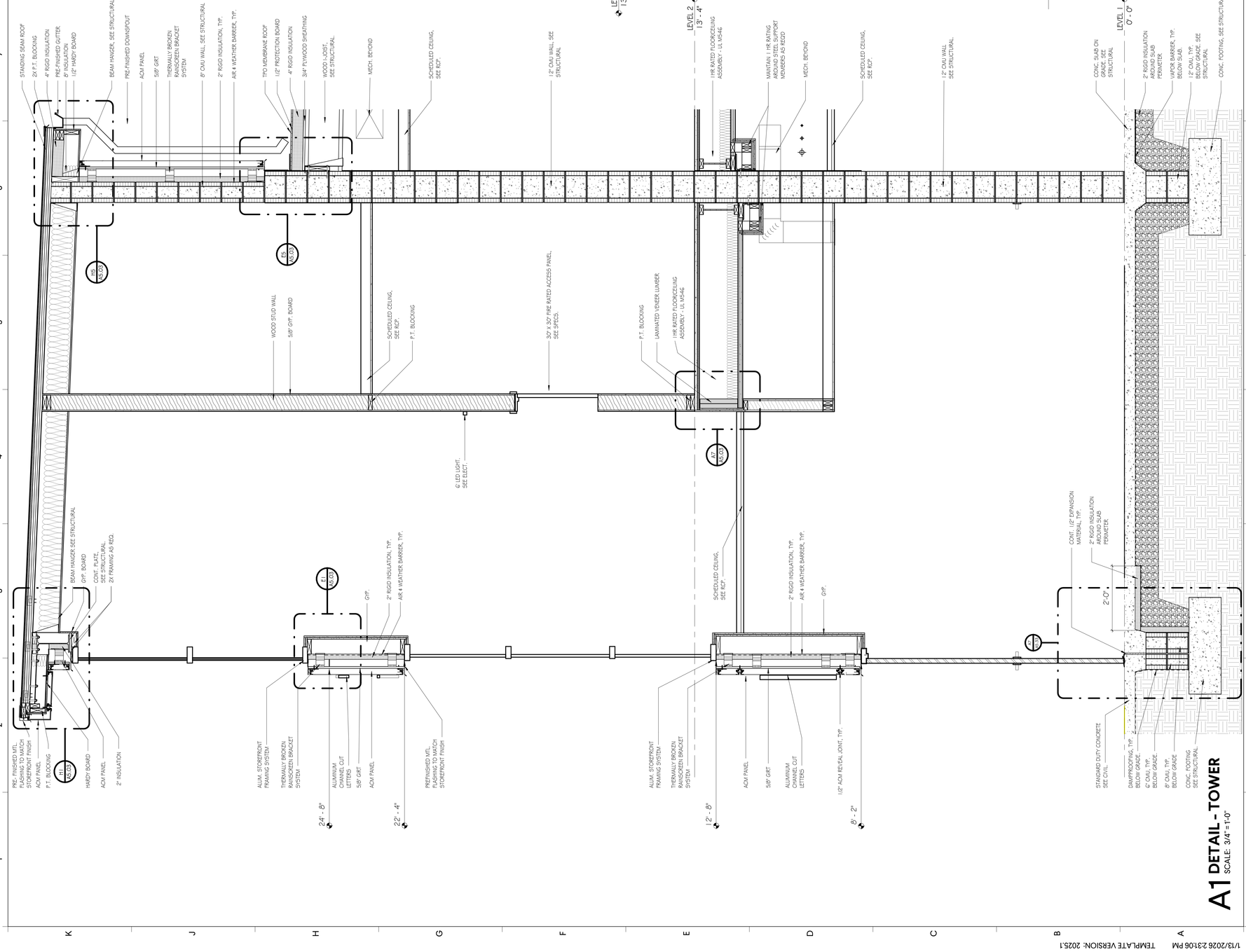


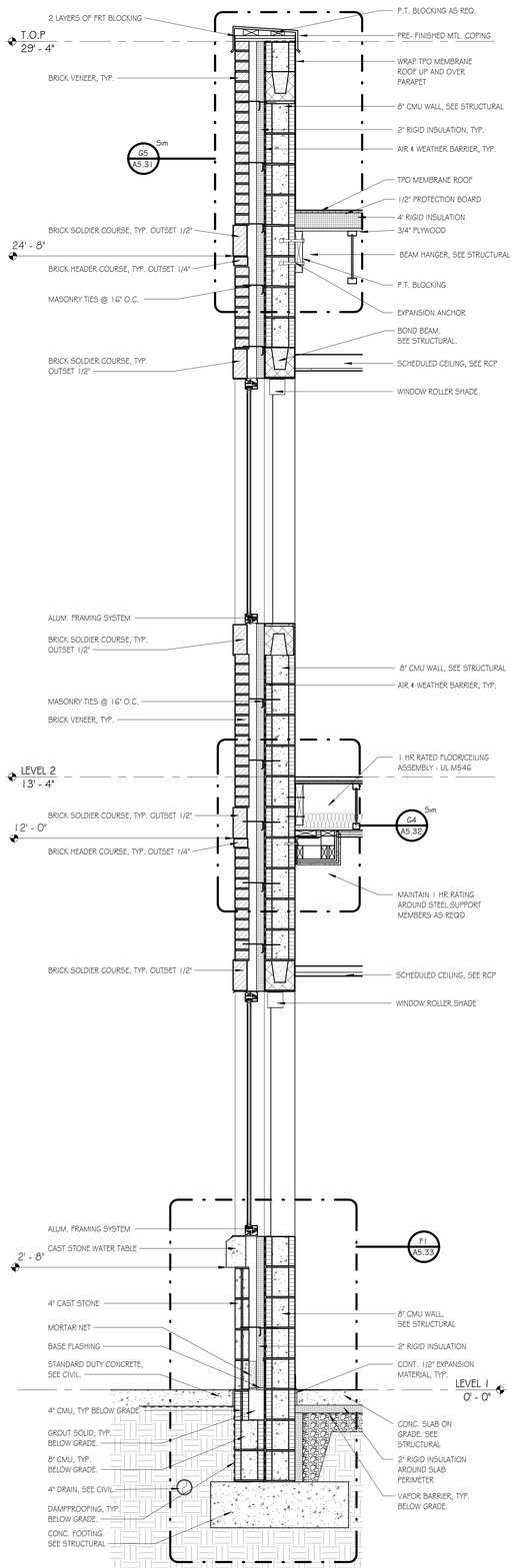
A8 DETAIL - OFFICE

SCALE: 3/4" = 1'-0"



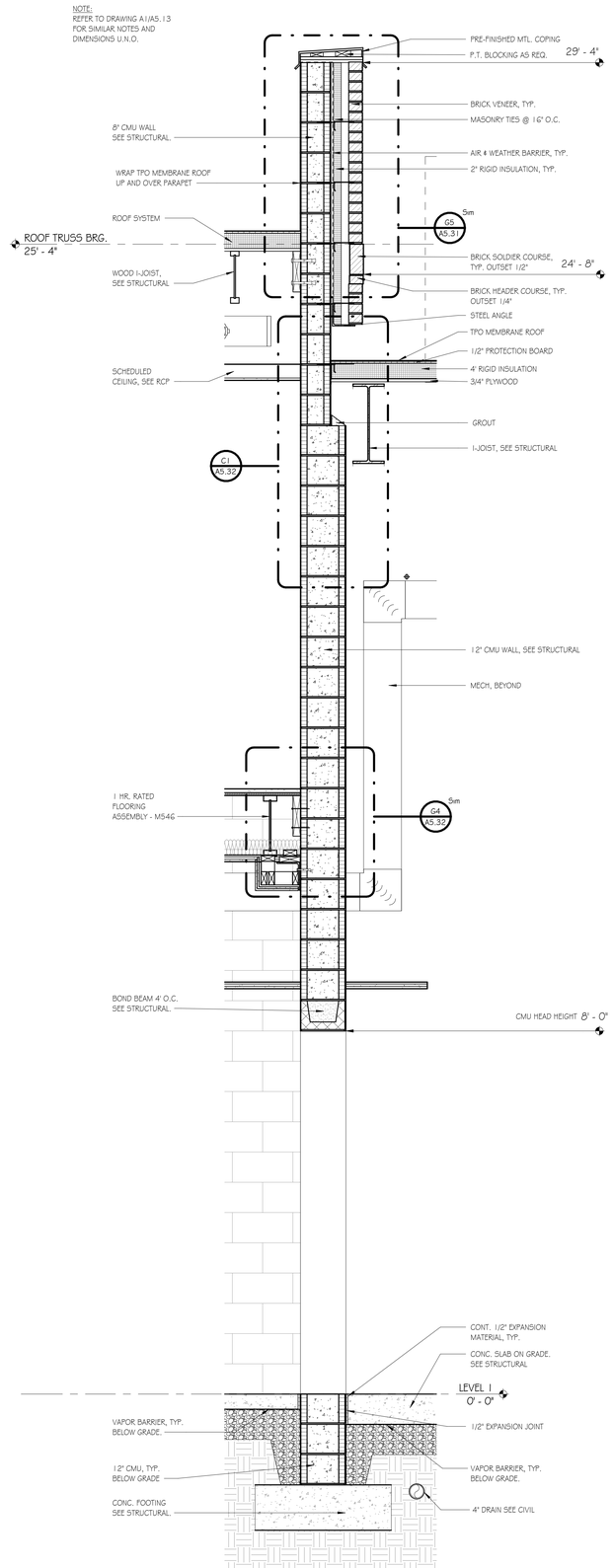
A1 DETAIL - TOWER

SCALE: 3/4" = 1'-0"



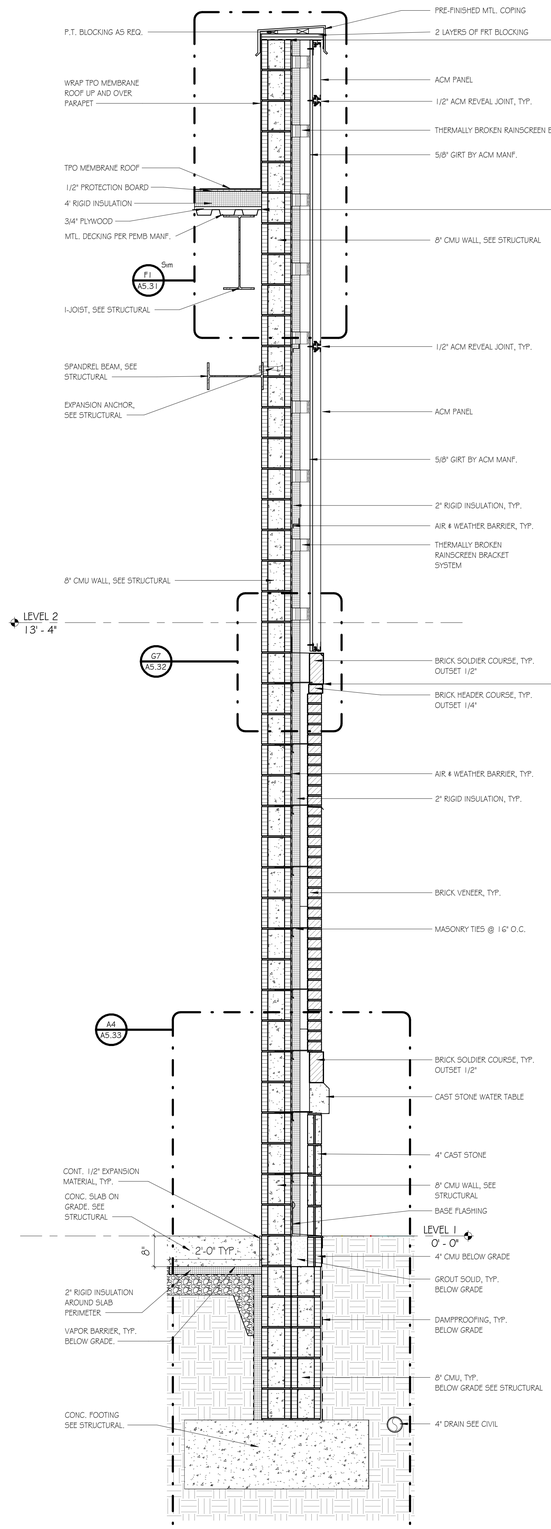
A1 ADMIN - EAST WALL

SCALE: 3/4" = 1'-0"



A5 APPARATUS BAY & IT/ELECT. OR STORAGE

SCALE: 3/4" = 1'-0"



A9 ~~APPARATUS BAY~~ – EXIT WALL WEST

SCALE: 3/4" = 1'-0"

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

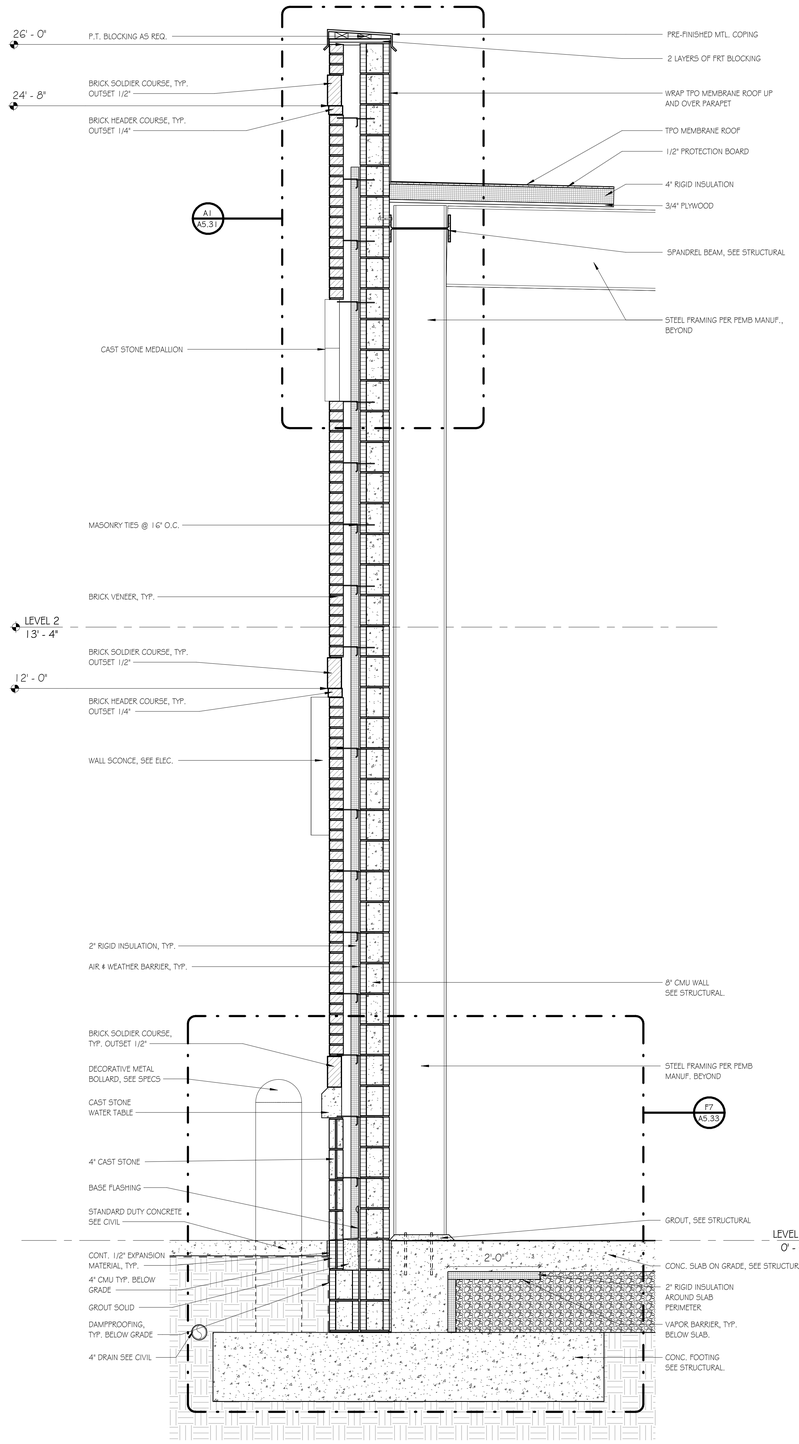
STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

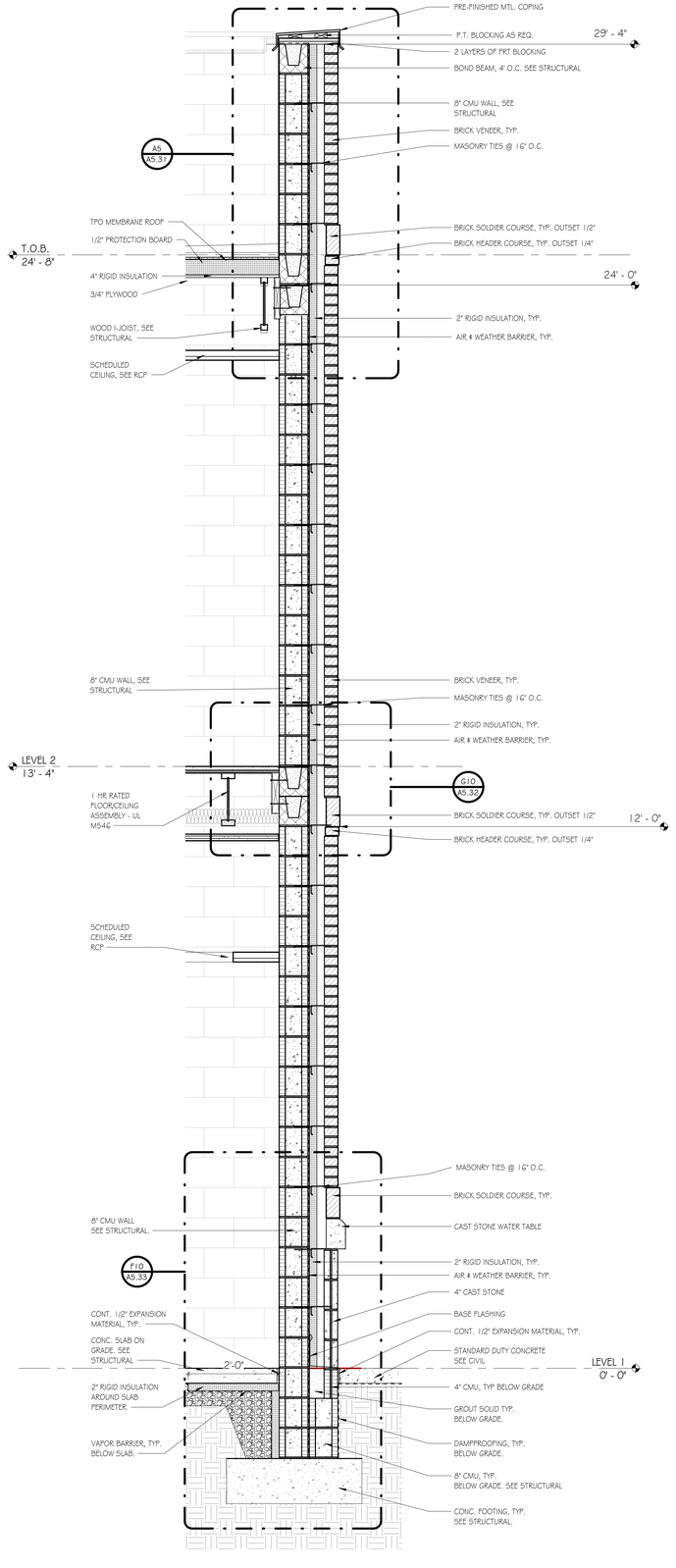
WALL SECTIONS

A5.13

TEMPLATE VERSION: 2025.1
1/13/2026 2:31:07 PM



A2 APPARATUS BAY
SCALE: 3/4" = 1'-0"



A8 EMS STORAGE
SCALE: 3/4" = 1'-0"

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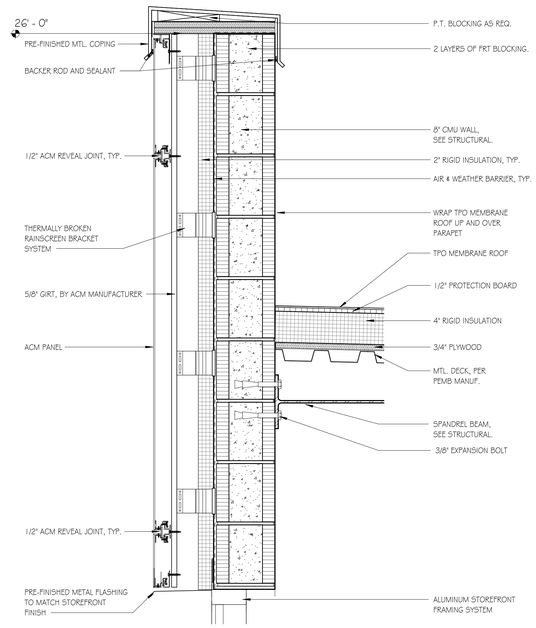
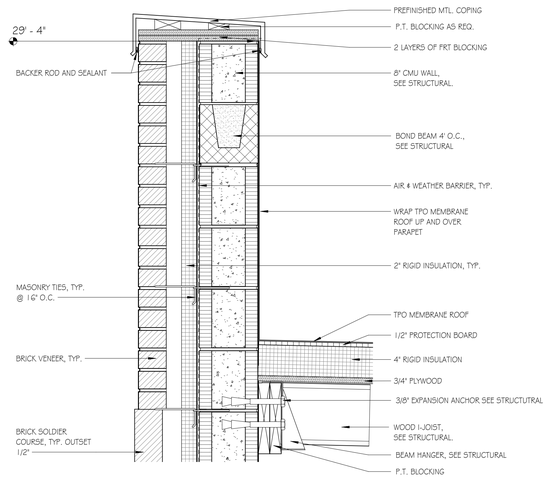
WALL SECTIONS

A5.14

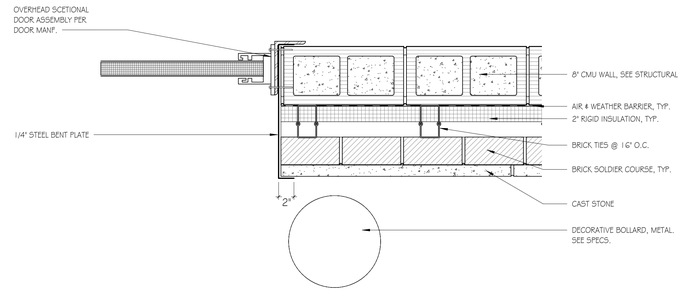
1/13/2026 2:31:08 PM TEMPLATE VERSION: 2025.1



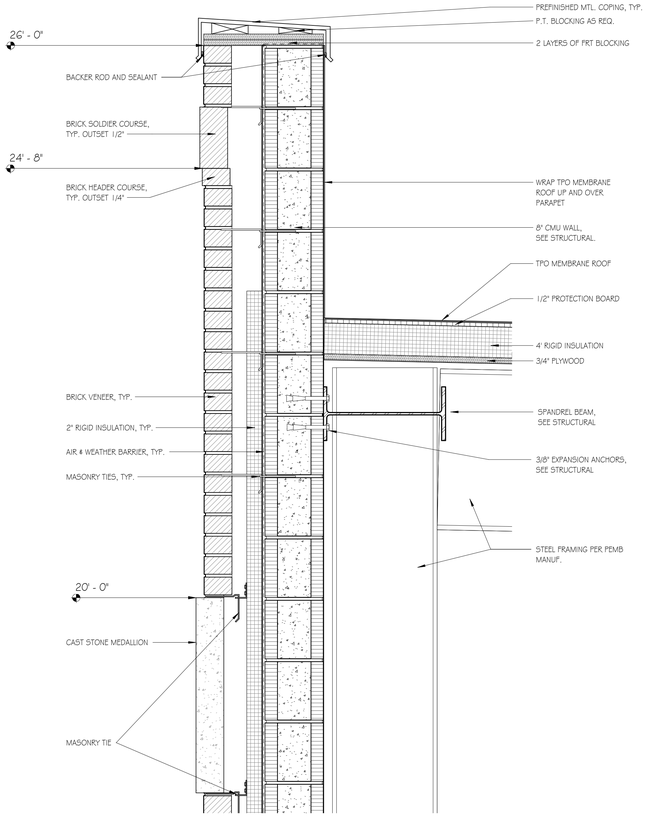
F1 APPARATUS BAY NORTH PARAPET ACM
SCALE: 1 1/2" = 1'-0"



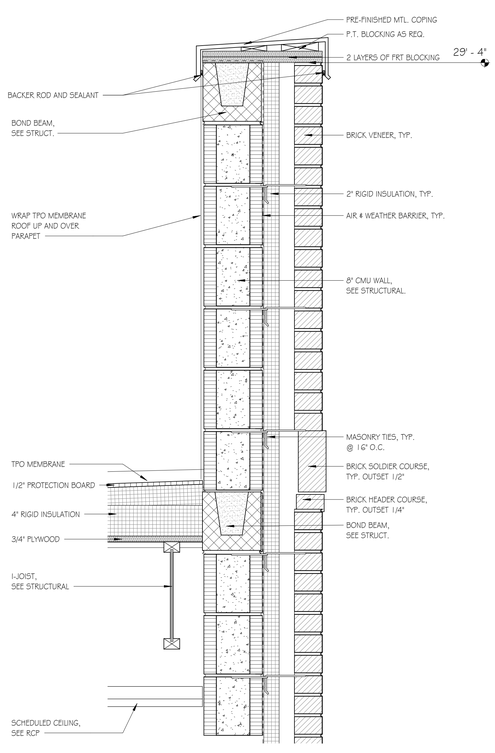
G5 FIRE RISER PARAPET
SCALE: 1 1/2" = 1'-0"



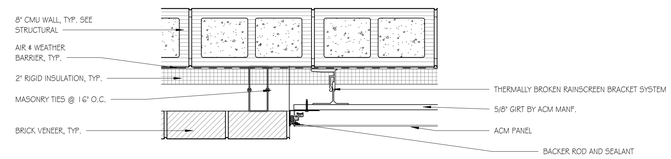
G9 OVERHEAD DOOR TO WALL CONNECTION
SCALE: 1 1/2" = 1'-0"



A1 APPARATUS BAY NORTH PARAPET BRICK
SCALE: 1 1/2" = 1'-0"



A5 EMS STORAGE PARAPET
SCALE: 1 1/2" = 1'-0"



D9 BRICK TO ACM CONNECTION
SCALE: 1 1/2" = 1'-0"

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SECTION DETAILS

A5.31

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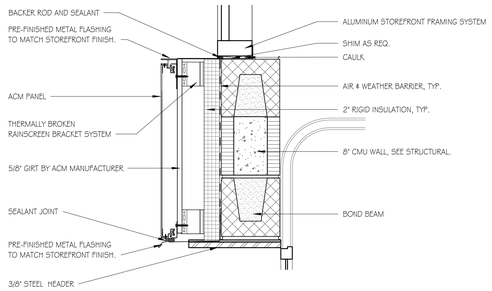
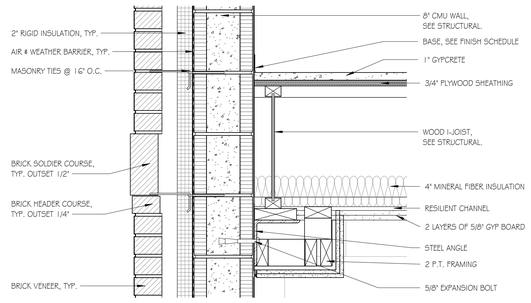
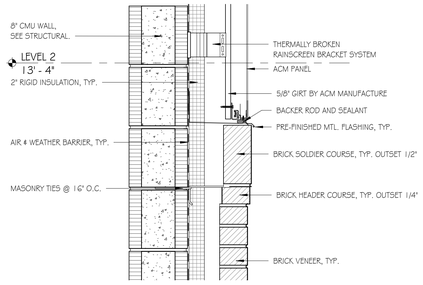
1/13/2026 2:31:09 PM



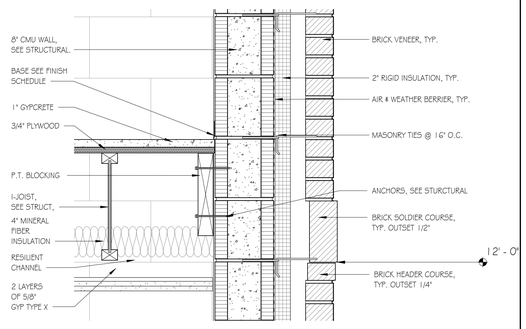
G1 APPARATUS BAY ACM PANEL DETAIL
SCALE: 1 1/2" = 1'-0"



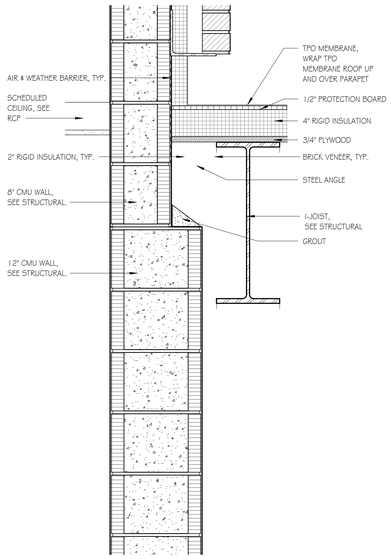
G4 DETAIL - FIRE RISER ROOM
SCALE: 1 1/2" = 1'-0"



G7 APPARATUS BAY ACM TO BRICK CONNECTION
SCALE: 1 1/2" = 1'-0"



G10 EMS STORAGE EAST WALL - LEVEL 2
SCALE: 1 1/2" = 1'-0"



C1 APPARTUS BAY CONNECTION TO ADMIN BUILDING
SCALE: 1 1/2" = 1'-0"

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Owens Cross Roads, Alabama
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SECTION DETAILS

A5.32

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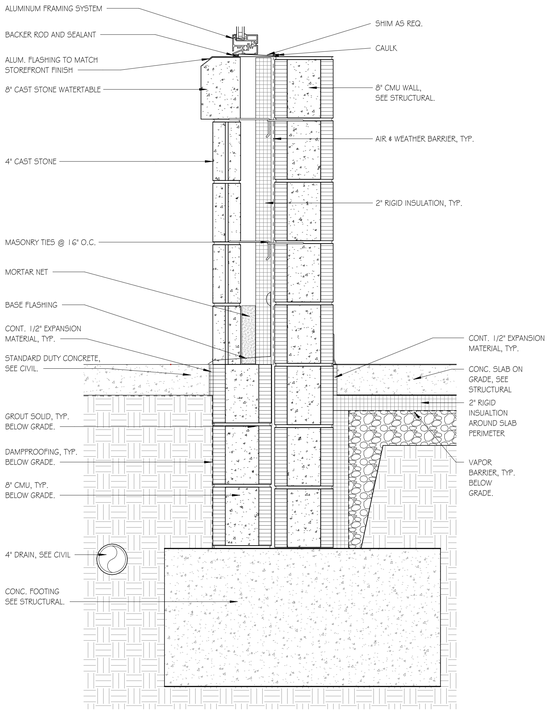
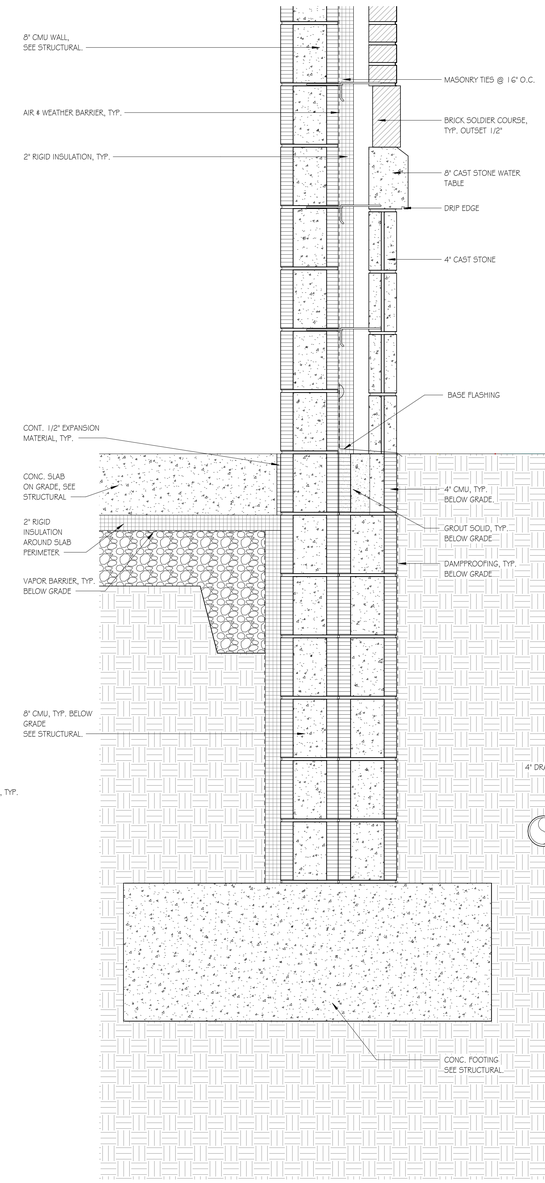
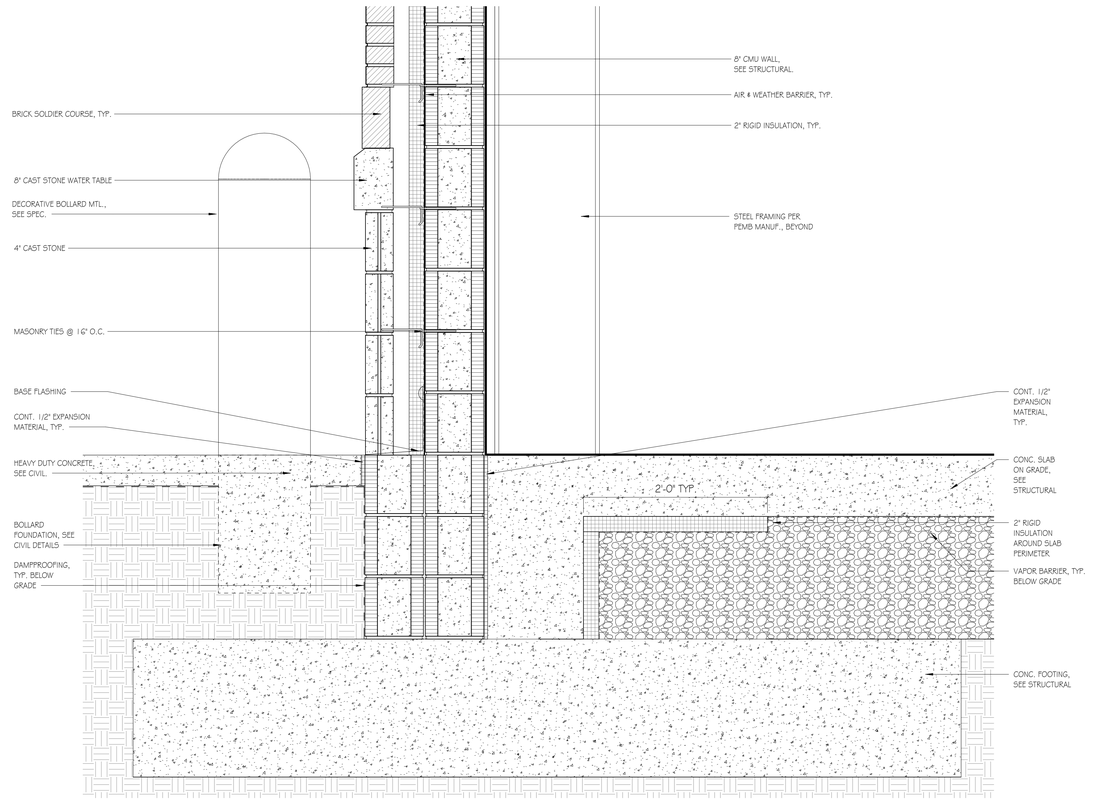


F1 ADMIN EAST TYP. WALL BASE DETAIL
SCALE: 1 1/2" = 1'-0"

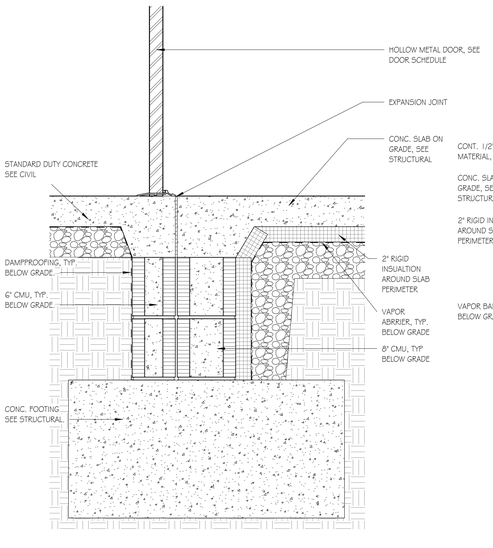


A4 APPARATUS BAY WEST TYP WALL BASE DETAIL
SCALE: 1 1/2" = 1'-0"

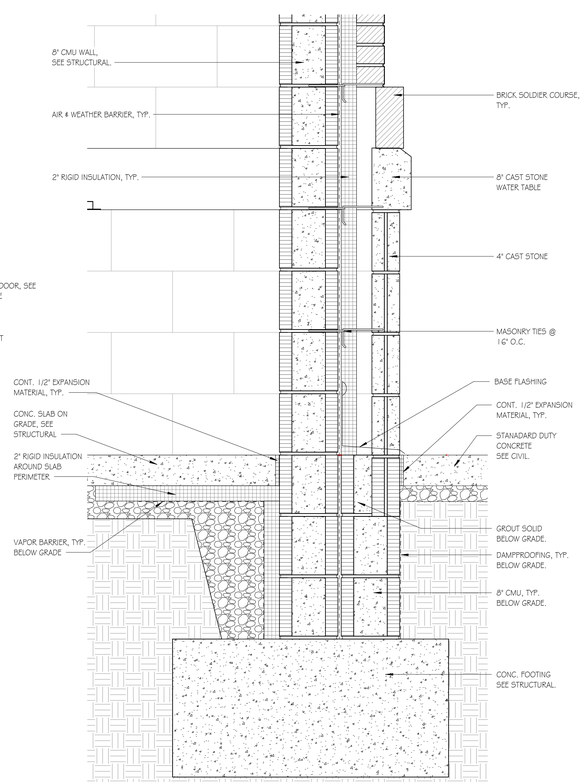
A1 FIRE RISER TYP. WALL BASE DETAIL - WATER TABLE
SCALE: 1 1/2" = 1'-0"



F7 APPARATUS BAY TYP. WALL BASE DETAIL
SCALE: 1 1/2" = 1'-0"



A7 FRONT TOWER DETAIL
SCALE: 1 1/2" = 1'-0"



F10 EMS STORAGE TYP. WALL BASE DETAIL
SCALE: 1 1/2" = 1'-0"

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SECTION DETAILS

A5.33

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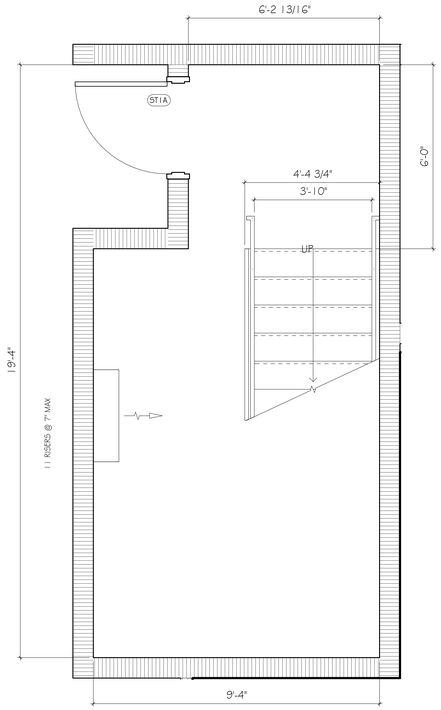
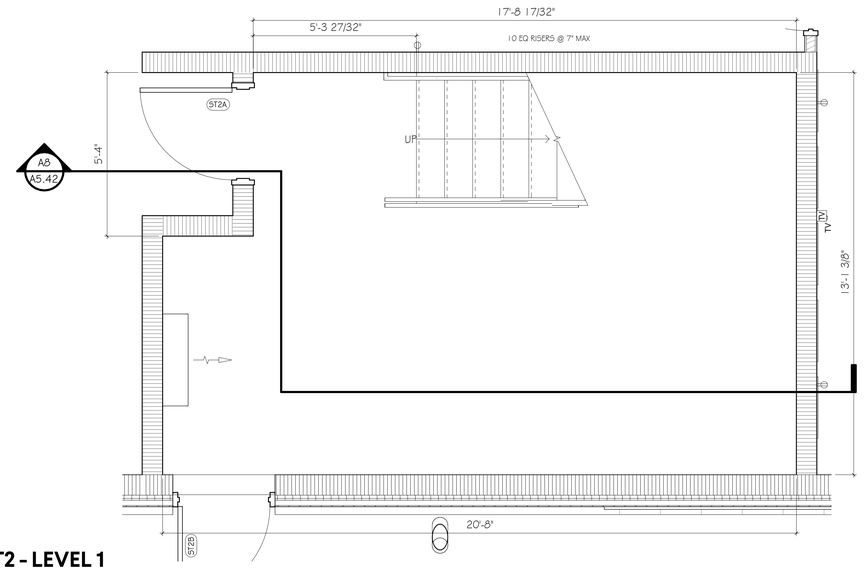
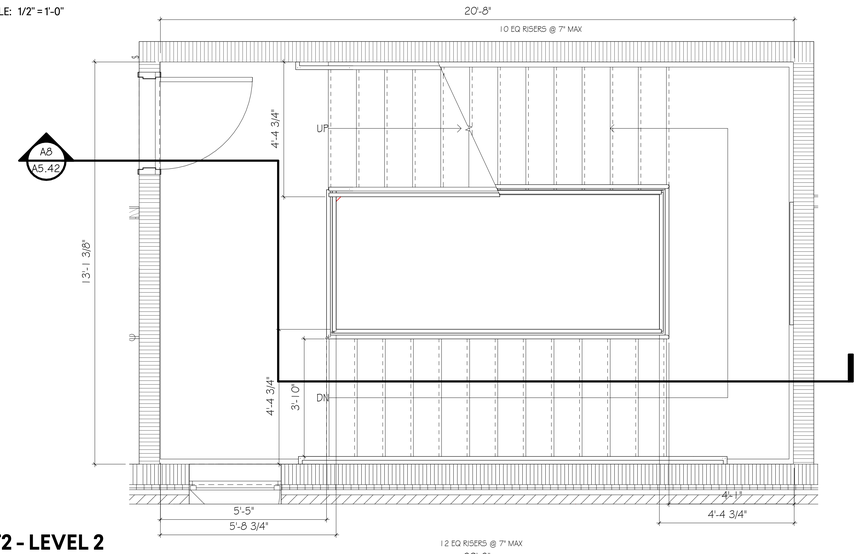


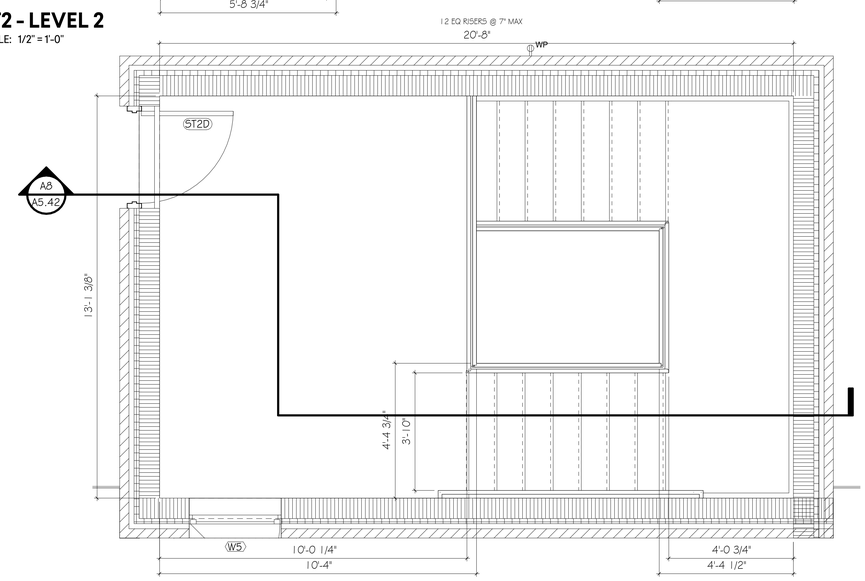
E4 ST1 - LEVEL 1
SCALE: 1/2" = 1'-0"



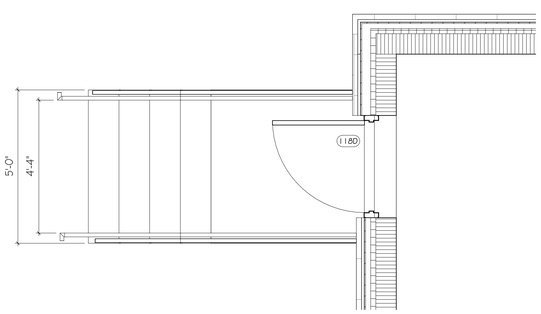
G7 ST2 - LEVEL 1
SCALE: 1/2" = 1'-0"



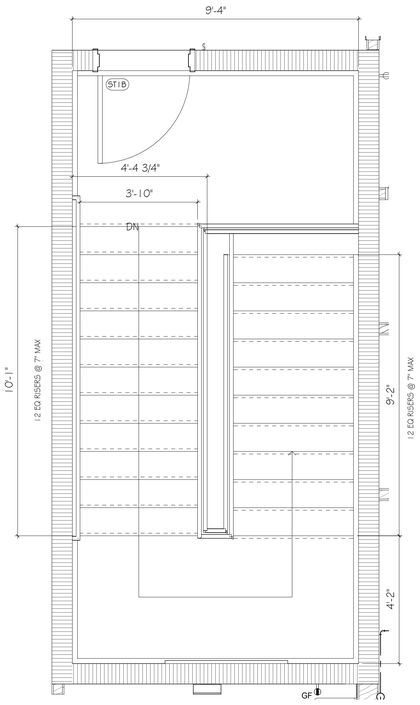
D7 ST2 - LEVEL 2
SCALE: 1/2" = 1'-0"



A7 ST2 - ROOF TOP ACCESS
SCALE: 1/2" = 1'-0"



A1 EXTERIOR STAIR
SCALE: 1/2" = 1'-0"



A4 ST1 - LEVEL 2
SCALE: 1/2" = 1'-0"

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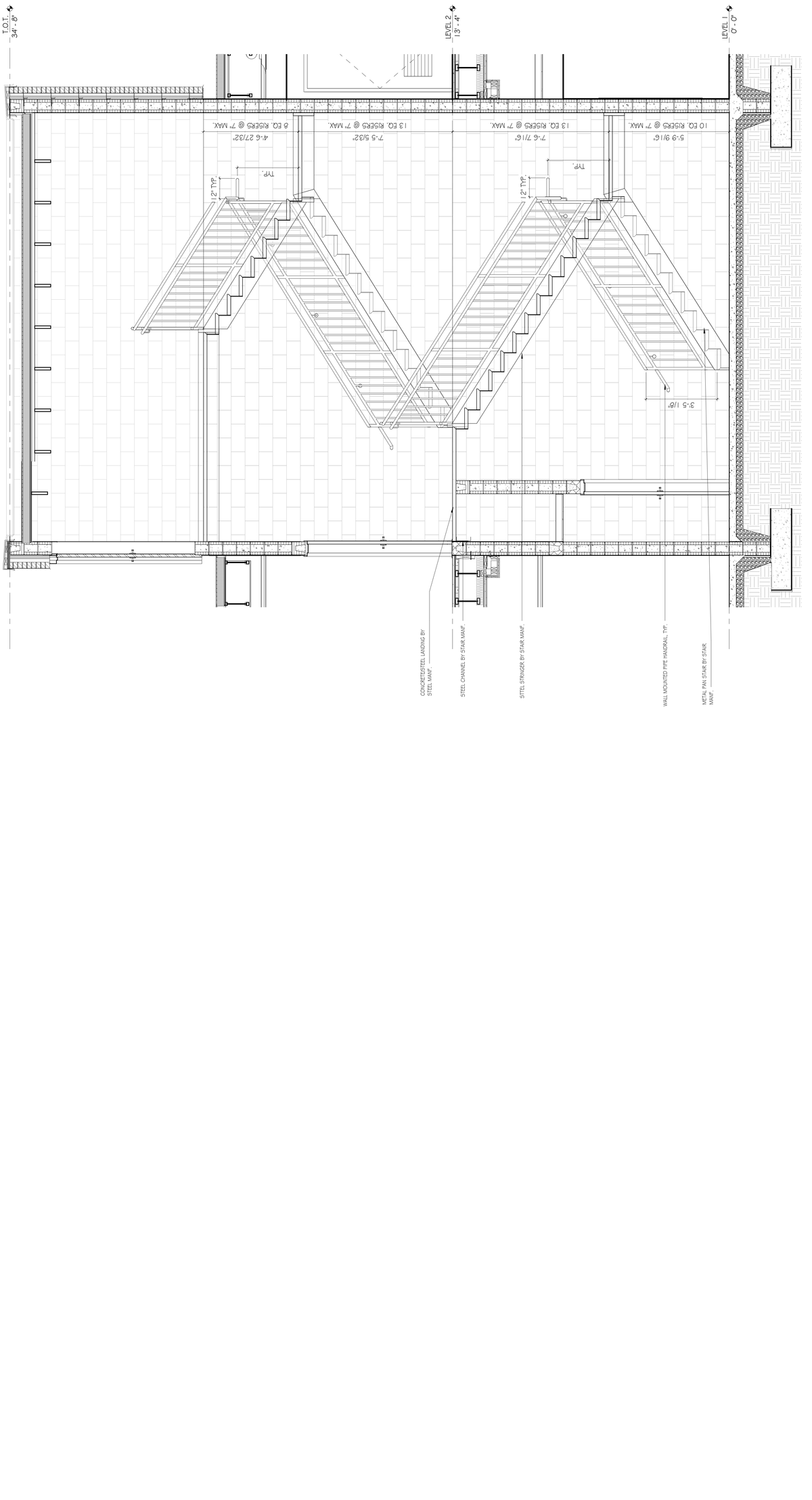
VERTICAL CIRCULATION

A5.41

1/13/2026 3:49:57 PM TEMPLATE VERSION: 2025.1



A8 ST2 - LONGITUDINAL SECTION

SCALE: 1/2" = 1'-0"

VERTICAL CIRCULATION DETAILS

01/09/2026

A5.42

STATE of ALABAMA — REGISTERED ARCHITECT — Jay W Purkey 9063 Owens Cross Roads Alabama

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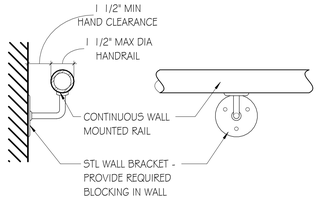
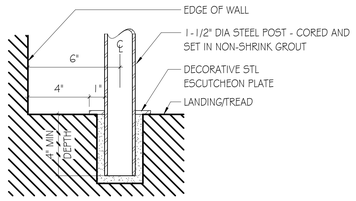
RAILING SCHEDULE							
RAIL TYPE	DESCRIPTION	LOCATION	MOUNT	PARTS	MATERIAL	FINISH	COMMENTS
R6	HANDRAIL, WALL MOUNTED						
R2	BALUSTER GUARDRAIL WITH HANDRAIL						
R2	BALUSTER GUARDRAIL WITH HANDRAIL						
R6	HANDRAIL, WALL MOUNTED						
R6	HANDRAIL, WALL MOUNTED						
R2	BALUSTER GUARDRAIL WITH HANDRAIL						
R6	HANDRAIL, WALL MOUNTED						
R2	BALUSTER GUARDRAIL WITH HANDRAIL						
R2	BALUSTER GUARDRAIL WITH HANDRAIL						
R1							
R2	BALUSTER GUARDRAIL WITH HANDRAIL						
R6	HANDRAIL, WALL MOUNTED						
R6	HANDRAIL, WALL MOUNTED						

RAILING ABBREVIATIONS

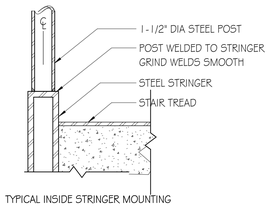
WM - WALL MOUNTED
FMW - FLOOR MOUNTED/WELDED TO EMBED
FMC - FLOOR (TREAD/LANDING) MOUNTED/CORED
PF - PREFINISHED
PNT - PAINTED FINISH
SST - STAINLESS STEEL
STL - STEEL
G - GLASS RAILING INFILL
HR-1 - HANDRAIL
HR-2 - DOUBLE SIDED HANDRAIL
GR - GUARDRAIL
SMW - STRINGER, MOUNTED/WELDED
ALUM - ALUMINUM
CBL - CABLE RAILING INFILL
WD - WOOD
STN - STAINED FINISH
SL - SEALED FINISH
WI - WROUGHT IRON
SSM - SIDE STRINGER MOUNTED



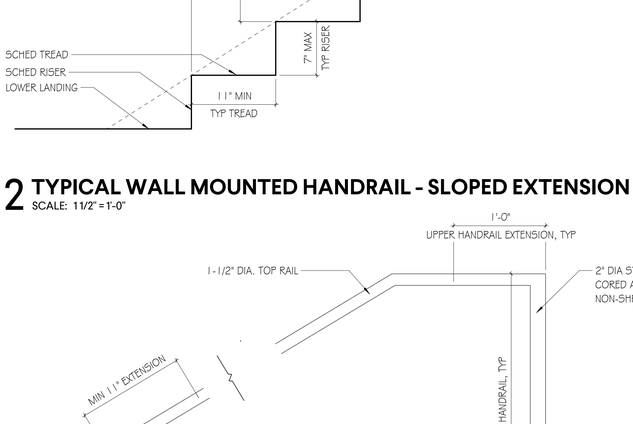
TYPICAL WALL MOUNTING



TYPICAL CORED LANDING/TREAD MOUNTING



TYPICAL INSIDE STRINGER MOUNTING



H9 TYPICAL GUARDRAIL ELEVATION
SCALE: 1 1/2" = 1'-0"

2 TYPICAL WALL MOUNTED HANDRAIL - SLOPED EXTENSION
SCALE: 1 1/2" = 1'-0"

A7 TYPICAL RAIL MOUNT - STRINGER
SCALE: 3" = 1'-0"

A9 TYPICAL FLOOR MOUNTED HANDRAIL
SCALE: 1 1/2" = 1'-0"

RAILING GENERAL NOTES

R.01. CODE COMPLIANCE: SEE GENERAL NOTES DIVISION 1 GENERAL REQUIREMENTS ITEM 1.09 FOR CODE COMPLIANCE.
R.02. MULTI-TRADE COORDINATION: SEE GENERAL NOTES DIVISION 1 GENERAL REQUIREMENTS ITEM 1.02 FOR MULTI-TRADE COORDINATION.
R.03. HANDRAIL DIMENSIONS: DIMENSIONS FOR HAND RAILINGS AS INDICATED IN CONTRACT DOCUMENTS. WIDTH BETWEEN HANDRAILS AT STAIRS AS INDICATED IN CONTRACT DOCUMENTS BUT SHALL NOT BE LESS THAN 44 INCHES CLEAR. WIDTH BETWEEN HANDRAILS AT RAMPS AS INDICATED IN CONTRACT DOCUMENTS BUT SHALL NOT BE LESS THAN 36 INCHES. HEIGHT OF HANDRAILS ABOVE STAIR TREAD NOSING OR FINISH SURFACES OF RAMPS AS INDICATED IN CONTRACT DOCUMENTS BUT SHALL BE UNIFORM AND NOT LESS THAN 24 INCHES AND NOT MORE THAN 38 INCHES. DIAMETER OF HANDRAILS AS INDICATED IN CONTRACT DOCUMENTS BUT SHALL NOT HAVE AN OUTSIDE DIAMETER OF LESS THAN 1-1/4 INCHES AND NOT GREATER THAN 2 INCHES. NON CIRCULAR HANDRAILS AS INDICATED IN CONTRACT DOCUMENTS BUT SHALL HAVE A PERIMETER DIMENSION OF AT LEAST 4 INCHES AND NOT GREATER THAN 6-1/4 INCHES WITH A MAXIMUM CROSS-SECTION DIMENSION OF 2-1/4 INCHES. EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01 INCHES. HANDRAIL EXTENSIONS AS INDICATED IN CONTRACT DOCUMENTS, BUT WHERE HANDRAILS ARE NOT CONTINUOUS BETWEEN FLIGHTS, THE HANDRAILS SHALL EXTEND HORIZONTALLY AT LEAST 12 INCHES BEYOND THE TOP RISER AND CONTINUE TO SLOPE FOR THE DEPTH OF ONE TREAD BEYOND THE BOTTOM RISER. AT RAMPS WHERE HANDRAILS ARE NOT CONTINUOUS BETWEEN RUNS, THE HANDRAILS SHALL EXTEND HORIZONTALLY ABOVE THE LANDING 12 INCHES MINIMUM BEYOND THE TOP AND BOTTOM OF RAMP RUNS. THE EXTENSIONS OF HANDRAILS SHALL BE IN THE SAME DIRECTION OF THE STAIR FLIGHT AS STAIRWAYS AND RAMP RUNS AT RAMPS. CLEAR SPACE BETWEEN HANDRAIL AND WALL OR OTHER SURFACE AS INDICATED IN CONTRACT DOCUMENTS BUT SHALL BE A MINIMUM OF 1-1/2 INCHES.
R.04. GUARDRAIL DIMENSIONS: DIMENSIONS FOR GUARDRAILS AS INDICATED IN CONTRACT DOCUMENTS. HEIGHT OF GUARDRAILS ABOVE ADJACENT WALKING SURFACES, ADJACENT FIXED SEATING, OR THE LINE CONNECTING THE LEADING EDGE OF TREADS AS INDICATED IN CONTRACT DOCUMENTS BUT SHALL NOT BE LESS THAN 42 INCHES. OPENINGS IN GUARDRAILS AS INDICATED IN CONTRACT DOCUMENTS BUT SHALL NOT ALLOW THE PASSAGE OF A SPHERE 4 INCHES IN DIAMETER FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT (FOR ROOF ACCESS SHALL PREVENT THE PASSAGE OF A SPHERE 21 INCHES IN DIAMETER). FROM A HEIGHT OF 36 INCHES TO 42 INCHES GUARDS SHALL NOT HAVE OPENINGS WHICH ALLOW PASSAGE OF A SPHERE 4-3/8 INCHES IN DIAMETER. THE TRIANGULAR OPENINGS AT THE OPEN SIDES OF A STAIR FORMED BY THE RISER, TREAD, AND BOTTOM RAIL SHALL NOT ALLOW PASSAGE OF A SPHERE 6 INCHES IN DIAMETER.

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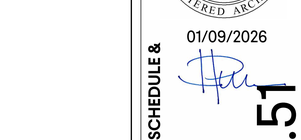
ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003



01/09/2026

RAILING SCHEDULE & DETAILS

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DOOR SCHEDULE

LOCATION		SIZE			DOOR			FRAME			HARDWARE					DETAILS				
												ELEC. COORD.								
DOOR NUMBER	ROOM NAME	WIDTH	HT	THK	DOOR TYPE	MAT'L	GLASS OR LOUVER TYPE	FRAME TYPE	MAT'L	GLASS TYPE	HARDWARE SET NO.	HOLD OPEN	FIRE ALARM INTERFACE	ACCESS CONTROL	HEAD	JAMB	SILL	FIRE RATING	NUMBERED NOTES
	PLATFORM	2' - 6"	2' - 6"	13/8"	F	WD													
100A	LOBBY	6' - 0"	8' - 0"	1 3/4"	FG2	HM	IG3	F13	HM										02
100B	LOBBY	6' - 0"	8' - 0"	1 3/4"	FG2	HM	G1	F13	HM									90 MIN	02
101	TRIAGE	4' - 0"	7' - 0"	1 3/4"	F	WD		F13	HM									90 MIN	
102	UNISEX TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	17, 21
103	OFFICE	3' - 0"	7' - 0"	1 3/4"	N4	WD		F1	HM	-								45 MIN	21
104	OFFICE	3' - 0"	7' - 0"	1 3/4"	N4	WD		F1	HM	-								45 MIN	21
105	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	HM		F13	HM	-								45 MIN	20, 21
106	WATCH OFFICE	3' - 0"	7' - 0"	1 3/4"	N4	WD		F1	HM	-								45 MIN	21
107	FIRE RISER	3' - 0"	7' - 0"	1 3/4"	F	HM		F13	HM										
108	IT/ELECT.	3' - 0"	7' - 0"	1 3/4"	F	WD		F13	HM									90 MIN	
109	CORRIDOR	3' - 0"	7' - 0"	1 3/4"	N4	HM		F13	HM										
110A	CORRIDOR	3' - 0"	7' - 0"	1 3/4"	N4	WD	G1	F1	HM									45 MIN	21
110B	TRAINING	3' - 0"	7' - 0"	1 3/4"	F	HM		F13	HM										
111	A/V & STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM										
112A	FITNESS	3' - 0"	7' - 0"	1 3/4"	HG	WD		F1	HM									45 MIN	21
112B	FITNESS	8' - 0"	10' - 0"	3/4"	OT														30
113	EMS STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD		F13	HM									45 MIN	21
114	GEAR ROOM	3' - 0"	7' - 0"	1 3/4"	N4	HM		F13	HM									45 MIN	21
115	UNISEX TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD		F13	HM									45 MIN	17, 21
116	DECON AREA	3' - 0"	7' - 0"	1 3/4"	N4	HM		F13	HM									45 MIN	21
117	SHOWER ROOM	3' - 0"	7' - 0"	1 3/4"	L	HM		F1	HM	-									31
118A	APPARATUS BAY	3' - 0"	7' - 0"	1 3/4"	N4	HM		F13	HM									45 MIN	21, 29
118B	APPARATUS BAY	3' - 0"	7' - 0"	1 3/4"	N4	HM		F13	HM									45 MIN	21, 29
118C	APPARATUS BAY	3' - 0"	7' - 0"	1 3/4"	F	HM		F13	HM										
118D	APPARATUS BAY	3' - 0"	7' - 0"	1 3/4"	F	HM		F13	HM										
118E	APPARATUS BAY	11' - 10"	13' - 11"	1 1/2"	GT														
118F	APPARATUS BAY	11' - 10"	13' - 11"	1 1/2"	GT														30
118G	APPARATUS BAY	11' - 10"	13' - 11"	1 1/2"	GT														30
118H	APPARATUS BAY	11' - 10"	13' - 11"	1 1/2"	GT														30
118I	APPARATUS BAY	11' - 10"	13' - 11"	1 1/2"	GT														30
118J	APPARATUS BAY	11' - 10"	13' - 11"	1 1/2"	GT														30
119	JAN.	3' - 0"	7' - 0"	1 3/4"	F	WD		F13	HM										
200	CORRIDOR	3' - 0"	7' - 0"	1 3/4"	F	WD		F13	HM									90 MIN	
203	STORAGE W/ LOCKERS	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	21
204	BUNK ROOM 1	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	16, 21, 29
205	BUNK ROOM 2	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	16, 21, 29
206	BUNK ROOM 3	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	16, 21, 29
207	BUNK ROOM 4	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	16, 21, 29
208	BUNK ROOM 5	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	16, 21, 29
209	BUNK ROOM 6	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	16, 21,29
210	BUNK ROOM 7	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	16, 21,29
211	IT/ELECT.	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	21
212A	CORRIDOR	3' - 0"	7' - 0"	1 3/4"	N4	WD		F1	HM	-								45 MIN	21
212B	CORRIDOR	3' - 0"	7' - 0"	1 3/4"	N4	WD		F1	HM	-								45 MIN	21
213	OFFICE/FLEX SPACE	3' - 0"	7' - 0"	1 3/4"	N4	WD		F1	HM	-								45 MIN	21
214	STORAGE	2' - 6"	6' - 8"	1 3/4"	F	WD		F1	HM										
215	PANTRY	2' - 6"	7' - 0"	1 3/4"	FL	WD	WD	F1	HM										
216	PANTRY	2' - 6"	7' - 0"	1 3/4"	FL	WD	WD	F1	HM										
217	PANTRY	2' - 6"	7' - 0"	1 3/4"	FL	WD	WD	F1	HM										
218	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	21
219	RESTROOM 1	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	17, 21
220	RESTROOM 2	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	17, 21
221	RESTROOM 3	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	17, 21
222	LAUNDRY	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	21, 29
223	RESTROOM 4	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	17, 21
224	STORAGE	3' - 0"	7' - 0"	1 3/4"	L	HM		F1	HM	-									21
225	STORAGE	3' - 0"	7' - 0"	1 3/4"	L	HM		F1	HM	-									21
226	STORAGE	2' - 0"	2' - 0"	13/8"	F	WD													
ST1A	CORRIDOR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM									45 MIN	
ST1B	STAIRWELL	3' - 0"	7' - 0"	1 3/4"	N4	WD		F1	HM									45 MIN	
ST2A	CORRIDOR	3' - 0"	7' - 0"	1 3/4"	N4	WD		F1	HM									45 MIN	
ST2B	STAIRWELL	3' - 0"	7' - 0"	1 3/4"	N4	HM		F13	HM									90 MIN	
ST2C	STAIRWELL	3' - 0"	7' - 0"	1 3/4"	N4	WD		F1	HM									45 MIN	
ST2D	STAIRWELL	3' - 0"	7' - 0"	1 3/4"	N4	HM		F13	HM									45 MIN	

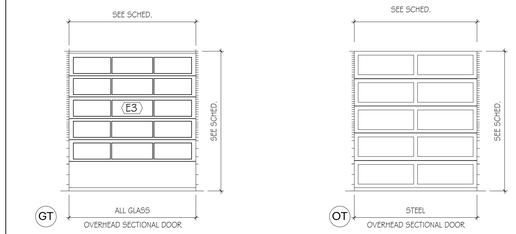
DOOR NUMBERED NOTES

01 MAGNETIC HOLD-OPEN DEVICES
02 AUTOMATIC DOOR OPERATOR, SEE SPECIFICATION 08 7100
03 AUTOMATIC ENTRANCE DOORS, SEE SPECIFICATIONS
04 ALUMINUM-FRAMED ENTRANCE DOORS, SEE SPECIFICATIONS
05 ALL-GLASS ENTRANCE DOORS, SEE SPECIFICATIONS
06 ALUMINUM-FRAMED ICU/CCU DOOR, SEE SPECIFICATIONS
07 SLIDING ICU/CCU DOOR, SEE SPECIFICATIONS
08 SLIDING EXAM ROOM DOOR, SEE SPECIFICATIONS
09 OVERHEAD COILING DOOR, SEE SPECIFICATIONS
10 OVERHEAD COILING GRILLE, SEE SPECIFICATIONS
11 LEAD-LINED DOOR AND FRAME, SEE SPECIFICATIONS 08 1416 & 13 4900
12 RF DOOR TO BE PROVIDED COMPLETE WITH HARDWARE BY RF SHIELDING VENDOR
13 INTEGRAL BLINDS BETWEEN 2 PANES ULTRACLEAR GLASS (UPPER LITES ONLY)
14 PROVIDE OPAQUE FILM AT DOOR GLAZING
15 THERMAL RATED (INSULATED) ASSEMBLY
16 SOUND RATED DOOR ASSEMBLY. MATCH RATING OF PARTITION IN WHICH LOCATED
17 PRIVACY LOCK WITH OCCUPANCY INDICATOR
18 EGRESS - EXIT ONLY DOOR
19 MECHANICAL KEYPAD LOCK. SEE SPECIFICATION 08 7100
20 HEAVY-DUTY DOOR
21 PROVIDE SMOKE SEALS AND POSITIVE LATCHING
22 PROVIDE POSITIVE LATCHING & LOCKSET. SEE HARDWARE SCHEDULE FOR FUNCTION
23 PROVIDE OVERALL DOOR WIDTH AS REQ'D FOR CLEAR DOOR OPNG TO BE 36" MIN.
24 PROVIDE OVERALL DOOR WIDTH AS REQ'D FOR CLEAR DOOR OPNG TO BE 42" MIN.
25 PROVIDE OVERALL DOOR WIDTH AS REQ'D FOR CLEAR DOOR OPNG TO BE 46" MIN.
26 PROVIDE OVERAL DOOR WIDTH AS REQ'D FOR CLEAR DOOR OPNG TO BE 48" MIN.
27 PROVIDE OVERALL DOOR WIDTH AS REQ'D FOR CLEAR DOOR OPNG TO BE 60" MIN.
28 PROVIDE OVERALL DOOR WIDTH AS REQ'D FOR CLEAR DOOR OPNG TO BE 72" MIN.
29 PROVIDE DOOR SWEEPS
30 DOOR FRAME SUPPLIED BY MANUFACTURER
31 PAINT WITH EPOXY PAINT

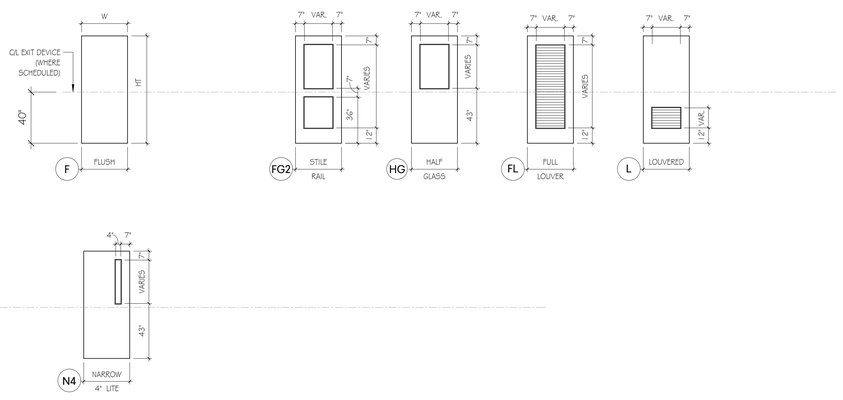
DOOR GENERAL NOTES

1) GENERAL:
A. DOOR AND/OR FRAME CONSTRUCTION SHALL BE AS SPECIFIED UNLESS NOTED OTHERWISE.
B. ALL TYPES OF DOORS ARE REPRESENTED IN THIS SCHEDULE FOR CONVENIENCE. WHERE MORE DESCRIPTIVE INFORMATION MAY BE LOCATED ELSEWHERE, NOTATION IS MADE IN THE NUMBERED NOTES COLUMN. (E.G. ALUMINUM FRAMED ENTRANCE DOORS. SEE SPECIFICATIONS)
2) MATERIAL AND FINISH:
A. MATERIALS AND FINISHES INDICATED ON THE SCHEDULE ARE AS FOLLOWS:
HM HOLLOW METAL
ST STEEL
STS STEEL / STAINLESS OR STAINLESS CLAD
WD SOLID CORE WOOD
WD/PL WOOD / PLASTIC LAMINATE FACED
WD/IR WOOD / IMPACT-RESISTANT VINYL-FACED
AL ALUMINUM
GL GLAZING/GLASS
PREFIN PREFINISHED (OR FACTORY FINISHED)
PNT PAINTED
STN STAINED
3) GLASS:
A. GLASS TYPES INDICATED ON THE SCHEDULE ARE AS FOLLOWS (SEE SPECIFICATION SECTIONS 08 8000 "GLAZING" & 13 4900 "RADIATION PROTECTION"):
MONOLITHIC:
G1 6.0mm CLEAR, TEMPERED (INCREASE TO 12.0mm TH. AT 2-SIDED GLAZING)
G1A 6.0mm CLEAR, HEAT STRENGTHENED
G2 6.0mm ULTRACLEAR, TEMPERED
G3 4.0mm(x2) ULTRACLEAR, TEMPERED, 2 LITES + INTEGRAL BLINDS
G4 7.5mm CLEAR, LAMINATED, INTERLAYER COLOR: CLEAR
G5 7.5mm ULTRACLEAR, LAMINATED, INTERLAYOR COLOR: CLEAR
G6 7.5mm CLEAR, LAMINATED, INTERLAYER COLOR: ARCTIC SNOW
G7 8.0mm CLEAR, FIRE-RATED CERAMIC GLAZING, MATCH RATING OF OPENING
G8 12.5mm LEAD-BARIUM X-RAY SHIELDING GLASS (SEE SPECIFICATION 13 4900)
G9 VARIES SPECIALTY GLASS, (IF SCHEDULED, SEE SPECIFICATION 08 8000)
INSULATING:
IG1 1 inch INSULATING, VISION LITE
IG2 1 inch INSULATING, SPANDREL LITE
IG3 1 5/16 in. INSULATING, LAMINATED, VISION LITE
IG4 1 5/16 in. INSULATING, LAMINATED, SPANDREL LITE
4) LOUVERS:
A. DOOR LOUVER TYPES INDICATION ON THE SCHEDULE ARE AS FOLLOWS:
L1 30" W 20" H, 55% FREE AREA, WEATHER RESISTANT, W/ INSECT SCREEN
L2 A' W X B" H, LIGHT PROOF
5) DOOR HARDWARE:
A. "HARDWARE SET NUMBER" REFERS TO HARDWARE SETS SPECIFIED IN SPECIFICATION SECTION 08 7100 "DOOR HARDWARE".

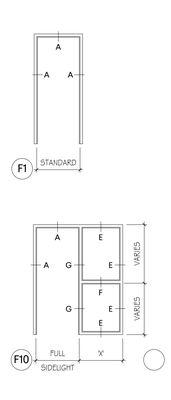
DOOR TYPES - SPECIALTY DOORS



DOOR TYPES - WOOD + HOLLOW METAL SWING DOORS

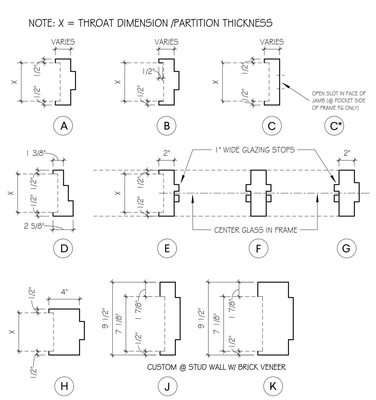


FRAME TYPES - HOLLOW METAL



NOTE: ALL FRAMES TO BE FACE-WELDED EXCEPT WHERE NOTED "KD"

FRAME PROFILES



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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953
GMC # AHUN250003

STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT
01/09/2026

DOOR SCHEDULE
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GLASS SCHEDULE

GLASS TYPES INDICATED ON THE SCHEDULE ARE AS FOLLOWS (SEE SPECIFICATION SECTIONS 088000 "GLAZING" & 134900 "RADIATION PROTECTION"):

MONOLITHIC:

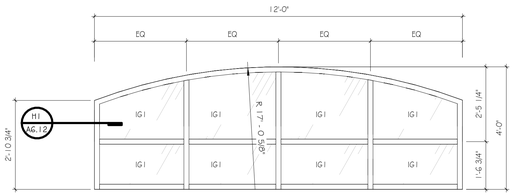
G1	6.0mm	CLEAR, TEMPERED
G2	7.5mm	CLEAR, LAMINATED, INTERLAYER COLOR: CLEAR
G3	7.5mm	CLEAR, LAMINATED, INTERLAYER COLOR: ARCTIC SNOW
G4	8.0mm	CLEAR, FIRE-RATED CERAMIC GLAZING, MATCH RATING OF OPNG.
G5	4.0mm(x2)	ULTRACLEAR, TEMPERED, 2 LITES + INTEGRAL BLINDS
G6	12.5mm	SAFETY, LEAD BORATE GLASS, SEE SPECIFICATIONS
G7	12.5mm	SAFETY, LASER RATED, SEE SPECIFICATIONS

INSULATING:

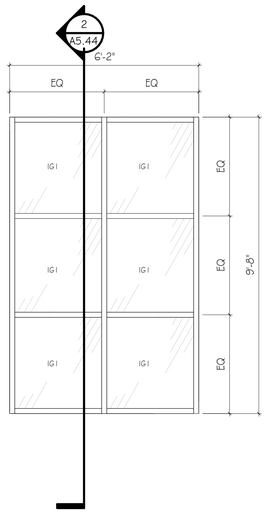
IG1	1 INCH	INSULATING, VISION LITE
IG2	1 INCH	INSULATING, SPANDREL LITE

SPECIALTY GLASS:

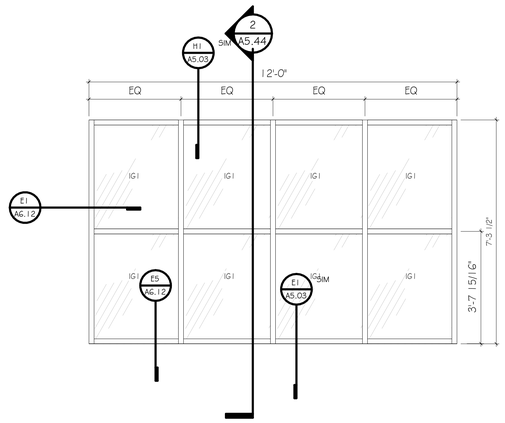
RG1	RF-SHIELDED GLASS AT MRI ROOM TO BE PROVIDED UNDER RF-SHIELDED ENCLOSURE PACKAGE



H1 SF1
SCALE: 1/2" = 1'-0"



G4 SF2
SCALE: 1/2" = 1'-0"



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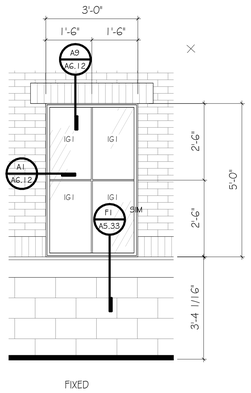
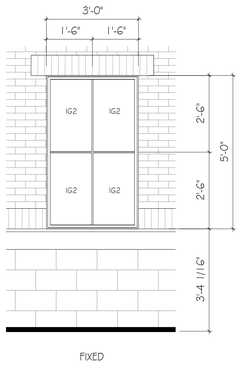
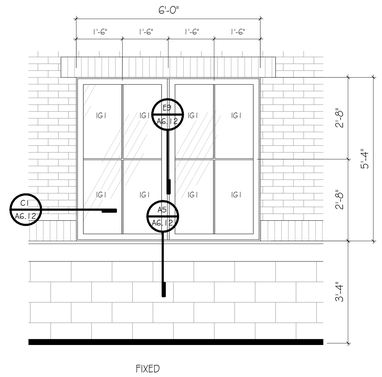


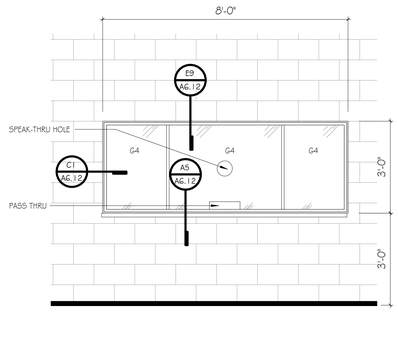
E1 W1
SCALE: 1/2" = 1'-0"



E3 W2
SCALE: 1/2" = 1'-0"

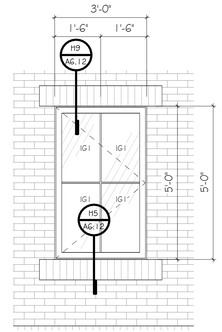


E5 W3
SCALE: 1/2" = 1'-0"



E8 W4
SCALE: 1/2" = 1'-0"

NOTE: RATED SERVICE WINDOW.



E11 W5 CASEMENT WINDOW
SCALE: 1/2" = 1'-0"

GMC

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ASHVILLE FIRE STATION #2
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GMC # AHUN250003

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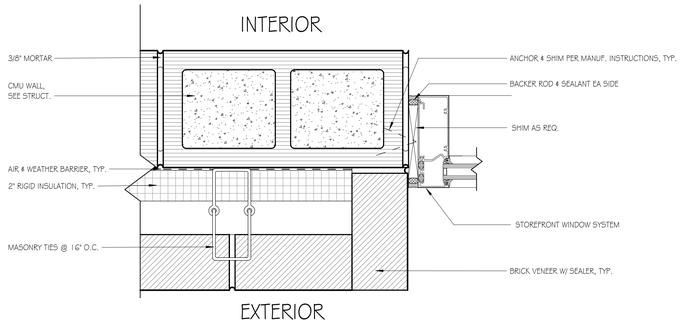
REGISTERED ARCHITECT

01/09/2026

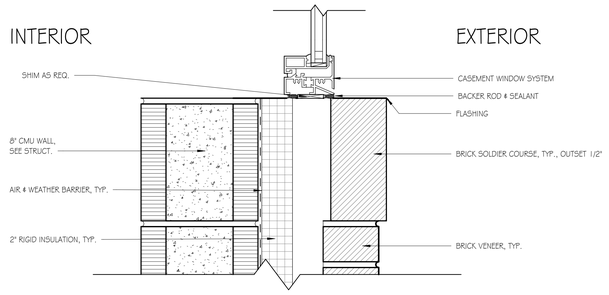
GLAZING & LOUVER SCHEDULES

A6.11

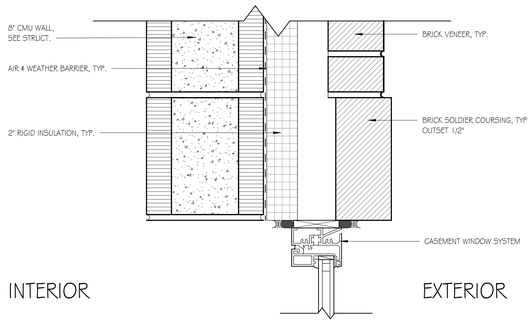
1/13/2026 2:31:17 PM TEMPLATE VERSION: 2025.1



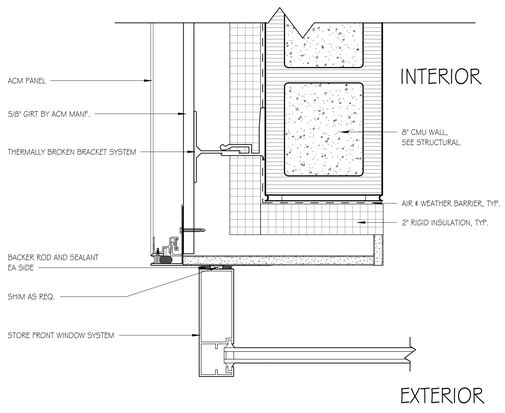
H1 EXT. SF MULL. JAMB @ MASONRY
SCALE: 3" = 1'-0"



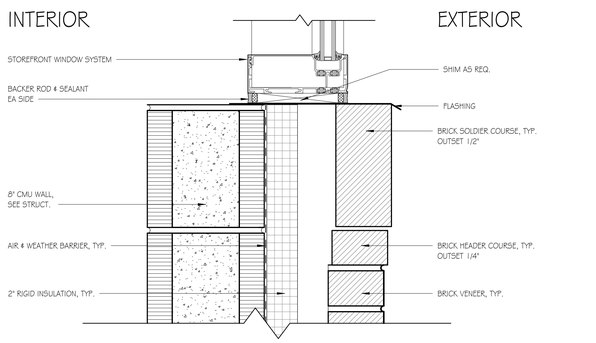
H5 EXT CASEMENT WINDOW SILL @ MASONRY
SCALE: 3" = 1'-0"



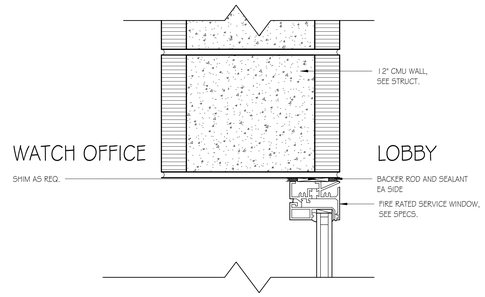
H9 EXT CASEMENT WINDOW HEAD @ MASONRY
SCALE: 3" = 1'-0"



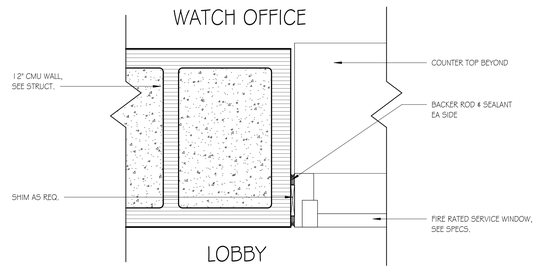
E1 EXT SF MULL. JAMB. @ ACM
SCALE: 3" = 1'-0"



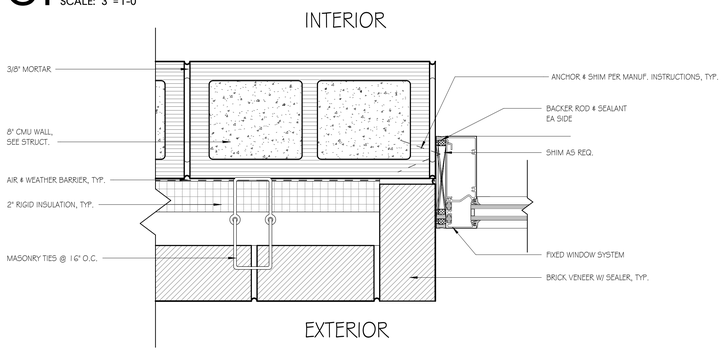
E5 EXT SF SILL @ MASONRY
SCALE: 3" = 1'-0"



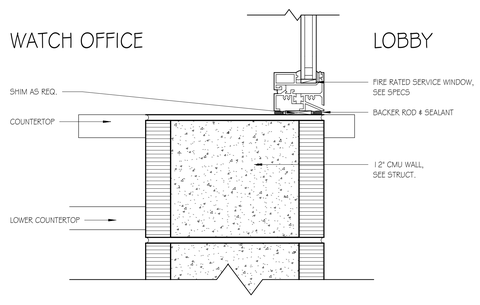
E9 INT SERVICE WINDOW HEAD @ CMU
SCALE: 3" = 1'-0"



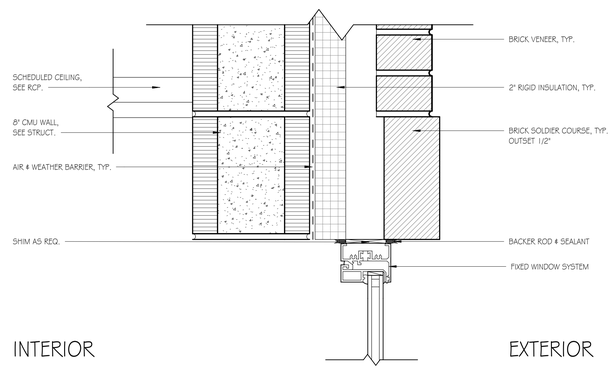
C1 INT SERVICE WINDOW JAMN @ CMU
SCALE: 3" = 1'-0"



A1 EXT FIXED WINDOW MULL. JAMB. @ MASONRY
SCALE: 3" = 1'-0"



A5 INT SERVICE WINDOW SILL @ CMU
SCALE: 3" = 1'-0"



A9 EXT FIXED WINDOW HEAD @ MASONRY
SCALE: 3" = 1'-0"

GMC
Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

ISSUE | DATE
100% CONSTRUCTION DOCUMENTS | 1/9/2026

DRAWN BY: ED
CHECKED BY: JP

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

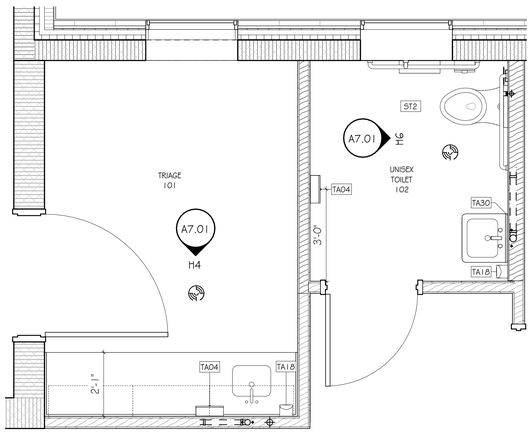
STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

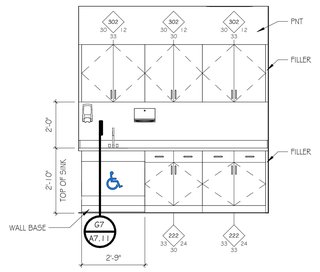
WINDOW DETAILS

A6.12

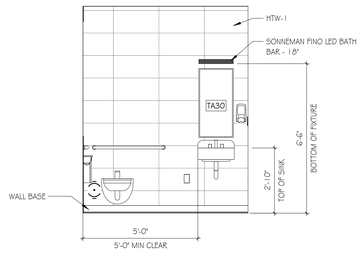
TEMPLATE VERSION: 2025.1
1/13/2026 2:31:19 PM



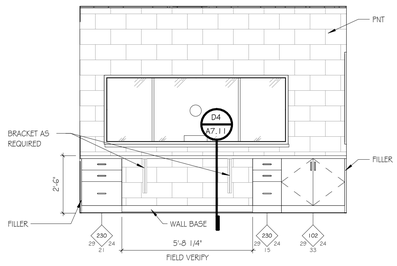
G1 ENLARGED PLAN - TRIAGE 101, UNISEX TOILET 102
SCALE: 1/2" = 1'-0"



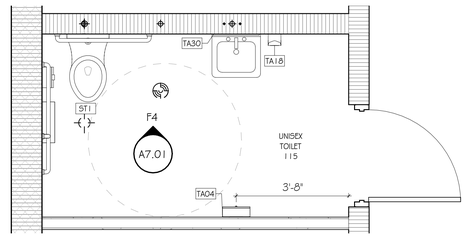
H4 TRIAGE 101 - SOUTH
SCALE: 3/8" = 1'-0"



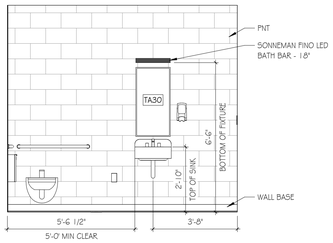
H6 UNISEX TOILET 102 - EAST
SCALE: 3/8" = 1'-0"



H8 WATCH OFFICE 106 - EAST
SCALE: 3/8" = 1'-0"

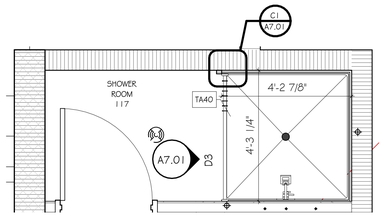


H10 ENLARGED PLAN - UNISEX TOILET 115
SCALE: 1/2" = 1'-0"

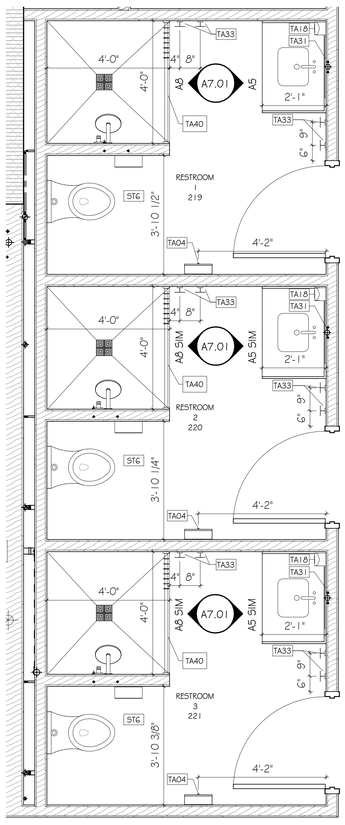


F4 UNISEX TOILET 115 - NORTH WALL
SCALE: 3/8" = 1'-0"

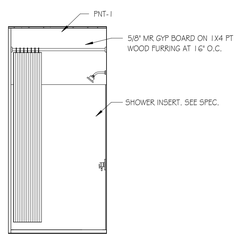
F7 FITNESS - WEST
SCALE: 3/8" = 1'-0"



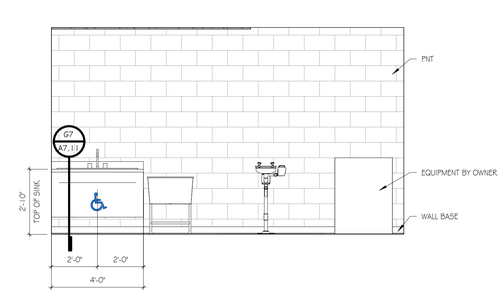
F10 ENLARGED PLAN - SHOWER ROOM 117
SCALE: 1/2" = 1'-0"



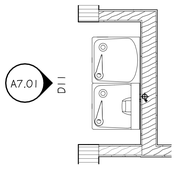
A1 ENLARGED PLAN - RESTROOM 1 219, RESTROOM 2 220, RESTROOM 3 221
SCALE: 1/2" = 1'-0"



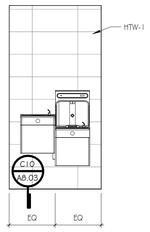
D3 SHOWER ROOM 117 - EAST
SCALE: 3/8" = 1'-0"



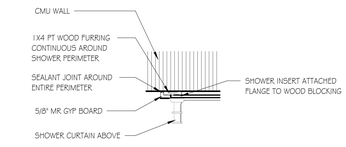
D5 DECON AREA 116 - EAST
SCALE: 3/8" = 1'-0"



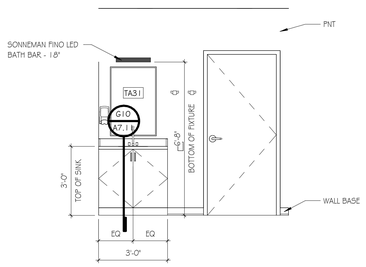
D8 ENLARGED PLAN - CORRIDOR 109
SCALE: 1/2" = 1'-0"



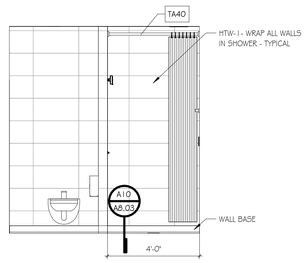
D11 CORRIDOR 109 - EAST
SCALE: 3/8" = 1'-0"



C1 SHOWER FLANGE
SCALE: 1" = 1'-0"



A5 TYP RESTROOM - EAST WALL
SCALE: 3/8" = 1'-0"



A8 TYP RESTROOM - WEST WALL
SCALE: 3/8" = 1'-0"

TOILET ACCESSORIES SCHEDULE		
TAG	DESCRIPTION	COMMENTS
TA01	TOILET TISSUE DISP - DBL. STD. ROLL W/SHELF	CFCI
TA02	TOILET TISSUE DISP - SGL. JUMBO ROLL	CFCI
TA04	PAPER TOWEL DISPENSER (FOLDED, HIGH-CAPACITY)	OFCI
TA18	STERIS SDS SOAP DISPENSER, SURFACE-MOUNT, MANUAL (LIQUID TYPE)	OFOI
TA23	18" VERTICAL GRAB BAR	CFCI
TA24	36" HORIZONTAL GRAB BAR	CFCI
TA25	42" HORIZONTAL GRAB BAR	CFCI
TA30	MIRROR, CHANNEL FRAMED WITHOUT SHELF (18 x 36 INCHES)	CFCI
TA31	MIRROR, CHANNEL FRAMED WITHOUT SHELF (24 x 36 INCHES)	CFCI
TA32	MIRROR, CHANNEL FRAMED (24 x 60 INCHES)	CFCI
TA33	ROBE HOOK (non-ADA)	CFCI
TA36	SANITARY NAPKIN DISPOSAL - SURF-MT, BOTTOM HINGED	CFCI
TA40	SHOWER ROD	CFCI
TA42	VINYL SHOWER CURTAIN	OFOI

SPECIALTY EQUIPMENT SCHEDULE		
TAG	DESCRIPTION	COMMENTS
S1	4K SMART TV, SEE INTERIOR ELEVATION FOR ELEC. COORDINATION	OFCI
S2	RANGE	OFCI
S3	MICROWAVE	OFCI
S4	REFRIGERATOR	OFCI
S5	DISH WASHER	OFCI
S6	TACK BOARD	CFCI
S7	MARKER BOARD - 10'-0"W X 4'-0"H	CFCI
S9	CEILING MOUNTED PROJECTION SCREEN - ELECTRIC	CFCI
S10	2 TIER HEAVY DUTY LOCKER	OFCI
S11	PROJECTOR	OFCI
S12	ICE MACHINE	OFOI
S13	COFFEE MAKER	OFCI

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117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
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DRAWN BY: AGL
CHECKED BY: JDP

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

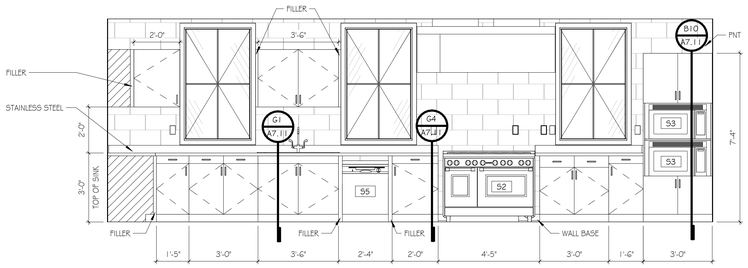
STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads
Alabama
REGISTERED ARCHITECT

01/09/2026

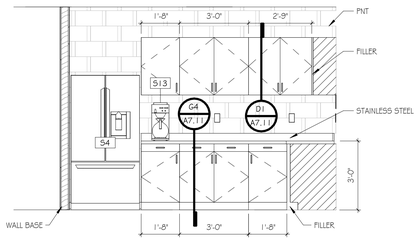
ENLARGED PLANS & INTERIOR ELEVATIONS

A7.01

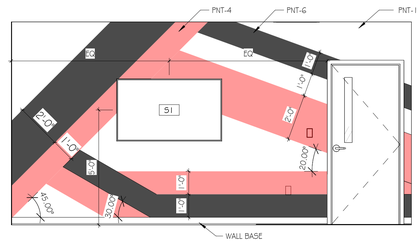
TEMPLATE VERSION: 2025.1
1/13/2026 2:31:25 PM



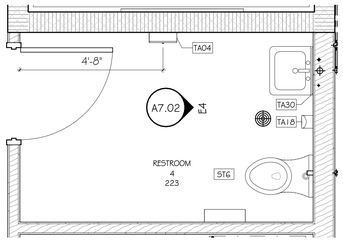
H1 KITCHEN - NORTH
SCALE: 3/8" = 1'-0"



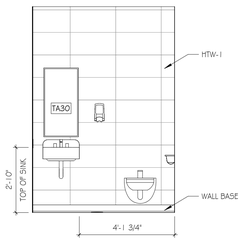
H5 KITCHEN - WEST
SCALE: 3/8" = 1'-0"



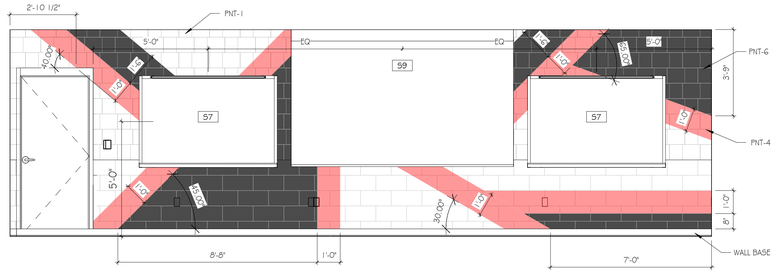
H8 DAY ROOM - SOUTH
SCALE: 3/8" = 1'-0"



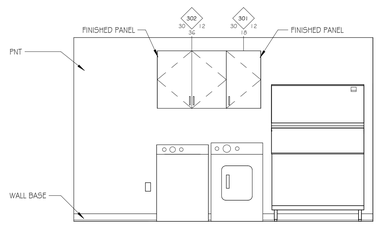
E1 ENLARGED PLAN - RESTROOM 4
SCALE: 1/2" = 1'-0"



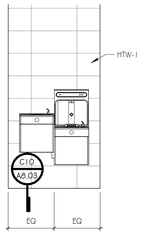
E4 RESTROOM 4 - EAST
SCALE: 3/8" = 1'-0"



E7 TRAINGING - EAST
SCALE: 3/8" = 1'-0"



C1 LAUNDRY 222 - EAST
SCALE: 3/8" = 1'-0"



C4 CORRIDOR 212 - EAST
SCALE: 3/8" = 1'-0"

TOILET ACCESSORIES SCHEDULE

TAG	DESCRIPTION	COMMENTS
TA01	TOILET TISSUE DISP - DBL. STD. ROLL W/SHELF	CFCI
TA02	TOILET TISSUE DISP - SGL. JUMBO ROLL	CFCI
TA04	PAPER TOWEL DISPENSER (FOLDED, HIGH-CAPACITY)	OFCI
TA18	STERIS SDS SOAP DISPENSER, SURFACE-MOUNT, MANUAL (LIQUID TYPE)	OFOI
TA23	18" VERTICAL GRAB BAR	CFCI
TA24	36" HORIZONTAL GRAB BAR	CFCI
TA25	42" HORIZONTAL GRAB BAR	CFCI
TA30	MIRROR, CHANNEL FRAMED WITHOUT SHELF (18 x 36 INCHES)	CFCI
TA31	MIRROR, CHANNEL FRAMED WITHOUT SHELF (24 x 36 INCHES)	CFCI
TA32	MIRROR, CHANNEL FRAMED (24 x 60 INCHES)	CFCI
TA33	ROBE HOOK (non-ADA)	CFCI
TA36	SANITARY NAPKIN DISPOSAL - SURF-MT, BOTTOM HINGED	CFCI
TA40	SHOWER ROD	CFCI
TA42	VINYL SHOWER CURTAIN	OFOI

SPECIALTY EQUIPMENT SCHEDULE

TAG	DESCRIPTION	COMMENTS
S1	4K SMART TV, SEE INTERIOR ELEVATION FOR ELEC. COORDINATION	OFCI
S2	RANGE	OFCI
S3	MICROWAVE	OFCI
S4	REFRIGERATOR	OFCI
S5	DISH WASHER	OFCI
S6	TACK BOARD	CFCI
S7	MARKER BOARD - 10'-0"W X 4'-0"H	CFCI
S9	CEILING MOUNTED PROJECTION SCREEN - ELECTRIC	CFCI
S10	2 TIER HEAVY DUTY LOCKER	OFCI
S11	PROJECTOR	OFCI
S12	ICE MACHINE	OFOI
S13	COFFEE MAKER	OFCI

GMC

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

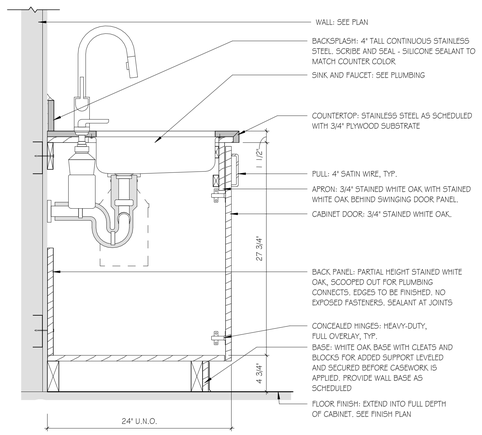
STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

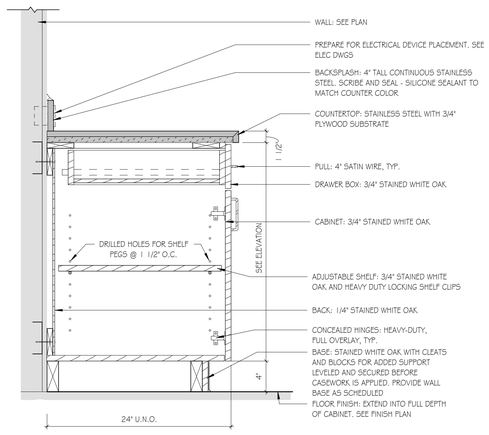
INTERIOR ELEVATIONS

A7.02

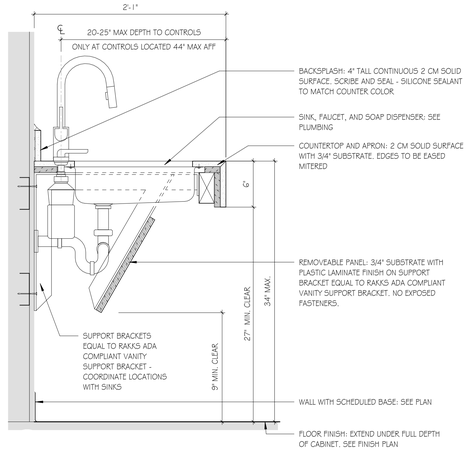
1/13/2026 2:31:28 PM TEMPLATE VERSION: 2025.1



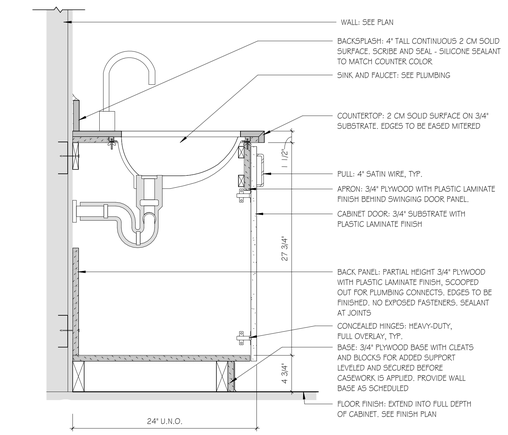
G1 KITCHEN SINK BASE CABINET
SCALE: 1 1/2" = 1'-0"



G4 TYP. BASE CABINET & DRAWER
SCALE: 1 1/2" = 1'-0"



G7 TRIAGE SINK BASE CABINET
SCALE: 1 1/2" = 1'-0"



G10 RESTROOM SINK BASE CABINET
SCALE: 1 1/2" = 1'-0"

D1 TYP. UPPER CABINET
SCALE: 1 1/2" = 1'-0"

D4 COUNTERTOP WITH CONCEALED BRACKET DETAIL
SCALE: 1 1/2" = 1'-0"

NOTES:
- SHELVES NOTED "G 10" ON PLAN
- STANDARDS TO EXTEND FROM 6" AFF TO 12" BELOW CEILING
- SEE RCP FOR CEILING HEIGHTS
- PROVIDE SHELF W/ BRACKETS FOR EVERY 12" H OF STANDARDS
- SEE FLOOR PLAN FOR SHELF DIMENSIONS- FIELD VERIFY PRIOR TO INSTALLATION
- PROVIDE BRACKETS AND STANDARDS PER MANUFACTURERS RECOMMENDATION

B7 PANTRY SHELVING
SCALE: 1 1/2" = 1'-0"

B10 DOUBLE MICROWAVE TALL CABINET
SCALE: 1 1/2" = 1'-0"

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

MILLWORK DETAILS

A7.11

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FINISH NOTES

FLOORS:

- REFER TO FLOOR FINISH PLANS FOR FLOOR PATTERN. CONTRACTOR MUST NOTIFY INTERIOR DESIGNER BEFORE INSTALLATION OF FLOORING TO REVIEW DESIGN INTENT OF FLOOR PATTERN PLAN

- ALL FLOORING TRANSITIONS INCLUDING TRANSITIONS TO SIMILAR MATERIAL OR REDUCER STRIPS AND OTHER THRESHOLDS TO DISSIMILAR MATERIAL SHALL BE LOCATED AT THE CENTERLINE OF DOOR WHEN IN CLOSED POSITION. COLORS SHALL BE SELECTED DURING SUBMITTAL REVIEW. REFER TO DETAILS FOR TRANSITIONS BETWEEN FLOORING MATERIALS. CONTRACTOR TO PROVIDE TRANSITION SIZES APPROPRIATE FOR THICKNESS

- AVOID ALL FLOORING MATERIAL SLIVER CUTS LESS THAN 4" WIDE @ WALL PERIMETERS & MATERIAL TRANSITIONS. CONTACT DESIGNER IF JOBSITE CONDITIONS DIFFER.

- INSTALL FLOORING CONTINUOUS UNDER ALL CASEWORK, MILLWORK, EQUIPMENT, & FURNITURE

- ALIGN VERTICAL GROUT JOINTS IN TILE BASE WITH THOSE IN THE FLOOR TILE UNLESS NOTED OTHERWISE

WALLS:

- REFER TO FINISH PLANS & ELEVATIONS FOR LOCATION OF ACCENT PAINT COLORS

- ALL HOLLOW METAL DOOR & WINDOW FRAMES TO BE PAINTED (PNT-2) UNLESS OTHERWISE NOTED

- ALL ACCESS PANELS AND MISCELLANEOUS METAL (RETURN AND AIR SUPPLY GRILLES, EXPANSION JOINTS, ETC.) LOCATED ON WALL SURFACES OR CEILING SURFACES TO BE PAINTED WALL OR CEILING COLOR U.N.O.

- WALL BASE TO BE INSTALLED ON ALL WALLS, MILLWORK, AND CASEWORK U.N.O.

- INSTALL FINISH STRIP EQUAL TO SCHLUTER "JOLLY" AT ALL EXPOSED TILE EDGES & CORNERS

MILLWORK / CASEWORK:

- INSTALL 3MM EDGEBAND ON ALL PLASTIC LAMINATE COUNTERTOPS AND CABINETS.

- ALL WINDOWS TO HAVE SOLID SURFACE (SS-2) SILL U.N.O.

- GROMMET LOCATIONS TO BE COORDINATED WITH OWNER

- FIELD VERIFY ALL DIMENSIONS FOR CASEWORK & MILLWORK PRIOR TO FABRICATION & INSTALLATION

- ALL EXPOSED ENDS AND EXPOSED INTERIORS OF CASEWORK/ MILLWORK TO RECEIVE MATCHING LAMINATES

- ALL FILE DRAWERS TO BE LOCKABLE.

MISC:

- DO NOT PAINT DOOR LABELS AT RATED DOORS OR FRAMES.

- PROVIDE BLOCKING AS REQUIRED AT ALL TELEVISION LOCATIONS - COORDINATE WITH OWNER'S EQUIPMENT

- PROVIDE BLOCKING FOR ALL GRAB BARS AND TOILET ACCESSORIES

- REFER TO RCP FOR ACCENT PAINT COLOR LOCATIONS IN CEILING - WHERE CEILINGS ARE CALLED OUT TO BE PAINTED, BOTH CEILING AND SOFFIT/BULKHEAD WALLS ARE TO BE PAINTED ACCENT COLOR

- ROLLER SHADES AND BLINDS ARE TAGGED ON THE RCP

- NON ADA TOILET FIXTURES SHALL BE CENTERED IN STALL

- WALL TILE TO BE INSTALLED TO CEILING ON ALL WET WALLS (REVISE THIS NOTE ACCORDINGLY)

- CAULK ALL DOOR FRAMES, MILLWORK, AND VIEW WINDOW FRAMES AFTER WALLCOVERING INSTALLATION IS COMPLETE. COLOR OF CAULK TO MATCH ADJACENT FINISH.

- GC TO PROVIDE SPECIFIED EXPANSION JOINT COVER AT ALL EXPOSED FINISH FLOOR, CEILING, AND WALL LOCATIONS

- MARKER BOARDS HEIGHTS TO BE (3'-0" A.F.F.) TO THE BOTTOM OF WRITING SURFACE. GC TO COORDINATE WALL BLOCKING AS REQ'D.

- ALL PARTIES RESPONSIBLE FOR DELIVERING FINISHES TO THE SITE SHALL CHECK AVAILABILITY OF QUANTITIES AND DELIVERY DATES UPON NOTICE TO PROCEED. NO CONSIDERATION WILL BE GIVEN FOR FAILURE TO COMPLY WITH THIS REQUIREMENT.

RCP NOTES:

- ALL SPRINKLER HEADS IN FINISHED CEILINGS ALL SHALL BE CENTERED IN CEILING TILE. SPRINKLER HEADS SHALL NOT BE PAINTED.

- INTERIOR CEILING HEIGHTS SHALL BE AS INDICATED ON THE REFLECTED CEILING PLANS.

- ALL BULKHEADS TO BE 4" BELOW ADJACENT ACT CEILING UNLESS NOTED OTHERWISE

- WHERE EXIT SIGNS ARE LOCATED ABOVE DOORWAYS, CENTER ABOUT DOOR, BUT MAINTAIN MINIMUM OVERHEAD CLEARANCE.

- IN EXPOSED CEILINGS (EXP-2) ALL EXPOSED ELEMENTS NOT LIMITED TO TRUSS SYSTEM, ACOUSTICAL DECK, DUCTWORK, CONDUIT, AND PIPING TO BE PAINTED

- ALL GYP CEILINGS TO BE PAINTED (PNT-3) UNLESS OTHERWISE NOTED IN RCP. BOTH CEILING AND SOFFIT /BULKHEAD SURFACES ARE TO BE PAINTED THE SAME COLOR.

- DO NOT INSTALL CEILING TILE LESS THAN 6" IN ANY DIRECTION - WHEN POSSIBLE CENTER TILE IN ROOM.

- COORDINATE WITH OWNER'S A/V CONSULTANT FOR PROJECTION SCREEN AND PROJECTOR LOCATIONS

ROOM FINISH SCHEDULE

ROOM #	ROOM NAME	FLOOR	BASE	WALL	MILLWORK/CASEWORK CABINET	MILLWORK/CASEWORK COUNTERTOP	COMMENTS
100	LOBBY	WOC-1, LVT-1	RB-1	PNT-1, WP-1			
101	TRIAGE	LVT-1	RB-1	PNT-1, WP-1	PL-2	SS-1	EPOXY PAINT
102	UNISEX TOILET	EF-1	EB-1	PNT-1, HTW-1			EPOXY PAINT
103	OFFICE	LVT-1	RB-1	PNT-1			
104	OFFICE	LVT-1	RB-1	PNT-1			
105	OFFICE	SC-1	RB-1	PNT-1			
106	WATCH OFFICE	SC-1	RB-1	PNT-1			
107	FIRE RISER	SC-1	RB-1	PNT-1			
108	IT/ELECT.	SC-1	RB-1	PNT-1			
109	CORRIDOR	SC-1	RB-1	PNT-1, PNT-4, HTW-1			
110	TRAINING	SC-1	RB-1	PNT-1, PNT-4, PNT-6			
111	A/V & STORAGE	SC-1	RB-1	PNT-1			
112	FITNESS	SC-1	RB-1	PNT-4, PNT-5, PNT-6			
113	EMS STORAGE	SC-1	RB-1	PNT-1			
114	GEAR ROOM	SC-1	RB-1	PNT-1			
115	UNISEX TOILET	EF-1	EB-1	PNT-1, HTW-1			EPOXY PAINT
116	DECON AREA	EF-1	EB-1	PNT-1	PL-2	SS-1	EPOXY PAINT
117	SHOWER ROOM	EF-1	EB-1	PNT-1, HTW-1			EPOXY PAINT
118	APPARATUS BAY	SC-1	RB-1	PNT-1, PNT-4			
119	JAN.	SC-1	RB-1	PNT-1, WP-1			EPOXY PAINT
200	PLATFORM	LVT-1	RB-1	PNT-1			
201	KITCHEN	LVT-1	RB-1	PNT-1, PNT-4	MILLWORK	STAINLESS STEEL	
202	DAY ROOM	LVT-1	RB-1	PNT-1, PNT-4, PNT-6			
203	STORAGE W/ LOCKERS	LVT-1	RB-1	PNT-1			
204	BUNK ROOM 1	LVT-1	RB-1	PNT-5			
205	BUNK ROOM 2	LVT-1	RB-1	PNT-5			
206	BUNK ROOM 3	LVT-1	RB-1	PNT-5			
207	BUNK ROOM 4	LVT-1	RB-1	PNT-5			
208	BUNK ROOM 5	LVT-1	RB-1	PNT-5			
209	BUNK ROOM 6	LVT-1	RB-1	PNT-5			
210	BUNK ROOM 7	LVT-1	RB-1	PNT-5			
211	IT/ELECT.	LVT-1	RB-1	PNT-1			
212	CORRIDOR	LVT-1	RB-1	PNT-1, HTW-1			
213	OFFICE/FLEX SPACE	LVT-1	RB-1	PNT-1			
214	STORAGE	LVT-1	RB-1	PNT-1			
215	PANTRY	LVT-1	RB-1	PNT-1			
216	PANTRY	LVT-1	RB-1	PNT-1			
217	PANTRY	LVT-1	RB-1	PNT-1			
218	STORAGE	LVT-1	RB-1	PNT-1			
219	RESTROOM 1	HTF-1	HTB-1	PNT-1, HTW-1	PL-1	SS-1	EPOXY PAINT
220	RESTROOM 2	HTF-1	HTB-1	PNT-1, HTW-1	PL-1	SS-1	EPOXY PAINT
221	RESTROOM 3	HTF-1	HTB-1	PNT-1, HTW-1	PL-1	SS-1	EPOXY PAINT
222	LAUNDRY	SF-1	RB-1	PNT-1	PL-2		EPOXY PAINT
223	RESTROOM 4	HTF-1	HTB-1	PNT-1, HTW-1	PL-1	SS-1	EPOXY PAINT
224	STORAGE	LVT-1	RB-1	PNT-1			
225	STORAGE	LVT-1	RB-1	PNT-1			
ST1	STAIRWELL	RF-1, RST-1	RB-1	PNT-1, PNT-4			
ST1	STAIRWELL	RF-1, RST-1	RB-1	PNT-1, PNT-4			
ST2	STAIRWELL	RF-1, RST-1	RB-1	PNT-1, PNT-4			
ST2	STAIRWELL	RF-1, RST-1	RB-1	PNT-1, PNT-4			

FINISH LEGEND

FLOOR

NUMBER	TYPE	DETAIL DESCRIPTION
HTF-1	HARD FLOOR TILE	MANUFACTURER: DALTILE STYLE NAME: KEYSTONES IN ORGANIC HEXAGON COLOR: CASTLEROCK GROUT: TBD LOCATION: WHERE NOTED
LVT-1	LUXURY VINYL TILE	MANUFACTURER: MOHAWK GROUP STYLE NAME: SEQOYA 5.0 C2104 COLOR: 828 HONEY MAPLE SIZE: 9.48" X 59.06" THICKNESS: 5MM INSTALLATION: ASHLAR LOCATION: WHERE NOTED
SC-1	SEALED CONCRETE	MANUFACTURER: EUCLID CHEMICAL STYLE NAME: 2 COATS: EUCO DIAMOND HARD W/ EUCO GRIP ANTI-SLIP ADDITIVE COLOR: CLEAR LOCATION: WHERE NOTED
EF-1	EPOXY FLOORING	MANUFACTURER: STONHARD STYLE NAME: STONTEC ERF COLOR: TORGINAL FLAKE: POLAR (B-330) SIZE: 1/8" FLAKE LOCATION: WHERE NOTED
RST-1	RUBBER STAIR TREAD & RISERS	MANUFACTURER: NORA STYLE NAME: NORAMENT ARGO TREAD 5172 COLOR: STAMINA LOCATION: STAIRWELLS
RF-1	RUBBER FLOORING	MANUFACTURER: NORA STYLE NAME: NORAMENT ARAGO COLOR: STAMINA SIZE: 39.53" X 19.76" THICKNESS: 3.5 MM INSTALLATION: MONOLITHIC LOCATION: WHERE NOTED
WOM-1	WALK-OFF MAT	MANUFACTURER: MANNINGTON STYLE NAME: FRIXTON COLOR: STATIC SIZE: 18" X 36" LOCATION: LOBBY
SF-1	SHEET FLOORING	MANUFACTURER: MANNINGTON STYLE NAME: TESSELATE COLOR: LAKE SIZE: 12' LOCATION: WHERE NOTED

BASE

NUMBER	TYPE	DETAIL DESCRIPTION
RB-1	RUBBER BASE	MANUFACTURER: ROPPE STYLE NAME: PINNACLE RUBBER BASE -TYPE-TS- 1/8" COLOR: 178 PEWTER SIZE: 4" INSTALLATION: CONTINUOUS LOCATION: WHERE NOTED
HTB-1	HARD TILE BASE	MANUFACTURER: DALTILE STYLE: MATCH HTW-1 COLOR: MATCH HTW-1 SIZE: 3 X 24" BULLNOSE LOCATION: WHERE NOTED PROVIDE SCHLUTER DILEX-AHK AT FLOOR TILE TO WALL TILE TRANSITION - TYPICAL
EB-1	EPOXY BASE	MANUFACTURER: MATCH EF-1 STYLE NAME: MATCH EF-1 COLOR: MATCH EF-1 SIZE: 4" LOCATION: WHERE NOTED

WALL

NUMBER	TYPE	DETAIL DESCRIPTION
PNT-1	[GENERAL/MAIN PAINT]	MANUFACTURER: SHERWIN WILLIAMS COLOR: SW 7672 KNITTING NEEDLES LOCATION: WHERE NOTED
PNT-2	[TRIM PAINT]	MANUFACTURER: SHERWIN WILLIAMS COLOR: SW 7018 DOVETAIL LOCATION: WHERE NOTED
PNT-3	[MAIN CEILING/SOFFIT PAINT]	MANUFACTURER: SHERWIN WILLIAMS COLOR: SW 7005 PURE WHITE LOCATION: WHERE NOTED
PNT-4	[ACCENT PAINT]	MANUFACTURER: SHERWIN WILLIAMS COLOR: SW 6869 STOP LOCATION: WHERE NOTED
PNT-5	[ACCENT PAINT]	MANUFACTURER: SHERWIN WILLIAMS COLOR: SW 6235 FOGGY DAY LOCATION: WHERE NOTED
PNT-6	[ACCENT PAINT]	MANUFACTURER: SHERWIN WILLIAMS COLOR: SW 7019 GAUNTLET GRAY LOCATION: WHERE NOTED
HTW-1	HARD WALL TILE	MANUFACTURER: DALTILE STYLE NAME: WANDERWISE COLOR: ROAM SIZE: 12" X 24" INSTALLATION: HORIZONTALLY STACKED GROUT: TBD LOCATION: WHERE NOTED

MISC

NUMBER	TYPE	DETAIL DESCRIPTION
PL-1	PLASTIC LAMINATE	MANUFACTURER: WILSONART COLOR: LANDMARK WOOD LOCATION: WHERE NOTED
PL-2	PLASTIC LAMINATE	MANUFACTURER: WILSONART COLOR: PEPPERDUST LOCATION: WHERE NOTED
SS-1	SOLID SURFACE	MANUFACTURER: WILSONART COLOR: ANGEL FALLS THICKNESS: 1/2" LOCATION: WHERE NOTED
SS-2	SOLID SURFACE	MANUFACTURER: WILSONART COLOR: DESIGNER WHITE THICKNESS: 1/2" LOCATION: WINDOW SILLS
CG-1	CORNER GUARDS	MANUFACTURER: INPRO CORP STYLE NAME: 150BN BLUNOSE HIGH IMPACT CORNER GUARD COLOR: GRAYSTONE 0151 SIZE: 3" WINGS x 8' LOCATION: EXPOSED GYP CORNERS
WP-1	WALL PROTECTION	MANUFACTURER: INPRO CORP STYLE NAME: PALLADIUM RIGID WALL COLOR: GRAYSTONE 0151 THICKNESS: 0.040" LOCATION: WHERE NOTED NOTE: PROVIDE TOP TRIM CAP & DIVIDER BARS WHERE SEAMS OCCUR. *CMU WALLS TO HAVE GAPS FILLED IN AND SMOOTHED.*
RS-1	ROLLER SHADES	MANUFACTURER: DRAPER STYLE: ACCESS FLEX SHADES FABRIC: 3% OPEN LOCATION: RS-1 LOCATIONS AS NOTED ON RCP

CASEWORK SCHEDULE

NOTE: CABINET DESIGN SERIES (CDS) NUMBERS BASED ON AWI STANDARDS EDITION 2

CDS #	CASEWORK TYPE	DESCRIPTION
102	BASE CAB	DBL DOOR
153	BASE CAB	FALSE DRWR / REMOVABLE TOE FOR ADA
211	BASE CAB	SGL DOOR / SGL DRWR
222	BASE CAB	DBL DOORS / DBL DRWRS
230	BASE CAB	3 FILES
301	WALL CAB	SGL DOOR
302	WALL CAB	DBL DOORS
ADA	BASE CAB	ADA SINK
MCWV	TALL STG	MICROWAVE CABINET

TOILET ACCESSORIES SCHEDULE

TAG	DESCRIPTION	COMMENTS
TA01	TOILET TISSUE DISP - DBL. STD. ROLL W/SHELF	CFCI
TA02	TOILET TISSUE DISP - SGL. JUMBO ROLL	CFCI
TA04	PAPER TOWEL DISPENSER (FOLDED, HIGH-CAPACITY)	OFCI
TA18	STERIS SDS SOAP DISPENSER, SURFACE-MOUNT, MANUAL (LIQUID TYPE)	OFOI
TA23	18" VERTICAL GRAB BAR	CFCI
TA24	36" HORIZONTAL GRAB BAR	CFCI
TA25	42" HORIZONTAL GRAB BAR	CFCI
TA30	MIRROR, CHANNEL FRAMED WITHOUT SHELF (18 x 36 INCHES)	CFCI
TA31	MIRROR, CHANNEL FRAMED WITHOUT SHELF (24 x 36 INCHES)	CFCI
TA32	MIRROR, CHANNEL FRAMED (24 x 60 INCHES)	CFCI
TA33	ROBE HOOK (non-ADA)	CFCI
TA36	SANITARY NAPKIN DISPOSAL - SURF-MT, BOTTOM HINGED	CFCI
TA40	SHOWER ROD	CFCI
TA42	VINYL SHOWER CURTAIN	OFOI

SPECIALTY EQUIPMENT SCHEDULE

TAG	DESCRIPTION	COMMENTS
S1	4K SMART TV, SEE INTERIOR ELEVATION FOR ELEC. COORDINATION	OFCI
S2	RANGE	OFCI
S3	MICROWAVE	OFCI
S4	REFRIGERATOR	OFCI
S5	DISH WASHER	OFCI
S6	TACK BOARD	CFCI
S7	MARKER BOARD - 10'-0"W X 4'-0"H	CFCI
S9	CEILING MOUNTED PROJECTION SCREEN - ELECTRIC	CFCI
S10	2 TIER HEAVY DUTY LOCKER	OFCI
S11	PROJECTOR	OFCI
S12	ICE MACHINE	OFOI
S13	COFFEE MAKER	OFCI

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FINISH LEGEND & SCHEDULE

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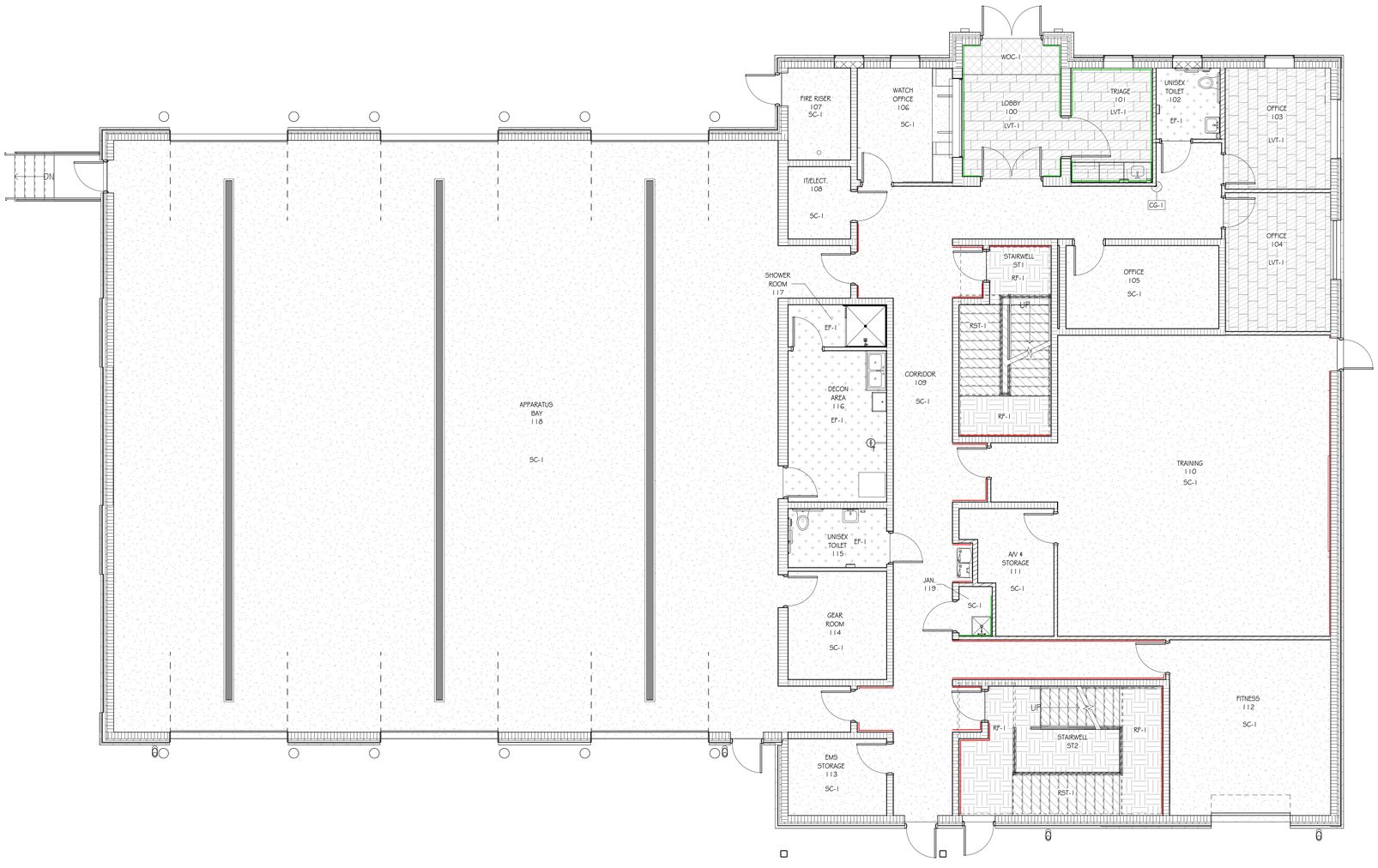

WP-1

ACCENT PAINT

A1 FLOOR FINISH PLAN - LEVEL 1

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

GENERAL NOTES - FINISH PLAN

1. REFER TO FINISH LEGEND FOR PAINT COLORS CALLED OUT ON REFLECTED CEILING PLANS AND FINISH PLANS.
2. UNLESS OTHERWISE NOTED, ALL FLOOR TILE SHALL BE CENTERED IN ROOM.
3. UNLESS OTHERWISE NOTED, ALL CEILING GRID AND LIGHT FIXTURES SHALL BE CENTERED IN ROOM/OPENING.
4. CONTRACTOR TO REVIEW WITH ARCHITECT, ON SITE, AREAS WITH MULTIPLE CEILING, WALL, AND FLOOR FINISHES BEFORE FINISH WORK BEGINS.
5. REFER TO RCP LEGEND ON OVERALL REFLECTED CEILING PLANS FOR RCP ABBREVIATIONS AND FINISHES.
6. WALL TILE AND BASE GROUT LINES SHALL ALIGN WITH FLOOR TILE.
7. PROVIDE BLOCKING FOR GRAB BARS AND TOILET ACCESSORIES IN RESTROOMS.

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FINISH PLAN - LEVEL 1

A8.02

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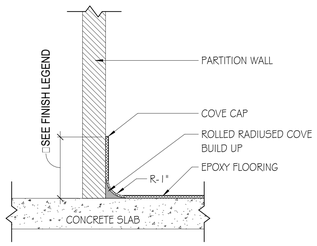
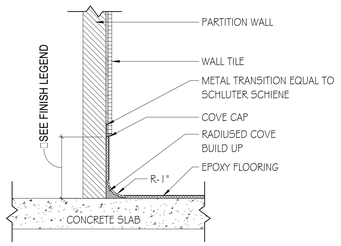


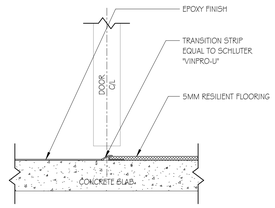
NOTE: USE DRY MIX TROWABLE VERSION OF FLOORING SYSTEM TO BUILD COVE BASE

H1 09- COVE BASE - EPOXY
SCALE: 3" = 1'-0"



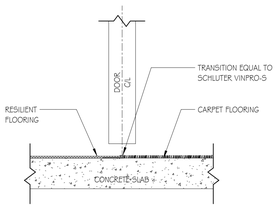
NOTE: USE DRY MIX TROWABLE VERSION OF FLOORING SYSTEM TO BUILD COVE BASE

H3 09- COVE BASE - EPOXY TO WALL TILE
SCALE: 3" = 1'-0"

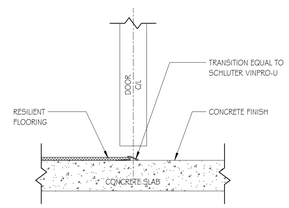


NOTE: IF EPOXY FINISH SYSTEM IS THICKER THAN 1/8", CHANGE TRANSITION DEPTH

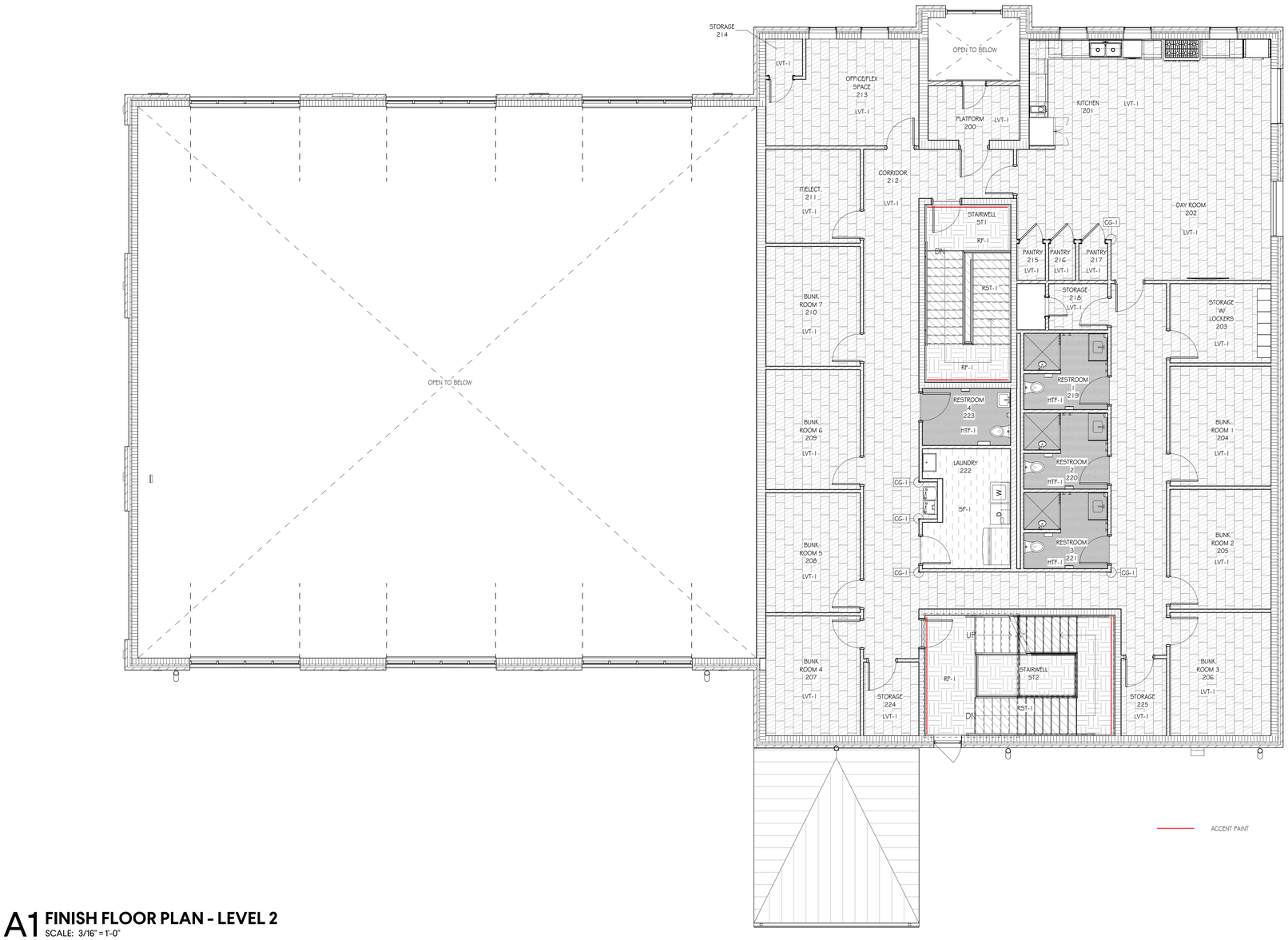
H5 09- EPOXY TO 5MM RESILIENT
SCALE: 3" = 1'-0"



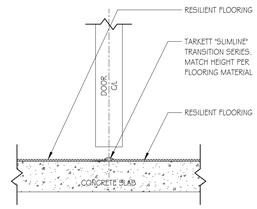
H8 09- RESILIENT TO CARPET - METAL
SCALE: 3" = 1'-0"



H10 09- RESILIENT TO CONCRETE - METAL
SCALE: 3" = 1'-0"

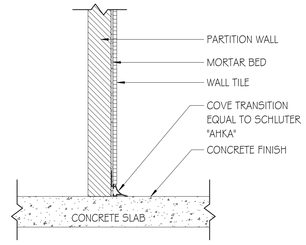


A1 FINISH FLOOR PLAN - LEVEL 2
SCALE: 3/16" = 1'-0"



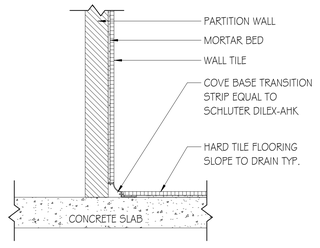
NOTE: FOR DIFFERENT HEIGHT RESILIENT ONLY

F10 09- RESILIENT TO RESILIENT
SCALE: 3" = 1'-0"



WHEN WALL TILE TERMINATES AT CONCRETE, RESILIENT, USE: SCHLUTER DILEX-AKHA

C10 09- METAL COVE - HTW TO RESILIENT/SC
SCALE: 3" = 1'-0"



A10 09- METAL COVE - HTW TO HTF
SCALE: 3" = 1'-0"

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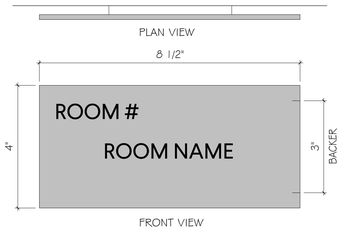
FINISH PLAN - LEVEL 2

A8.03

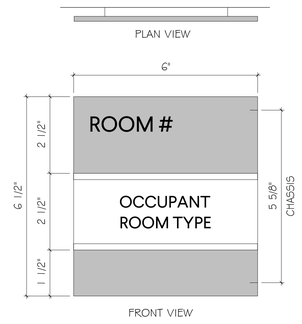
1/13/2026 2:31:33 PM TEMPLATE VERSION: 2025.1

SIGNAGE TYPES:

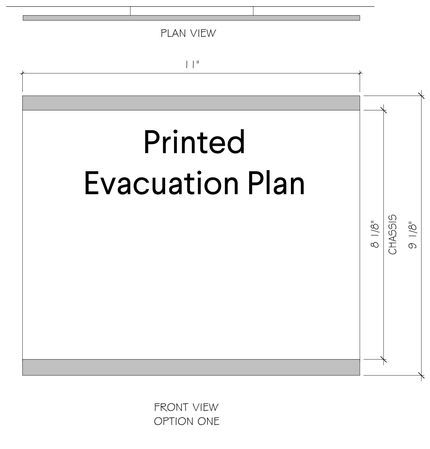
BASED ON APCO SIGNS ELEVATE SERIES



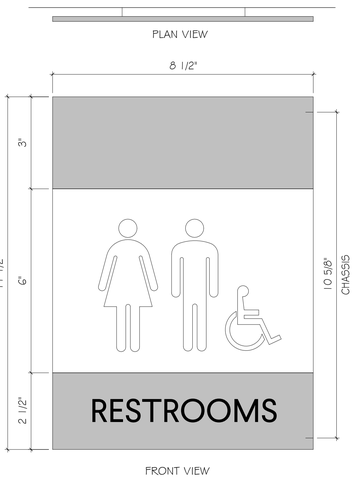
TYPE: A2 (EV85)
SIZE: 4" X 8.5"
MOUNTING: VT
QUANTITY: SEE SCHEDULE



TYPE: A4 (EV06)
SIZE: 6" X 6 5/8"
MOUNTING: VT
QUANTITY: SEE SCHEDULE



TYPE: A8 (EV11)
SIZE: 11" X 9 1/8"
MOUNTING: VT
QUANTITY: 12



TYPE: A6 (EV85)
SIZE: 8.5" X 11 5/8"
SYMBOL: A5 REQUIRED
MOUNTING: VT
QUANTITY: SEE SCHEDULE

SIGNAGE SCHEDULE

PLAN NUMBER	PLAN NAME	SIGN TYPE	MESSAGE ROOM NAME	SIGNAGE COMMENTS
100	LOBBY	-		
101	TRIAGE	A4		
102	UNISEX TOILET	A6		
103	OFFICE	A4		
104	OFFICE	A4		
105	OFFICE	A4		
106	WATCH OFFICE	A4		
107	FIRE RISER	A2		
108	IT/ELECT.	A2		
109	CORRIDOR	-		
110	TRAINING	A4		
111	A/V & STORAGE	A2		
112	FITNESS	A4		
113	EMS STORAGE	A2		
114	GEAR ROOM	A4		
115	UNISEX TOILET	A6		
116	DECON AREA	A4		
117	SHOWER ROOM	A4		
118	APPARATUS BAY	A4		
119	JAN.	A2		
200	PLATFORM	A2		INTERIOR ACCESS PANEL TO HAVE SIGN
201	KITCHEN	-		
202	DAY ROOM	-		
203	STORAGE W/ LOCKERS	A4		
204	BUNK ROOM 1	-		
205	BUNK ROOM 2	-		
206	BUNK ROOM 3	-		
207	BUNK ROOM 4	-		
208	BUNK ROOM 5	-		
209	BUNK ROOM 6	-		
210	BUNK ROOM 7	-		
211	IT/ELECT.	A2		
212	CORRIDOR	-		
213	OFFICE/FLEX SPACE	A4		
214	STORAGE	A2		
215	PANTRY	-		
216	PANTRY	-		
217	PANTRY	-		
218	STORAGE	A2		
219	RESTROOM 1	A6		
220	RESTROOM 2	A6		
221	RESTROOM 3	A6		
222	LAUNDRY	A4		
223	RESTROOM 4	A6		
224	STORAGE	A2		
225	STORAGE	A2		
ST1	STAIRWELL	A4		
ST1	STAIRWELL	A4		
ST2	STAIRWELL	A4		
ST2	STAIRWELL	A4		

SIGNAGE NOTES:

1. ALL SIGNS TO BE MECHANICALLY FASTENED TO WALL.

2. DO NOT USE ROOM NUMBERS ON DRAWINGS - OWNER WILL PROVIDE NEW ROOM NUMBERS.

3. ALL ROOM NAMES TO BE VERIFIED WITH OWNER.

4. ROOM SIGNAGE TO BE MOUNTED TO COMPLAY WITH ADA 703.4.1. COORDINATE WITH ARCHITECT FOR ANY OBSTRUCTION ISSUES FOR MOUNTING SIGNS.

5. COMPLY WITH STANDARDS FOR ACCESSIBLE DESIGN - INCLUDING BUT NOT LIMITED TO SECTION 7.03. IT IS THE RESPONSIBILITY OF THE SIGNAGE SUPPLIER AND INSTALLER TO MEET ADA REQUIREMENTS FOR SIGNAGE FONT SIZE, BRAILLE TYPE, GRAPHIC SYMBOLS, CONTRAST, MOUNTING HEIGHTS, ETC. SHOP DRAWINGS SHALL CLEARLY ILLUSTRATE COMPLIANCE WITH CURRENT ADA STANDARDS.

6. PROVIDE SIGN PER DOOR FOR EACH ROOM.

7. PROVIDE EXTERIOR GRADE SIGNS FOR ANY SIGNS ON EXTERIOR OF BUILDING.

8. SEE LIFE SAFETY AND ELECTRICAL FOR REQUIRED EXIT SIGNS.

GMC

Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

STATE of ALABAMA
Jay W Purkey
9063
Owens Cross Roads, Alabama
REGISTERED ARCHITECT

01/09/2026

SIGNAGE PLAN

A9.01

1/13/2026 2:31:34 PM TEMPLATE VERSION: 2025.1

ABBREVIATIONS AND ACRONYMS

(APPLIES TO ALL MECHANICAL SHEETS)

%	PERCENT
°	DEGREE
°C	DEGREE CELSIUS
°F	DEGREE FAHRENHEIT
ø OR DIA	DIAMETER
Δ	DIFFERENCE
AAV	AIR ADMITTANCE VALVE
AC	ALTERNATING CURRENT
ACH	AIR CHANGES PER HOUR
ACU	AIR-CONDITIONING UNIT(S)
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHRI	AIR-CONDITIONING, HEATING, AND REFRIGERATION INSTITUTE
AHU	AIR-HANDLING UNIT
AMB	AMBIENT
AMCA	AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL
AMP	AMPERE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AS	AIR SEPARATOR
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR-CONDITIONING ENGINEERS
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ATM	ATMOSPHERE
AVG	AVERAGE
AWG	AMERICAN WIRE GAGE
BAS	BUILDING AUTOMATION SYSTEM
BEP	BEST EFFICIENCY POINT
BFP	BACKFLOW PREVENTER
BHP	BRAKE HORSEPOWER
BOD	BASIS OF DESIGN
BP	BOILING POINT
BT	BUFFER TANK
BTU	BRITISH THERMAL UNIT
BTU/H	BRITISH THERMAL UNIT PER HOUR
CAV	CONSTANT AIR VOLUME
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CHWP	CHILLED WATER PUMP
CLG	COOLING OR CEILING
CO	CLEANOUT
COMP	COMPRESSOR
COORD	COORDINATE
COP	COEFFICIENT OF PERFORMANCE
CPVC	CHLORINATED POLYVINYL CHLORIDE
CRAC	COMPUTER ROOM AIR CONDITIONING UNIT
CRAH	COMPUTER ROOM AIR HANDLING UNIT
CS	CURRENT SWITCH
CT	COOLING TOWER
CU	CONDENSING UNIT
CU FT	CUBIC FEET
CU IN	CUBIC INCH
C_V	COEFFICIENT, VALVE FLOW
CWP	CONDENSER WATER PUMP
DAT	DISCHARGE AIR TEMPERATURE
DB	DECIBEL
DBT	DRY-BULB TEMPERATURE
DC	DIRECT CURRENT
DCV	DEMAND CONTROL VENTILATION
DD	DIRECT DRIVE
DDC	DIRECT DIGITAL CONTROL
DN	DOWN
DOAS	DEDICATED OUTDOOR AIR SYSTEM
DP	DIFFERENTIAL PRESSURE
DPT	DEW-POINT TEMPERATURE
DWG	DRAWING
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRONICALLY COMMUTATED
EDH	ELECTRIC DUCT HEATER
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EL	ELEVATION
ENT	ENTERING
ERV	ENERGY RECOVERY VENTILATOR
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EWT	ENTERING WATER TEMPERATURE
FAS	FIRE ALARM SYSTEM
FCU	FAN COIL UNIT
FEI	FAN ENERGY INDEX
FLA	FULL LOAD AMPS
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FPTU	FAN POWERED TERMINAL UNIT
FSK	FOIL, SCRIM, AND KRAFT PAPER
FT	FOOT OR FEET
FT LB	FOOT-POUND
GAL	GALLONS
GPM	GALLONS PER MINUTE
GR	GRAINS
GV	GRAVITY VENTILATOR
H/P	HEAT PUMP
H2O	WATER
HD	HEAD
HEPA	HIGH-EFFICIENCY PARTICULATE AIR FILTER
HOA	HAND-OFF-AUTO
HP	HORSEPOWER
HRV	HEAT RECOVERY VENTILATOR
HSPF	HEATING SEASONAL PERFORMANCE FACTOR
HTG	HEATING
HVAC	HEATING, VENTILATING, AND AIR-CONDITIONING
HX	HEAT EXCHANGER
HZ	HERTZ (FREQUENCY)
IAQ	INDOOR AIR QUALITY
ICC	INTERNATIONAL CODE COUNCIL
IE	INVERT ELEVATION
IEER	INTEGRATED ENERGY EFFICIENCY RATIO
IN	INCH
IPLV	INTEGRATED PART LOAD VALUE
IPS	INTERNATIONAL PIPE STANDARD OR IRON PIPE SIZE
K	THERMAL CONDUCTIVITY
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LB	POUND
LHG	LATENT HEAT GAIN
LVR	LOUVER
LWT	LEAVING WATER TEMPERATURE
MAT	MIXED AIR TEMPERATURE
MAU	MAKEUP AIR UNIT
MAX	MAXIMUM
MBH	1,000 BRITISH THERMAL UNITS PER HOUR
MCA	MINIMUM CIRCUIT AMPS
MECH	MECHANICAL
MERV	MINIMUM EFFICIENCY REPORTING VALUE
MHGRH	MODULATING HOT GAS REHEAT
MIN	MINIMUM
MOCP	MAXIMUM OVERCURRENT PROTECTION
N C	NORMALLY CLOSED
N I C	NOT IN CONTRACT
N O	NORMALLY OPEN
N T S	NOT TO SCALE
N/A	NOT APPLICABLE
NC	NOISE CRITERIA
NEC	NATIONAL ELECTRIC CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NG	NATURAL GAS
NPSH	NET POSITIVE SUCTION HEAD
NPT	NATIONAL PIPE THREAD
OA	OUTDOOR AIR
OAT	OUTDOOR AIR TEMPERATURE
PD	PRESSURE DROP
PH	PHASE (ELECTRICAL)
PRV	PRESSURE REDUCING VALVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIA	PSI ABSOLUTE
PSIG	PSI GAGE
PTAC	PACKAGED TERMINAL AIR CONDITIONER
PTHP	PACKAGED TERMINAL HEAT PUMP
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
R	THERMAL RESISTANCE
RA	RETURN AIR
RAT	RETURN AIR TEMPERATURE
RD	ROOF DRAIN
RECIRC	RECIRCULATE
RH	RELATIVE HUMIDITY
RPM	REVOLUTIONS PER MINUTE
RTU	ROOFTOP UNIT
S	SECOND
SA	SUPPLY AIR
SAT	SUPPLY AIR TEMPERATURE
SCFM	CFM, STANDARD CONDITIONS
SCR	SILICON CONTROLLED RECTIFIER
SD	SUCTION DIFFUSER
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SG	SPECIFIC GRAVITY
SH	SENSIBLE HEAT
SHG	SENSIBLE HEAT GAIN
SHR	SENSIBLE HEAT RATIO
SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION
SP	STATIC PRESSURE
SP HT	SPECIFIC HEAT
SP VOL	SPECIFIC VOLUME
SPEC	SPECIFICATION
SQ	SQUARE
SQ FT	SQUARE FEET
SS	SPLIT SYSTEM
SSR	SOLID STATE RELAY
STD	STANDARD
STR	STARTER (MOTOR)
T STAT	THERMOSTAT
TAB	TESTING, ADJUSTING, AND BALANCING
TDV	TRIPLE DUTY VALVE
TEMP	TEMPERATURE
TMV	THERMOSTATIC MIXING VALVE
TONS	TONS OF REFRIGERATION
TSP	TOTAL STATIC PRESSURE
TXV	THERMAL EXPANSION VALVE
TYP	TYPICAL
U	HEAT TRANSFER COEFFICIENT
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
V	VOLT
VA	VOLT AMPERE
VAC	VACUUM
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VENT	VENTILATION, VENT
VFD	VARIABLE FREQUENCY DRIVE
VOL	VOLUME
VRF	VARIABLE REFRIGERANT FLOW
W	WATT
W/	WITH
WBT	WET-BULB TEMPERATURE
WC	WATER COLUMN
WG	WATER GAGE

DUCTWORK

- RECTANGULAR DUCTWORK (FIRST DIMENSION IS SIDE SHOWN) — 24"x12"
- SUPPLY DUCT SECTION, UP
- SUPPLY DUCT SECTION, DOWN
- RETURN DUCT SECTION, UP
- RETURN DUCT SECTION, DOWN
- EXHAUST DUCT SECTION, UP
- EXHAUST DUCT SECTION, DOWN
- ROUND DUCT SECTION, UP
- ROUND DUCT SECTION, DOWN
- CHANGE OF ELEVATION (UP/DOWN) — U/D
- DUCT TRANSITION
- MANUAL VOLUME DAMPER
- FLEX DUCT
- CEILING SUPPLY DIFFUSER
- CEILING SUPPLY DIFFUSER (ROUND)
- CEILING RETURN GRILLE
- CEILING EXHAUST GRILLE
- SIDEWALL GRILLE
- TURNING VANES
- AIR FILTER

PIPING SYSTEMS

——	CW	DOMESTIC COLD WATER PIPING
— — —	HW	DOMESTIC HOT WATER PIPING
— — —	HWC	DOMESTIC HOT WATER CIRCULATING PIPING
————	SAN	SANITARY DRAIN PIPING (ABOVE SLAB)
— — —	SAN U/G	SANITARY DRAIN PIPING (UNDERGROUND)
————	ST	STORM DRAIN PIPING (ABOVE SLAB)
————	STO	STORM OVERFLOW PIPING
— — —	ST U/G	STORM DRAIN PIPING (UNDERGROUND)
- - - -	V	VENT PIPING
————	G	GAS PIPING
————	CD	CONDENSATE PIPING
————	CHWS	CHILLED WATER SUPPLY PIPING
————	CHWR	CHILLED WATER RETURN PIPING
————	CWS	CONDENSER WATER SUPPLY PIPING
————	CWR	CONDENSER WATER RETURN PIPING
————	A	COMPRESSED AIR PIPING

PIPING

- BALL VALVE
- BUTTERFLY VALVE
- CHECK VALVE
- GATE VALVE
- GATE, ANGLE VALVE
- GLOBE VALVE
- GLOBE, ANGLE VALVE
- PLUG VALVE
- DIAPHRAGM VALVE
- NEEDLE VALVE
- LOCK SHIELD VALVE
- SAFETY OR RELIEF VALVE
- PRESSURE-REDUCING REGULATOR
- THREE WAY VALVE
- ELECTRIC SOLENOID VALVE — S
- ELECTRIC MOTOR ACTUATED 2-WAY VALVE — M
- ELECTRIC MOTOR ACTUATED 3-WAY VALVE — M
- BACKFLOW PREVENTER (SMALL ASSEMBLY)
- BACKFLOW PREVENTER (LARGE ASSEMBLY)
- PIPE CAP
- PIPE ELBOW, DOWN
- PIPE ELBOW, UP
- PIPE TEE, DOWN
- PIPE TEE
- P-TRAP
- UNION
- AUTOMATIC AIR VENT
- FLOW SWITCH — FS
- PRESSURE SWITCH — PS
- PRESSURE GAGE AND COCK
- PUMP
- STRAINER
- STRAINER, BLOW OFF
- THERMOMETER
- PUMP SUCTION DIFFUSER — PSD
- FLEXIBLE CONNECTOR
- TEST PLUG

CONTROLS

- DIGITAL INPUT / DIGITAL OUTPUT WITH CONTROL POINT IDENTIFICATION — DI, DO
- ANALOG INPUT / ANALOG OUTPUT WITH CONTROL POINT IDENTIFICATION — AI, AO
- INTERFACE — IF
- SPACE THERMOSTAT WITH HUMIDISTAT — T
- DUCT-MOUNTED SMOKE DETECTOR — → TO FAS
- AIRFLOW STATION — F
- DUCT-MOUNTED TEMPERATURE SENSOR / SPACE TEMPERATURE SENSOR / FREEZE STAT — T, T, FZ
- DUCT-MOUNTED RH SENSOR / SPACE RH SENSOR — RH, RH
- DUCT-MOUNTED CO_2 SENSOR / SPACE CO_2 SENSOR — CO_2, CO_2
- DUCT-MOUNTED ENTHALPY SENSOR — H
- DUCT-MOUNTED STATIC PRESSURE SENSOR — SP
- DIFFERENTIAL PRESSURE SENSOR — DP
- MANUAL OPPOSED BLADE DAMPER / ELECTRIC MOTOR ACTUATED OPPOSED BLADE DAMPER (24V UNO) — M
- MANUAL PARALLEL BLADE DAMPER / ELECTRIC MOTOR ACTUATED PARALLEL BLADE DAMPER (24V UNO) — M
- MANUAL SINGLE BLADE DAMPER / ELECTRIC MOTOR ACTUATED SINGLE BLADE DAMPER (24V UNO) — M
- BAROMETRIC RELIEF DAMPER
- CENTRIFUGAL FAN
- PLENUM FAN
- AXIAL FAN
- DX COOLING COIL
- DX HEAT PUMP COIL
- CHILLED WATER COOLING COIL
- HEATING HOT WATER COIL
- HYDRONIC CHANGEOVER COIL
- ELECTRIC HEATING COIL
- GAS BURNER

ANNOTATIONS

- KEYNOTE — #
- DIFFUSER TAG: SD-1 - 6"ø / 120 CFM — TYPE - SIZE / CFM OR TYPE
- EQUIPMENT TAG (REFER TO SCHEDULES) — RTU-1
- ENLARGED PLAN OR DETAIL CALL-OUT — ? / ?
- SECTION CALL-OUT — ? / ?

DESIGN PARAMETERS

ELEVATION ABOVE SEA LEVEL: 575 FT

INDOOR CONDITIONS						OUTDOOR CONDITIONS			
COOLING				HEATING		COOLING		HEATING	
OFFICE ROOMS		BUNK ROOMS		OFFICE ROOMS	BUNK ROOMS				
DBT (°F)	% RH	DBT (°F)	% RH	DBT (°F)	DBT (°F)	DBT (°F)	WBT (°F)	DBT (°F)	WBT (°F)
75	50	68	55	70	70	94.2	75	18.8	15.5

NOTES:

OUTDOOR COOLING CONDITIONS BASED ON DRY BULB TEMPERATURE CORRESPONDING TO 0.4% ANNUAL CUMULATIVE FREQUENCY OF OCCURRENCE AND MEAN COINCIDENT WET BULB TEMPERATURE. OUTDOOR HEATING CONDITIONS BASED ON DRY BULB TEMPERATURE CORRESPONDING TO 99.6% ANNUAL CUMULATIVE FREQUENCY OF OCCURRENCE.

MECHANICAL GENERAL NOTES

A. COORDINATE ALL MECHANICAL WORK WITH WORK BY OTHER TRADES. DUCTWORK SHALL BE ROUTED ABOVE PLUMBING PIPE UNLESS NOTED OTHERWISE. BOTTOM OF DUCT OR DUCT INSULATION SHALL BE A MINIMUM OF 8" ABOVE CEILING.

B. COORDINATE EXPOSED AIR TERMINAL MOUNTING HEIGHT WITH EXPOSED LIGHTING FIXTURES. EXPOSED AIR TERMINALS SHALL BE MOUNTED TO PREVENT SHADOWS AND LIGHTING FIXTURES FROM SWAYING.

C. PROVIDE DUCT, DUCT INSULATION, FITTINGS, AND JOINING METHODS PER SPECIFICATIONS.

D. ALL EXPOSED SUPPLY AIR AND RETURN AIR DUCT SHALL BE DOUBLE WALL WITH INSULATION BETWEEN EACH DUCT WALL.

E. ALL DUCT ROUTING SHALL BE ORTHOGONAL TO BUILDING LINES.

F. MOUNT ALL THERMOSTATS ON INTERIOR WALLS 4'-00" ABOVE FINISHED FLOOR.

G. THE TERMINATION POINT OF RESTROOM EXHAUST OUTLETS AND DUCTS DISCHARGING TO THE OUTDOORS SHALL BE LOCATED A MINIMUM DISTANCE OF 3 FEET FROM OPERABLE OPENINGS INTO BUILDING AND 10 FEET FROM MECHANICAL AIR INTAKES.

H. COORDINATE ALL ROOF MOUNTED MECHANICAL EQUIPMENT PLACEMENT WITH STRUCTURAL DRAWINGS AND LOCATION OF ASSOCIATED DUCTWORK BELOW ROOF LEVEL.

I. MECHANICAL EQUIPMENT, APPLIANCES AND SUPPORTS THAT ARE EXPOSED TO WIND SHALL BE DESIGNED AND INSTALLED TO RESIST THE WIND PRESSURES DETERMINED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE.

J. CONDENSATE FROM ALL COOLING COILS AND EVAPORATORS SHALL NOT DISCHARGE INTO A STREET, ALLEY OR OTHER AREAS SO AS TO CAUSE A NUISANCE. CONDENSATE SHALL BE CONVEYED FROM THE DRAIN PAN OUTLET TO A PLACE OF DISPOSAL (I.E. ROOF DRAIN OR MOP SINK DRAIN) AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.

K. FOR EACH COOLING COIL OR FUEL-FIRED APPLIANCE THAT PRODUCES CONDENSATE, A WATER-LEVEL DETECTION DEVICE CONFORMING TO UL 508 SHALL BE PROVIDED THAT WILL SHUTOFF THE EQUIPMENT SERVED IN THE EVENT THAT THE PRIMARY DRAIN IS BLOCKED.

L. MATERIALS WITHIN PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL BE LISTED AND LABELED AS HAVING A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84 OR UL 723.

M. PROVIDE FIRE DAMPERS IN DUCTS AND AIR TRANSFER OPENINGS PENETRATING ANY ASSEMBLY REQUIRED TO BE PROTECTED.

N. FLEXIBLE DUCTS AND AIR CONNECTORS SHALL NOT PASS THROUGH ANY FIRE-RESISTANCE-RATED ASSEMBLY.

O. WHERE USED TO CONTROL BOTH HEATING AND COOLING, ZONE THERMOSTATIC CONTROLS SHALL BE CAPABLE OF PROVIDING A TEMPERATURE RANGE OR DEADBAND OF AT LEAST 5°F WITHIN WHICH THE SUPPLY OF HEATING AND COOLING ENERGY TO THE ZONE IS CAPABLE OF BEING SHUT OFF OR REDUCED TO A MINIMUM.

P. EACH ZONE SHALL BE PROVIDED WITH THERMOSTATIC SETBACK CONTROLS THAT ARE CONTROLLED BY EITHER AN AUTOMATIC TIME CLOCK OR PROGRAMMABLE CONTROL SYSTEM. THE CONTROLS SHALL HAVE THE CAPABILITY TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55°F OR UP TO 85°F. CONTROLS SHALL HAVE A MANUAL OVERRIDE THAT ALLOWS TEMPORARY OPERATION OF THE SYSTEM FOR UP TO 2 HOURS.

Q. EACH HVAC SYSTEM SHALL BE PROVIDED WITH AUTOMATIC START CONTROLS, CAPABLE OF AUTOMATICALLY ADJUSTING THE DAILY START TIME OF THE HVAC SYSTEM IN ORDER TO BRING EACH SPACE TO THE DESIRED OCCUPIED TEMPERATURE IMMEDIATELY PRIOR TO SCHEDULED OCCUPANCY.

R. STATIC PRESSURE SENSORS USED TO CONTROL VAV FANS SHALL BE LOCATED SUCH THAT THE CONTROLLER SET POINT IS NOT GREATER THAN 1.2 INCHES WATER COLUMN. WHERE THIS RESULTS IN ONE OR MORE SENSORS BEING LOCATED DOWNSTREAM OF MAJOR DUCT SPLITS, NOT LESS THAN ONE SENSOR SHALL BE LOCATED ON EACH MAJOR BRANCH TO ENSURE THAT STATIC PRESSURE CAN BE MAINTAINED IN EACH BRANCH.

S. ALL HVAC SYSTEMS SHALL BE TESTED AND BALANCED PER THE SPECIFICATIONS. VOLUME DAMPERS SHALL BE PROVIDED IN THE BRANCH DUCTS OR AT EACH INDIVIDUAL DUCT REGISTER, GRILLE OR DIFFUSER. EACH VOLUME DAMPER USED IN BALANCING SHALL BE PROVIDED WITH ACCESS. AIR SYSTEMS SHALL BE BALANCED IN A MANNER TO FIRST MINIMIZE THROTTLING LOSSES, THEN FAN SPEED SHALL BE ADJUSTED TO MEET DESIGN FLOW CONDITIONS.

ROCKET MEP LLC
MECHANICAL - ELECTRICAL - PLUMBING ENGINEERS
256-203-6373 INFO@ROCKETMEP.COM
1300 MERIDIAN ST, SUITE 302, HUNTSVILLE, AL 35801 AL CERT OF AUTH: ECA50597

GMC

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Huntsville, AL 35801
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GMCNETWORK.COM

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CHECKED BY: ARH

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 38810 ANDREAS R. HAUN

MECHANICAL ABBREVIATIONS, LEGENDS, & GENERAL NOTES

M0.01

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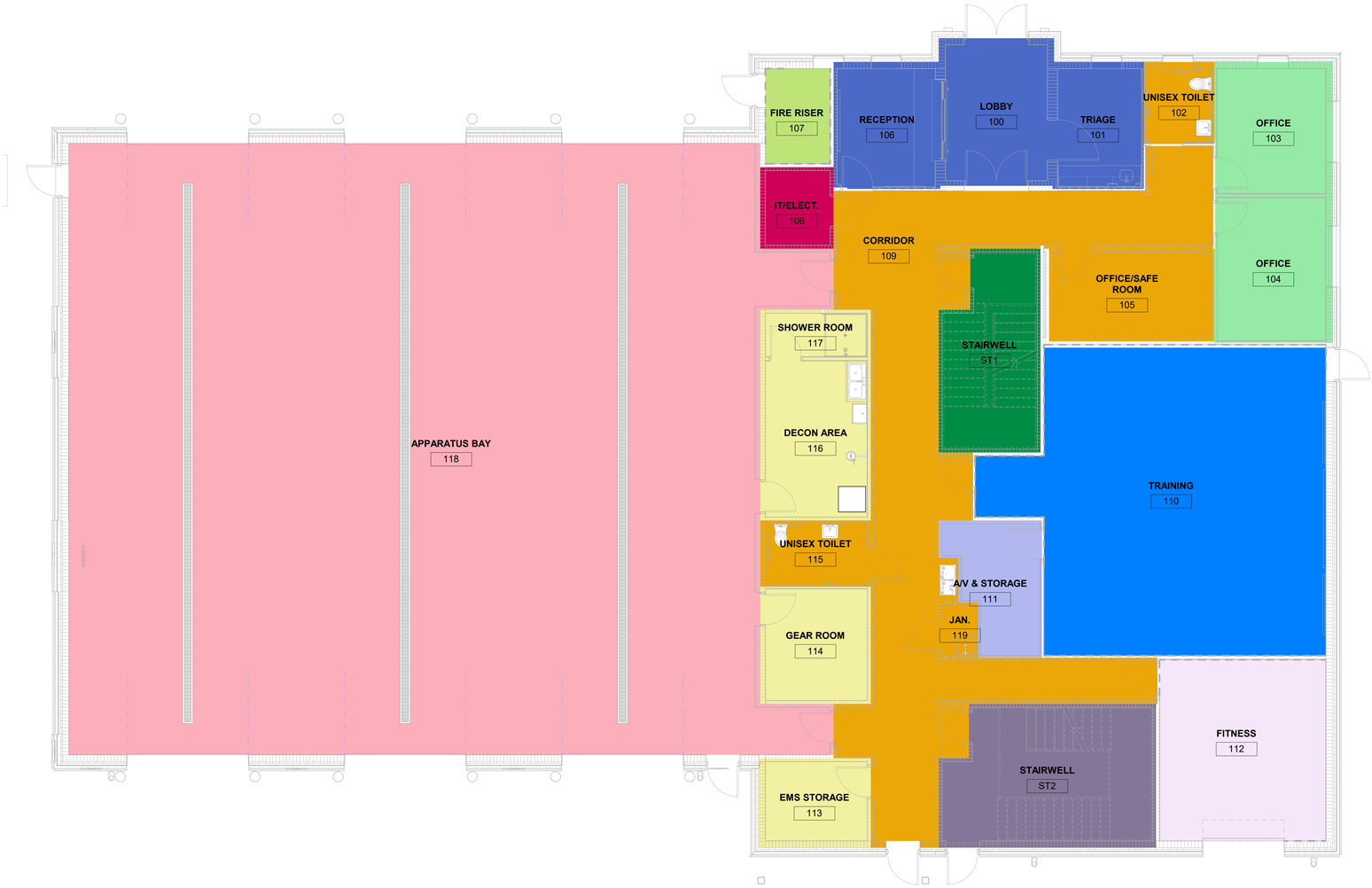
INFO@ROCKETMEP.COM
AL CERT OF AUTH: ECA50597

MECHANICAL ZONES

- GUH-01 & GUH-02
- UH-01
- UH-02
- UH-03
- VAV-1-01
- VAV-1-02
- VAV-1-03
- VAV-1-04
- VAV-1-05
- VAV-1-06
- VAV-1-07
- VAV-1-08



1 LEVEL 1 - MECHANICAL ZONING PLAN
3/16" = 1'-0"

0 4' 8' 12' 16'
3/16" = 1'-0"

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

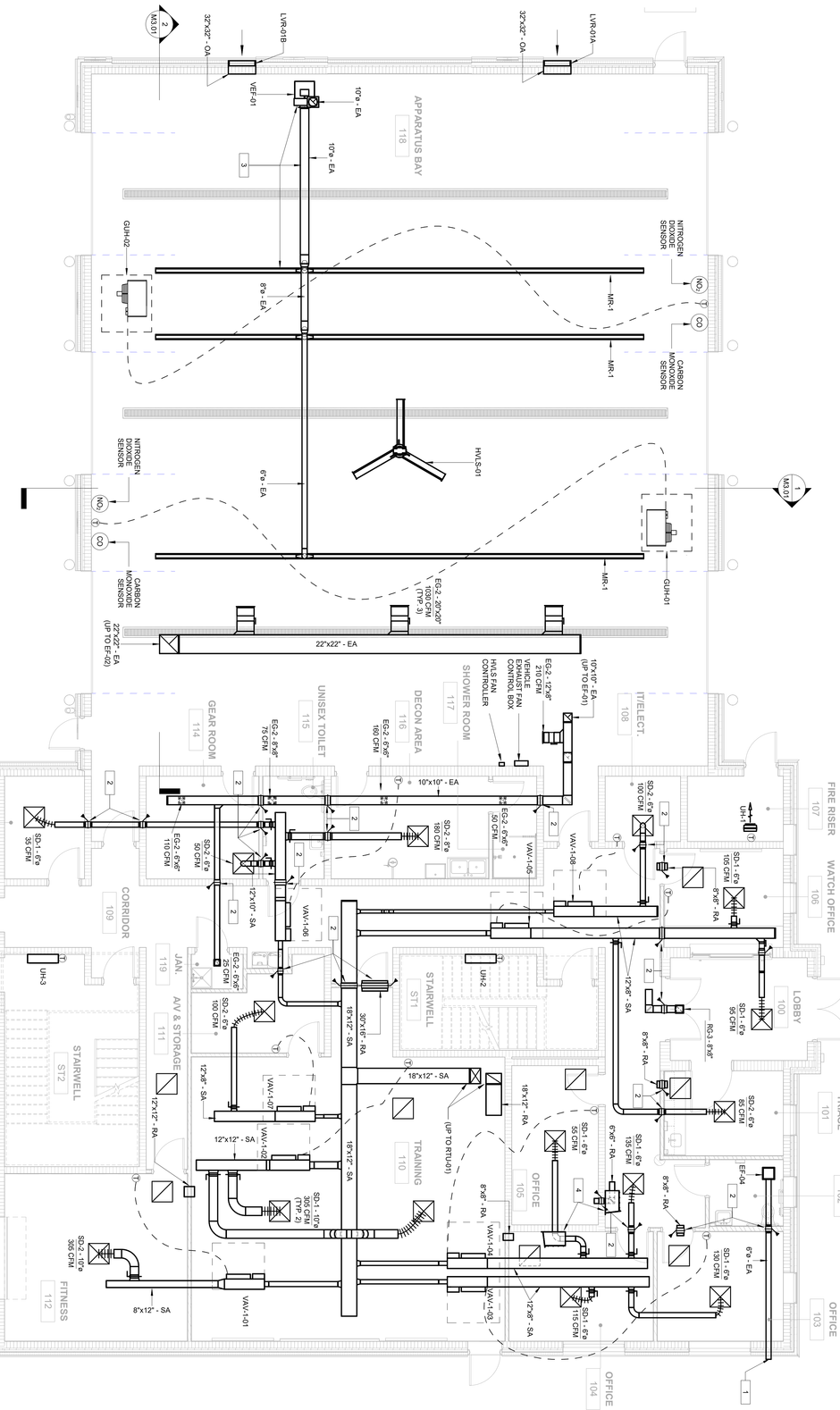
ALABAMA LICENSED PROFESSIONAL ENGINEER No. 38810 01/09/2026 ANDREAS R. HAHN

LEVEL 1 - MECHANICAL ZONING PLAN

M1.01

TEMPLATE VERSION: 2025.1
1/9/2026 3:28:40 PM

1 LEVEL 1 - MECHANICAL PLAN
3/16" = 1'-0"



MECHANICAL KEYED NOTES

1. DESIGN SHALL BE BY TAMCO MODEL 7WWL OR APPROVED EQUAL.
2. PROVIDE FIRE DAMPER WITH 1½ HOUR FIRE RESISTANCE RATED ASSEMBLY. FIRE DAMPER SHALL BE LISTED AND LABELED AS A DYNAMIC CURTAIN TYPE FIRE DAMPER WITH BLADES OUT OF THE AIRSTREAM IN ACCORDANCE WITH UL 555.
3. THE APPARATUS BAY SHALL BE PROVIDED WITH A SOURCE CAPTURE SYSTEM THAT CONSISTS OF FLEXIBLE EXHAUST HOSE REELS INSTALLED OVER EACH APPARATUS BAY. ENGINEERED BY A REGISTERED DESIGN PROFESSIONAL OR SHALL BE FACTORY-BUILT EQUIPMENT DESIGNED AND SIZED FOR THE PURPOSE. THE VEHICLE EXHAUST SYSTEM SHALL BE INSTALLED TO THE MANUFACTURER'S INSTRUCTIONS. SYSTEMS USED FOR PURPOSES ONLY—THE ACTUAL SYSTEM COMPONENTS, SIZES, AND LOCATIONS MAY VARY.
4. PROVIDE DUCT PENETRATIONS OF SAFE ROOM WITH SHROUD. BASIS OF DESIGN SHALL BE ROOF PENETRATION HOUSINGS—MODEL CYCLONE WALL SHROUD, OR APPROVED EQUAL.

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AL CERT OF AUTH: EC24397

LEVEL 1 MECHANICAL FLOOR PLAN

M1.02

ASHVILLE FIRE STATION #2

222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ISSUE	DATE
CONSTRUCTION DOCUMENTS	01/09/2026

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Goodwyn Mills Cawood, LLC
117 Jefferson Street North
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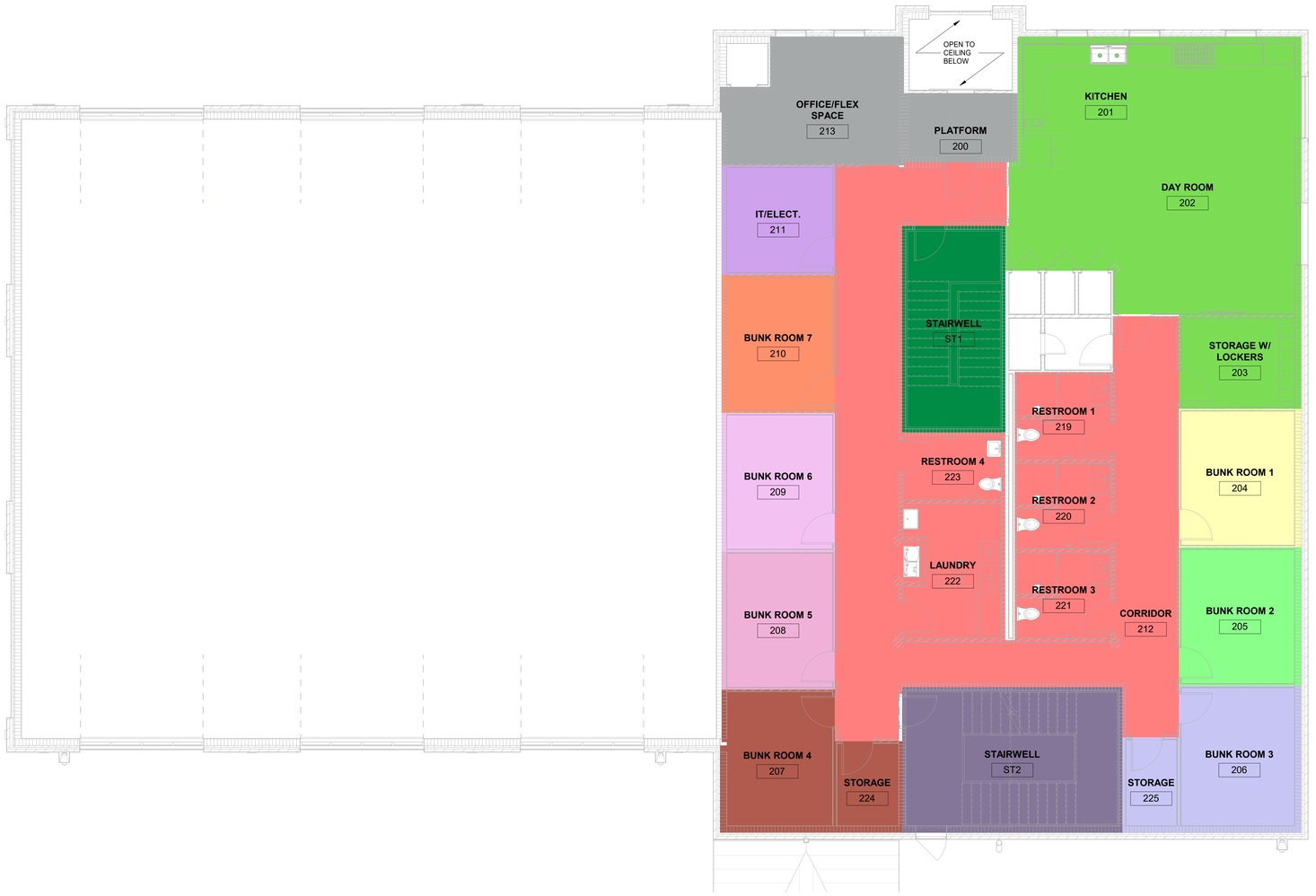
MECHANICAL ZONES

- UH-02
- UH-03
- VAV-2-01
- VAV-2-02
- VAV-2-03
- VAV-2-04
- VAV-2-05
- VAV-2-06
- VAV-2-07
- VAV-2-08
- VAV-2-09
- VAV-2-10
- VAV-2-11



1 LEVEL 2 - MECHANICAL ZONING PLAN
3/16" = 1'-0"

0 4" 8" 12" 16"
3/16" = 1'-0"

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ALABAMA LICENSED No. 38810 PROFESSIONAL ENGINEER ANDREAS R. HAHN 01/09/2026

LEVEL 2 - MECHANICAL ZONING PLAN

M1.03

LEVEL 2 MECHANICAL FLOOR PLAN

ASHVILLE FIRE STATION #2

222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

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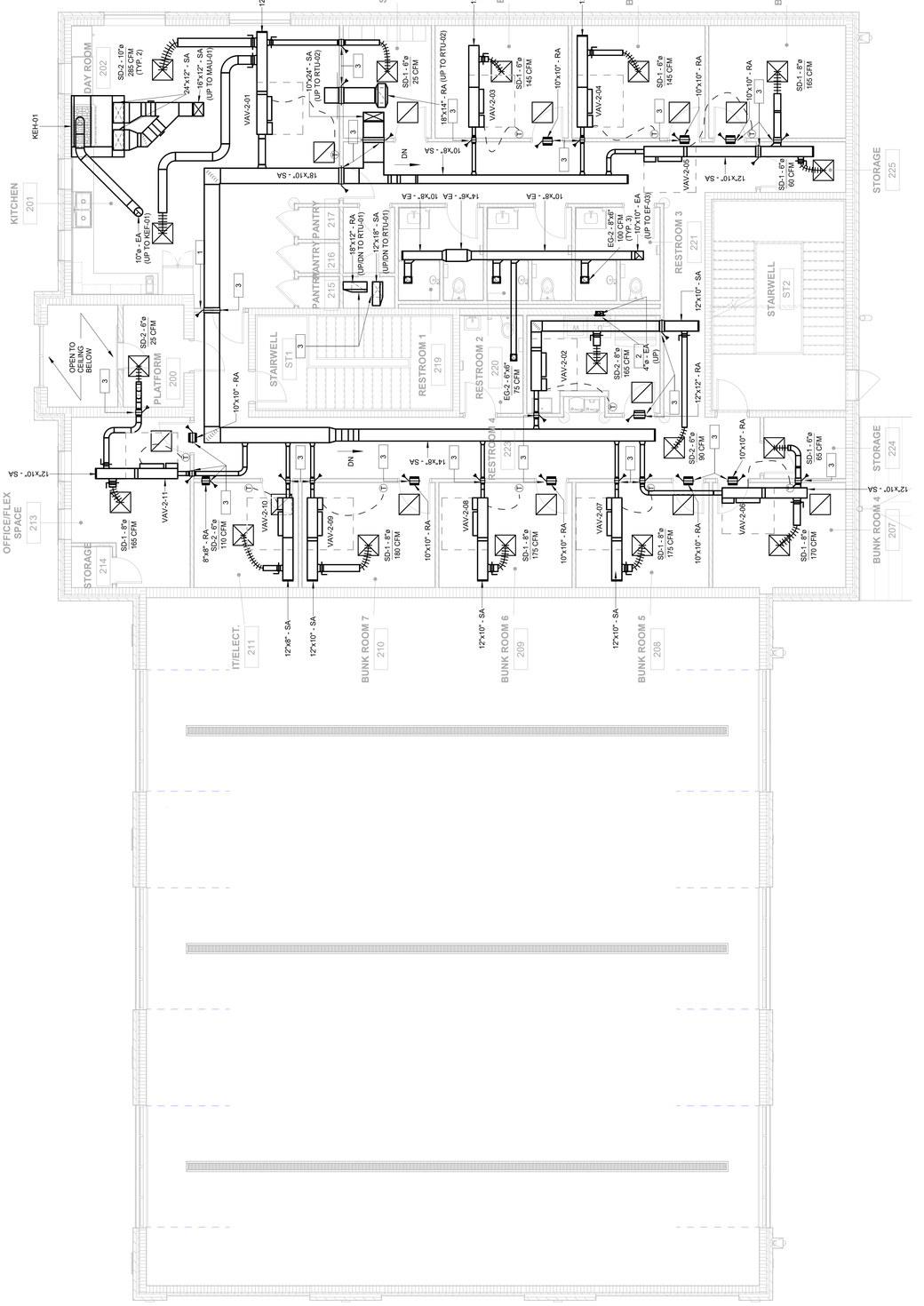
AL CERT OF AUTH: ECA00597

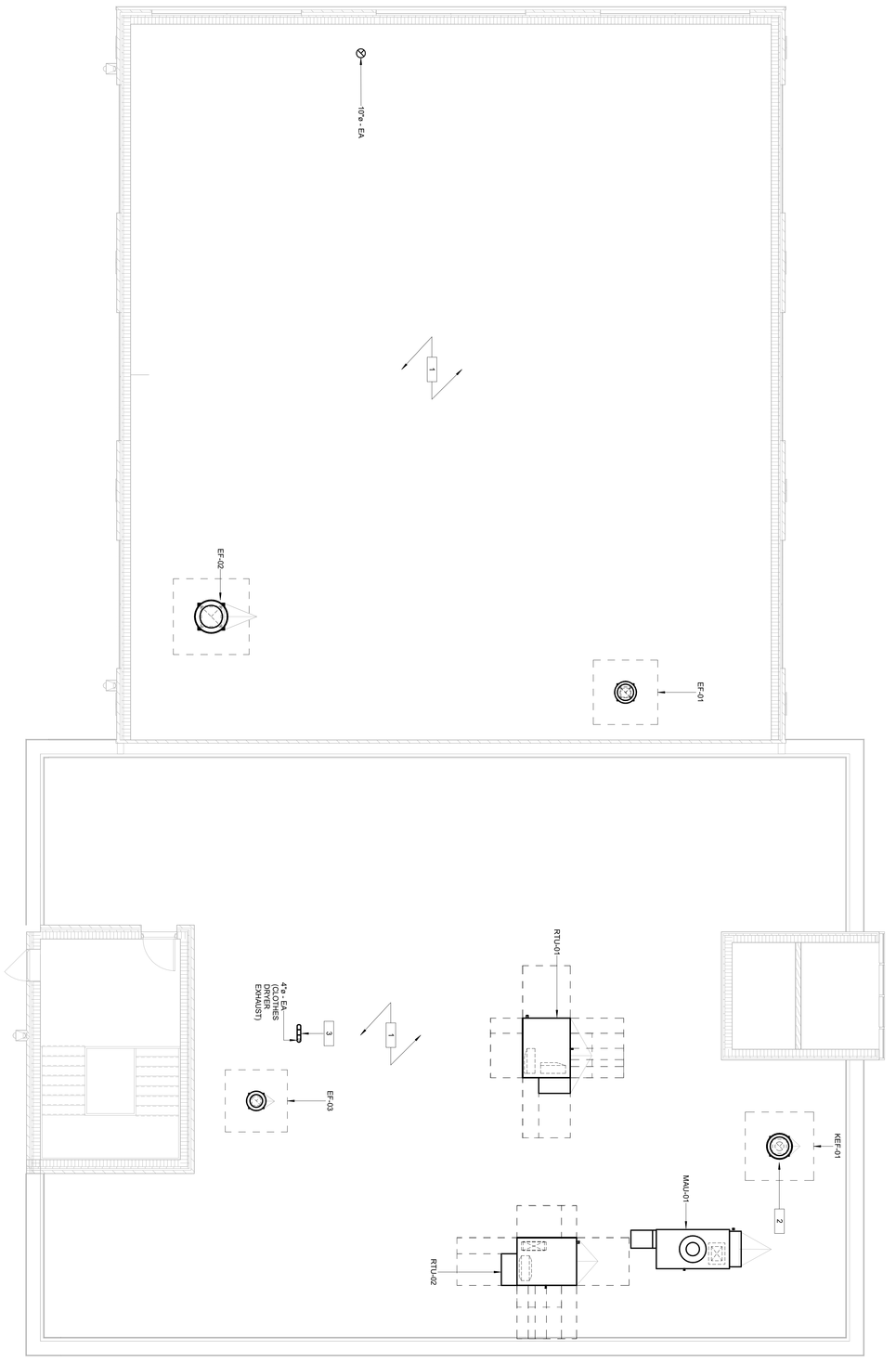
MECHANICAL KEYED NOTES

1. PROVIDE MANUAL PUSH-BUTTON ACTUATOR FOR TYPE I HOOD FIRE EXTINGUISHING SYSTEM. PUSH-BUTTON SHALL COME WITH PROTECTIVE GUARD TO PREVENT ACCIDENTAL ACTUATION OF THE TYPE I HOOD FIRE EXTINGUISHING SYSTEM.
2. PROVIDE DRYERBOX EXHAUST RECEPTACLE. ROUTE DRYER EXHAUST UP AND TERMINATE WITH INSULATED GOOSENECK VENT ABOVE THE ROOF SURFACE.
3. PROVIDE FIRE DAMPER WITH 1-1/2 HOUR RATING AT DUCT PENETRATION OF FIRE-RESISTANCE-RATED WALL ASSEMBLY. FIRE DAMPER SHALL BE TESTED AND LABELED AS A DYNAMIC, CURTAIN TYPE FIRE DAMPER WITH BLADES OUT OF THE AIRSTREAM IN ACCORDANCE WITH UL 555.



1 LEVEL 2 - MECHANICAL PLAN
3/16" = 1'-0"

M1.04



1 MECHANICAL ROOF PLAN
3/16" = 1'-0"

MECHANICAL KEYED NOTES

1. MEANS AND METHODS FOR ALL ROOF-MOUNTED EQUIPMENT EXHAUST OUTLETS SHALL BE A MINIMUM OF 10 FEET (HORIZONTALLY) FROM OUTDOOR AIR INTAKES.
2. DISCHARGE OPENINGS LOCATED LESS THAN 10 FEET (HORIZONTALLY) FROM THE DISCHARGE OPENING LOCATED LESS THAN 10 FEET (HORIZONTALLY) FROM OUTDOOR AIR INTAKES OR OTHER BUILDING OPENINGS SHALL BE NOT LESS THAN 40 INCHES ABOVE THE ROOF SURFACE.
3. TERMINATION OF DRYER EXHAUST DUCTS THROUGH THE ROOF SHALL TERMINATE WITH EXHAUST OUTLET SHALL BE NOT LESS THAN 12 INCHES ABOVE THE ROOF SURFACE. THE CLOTHES DRYER EXHAUST DUCT SHALL TERMINATE ON THE OUTSIDE OF THE BUILDING AND SHALL BE PROVIDED WITH A BACKDRAFT DAMPER. SCREENS OR SIMILAR DEVICES SHALL NOT BE INSTALLED ANYWHERE IN THE CLOTHES DRYER EXHAUST DUCT SYSTEM.

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N

0 4' 8' 12' 16'
3/16" = 1'-0"

MECHANICAL ROOF PLAN

M1.05

ASHVILLE FIRE STATION #2
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MECHANICAL SECTIONS

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

M3.01

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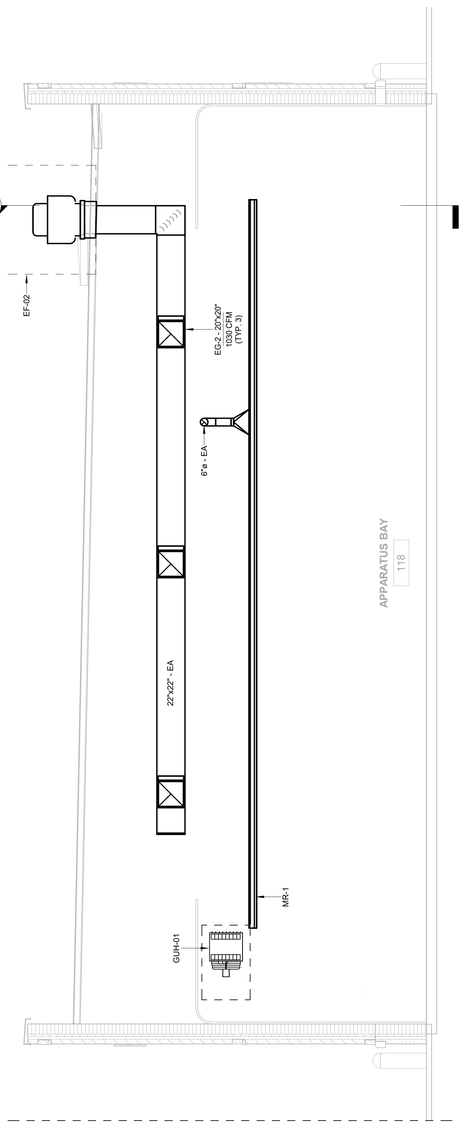
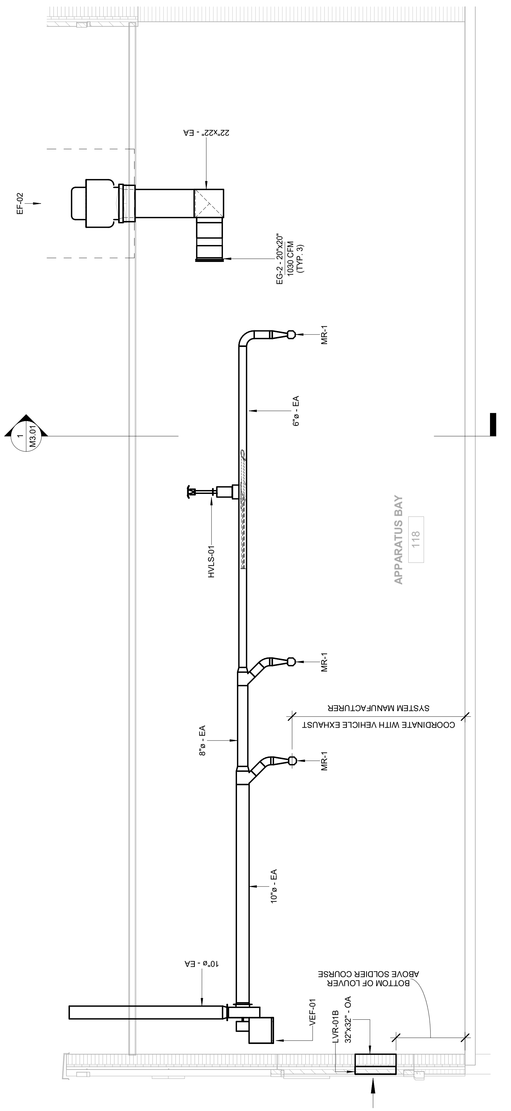
0 2' 4' 8' 12'
1/4" = 1'-0"



1 APPARATUS BAY SECTION VIEW 1
1/4" = 1'-0"



2 APPARATUS BAY SECTION VIEW 2
1/4" = 1'-0"

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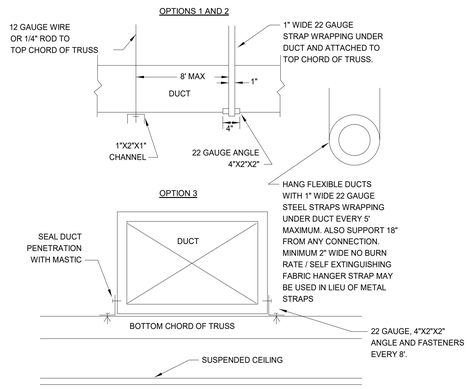
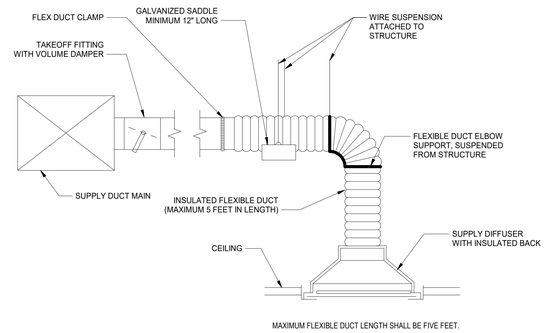
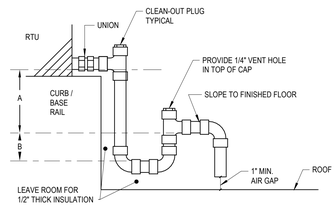


1 DUCT SUPPORT DETAIL
NTS



MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE FIVE FEET.

2 DIFFUSER RUNOUT DETAIL
NTS



RTU	A	B
RTU-1 & RTU-2	3"	1.5"

NOTES:

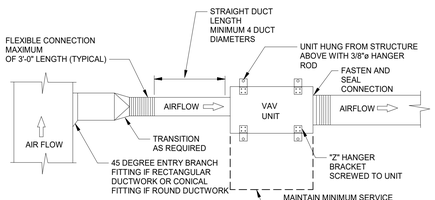
1. SEE SPECIFICATION FOR CONDENSATE PIPING MATERIAL.
2. CONDENSATE DRAIN SHALL BE PIPED FULL SIZE OF UNIT CONNECTION.
3. INSULATE CONDENSATE PIPING PER SPECIFICATIONS.

3 CONDENSATE P-TRAP DETAIL
NTS

NOTES:

1. 14 GAUGE INSULATED CURB BY RTU MANUFACTURER WITH SUPPORTS 24" ON CENTER
2. PROVIDE STRUCTURAL SUPPORTS AS REQUIRED TO MAKE INSTALLED UNIT LEVEL
3. VERIFY ROOF SLOPE & CONSTRUCTION & PROVIDE CURB TO MATCH

4 ROOFTOP UNIT CURB DETAIL
NTS



NOTES:

1. UNIT CONTROLLER TO BE PROVIDED AND PROGRAMMED BY THE HVAC CONTROLS CONTRACTOR AND SHIPPED TO TERMINAL UNIT MANUFACTURER FOR INSTALLATION. MANUFACTURER OF TERMINAL UNIT SHALL INSTALL CONTROLS ON LEFT OR RIGHT SIDE AS REQUIRED BY FIELD CONDITIONS.
2. ARRANGE ACCESS TO PERMIT EASY FIELD BALANCE AND MAINTENANCE OF VAV BOX.
3. COORDINATE LOCATION OF VAV BOXES WITH LIGHTING FIXTURES AND OTHER DEVICES ABOVE THE CEILING.
4. DUCTWORK DOWNSTREAM OF VAV BOX SHALL BE THE SAME SIZE AS THE DISCHARGE CONNECTION UNLESS NOTED OTHERWISE.
5. DUCTWORK UPSTREAM OF VAV BOX SHALL BE THE SAME SIZE AS THE INLET CONNECTION UNLESS NOTED OTHERWISE.

5 VAV BOX DETAIL
NTS

SPACE OUTDOOR AIR SCHEDULE

LEVEL	ZONE	NUMBER	NAME	SPACE TYPE	CFM / SF (Ra)	SF (Az)	CFM (Ra x Az)	CFM / PERSON (Rp)	PEOPLE (Pz)	CFM (Rp x Pz)	CFM (Vbz)	Ez	CFM (Voz)	EXHAUST CFM
LEVEL 1	GUH-01 & GUH-02	118	APPARATUS BAY	PARKING GARAGE	0.00	4,114	0	0.0	9	0	0	1	0	210
GUH-01 & GUH-02						4,114	0		9	0	0		0	210
LEVEL 1	UH-01	107	FIRE RISER	FIRE RISER	0.00	59	0	0.0	0	0	0	1	0	0
UH-01						59	0		0	0	0		0	0
LEVEL 1	UH-02	ST1	STAIRWELL	STAIRS	0.00	162	0	0.0	2	0	0	1	0	0
UH-02						162	0		2	0	0		0	0
LEVEL 1	UH-03	ST2	STAIRWELL	STAIRS	0.00	255	0	0.0	2	0	0	1	0	0
UH-03						255	0		2	0	0		0	0
LEVEL 1	VAV-1-01	112	FITNESS	HEALTH CLUB/WEIGHT ROOM	0.06	290	17	20.0	3	60	77	0.8	97	0
VAV-1-01						290	17		3	60	77		97	0
LEVEL 1	VAV-1-02	110	TRAINING	GYM	0.18	877	158	20.0	6	123	281	0.8	351	0
VAV-1-02						877	158		6	123	281		351	0
LEVEL 1	VAV-1-03	103	OFFICE	OFFICE	0.06	131	8	5.0	1	5	13	0.8	16	0
LEVEL 1	VAV-1-03	104	OFFICE	OFFICE	0.06	150	9	5.0	1	5	14	0.8	17	0
VAV-1-03						281	17		2	10	27		34	0
LEVEL 1	VAV-1-04	102	UNISEX TOILET	RESTROOM	0.00	46	0	0.0	0	0	0	0		75
LEVEL 1	VAV-1-04	105	OFFICE/SAFE ROOM	OFFICE	0.06	131	8	5.0	1	5	13	0.8	16	0
LEVEL 1	VAV-1-04	109	CORRIDOR	CORRIDOR	0.06	762	46	0.0	0	0	46	0.8	57	0
LEVEL 1	VAV-1-04	115	UNISEX TOILET	RESTROOM	0.00	60	0	0.0	0	0	0	1	0	75
LEVEL 1	VAV-1-04	119	JAN.	JANITOR'S CLOSET	0.00	17	0	0.0	0	0	0	1	0	25
VAV-1-04						1,016	54		1	5	59		73	175
LEVEL 1	VAV-1-05	100	LOBBY	MAIN ENTRY LOBBY	0.06	133	8	5.0	2	10	18	0.8	23	0
LEVEL 1	VAV-1-05	101	TRIAGE	OFFICE	0.06	96	6	5.0	2	10	16	0.8	20	0
LEVEL 1	VAV-1-05	106	RECEPTION	OFFICE	0.06	112	7	5.0	1	5	12	0.8	15	0
VAV-1-05						341	20		5	25	45		57	0
LEVEL 1	VAV-1-06	113	EMS STORAGE	UNOCCUPIABLE STORAGE - DRY MATERIALS	0.06	78	5	0.0	0	0	5	0.8	6	0
LEVEL 1	VAV-1-06	114	GEAR ROOM	UNOCCUPIABLE STORAGE - DRY MATERIALS	0.06	110	7	0.0	0	0	7	0.8	8	110
LEVEL 1	VAV-1-06	116	DECON AREA	LOCKER/DRESSING ROOM	0.00	153	0	0.0	0	0	0	0.8	0	160
LEVEL 1	VAV-1-06	117	SHOWER ROOM	SHOWER ROOM	0.00	43	0	0.0	0	0	0	1	0	50
VAV-1-06						383	11		0	0	11		14	320
LEVEL 1	VAV-1-07	111	A/V & STORAGE	ELECTRICAL ROOM	0.00	96	0	0.0	0	0	0	1	0	0
VAV-1-07						96	0		0	0	0		0	0
LEVEL 1	VAV-1-08	108	IT/ELECT.	ELECTRICAL ROOM	0.00	47	0	0.0	0	0	0	1	0	0
VAV-1-08						47	0		0	0	0		0	0
LEVEL 2	UH-02	ST1	STAIRWELL	STAIRS	0.00	180	0	0.0	2	0	0	1	0	0
UH-02						180	0		2	0	0		0	0
LEVEL 2	UH-03	ST2	STAIRWELL	STAIRS	0.00	271	0	0.0	3	0	0	1	0	0
UH-03						271	0		3	0	0		0	0
LEVEL 2	VAV-2-01	201	KITCHEN	KITCHEN (COOKING)	0.12	200	24	7.5	3	23	46	0.8	58	985
LEVEL 2	VAV-2-01	202	DAY ROOM	KITCHEN (COOKING)	0.12	464	56	7.5	7	53	108	0.8	135	0
LEVEL 2	VAV-2-01	203	STORAGE W/ LOCKERS	LOCKER/DRESSING ROOM	0.00	95	0	0.0	0	0	0	0.8	0	0
VAV-2-01						759	80		10	75	155		193	985
LEVEL 2	VAV-2-02	212	CORRIDOR	CORRIDOR	0.06	716	43	0.0	0	0	43	0.8	54	0
LEVEL 2	VAV-2-02	219	RESTROOM 1	SHOWER ROOM	0.00	74	0	0.0	0	0	0	1	0	100
LEVEL 2	VAV-2-02	220	RESTROOM 2	SHOWER ROOM	0.00	74	0	0.0	0	0	0	1	0	100
LEVEL 2	VAV-2-02	221	RESTROOM 3	SHOWER ROOM	0.00	74	0	0.0	0	0	0	1	0	100
LEVEL 2	VAV-2-02	222	LAUNDRY	LAUNDRY	0.12	114	14	5.0	2	10	24	0.8	30	0
LEVEL 2	VAV-2-02	223	RESTROOM 4	RESTROOM	0.00	59	0	0.0	0	0	0	1	0	75
VAV-2-02						1,110	57		2	10	67		83	375
LEVEL 2	VAV-2-03	204	BUNK ROOM 1	BEDROOM	0.06	143	9	5.0	2	10	19	0.8	23	0
VAV-2-03						143	9		2	10	19		23	0
LEVEL 2	VAV-2-04	205	BUNK ROOM 2	BEDROOM	0.06	143	9	5.0	2	10	19	0.8	23	0
VAV-2-04						143	9		2	10	19		23	0
LEVEL 2	VAV-2-05	206	BUNK ROOM 3	BEDROOM	0.06	147	9	5.0	2	10	19	0.8	24	0
LEVEL 2	VAV-2-05	225	STORAGE	UNOCCUPIABLE STORAGE - DRY MATERIALS	0.06	41	2	0.0	0	0	2	0.8	3	0
VAV-2-05						189	11		2	10	21		27	0
LEVEL 2	VAV-2-06	207	BUNK ROOM 4	BEDROOM	0.06	133	8	5.0	2	10	18	0.8	23	0
LEVEL 2	VAV-2-06	224	STORAGE	UNOCCUPIABLE STORAGE - DRY MATERIALS	0.06	48	3	0.0	0	0	3	0.8	4	0
VAV-2-06						181	11		2	10	21		26	0
LEVEL 2	VAV-2-07	208	BUNK ROOM 5	BEDROOM	0.06	133	8	5.0	2	10	18	0.8	23	0
VAV-2-07						133	8		2	10	18		23	0
LEVEL 2	VAV-2-08	209	BUNK ROOM 6	BEDROOM	0.06	133	8	5.0	2	10	18	0.8	23	0
VAV-2-08						133	8		2	10	18		23	0
LEVEL 2	VAV-2-09	210	BUNK ROOM 7	BEDROOM	0.06	133	8	5.0	2	10	18	0.8	23	0
VAV-2-09						133	8		2	10	18		23	0
LEVEL 2	VAV-2-10	211	IT/ELECT.	ELECTRICAL ROOM	0.00	105	0	0.0	0	0	0	0.8	0	0
VAV-2-10						105	0		0	0	0		0	0
LEVEL 2	VAV-2-11	200	PLATFORM	UNOCCUPIABLE STORAGE - DRY MATERIALS	0.06	59	4	0.0	0	0	4	0.8	4	0
LEVEL 2	VAV-2-11	213	OFFICE/FLEX SPACE	OFFICE	0.06	174	10	5.0	1	4	15	0.8	19	0
VAV-2-11						233	14		1	4	18		23	0
TOTAL						11,634	491		61	382	873		1,091	2,065

GMC

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CHECKED BY: Checker

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 38810 ANDREAS R. HAIN

MECHANICAL DETAILS

M5.01

1/9/2026 3:28:48 PM TEMPLATE VERSION: 2025.1

ROCKET MEP LLC
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1300 MERIDIAN ST, SUITE 302, HUNTSVILLE, AL 35801 AL CERT OF AUTH: ECA50597

PACKAGED ROOFTOP UNIT (RTU) SCHEDULE

MARK	UNIT NOMINAL SIZE (TONS)	SUPPLY FAN						FILTER MERV	DX COOLING COIL								NATURAL GAS PREHEAT				ELECTRICAL			BASIS OF DESIGN				NOTES
		FAN				FAN MOTOR			REFRIGERANT TYPE	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	EAT		LAT		EFFICIENCY												
		SUPPLY AIR CFM	OUTSIDE AIR CFM	ESP (IN. W.G.)	BHP	DRIVE TYPE	HP					DBT (°F)	WBT (°F)	DBT (°F)	WBT (°F)	EER	IEER	CFM	INPUT (MBH)	OUTPUT (MBH)	GAS PRESSURE (IN. W.C.)	EAT (°F)	LAT (°F)	NO. STAGES	MCA	MOCP	VOLT / PH	L x W x H (IN x IN x IN)	UNIT WEIGHT (LB)	MANUFACTURER	MODEL	
RTU-01	6	1,860	500	2.0	1.49	DIRECT	3.0	8	R-32	69.4	52.9	80.9	66.4	53.5	53.5	11.2	21.1	1,200	80	64.8	5-14	46	55	MODULATING	38.8	50	208 / 3	84.5 X 53.3 X 69.5	1,028	DAIKIN APPLIED	DPSC06	1 THROUGH 14
RTU-02	6	2,230	450	2.0	1.88	DIRECT	3.0	8	R-32	71.0	59.6	79.0	64.6	53.4	53.4	11.2	21.1	1,200	80	64.8	5-14	46	55	MODULATING	38.8	50	208 / 3	84.5 X 53.3 X 69.5	1,028	DAIKIN APPLIED	DPSC06	1 THROUGH 14

NOTES:

1. DIVISION 23 CONTRACTOR SHALL SUPPLY ELECTRICAL DISCONNECTS, PROVIDED BY MANUFACTURER OR OTHERS. DISCONNECTS THAT ARE SHIPPED LOOSE SHALL BE INSTALLED BY DIVISION 26 CONTRACTOR.
2. PROVIDE WITH THROUGH-THE-BASE ELECTRICAL CONNECTIONS.
3. PROVIDE WITH UNIT POWERED 115V GFCI OUTLET.
4. PROVIDE WITH CONFIGURABLE CONTROLS BY THE RTU MANUFACTURER. MULTI-ZONE VARIABLE-AIR-VOLUME (MZVAV) CONTROL ALGORITHMS AND ALL SEQUENCES NECESSARY TO OPERATE THE UNIT BASED ON THE CONTROL DIAGRAMS IN THE CONSTRUCTION DOCUMENTS SHALL BE PROVIDED. CONTROLS SHALL BE CAPABLE OF SUPPORTING DIGITAL COMMUNICATION USING THE BACnet PROTOCOL. CONTROLS SHALL BE INTEGRATED WITH ASSOCIATED VAV BOX CONTROLS.
5. PROVIDE WITH DOUBLE-WALL FOAM INSULATED CABINET OR DOUBLE-WALL FIBERGLASS INSULATED CABINET. CABINET SHALL BE MINIMUM R-7.
6. PROVIDE WITH HINGED ACCESS PANELS.
7. PROVIDE WITH OUTDOOR AIR HOOD.
8. PROVIDE MIXING BOX WITH MODULATING OUTDOOR AIR DAMPER AND MODULATING RETURN AIR DAMPER.
9. PROVIDE WITH VARIABLE SPEED REFRIGERANT COMPRESSOR OR SOME MEANS TO MODULATE CAPACITY ON PART-LOAD DAY.
10. PROVIDE STAINLESS STEEL CONDENSATE DRAIN PAN WITH CONDENSATE OVERFLOW SWITCH.
11. PROVIDE WITH SUPPLY FAN WITH EITHER ELECTRONICALLY COMMUTATED MOTOR OR MOTOR WITH VARIABLE SPEED DRIVE.
12. PROVIDE WITH BOTTOM SUPPLY AND RETURN DUCT CONNECTIONS.
13. PROVIDE DUCT SMOKE DETECTOR IN THE SUPPLY AND RETURN AIR STREAMS.
14. PROVIDE WITH 18" TALL ROOF CURB TO ACCOMMODATE SLOPED ROOF. REFER TO ARCHITECTURE ROOF PLAN FOR ROOF SLOPE. ROOF CURB SHALL COME WITH VIBRATION ISOLATION AND ACOUSTIC REDUCTION PER THE SPECIFICATIONS.

GENERAL EXHAUST FAN (EF) SCHEDULE

MARK	EXHAUST FAN							VOLT / PH	BASIS OF DESIGN			NOTES
	FAN				FAN MOTOR				UNIT WEIGHT (LB)	MANUFACTURER	MODEL	
	FAN TYPE	AIRFLOW (CFM)	ESP (IN. W.G.)	BHP	DRIVE	HP						
EF-01	CENTRIFUGAL DOWNBLAST	630	0.5	0.09	DIRECT	1/4	115 / 1		GREENHECK	G-100-VG	1 THROUGH 4	
EF-02	CENTRIFUGAL UPBLAST	3,100	0.7	0.72	DIRECT	2	208 / 3	192	GREENHECK	CUE-180-VG	1 THROUGH 4	
EF-03	CENTRIFUGAL DOWNBLAST	375	0.56	0.07	DIRECT	1/15	115 / 1		GREENHECK	G-090-VG	1 THROUGH 4	
EF-04	CENTRIFUGAL CEILING	75	0.25	0.01	DIRECT	1/50	115 / 1		GREENHECK	SP-A90	1 THROUGH 4	

NOTES:

1. DIVISION 23 CONTRACTOR SHALL SUPPLY ELECTRICAL DISCONNECTS, PROVIDED BY MANUFACTURER OR OTHERS. DISCONNECTS THAT ARE SHIPPED LOOSE SHALL BE INSTALLED BY DIVISION 26 CONTRACTOR.
2. PROVIDE WITH HAND / OFF / AUTO (HOA) CONTROLLER.
3. PROVIDE WITH GRAVITY BACKDRAFT DAMPER.
4. PROVIDE WITH 12" TALL ROOF CURB TO ACCOMMODATE SLOPED ROOF. REFER TO ARCHITECTURE ROOF PLAN FOR ROOF SLOPE.

LOUVER (LVR) SCHEDULE

MARK	APPLICATION	CFM	FREE AREA VELOCITY (FPM)	FREE AREA (SQFT)	PRESSURE DROP (IN. W.C.)	VOLT / PH	W X H X D (IN x IN x IN)	UNIT WEIGHT (LB)	MANUFACTURER	MODEL	NOTES
LVR-01A	INTAKE	1,550	510	3.04	0.036	115 / 1	32 X 32 X 6	65	GREENHECK	ECD-601	1 THROUGH 4
LVR-01B	INTAKE	1,550	510	3.04	0.036	115 / 1	32 X 32 X 6	65	GREENHECK	ECD-601	1 THROUGH 4

NOTES:

1. PROVIDE WITH BIRDSCREEN.
2. PROVIDE WITH FLANGE FRAME.
3. PROVIDE WITH MOUNTING CLIPS.
4. PROVIDE WITH BAKED ENAMEL FINISH AND COLOR APPROVED BY ARCHITECT.

VAV TERMINAL UNIT SCHEDULE

MARK	INLET ø (IN)	MAX. COOLING CFM	MIN. CFM	MAX. HEATING CFM	ELECTRIC HEAT					BASIS OF DESIGN		NOTES
					EAT (°F)	LAT (°F)	KW	NO. STAGES	VOLT / PH	MANUFACTURER	MODEL	
VAV-1-01	6	305	95	225	50	90	3	MODULATING	208 / 3	DAIKIN APPLIED	MQTH506	1 THROUGH 7
VAV-1-02	8	610	185	305	50	90	4	MODULATING	208 / 3	DAIKIN APPLIED	MQTH508	1 THROUGH 7
VAV-1-03	5	245	75	245	50	90	3	MODULATING	208 / 3	DAIKIN APPLIED	MQTH505	1 THROUGH 7
VAV-1-04	5	190	60	165	50	90	2	MODULATING	208 / 3	DAIKIN APPLIED	MQTH505	1 THROUGH 7
VAV-1-05	6	285	90	285	50	90	3.5	MODULATING	208 / 3	DAIKIN APPLIED	MQTH506	1 THROUGH 7
VAV-1-06	5	265	80	150	50	90	2	MODULATING	208 / 3	DAIKIN APPLIED	MQTH505	1 THROUGH 7
VAV-1-07	4	100	45	--	--	--	--	--	115 / 1	DAIKIN APPLIED	MQTH504	1 THROUGH 7
VAV-1-08	4	100	45	--	--	--	--	--	115 / 1	DAIKIN APPLIED	MQTH504	1 THROUGH 7
VAV-2-01	8	595	180	415	50	90	5.5	MODULATING	208 / 3	DAIKIN APPLIED	MQTH508	1 THROUGH 7
VAV-2-02	5	265	80	265	50	90	3.5	MODULATING	208 / 3	DAIKIN APPLIED	MQTH505	1 THROUGH 7
VAV-2-03	4	145	45	75	50	90	1	MODULATING	208 / 3	DAIKIN APPLIED	MQTH504	1 THROUGH 7
VAV-2-04	4	145	45	75	50	90	1	MODULATING	208 / 3	DAIKIN APPLIED	MQTH504	1 THROUGH 7
VAV-2-05	5	225	70	115	50	90	1.5	MODULATING	208 / 3	DAIKIN APPLIED	MQTH505	1 THROUGH 7
VAV-2-06	5	235	75	120	50	90	1.5	MODULATING	208 / 3	DAIKIN APPLIED	MQTH505	1 THROUGH 7
VAV-2-07	4	175	55	115	50	90	1.5	MODULATING	208 / 3	DAIKIN APPLIED	MQTH504	1 THROUGH 7
VAV-2-08	4	175	55	115	50	90	1.5	MODULATING	208 / 3	DAIKIN APPLIED	MQTH504	1 THROUGH 7
VAV-2-09	4	180	55	115	50	90	1.5	MODULATING	208 / 3	DAIKIN APPLIED	MQTH504	1 THROUGH 7
VAV-2-10	4	110	45	75	50	90	1	MODULATING	208 / 3	DAIKIN APPLIED	MQTH504	1 THROUGH 7
VAV-2-11	5	190	60	190	50	90	2.5	MODULATING	208 / 3	DAIKIN APPLIED	MQTH505	1 THROUGH 7

NOTES:

1. DIVISION 23 CONTRACTOR SHALL SUPPLY ELECTRICAL DISCONNECTS, PROVIDED BY MANUFACTURER OR OTHERS. DISCONNECTS THAT ARE SHIPPED LOOSE SHALL BE INSTALLED BY DIVISION 26 CONTRACTOR. UNIT SHALL HAVE A SINGLE POINT POWER CONNECTION.
2. PROVIDE WITH POWER FUSE.
3. PROVIDE WITH FACTORY MOUNTED DDC CONTROLS AND CONTROLS ENCLOSURE.
4. PROVIDE WITH REMOVABLE AIRFLOW SENSOR.
5. PROVIDE WITH 1" THICK FOIL FACED FIBERGLASS LINER.
6. PROVIDE WITH HANGER BRACKETS.
7. COORDINATE LEFT/RIGHT HAND UNIT SELECTION WITH ACTUAL FIELD INSTALLED LOCATION.

MAKEUP AIR UNIT (MAU) SCHEDULE

MARK	SUPPLY FAN				SUPPLY FAN MOTOR			DX COOLING COIL						MODULATING HOT GAS REHEAT		MODULATING NATURAL GAS HEAT				ELECTRICAL					NOTES
	CFM	RPM	ESP (IN. W.C.)	BHP	DRIVE	HP	FILTER TYPE	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	EAT (°F)		LAT (°F)		CAPACITY (MBH)	LAT (°F)	INPUT (MBH)	OUTPUT (MBH)	EAT (°F)	LAT (°F)	MCA	MOCP	VOLT / PH	WEIGHT (LB)	MODEL	
										DBT	WBT	DBT	WBT												
MAU-01	790	1,106	0.50	0.15	DIRECT	1/2	MERV 8	70.5	25.2	83.1	78.2	51.8	51.3	24.2	75	75	60.8	18.8	70	27.9	45	208 / 3	1,064	RV-20-SJ-B-E2	1 THROUGH 13

NOTES:

1. DIVISION 23 CONTRACTOR SHALL SUPPLY ELECTRICAL DISCONNECTS, PROVIDED BY MANUFACTURER OR OTHERS. DISCONNECTS THAT ARE SHIPPED LOOSE SHALL BE INSTALLED BY DIVISION 26 CONTRACTOR.
2. PROVIDE WITH THROUGH-THE-BASE ELECTRICAL CONNECTIONS.
3. PROVIDE WITH UNIT POWERED 115V GFCI OUTLET.
4. PROVIDE WITH CONFIGURABLE CONTROLS BY THE RTU MANUFACTURER. CONTROLS SHALL BE CAPABLE OF SUPPORTING DIGITAL COMMUNICATION USING THE BACnet PROTOCOL. CONTROLS SHALL BE INTEGRATED WITH ASSOCIATED VAV BOX CONTROLS.
5. PROVIDE WITH DOUBLE-WALL FOAM INSULATED CABINET OR DOUBLE-WALL FIBERGLASS INSULATED CABINET. CABINET SHALL BE MINIMUM R-7.
6. PROVIDE WITH HINGED ACCESS PANELS.
7. PROVIDE WITH OUTDOOR AIR HOOD.
8. PROVIDE WITH TWO-POSITION OUTDOOR AIR DAMPER.
9. PROVIDE WITH VARIABLE SPEED REFRIGERANT COMPRESSOR OR SOME MEANS TO MODULATE CAPACITY ON PART-LOAD DAY.
10. PROVIDE STAINLESS STEEL CONDENSATE DRAIN PAN WITH CONDENSATE OVERFLOW SWITCH.
11. PROVIDE WITH SUPPLY FAN WITH EITHER ELECTRONICALLY COMMUTATED MOTOR OR MOTOR WITH VARIABLE SPEED DRIVE.
12. PROVIDE WITH BOTTOM SUPPLY DUCT CONNECTION.
13. PROVIDE WITH 18" TALL ROOF CURB TO ACCOMMODATE SLOPED ROOF. REFER TO ARCHITECTURE ROOF PLAN FOR ROOF SLOPE. ROOF CURB SHALL COME WITH VIBRATION ISOLATION AND ACOUSTIC REDUCTION PER THE SPECIFICATIONS.

HIGH VOLUME, LOW SPEED (HVLS) FAN SCHEDULE

MARK	AREA SERVED	FAN								ELECTRICAL		BASIS OF DESIGN			NOTES
		AIRFLOW (CFM)	RPM	MAX. RPM	AVG. AIR SPEED (FPM)	OPERATIVE TEMPERATURE (°F)	RELATIVE HUMIDITY (%)	METABOLIC RATE	CLOTHING LEVEL	PERCEIVED COOLING EFFECT (°F)	MOTOR WATTAGE (W)	VOLT / PH	IMPELLER DIAMETER (IN)	UNIT WEIGHT (LB)	MANUFACTURER	MODEL	
HVLS-01	APPARATUS BAY	25,744	88	141	130	77	60	1.7 WALKING	0.57 PANTS, SHORT SLEEVES	7	500	208 / 3	120	135	GREENHECK	DS-3-10-70LV	1 THROUGH 5

NOTES:

1. DIVISION 23 CONTRACTOR SHALL SUPPLY ELECTRICAL DISCONNECTS, PROVIDED BY MANUFACTURER OR OTHERS. DISCONNECTS THAT ARE SHIPPED LOOSE SHALL BE INSTALLED BY DIVISION 26 CONTRACTOR.
2. PROVIDE FACTORY-MOUNTED, WIRED, AND PROGRAMMED VFD. VFD SHALL BE CAPABLE OF OVER-SPEED AND IMPACT DETECTION ALONG WITH TEMPERATURE, VOLTAGE, AND CURRENT MONITORING.
3. PROVIDE WITH DIGITAL KEYPAD CONTROL INTERFACE.
4. PROVIDE WITH MOUNTING KIT APPROPRIATE FOR BUILDING CONSTRUCTION.
5. PROVIDE FINISH AS APPROVED BY ARCHITECT.

GAS UNIT HEATER (GUH) SCHEDULE

MARK	AREA(S) SERVED	TYPE	INPUT (MBH)	OUTPUT (MBH)	FAN HP	AMPS	VOLT / PH	L x W x H (IN x IN x IN)	MANUFACTURER	MODEL	NOTES
GUH-01	APPARATUS BAY	GAS-FIRED PROPELLER	200	164	1/3	7.15	115 / 1	42.5 X 22.1 X 25.8	MODINE	PTX-200	1,2
GUH-02	APPARATUS BAY	GAS-FIRED PROPELLER	200	164	1/3	7.15	115 / 1	42.5 X 22.1 X 25.8	MODINE	PTX-200	1,2

NOTES:

1. DIVISION 23 CONTRACTOR SHALL SUPPLY ELECTRICAL DISCONNECTS, PROVIDED BY MANUFACTURER OR OTHERS. DISCONNECTS THAT ARE SHIPPED LOOSE SHALL BE INSTALLED BY DIVISION 26 CONTRACTOR.
2. PROVIDE WITH VERTICAL CONCENTRIC VENT KIT.

KITCHEN EXHAUST FAN (KEF) SCHEDULE

MARK	EXHAUST FAN							VOLT / PH	BASIS OF DESIGN			NOTES
	FAN				FAN MOTOR				UNIT WEIGHT (LB)	MANUFACTURER	MODEL	
	FAN TYPE	AIRFLOW (CFM)	ESP (IN. W.G.)	BHP	DRIVE	HP						
KEF-01	CENTRIFUGAL UPBLAST	985	0.832	0.26	DIRECT	1/2	115 / 1	142	GREENHECK	CUE-140-VG	1 THROUGH 5	

NOTES:

1. DIVISION 23 CONTRACTOR SHALL SUPPLY ELECTRICAL DISCONNECTS, PROVIDED BY MANUFACTURER OR OTHERS. DISCONNECTS THAT ARE SHIPPED LOOSE SHALL BE INSTALLED BY DIVISION 26 CONTRACTOR.
2. PROVIDE WITH ROOF CURB TO ACCOMMODATE SLOPED ROOF. REFER TO ARCHITECTURE ROOF PLAN FOR ROOF SLOPE. ROOF CURB HEIGHT SHALL BE TALL ENOUGH SO EXHAUST DISCHARGE OUTLET IS AT LEAST 40 INCHES ABOVE THE ROOF SURFACE.
3. PROVIDE FAN LISTED AND LABELED IN ACCORDANCE WITH UL 705 -SUPPLEMENT SC -RESTAURANT EXHAUST.
4. PROVIDE WITH GREASE CUP.
5. PROVIDE UPBLAST FAN WHEEL ACCESS PORT.

ELECTRIC UNIT HEATER (UH) SCHEDULE

MARK	AREA(S) SERVED	TYPE	INPUT (KW)	AMPS	VOLT / PH	L x W x H (IN x IN x IN)	MANUFACTURER	MODEL	NOTES
UH-1	FIRE RISER	ELECTRIC	3.3	9.17	208 / 3	14-15/32 X 6-1/2 X 17-3/4	MARKEL	5100 SERIES	1,2,3
UH-2	STAIRWELL 1	ELECTRIC	3.0	9.2	208 / 3	33 X 6-1/2 X 17-3/4	MARKEL	6300 SERIES	1,2
UH-3	STAIRWELL 2	ELECTRIC	3.0	9.2	208 / 3	33 X 6-1/2 X 17-3/4	MARKEL	6300 SERIES	1,2

NOTES:

1. DIVISION 23 CONTRACTOR SHALL SUPPLY ELECTRICAL DISCONNECTS, PROVIDED BY MANUFACTURER OR OTHERS. DISCONNECTS THAT ARE SHIPPED LOOSE SHALL BE INSTALLED BY DIVISION 26 CONTRACTOR.
2. PROVIDE WITH WIRED THERMOSTAT.
3. PROVIDE WITH WALL/CEILING BRACKET.

GRILLES, REGISTERS & DIFFUSERS SCHEDULE

MARK	TYPE	MOUNTING	MATERIAL	FACE SIZE	BASIS OF DESIGN		NOTES
					MANUFACTURER	MODEL	
EG-2	LOUVERED EXHAUST GRILLE	SURFACE	ALUMINUM	PER MFG.	PRICE INDUSTRIES	630	1,2,3
RG-1	EGGCRATE RETURN GRILLE	LAY-IN	ALUMINUM	24" x 24"	PRICE INDUSTRIES	80	1,2
RG-2	EGGCRATE RETURN GRILLE	SURFACE	ALUMINUM	PER MFG.	PRICE INDUSTRIES	80	1,2
RG-3	LOUVERED RETURN GRILLE	SURFACE	ALUMINUM	PER MFG.	PRICE INDUSTRIES	630	1,2
SD-1	SQUARE PLAQUE DIFFUSER	LAY-IN	ALUMINUM	24" x 24"	PRICE INDUSTRIES	ASPD	1,2,3,4
SD-2	SQUARE PLAQUE DIFFUSER	SURFACE	ALUMINUM	24" x 24"	PRICE INDUSTRIES	ASPD	1,2,3,4

NOTES:

1. PROVIDE WITH POWDER COAT FINISH WITH STANDARD WHITE PAINT.
2. PROVIDE WITH NECK SIZE AS INDICATED ON PLANS. ALL LAY-IN RETURN GRILLES WITHOUT A DUCT CONNECTION SHALL COME WITH A RETURN AIR CANOPY (PRICE, MODEL: RAC) AND SHALL HAVE A NECK SIZE OF 22"x22" UNLESS NOTED OTHERWISE.
3. PROVIDE WITH MANUAL BALANCING DAMPER. BALANCING DAMPER SHALL BE LOCATED AT BRANCH TAKE OFF. WHERE PROVIDING BALANCING DAMPER AT BRANCH TAKE OFF IS NOT FEASIBLE, BALANCING DAMPER SHALL BE FACTORY INSTALLED AND PROVIDED AT THE AIR TERMINAL.
4. PROVIDE BACK PAN WITH EXTERNAL R-6 INSULATION WITH A MOLDED HEAVY DUTY FOIL/SCRIM VAPOR BARRIER.

VEHICLE EXHAUST RAIL SCHEDULE

MARK	LENGTH (FT)	WEIGHT (LB)	MOUNTING HEIGHT (FT)	RAIL TO VEHICLE DISTANCE (IN)	RAIL TO DOOR DISTANCE (FT)	MANUFACTURER	MODEL
MR-1	47.5	235	10-14	12-24	5.5-8	PLYMOVENT	MRP-50

VEHICLE EXHAUST FAN (VEF) SCHEDULE

MARK	EXHAUST FAN						BASIS OF DESIGN			NOTES
	FAN		FAN MOTOR				UNIT WEIGHT (LB)	MANUFACTURER	MODEL	
	FAN TYPE	AIRFLOW (CFM)	ESP (IN. W.G.)	DRIVE	HP	VOLT / PH				
VEF-01	CENTRIFUGAL	1,528	8.05	DIRECT	3	208 / 3	99.2	PLYMOVENT	FUA-4700	

GMC

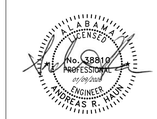
Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

ISSUE DATE
CONSTRUCTION DOCUMENTS 01/09/2026

DRAWN BY: RU
CHECKED BY: ARH

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003



MECHANICAL SCHEDULES

M6.01

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SINGLE-DUCT VAV TERMINAL UNIT

SYSTEM DESCRIPTION:
THE SINGLE-DUCT VAV TERMINAL UNIT CONSISTS OF AN AIRFLOW SENSOR, MOTORIZED SUPPLY AIRFLOW CONTROL DAMPER, A MODULATING ELECTRIC REHEAT COIL, AND ALL ASSOCIATED APPURTENANCES AND DEVICES DEPICTED ON THE CONTROL SYSTEM DIAGRAM.

UNIT CONTROLLER AND ZONE SENSORS:
THE UNIT CONTROLLER SHALL BE PROVIDED AND PROGRAMMED BY THE HVAC CONTROLS CONTRACTOR. THE UNIT CONTROLLER SHALL BE CAPABLE OF SUPPORTING DIGITAL COMMUNICATION USING THE BACnet PROTOCOL. THE HVAC CONTROLS CONTRACTOR SHALL INTEGRATE THE UNIT CONTROLLER WITH THE BUILDING AUTOMATION SYSTEM (BAS) AND SHALL PROVIDE THE NECESSARY CONTROL WIRING AND DEVICES (NETWORK CONTROLLERS, GATEWAYS, ETC.) FOR THE BAS TO MONITOR AND ADJUST SETPOINTS AND GENERATE ALARMS.

EACH VAV TERMINAL UNIT SHALL BE SUPPLIED WITH A WIRED, WALL-MOUNTED ZONE TEMPERATURE AND HUMIDITY SENSOR WITH OVERRIDE BUTTON TO TEMPORARILY OVERRIDE UNOCCUPIED MODE FOR UP TO 2 HOURS.

OCCUPIED MODE:

WHEN THE ASSOCIATED AHU IS PLACED IN OCCUPIED MODE, THE FOLLOWING ACTIONS SHALL OCCUR:

COOLING MODE:
WHEN THE ZONE TEMPERATURE IS ABOVE THE OCCUPIED ZONE DRY BULB TEMPERATURE COOLING SETPOINT OF 75°F (ADJUSTABLE), THE UNIT CONTROLLER SHALL OPEN THE SUPPLY AIRFLOW CONTROL DAMPER TO THE MAXIMUM AIRFLOW POSITION. AS THE ZONE DRY BULB TEMPERATURE FALLS TO THE COOLING SETPOINT, THE UNIT CONTROLLER SHALL MODULATE THE SUPPLY AIRFLOW CONTROL DAMPER BETWEEN MINIMUM AND MAXIMUM AIRFLOW POSITIONS TO MAINTAIN THE ZONE DRY BULB TEMPERATURE SETPOINT. THE UNIT SHALL MAINTAIN THE SUPPLY AIRFLOW CONTROL DAMPER AT THE MINIMUM AIRFLOW POSITION WHEN THE ZONE DRY BULB TEMPERATURE IS BETWEEN THE COOLING AND HEATING SETPOINTS.

DEHUMIDIFICATION MODE:
THE UNIT CONTROLLER SHALL MONITOR THE ZONE RELATIVE HUMIDITY LEVEL. WHEN THE UNIT IS IN COOLING MODE AND THE ZONE RELATIVE HUMIDITY IS 10% ABOVE THE ZONE RELATIVE HUMIDITY SETPOINT OF 50% (ADJUSTABLE), THE UNIT CONTROLLER SHALL ENABLE DEHUMIDIFICATION MODE. IN THIS MODE, THE UNIT SHALL INCREASE THE SUPPLY AIRFLOW INCREMENTALLY, UP TO THE MAXIMUM AIRFLOW RATE, AND MODULATE THE REHEAT COIL TO MAINTAIN ZONE TEMPERATURE AT 0-3°F (ADJUSTABLE) BELOW THE OCCUPIED ZONE DRY BULB TEMPERATURE COOLING SETPOINT. WHEN THE ZONE RELATIVE HUMIDITY FALLS TO WITHIN 3% (ADJUSTABLE) OF THE ZONE RELATIVE HUMIDITY SETPOINT, THE UNIT CONTROLLER SHALL DE-ENGERGIZE THE REHEAT COIL AND DISABLE DEHUMIDIFICATION MODE.

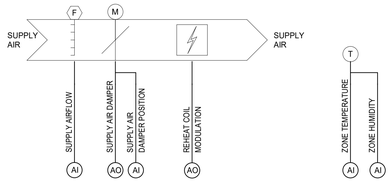
HEATING MODE:
WHEN THE ZONE TEMPERATURE FALLS BELOW THE OCCUPIED ZONE DRY BULB TEMPERATURE HEATING SETPOINT OF 70°F (ADJUSTABLE), THE UNIT CONTROLLER SHALL ENGAGE HEATING MODE. IN THIS MODE, THE UNIT CONTROLLER SHALL MODULATE THE REHEAT COIL TO MAINTAIN THE OCCUPIED ZONE DRY BULB TEMPERATURE HEATING SETPOINT. IF THE ZONE DRY BULB TEMPERATURE CONTINUES TO FALL, THE UNIT CONTROLLER SHALL MODULATE THE SUPPLY AIRFLOW CONTROL DAMPER OPEN, UP TO THE MAXIMUM HEATING AIRFLOW RATE, IN CONJUNCTION WITH MODULATING THE REHEAT COIL TO MAINTAIN THE OCCUPIED ZONE DRY BULB TEMPERATURE HEATING SETPOINT.

ZONE TEMPERATURE DEADBAND:
THE MINIMUM OCCUPIED ZONE TEMPERATURE DEADBAND SHALL NOT BE ALLOWED TO BE LESS THAN 5°F; IF THE OCCUPIED ZONE HEATING OR COOLING SETPOINT IS ADJUSTED, THE UNIT CONTROLLER SHALL AUTOMATICALLY ADJUST THE CONVERSE SETPOINT TO MAINTAIN A 5°F DEADBAND.

UNOCCUPIED MODE:

WHEN THE ASSOCIATED RTU IS PLACED IN UNOCCUPIED MODE, THE FOLLOWING ACTIONS SHALL OCCUR:

1. THE UNIT CONTROLLER SHALL DE-ENERGIZE THE REHEAT COIL AND FULLY OPEN THE SUPPLY AIRFLOW CONTROL DAMPER..
2. IF THE ZONE TEMPERATURE RISES ABOVE/DROPS BELOW MORE THAN 3°F THAN THE UNOCCUPIED ZONE DRY BULB TEMPERATURE SETPOINTS OF 85°F (COOLING) AND 55°F (HEATING) (BOTH SETPOINTS ADJUSTABLE), THE BAS SHALL START THE ASSOCIATED RTU AND THE BAS SHALL ENABLE THE COOLING MODE/HEATING MODE SEQUENCES UNTIL THE ZONE DRY BULB TEMPERATURE IS INSIDE THE UNOCCUPIED ZONE TEMPERATURE SETPOINTS BY AT LEAST 3°F.
3. IF THE ZONE HUMIDITY LEVEL RISES MORE THAN 15% ABOVE THE ZONE HUMIDITY LEVEL SETPOINT OF 50% (ADJUSTABLE), AND THE ZONE TEMPERATURE IS ABOVE THE OCCUPIED COOLING SETPOINT OF 75°F (ADJUSTABLE), THE BAS SHALL START THE ASSOCIATED RTU AND THE BAS SHALL ENABLE THE COOLING MODE SEQUENCE UNTIL THE ZONE HUMIDITY LEVEL IS NO MORE THAN 10% ABOVE THE ZONE HUMIDITY LEVEL SETPOINT.



CONTROL POINT SCHEDULE

VAV-1-01 THROUGH VAV-2-07

#	DESCRIPTION	INPUT		OUTPUT	
		ANALOG	DIGITAL	ANALOG	DIGITAL
1	SUPPLY AIRFLOW RATE	X			
2	SUPPLY AIR DAMPER CONTROL (0 TO 100%)			X	
3	SUPPLY AIR DAMPER POSITION	X			
4	REHEAT COIL MODULATION			X	
5	ZONE AIR DRY BULB TEMPERATURE	X			
6	ZONE AIR DRY BULB TEMPERATURE SETPOINT	X			
7	ZONE AIR RELATIVE HUMIDITY	X			

MULTI-ZONE VAV RTU

SYSTEM DESCRIPTION:
THE MULTI-ZONE ROOFTOP UNIT CONSISTS OF A RETURN AIR PATH WITH RETURN AIR DAMPER, OUTDOOR AIR PATH WITH OUTDOOR AIR DAMPER, PLEATED FILTERS, A DX COOLING COIL, A GAS HEAT EXCHANGER, DIRECT DRIVE SUPPLY AIR FAN(S) WITH VFD, AND ALL ASSOCIATED APPURTENANCES AND DEVICES DEPICTED ON THE CONTROL SYSTEM DIAGRAM.

REFER TO THE ZONE VAV TERMINAL UNIT CONTROLS DIAGRAM FOR THE ASSOCIATED CONTROL SEQUENCES.

UNIT CONTROLLER:
THE UNIT CONTROLLER SHALL BE PROVIDED AND PROGRAMMED BY THE HVAC CONTROLS CONTRACTOR. THE UNIT CONTROLLER SHALL BE CAPABLE OF SUPPORTING DIGITAL COMMUNICATION USING THE BACnet PROTOCOL. THE HVAC CONTROLS CONTRACTOR SHALL INTEGRATE THE UNIT CONTROLLER WITH THE BUILDING AUTOMATION SYSTEM (BAS) AND SHALL PROVIDE THE NECESSARY CONTROL WIRING AND DEVICES (NETWORK CONTROLLERS, GATEWAYS, ETC.) FOR THE BAS TO MONITOR AND ADJUST SETPOINTS AND GENERATE ALARMS.

SYSTEM STARTUP/SHUTDOWN:

THE UNIT SHALL BE STARTED/STOPPED THROUGH THE BAS. THE BAS SHALL ALLOW THE OPERATOR TO SET AND ADJUST OCCUPIED/UNOCCUPIED MODES BASED ON A 24-HOUR/7-DAY SCHEDULE.

OCCUPIED MODE:

WHEN THE SYSTEM IS PLACED IN OCCUPIED MODE, THE FOLLOWING STANDARD SEQUENCES SHALL BE ENABLED:

OUTDOOR AIR / RETURN AIR DAMPER CONTROL FOR VENTILATION:
THE RETURN AIR DAMPER AND THE OUTDOOR AIR DAMPER SHALL MODULATE TO MAINTAIN THE OUTDOOR AIRFLOW RATE (CFM) SETPOINT, AS INDICATED BY THE AIRFLOW MEASUREMENT STATION. AN ALARM SHALL BE GENERATED AT THE BAS OPERATOR'S WORKSTATION IF THE OUTDOOR AIRFLOW RATE VARIES BY MORE THAN 10% FROM SETPOINT.

SUPPLY AIR FAN CONTROL:
THE SUPPLY AIR FAN(S) SHALL RUN CONTINUOUSLY. THE UNIT SHALL USE ITS INTERNAL CONTROL ALGORITHMS TO VARY THE SPEED OF THE SUPPLY AIR FAN(S) (MULTI-ZONE VARIABLE AIR VOLUME CONTROL) TO MAINTAIN A DUCT STATIC PRESSURE SETPOINT OF 1.0 IN. W.G. (ADJUSTED DURING TEST AND BALANCE). THE DUCT STATIC PRESSURE TRANSMITTER SHALL BE INSTALLED IN THE DOWNSTREAM DUCTWORK, IN A LOCATION APPROXIMATELY 2/3 TO 3/4 TO THE FARTHEST VAV TERMINAL BOX.

SUPPLY AIR TEMPERATURE CONTROL (COOLING):
WHEN THE SUPPLY AIR TEMPERATURE IS ABOVE THE SUPPLY AIR DRY BULB TEMPERATURE MAXIMUM SETPOINT OF 55°F (ADJUSTABLE), THE UNIT CONTROLLER SHALL ENABLE COOLING MODE. IN THIS MODE, THE UNIT CONTROLLER SHALL MODULATE THE COOLING COIL TO MAINTAIN A MAXIMUM SUPPLY AIR DRY BULB TEMPERATURE OF 55°F (ADJUSTABLE).

SUPPLY AIR TEMPERATURE CONTROL (HEATING):
WHEN THE SUPPLY AIR TEMPERATURE IS BELOW THE SUPPLY AIR DRY BULB TEMPERATURE MINIMUM SETPOINT OF 50°F (ADJUSTABLE), THE UNIT CONTROLLER SHALL ENABLE HEATING MODE. IN THIS MODE, THE UNIT CONTROLLER SHALL MODULATE THE GAS HEAT EXCHANGER TO MAINTAIN THE SUPPLY AIR DRY BULB TEMPERATURE MINIMUM SETPOINT OF 50°F (ADJUSTABLE).

SUPPLY AIR TEMPERATURE DEADBAND:
WHEN THE SUPPLY AIR TEMPERATURE IS BETWEEN THE SUPPLY AIR DRY BULB TEMPERATURE MINIMUM AND MAXIMUM SETPOINTS (50°F - 55°F, ADJUSTABLE), THE UNIT CONTROLLER SHALL CLOSE THE GAS HEAT EXCHANGER VALVE AND DE-ENERGIZE THE COOLING COIL TO PREVENT SIMULTANEOUS HEATING AND COOLING. THE SUPPLY AIR TEMPERATURE DEADBAND SHALL NOT BE ALLOWED TO BE LESS THAN 5°F; IF THE SUPPLY AIR HEATING OR COOLING SETPOINT IS ADJUSTED, THE UNIT CONTROLLER SHALL AUTOMATICALLY ADJUST THE CONVERSE SETPOINT TO MAINTAIN A 5°F DEADBAND.

SUPPLY AIR TEMPERATURE RESET:
WHEN THE OUTDOOR AIR TEMPERATURE FALLS BELOW 70°F (ADJUSTABLE) IN COOLING MODE, THE UNIT CONTROLLER SHALL RESET THE SUPPLY AIR TEMPERATURE SETPOINT UPWARDS LINEARLY AS OUTDOOR AIR TEMPERATURE FALLS BETWEEN 70°F AND 60°F, TO A MAXIMUM SETPOINT OF 60°F (ADJUSTABLE). AS THE OUTDOOR AIR TEMPERATURE RISES ABOVE 70°F, OR IF THE ZONE RELATIVE HUMIDITY IN ANY ASSOCIATED ZONE IS MORE THAN 5% ABOVE THE ZONE RELATIVE HUMIDITY SETPOINT OF 50% (ADJUSTABLE), THE UNIT CONTROLLER SHALL RESET THE SUPPLY AIR TEMPERATURE SETPOINT DOWNARDS TO THE MINIMUM SETPOINT OF 55°F (ADJUSTABLE).

STATIC PRESSURE RESET:
THE BAS SHALL MONITOR THE DAMPER POSITION OF ALL VAV TERMINAL BOXES ASSOCIATED WITH THE AHU. IF THE DAMPER POSITION OF ALL VAV TERMINAL BOXES IS BELOW 60% (ADJUSTABLE), THE BAS SHALL RESET THE STATIC PRESSURE SETPOINT DOWNWARDS, IN 0.1 IN. W.G. INCREMENTS, UNTIL THE MINIMUM VAV TERMINAL BOX DAMPER POSITION IS ABOVE 60% (ADJUSTABLE). IF THE MAXIMUM VAV TERMINAL BOX DAMPER POSITION RISES ABOVE 90%, THE BAS SHALL RESET THE STATIC PRESSURE UPWARDS SETPOINT UPWARDS, IN 0.2 IN. WG. INCREMENTS, UNTIL THE MAXIMUM VAV TERMINAL BOX IS BELOW 85%, OR THE STATIC PRESSURE REACHES THE MAXIMUM STATIC PRESSURE SETPOINT OF 1.0 IN W.G. (ADJUSTABLE).

UNOCCUPIED MODE:

WHEN THE UNIT IS PLACED IN UNOCCUPIED MODE, THE FOLLOWING ACTIONS SHALL OCCUR:

1. THE UNIT CONTROLLER SHALL USE ITS INTERNAL SHUTDOWN CONTROL ALGORITHMS TO CLOSE THE GAS HEAT EXCHANGER VALVE, DE-ENERGIZE THE COOLING COIL, DE-ENERGIZE THE SUPPLY AIR FAN(S), CLOSE THE OUTDOOR AIR DAMPER, AND OPEN THE RETURN AIR DAMPER.
2. IF THE ZONE TEMPERATURE IN ANY TWO (2) ASSOCIATED ZONES RISES ABOVE/DROPS BELOW THE UNOCCUPIED ZONE DRY BULB TEMPERATURE SETPOINTS OF 85°F (COOLING) AND 55°F (HEATING) (BOTH SETPOINTS ADJUSTABLE), OR IF THE ZONE TEMPERATURE IN ANY ONE (1) ZONE RISES ABOVE/DROPS BELOW MORE THAN 3°F THAN THE UNOCCUPIED DRYBULB TEMPERATURE SETPOINTS, THE BAS SHALL START THE UNIT AND THE UNIT SHALL ENABLE THE COOLING MODE/HEATING MODE SEQUENCES—WITH THE OUTDOOR AIR DAMPER CLOSED—UNTIL THE ZONE DRY BULB TEMPERATURE IN EACH ZONE IS INSIDE THE UNOCCUPIED ZONE TEMPERATURE SETPOINTS BY AT LEAST 3°F.
3. IF THE ZONE HUMIDITY LEVEL IN ANY ONE (1) ASSOCIATED ZONE RISES MORE THAN 15% ABOVE THE ZONE HUMIDITY LEVEL SETPOINT OF 50% (ADJUSTABLE), AND THE ZONE TEMPERATURE IS ABOVE THE OCCUPIED COOLING SETPOINT OF 75°F (ADJUSTABLE), THE BAS SHALL START THE UNIT AND THE UNIT SHALL ENABLE THE COOLING MODE SEQUENCE—WITH THE OUTDOOR AIR DAMPER CLOSED—UNTIL THE ZONE HUMIDITY LEVEL IS NO MORE THAN 10% ABOVE THE ZONE HUMIDITY LEVEL SETPOINT.

SMOKE DETECTION SHUTDOWN:

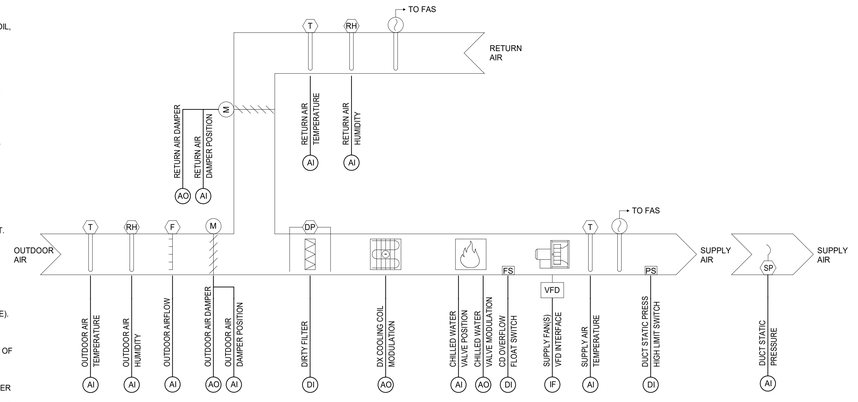
UPON ACTIVATION OF THE ASSOCIATED, HARD WIRED, INTERLOCKED DUCT SMOKE DETECTORS, THE FIRE ALARM SYSTEM SHALL DE-ENERGIZE THE UNIT (INCLUDING THE SUPPLY FAN(S)). THE UNIT CONTROLLER SHALL THEN SEND AN ALARM TO THE OPERATOR'S WORKSTATION. THE DUCT SMOKE DETECTORS SHALL BE ABLE TO BE REMOTELY RESET VIA THE FIRE ALARM PANEL OR REMOTE TEST SWITCH.

DRAIN PAN FLOAT SWITCH SHUTDOWN:

UPON ACTIVATION OF THE DRAIN PAN CONDENSATE FLOAT SWITCH, THE UNIT CONTROLLER SHALL USE ITS INTERNAL SHUTDOWN CONTROL ALGORITHMS TO CLOSE THE GAS HEAT EXCHANGER VALVE, DE-ENERGIZE THE COOLING COIL, DE-ENERGIZE THE SUPPLY AIR FAN(S), CLOSE THE OUTDOOR AIR DAMPER, AND OPEN THE RETURN AIR DAMPER. AN ALARM SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

HIGH DUCT STATIC PRESSURE LIMIT SWITCH SHUTDOWN:

UPON ACTIVATION OF THE HIGH DUCT STATIC PRESSURE LIMIT SWITCH, THE UNIT CONTROLLER SHALL USE ITS INTERNAL SHUTDOWN CONTROL ALGORITHMS TO CLOSE THE GAS HEAT EXCHANGER VALVE, DE-ENERGIZE THE COOLING COIL, DE-ENERGIZE THE SUPPLY AIR FAN(S), CLOSE THE OUTDOOR AIR DAMPER, AND OPEN THE RETURN AIR DAMPER. AN ALARM SHALL BE SENT TO THE OPERATOR'S WORKSTATION.



CONTROL POINT SCHEDULE

RTU-01, RTU-02

#	DESCRIPTION	INPUT		OUTPUT	
		ANALOG	DIGITAL	ANALOG	DIGITAL
1	RETURN AIR DRY BULB TEMPERATURE	X			
2	RETURN AIR RELATIVE HUMIDITY (OR DEWPOINT)	X			
3	RETURN AIR DAMPER CONTROL (0-100%)			X	
4	RETURN AIR DAMPER POSITION	X			
5	OUTDOOR AIR DRY BULB TEMPERATURE	X			
6	OUTDOOR AIR RELATIVE HUMIDITY (OR DEWPOINT)	X			
7	OUTDOOR AIRFLOW RATE	X			
8	OUTDOOR AIR DAMPER CONTROL (0 TO 100%)			X	
9	OUTDOOR AIR DAMPER POSITION	X			
10	DIRTY AIR FILTER SWITCH		X		
11	DX COOLING COIL MODULATION			X	
12	GAS HEAT EXCHANGER MODULATION			X	
13	CONDENSATE OVERFLOW SWITCH		X		
14	SUPPLY AIR FAN VFD INTERFACE (ON/OFF, STATUS)		X		X
15	SUPPLY AIR FAN VFD INTERFACE (SPEED CONTROL)			X	
16	LEAVING UNIT SUPPLY AIR DRY BULB TEMPERATURE	X			
17	DUCT STATIC PRESSURE HIGH LIMIT SWITCH		X		
18	DUCT STATIC PRESSURE	X			

NOTES:

A. RETURN AIR DAMPER AND OUTDOOR AIR DAMPER MAY BE INTERLOCKED AND MAY SHARE A COMMON MOTOR ACTUATOR OR EACH MAY HAVE ITS OWN MOTOR ACTUATOR.

EMERGENCY EXHAUST FAN CONTROL

SYSTEM DESCRIPTION:

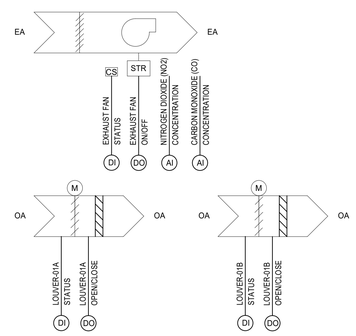
THE APPARATUS BAY EMERGENCY EXHAUST FAN SYSTEM CONSISTS OF A DIRECT-DRIVE FAN, GRAVITY-OPERATED BACKDRAFT DAMPER, AND ALL ASSOCIATED APPURTENANCES AND DEVICES DEPICTED ON THE CONTROL SYSTEM DIAGRAM. IN ADDITION TO THE EXHAUST FAN, TWO (X2) INTAKE COMBINATION LOUVER/DAMPERS SHALL BE INTERLOCKED WITH THE EXHAUST FAN OPERATION.

UNIT CONTROLLER:

THE EXHAUST FAN SHALL BE SUPPLIED WITH A FACTORY-MOUNTED DDC CONTROLLER WITH HAND / OFF / AUTO (HOA) CONTROL.

SYSTEM STARTUP/SHUTDOWN

THE EXHAUST FAN SHALL BE STARTED/STOPPED BASED ON INPUTS FROM CARBON MONOXIDE AND NITROGEN DIOXIDE SENSORS LOCATED IN THE APPARATUS BAY. IF ANY CARBON MONOXIDE SENSOR DETECTS A CONCENTRATION OF 25 PPM OR GREATER OR IF ANY NITROGEN DIOXIDE SENSOR DETECTS A CONCENTRATION OF 0.5 PPM OR GREATER, LOUVER-01A'S DAMPER AND LOUVER-01B'S DAMPER SHALL OPEN. ONCE BOTH LOUVER DAMPERS ARE CONFIRMED OPEN, THE EXHAUST FAN SHALL BE STARTED AND SHALL RUN CONTINUOUSLY AT A CONSTANT SPEED, SET DURING TEST AND BALANCE, TO EXHAUST THE SCHEDULED AIRFLOW (CFM). THE EXHAUST FAN SHALL BE STOPPED WHEN THE APPARATUS BAYS CARBON MONOXIDE CONCENTRATION DROPS BELOW 20 PPM AND THE NITROGEN DIOXIDE CONCENTRATION DROPS BELOW 0.4 PPM.



CONTROL POINT SCHEDULE

EF-02

#	DESCRIPTION	INPUT		OUTPUT	
		ANALOG	DIGITAL	ANALOG	DIGITAL
1	EXHAUST FAN ON/OFF				X
2	EXHAUST FAN STATUS		X		
3	LOUVER-01A DAMPER OPEN/CLOSE				X
4	LOUVER-01A DAMPER POSITION		X		
5	LOUVER-01B DAMPER OPEN/CLOSE				X
6	LOUVER-01B DAMPER POSITION		X		
7	APPARATUS BAY CO PPM	X			
8	APPARATUS BAY NO_2 PPM	X			

GENERAL EXHAUST FAN CONTROL

SYSTEM DESCRIPTION:

THE EXHAUST FAN CONSISTS OF A DIRECT-DRIVE FAN, GRAVITY-OPERATED BACKDRAFT DAMPER, AND ALL ASSOCIATED APPURTENANCES AND DEVICES DEPICTED ON THE CONTROL SYSTEM DIAGRAM.

UNIT CONTROLLER:

THE EXHAUST FAN SHALL BE SUPPLIED WITH A FACTORY-MOUNTED DDC CONTROLLER WITH HAND / OFF / AUTO (HOA) CONTROL.

SYSTEM STARTUP/SHUTDOWN

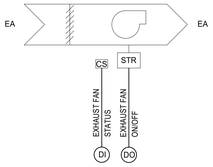
THE EXHAUST FAN SHALL BE STARTED/STOPPED BASED ON THE CONFIGURATION OF A 7-DAY DIGITAL TIME CLOCK.

OCCUPIED MODE:

WHEN THE SYSTEM IS PLACED IN OCCUPIED MODE, THE EXHAUST FAN SHALL OPERATE CONTINUOUSLY AT A CONSTANT SPEED, TO BE SET DURING TEST AND BALANCE, TO EXHAUST THE SCHEDULED AIRFLOW (CFM). IF THE FAN FAILS TO START, AS INDICATED BY THE CURRENT SWITCH, AN ALARM SHALL BE GENERATED AT THE OPERATOR'S WORKSTATION.

UNOCCUPIED MODE:

WHEN THE UNIT IS PLACED IN AN UNOCCUPIED MODE, THE EXHAUST FAN SHALL BE DE-ENERGIZED.



CONTROL POINT SCHEDULE

EF-01, EF-03, EF-04

#	DESCRIPTION	INPUT		OUTPUT	
		ANALOG	DIGITAL	ANALOG	DIGITAL
1	EXHAUST FAN ON/OFF				X
2	EXHAUST FAN STATUS		X		

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ISSUE DATE
CONSTRUCTION DOCUMENTS 01/09/2026

DRAWN BY: Author
CHECKED BY: Checker

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA LICENSED No. 38810 PROFESSIONAL ENGINEER ANDREAS R. MANN

MECHANICAL CONTROL DIAGRAM

M7.01

1/9/2026 3:28:50 PM TEMPLATE VERSION: 2025.1

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ABBREVIATION AND ACRONYMS

(APPLIES TO ALL PLUMBING SHEETS)

%	PERCENT
°	DEGREE
°C	CELSIUS
°F	FAHRENHEIT
ø OR DIA	DIAMETER
Δ	DIFFERENCE
A	COMPRESSED AIR
AAV	AIR ADMITTANCE VALVE
AC	ALTERNATING CURRENT
AD	ACCESS DOOR OR AREA DRAIN
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFR	ABOVE FINISHED ROOF
AG	ABOVE GRADE
AGA	AMERICAN GAS ASSOCIATION
ALT	ALTERNATE
AMB	AMBIENT
AMP	AMPERE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AS	ABOVE SLAB
ASPE	AMERICAN SOCIETY OF PLUMBING ENGINEERS
ASSE	AMERICAN SOCIETY OF SANITARY ENGINEERING
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATM	ATMOSPHERE
AV	ANGLE VALVE
AVG	AVERAGE
AWG	AMERICAN WIRE GAGE
AWWA	AMERICAN WATER WORKS ASSOCIATION
BAS	BUILDING AUTOMATION SYSTEM
BEP	BEST EFFICIENCY POINT
BF	BELOW FLOOR
BFP	BACKFLOW PREVENTER
BFV	BUTTERFLY VALVE
BG	BELOW GRADE
BHP	BRAKE HORSEPOWER
BOD	BASIS OF DESIGN
BOP	BOTTOM OF PIPE
BP	BOILING POINT
BS	BELOW SLAB
BT	BATHTUB
BV	BALL VALVE
CA	COMPRESSED AIR
CAP	CAPACITY
CB	CATCH BASIN
CD	CONDENSATE
CFH	CUBIC FEET PER HOUR
CI	CAST IRON
CLG	COOLING OR CEILING
CO	CLEANOUT
CONN	CONNECTION
CONT	CONTINUE
COORD	COORDINATE
CP	CIRCULATING PUMP
CPVC	CHLORINATED POLYVINYL CHLORIDE
CU FT	CUBIC FEET
CU IN	CUBIC INCH
C_v	COEFFICIENT, VALVE FLOW
CV	CHECK VALVE
CW	DOMESTIC COLD WATER
DB	DECIBEL
DC	DIRECT CURRENT
DCV	DOUBLE CHECK VALVE
DD	DIRECT DRIVE
DDC	DIRECT DIGITAL CONTROL
DE	DEIONIZED WATER
DF	DRINKING FOUNTAIN
DFU	DRAINAGE FIXTURE UNIT
DHW	DOMESTIC HOT WATER
DI	DRAINAGE INLET OR DISTILLED WATER
DN	DOWN
DWG	DRAWING
EC	ELECTRONICALLY COMMUTATED
ECO	EXTERIOR CLEANOUT
EFF	EFFICIENCY
EL OR ELEV	ELEVATION
ELEC	ELECTRIC, ELECTRICAL
ENT	ENTERING
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EWT	ENTERING WATER TEMPERATURE
EXIST	EXISTING
FAS	FIRE ALARM SYSTEM
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FIN	FINISH
FL	FLOOR
FLA	FULL LOAD AMPS
FOG	FATS, OILS, AND GREASE
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FOOT OR FEET
FT HD	FOOT HEAD
FT LB	FOOT-POUND
FU	FIXTURE UNIT
G	NATURAL GAS
GAL	GALLONS
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GPY	GALLONS PER YEAR
GR	GREASE WASTE
H2O	WATER
HB	HOSE BIBB
HD	HEAD
HP	HORSEPOWER
HR	HOUR
HW	DOMESTIC HOT WATER
HWC	DOMESTIC HOT WATER CIRCULATING
HZ	HERTZ (FREQUENCY)
IA	INSTRUMENT AIR
ICC	INTERNATIONAL CODE COUNCIL
ID	INTERNAL DIAMETER
IE	INVERT ELEVATION
IN	INCH
IP	INCH-POUND
IPS	INTERNATIONAL PIPE STANDARD OR IRON PIPE SIZE
IRR	IRRIGATION WATER
IW	INDUSTRIAL WASTE
KS	KITCHEN SINK
KW	KILOWATT
KWH	KILOWATT HOUR
L	LEADER
LAV	LAVATORY
LB	POUND
LIN FT	LINEAR FOOT OR FEET
LPG	LIQUEFIED PETROLEUM GAS
LT	LAUNDRY TRAY
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPS
MECH	MECHANICAL
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MIN	MINIMUM
MOCP	MAXIMUM OVERCURRENT PROTECTION
MS	MOP SINK
N C	NORMALLY CLOSED
N I C	NOT IN CONTRACT
N O	NORMALLY OPEN
N T S	NOT TO SCALE
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NG	NATURAL GAS
NO	NUMBER
NPS	NOMINAL PIPE SIZE
NPSH	NET POSITIVE SUCTION HEAD
NPT	NATIONAL PIPE THREAD
NSF	NATIONAL SANITATION FOUNDATION
NTP	NORMAL TEMPERATURE AND PRESSURE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFD	OVERFLOW DRAIN
ORL	STORM OVERFLOW
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
P & ID	PIPING AND INSTRUMENTATION DIAGRAM
PCW	PUMPED COLD WATER
PD	PRESSURE DROP
PDI	PLUMBING DRAINAGE INSTITUTE
PH	PHASE (ELECTRICAL)
PIW	PUMPED INDUSTRIAL WASTE
PRV	PRESSURE REDUCING VALVE
PSAN	PUMPED SANITARY
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIA	PSI ABSOLUTE
PSIG	PSI GAGE
PV	PLUG VALVE OR PRESSURE RELIEF VALVE
PVC	POLYVINYL CHLORIDE
PW	PROCESS WATER
RD	ROOF DRAIN
RECIRC	RECIRCULATE
RO	REVERSE OSMOSIS WATER
RODI	RO DEIONIZED WATER
RPBA	REDUCED PRESSURE BACKFLOW ASSEMBLY
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
S	SANITARY OR SECOND
SCH	SCHEDULE
SG	SPECIFIC GRAVITY
SH	SHOWER
SK	SINK
SP HT	SPECIFIC HEAT
SP VOL	SPECIFIC VOLUME
SPEC	SPECIFICATION
SQ	SQUARE
SS	SERVICE SINK OR STAINLESS STEEL
STD	STANDARD
STL	STEEL
STO	STORM OVERFLOW
TAB	TESTING, ADJUSTING, AND BALANCING
TDH	TOTAL DYNAMIC HEAD
TE	TOP ELEVATION
TEMP	TEMPERATURE
TET	THERMAL EXPANSION TANK
TMV	THERMOSTATIC MIXING VALVE
TOP	TOP OF PIPE
TOS	TOP OF SLAB
TP	TRAP PRIMER
TPRV	TEMPERATURE & PRESSURE RELIEF VALVE
TW	TEMPERED WATER
TYP	TYPICAL
UIG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
V	VENT OR VOLT
VA	VOLT AMPERE
VAC	VACUUM
VB	VACUUM BREAKER
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VLV	VALVE
VOL	VOLUME
VTR	VENT THROUGH ROOF
W	WATT
W/	WITH
WC	WATER CLOSET OR WATER COLUMN
WFU	WATER SUPPLY FIXTURE UNITS
WG	WATER GAGE
WH	WALL HYDRANT
WHA	WATER HAMMER ARRESTOR
WOG	WATER, OIL, AND GAS
WWP	WATER WORKING PRESSURE
YH	YARD HYDRANT

PIPING

- CW — DOMESTIC COLD WATER PIPING
- HW — DOMESTIC HOT WATER PIPING
- HWC — DOMESTIC HOT WATER CIRCULATING PIPING
- SAN — SANITARY DRAIN PIPING (ABOVE SLAB)
- SAN U/G — SANITARY DRAIN PIPING (UNDERGROUND)
- ST — STORM DRAIN PIPING (ABOVE SLAB)
- ST U/G — STORM DRAIN PIPING (UNDERGROUND)
- STO — STORM OVERFLOW PIPING
- V — VENT PIPING
- G — NATURAL GAS PIPING
- CD — CONDENSATE PIPING
- A — COMPRESSED AIR PIPING

BALL VALVE
BUTTERFLY VALVE
CHECK VALVE
GATE VALVE
GLOBE VALVE
PLUG VALVE
THREE WAY VALVE
NEEDLE VALVE
PRESSURE REDUCING VALVE
SAFETY OR RELIEF VALVE
ELECTRIC MOTOR ACTUATED VALVE (M)
PIPE CAP
PIPE ELBOW, DOWN
PIPE ELBOW, UP
PIPE TEE, DOWN
PIPE TEE
P-TRAP
UNION
AUTOMATIC AIR VENT
FLOW SWITCH (FS)
PRESSURE SWITCH (PS)
PRESSURE GAGE AND COCK
PUMP
STRAINER
STRAINER, BLOW OFF
THERMOMETER
FLEXIBLE CONNECTOR
TEST PLUG

ANNOTATIONS

- # — KEYNOTE
- EWH-1 — EQUIPMENT TAG (REFER TO SCHEDULES)
- ENLARGED PLAN OR DETAIL CALL-OUT
- SECTION CALL-OUT

PLUMBING GENERAL NOTES

A. COORDINATE ALL PLUMBING WORK WITH WORK BY OTHER TRADES.

B. PROVIDE PIPE, PIPE INSULATION, FITTINGS, AND JOINING METHODS PER SPECIFICATIONS.

C. ALL PIPE ROUTING SHALL BE ORTHOGONAL TO BUILDING LINES.

D. VENT PIPE SHALL TERMINATE NO LESS THAN 8" ABOVE FINISHED ROOF LEVEL AND SHALL BE AT MINIMUM 10'-00" HORIZONTAL DISTANCE FROM ANY OUTDOOR AIR INTAKE.

E. PROVIDE CLEANOUTS IN BUILDING DRAINS AT INTERVALS OF NOT MORE THAN 100'-00". PROVIDE CLEANOUTS AT THE JUNCTION OF BUILDING DRAIN AND BUILDING SEWER AND AT ANY CHANGE OF HORIZONTAL DIRECTION GREATER THAN 45 DEGREES IN ANY DRAINAGE PIPE. HORIZONTAL DRAINAGE PIPING SHALL BE SLOPED DOWNWARD IN THE DIRECTION OF FLOW: 2% FOR 2-1/2"ø OR SMALLER, 1% FOR 3"ø TO 6"ø, AND 0.5% FOR 8"ø OR LARGER.

F. A PRESSURE REDUCING VALVE SHALL BE PROVIDED AT THE START OF THE BUILDING WATER DISTRIBUTION PIPING WHERE WATER PRESSURE WITHIN THE BUILDING EXCEEDS 80 PSI STATIC.

G. EXTERIOR WATER SUPPLY PIPING SHALL BE INSTALLED NOT LESS THAN 18" BELOW GRADE—AT MINIMUM 6" BELOW FROST LINE.

H. PROVIDE ALL HYDRANTS WITH AN ACCESSIBLE AND IDENTIFIABLE, OR TAGGED, SHUTOFF VALVE.

I. PROVIDE ALL PLUMBING FIXTURES, APPLIANCES AND MECHANICAL EQUIPMENT WITH AN ACCESSIBLE SHUTOFF VALVE ON THE WATER SUPPLY PIPE.

J. PROVIDE FULL-OPEN VALVE AT THE START OF THE BUILDING WATER DISTRIBUTION PIPING AND ON THE WATER SUPPLY PIPE TO EACH WATER HEATER.

K. ALL PLUMBING FIXTURE SUPPLY PIPES SHALL TERMINATE NOT MORE THAN 30" FROM THE POINT OF CONNECTION TO THE FIXTURE.

L. THE VERTICAL DISTANCE FROM ANY TRAPPED FIXTURE'S OUTLET TO THE TRAP WEIR SHALL NOT EXCEED 24" AND THE HORIZONTAL DISTANCE SHALL NOT EXCEED 30" MEASURED FROM THE CENTERLINE OF THE FIXTURE OUTLET TO THE CENTERLINE OF THE INLET OF THE TRAP. CLOTHES WASHER STANDPIPE SHALL EXTEND NOT LESS THAN 18" BUT NOT GREATER THAN 42" ABOVE THE TRAP WEIR.

M. WALL HYDRANTS LOCATED ON EXTERIOR WALLS SHALL BE MOUNTED 2'-00" ABOVE FINISHED GRADE.

N. PROVIDE A DOUBLE CHECK BACKFLOW PREVENTION ASSEMBLY CONFORMING TO ASSE 1015 OR AWWA C510 AT THE START OF THE BUILDING WATER DISTRIBUTION PIPING IF NOT PRESENT ON THE WATER SERVICE PIPE FROM THE WATER MAIN OR OTHER SOURCE OF POTABLE WATER SUPPLY.

O. ALL HYDRANTS, FAUCETS AND FIXTURE FITTINGS WITH HOSE-CONNECTED OUTLETS SHALL BE PROTECTED BY AN ATMOSPHERIC-TYPE VACUUM BREAKER—CONFORMING TO ASME A112.21.3, ASSE 1011, ASSE 1019, ASSE 1035, OR ASSE 1052—OR A PRESSURE-TYPE VACUUM BREAKER CONFORMING TO ASSE 1020.

P. THE WATER SUPPLY CONNECTION TO EACH COFFEE MACHINE SHALL BE PROTECTED AGAINST BACKFLOW BY A BACKFLOW PREVENTER CONFORMING TO ASSE 1024.

Q. THE MAXIMUM OPERATING PRESSURE FOR GAS PIPING LOCATED INSIDE THE BUILDING SHALL NOT EXCEED 5 PSIG.

R. PROVIDE A LINE PRESSURE REGULATOR FOR ALL GAS EQUIPMENT WHERE PRESSURE DOWNSTREAM OF SERVICE PRESSURE REGULATOR IS GREATER THAN THE INLET PRESSURE REQUIREMENT OF GAS EQUIPMENT.

S. PIPE PENETRATIONS OF FLOOR / CEILING ASSEMBLIES AND ASSEMBLIES REQUIRED TO HAVE A FIRE-RESISTANCE RATING SHALL BE PROTECTED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE.

T. PIPE INSULATION INSTALLED IN THE BUILDING SHALL CONFORM TO THE REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE; SHALL BE TESTED IN ACCORDANCE WITH ASTM E84 OR UL 723, USING THE SPECIMEN PREPARATION AND MOUNTING PROCEDURES OF ASTM E2231; AND SHALL HAVE A MAXIMUM FLAME SPREAD INDEX OF 25 AND A SMOKE-DEVELOPED INDEX NOT EXCEEDING 450. PIPE INSULATION INSTALLED WITHIN A PLENUM SHALL HAVE A MAXIMUM FLAME SPREAD INDEX OF 25 AND A SMOKE-DEVELOPED INDEX NOT EXCEEDING 50.

U. ALL EQUIPMENT THAT CONTAINS AN EVAPORATOR OR A COOLING COIL OR CONTAINS FUEL-BURNING EQUIPMENT SHALL BE PROVIDED WITH A CONDENSATE DRAIN. CONDENSATE SHALL BE CONVEYED FROM THE DRAIN PAN OUTLET TO A PLACE OF DISPOSAL (I.E. ROOF DRAIN OR MOP SINK DRAIN) AS APPROVED BY THE AUTHORITY HAVING JURISDICTION. THE CONDENSATE DRAIN SHALL BE SLOPED DOWNWARD IN THE DIRECTION OF FLOW AT A MINIMUM SLOPE OF 1%. THE CONDENSATE DRAIN SHALL BE FULL SIZE OF THE EQUIPMENT'S DRAIN PAN OUTLET; THE MINIMUM ALLOWABLE CONDENSATE DRAIN SIZE SHALL BE 3/4" INTERNAL DIAMETER. CONDENSATE DRAINS SHALL BE TRAPPED AS REQUIRED BY THE EQUIPMENT MANUFACTURER.

V. WATER CLOSET FLUSH CONTROLS SHALL BE LOCATED ON THE OPEN SIDE OF THE WATER CLOSET.

W. ALL LAVATORIES IN PUBLIC TOILET FACILITIES SHALL BE PROVIDED WITH AN APPROVED WATER-TEMPERATURE LIMITING DEVICE THAT CONFORMS TO THE REQUIREMENTS OF ASSE 1070. WATER TEMPERATURE AT LAVATORY OUTLETS SHALL BE FIELD ADJUSTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS TO 110°F OR TEMPERED WATER TEMPERATURE.

X. INDIVIDUAL SHOWER VALVES SHALL BE BALANCED-PRESSURE, THERMOSTATIC, OR COMBINATION BALANCED-PRESSURE/THERMOSTATIC VALVES THAT CONFORM TO THE REQUIREMENTS OF ASSE 1016 AND SHALL BE INSTALLED AT THE POINT OF USE. SHOWER VALVES SHALL BE EQUIPPED WITH A MEANS TO LIMIT THE MAXIMUM SETTING OF THE VALVE TO 120°F, WHICH SHALL BE FIELD ADJUSTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

Y. ALL EMERGENCY FLOOR DRAINS AND FIXTURES WHOSE TRAP SEAL IS SUBJECT TO EVAPORATION SHALL BE PROTECTED WITH A POTABLE WATER-SUPPLIED TRAP SEAL PRIMER VALVE THAT CONFORMS TO THE REQUIREMENTS OF ASSE 1018. THE DISCHARGE PIPE FROM THE TRAP SEAL PRIMER VALVE SHALL CONNECT ABOVE THE TRAP SEAL ON THE INLET SIDE OF THE TRAP.

Z. INSTALL ESCUTCHEONS FOR ALL EXPOSED PIPING PENETRATIONS OF WALLS, CEILINGS, AND FINISHED FLOORS. ESCUTCHEONS SHALL HAVE AN INTERNAL DIAMETER SLIGHTLY LARGER THAN THE DIAMETER OF THE PIPE PLUS INSULATION AND SHALL HAVE AN OUTER DIAMETER THAT COMPLETELY COVERS THE PENETRATION.

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA LICENSED No. 38810 PROFESSIONAL ENGINEER ANDREAS R. HAHN

PLUMBING ABBREVIATIONS, LEGENDS, & GENERAL NOTES

P0.01

1/9/2026 4:33:37 PM TEMPLATE VERSION: 2025.1

FIRST FLOOR GRAVITY

ASHVILLE FIRE STATION #2
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P1.01

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ROCKET MEP LLC
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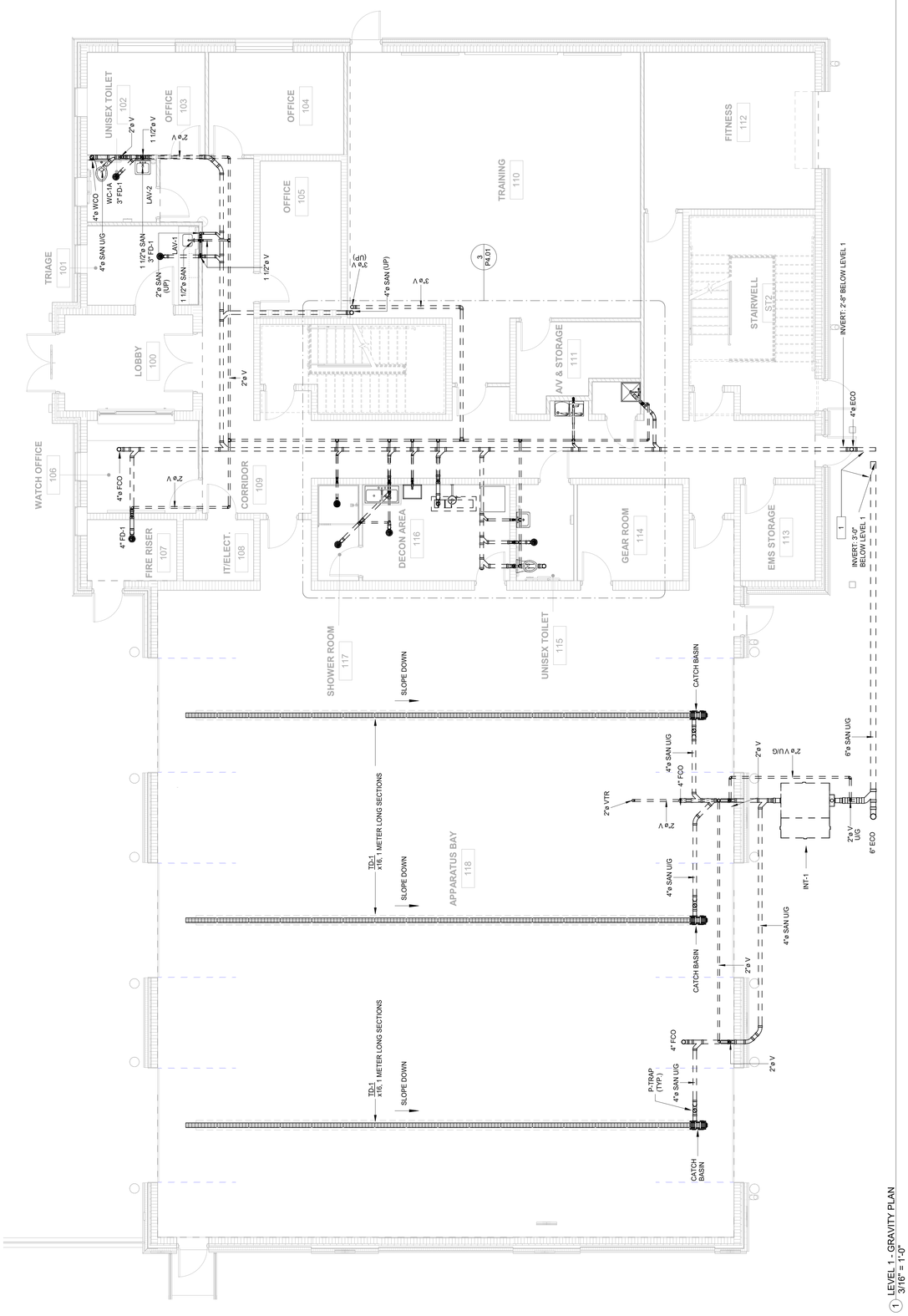
256-203-4573 INFO@ROCKETMEP.COM
AL CERT OF AUTH: ECA30597

PLUMBING KEYED NOTES

1. REFER TO CIVIL DRAWINGS FOR CONTINUATION OF UNDERGROUND SANITARY SEWER.



1 LEVEL 1 - GRAVITY PLAN
3/16" = 1'-0"

0 4' 8' 12' 16'
3/16" = 1'-0"

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PLUMBING KEYED NOTES

1.

1 LEVEL 2 - GRAVITY PLAN
3/16" = 1'-0"

3/16" = 1'-0"

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ALABAMA LICENSED No. 38810 PROFESSIONAL ENGINEER ANDREAS R. HAHN

SECOND FLOOR GRAVITY

P1.02

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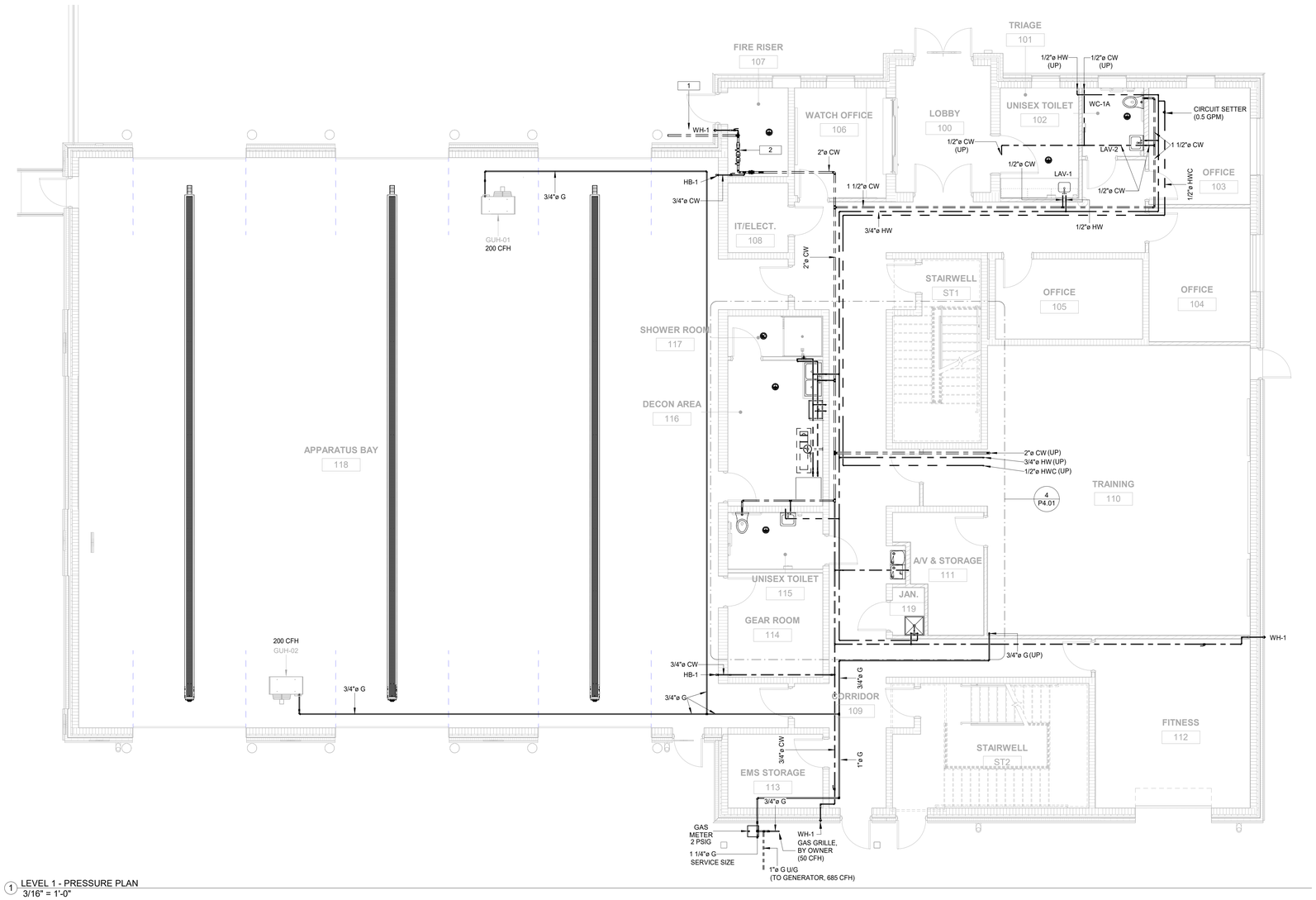
PLUMBING KEYED NOTES

1. REFER TO CIVIL DRAWINGS FOR CONTINUATION OF UNDERGROUND DOMESTIC WATER SUPPLY.
2. PROVIDE DOMESTIC WATER SHUT-OFF VALVE FOR THE ENTIRE BUILDING AND BACKFLOW PREVENTER. PROVIDE A PRESSURE REDUCING VALVE DOWNSTREAM OF THE BACKFLOW PREVENTER WHERE THE STREET PRESSURE IS GREATER THAN 80 PSIG.



1 LEVEL 1 - PRESSURE PLAN
3/16" = 1'-0"

N

0 4' 8' 12' 16'
3/16" = 1'-0"

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ALABAMA LICENSED PROFESSIONAL ENGINEER No. 38810 ANDREAS R. MARKOU

FIRST FLOOR PRESSURE PLAN

P1.03

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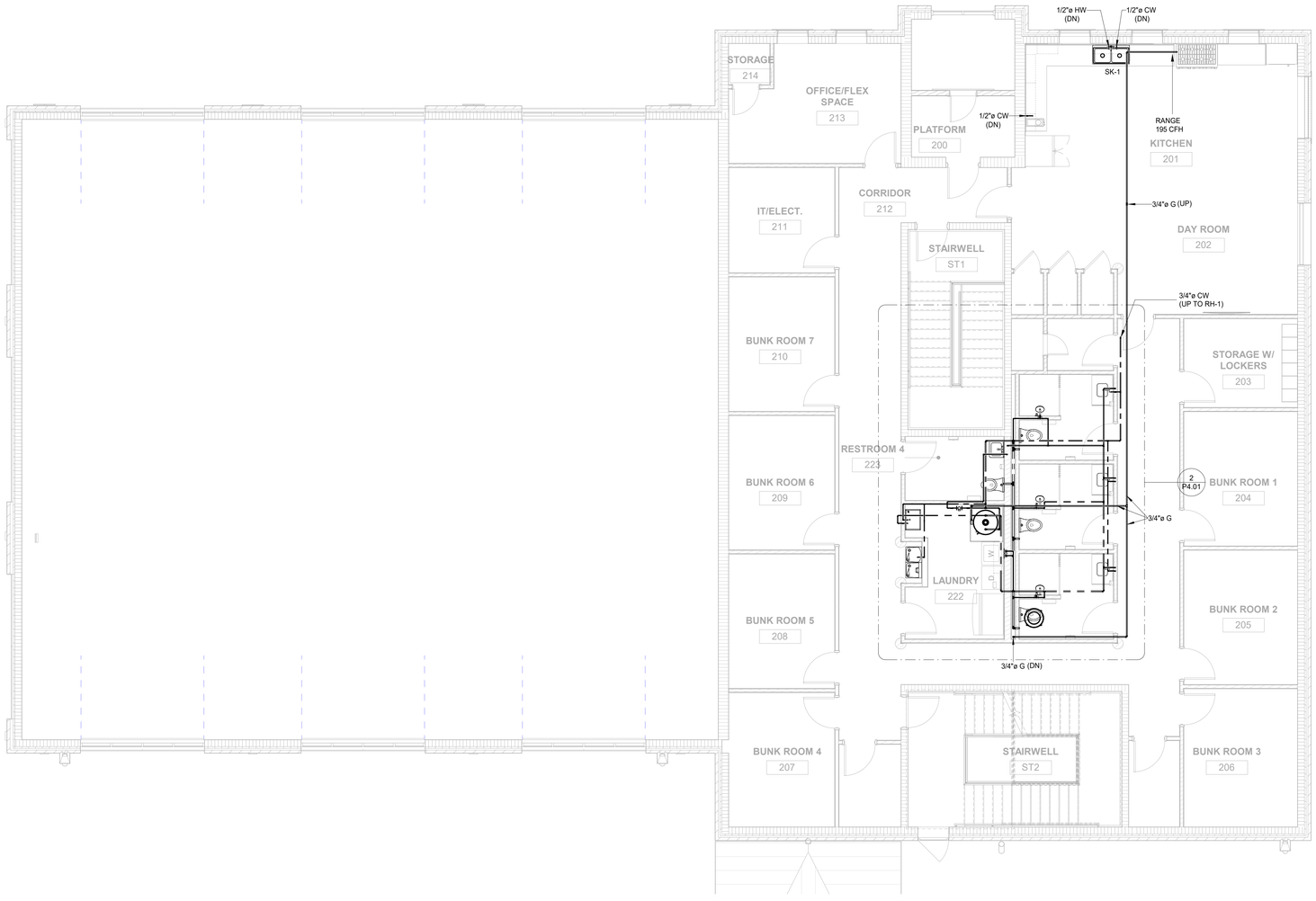
PLUMBING KEYED NOTES

1.



1 LEVEL 2 - PRESSURE PLAN
3/16" = 1'-0"

0 4' 8' 12' 16'
3/16" = 1'-0"

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ALABAMA LICENSED No. 38810 PROFESSIONAL ENGINEER ANDREAS R. MANN

SECOND FLOOR PRESSURE PLAN

P1.04

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ROOF PLUMBING PLAN

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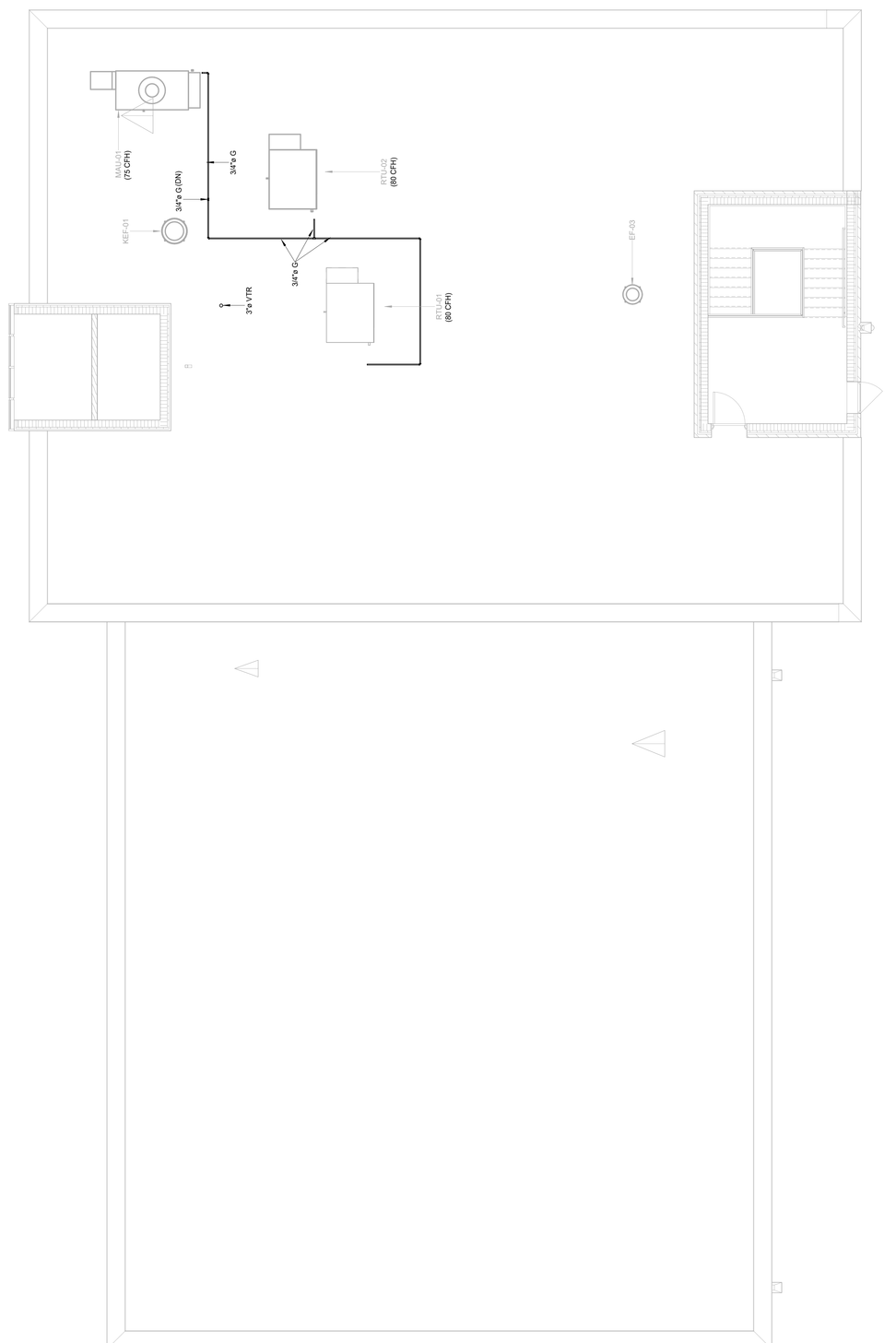
PLUMBING KEYED NOTES

1.



1 ROOF - PLUMBING PLAN
3/16" = 1'-0"

0 4' 8' 12' 16'
3/16" = 1'-0"

P1.05

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PLUMBING ENLARGED PLAN

ASHVILLE FIRE STATION #2
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P4.01

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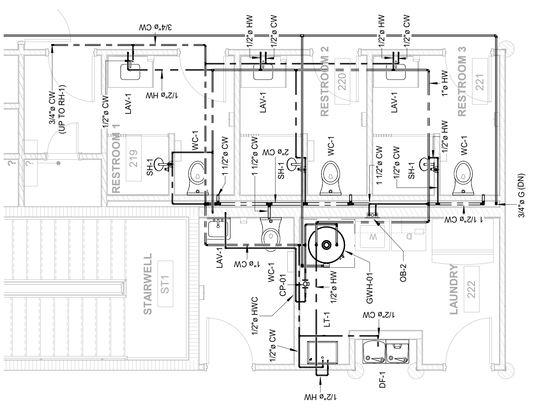
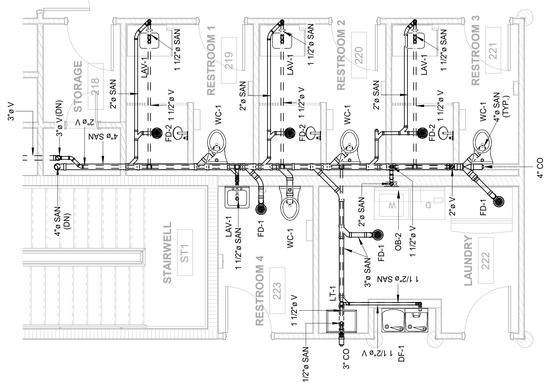
0 2 4 8 12
1/4" = 1'-0"

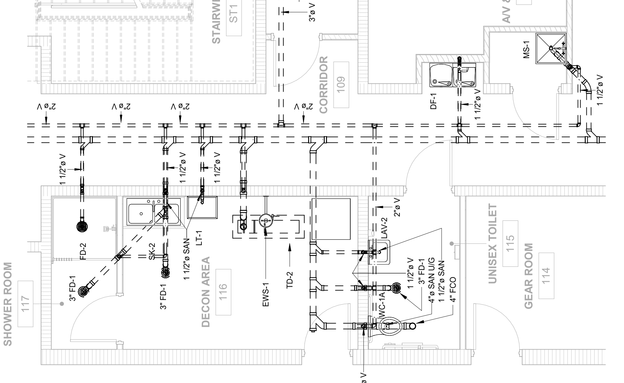


2 LEVEL 2 - PRESSURE ENLARGED PLAN
1/4" = 1'-0"

4 LEVEL 1 - PRESSURE ENLARGED PLAN
1/4" = 1'-0"



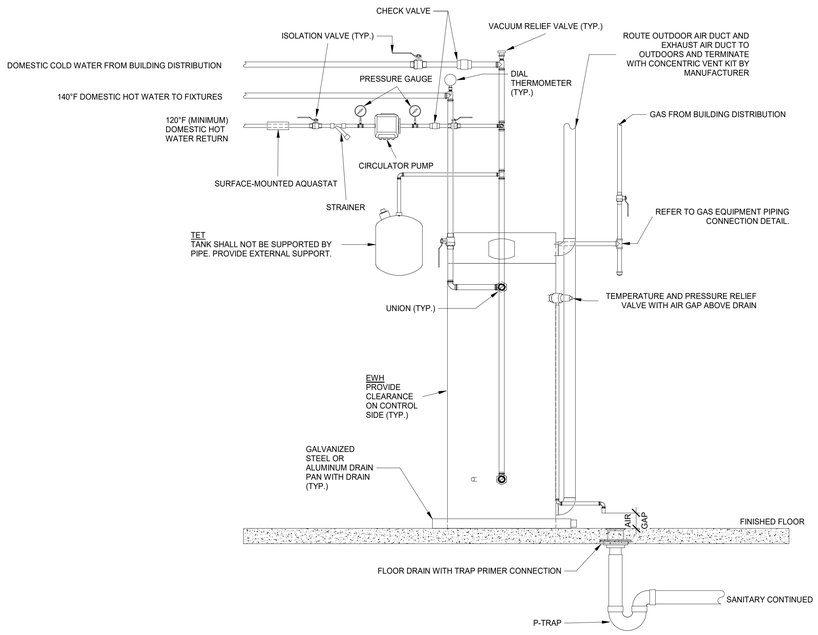
1 LEVEL 2 - GRAVITY ENLARGED PLAN
1/4" = 1'-0"



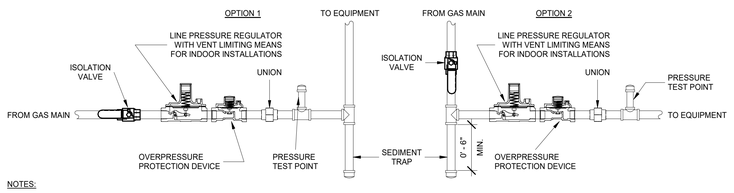
3 LEVEL 1 - GRAVITY ENLARGED PLAN
1/4" = 1'-0"

NOTES:

A. AQUASTAT SHALL AUTOMATICALLY CONTROL CIRCULATOR PUMP. CIRCULATOR PUMP SHALL TURN ON WHEN WATER IN CIRCULATING PIPING IS 120°F OR BELOW AND SHALL TURN OFF WHEN WATER IN CIRCULATING PIPING IS ABOVE 120°F. MINIMUM WATER TEMPERATURE IN CIRCULATING PIPING SHALL BE SPECIFIED BY AUTHORITY HAVING JURISDICTION BUT IN NO CASE SHALL THE WATER TEMPERATURE IN CIRCULATING PIPING DROP BELOW 120°F.
B. WITH EXPANSION TANK EMPTY OF WATER, ADJUST PRE-CHARGE TO MATCH DOMESTIC COLD WATER SUPPLY PRESSURE BEFORE CONNECTING TO SYSTEM.
C. DISCHARGE PIPING SERVING THE ELECTRIC WATER HEATER'S TEMPERATURE AND PRESSURE RELIEF VALVE SHALL MEET ALL OF THE REQUIREMENTS OF SECTION *504.6 REQUIREMENTS FOR DISCHARGE PIPING* OF THE *2018 IPC*.
D. WATER HEATERS USING SOLID, LIQUID, OR GAS FUEL SHALL NOT BE INSTALLED IN A ROOM CONTAINING AIR-HANDLING MACHINERY WHERE SUCH ROOM IS USED AS A PLENUM PER SECTION *502.2 ROOMS USED AS A PLENUM* OF THE *2018 IPC*.
E. PROVIDE VACUUM RELIEF VALVE, COMPLYING WITH ANSI Z21.22, IN THE COLD WATER SUPPLY ABOVE THE TOP OF EACH HEATER OR TANK.



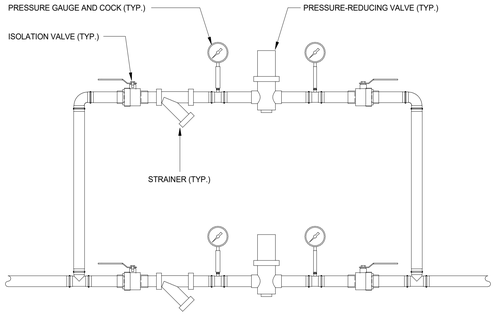
6 GAS WATER HEATER WITH CIRCULATING PUMP DETAIL
NTS



NOTES:

A. SEDIMENT TRAP SHALL CAUSE GAS FLOW TO CHANGE DIRECTION 90 DEGREES AT THE COLLECTION POINT.
B. SEDIMENT TRAP SHALL BE INSTALLED AS CLOSE TO THE INLET OF THE EQUIPMENT AS PRACTICAL.
C. ISOLATION VALVE SHALL BE INSTALLED UPSTREAM OF SEDIMENT TRAP.
D. LINE PRESSURE REGULATOR SHALL COMPLY WITH ANSI Z21.80.
E. OVERPRESSURE PROTECTION DEVICE SHALL BE REQUIRED WHERE THE SERVING GAS SUPPLIER DELIVERS GAS AT A PRESSURE GREATER THAN 2 PSI FOR PIPING SYSTEMS SERVING APPLIANCES DESIGNED TO OPERATE AT A GAS PRESSURE OF 14 INCHES W.C. OR LESS. PIPING SYSTEMS SERVING EQUIPMENT DESIGNED TO OPERATE AT INLET PRESSURES GREATER THAN 14 INCHES W.C. SHALL BE EQUIPPED WITH OVERPRESSURE PROTECTION DEVICES AS REQUIRED BY THE APPLIANCE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

7 GAS EQUIPMENT PIPING CONNECTION
NTS



NOTES:

A. WHERE WATER PRESSURE WITHIN A BUILDING EXCEEDS 80 PSIG STATIC, AN APPROVED WATER PRESSURE-REDUCING VALVE CONFORMING TO ASSE 1003 OR CSA B356 WITH STRAINER SHALL BE INSTALLED TO REDUCE THE PRESSURE IN THE BUILDING WATER DISTRIBUTION PIPING TO NOT GREATER THAN 80 PSIG STATIC. EXCEPTIONS INCLUDE SERVICE LINES TO SILL COCKS AND OUTSIDE HYDRANTS.
B. THE PRESSURE-REDUCING VALVE SHALL BE DESIGNED TO REMAIN OPEN TO PERMIT UNINTERRUPTED WATER FLOW IN CASE OF VALVE FAILURE.
C. THE TOTAL CAPACITY OF THE VALVES SHOULD EQUAL OR EXCEED THE CAPACITY REQUIRED BY THE SYSTEM. ONE VALVE SHALL BE SET AT A 10 PSIG HIGHER DELIVERY PRESSURE THAN THE OTHER VALVE (I.E. ONE VALVE SET AT 60 PSIG AND THE OTHER VALVE SET AT 70 PSIG). WHEN LOW VOLUME IS REQUIRED, THE HIGHER-SET VALVE OPERATES ALONE. WHEN A LARGER VOLUME IS DEMANDED, BOTH VALVES OPEN, DELIVERING FULL-LINE CAPACITY.
D. THE PRESSURE-REDUCING VALVE STATION SHALL BE INSTALLED DOWNSTREAM OF THE WATER METER AND BACKFLOW PREVENTER.

8 PRV STATION DETAIL
NTS

WHA SCHEDULE

ARRESTOR SIZE	WSFU	PDI-WH 201
1/2"	1-11	PDI-A
3/4"	12-32	PDI-B
1"	33-60	PDI-C
1-1/4"	61-133	PDI-D
1-1/2"	114-154	PDI-E
2"	155-330	PDI-F

NOTES:

A. ALL ARRESTORS SHALL BE SIZED AND INSTALLED PER PDI STANDARD PDI-WH 201 (2017).

NATURAL GAS DEMAND SCHEDULE

MARK	MBH	CFH	INLET PRESSURE RANGE (IN W.C)
GUH-1	200	200	6-7
GUH-2	200	200	6-7
GWH-1	80	80	4-14
MAU-1	75	75	6
RTU-1	80	80	5-14
RTU-2	80	80	5-14
OUTDOOR GRILLE	50	50	PER MANUFACTURER
RANGE	195	195	PER MANUFACTURER
GENERATOR	685	685	PER MANUFACTURER

NOTES:

1. GAS PRESSURE AT SERVICE REGULATOR SHALL BE 2 PSIG.

PLUMBING FIXTURE SCHEDULE

MARK	TYPE	MOUNTING	ADA REQUIRED	BASIS OF DESIGN		NOTES	
				MANUFACTURER	MODEL		
DF-1	WATER-COOLER DRINKING FOUNTAIN	WALL-MOUNT	YES	ELKAY	LZSTL8WSLK	WATER COOLER:	BI-LEVEL, BOTTLE FILLING STATION, FILTERED, REFRIGERATED, FRONT & SIDE PUSHBAR ACTIVATION, LIGHT GRAY GRANITE FINISH
EWS-1	EYEWASH STATION	FLOOR-MOUNT	YES	GUARDIAN	G1825P	EYEWASH: MIXING VALVE:	SPRAY HEADS WITH FLIP TOP DUST COVER, 1/2" IPS STAY-OPEN BALL VALVE, PLASTIC BOWL, SCHEDULE 40 GALVANIZED STEEL
HB-1	HOSE BIBB	WALL-MOUNT	NO	ZURN	Z1341XL	HOSE BIBB:	EXPOSED, LEAD-FREE, EXTERNAL VACUUM BREAKER, BRONZE AND STAINLESS STEEL INTERIOR COMPONENTS, POLISHED BRONZE FINISH, 3/4"ø MALE HOSE CONNECTION, WHEEL TYPE HANDLE
LAV-1	LAVATORY	UNDERMOUNT	YES	KOHLER	VERTICYL K-2882-0	LAVATORY: FAUCET: DRAIN: MIXING VALVE:	VITREOUS CHINA, 19-13/16" LENGTH x 15-5/8" WIDTH x 6-3/4" HEIGHT, WITH OVERFLOW KOHLER—MODEL K-28126-4N: SINGLE HOLE, SINGLE LEVER, 0.5 GPM, POLISHED CHROME PROVIDE GRID DRAIN, POLISHED CHROME P-TRAP WATTS—MODEL LFUSG-B M3: ASSE 1070 COMPLIANT
LAV-2	LAVATORY	WALL-MOUNT	YES	KOHLER	KINGSTON K-2007-0	LAVATORY: FAUCET: DRAIN: MIXING VALVE:	VITREOUS CHINA, 21-1/2" LENGTH x 18-1/8" WIDTH x 11-3/4" HEIGHT, SINGLE HOLE, WITH OVERFLOW, WITH WALL HANGER KOHLER—MODEL K-28126-4N: SINGLE HOLE, SINGLE LEVER, 0.5 GPM, POLISHED CHROME PROVIDE GRID DRAIN, POLISHED CHROME P-TRAP, ADA COMPLIANT UNDER-LAVATORY PIPE PROTECTION WATTS—MODEL LFUSG-B M3: ASSE 1070 COMPLIANT
LT-1	LAUNDRY TUB	FLOOR-MOUNT	NO	E.L. MUSTEE & SONS	15F	TUB: FAUCET: DRAIN:	THERMOPLASTIC RESIN, 23-1/2" LENGTH x 23" WIDTH x 34" HEIGHT, 19 GALLON, STEEL LEGS WITH LEVELERS, SCRUB BOARD KOHLER—MODEL K-22035: THREE-HOLE ON 4" CENTERS, SINGLE LEVER, TWO-FUNCTION PULL-OUT, 4 GPM AT 20 PSI, POLISHED CHROME INTEGRAL MOLDED-IN DRAIN, POLISHED CHROME P-TRAP
MS-1	MOP SINK	FLOOR-MOUNT	NO	ZURN	Z1996-24	MOP SINK: FAUCET:	24"x24"x10", MOLDED HIGH DENSITY COMPOSITE BASIN, STAINLESS STEEL DRAIN ZURN MODEL Z1996-SF: WALL-MOUNT, CHROME-PLATED, INTEGRAL STOPS, VACUUM BREAKER, ADJUSTABLE WALL BRACE, PAIL HOOK, 3/4" HOSE THREAD
OB-1	ICE MAKER SUPPLY BOX	WALL-MOUNT	NO	OATEY	39152	SUPPLY BOX: VALVE:	WHITE, HIGH IMPACT POLYSTYRENE, SQUARE BOX WITH SUPPORT BRACKETS 1/4"ø, BRASS, QUARTER TURN SHUT OFF VALVE WITH COPPER TAILPIECE AND WATER HAMMER ARRESTOR
OB-2	WASHING MACHINE SUPPLY BOX	WALL-MOUNT	NO	OATEY	38540	SUPPLY BOX: VALVE:	WHITE, HIGH IMPACT POLYSTYRENE BOX WITH SUPPORT BRACKETS AND 2"ø DRAIN OPENING 3/4"ø, BRASS, QUARTER TURN COLD & HOT WATER SHUT OFF VALVES WITH COPPER TAILPIECE AND WATER HAMMER ARRESTORS
RH-1	NON-FREEZE ROOF HYDRANT	ROOF-MOUNT	NO	JAY R. SMITH	5903	ROOF HYDRANT:	NON-FREEZE, SELF CONTAINED, CAST IRON HEAD, ADJUSTABLE FLOW WHEEL LOCK HANDLE, GALVANIZED STEEL CASING, STAINLESS STEEL CANISTER, VENTURI, ROOF MOUNT ASSEMBLY, 3/4"ø INLET CONNECTION, 3/4"ø HOSE CONNECTION, VACUUM BREAKER
SH-1	SHOWER	WALL-MOUNT	NO	KOHLER	AWAKEN G110	HEAD: TRIM: VALVE:	THREE-FUNCTION, 2.5 GPM AT 45 PSI, POLISHED CHROME KOHLER—MODEL K-TS74042-4: SINGLE LEVER, POLISHED CHROME KOHLER—MODEL K-8304-KS: ASSE 1016 COMPLIANT, SERVICE STOPS WITH INTEGRAL CHECK VALVES, HIGH TEMPERATURE LIMIT STOP
SK-1	SINGLE COMPARTMENT SINK	UNDERMOUNT	YES	KOHLER	VAULT K-25939	SINK: FAUCET: DRAIN:	18 GAUGE STAINLESS STEEL, 32" LENGTH x 18-5/16" WIDTH x 5-13/16" HEIGHT KOHLER—MODEL K-22972: SINGLE LEVER, PULL-DOWN WITH THREE-FUNCTION SPRAYHEAD, 1.5 GPM, CHROME-PLATED 3-5/8" DRAIN, 304 STAINLESS STEEL BODY, STRAINER BASKET
SK-2	DOUBLE COMPARTMENT SINK	UNDERMOUNT	NO	KOHLER	VAULT K-3820	SINK: FAUCET: DRAIN:	18 GAUGE STAINLESS STEEL, 32" LENGTH x 18-5/16" WIDTH x 9-7/16" HEIGHT, EQUAL BOWL DIMENSIONS KOHLER—MODEL K-22972: SINGLE LEVER, PULL-DOWN WITH THREE-FUNCTION SPRAYHEAD, 1.5 GPM, CHROME-PLATED 3-7/8" DRAIN, 304 STAINLESS STEEL BODY, STRAINER BASKET
TP-1	TRAP PRIMER	PIPE-MOUNT	NO	PRECISION PLUMBING PRODUCTS	CPO-500 DU-4	PRIMER:	AUTOMATIC PRESSURE DROP ACTIVATED TRAP PRIMER, REQUIRES 10 PSI PRESSURE DROP ACROSS VALVE, INSTALL ON 1/2" - 1-1/2" CW PIPE SERVING FLUSHOMETER VALVE PROVIDE PRIMER W/ DISTRIBUTION UNIT WHEN PRIMING 2-4 FLOOR DRAINS, OTHERWISE PROVIDE JUST PRIMER
TP-2	TRAP PRIMER	PIPE-MOUNT	NO	PRECISION PLUMBING PRODUCTS	PRO1-ULP500	PRIMER:	FLOW ACTIVATED TRAP PRIMER, VACUUM BREAKER PORTS, INTERNAL BACKFLOW PROTECTION, INSTALL UNDER LAVATORY/SINK
WC-1	FLUSH VALVE WATER CLOSET	FLOOR-MOUNT	NO	KOHLER	WELLCOMME ULTRA K-96053-0	WATER CLOSET: FLUSH VALVE: SEAT:	STANDARD HEIGHT, 1.6 GALLONS PER FLUSH, VITREOUS CHINA, 1-1/2" TOP SPUD, SIPHON JET ACTION, 12" ROUGH-IN KOHLER—MODEL K-76322: EXPOSED, MANUAL LEVER ACTIVATION, CHROME-PLATED WHITE PLASTIC, ELONGATED SHAPE, OPEN FRONT, LESS COVER
WC-1A	FLUSH VALVE WATER CLOSET	FLOOR-MOUNT	YES	KOHLER	HIGHCLIFF K-96057-0	WATER CLOSET: FLUSH VALVE: SEAT:	ADA HEIGHT, 1.6 GALLONS PER FLUSH, VITREOUS CHINA, 1-1/2" TOP SPUD, SIPHON JET ACTION, 12" ROUGH-IN KOHLER—MODEL K-76322: EXPOSED, MANUAL LEVER ACTIVATION, CHROME-PLATED WHITE PLASTIC, ELONGATED SHAPE, OPEN FRONT, LESS COVER
WH-1	NON-FREEZE WALL HYDRANT	WALL-MOUNT	NO	ZURN	Z1321XL	WALL HYDRANT:	LEAD-FREE, NON-FREEZE, INTEGRAL BACKFLOW PREVENTER, COPPER CASING, BRONZE INTERIOR COMPONENTS, STAINLESS STEEL HOUSING, HINGED COVER WITH KEY, 3/4"ø MALE HOSE CONNECTION

PLUMBING DRAINAGE SPECIALTIES SCHEDULE

MARK	SPECIALTY	TYPE	MATERIAL	STYLE	PIPE CONNECTION SIZE	BASIS OF DESIGN		NOTES
						MANUFACTURER	MODEL	
FD-1	FLOOR DRAIN (EMERGENCY)	NO HUB	CAST IRON BODY / NICKEL BRONZE TOP	ROUND TOP POLISHED	3"ø	JAY R. SMITH	2005	CAST IRON BODY WITH BOTTOM OUTLET, FLASHING COLLAR, ADJUSTABLE STRAINER HEAD, 6" ROUND TOP, 1/2" TRAP PRIMER CONNECTION, VANDAL PROOF
FD-2	FLOOR DRAIN (SHOWER)	NO HUB	CAST IRON BODY / NICKEL BRONZE TOP	SQUARE TOP POLISHED	2"ø	JAY R. SMITH	2005	CAST IRON BODY WITH BOTTOM OUTLET, FLASHING COLLAR, ADJUSTABLE STRAINER HEAD, 5" x 5" SQUARE TOP, VANDAL PROOF
TD-1	TRENCH DRAIN	---	PRECAST POLYESTER CONCRETE BODY / DUCTILE IRON GRATE	---	4"ø	JAY R. SMITH	9895	1 METER PRECAST POLYESTER CONCRETE CHANNEL OF INTERLOCKING DESIGN WITH A BUILT IN SLOPE OF 0.5%, INTEGRAL METAL RAIL, RADIUSED BOTTOM, 4" INTERNAL WIDTH, EXTRA HEAVY DUTY DUCTILE IRON SLOTTED GRATE COMPLYING WITH DIN 19580/EN 1433 LOAD CLASS E (134,800 POUND WEIGHT CAPACITY). CATCH BASIN: JAY R. SMITH: MODEL 9895-901G-CB
TD-2	TRENCH DRAIN	---	304 STAINLESS STEEL BODY / 304 STAINLESS STEEL GRATE	---	4"ø	JAY R. SMITH	SQ-TD-0884	LINT TROUGH WITH REMOVABLE STAINLESS STEEL FILTER SCREEN. STAINLESS STEEL MESH OVER DOME BOTTOM STRAINER, STAINLESS STEEL LOOSE SET BAR GRATE, BOTTOM SURFACE SLOPED TO OUTLET, 54" LENGTH x 12" WIDTH x 8" DEPTH

INTERCEPTOR SCHEDULE

MARK	TYPE	GPM	OIL / GREASE CAPACITY (GAL / LB)	L x W x H (IN x IN x IN)	MANUFACTURER	MODEL	NOTES
INT-1	OIL	200	250	68-1/2" x 60-3/4" x 65"	JAY R. SMITH	8599-200-250	1. PROVIDE WITH TRAFFIC RATED COVER. 2. PROVIDE WITH INTEGRAL EXTENSION WITH HEIGHT ADEQUATE TO PROVIDE MINIMUM BURIAL DEPTH OF UNDERGROUND SANITARY PIPE. 3. PROVIDE WITH OIL LEVEL DETECTION DEVICE.
INT-2	GREASE	10	20	21-1/4" x 11-1/2" x 13-1/4"	JAY R. SMITH	8010	

DOMESTIC HOT WATER CIRCULATOR PUMP SCHEDULE

MARK	LOCATION	MAX. FLOW RATE (GPM)	ΔP (FT. H2O)	MOTOR				MANUFACTURER	MODEL	NOTES
				MAX. RPM	MAX. POWER (W)	MAX. AMP	VOLT / PH			
CP-01	LAUNDRY	1	12	4,830	44	0.54	115 / 1	TACO	006e3	1 THROUGH 8

NOTES

1. MAXIMUM FLOW VELOCITY THROUGH ANY HOT WATER CIRCULATING PIPING SHALL BE 2 FEET PER SECOND OR LESS IN PIPE.
2. ADJUST CIRCULATOR TO MATCH SYSTEM REQUIREMENTS (I.E. FLOW AND HEAD).
3. PUMP SHALL COME WITH ITS OWN POWER CORD.
4. PROVIDE SWEAT FITTINGS FOR CONNECTION TO PIPING SYSTEM.
5. PROVIDE ISOLATION VALVES AND PRESSURE GAUGES UP/DOWNSTREAM OF PUMP.
6. PROVIDE INLINE, LOW PRESSURE DROP CHECK VALVE DOWNSTREAM OF PUMP.
7. PROVIDE STRAINER UPSTREAM OF PUMP.
8. PROVIDE WITH AQUASTAT. SET AQUASTAT TO TURN PUMP ON WHEN SYSTEM TEMPERATURE REACHES 120°F.

GAS WATER HEATER SCHEDULE

MARK	LOCATION	STORAGE VOLUME (GAL)	RECOVERY (AT 100°F RISE) (GPH)	INPUT (MBH)	DIAMETER x HEIGHT (IN)	SHIPPING WEIGHT (LB)	MANUFACTURER	MODEL	NOTES
GWH-01	LAUNDRY 222	100	78	80	28-1/4 x 63-3/8	424	BRADFORD WHITE	LG2100H803N	1,2

NOTES

1. SET STORAGE TEMPERATURE TO 140°F.
2. PROVIDE WITH CONCENTRIC VENT KIT.

ROCKET MEP LLC
MECHANICAL - ELECTRICAL - PLUMBING ENGINEERS
256-203-6373 INFO@ROCKETMEP.COM
1300 MERIDIAN ST, SUITE 302, HUNTSVILLE, AL 35801 AL CERT OF AUTH: ECA50597

GMC
Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

ISSUE DATE
CONSTRUCTION DOCUMENTS 01/09/2026

DRAWN BY: JHS
CHECKED BY: ARH

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 38810 01-09-2026 ANDREAS R. HAHN

PLUMBING DETAILS AND SCHEDULES

P6.01

1/9/2026 4:34:00 PM TEMPLATE VERSION: 2025.1

ROCKET MEP LLC
MECHANICAL - ELECTRICAL - PLUMBING ENGINEERS
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ABBREVIATIONS AND ACRONYMS

(APPLIES TO ALL FIRE PROTECTION SHEETS)

AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AMP	AMPERE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AS	ABOVE SLAB
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AV	ANGLE VALVE
AVG	AVERAGE
AWG	AMERICAN WIRE GAGE
BAS	BUILDING AUTOMATION SYSTEM
BFP	BACKFLOW PREVENTER
BFV	BUTTERFLY VALVE
BHP	BRAKE HORSEPOWER
BOD	BASIS OF DESIGN
BOP	BOTTOM OF PIPE
BS	BELOW SLAB
BV	BALL VALVE
°C	CELSIUS
CAP	CAPACITY
CLG	CEILING
CONN	CONNECTION
COORD	COORDINATE
CU FT	CUBIC FEET
CU IN	CUBIC INCH
C_V	COEFFICIENT, VALVE FLOW
CV	CHECK VALVE
°	DEGREE
Δ	DIFFERENCE
DB	DECIBEL
DC	DIRECT CURRENT
DCV	DOUBLE CHECK VALVE
DD	DIRECT DRIVE
DDC	DOUBLE DETECTOR CHECK
DIA	DIAMETER
DN	DOWN
DP	DRY PENDANT
DS	DRY SIDE WALL
DWG	DRAWING
EC	ELECTRONICALLY COMMUTATED
EL	ELEVATION
ESFR	EARLY SUPPRESSION FAST RESPONSE
ET	EXPANSION TANK
°F	FAHRENHEIT
FAS	FIRE ALARM SYSTEM
FCP	FIRE ALARM CONTROL PANEL
FDC	FIRE DEPARTMENT CONNECTION
FDV	FIRE DEPARTMENT VALVE
FE	FIRE EXTINGUISHER
FHR	FIRE HOSE RACK
FHV	FIRE HOSE VALVE
FLA	FULL LOAD AMPS
FM	FACTORY MUTUAL
FP	FIRE PROTECTION
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FS	FLOW SWITCH
FT	FOOT OR FEET
FT-LB	FOOT-POUND
GAL	GALLON(S)
GPM	GALLONS PER MINUTE
H2O	WATER
HD	HEAD
HOA	HAND-OFF-AUTO
HP	HORSEPOWER
HYD	HYDRANT
HZ	FREQUENCY
ICC	INTERNATIONAL CODE COUNCIL
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IN	INCH
IPS	INTERNATIONAL PIPE STANDARD OR IRON PIPE SIZE
KW	KILOWATT
LBS	POUNDS
LF	LINEAR FEET
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPS
MECH	MECHANICAL
MH	MANHOLE
MIN	MINIMUM
MOCP	MAXIMUM OVERCURRENT PROTECTION
N/A	NOT APPLICABLE
N C	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
N I C	NOT IN CONTRACT
N O	NORMALLY OPEN
NPT	NATIONAL PIPE THREAD
N T S	NOT TO SCALE
OD	OUTSIDE DIAMETER
OS&Y	OUTSIDE SCREW AND YOLK
%	PERCENT
PD	PRESSURE DROP
PH	PHASE (ELECTRICAL)
PIV	POST INDICATOR VALVE
POC	POINT OF CONNECTION
PRV	PRESSURE REDUCING VALVE
PS	PRESSURE SWITCH
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIA	PSI ABSOLUTE
PSIG	PSI GAGE
QR	QUICK RESPONSE
QTY	QUANTITY
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
S	SECOND
SPEC	SPECIFICATION
SPKR	SPRINKLER
SQ	SQUARE
SQ FT	SQUARE FEET
SR	STANDARD RESPONSE
STD	STANDARD
STR	STARTER (MOTOR)
TAB	TESTING, ADJUSTING, AND BALANCING
TDDC	TESTABLE DOUBLE DETECTOR CHECK
TEMP	TEMPERATURE
TOP	TOP OF PIPE
TOR	TOP OF RISER
TS	TAMPER SWITCH
TYP	TYPICAL
U/G	UNDERGROUND
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
V	VOLT
VA	VOLT AMPERE
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VIV	VALVE IN VERTICAL
VLV	VALVE
W	WATT
W/	WITH
WC	WATER COLUMN
WG	WATER GAGE

PIPING

- F — FIRE PROTECTION WATER SUPPLY PIPING
- F U/G — FIRE PROTECTION WATER SUPPLY PIPING (UNDERGOUND)
- BACKFLOW PREVENTER (SMALL ASSEMBLY)
- BACKFLOW PREVENTER (LARGE ASSEMBLY)
- PIPE CAP
- PIPE ELBOW, DOWN
- PIPE ELBOW, UP
- PIPE TEE, DOWN
- PIPE TEE
- UNION
- AUTOMATIC AIR VENT
- FLOW SWITCH (FS)
- PRESSURE SWITCH (PS)
- PRESSURE GAGE AND COCK
- PUMP
- STRAINER
- STRAINER, BLOW OFF
- FLEXIBLE CONNECTOR
- TEST PLUG

ANNOTATIONS

- # — KEYNOTE
- FP-1 — EQUIPMENT TAG (REFER TO SCHEDULES)
- ENLARGED PLAN OR DETAIL CALL-OUT
- SECTION CALL-OUT

FLOW TEST SUMMARY REPORT

LOCATION	DATE	ORIFICE SIZE	DISCHARGE COEFFICIENT	STATIC PRESSURE	RESIDUAL PRESSURE	FLOW PRESSURE	FLOW AT 55PSI	FLOW AT 20PSI
ASHVILLE FIRE STATION	04/29/2025	2-1/2"	0.9	90 PSI	70 PSI	55 PSI	1,244 GPM	2,448 GPM

FIRE PROTECTION COMPLIANCE

SCOPE OF WORK:

THE PROJECT SCOPE INVOLVES THE PROFESSIONAL DESIGN AND INSTALLATION OF A FIRE SUPPRESSION SPRINKLER SYSTEM. THIS INLCLUDES, BUT IS NOT LIMITED TO, FIRE PROTECTION SPRINKLER SYSTEM AND EQUIPMENT PROVIDED AND INSTALLED BY FIRE PROTECTION SPRINKLER CONTRACTOR.

THE FINAL DESIGN OF THE FIRE SUPPRESSION SPRINKLER SYSTEM SHALL BE PERFORMED BY A LICENSED FIRE PROTECTION ENGINEER IN THE STATE OF ALABAMA WHO SHALL ASSUME RESPONSIBLE CHARGE OF THE SYSTEM DESIGN. THESE PRELIMINARY DESIGN DOCUMENTS ARE PROVIDED FOR INITIAL COORDINATION ONLY.

SUBMITTALS FOR THE FIRE PROTECTION SYSTEMS WILL NOT BE REVIEWED OR APPROVED BY THE ENGINEER OF RECORD IF COORDINATION WITH OTHER DISCIPLINES HAS NOT OCCURRED PRIOR TO THE SUBMISSION OF SHOP DRAWINGS.

APPLICABLE CODES AND NFPA STANDARDS (THIS LIST MAY NOT BE ALL-INCLUSIVE):

- 2018 INTERNATIONAL BUILDING CODE
- 2018 INTERNATIONAL EXISTING BUILDING CODE
- 2021 INTERNATIONAL FIRE CODE
- 2019 NFPA 13 STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS
- 2019 NFPA 24 STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES
- 2020 NFPA 25 STANDARD FOR THE INSPECTION, TESTING, AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS

DESIGN APPROACH:

THE FIRE PROTECTION SYSTEM SHALL BE DESIGNED AND HYDRAULICALLY CALCULATED BY A FIRE PROTECTION PROFESSIONAL ENGINEER WITH COMPETENCY IN SPRINKLER LAYOUT AND HYDRAULIC CALCULATIONS. THE FIRE PROTECTION PROFESSIONAL ENGINEER MAY UTILIZE A CURRENT NICET LEVEL III OR NICET LEVEL IV IN WATER-BASED SYSTEMS LAYOUT. THE FIRE PROTECTION PROFESSIONAL ENGINEER SHALL BE EITHER EMPLOYED BY OR CONTRACTED BY THE FIRE PROTECTION SPRINKLER CONTRACTOR. HYDRAULIC CALCULATIONS SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 13 CHAPTER 27, *PLANS AND CALCULATIONS*, AND IN ACCORDANCE WITH THE SPRINKLER LISTING.

THE INSTALLATION SHALL BE MADE WITH ALL NEW MATERIALS, INCLUDING NEW STEEL SUPPLY PIPING TO NEW SPRINKLERS. ALL FIRE PROTECTION EQUIPMENT SHALL BE UL LISTED AND/OR FM APPROVED WHERE APPLICABLE. THE SYSTEMS ARE TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 AND SHALL COMPLY WITH ALL THE REQUIREMENTS OF THE LOCAL FIRE MARSHAL AND AUTHORITIES HAVING JURISDICTION. THE SPRINKLER SYSTEM SHALL EXTEND INTO ALL AREAS IN ACCORDANCE WITH NFPA 13.

ALL FIRE SPRINKLER RISER(S) AND ALL CONTROL VALVES, POST INDICATOR VALVES, AND BACKFLOW PREVENTERS SHALL BE EQUIPPED WITH A SUPERVISED TAMPER SWITCH.

ALL FIRE PROTECTION PIPING AND EQUIPMENT SUPPORT BY THE BUILDING STRUCTURE SHALL BE REVIEWED AND APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD OR A COMPETENT, STATE LICENSED PROFESSIONAL ENGINEER PRIOR TO INSTALLATION.

COORDINATION BETWEEN DISCIPLINES:

THE FIRE PROTECTION SPRINKLER CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE FIRE SUPPRESSION SPRINKLER SYSTEM WITH OTHER DISCIPLINES PRIOR TO PURCHASING MATERIALS AND DURING INSTALLATION OF THE FIRE SUPPRESSION SPRINKLER SYSTEM.

THE FIRE SPRINKLER CONTRACTOR SHALL COORDINATE THE INTEGRATION BETWEEN THE FIRE SPRINKLER SYSTEM AND FIRE ALARM SYSTEM.

ACCEPTANCE TEST CRITERIA:

THE ACCEPTANCE TESTING OF THE FIRE SPRINKLER SYSTEM AND ITS COMPONENTS SHALL COMPLY WITH ALL APPLICABLE ITEMS INDICATED IN NFPA 13 CHAPTER 6, *INSTALLATION UNDERGROUND PIPING*; CHAPTER 28, *SYSTEM ACCEPTANCE*; AND CHAPTER 31, *SYSTEM INSPECTION, TESTING, AND MAINTENANCE*.

OWNER RESPONSIBILITIES:

THE BUILDING OWNER IS RESPONSIBLE FOR MAINTAINING AND PERFORMING SCHEDULED FIRE PROTECTION SYSTEM TESTING AND MAINTENANCE PER NFPA 25. ALTERNATIVELY, THE BUILDING OWNER SHALL RETAIN THE SERVICES OF A FIRE PROTECTION SPRINKLER CONTRACTOR THAT IS EXPERIENCED WITH THE SYSTEM TYPES THAT HAVE BEEN INSTALLED TO PERFORM THE SCHEDULED FIRE PROTECTION SYSTEM TESTING AND MAINTENANCE PER NFPA 25.

NFPA CLASSIFICATION OF HAZARD OCCUPANCY AND REQUIREMENTS:

A. LIGHT HAZARD OCCUPANCIES
   a. OCCUPANCIES OR PORTIONS OF OTHER OCCUPANCIES WHERE THE QUANTITY AND/OR COMBUSTIBILITY OF CONTENTS IS LOW AND FIRES WITH RELATIVELY LOW RATES OF HEAT RELEASE ARE EXPECTED.
   b. FOR NEW SYSTEMS, THE WATER DEMAND FOR SPRINKLERS SHALL BE DETERMINED FROM THE FOLLOWING:
      - 0.1 GPM / FT^2 FOR AREAS OF SPRINKLER OPERATION LESS THAN 1,500 FT^2
   c. ACCEPTABLE SPRINKLER K FACTOR: 5.6
   d. SPRINKLER TEMPERATURE RATING: ORDINARY, UNLESS NOTED OTHERWISE
   e. SPRINKLER HEAD SPACING: 225 FT^2 MAX. PER SPRINKLER HEAD OR BY MANUFACTURER LITERATURE
   f. HOSE ALLOWANCE (TOTAL COMBINED INSIDE AND OUTSIDE HOSE): 100 GPM FOR MIN. 30 MINUTES
B. ORDINARY HAZARD (GROUP 1) (OH1)
   a. OCCUPANCIES OR PORTIONS OF OTHER OCCUPANCIES WHERE COMBUSTIBILITY IS LOW, QUANTITY OF COMBUSTIBLES IS MODERATE, STOCKPILES OF CONTENTS DO NOT EXCEED 8 FT (2.4 M), AND FIRES WITH MODERATE RATES OF HEAT RELEASE ARE EXPECTED.
   b. FOR NEW SYSTEMS, THE WATER DEMAND FOR SPRINKLERS SHALL BE DETERMINED FROM THE FOLLOWING:
      - 0.15 GPM / FT^2 FOR AREAS OF SPRINKLER OPERATION LESS THAN 1,500 FT^2
   c. ACCEPTABLE SPRINKLER K FACTOR: 5.6 OR 8.0
   d. SPRINKLER TEMPERATURE RATING: INTERMEDIATE, UNLESS NOTED OTHERWISE
   e. SPRINKLER HEAD SPACING: 130 FT^2 MAX. PER SPRINKLER HEAD OR BY MANUFACTURER LITERATURE
   f. HOSE ALLOWANCE (TOTAL COMBINED INSIDE AND OUTSIDE HOSE): 250 GPM FOR MIN. 60 MINUTES (MONITORED FIRE ALARM SYSTEM) OR 90 MINUTES (WITHOUT A MONITORED FIRE ALARM SYSTEM)

FIRE PROTECTION GENERAL NOTES

1. THE CITY OF ASHVILLE FIRE MARSHAL'S OFFICE IS THE AHJ. THE FINAL INSPECTION AND APPROVAL SHALL BE BY THE CITY OF ASHVILLE FIRE MARSHAL'S OFFICE AND THE ARCHITECT/ENGINEER.
2. THE FIRE PROTECTION SPRINKLER CONTRACTOR SHALL VISIT THE SITE TO CHECK AND VERIFY ALL EXISTING CONDITIONS PRIOR TO BIDDING TO INSURE THE COORDINATION OF THE FIRE SERVICES WITH EXISTING SITE CONDITIONS.
3. CUTTING OF STRUCTURAL MEMBERS SHALL BE DONE ONLY WITH THE WRITTEN APPROVAL OF THE ARCHITECT AND STRUCTURAL ENGINEER.
4. FITTINGS REQUIRED FOR PROPER INSTALLATION, COORDINATION WITH OTHER EXISTING TRADES, AND/OR TO MAINTAIN PROPER CLEARANCES SHALL BE PROVIDED. VERIFY STRUCTURAL, MECHANICAL, ELECTRICAL INSTALLATIONS AND AVOID ALL OBSTRUCTIONS OR INTERFERENCES WITH FIRE PROTECTION PIPE ROUTING.
5. THE FIRE SPRINKLER SYSTEM SUBMITTAL SHALL CONTAIN FINAL PIPE SIZES BASED ON THE RESULTS OF THE FIRE SPRINKLER CONTRACTOR'S FIRE PROTECTION ENGINEER'S HYDRAULIC CALCULATIONS.
6. FIRE STOP ALL PENETRATIONS OF SMOKE/FIRE WALLS, CEILINGS, FLOORS, ROOFS, ETC.
7. PROVIDE ACCESS PANELS TO ALL VALVES ABOVE/BEHIND NON-ACCESSIBLE CEILINGS AND CHASE WALLS.
8. SPRINKLERS ARE TO BE COORDINATED WITH ALL LOCATIONS OF DIFFUSERS, SPEAKERS, LIGHTING FIXTURES, CEILING SYSTEMS, AND STRUCTURAL SYSTEM.
9. SPRINKLER TYPES SHALL BE COORDINATED WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. REFER TO ARCHITECT'S DRAWINGS FOR CEILING TYPES AND CEILING HEIGHTS.
10. INDICATE CENTER-TO-CENTER DIMENSIONS AND/OR PIPE CUT LENGTHS AND NOMINAL PIPE DIAMETERS ON ALL PIPING. INDICATE PIPE TYPE SCHEDULE OF WALL THICKNESSES, AND METHOD OF JOINING ON SHOP DRAWINGS.
11. PROVIDE STOCK OF EXTRA SPRINKLERS IN A WALL-MOUNTED CABINET IN ACCORDANCE WITH NFPA 13.
12. PROVIDE DETAIL AND INDICATE TYPE OF HANGERS TO BE INSTALLED FOR SPRINKLER PIPING. METHODS OF HANGING PIPES, HEADERS, AND BRANCHES SHALL BE IN ACCORDANCE WITH NFPA 13. ALL HANGERS ON 4"ø PIPE AND LARGER SHALL BE CLEVIS-TYPE HANGERS. HANGERS SHALL NOT INTERFERE WITH ANY OTHER TRADE. POWDER DRIVEN STUDS SHALL NOT BE USED.
13. ALL GROOVED AND THREADED FITTINGS SHALL BE UL LISTED/FM APPROVED. ALL THREADED PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE IN ACCORDANCE WITH ASTM A120 AND SHALL BE JOINED BY SCREWED JOINTS IN ACCORDANCE WITH ANSI B2.1. ALL GROOVED PIPING 2-1/2"ø OR LARGER SHALL BE SCHEDULE 10 BLACK STEEL UNDERGROUND PIPING BELOW BUILDING FLOOR SLAB SHALL BE DUCTILE IRON.
14. WELD-O-LETS SHALL BE TWO SIZES SMALLER THAN CROSS MAIN. NO LENGTH OF CROSS MAIN SHALL BE GREATER THAN 10'-00". ALL SPRINKLER PIPING AND FITTINGS SHALL BE INSTALLED ABSOLUTELY RUST FREE.
15. THE AUTOMATIC SPRINKLER TEMPERATURE RATINGS OF THE FUSIBLE ELEMENTS SHALL BE IN ACCORDANCE WITH NFPA 13. ALL SPRINKLERS THAT ARE INSTALLED IN AREAS WHERE THEY MAY BE EXPOSED TO CHEMICAL FUMES OR VAPORS SHALL HAVE A CORROSION RESISTANT COATING.
16. ALL VALVES FOR FIRE SERVICE SHALL BE UL OR FM APPROVED. VALVES SHALL BE FACTORY MARKED "UL" OR "FM" AND RATED FOR A MIN. OF 175 PSIG WORKING PRESSURE UNLESS NOTED OTHERWISE.
17. ALL VALVES ON THE FIRE PROTECTION SYSTEM SHALL BE ELECTRICALLY SUPERVISED. THE TYPE, LOCATION, AND INSTALLATION OF FLOW AND SUPERVISORY SWITCHES SHALL BE BY THE FIRE PROTECTION SPRINKLER CONTRACTOR. THE FIRE PROTECTION SPRINKLER CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR TO PROVIDE ADDITIONAL CIRCUITS, WIRING, SWITCHES, CONDUIT, OR JUNCTION BOXES AS REQUIRED FOR A FULLY FUNCTIONAL SYSTEM.
18. SPRINKLERS SHALL COVER THE ENTIRE AREA OF ALL STRUCTURAL MEMBERS. THE SPRAY PATTERN ON ANY SPRINKLER SHALL NOT BE OBSTRUCTED BY WALLS, PARTITIONS, OR STRUCTURAL COMPONENTS.
19. THE FIRE PROTECTION SPRINKLER CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES FOUND BETWEEN THESE DRAWINGS, OTHER ENGINEERING DRAWINGS, THE ARCHITECTURAL DRAWINGS, AND/OR FIELD CONDITIONS PRIOR TO FINAL BID PRICE OR FINAL PERMITTING.
20. IN CASE OF DISPUTE OR DOUBT AS TO INTENT OF DRAWINGS OR SPECIFICATIONS, OBTAIN ARCHITECT'S/ENGINEER'S WRITTEN DECISION BEFORE PROCEEDING WITH BID OR WORK INVOLVED.
21. BEFORE SUBMITTING PROPOSAL OR BID, EXAMINE ALL DRAWINGS AND SPECIFICATIONS RELATING TO THIS PROJECT; THE AMOUNT OF SPACE AVAILABLE FOR PIPING, EQUIPMENT, AND CONNECTING SERVICES; THE SITE WORK SCOPE; THE REQUIREMENTS TO COORDINATE THE FIRE PROTECTION WORK WITH THAT OF OTHER DISCIPLINES; AND THE TIME SCHEDULE NECESSARY TO PERFORM THAT WORK.
22. ALL SPRINKLER PIPE SHALL BE REAMED AND CLEANED BEFORE ASSEMBLY. AFTER ASSEMBLY, THE ENTIRE PIPING SYSTEM SHALL BE FLUSHED CLEAN.
23. ADJUST NEW SPRINKLER PIPING AND SPRINKLER HEAD PLACEMENT TO ACCOMODATE CEILING HEIGHTS AND STRUCTURAL CONFIGURATIONS.
24. PROVIDE SPRINKLERS ABOVE AND BELOW EXPOSED OBSTRUCTION 4'-00" OR WIDER PER NFPA 13.
25. FOR NONCOMBUSTIBLE STAIRS WITH NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE FINISHES, SPRINKLERS SHALL BE INSTALLED AT THE TOP OF STAIRWAY SHAFT AND UNDER THE FIRST ACCESSIBLE LANDING ABOVE THE BOTTOM OF STAIRWAY SHAFT PER NFPA 13.
26. THE FIRE PROTECTION SPRINKLER CONTRACTOR SHALL INDICATE THE TOTAL AREA (FT^2) PROTECTED BY EACH SPRINKLER SYSTEM.
27. ALL PENDANT SPRINKLERS SHALL BE CENTER OF TILE, UNLESS MAX. DISTANCES FROM WALLS OR BETWEEN SPRINKLERS IS EXCEEDED. IF NOT POSSIBLE, ALL SPRINKLERS MOUNTED IN CEILING SHALL BE LOCATED A MIN. 4" AWAY FROM ANY WALLS; CEILING GRID MEMBERS; CEILING HEIGHT CHANGES; OR ANY OTHER VERTICAL INTERSECTING STRUCTURAL SURFACE.
28. FIRE SPRINKLER PIPING SHALL NOT TRAVEL OVER THE TOPS OF ELECTRICAL PANELBOARDS.
29. ALL MATERIALS, WHERE APPLICABLE, SHALL BE UL LISTED OR FM APPROVED FOR USE IN AUTOMATIC SPRINKLER SYSTEMS. ALL NEW PIPING SHALL BE HYDROSTATICALLY TESTED FOR TWO HOURS IN ACCORDANCE WITH NFPA 13. MIN. HYDROSTATIC PRESSURE SHALL BE 200 PSIG.

GMC

Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

ISSUE | DATE
CONSTRUCTION DOCUMENTS | 01/09/2026

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CHECKED BY: ARH

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 38810 01/09/2026 ANDREAS R. HAHN

FP GENERAL NOTES

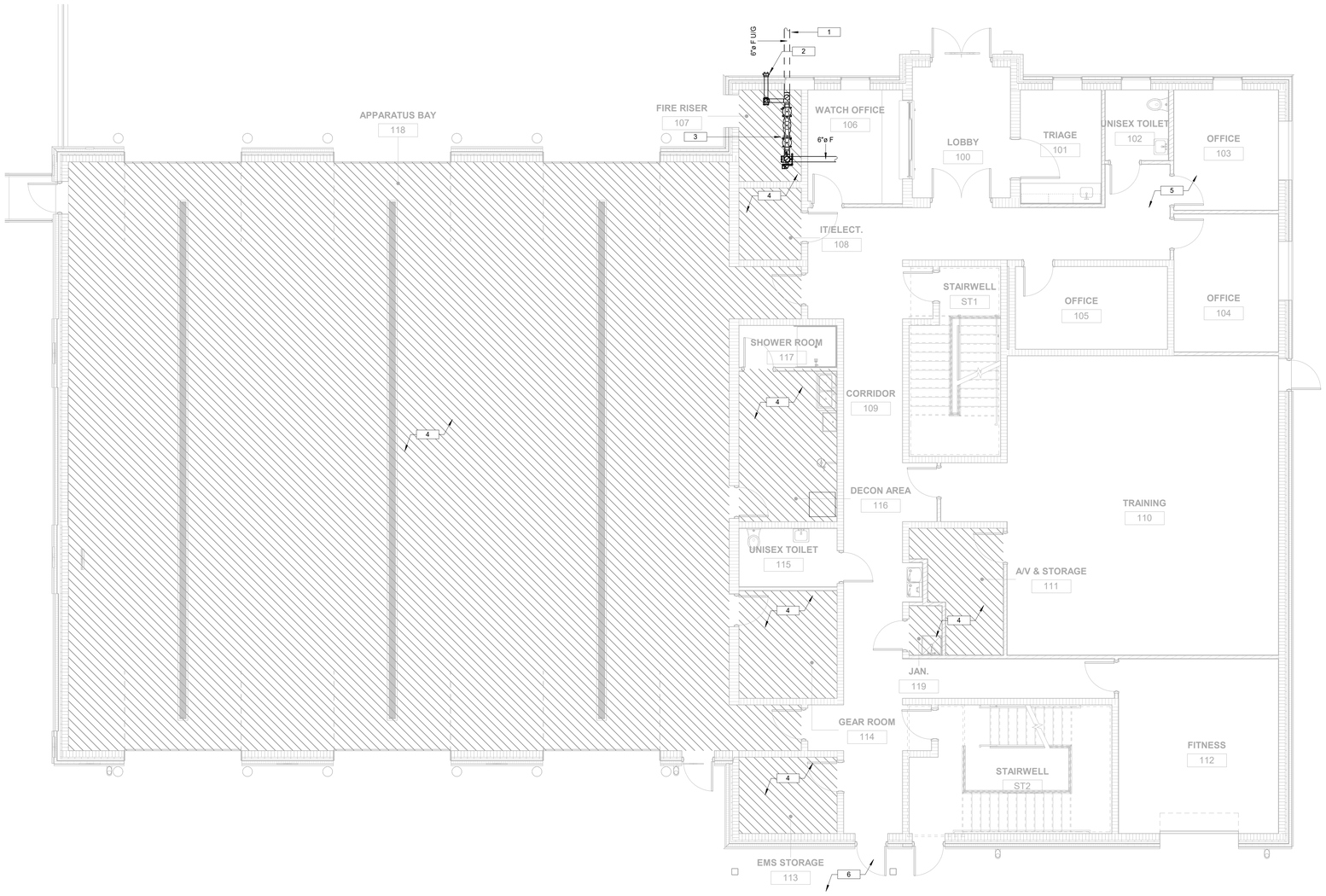
FP0.01

1/9/2026 4:33:31 PM TEMPLATE VERSION: 2025.1

ROCKET MEP LLC
MECHANICAL - ELECTRICAL - PLUMBING ENGINEERS
256-203-6373
1300 MERIDIAN ST, SUITE 302, HUNTSVILLE, AL 35801
INFO@ROCKETMEP.COM
AL CERT OF AUTH: ECA50597

FIRE PROTECTION KEYED NOTES

1. REFER TO CIVIL DRAWINGS FOR CONTINUATION OF UNDERGROUND FIRE WATER SUPPLY.
2. FIRE DEPARTMENT CONNECTION
3. SUPERVISED WATER SUPPLY CONTROL VALVE, BACKFLOW PREVENTER, ALARM CHECK VALVE, AND MAIN DRAIN
4. AREAS WITH A FILLED DIAGONAL HATCH PATTERN SHALL BE PROTECTED WITH A WET PIPE AUTOMATIC SPRINKLER SYSTEM AND SHALL HAVE AN OCCUPANCY HAZARD CLASSIFICATION OF ORDINARY HAZARD GROUP 1, PER NFPA 13.
5. ALL OTHER AREAS SHALL BE PROTECTED WITH A WET PIPE AUTOMATIC SPRINKLER SYSTEM AND SHALL HAVE AN OCCUPANCY HAZARD CLASSIFICATION OF LIGHT HAZARD, PER NFPA 13.
6. PROVIDE DRY SIDEWALL SPRINKLER HEADS UNDER OVERHANG.



1 LEVEL 1 - FIRE PROTECTION PLAN
3/16" = 1'-0"

0 4' 8' 12' 16'
3/16" = 1'-0"

1/9/2026 4:33:35 PM TEMPLATE VERSION: 2025.1

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ALABAMA LICENSED No. 38810 PROFESSIONAL ENGINEER ANDREAS R. HAHN 01/09/2026

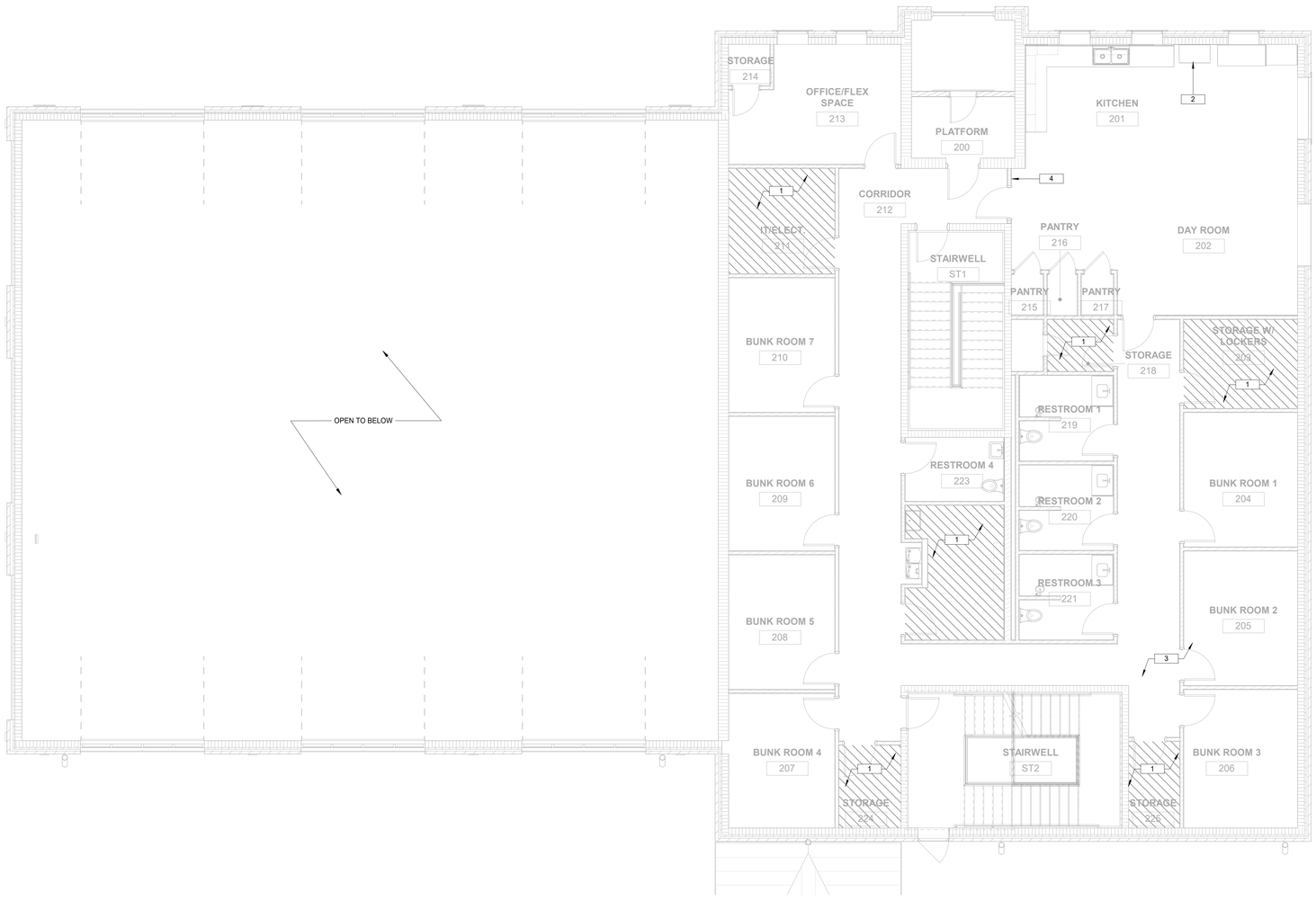
FIRE PROTECTION FLOOR PLAN

FP1.01

ROCKET MEP LLC
MECHANICAL - ELECTRICAL - PLUMBING ENGINEERS
256-203-6373
1300 MERIDIAN ST, SUITE 302, HUNTSVILLE, AL 35801
INFO@ROCKETMEP.COM
AL CERT OF AUTH: ECA50597

FIRE PROTECTION KEYED NOTES

1. AREAS WITH A FILLED DIAGONAL HATCH PATTERN SHALL BE PROTECTED WITH A WET PIPE AUTOMATIC SPRINKLER SYSTEM AND SHALL HAVE AN OCCUPANCY HAZARD CLASSIFICATION OF ORDINARY HAZARD GROUP 1, PER NFPA 13.
2. THE KITCHEN EXHAUST SYSTEM (I.E., COOKING EQUIPMENT, GREASE REMOVAL DEVICE, HOOD EXHAUST PLENUM, AND EXHAUST DUCT) SHALL BE PROVIDED WITH A PRE-ENGINEERED AUTOMATIC WET CHEMICAL FIRE-EXTINGUISHING SYSTEM BY THE KITCHEN EXHAUST EQUIPMENT MANUFACTURER. THE FIRE-EXTINGUISHING SYSTEM SHALL COMPLY WITH NFPA 96 AND UL 300 OR OTHER EQUIVALENT STANDARDS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LISTING, THE MANUFACTURER'S INSTRUCTIONS, AND NFPA 17A.
3. ALL OTHER AREAS SHALL BE PROTECTED WITH A WET PIPE AUTOMATIC SPRINKLER SYSTEM AND SHALL HAVE AN OCCUPANCY HAZARD CLASSIFICATION OF LIGHT HAZARD, PER NFPA 13.
4. PROVIDE MANUAL PUSH-BUTTON ACTUATOR FOR TYPE I HOOD FIRE EXTINGUISHING SYSTEM. PUSH-BUTTON SHALL COME WITH PROTECTIVE GUARD TO PREVENT ACCIDENTAL ACTUATION OF THE TYPE I HOOD FIRE EXTINGUISHING SYSTEM. ACTUATION OF THE PUSH-BUTTON SHALL SHUT OFF GAS SUPPLY TO RANGE. PUSH-BUTTON SHALL TIE INTO FIRE ALARM SYSTEM.



1 LEVEL 2 - FIRE PROTECTION PLAN
3/16" = 1'-0"

0 4' 8' 12' 16'
3/16" = 1'-0"

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA LICENSED No. 38810 PROFESSIONAL ENGINEER ANDREAS R. HAHN

FIRE PROTECTION FLOOR PLAN

FP1.02

1/9/2026 4:33:37 PM TEMPLATE VERSION: 2025.1

ROCKET MEP LLC
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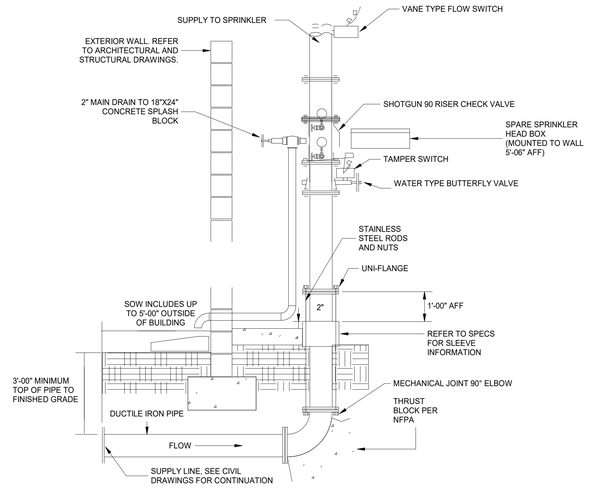
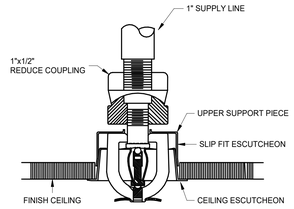
1300 MERIDIAN ST, SUITE 302, HUNTSVILLE, AL 35801
INFO@ROCKETMEP.COM
AL CERT OF AUTH: ECA50597



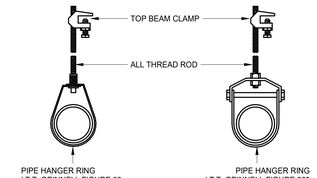
NOTES:

1. SEE CIVIL DRAWINGS AND SITE PLAN FOR LOCATION OF FIRE DEPARTMENT CONNECTIONS.
2. LABEL PIPING ACCORDING TO SPECS FOR SPRINKLER PIPING THROUGHOUT BUILDING.
3. MAINTAIN FIRE RATINGS AT ALL WALLS AND FLOOR DECK PENETRATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR WALL TYPES AND WALL RATINGS.
4. PROVIDE TAMPER SWITCHES AS INDICATED.

1 WET PIPE RISER WITH FIRE DEPARTMENT CONNECTION
NTS



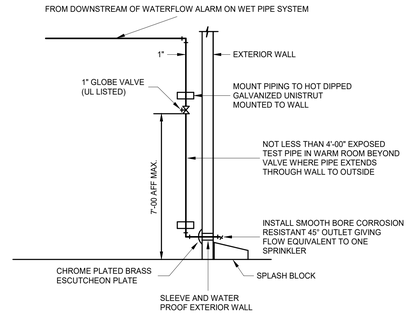
2 TYPICAL SEMI-RECESSED SPRINKLER HEAD DETAIL
NTS



NOTES:

1. BEFORE ATTACHING, COORDINATE W/ SPRAY ON FIREPROOFING CONTRACTOR FOR PROPER CONNECTION METHOD

3 BEAM CLAMP AND SPRINKLER PIPE HANGAR
NTS



4 INSPECTORS TEST CONNECTION DETAIL
NTS

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

FIRE PROTECTION DETAILS

FP5.01

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POWER DEVICES

- SIMPLEX RECEPTACLE, NEMA 5-20R
- DUPLEX RECEPTACLE, NEMA 5-20R U.O.N.
- DUPLEX RECEPTACLE, CEILING
- DUPLEX RECEPTACLE, COUNTER HEIGHT, ABOVE COUNTER OR 36"
- QUADRUPLEX RECEPTACLE
- FLOOR BOX - RECEPTACLES AS INDICATED
- SPECIAL RECEPTACLE 208 OR 240V- RATING AS NOTED
- SPECIAL RECEPTACLE 480V- RATING AS NOTED
- (J) JUNCTION BOX

RECEPTACLE DESIGNATIONS:
GF: RECEPTACLE, GFCI PROTECTED
WP: RECEPTACLE, GFCI PROTECTED WITH WEATHERPROOF COVER
TR: TAMPER RESISTANT
EP: EXPLOSION PROOF
EWC: ELECTRIC WATER COOLER, GFCI PROTECTED
DW: DISHWASHER, GFCI PROTECTED
REF: REFRIGERATOR, GFCI PROTECTED

ONE-LINE DIAGRAM SYMBOLS

- BUS
- BUS OR CABLE TERMINATION
- CONDUCTORS / CABLES
- BUSWAY
- TRANSFORMER, TYPE AND RATING AS INDICATED
- (G) GENERATOR, TYPE AND RATINGS AS INDICATED
- (N S) AUTOMATIC TRANSFER SWITCH
- UPS UNINTERRUPTIBLE POWER SUPPLY
- (M) METER
- CURRENT TRANSFORMER
- FFF / TTT LOW VOLTAGE POWER CIRCUIT BREAKER, DRAW-OUT
  FFF = FRAME RATING
  TTT = TRIP RATING
- FFF / TTT LOW VOLTAGE POWER CIRCUIT BREAKER, FIXED
  FFF = FRAME RATING
  TTT = TRIP RATING
- MOLDED CASE CIRCUIT BREAKER

CIRCUIT BREAKER FEATURES AND TRIP FUNCTIONS
LSIG = LONG TIME; SHORT TIME; INSTANTANEOUS; GROUND FAULT INTERRUPTING
EO = ELECTRICALLY OPERATED
ST = SHUNT TRIP

- AERS ARC-FLASH ENERGY REDUCTION SYSTEM
- SWITCH
  SEE RATING DESIGNATIONS IN SWITCHES AND CONTROLLER SECTION
- FUSE
- MOTOR STARTER
- SPD SURGE PROTECTIVE DEVICE
- CONTACTOR
- MOTOR
- PANEL H1 225A MLO — PANELBOARD, 480Y/277V
- PANEL L1 225A MLO — PANELBOARD, 208Y/120V OR 240/120V
- CONNECTION TO SYSTEM GROUND OR GROUNDING ELECTRODE

ANNOTATIONS

- 1 KEY NOTE
- 800.4 FEEDER TAG - REFER TO FEEDER SCHEDULE
- 1 REVISION

FIRE ALARM

- FACP FIRE ALARM CONTROL PANEL - (FACP)
- ANN FIRE ALARM ANNUNCIATOR PANEL
- F MANUAL PULL STATION
- AUDIBLE AND VISUAL SIGNAL DEVICE (HORN STROBE). 75cd UNLESS OTHERWISE NOTED
- C CEILING MOUNTED AUDIBLE AND VISUAL SIGNAL DEVICE (CEILING HORN STROBE). 75cd UNLESS OTHERWISE NOTED
- AUDIBLE AND VISUAL SIGNAL DEVICE (SPEAKER STROBE). 75cd UNLESS OTHERWISE NOTED
- C CEILING MOUNTED AUDIBLE AND VISUAL SIGNAL DEVICE (CEILING SPEAKER STROBE). 75cd UNLESS OTHERWISE NOTED
- VISUAL SIGNAL DEVICE (STROBE). 75cd UNLESS OTHERWISE NOTED
- CEILING MOUNTED VISUAL SIGNAL DEVICE (CEILING STROBE). 75cd UNLESS OTHERWISE NOTED
- SMOKE DETECTOR
- DUCT SMOKE DETECTOR
- HEAT DETECTOR
- TS FIRE ALARM TAMPER SWITCH
- FS FIRE ALARM FLOW SWITCH
- B EXTERIOR SPRINKLER FLOW BELL
- M D MONITORING MODULE. "D" INDICATES DUAL INPUTS
- SD SMOKE DAMPER
- FIRE/SMOKE DAMPER WITH ACCESS PANEL LOCATION
- RTI DUCT SMOKE DETECTOR REMOTE TEST INDICATION STATION
- DH MAGNETIC DOOR HOLD
- (S) GAS SHUTOFF SOLENOID VALVE
- R RELAY
- XXcd CANDELA RATING

GROUNDING AND LPS

- GROUND ROD
- EXOTHERMIC WELD
- TEST WELL
- CROSS CONDUCTOR
- AIR TERMINAL
- DN DOWN CONDUCTOR
- COUNTERPOISE CONDUCTOR

SWITCHES AND CONTROLLERS

- M MANUAL STARTER (HP RATED SWITCH)
- DISCONNECT, NON-FUSED
- DISCONNECT, FUSED
- ENCLOSED CIRCUIT BREAKER
- COMBINATION MOTOR STARTER
- VFD VARIABLE FREQUENCY DRIVE
- PUSHBUTTON
- RR/P / FF X — DISCONNECT/ENCLOSED BREAKER RATINGS
  RR: CONTINUOUS/FRAME RATING
  P: NUMBER OF POLES
  FF: FUSE/TRIP RATING; " " = NON-FUSED
  X: ENCLOSURE TYPE, NEMA 1 IF OMITTED
- SS/P / BB X — COMBINATION STARTER RATINGS
  SS: NEMA STARTER SIZE
  P: NUMBER OF POLES
  BB: BREAKER SIZE
  X: ENCLOSURE TYPE, NEMA 1 IF OMITTED

LIGHTING

NOTE: ADDITIONAL FIXTURE SHAPES AND STYLES MAY BE USED THAT DO NOT APPEAR HERE. REFER TO FIXTURE SCHEDULE, LIGHTING PLANS, AND SPECIFICATIONS.
* EMERGENCY FIXTURES MAY SUPPLIED BY EMERGENCY CIRCUITS OR CONTAIN INTEGRAL BACKUP BATTERY SYSTEMS.
- SUBSCRIPT "a" REFERS T CONTROL ZONE.

- LED STRIP FIXTURE, 4'
- LED STRIP FIXTURE, 4', EMERGENCY POWER*
- 1' X 4' LED RECESSED FIXTURE
- 1' X 4' LED RECESSED FIXTURE, EMERGENCY POWER*
- 2' X 2' LED RECESSED FIXTURE
- 2' X 2' LED RECESSED FIXTURE, EMERGENCY POWER*
- 2' X 4' LED RECESSED FIXTURE
- 2' X 4' LED RECESSED FIXTURE, EMERGENCY POWER*
- LED RECESSED DOWNLIGHT
- LED RECESSED DOWNLIGHT, EMERGENCY POWER*
- LED LINEAR SURFACE OR PENDANT
- LED LINEAR SURFACE OR PENDANT, EMERGENCY POWER*
- HIGH BAY OR LOW BAY FIXTURE
- WALL SCONCE
- LED TWIN-HEAD UNIVERSAL EMERGENCY FIXTURE
- EXIT FIXTURE, LED - ILLUMINATED FACE(S) AND DIRECTIONAL ARROWS AS INDICATED
- EXTERIOR WALL PACK
- POLE-MOUNTED FIXTURE
- $ SWITCH
  -REFER TO LIGHTING CONTROL SCHEDULE FOR SPECIFIC SWITCH TYPES.
  -SUBSCRIPT "a" REFERS TO CONTROL ZONE.
- OC CEILING-MOUNTED OCCUPANCY SENSOR
- DS CEILING-MOUNTED DAYLIGHT SENSOR
- OD CEILING-MOUNTED COMBINATION OCCUPANCY & DAYLIGHT SENSOR
- PC PHOTOCELL
- 1 LIGHTING CONTROL KEY

CIRCUITS

NOTE: WIRING AND HOMERUN ARROWS MAY NOT BE SHOWN, IN WHICH CASE CIRCUITS ARE SHOWN ADJACENT TO EQUIPMENT AND FIXTURES, AND CONTRACTOR IS TO DETERMINE APPROPRIATE ROUTING OF CIRCUITS BASED ON APPLICABLE CODES, PROJECT REQUIREMENTS, AND FIELD CONDITIONS.

- H1-XX HOME RUN, CIRCUIT AS INDICATED
- WIRE TICK MARKS:
  SHORT: HOT CONDUCTOR(S)
  LONG: NEUTRAL CONDUCTOR(S)
  DIAGONAL: GROUND CONDUCTOR (S)
- (2) #12, (1) #12, (1) #12G — HOMERUN OR BRANCH CONDUCTOR TAG
  TOP: HOT CONDUCTOR(S)
  MIDDLE (IF SHOWN): NEUTRAL CONDUCTOR(S)
  BOTTOM: GROUND CONDUCTOR(S)

DISTRIBUTION EQUIPMENT

- TX DRY-TYPE TRANSFORMER, RATING AS MARKED
- PANELBOARD - 208Y/120V OR 240/120V, REFER TO SCHEDULES AND ONE-LINE DIAGRAMS
- PANELBOARD - 480Y/277V, REFER TO SCHEDULES AND ONE-LINE DIAGRAMS
- ATS AUTOMATIC TRANSFER SWITCH
- SB SWITCHBOARD OR SWITCHGEAR, REFER TO SCHEDULES AND ONE-LINE DIAGRAMS
- SPD SURGE PROTECTIVE DEVICE

COMMUNICATIONS

- VOICE OUTLET - 2-1/8" DEEP 4" BOX W/ 1-GANG P-RING, 3/4" CONDUIT WITH PULL STRING AND BUSHINGS TO ACCESSIBLE CEILING.
- DATA OUTLET - 2-1/8" DEEP 4" BOX W/ 1-GANG P-RING, 3/4" CONDUIT WITH PULL STRING AND BUSHINGS TO ACCESSIBLE CEILING.
- COMBINATION OUTLET - 2-1/8" DEEP 4" BOX W/ 1-GANG P-RING, 3/4" CONDUIT WITH PULL STRING AND BUSHINGS TO ACCESSIBLE CEILING.
- DATA FLOOR OUTLET, # OF RJ-45 PORTS AS INDICATED
- VOICE/DATA FLOOR OUTLET, # OF RJ-45 PORTS AS INDICATED
- TTB TTB (TELEPHONE BACKBOARD)
- (J) DATA JUNCTION BOX, SERVICE AS INDICATED
- WAP WIRELESS ACCESS POINT. PROVIDE STANDARD BOX W/ 1-GANG P-RING, 3/4" CONDUIT TO ACCESSIBLE CEILING.
- TV TV OUTLETCOMBINATION FLUSH-MOUNTED POWER, DATA, AND A/V BOX, SIMILAR TO PASS & SEYMOUR TV2MW. 1-1/4" EMT FROM A/V COMPARTMENT TO ACCESSIBLE CEILING W/ PULL STRING AND BUSHINGS. CAREFULLY COORDINATE LOCATION WITH ARCH AND OWNER, AND FIELD COORDINATE WITH WALL TYPES TO ENSURE ADEQUATE DEPTH.
- (S) AUDIO SPEAKER (PROVIDED BY OWNER)

SECURITY

- CR CARD READER
- EL ELECTRIC STRIKE
- ML MAGNETIC LOCK
- DC DOOR CONTACT
- WC WINDOW CONTACT
- KP KEYPAD
- SEC SECURITY SYSTEM PANEL
- IR INFRARED MOTION SENSOR
- CAM CAMERA

RACEWAY AND ENCLOSURES

- CONDUIT, EXPOSED OR ABOVE CEILING
- CONDUIT, UNDERGROUND
- CONDUIT, TURNED UP
- CONDUIT, TURNED DOWN
- CABLE TRAY, LADDER TYPE
- CABLE TRAY, WIRE BASKET TYPE
- MANHOLE OR HANDHOLE, AS INDICATED
- 18" X 36" MISCELLANEOUS ENCLOSURE OR WIREWAY, SIZE AS INDICATED

DEVICE MOUNTING HEIGHTS

SWITCHES	48" AFF TO CENTER LINE OF BOX, UON
RECEPTACLES	18" AFF TO CENTER LINE, UON
COUNTER HEIGHT RECEPTACLES	48" AFF TO CENTER LINE OR 2" ABOVE BACKSPLASH UON
TELEPHONE/DATA OUTLET (OFFICES)	18" AFF TO CENTER LINE, UON
WALL MOUNTED TELEPHONE	48" AFF TO CENTER LINE OF BOX, UON
FIRE ALARM PULL STATIONS	48" TO CENTER LINE OF BOX
FIRE ALARM SPEAKER/STROBES	80" TO BOTTOM OF STROBE
EXTERIOR WALL RECEPTACLES	24" AFG TO BOTTOM, UON

ALL HEIGHTS ARE BASED ON NON-OBSTRUCTED REACH. MODIFY MOUNTING HEIGHTS IF/AS NECESSARY PER ADA AS REQUIRED.

ABBREVIATIONS AND ACRONYMS

(APPLIES TO ALL ELECTRICAL SHEETS)

A	AMPERES	MLO	MAIN LUG ONLY
AC	ALTERNATING CURRENT	N	NEUTRAL
ADA	AMERICANS WITH DISABILITIES ACT	NA	NOT APPLICABLE
AFF	ABOVE FINISHED FLOOR	N.C.	NORMALLY CLOSED
AFG	ABOVE FINISHED GRADE	NF	NON-FUSED
AHU	AIR HANDLING UNIT	NEC	NATIONAL ELECTRICAL CODE
AIC	AMPERE INTERRUPTING CAPACITY	NIC	NOT IN CONTRACT
ASSOC	ASSOCIATION	NEMA	NATIONAL ELECTRICAL MANUF ASSOC
A/V	AUDIO VISUAL	NFPA	NATIONAL FIRE PROTECTION ASSOC
AWG	AMERICAN WIRE GAUGE	NL	NIGHT LIGHTING
BAS	BUILDING AUTOMATION SYSTEM	N.O.	NORMALLY OPEN
C	CONDUIT	NRTL	NATIONALLY RECOGNIZED TESTING LABORATORY
CLG	CEILING	NTS	NOT TO SCALE
COMM	COMMUNICATION	O.C.	ON CENTER
CU	COPPER	OCPD	OVER CURRENT PROTECTION DEVICE
DISC	DISCONNECT	OH	OVERHEAD
DIV	DIVISION	PNL	PANELBOARD
DWG	DRAWING	PROJ	PROJECTOR
ECB	ENCLOSED CIRCUIT BREAKER	PVC	POLYVINYL CHLORIDE
EF	EXHAUST FAN	RM	ROOM
ELEC	ELECTRICAL	RECPT(S)	RECEPTACLE(S)
EM	EMERGENCY	RGS	RIGID GALVANIZED STEEL
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM	SN	SOLID NEUTRAL
EMT	ELECTRICAL METALLIC TUBING	SEC	SECURITY
EST	ESTIMATED	SPD	SURGE PROTECTION DEVICE
ETR	EXISTING TO REMAIN	SPEC	SPECIFICATION
GF	GROUND FAULT CIRCUIT INTERRUPTER	SPST	SINGLE POLE SINGLE THROW
GND	GROUND	SQ	SQUARE
HVAC	HEATING, VENTILATING & AIR CONDITIONING	SW	SWITCH
JBOX	JUNCTION BOX	TEL	TELEPHONE
KAIC	(THOUSAND) AMPERE INTERRUPTING CAPACITY	TEMP	TEMPORARY
kcmil	THOUSAND OF CIRCULAR MILS	TTC	TELEPHONE TERMINAL CABINET
KVA	KILOVOLT-AMPERES	TYP	TYPICAL
KW	KILOWATT	UG	UNDERGROUND
LC	LIGHTING CONTACTOR	UH	UNIT HEATER
LCP	LIGHTING CONTROL PANEL	UON	UNLESS OTHERWISE NOTED
LED	LIGHT EMITTING DIODE	USB	UNIVERSAL SERIAL BUS
LTG	LIGHTING	V	VOLTS
LTS	LIGHTS	W	WIRE
LSI	LONG, SHORT, INSTANTANEOUS	WP	WEATHER PROOF
LSIG	LONG, SHORT, INSTANTANEOUS, GROUND FAULT	XFMR	TRANSFORMER
MANUF	MANUFACTURERS	Y	WYE (CONNECTED)
MCB	MAIN CIRCUIT BREAKER		

GENERAL NOTES:

1. ALL WORK SHALL BE IN COMPLIANCE WITH THE LOCALLY ADOPTED NEC, LOCAL ORDINANCES AND REGULATIONS.
2. ELECTRICAL SERVICE TO AND FOR MECHANICAL AND OTHER EQUIPMENT IS BASED ON EQUIPMENT DESIGN DATA, THE VALUES MAY DIFFER DEPENDING UPON THE ACTUAL EQUIPMENT TO BE FURNISHED. COORDINATE RATINGS WITH OTHER TRADES PRIOR TO ORDERING ELECTRICAL EQUIPMENT. ANY MODIFICATION TO THE ELECTRICAL INSTALLATION BASED UPON ACTUAL EQUIPMENT SELECTION, SHALL RESULT IN NO ADDITIONAL COST TO THE CONTRACT.
3. THOROUGHLY REVIEW ALL DESIGN DOCUMENTS TO ASSURE THAT ELECTRICAL SERVICE FOR ALL ITEMS AND/OR EQUIPMENT REQUIRING ELECTRICAL SERVICE IS INCLUDED. ANY ITEM AND/OR EQUIPMENT NOT PROVIDED WITH ELECTRICAL SERVICE, REQUIRING ELECTRICAL SERVICE, SHALL BE IMMEDIATELY BROUGHT TO THE ARCHITECT AND ENGINEER'S ATTENTION.
4. MECHANICAL AND ELECTRICAL EQUIPMENT HAS BEEN LOCATED AND ARRANGED TO MINIMIZE THE INTERFERENCES OF EQUIPMENT AND STRUCTURE. THOROUGHLY REVIEW CONTRACT DOCUMENTS TO BECOME FAMILIAR WITH THE WORK TO BE PERFORMED BY ALL TRADES AND THE PHYSICAL CHARACTERISTICS OF THE STRUCTURE IN ORDER TO SCHEDULE AND INSTALL EQUIPMENT AND TO MINIMIZE POSSIBLE INTERFERENCE. FAILURE TO PROPERLY COMMUNICATE AND SCHEDULE WORK WITH OTHER TRADES RESULTING IN ADDITIONAL WORK AND MATERIAL, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. MOTOR STARTERS AND DISCONNECT SWITCHES ARE FURNISHED FOR MECHANICAL EQUIPMENT BY DIVISION 23 AND SHALL BE INSTALLED AND WIRED BY DIVISION 26, UNLESS OTHERWISE NOTED. WHERE EQUIPMENT IS PROVIDED WITHOUT A DISCONNECT SWITCH, AND ONE IS REQUIRED BY CODES, STANDARDS, OR CONTRACT DOCUMENTS, PROVIDE SUITABLE DISCONNECTING MEANS, WHETHER OR NOT INDICATED ON PLANS.
6. SINGLE POLE 120V OR 277V MOTORIZED EQUIPMENT SUCH AS FAN TERMINAL BOXES OR EXHAUST FANS REQUIRING A DISCONNECT MEANS SHALL UTILIZE SNAP SWITCHES LISTED FOR MOTOR LOADS AND SHALL BE MARKED WITH A HP RATING SUITABLE FOR THE LOAD.
7. MOUNT ALL DISCONNECT SWITCHES FOR MECHANICAL EQUIPMENT WITHIN SIX (6) FEET OF EQUIPMENT OR AS REQUIRED BY APPLICABLE CODES AND STANDARDS. LOCATIONS FOR DISCONNECT SWITCHES SHOWN ON PLANS IS FOR GENERAL INFORMATION ONLY.
8. CONTRACTOR IS RESPONSIBLE FOR ENSURING CIRCUITS SUPPLYING EQUIPMENT THAT IS PROVIDED BY OTHER TRADES ARE COMPATIBLE WITH THE ACTUAL EQUIPMENT TO BE INSTALLED. CONTRACTOR SHALL ENSURE VOLTAGE, CIRCUIT RATING, CONNECTION TYPE, AND PROTECTIVE DEVICES ARE COORDINATED FOR EACH PIECE OF EQUIPMENT. SHOP DRAWINGS AND PRODUCT DATA FOR MATERIALS PROVIDED UNDER OTHER TRADES, BUT THAT REQUIRE ELECTRICAL SUPPLY, SHALL BEAR THE STAMP OR SIGNATURE OF THE ELECTRICAL CONTRACTOR CONFIRMING A COORDINATION REVIEW PRIOR TO REVIEW BY THE ENGINEER OF RECORD. THE ABSENCE OF SUCH STAMP OR SIGNATURE CONFIRMING COORDINATION REVIEW MAY RESULT IN REJECTION OF APPLICABLE SUBMITTALS OR SHOP DRAWINGS. NO ADDITIONAL COST TO THE CONTRACT SHALL BE AWARDED FOR FAILURE TO COORDINATE THE PROPER CONNECTIONS TO EQUIPMENT.
9. VERIFY EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT, INCLUDING WALL SWITCHES, THERMOSTATS, ETC WITH MECHANICAL CONTRACTOR AND MECHANICAL DRAWINGS. COORDINATE WITH DIV 23 DRAWINGS AND PROVIDE A SINGLE GANG BOX AND 1/2" EMT CONDUIT FROM BOX TO ABOVE CEILING FOR THERMOSTAT. MOUNTING HEIGHT PER DIV 23.
10. COORDINATE LOCATIONS OF DISCONNECT SWITCHES, CONTROLLERS, AND OTHER DEVICES AND FIXTURES WITH CORRESPONDING EQUIPMENT OR APPLIANCES SUCH THAT REQUIRED CLEARANCES ARE MAINTAINED AFTER FINAL EQUIPMENT AND ACCESSORIES ARE INSTALLED. DISCONNECT SWITCHES, CONTROLLERS, AND SIMILAR APPURTENANCES INSTALLED WITHOUT PROPER CLEARANCES WILL BE RELOCATED TO MEET REQUIREMENTS AT THE EXPENSE OF THE CONTRACTOR, REGARDLESS OF LOCATION INDICATED ON PLANS.
11. INSTALL GROUND-FAULT PROTECTED RECEPTACLE WITHIN 25' OF HVAC EQUIPMENT. COORDINATE WITH OTHER TRADES SO THAT FINAL LOCATION OF EQUIPMENT, ESPECIALLY WHERE ADJUSTED DURING CONSTRUCTION, DOES NOT RESULT IN DISTANCES GREATER THAN 25'.
12. REFER TO MECHANICAL EQUIPMENT SCHEDULE FOR DISCONNECTS, CONTROLLERS AND MISCELLANEOUS APPURTENANCES REQUIRED FOR ALL MECHANICAL EQUIPMENT, IF PROVIDED.
13. EQUIPMENT INSTALLED WITHIN CONCEALED SPACES SHALL HAVE REASONABLE AND CODE COMPLIANT ACCESS PANELS PROVIDED NEARBY FOR INSPECTION, TESTING AND SERVICE CONSIDERATIONS.
14. VERIFY CEILING TYPES AND INSTALLATION REQUIREMENTS PRIOR TO ORDERING LIGHT FIXTURES.
15. PAINT ALL EXPOSED CONDUIT TO MATCH ADJACENT SURFACE IN FINISHED SPACES.
16. COORDINATE EXACT INSTALLATION REQUIREMENTS OF OUTLETS IN MILLWORK WITH ARCHITECTURAL DRAWINGS AND ACCEPTED MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN.
17. RECEPTACLES MOUNTED AT COUNTER HEIGHT SHALL BE LOCATED ABOVE BACK SPLASH WHERE POSSIBLE.
18. COORDINATE THE HEIGHTS OF WALL MOUNTED LIGHTING FIXTURES TO CLEAR MIRRORS, CABINETS AND BUILT-INS.
19. REFER TO ARCHITECTURAL DRAWINGS FOR RATED FIRE- AND SMOKE- WALLS, ASSEMBLIES, AND PARTITIONS. PROVIDE CODE COMPLIANT DEVICE BOXES FOR UL LISTED FOR THE APPLICATION. INSTALL FIRE RATED UL LISTED SEALS OR SEALS SYSTEMS FOR ALL RATED FIRE WALL/CEILING PENETRATIONS. INSTALLATION SHALL MEET APPLICABLE LOCAL ADOPTED CODES.
20. ALL ELECTRIC WATER COOLER (EWC) RECEPTACLES AND BOTTLE FILL STATIONS SHALL BE INSTALLED SUCH THAT THEY ARE CONCEALED BEHIND THE COOLER'S ENCLOSURE AND GFCI PROTECTED IN ACCORDANCE WITH NEC ART. 422 USING A GFCI CIRCUIT BREAKER.
21. FOR UNDERGROUND CONDUITS LARGER THAN 1-1/2", PROVIDE GALVANIZED RIGID METAL SWEEPS AND BENDS.
22. EXPOSED CONDUIT BUNDLES (4 CONDUITS OR MORE) THROUGH GROUND LEVEL FLOOR, FEEDING PANELS, ETC SHALL HAVE A 3" HIGH CONCRETE "HOUSEKEEPING" PAD INSTALLED WITH 3" COVER AROUND OUTSIDE OF CONDUITS AND CONDUIT SYSTEMS ARE SHOWN DIAGRAMMATICALLY AND SHALL BE ROUTED TO SUIT FIELD CONDITIONS AND EQUIPMENT LOCATIONS.
23. ALL LIGHTING FIXTURES AND GENERAL PURPOSE RECEPTACLES IN MECHANICAL, ELECTRICAL AND EQUIPMENT ROOMS SHALL BE FIELD LOCATED TO SUIT EQUIPMENT CONDITIONS AND EQUIPMENT LOCATIONS.
24. CABLES, CONDUCTORS (WHERE NOT IN RACEWAY), ENCLOSURES, AND DEVICES INSTALLED WITHIN AIR-HANDLING SPACES (PLENUMS) SHALL BE LISTED FOR SUCH INSTALLATION. NON-METALLIC RACEWAYS MAY NOT BE INSTALLED WITHIN AIR-HANDLING PLENUMS UNDER ANY CIRCUMSTANCES.
25. PROVIDE GFCI CIRCUIT BREAKERS TO PROTECT PERMANENTLY INSTALLED APPLIANCES THAT REQUIRE GROUND FAULT CIRCUIT PROTECTION FOR PERSONNEL IN ACCORDANCE WITH NEC ARTICLES 210 AND 422.
26. PROVIDE AFCI CIRCUIT BREAKERS TO PROTECT DEVICE CIRCUITS IN ACCORDANCE WITH NEC ARTICLE 210, WHETHER OR NOT INDICATED ON PLANS.
27. PROVIDE TAMPER-RESISTANT RECEPTACLES IN APPLICATIONS DESCRIBED IN NEC ARTICLE 406, WHETHER OR NOT INDICATED ON PLANS.
28. DISCREPANCIES, WHETHER PERCEIVED OR ACTUAL, BETWEEN DRAWINGS, SPECIFICATIONS, AND/OR SUBMITTALS AND SHOP DRAWINGS, SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO PURCHASE OF EQUIPMENT. FAILURE TO NOTIFY ENGINEER OF DISCREPANCY PRIOR TO PURCHASE OF MATERIALS OR PERFORMANCE OF WORK SHALL NOT RESULT IN ADDITIONAL COST TO THE CONTRACT.
29. MULTIPLE, REPEATED REVIEWS OF SUBMITTALS/SHOP DRAWINGS WILL INCUR ADDITIONAL SERVICES AT THE CURRENT BILLING RATE FOR THE TIME REQUIRED TO PERFORM SUBSEQUENT REVIEWS AND TO COORDINATE THE REQUIREMENTS WITH CONTRACTORS.
30. FIELD MARK ELECTRICAL SERVICE EQUIPMENT WITH A CONSPICUOUS AND PERMANENT LABEL THAT INDICATES THE AVAILABLE FAULT CURRENT IN ACCORDANCE WITH NEC 110.24.
31. PROVIDE ARC-FLASH WARNING LABELS THAT COMPLY WITH NEC 110.16(A) ON ELECTRICAL EQUIPMENT.
32. PANELBOARDS SUPPLIED BY A FEEDER SHALL BE MARKED IN THE FIELD TO INDICATE THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLY ORIGINATES.
33. OUTLET BOXES INSTALLED IN WET LOCATIONS WITH WEATHERPROOF HOODS SHALL BE LISTED AND IDENTIFIED AS "EXTRA DUTY".
34. FOR ANY LIGHTING FIXTURE THAT REQUIRES REMOTE POWER SUPPLIES AND/OR CONTROLLERS, COORDINATE LOCATION OF THOSE SO THEY ARE NOT VISIBLE IN FINISHED SPACES.

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222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA
01/09/2026
ENGINEER
JOHN DANIELSON JR.

LEGEND

E0.00

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SITE PLAN GENERAL NOTES:

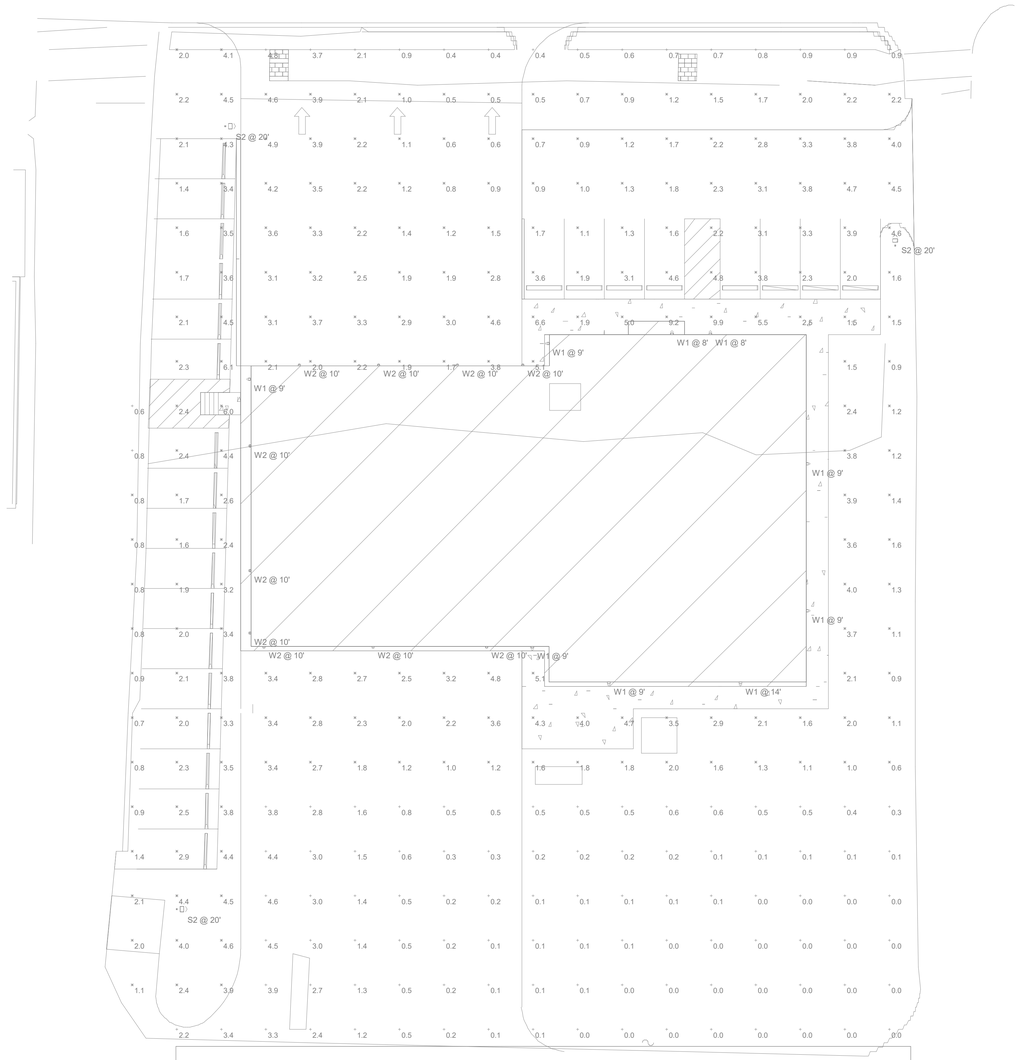
A. PROVIDE ADDITIONAL 3/4" CONDUIT TO ALL EXTERIOR LIGHTING FIXTURES FOR 0-10V CONTROL WIRING.

B. REFER TO LIGHTING CONTROL PANEL SCHEDULE E2.00/#3 FOR RELAY ASSIGNMENTS

C. LIGHT POLES SHALL BE INSTALLED ON 30" BASE. REFER TO DETAIL E5.00/#8.

SITE PLAN KEYED NOTES:

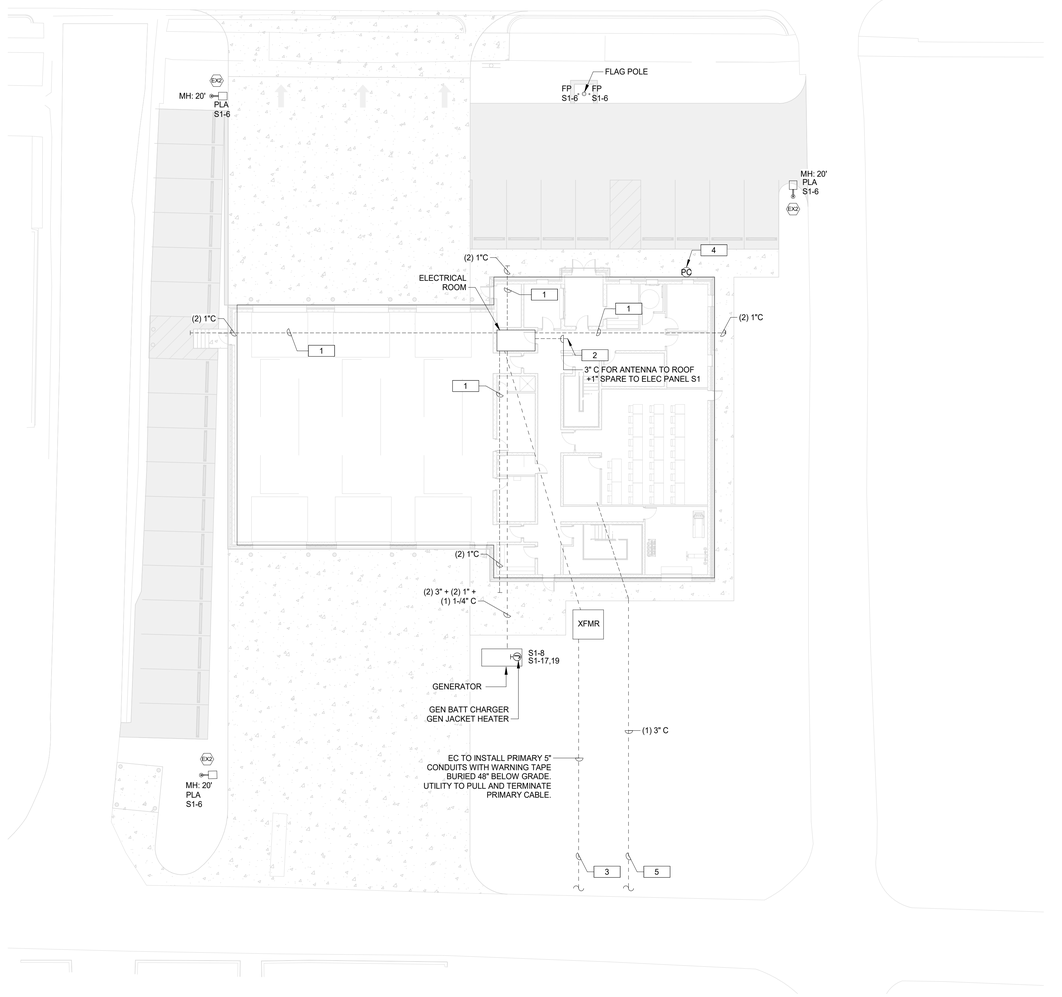
1. PROVIDE SPARE CONDUITS FROM MAIN ELECTRICAL ROOM STUBBED OUTSIDE THE BUILDING IN EACH CARDINAL DIRECTION. CAP AND INSTALL CONDUIT MARKER AT GRADE ABOVE TERMINAL ENDS. RECORD DIMENSIONED AS-INSTALLED LOCATION ON RECORD DRAWINGS.
2. COORDINATE ANTENNA LOCATIONS AND CONDUIT REQUIREMENTS WITH OWNER PRIOR TO PERFORMING WORK. PROVIDE GROUND MAT AND GROUND RING (NOT SHOWN). PROVIDE POWER CIRCUIT IF/AS REQUIRED.
3. COORDINATE PRIMARY CONDUIT REQUIREMENTS AND ROUTING WITH UTILITY PRIOR TO BEGINNING WORK.
4. PROVIDE PHOTOCELL ON WALL 24" BELOW ROOF, CLEAR OF ANY OBSTRUCTION OR ARTIFICIAL LIGHT. ROUTE WIRING IN CONDUIT BACK TO LCP ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
5. COORDINATE TERMINATION REQUIREMENTS AND LOCATION OF COMMUNICATION CONDUITS WITH OWNER OR SERVICE PROVIDER.



Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking/Drive/Entry		2.6 fc	9.9 fc	0.5 fc	19.8:1	5.2:1
Site		2.0 fc	9.9 fc	0.0 fc	N/A	N/A

1 ELECTRICAL SITE PLAN PHOTOMETRICS
N.T.S.



2 ELECTRICAL SITE PLAN
1/16" = 1'-0"

NORTH
0 8' 16' 32' 48'
1/16" = 1'-0"

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ALABAMA
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ENGINEER
JOHN DANIELSON IV

ELECTRICAL SITE PLAN

E1.00

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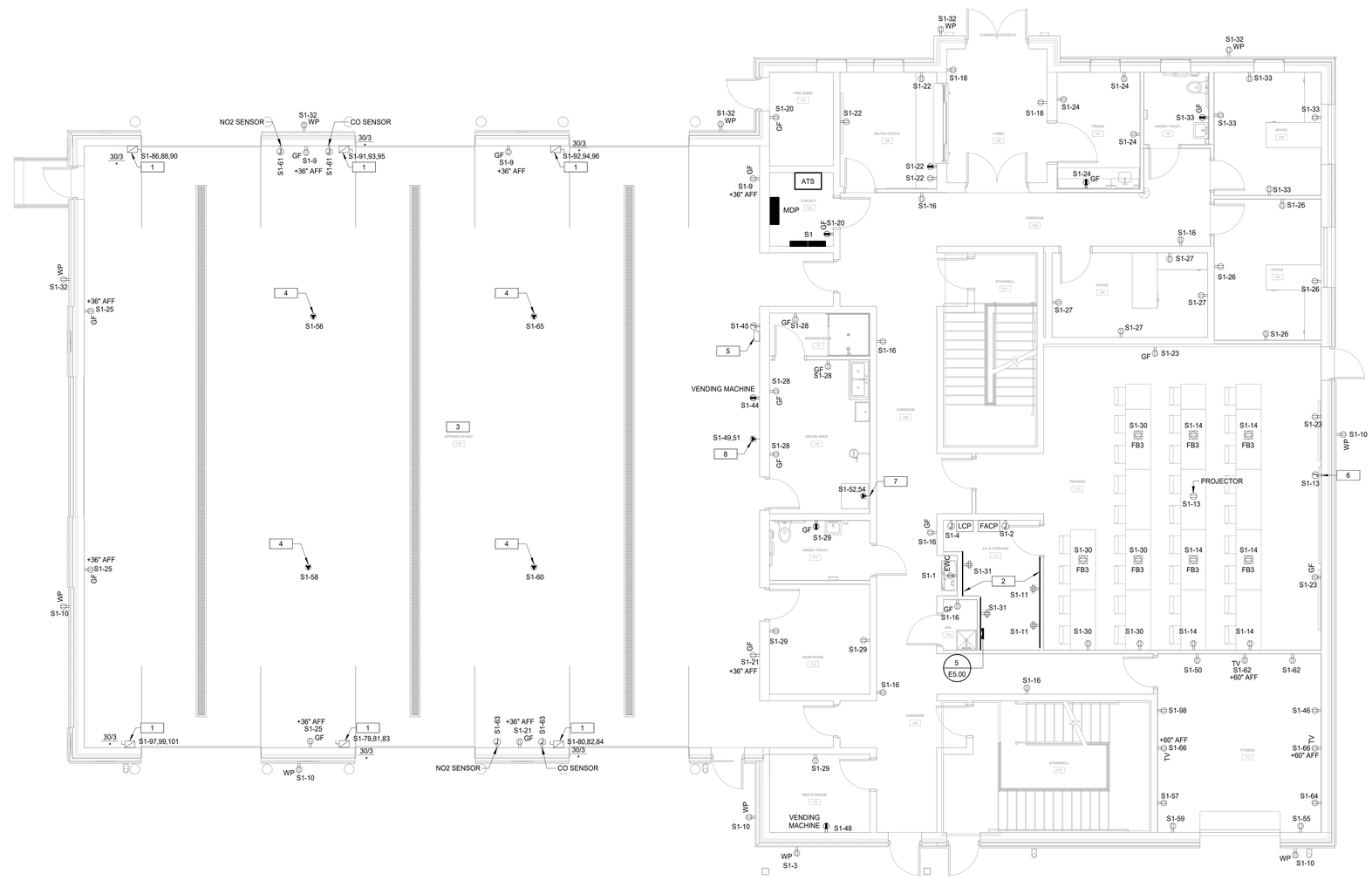
FLOOR BOX SCHEDULE

TAG	DESCRIPTION	BOX MAKE/MODEL BASIS OF DESIGN	COVER PLATE	DEVICES AND CONDUITS
FB1	6-GANG IN CONCRETE FLOOR BOX	LEGRAND RFBA6	RECTANGULAR, FLUSH, FINISH TO BE CONFIRMED WITH ARCH	DUPLEX RECEPTACLE; COMMUNICATIONS PLATES AND GANG ADAPTERS AS REQUIRED FOR OWNER PROVIDED DEVICES - COORDINATE REQUIREMENT WITH OWNER. 1" CONDUIT FROM DATA COMPARTMENT; 1-1/4" CONDUIT FROM A/V
FB2	4-GANG IN CONCRETE FLOOR BOX	LEGRAND RFBA4	RECTANGULAR, FLUSH, FINISH TO BE CONFIRMED WITH ARCH	DUPLEX RECEPTACLE; COMMUNICATIONS PLATES AND GANG ADAPTERS AS REQUIRED FOR OWNER PROVIDED DEVICES - COORDINATE REQUIREMENT WITH OWNER. 1" CONDUIT FROM DATA COMPARTMENT; 1-1/4" CONDUIT FROM A/V COMPARTMENT, U.O.N.
FB3	2-GANG IN CONCRETE FLOOR BOX	LEGRAND RFBA2	RECTANGULAR, FLUSH, FINISH TO BE CONFIRMED WITH ARCH	DUPLEX RECEPTACLE; SPARE 1" CONDUIT FROM DATA COMPARTMENT, U.O.N.



1 FIRST FLOOR POWER PLAN
3/16" = 1'-0"

POWER GENERAL NOTES:

A. COORDINATE LOCATION AND HEIGHT OF TV'S OR DIGITAL DISPLAYS, CLOCKS, POWERED SPEAKERS, AND OTHER WALL-MOUNTED APPURTENANCES WITH OWNER AND ARCHITECT PRIOR TO ROUGH-IN.

B. BRANCH CIRCUITS SHALL HAVE DEDICATED NEUTRAL CONDUCTORS, UP TO THREE BRANCH CIRCUITS RATED NOT MORE THAN 30A, AND OF DIFFERENT PHASES, MAY BE INSTALLED IN A SINGLE CONDUIT, BUT CONDUCTOR AMPACITIES MUST BE DERATED IN ACCORDANCE WITH NEC 315.15 (B) (3).

C. CONTRACTOR SHALL PROVIDE ALL NECESSARY PROVISIONS, SUCH AS CONDUIT AND CONDUCTORS, TO MAKE FINAL CONNECTIONS TO HVAC AND PLUMBING EQUIPMENT FOR ENTIRE PROJECT. COORDINATE ALL STUB-UPS AND PENETRATIONS WITH OTHER TRADES PRIOR TO ROUGH-IN.

D. ENTIRE BRANCH CIRCUIT SHALL UTILIZE SAME CONDUCTOR SIZE AND QUANTITY BETWEEN OUTLETS AS HOMERUN UNLESS OTHERWISE NOTED.

E. INSTALL DISCONNECTS, MOTOR STARTERS, VFD'S, AND SIMILAR EQUIPMENT IN COORDINATION WITH OTHER TRADES TO ENSURE NEC REQUIRED DEDICATED SPACE AND WORKING CLEARANCES ARE MAINTAINED.

F. INSTALL DRY-TYPE TRANSFORMERS WITH ADEQUATE VENTILATION SPACE AT SIDES AND REAR. COMPLY WITH MANUFACTURER'S INSTRUCTIONS.

POWER KEYED NOTES:

1. PROVIDE POWER FOR MOTORIZED DOORS. COORDINATE EXACT REQUIREMENTS WITH ARCHITECTURAL AND WITH FINAL SHOP DRAWINGS. DISCONNECT MAY BE OMITTED IF DOOR CONTROLLER CONTAINS INTEGRAL DISCONNECT. PROVIDE SPARE 1/2" CONDUIT FROM DOOR CONTROLLERS BACK TO RADIO ROOM FOR AUTOMATIC DOOR OPENING UPON EMERGENCY CALL.
2. PROVIDE PLYWOOD BACKBOARD FOR TELECOM EQUIPMENT, 8'-0" HIGH X 3/4" THICK. MOUNT WITH BOTTOM AT 6" ABOVE FINISHED FLOOR. BACKBOARDS SHALL BE AC GRADE (FACE "A" SIDE INTO ROOM) FIRE RETARDANT PLYWOOD (HOOVER PYRO-GUARD OR APPROVED EQUAL). COUNTERSINK ALL SCREWS, FILL AND SMOOTH ALL SEAMS COUNTERSUNK SCREW HOLES AND VOIDS. PRIME WITH TWO COATS PRIMER, SANDING SMOOTH AFTER EACH COAT. FINISH WITH TWO COATS SEMI-GLOSS ENAMEL PAINT COLOR "GRAY", ON ALL EXPOSED SURFACES. FINAL SURFACES SHALL BE UNIFORM,Y SMOOTH AND EVEN. ROUGH ALL ELECTRICAL OUTLETS INTO SPACE BEHIND BACKBOARD FOR FLUSH MOUNT INSTALLATION OF FACEPLATES.
3. RACEWAYS IN APPARATUS BAY SHALL BE CONCEALED WITHIN WALLS, OR BELOW GRADE CONDUITS AT CEILINGS SHALL BE INSTALLED TIGHT AGAINST CEILING AND WHERE TURNING DOWN AT WALL, SHALL PENETRATE AND RUN WITHIN WALL CAVITY. ALL WALL MOUNTED DEVICES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED.
4. CORD REELS FOR VEHICLE SHORE POWER: 45' HEAVY DUTY 12/3 CORD W/ (2) NEMA 5-20R RECEPTACLES. BASIS OF DESIGN IS REELCRAFT H-10991.
5. VEHICLE EXHAUST CONTROL PANEL. COORDINATE EXACT LOCATION WITH DIVISION 23.
6. POWER FOR MOTORIZED SCREEN. COORDINATE EXACT LOCATION AND HEIGHT WITH ARCHITECT.
7. POWER FOR WASHER/EXTRACTOR. COORDINATE EXACT POWER REQUIREMENTS AND RECEPTACLE CONFIGURATION WITH OWNER PRIOR TO ROUGH-IN.
8. POWER FOR BREATHING AIR TANK FILLER. COORDINATE EXACT POWER REQUIREMENTS WITH OWNER PRIOR TO ROUGH-IN.

NORTH

0 4' 8' 12' 16'
3/16" = 1'-0"

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ALABAMA
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ENGINEER
JOHN DANIELSON JR

POWER PLAN - FIRST FLOOR

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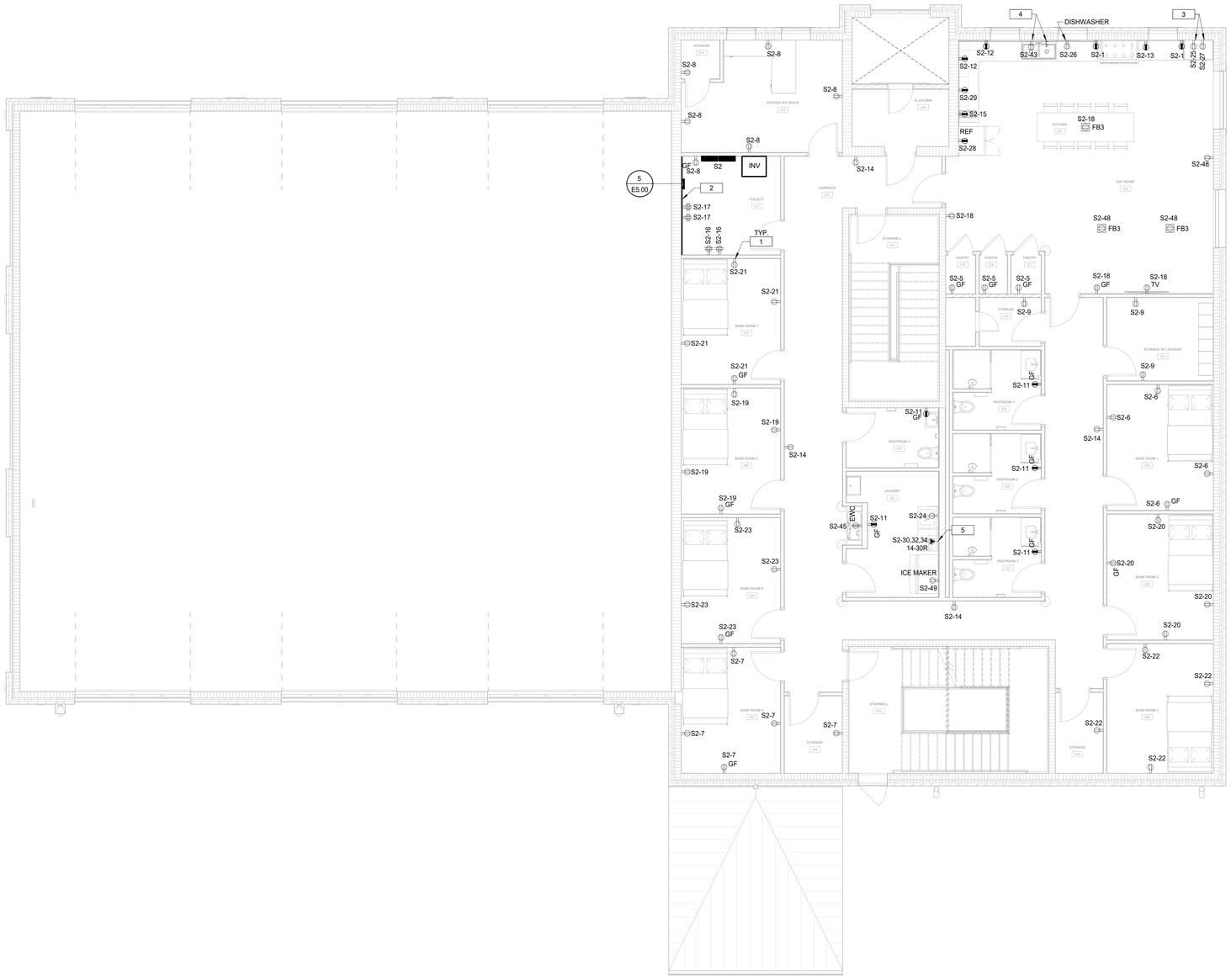
FLOOR BOX SCHEDULE

TAG	DESCRIPTION	BOX MAKE/MODEL BASIS OF DESIGN	COVER PLATE	DEVICES AND CONDUITS
FB1	6-GANG IN CONCRETE FLOOR BOX	LEGRAND RFBA6	RECTANGULAR, FLUSH, FINISH TO BE CONFIRMED WITH ARCH	DUPLEX RECEPTACLE; COMMUNICATIONS PLATES AND GANG ADAPTERS AS REQUIRED FOR OWNER PROVIDED DEVICES - COORDINATE REQUIREMENT WITH OWNER. 1" CONDUIT FROM DATA COMPARTMENT; 1-1/4" CONDUIT FROM A/V
FB2	4-GANG IN CONCRETE FLOOR BOX	LEGRAND RFBA4	RECTANGULAR, FLUSH, FINISH TO BE CONFIRMED WITH ARCH	DUPLEX RECEPTACLE; COMMUNICATIONS PLATES AND GANG ADAPTERS AS REQUIRED FOR OWNER PROVIDED DEVICES - COORDINATE REQUIREMENT WITH OWNER. 1" CONDUIT FROM DATA COMPARTMENT; 1-1/4" CONDUIT FROM A/V COMPARTMENT, U.O.N.
FB3	2-GANG IN CONCRETE FLOOR BOX	LEGRAND RFBA2	RECTANGULAR, FLUSH, FINISH TO BE CONFIRMED WITH ARCH	DUPLEX RECEPTACLE; SPARE 1" CONDUIT FROM DATA COMPARTMENT, U.O.N.



1 SECOND FLOOR POWER PLAN
3/16" = 1'-0"

POWER GENERAL NOTES:

A. COORDINATE LOCATION AND HEIGHT OF TV'S OR DIGITAL DISPLAYS, CLOCKS, POWERED SPEAKERS, AND OTHER WALL-MOUNTED APPURTENANCES WITH OWNER AND ARCHITECT PRIOR TO ROUGH-IN.

B. BRANCH CIRCUITS SHALL HAVE DEDICATED NEUTRAL CONDUCTORS. UP TO THREE BRANCH CIRCUITS RATED NOT MORE THAN 30A, AND OF DIFFERENT PHASES, MAY BE INSTALLED IN A SINGLE CONDUIT, BUT CONDUCTOR AMPACITIES MUST BE DERATED IN ACCORDANCE WITH NEC 315.15 (B) (3).

C. CONTRACTOR SHALL PROVIDE ALL NECESSARY PROVISIONS, SUCH AS CONDUIT AND CONDUCTORS, TO MAKE FINAL CONNECTIONS TO HVAC AND PLUMBING EQUIPMENT FOR ENTIRE PROJECT. COORDINATE ALL STUB-UPS AND PENETRATIONS WITH OTHER TRADES PRIOR TO ROUGH-IN.

D. ENTIRE BRANCH CIRCUIT SHALL UTILIZE SAME CONDUCTOR SIZE AND QUANTITY BETWEEN OUTLETS AS HOMERUN UNLESS OTHERWISE NOTED.

E. INSTALL DISCONNECTS, MOTOR STARTERS, VFD'S, AND SIMILAR EQUIPMENT IN COORDINATION WITH OTHER TRADES TO ENSURE NEC REQUIRED DEDICATED SPACE AND WORKING CLEARANCES ARE MAINTAINED.

F. INSTALL DRY-TYPE TRANSFORMERS WITH ADEQUATE VENTILATION SPACE AT SIDES AND REAR. COMPLY WITH MANUFACTURER'S INSTRUCTIONS.

POWER KEYED NOTES:

1. RECEPTACLES NEAR BUNKS SHALL BE LOCATED AT 28" AFF TO CENTER OF DEVICE. COORDINATE RECEPTACLE LOCATIONS WITH FURNITURE LAYOUT.
2. PROVIDE PLYWOOD BACKBOARD FOR TELECOM EQUIPMENT. 8'-0" HIGH X 3/4" THICK. MOUNT WITH BOTTOM AT 6" ABOVE FINISHED FLOOR. BACKBOARDS SHALL BE AC GRADE (FACE "A" SIDE INTO ROOM) FIRE RETARDANT PLYWOOD (HOOVER PYRO-GUARD OR APPROVED EQUAL). COUNTERSINK ALL SCREWS, FILL AND SMOOTH ALL SEAMS COUNTERSUNK SCREW HOLES AND VOIDS. PRIME WITH TWO COATS PRIMER, SANDING SMOOTH AFTER EACH COAT. FINISH WITH TWO COATS SEMI-GLOSS ENAMEL PAINT COLOR "GRAY". ON ALL EXPOSED SURFACES. FINAL SURFACES SHALL BE UNIFORMLY SMOOTH AND EVEN. ROUGH ALL ELECTRICAL OUTLETS INTO SPACE BEHIND BACKBOARD FOR FLUSH MOUNT INSTALLATION OF FACEPLATES.
3. STACKED MICROWAVES. COORDINATE MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN.
4. UNDER CABINET RECEPTACLE FOR GARBAGE DISPOSAL. LOCATE SWITCH FOR GARBAGE DISPOSAL ABOVE COUNTER. COORDINATE EXACT LOCATION WITH ARCHITECT.
5. INSTALL DRYER RECEPTACLE AT 34" AFF. COORDINATE FINAL LOCATIONS AND RECEPTACLE REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH IN.

NORTH

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3/16" = 1'-0"

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ALABAMA
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ENGINEER
JOHN DANIEL
DANIEL

POWER PLAN - SECOND FLOOR

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EQUIPMENT GENERAL NOTES:

A. BRANCH CIRCUITS SHALL HAVE DEDICATED NEUTRAL CONDUCTORS. UP TO THREE BRANCH CIRCUITS RATED NOT MORE THAN 30A, AND OF DIFFERENT PHASES, MAY BE INSTALLED IN A SINGLE CONDUIT, BUT CONDUCTOR AMPACITIES MUST BE DERATED IN ACCORDANCE WITH NEC 315.15 (B) (3).

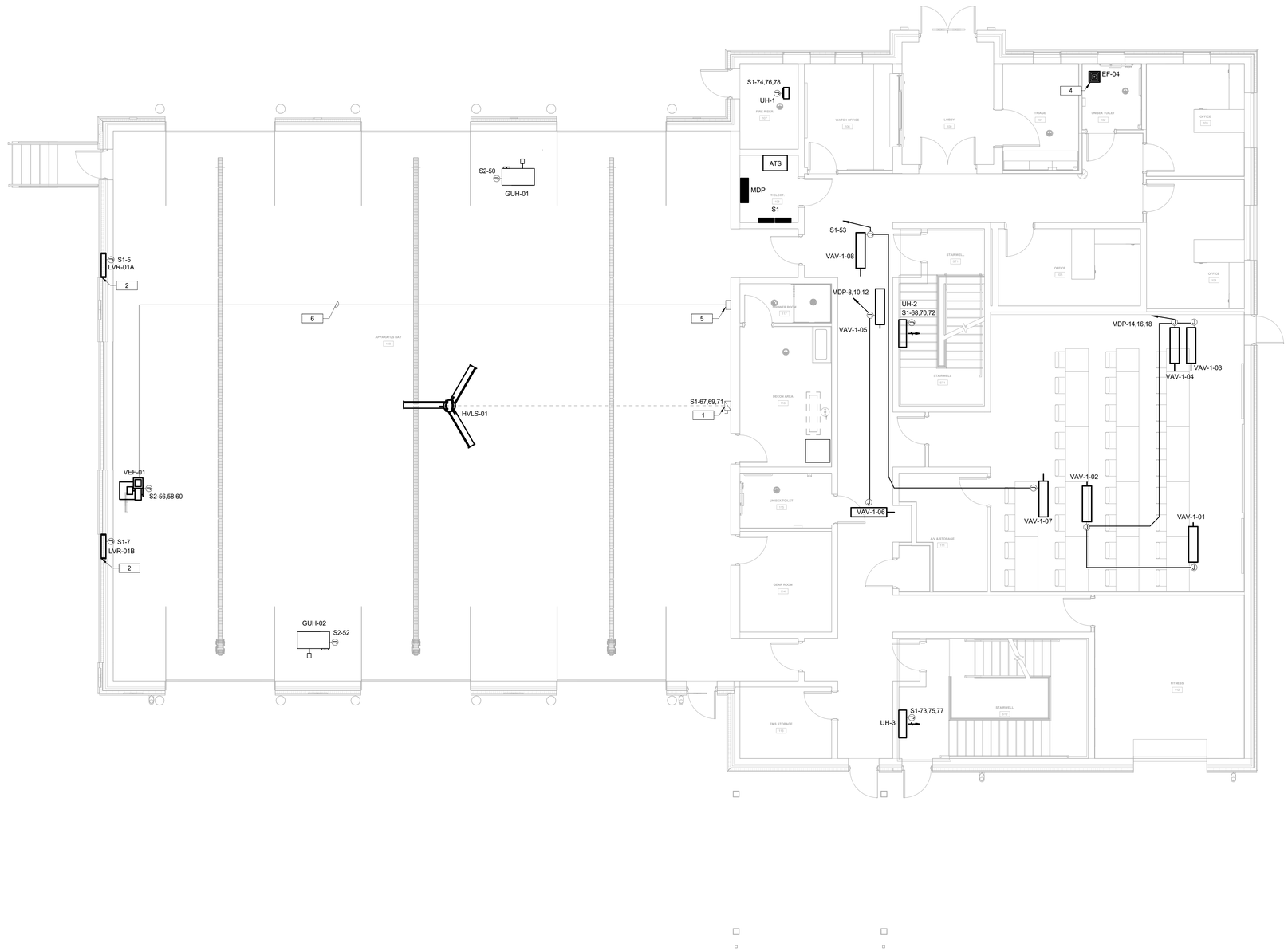
B. CONTRACTOR SHALL PROVIDE ALL NECESSARY PROVISIONS, SUCH AS CONDUIT AND CONDUCTORS, TO MAKE FINAL CONNECTIONS TO HVAC AND PLUMBING EQUIPMENT FOR ENTIRE PROJECT. COORDINATE ALL STUB-UPS AND PENETRATIONS WITH OTHER TRADES PRIOR TO ROUGH-IN.

C. ENTIRE BRANCH CIRCUIT SHALL UTILIZE SAME CONDUCTOR SIZE AND QUANTITY BETWEEN OUTLETS AS HOMERUN UNLESS OTHERWISE NOTED.

D. INSTALL DISCONNECTS, MOTOR STARTERS, VFD'S, AND SIMILAR EQUIPMENT IN COORDINATION WITH OTHER TRADES TO ENSURE NEC REQUIRED DEDICATED SPACE AND WORKING CLEARANCES ARE MAINTAINED.

EQUIPMENT KEYED NOTES:

1. HVLS CONTROLLER - COORDINATE EXACT LOCATION WITH DIVISION 23.
2. COORDINATE LOUVER POWER AND CONTROL WITH DIVISION 23. PROVIDE CONDUIT AND WIRING AS NEEDED FOR PROPER FUNCTION OF LOUVERS, WHETHER OR NOT INDICATED ON PLANS.
3. RACEWAYS IN APPARATUS BAY SHALL BE CONCEALED WITHIN WALLS, OR BELOW GRADE CONDUITS AT CEILINGS SHALL BE INSTALLED TIGHT AGAINST CEILING AND WHERE TURNING DOWN AT ALL, SHALL PENETRATE AND RUN WITHIN WALL CAVITY. ALL WALL MOUNTED DEVICES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED.
4. EXHAUST FAN TO BE CONNECTED TO LIGHTING CIRCUIT IN THE ROOM AND CONTROLLED BY LIGHT SWITCH.
5. VEHICLE EXHAUST CONTROL PANEL. COORDINATE EXACT LOCATION WITH DIVISION 23.
6. PROVIDE POWER AND CONTROL CONDUITS & WIRING BETWEEN VEH. EXHAUST FAN AND CONTROLLER. PROVIDE MAIN POWER CONNECTION AT FAN OR CONTROLLER AS DIRECTED BY MANUFACTURER. COORDINATE WITH FINALIZED SHOP DRAWING. PROVIDE SEPARATE DISCONNECT IF REQUIRED BY MFR.



1 FIRST FLOOR EQUIPMENT PLAN
3/16" = 1'-0"

NORTH
0 4' 8' 12' 16'
3/16" = 1'-0"

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EQUIPMENT PLAN - FIRST FLOOR

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ROCKET MEP LLC
MECHANICAL - ELECTRICAL - PLUMBING ENGINEERS
256-203-4373
1300 MERIDIAN ST, SUITE 302, HUNTSVILLE, AL 35801
INFO@ROCKETMEP.COM
AL CERT OF AUTH: ECA50597

EQUIPMENT GENERAL NOTES:

A. BRANCH CIRCUITS SHALL HAVE DEDICATED NEUTRAL CONDUCTORS. UP TO THREE BRANCH CIRCUITS RATED NOT MORE THAN 30A, AND OF DIFFERENT PHASES, MAY BE INSTALLED IN A SINGLE CONDUIT, BUT CONDUCTOR AMPACITIES MUST BE DERATED IN ACCORDANCE WITH NEC 315.15 (B) (3).

B. CONTRACTOR SHALL PROVIDE ALL NECESSARY PROVISIONS, SUCH AS CONDUIT AND CONDUCTORS, TO MAKE FINAL CONNECTIONS TO HVAC AND PLUMBING EQUIPMENT FOR ENTIRE PROJECT. COORDINATE ALL STUB-UPS AND PENETRATIONS WITH OTHER TRADES PRIOR TO ROUGH-IN.

C. ENTIRE BRANCH CIRCUIT SHALL UTILIZE SAME CONDUCTOR SIZE AND QUANTITY BETWEEN OUTLETS AS HOMERUN UNLESS OTHERWISE NOTED.

D. INSTALL DISCONNECTS, MOTOR STARTERS, VFD'S, AND SIMILAR EQUIPMENT IN COORDINATION WITH OTHER TRADES TO ENSURE NEC REQUIRED DEDICATED SPACE AND WORKING CLEARANCES ARE MAINTAINED.

EQUIPMENT KEYED NOTES:

1. PROVIDE CONNECTION FOR EXHAUST HOOD. PROVIDE ADDITIONAL CONDUITS BETWEEN HOOD CONTROLS, EXHAUST FAN AND MAKEUP AIR UNIT AS REQUIRED BY MANUFACTURER. COORDINATE WITH FINALIZED SHOP DRAWINGS.

1 SECOND FLOOR EQUIPMENT PLAN
3/16" = 1'-0"

NORTH

0 4' 8' 12' 16'
3/16" = 1'-0"

GMC

Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA
01/09/2026
ENGINEER
JOHN T. DANIELSON, JR.

EQUIPMENT PLAN - SECOND FLOOR

E1.12

1/9/2026 7:47:42 AM TEMPLATE VERSION: 2025.1

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EQUIPMENT GENERAL NOTES:

A. COORDINATE LOCATION AND HEIGHT OF TV'S OR DIGITAL DISPLAYS, CLOCKS, POWERED SPEAKERS, AND OTHER WALL-MOUNTED APPURTENANCES WITH OWNER AND ARCHITECT PRIOR TO ROUGH-IN.

B. BRANCH CIRCUITS SHALL HAVE DEDICATED NEUTRAL CONDUCTORS. UP TO THREE BRANCH CIRCUITS RATED NOT MORE THAN 30A, AND OF DIFFERENT PHASES, MAY BE INSTALLED IN A SINGLE CONDUIT, BUT CONDUCTOR AMPACITIES MUST BE DERATED IN ACCORDANCE WITH NEC 315.15 (B) (3).

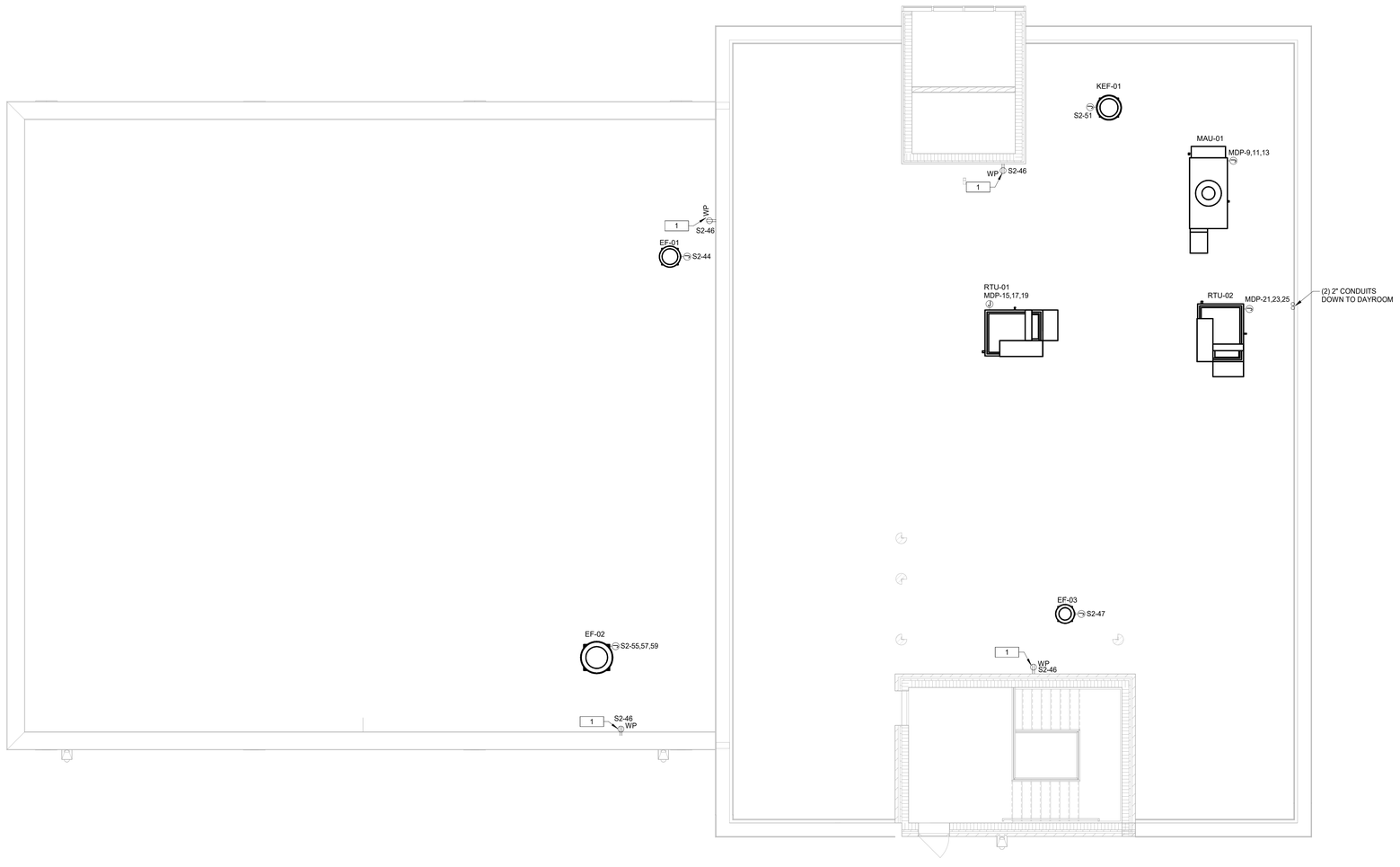
C. CONTRACTOR SHALL PROVIDE ALL NECESSARY PROVISIONS, SUCH AS CONDUIT AND CONDUCTORS, TO MAKE FINAL CONNECTIONS TO HVAC AND PLUMBING EQUIPMENT FOR ENTIRE PROJECT. COORDINATE ALL STUB-UPS AND PENETRATIONS WITH OTHER TRADES PRIOR TO ROUGH-IN.

D. ENTIRE BRANCH CIRCUIT SHALL UTILIZE SAME CONDUCTOR SIZE AND QUANTITY BETWEEN OUTLETS AS HOMERUN UNLESS OTHERWISE NOTED.

E. INSTALL DISCONNECTS, MOTOR STARTERS, VFD'S, AND SIMILAR EQUIPMENT IN COORDINATION WITH OTHER TRADES TO ENSURE NEC REQUIRED DEDICATED SPACE AND WORKING CLEARANCES ARE MAINTAINED.

EQUIPMENT KEYED NOTES:

1. PROVIDE A 120V, 20A GFCI TYPE SERVICE RECEPTACLE AT AN ACCESSIBLE LOCATION WITHIN 25FT. OF ANY MECHANICAL EQUIPMENT. THE RECEPTACLE OUTLET SHALL NOT BE CONNECTED TO THE LOAD SIDE OF THE EQUIPMENT DISCONNECTING MEANS IN COMPLIANCE WITH NEC 210.63.



1 ROOF EQUIPMENT PLAN
3/16" = 1'-0"

NORTH

0 4' 8' 12' 16'
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ABAMA
01/09/2026
ENGINEER
JOHN DANIELSON JR.

EQUIPMENT PLAN - ROOF

E1.13

1/9/2026 7:47:43 AM TEMPLATE VERSION: 2025.1

LIGHTING FIXTURE SCHEDULE

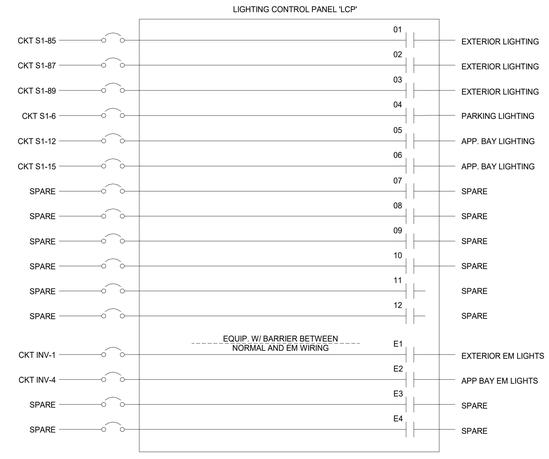
TYPE	DESCRIPTION	MANUFACTURER	MODEL (EQUALS CAN BE SUBMITTED FOR APPROVAL)	WATTAGE	VOLTAGE	Comments
A1	2' X 4' RECESSED CENTER ELEMENT LED, 5000 LUMENS, 80 CRI, 3500K, CURVED OPAL LENS	LITHONIA	STAKS 2X4 5000LM 3500K	40 W	120V	<varies>
A1E	2' X 4' RECESSED CENTER ELEMENT LED, 5000 LUMENS, 80 CRI, 3500K, CURVED OPAL LENS, CONNECTED TO EMERGENCY POWER	LITHONIA	STAKS 2X4 5000LM 3500K	40 W	120V	RECESSED. COORDAINTE WITH CEILING TYPE.
A2E	2' X 4' RECESSED CENTER ELEMENT LED, 5000 LUMENS, 80 CRI, 3500K, CURVED OPAL LENS, WITH INTEGRAL OCC SENSORS, CONNECTED TO EMERGENCY POWER	LITHONIA	STAKS 2X4 5000LM 3500K	40 W	120V	RECESSED. COORDAINTE WITH CEILING TYPE, INTEGRAL OCC SESOR
A3	2' X 2' RECESSED CENTER ELEMENT LED, 5000 LUMENS, 80 CRI, 3500K, CURVED OPAL LENS	LITHONIA	STAKS 2X2 5000LM 3500K	35 W	120V	RECESSED. COORDAINTE WITH CEILING TYPE.
A3E	2' X 2' RECESSED CENTER ELEMENT LED, 5000 LUMENS, 80 CRI, 3500K, CURVED OPAL LENS, CONNECTED TO EMERGENCY POWER	LITHONIA	STAKS 2X2 5000LM 3500K	35 W	120V	RECESSED. COORDAINTE WITH CEILING TYPE.
D4	4" LED RECESSED DOWNLIGHT, 2000 LUMENS, 80 CRI, 3500K, BEVEL TRIM, WIDE BATWING DISTRIBUTION	GOTHAM	IVO4D 20LM 35K 80CRI WD BEV ARS	20 W	120V	RECESSED. COORDAINTE WITH CEILING TYPE.
D4E	4" LED RECESSED DOWNLIGHT, 2000 LUMENS, 80 CRI, 3500K, BEVEL TRIM, WIDE BATWING DISTRIBUTION, CONNECTED TO EMERGENCY POWER	GOTHAM	IVO4D 20LM 35K 80CRI WD BEV ARS	20 W	120V	RECESSED. COORDAINTE WITH CEILING TYPE.
D4W	4" LED RECESSED DOWNLIGHT, 2000 LUMENS, 80 CRI, 3500K, BEVEL TRIM, WIDE BATWING DISTRIBUTION, WET LOCATION LISTED	GOTHAM	IVO4D 20LM 35K 80CRI WD BEV ARS	20 W	120V	RECESSED. COORDAINTE WITH CEILING TYPE.
D4WE	4" LED RECESSED DOWNLIGHT, 2000 LUMENS, 80 CRI, 3500K, BEVEL TRIM, WIDE BATWING DISTRIBUTION, WET LOCATION LISTED, CONNECTED TO EMERGENCY POWER	GOTHAM	IVO4D 20LM 35K 80CRI WD BEV ARS	20 W	120V	RECESSED. COORDAINTE WITH CEILING TYPE.
F1	4' LED STRIP, WHITE DIFFUSE LENSE, 4000 LUMENS,3500K, 80CRI	LITHONIA	CSS L48 4000LM 35K	40 W	120V	
F1E	4' LED STRIP, WHITE DIFFUSE LENSE, 4000 LUMENS,3500K, 80CRI, CONNECTED TO EMERGENCY POWER	LITHONIA	CSS L48 4000LM 35K	40 W	120V	
F2E	4' LED STRIP, WHITE DIFFUSE LENSE, 4000 LUMENS,3500K, 80CRI, WITH INTEGRAL OCC SENSORS, CONNECTED TO EMERGENCY POWER	LITHONIA	CSS L48 4000LM 35K	40 W	120V	WITH INTEGRAL OCC SENSOR
FP	IN-GRADE LIGHT, 46W, 4000K, MEDIUM FLOOD, GLARE SHIELD, COORDINATE FINISH WITH ARCHITECT	HYDREL	M9710C P3 40K MFL FLCSR GS	46 W	120V	
H2	LED LINEAR HIGH BAY, 18,000 LUMENS, 4000K, 80 CRI, GLARE CONTROL, HIGH EFFICIENCY, WIDE DISTRIBUTION	LITHONIA	CPHB 18000LM HEF GCL WD 40K 80CRI	130 W	120V	MOUNT SO THAT BOTTOM OF FIXTURE IS EVEN WITH BOTTOM OF ROOF JOIST.
H2E	LED LINEAR HIGH BAY, 18,000 LUMENS, 4000K, 80 CRI, GLARE CONTROL, HIGH EFFICIENCY, WIDE DISTRIBUTION, CONNECTED TO EMERGENCY POWER	LITHONIA	CPHB 18000LM HEF GCL WD 40K 80CRI	130 W	120V	MOUNT SO THAT BOTTOM OF FIXTURE IS EVEN WITH BOTTOM OF ROOF JOIST.
PLA	POLE MOUNTED AREA LUMINAIRE, P7 PERFORMANCE PACKAGE, 4000K, 70CRI, TYPE 2 MEDIUM, MOUNTED AT 25'; POLE SHALL BE SQUARED NON-TAPERED STEEL POLE, FINISH BY ARCHITECT.	LITHONIA	DSX0 LED P7 40K 70CRI	170 W	120V	
V1	LED VANITY LIGHT, 18IN, SATIN BLACK, 3000K	SONNEMAN	FINO LED BATH BAR	11 W	120V	MOUNTED 7'-0" AFF CENTERED ABOVE SINK
W1	WALL PACK, 3000 LUMENS, 4000K, TYPE 3 MEDIUM, 80 CRI, COORDINATE FINISH WITH ARCHITECT	LITHONIA	WDGE2 P3 40K T3M MVOLT	20 W	120V	REFER TO PLANS FOR MOUNTING HEIGHT
W1E	WALL PACK, 3000 LUMENS, 4000K, TYPE 3 MEDIUM, 80 CRI, COORDINATE FINISH WITH ARCHITECT, CONNECTED TO EMERGENCY POWER	LITHONIA	WDGE2 P3 40K T3M MVOLT	20 W	120V	REFER TO PLANS FOR MOUNTING HEIGHT
W2	36" EXTERIOR SCONCE, 4000K, 3500 LUMENS, COORDINATE FINISH WITH ARCHITECT	SCOTT ARCHITECTURAL LIGHTING	S9272-L48	20 W	120V	REFER TO PLANS FOR MOUNTING HEIGHT
X1	UNIVERSAL MOUNT LED EXIT SIGN, SINGLE-SIDED ILLUMINATED FACE, GREEN, ARROWS AS INDICATED, CONNECTED TO EMERGENCY POWER	LITHONIA	EDG G	5 W	120V	

LIGHTING CONTROL SCHEDULE

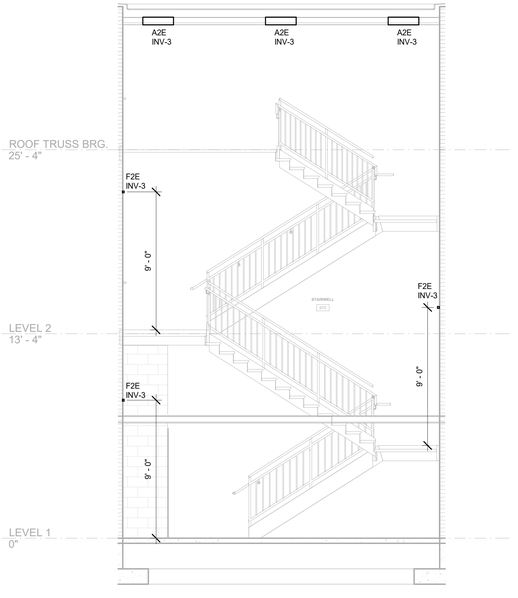
LIGHTING CONTROL KEY	SPACE TYPE	WALL SWITCH	SENSOR	DAYLIGHT CTRL.	SCHEDULE	OPERATION
C1	CONFERENCE ROOM	DT1	CEILING	-	-	MANUAL ON; AUTO OFF AFTER 20 MIN VACANCY; SCENE PER TABLE
C1D	CONFERENCE ROOM W/ DAYLIGHTING	DT1	CEILING	YES	-	MANUAL ON; AUTO OFF AFTER 20 MIN VACANCY; SCENE PER TABLE. AUTOMATIC DIM FROM 100% DOWN TO 15% BASED ON MEASURED DAYLIGHT INTENSITY (ADJUSTABLE)
C2	CORRIDOR	D2K	CEILING	-	-	MANUAL ON/OFF (OVERRIDE) PER ZONE; OCCUPANCY ON TO 100%, AUTO DIM TO 50% AFTER 20 MIN VACANCY
C3	CLASSROOM	D4A	CEILING	-	-	MANUAL ON; AUTO ON TO 50%, AUTO OFF AFTER 20 MIN VACANCY; SCENE 1: 40%; SCENE 2: 75%
C3D	CLASSROOM W/ DAYLIGHTING	D4A	CEILING	-	-	MANUAL ON; AUTO ON TO 50%, AUTO OFF AFTER 20 MIN VACANCY; SCENE 1: 40%; SCENE 2: 75%. AUTOMATIC DIM FROM 100% DOWN TO 15% BASED ON MEASURED DAYLIGHT INTENSITY (ADJUSTABLE)
E1	ELECTRICAL/MECHANICAL ROOM	S1	-	-	-	MANUAL ON/OFF
EX1	EXTERIOR BUILDING WALL PACKS	-	PHOTOCELL	-	YES	AUTO ON PHOTOCELL OR SCHEDULE 6:00PM, WHICHEVER IS FIRST; OFF AT 00:00
EX2	EXTERIOR PARKING	-	PHOTOCELL	-	YES	AUTO ON OR SCHEDULE 6:00PM, WHICHEVER IS FIRST; DIM TO 50% AT 00:00
F1	FITNESS/EXERCISE AREA	D4B	-	-	-	MANUAL ON, DIM UP/DN; OCCUPANCY ON TO 50%; AUTO OFF AFTER 20 MIN VACANCY
K1D	KITCHEN/W DAYLIGHTING	D4A	CEILING	YES	-	MANUAL ON; OCCUPANCY ON TO 50%; AUTO OFF AFTER 20 MIN VACANCY; SCENE 1: 50%; SCENE 2: 75%; AUTOMATIC DIM FROM 100% DOWN TO 15% BASED ON MEASURED DAYLIGHT INTENSITY (ADJUSTABLE)
L1	LAUNDRY	D4A	CEILING	-	-	MANUAL ON; OCCUPANCY ON TO 50%; AUTO OFF AFTER 20 MIN VACANCY; SCENE 1: 50%; SCENE 2: 75%
L3	LOBBY	D2K	CEILING	-	-	MANUAL ON/AUTO OFF (OVERRIDE) PER ZONE; OCCUPANCY ON TO 100%, AUTO DIM TO 50% AFTER 20 MIN VACANCY;
L3D	LOBBY W/ DAYLIGHTING	D2K	CEILING	YES	-	MANUAL ON/OFF (OVERRIDE) PER ZONE; AUTOMATIC DIM FROM 100% DOWN TO 15% BASED ON MEASURED DAYLIGHT INTENSITY (ADJUSTABLE)
L4	LOCKER ROOM	D4B	CEILING	-	-	MANUAL ON, DIM UP/DN; OCCUPANCY ON TO 50%; AUTO OFF AFTER 20 MIN VACANCY
L5	LOUNGE/BREAKROOM	D2	CEILING	-	-	MANUAL ON; OCCUPANCY ON TO 50%; AUTO OFF AFTER 20 MIN VACANCY
O1	OFFICE < 250 SQ FT	OS2	-	-	-	MANUAL ON; OCCUPANCY ON TO 50%; AUTO OFF AFTER 20 MIN VACANCY
O2	OFFICE > 250 SQ FT	D4B	CEILING	-	-	MANUAL ON; OCCUPANCY ON TO 50%; AUTO OFF AFTER 20 MIN VACANCY
R1	RESTROOM - SMALL	OS	-	-	-	MANUAL ON; OCCUPANCY ON; AUTO OFF AFTER 20 MIN VACANCY
R2	RESTROOM - GROUP/LARGE	D2K	CEILING	-	-	MANUAL ON; OCCUPANCY ON; AUTO OFF AFTER 20 MIN VACANCY
S1	STAIRWAY	SK	INTEGRAL	-	-	MANUAL ON; OCCUPANCY ON; DIM TO 50% AUTO AFTER 20 MIN VACANCY; FIXTURES TO HAVE INTEGRAL OCC SENSORS
S2	STORAGE < 50 SQ FT	OS	-	-	-	MANUAL ON; OCCUPANCY ON; AUTO OFF AFTER 20 MIN VACANCY
S3	STORAGE < 1000 SQ FT	D2	CEILING	-	-	MANUAL ON; OCCUPANCY ON; AUTO OFF AFTER 20 MIN VACANCY
S4	SLEEPING QUARTERS	D6	-			PROGRAMMED SCENE DIMMING TO 30% (ADJUSTABLE) WITH TIME DELAY TO 50% OVER 2 MIN (ADJUSTABLE) UPON DISPATCH CALL (CONTACT CLOSURE INPUT). COORDINATE EXACT TIME DELAY WITH OWNER
W2	APPARTUS BAY	D4B	-	-	YES	SCHEDULE ON/OFF: PROVIDE MANUAL ON/OFF OVERRIDE. IF OWNER DESIRED, PROVIDE CONNECTION BETWEEN EMERGENCY DISPATCH CALL SYSTEM AND LIGHTING CONTROL PANEL TO ACTIVIATE LIGHTS UPON EMERGENCY CALL.

LIGHTING SWITCH SCHEDULE

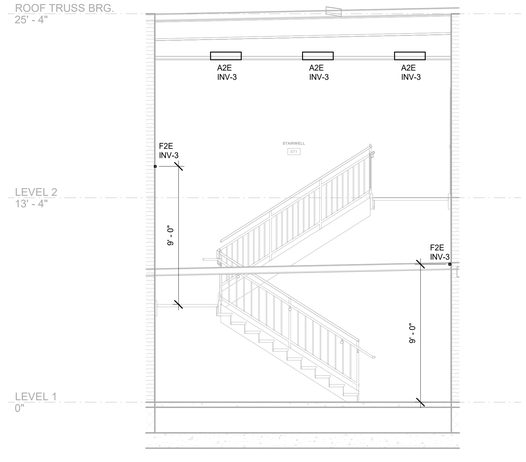
SWITCH	DESCRIPTION
D2	DIGITAL 2 BUTTON SWITCH: ON, OFF
D2K	KEYED DIGITAL 2 BUTTON SWITCH: ON, OFF
D4A	DIGITAL 4 BUTTON SWITCH: ON, OFF, SCENE 1, SCENE 2
D4B	DIGITAL 4 BUTTON SWITCH: ON, OFF, UP, DOWN
D4K	KEYED DIGITAL 4 BUTTON SWITCH: ON, OFF, UP, DOWN
D6	DIGITAL 6 BUTTON SWITCH: ON, OFF, UP, DN, SCENE 1, SCENE 2
DT1	DIGITAL TOUCH SCREEN CONTROLLER
OS	WALL-MOUNTED LOW VOLTAGE SWITCH WITH INTEGRAL OCCUPANCY SENSOR
OS2	WALL-MOUNTED LOW VOLTAGE SWITCH WITH INTEGRAL OCCUPANCY SENSOR AND DIMMING
S1	LINE VOLTAGE SWITCH
SK	LINE VOLTAGE KEYED SWITCH
T1	TIMER SWITCH



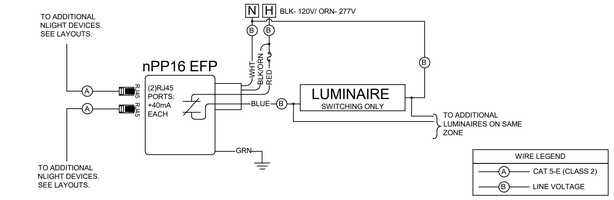
3 LIGHTING CONTROL PANEL
N.T.S.



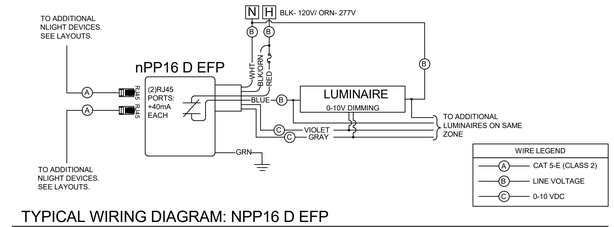
1 SOUTH STAIRWELL LIGHTING
1/4" = 1'-0"



2 NORTH STAIRWELL LIGHTING
1/4" = 1'-0"



TYPICAL WIRING DIAGRAM: NPP16 EFP
N.T.S.



TYPICAL WIRING DIAGRAM: NPP16 D EFP
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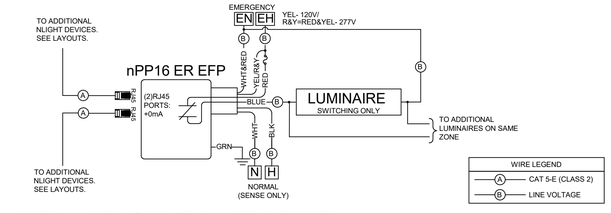

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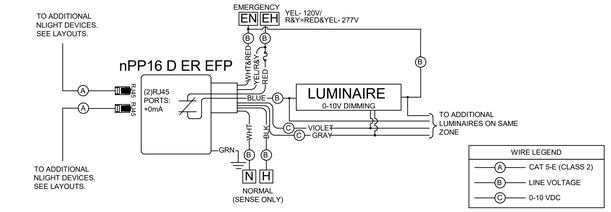

TYPICAL WIRING DIAGRAM: NPP16 D ER EFP
N.T.S.

4 LIGHTING CONTROL DETAILS
N.T.S.

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LIGHTING - GENERAL

E2.00

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B. CONNECT ALL EXIT SIGNS AHEAD OF ALL SWITCHING IN SPACES SERVED.

C. ALL EXTERIOR LIGHTING SHALL HAVE THE SAME COLOR TEMPERATURE.

D. OCCUPANCY SENSORS SHALL BE DUAL TECHNOLOGY AND BE COMPATIBLE WITH ROOM LOW-VOLTAGE DIMMING OR ON/OFF SWITCHING AS INDICATED.

E. PROVIDE POWER PACKS AND ADDITIONAL COMPONENTS AS NEEDED, WHETHER OR NOT SHOWN ON PLANS, TO PROVIDE A FULLY FUNCTIONING CONTROL SYSTEM COMPLIANT WITH INTERNATIONAL ENERGY CONSERVATION CODE (IECC). COORDINATE ABOVE CEILING ACCESS TO INSTALLED COMPONENTS WITH ARCHITECT PRIOR TO ROUGH-IN. IF FIXTURES ARE INSTALLED IN HARD CEILINGS, LOCATE DEVICES, E.G. POWER PACKS, ETC., ABOVE ADJACENT SPACES WITH CEILING GRID OR OPEN TO STRUCTURE EQUIPMENT SPACES FOR ACCESS.

F. FINISH COLORS OF LIGHTING FIXTURES SHALL BE CONFIRMED WITH OWNER AND ARCHITECT PRIOR TO SUBMITTAL OF PRODUCT DATA FOR REVIEW BY ENGINEER.

G. OCCUPANCY AND DAYLIGHT SENSOR LAYOUT SHOWN IS APPROXIMATE. ADJUST LOCATIONS AND QUANTITIES IN FIELD AS NECESSARY TO PROVIDE FULL ROOM COVERAGE IN ACCORDANCE WITH MANUFACTURER'S DOCUMENTATION.

H. PROVIDE LOW-VOLTAGE SWITCHES CAPABLE OF MULTI-UNIT COMMUNICATION WITH POWER PACKS, OCCUPANCY SENSORS AND/OR LIGHT FIXTURES AS REQUIRED IN SPACES THAT REQUIRE MULTIPLE SWITCH LOCATIONS (SUCH AS 3-WAY AND 4-WAY APPLICATIONS).

I. CONTRACTOR SHALL CLOSELY COORDINATE ARCHITECTURAL REFLECTED CEILING PLANS AND CEILING TYPE SPECIFICATIONS WITH RESPECTIVE LIGHTING FIXTURE FOR EACH ROOM PRIOR TO ORDERING TO ASSURE PROPER INSTALLATION. CONFLICTS PERTAINING TO THE INSTALLATION REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER OF RECORD.

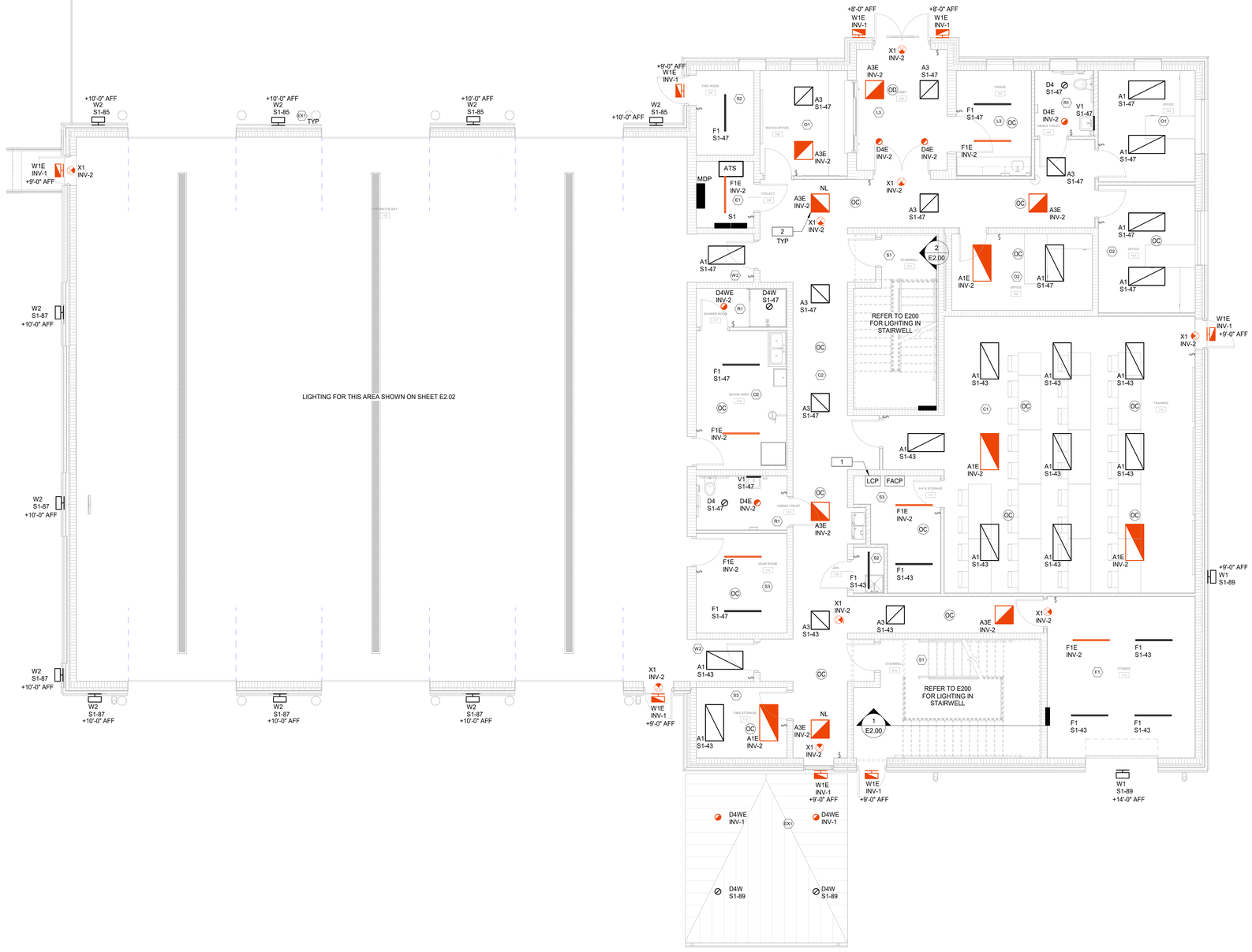
J. FOR ANY LIGHTING FIXTURE THAT REQUIRES REMOTE POWER SUPPLIES AND/OR CONTROLLERS, COORDINATE LOCATION OF THOSE SO THEY ARE NOT VISIBLE IN FINISHED SPACES.

K. UNLESS OTHERWISE NOTED, LIGHT FIXTURES DESIGNATED AS EMERGENCY THAT DO NOT CONTAIN INTEGRAL EMERGENCY BATTERIES SHALL BE CONTROLLED TO OPERATE (ON, OFF, DIM) WITH OTHER FIXTURES IN THE SAME GROUP, ROOM, OR AREA. SUCH FIXTURES SHALL EMPLOY AN EMERGENCY POWER PACK OR EMERGENCY SHUNT DEVICE WHICH CONNECTS THE FIXTURE TO ITS ALTERNATE POWER SUPPLY IN THE EVENT OF UTILITY POWER LOSS. EXTEND UNSWITCHED "NORMAL" UTILITY CIRCUIT TO THE POWER PACK OR SHUNT DEVICE FOR DETECTION OF UTILITY POWER LOSS.

LIGHTING KEYED NOTES:

1. LIGHTING CONTROL PANEL SHALL BE EQUIPPED WITH 24 RELAYS. RELAYS SHALL BE 120V RATED 20A. CONTROL PANEL SHALL BE EQUIPPED WITH ASTRONOMICAL TIME CLOCK, PHOTOCELL, 7 DAY +HOLIDAY SCHEDULING, 0-10V DIMMING AND SHALL BE EQUIPPED WITH NETWORK PORT AND INPUT FOR FIRE ALARM OVERRIDE.

2. FIXTURES INDICATED AS NIGHTLIGHTS SHALL BE CONTROLLED ALONG WITH OTHER FIXTURES IN THEIR GROUP DURING NORMAL BUSINESS HOURS. AFTER HOURS, FIXTURES DESIGNATED AS NIGHTLIGHTS SHALL ILLUMINATE TO 50%.



1 FIRST FLOOR LIGHTING PLAN
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LIGHTING PLAN - FIRST FLOOR

E2.01

1/9/2026 7:47:52 AM TEMPLATE VERSION: 2025.1

ROCKET MEP LLC
MECHANICAL - ELECTRICAL - PLUMBING ENGINEERS
256-203-4373 | 1300 MERIDIAN ST, SUITE 302, HUNTSVILLE, AL 35801
INFO@ROCKETMEP.COM | AL CERT OF AUTH: ECA50597

1 SECOND FLOOR LIGHTING PLAN
3/16" = 1'-0"

LIGHTING GENERAL NOTES:

A. BRANCH CIRCUITS SHALL HAVE DEDICATED NEUTRAL CONDUCTORS. UP TO THREE BRANCH CIRCUITS RATED NOT MORE THAN 30A, AND OF DIFFERENT PHASES, MAY BE INSTALLED IN A SINGLE CONDUIT, BUT CONDUCTOR AMPACITIES MUST BE DERATED IN ACCORDANCE WITH NEC 315.15 (B) (3).

B. CONNECT ALL EXIT SIGNS AHEAD OF ALL SWITCHING IN SPACES SERVED.

C. ALL EXTERIOR LIGHTING SHALL HAVE THE SAME COLOR TEMPERATURE.

D. OCCUPANCY SENSORS SHALL BE DUAL TECHNOLOGY AND BE COMPATIBLE WITH ROOM LOW-VOLTAGE DIMMING OR ON/OFF SWITCHING AS INDICATED.

E. PROVIDE POWER PACKS AND ADDITIONAL COMPONENTS AS NEEDED, WHETHER OR NOT SHOWN ON PLANS, TO PROVIDE A FULLY FUNCTIONING CONTROL SYSTEM COMPLIANT WITH INTERNATIONAL ENERGY CONSERVATION CODE (IECC). COORDINATE ABOVE CEILING ACCESS TO INSTALLED COMPONENTS WITH ARCHITECT PRIOR TO ROUGH-IN. IF FIXTURES ARE INSTALLED IN HARD CEILINGS, LOCATE DEVICES, E.G. POWER PACKS, ETC., ABOVE ADJACENT SPACES WITH CEILING GRID OR OPEN TO STRUCTURE EQUIPMENT SPACES FOR ACCESS.

F. FINISH COLORS OF LIGHTING FIXTURES SHALL BE CONFIRMED WITH OWNER AND ARCHITECT PRIOR TO SUBMITTAL OF PRODUCT DATA FOR REVIEW BY ENGINEER.

G. OCCUPANCY AND DAYLIGHT SENSOR LAYOUT SHOWN IS APPROXIMATE. ADJUST LOCATIONS AND QUANTITIES IN FIELD AS NECESSARY TO PROVIDE FULL ROOM COVERAGE IN ACCORDANCE WITH MANUFACTURER'S DOCUMENTATION.

H. PROVIDE LOW-VOLTAGE SWITCHES CAPABLE OF MULTI-UNIT COMMUNICATION WITH POWER PACKS, OCCUPANCY SENSORS AND/OR LIGHT FIXTURES AS REQUIRED IN SPACES THAT REQUIRE MULTIPLE SWITCH LOCATIONS (SUCH AS 3-WAY AND 4-WAY APPLICATIONS).

I. CONTRACTOR SHALL CLOSELY COORDINATE ARCHITECTURAL REFLECTED CEILING PLANS AND CEILING TYPE SPECIFICATIONS WITH RESPECTIVE LIGHTING FIXTURE FOR EACH ROOM PRIOR TO ORDERING TO ASSURE PROPER INSTALLATION. CONFLICTS PERTAINING TO THE INSTALLATION REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER OF RECORD.

J. FOR ANY LIGHTING FIXTURE THAT REQUIRES REMOTE POWER SUPPLIES AND/OR CONTROLLERS, COORDINATE LOCATION OF THOSE SO THEY ARE NOT VISIBLE IN FINISHED SPACES.

K. UNLESS OTHERWISE NOTED, LIGHT FIXTURES DESIGNATED AS EMERGENCY THAT DO NOT CONTAIN INTEGRAL EMERGENCY BATTERIES SHALL BE CONTROLLED TO OPERATE (ON, OFF, DIM) WITH OTHER FIXTURES IN THE SAME GROUP, ROOM, OR AREA. SUCH FIXTURES SHALL EMPLOY AN EMERGENCY POWER PACK OR EMERGENCY SHUNT DEVICE WHICH CONNECTS THE FIXTURE TO ITS ALTERNATE POWER SUPPLY IN THE EVENT OF UTILITY POWER LOSS. EXTEND UNSWITCHED "NORMAL" UTILITY CIRCUIT TO THE POWER PACK OR SHUNT DEVICE FOR DETECTION OF UTILITY POWER LOSS.

L. UNLESS OTHERWISE NOTED, LIGHT FIXTURES DESIGNATED AS EMERGENCY THAT CONTAIN INTEGRAL EMERGENCY BATTERIES SHALL BE CONTROLLED TO OPERATE (ON, OFF, DIM) WITH OTHER FIXTURES IN THE SAME GROUP, ROOM, OR AREA. SUCH FIXTURES SHALL EMPLOY AN INTEGRAL EMERGENCY BATTERY UNIT AND EMERGENCY SHUNT DEVICE WHICH CONNECTS THE FIXTURE TO ITS ALTERNATE POWER SUPPLY IN THE EVENT OF UTILITY POWER LOSS. EXTEND UNSWITCHED "NORMAL" UTILITY CIRCUIT TO THE FIXTURE FOR DETECTION OF UTILITY POWER LOSS.

LIGHTING KEYED NOTES:

1. MANUAL DIAL SWITCH FOR SHOWERS, 60 MINUTE TIMER.
2. FIXTURES INDICATED AS NIGHTLIGHTS SHALL BE CONTROLLED ALONG WITH OTHER FIXTURES IN THEIR GROUP DURING NORMAL BUSINESS HOURS. AFTER HOURS, FIXTURES DESIGNATED AS NIGHTLIGHTS SHALL ILLUMINATE TO 50%.

NORTH

0 4' 8' 12' 16'
3/16" = 1'-0"

GMC
Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

ISSUE	DATE
CONSTRUCTION DOCUMENTS	01/09/2026

DRAWN BY: REA
CHECKED BY: JTD

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA 01/09/2026 ENGINEER JOHN DANIELSON III

LIGHTING PLAN - SECOND FLOOR

E2.02

1/9/2026 7:47:56 AM TEMPLATE VERSION: 2025.1

ROCKET MEP LLC
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AL CERT OF AUTH: ECA50597

SYSTEMS GENERAL NOTES:

A. FIRE ALARM DEVICES, LIGHT SWITCHES, DOOR CONTROLS, AND OTHER DEVICES THAT OCCUPANTS WILL INTERACT WITH SHALL COMPLY WITH THE ARCHITECTURAL BARRIERS ACT.

B. FOR DOORS WITH ACCESS CONTROL FEATURES INDICATED: INSTALL BACKBOX AT 46" FOR CARD READER AND 1" CONDUIT TO BOX ABOVE CEILING. INSTALL 1/2" OR LARGER CONDUIT FROM STRIKE BOX TO ABOVE CEILING BOX - COORDINATE IN-FRAME BOX AND CONDUIT REQUIREMENTS WITH APPROVED DOOR PACKAGE AND ACCESS CONTROL VENDOR.

C. EXTERIOR CAMERAS: PROVIDE BACK-BOX AND 1" CONDUIT TO INTERIOR ABOVE-CEILING SPACE. INSTALL PULL STRING AND GASKETED BLANK COVER. SEAL CONDUITS WITH A REMOVABLE, MOISTURE-RESISTANT PLUG OR SIMILAR.

D. FIRE ALARM CIRCUITS CONCEALED IN WALLS, INACCESSIBLE CEILINGS, OR EXPOSED SHALL BE INSTALLED IN EMT. OPEN WIRING PERMITTED ONLY ABOVE DROP CEILINGS, SUPPORTED AS INDICATED IN PROJECT DOCUMENTS.

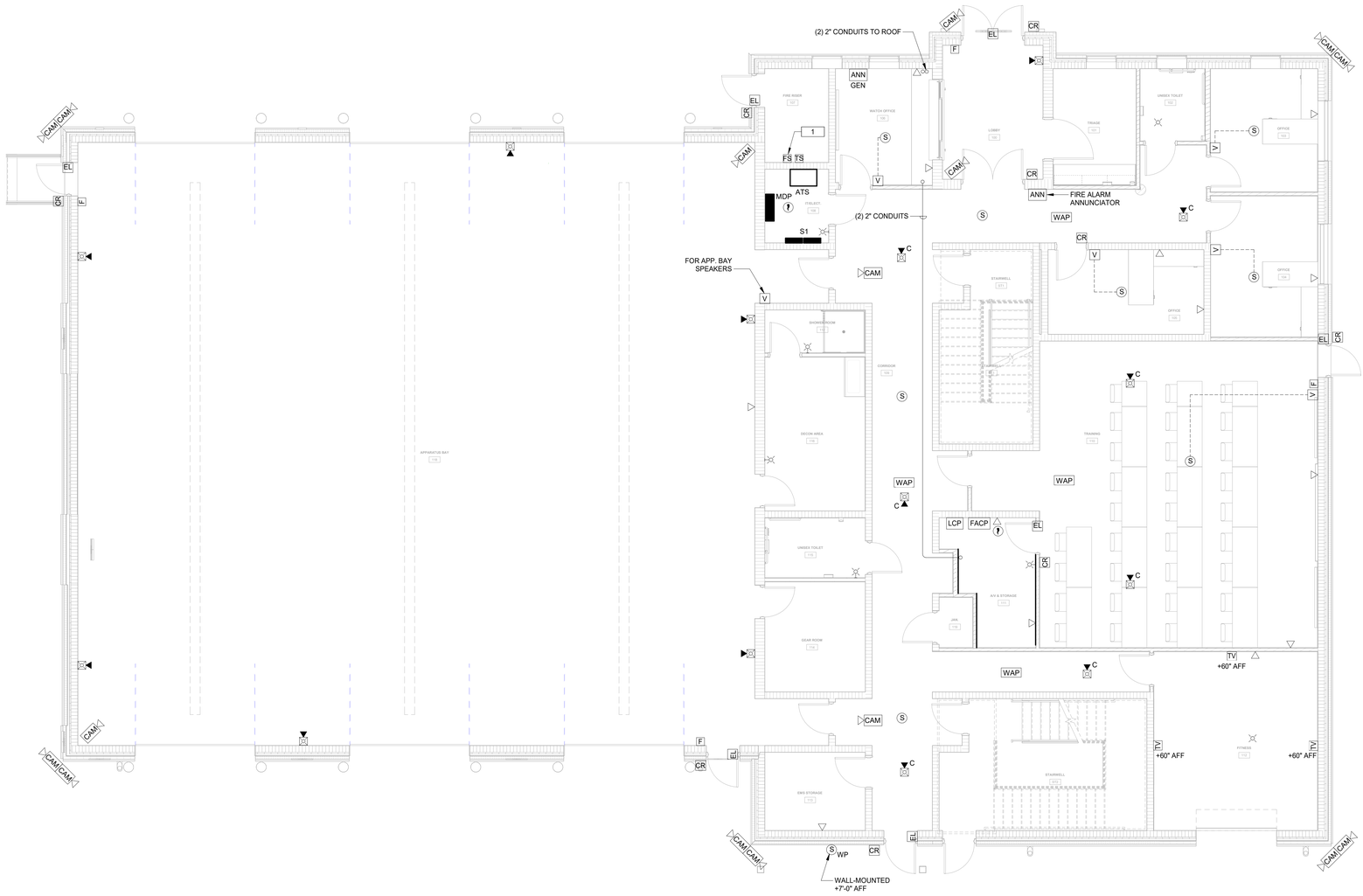
E. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS OF TELEVISIONS, DISPLAYS, SMART BOARDS, ETC. COORDINATE HEIGHT OF IN-WALL TV BOXES SO THAT BOX AND CABLING WILL BE HIDDEN AFTER FINAL INSTALLATION.

F. ALL EXPOSED CABLING ABOVE CEILING SHALL BE PLENUM RATED.

G. HORN STROBES IN THE BUNK ROOMS SHALL BE LOW FREQUENCY.

SYSTEMS KEYED NOTES:

1. COORDINATE QUANTITY OF FLOW AND TAMPER SWITCHES WITH FINAL FIRE PROTECTION DESIGN.



1 FIRST FLOOR SYSTEMS PLAN
3/16" = 1'-0"

NORTH

0 4' 8' 12' 16'
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GMC # AHUN250003

ALABAMA
ENGINEER
JOHN DAWLSON JR

SYSTEMS PLAN - FIRST FLOOR

E3.01

1/9/2026 7:47:58 AM TEMPLATE VERSION: 2025.1

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1 SECOND FLOOR SYSTEMS PLAN
3/16" = 1'-0"

SYSTEMS GENERAL NOTES:

A. FIRE ALARM DEVICES, LIGHT SWITCHES, DOOR CONTROLS, AND OTHER DEVICES THAT OCCUPANTS WILL INTERACT WITH SHALL COMPLY WITH THE ARCHITECTURAL BARRIERS ACT.

B. FOR DOORS WITH ACCESS CONTROL FEATURES INDICATED: INSTALL BACKBOX AT 46" FOR CARD READER AND 1" CONDUIT TO BOX ABOVE CEILING. INSTALL 1/2" OR LARGER CONDUIT FROM STRIKE BOX TO ABOVE CEILING BOX - COORDINATE IN-FRAME BOX AND CONDUIT REQUIREMENTS WITH APPROVED DOOR PACKAGE AND ACCESS CONTROL VENDOR.

C. EXTERIOR CAMERAS: PROVIDE BACK-BOX AND 1" CONDUIT TO INTERIOR ABOVE-CEILING SPACE. INSTALL PULL STRING AND GASKETED BLANK COVER. SEAL CONDUITS WITH A REMOVABLE, MOISTURE-RESISTANT PLUG OR SIMILAR.

D. FIRE ALARM CIRCUITS CONCEALED IN WALLS, INACCESSIBLE CEILINGS, OR EXPOSED SHALL BE INSTALLED IN EMT. OPEN WIRING PERMITTED ONLY ABOVE DROP CEILINGS, SUPPORTED AS INDICATED IN PROJECT DOCUMENTS.

E. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS OF TELEVISIONS, DISPLAYS, SMART BOARDS, ETC. COORDINATE HEIGHT OF IN-WALL TV BOXES SO THAT BOX AND CABLING WILL BE HIDDEN AFTER FINAL INSTALLATION.

F. ALL EXPOSED CABLING ABOVE CEILING SHALL BE PLENUM RATED.

G. HORN STROBES IN THE BUNK ROOMS SHALL BE LOW FREQUENCY.

SYSTEMS KEYED NOTES:

1. INSTALL HOOD FIRE-SUPPRESSION INTERFACE RELAY SHOWN . RELAY TO RECEIVE SIGNAL FROM FIRE EXTINGUISHING SYSTEM AND TRIP SHUNT-TRIP BREAKER FEEDING HOOD/UNDER-HOOD EQUIPMENT. PROVIDE ALL CONTROL WIRING AND COORDINATE WITH FIRE-EXTINGUISHING SYSTEM SHOP DRAWINGS.
2. COORDINATE LOCATION WITH GAS SHUT-OFF WITH PLUMBING. PROVIDE LINE-VOLTAGE CIRCUIT TO SOLENOID IF REQUIRED - COORDINATE WITH SHOP DRAWINGS.
3. PROVIDE LARGE RADIUS (MIN. 24") ELBOWS FOR ANTENNA CABLING. INSTALL PULL BOXES ABOVE CEILING AS NEEDED (NOT SHOWN) TO LIMIT TOTAL BENDS TO 270 DEGREES.

NORTH
0 4' 8' 12' 16'
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ALABAMA
01/09/2026
ENGINEER
JOHN DANIELSON JR.

SYSTEMS PLAN - SECOND FLOOR

E3.02

1/9/2026 7:48:00 AM TEMPLATE VERSION: 2025.1

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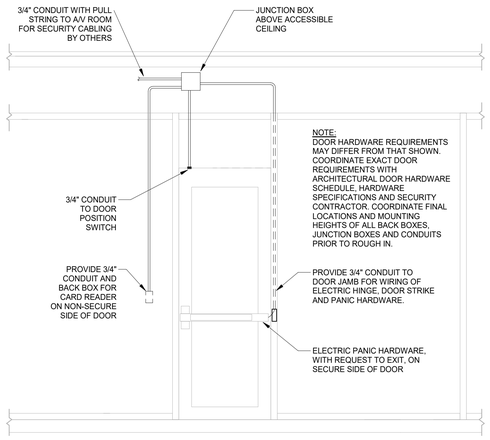
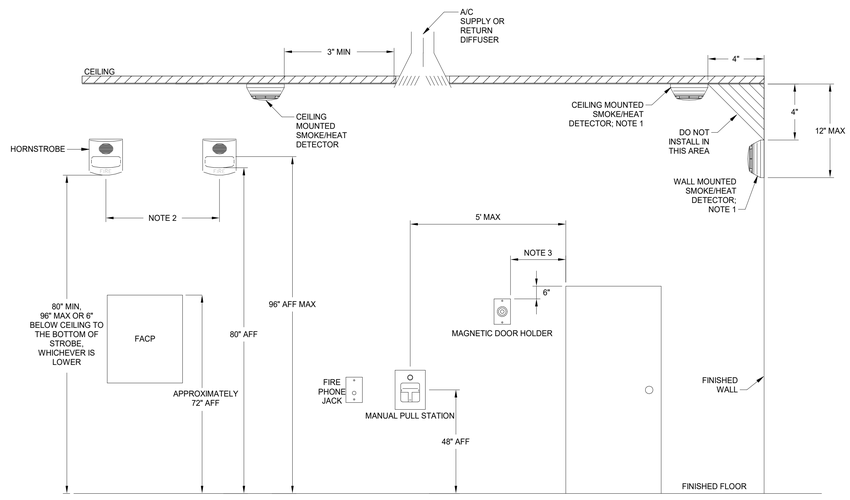


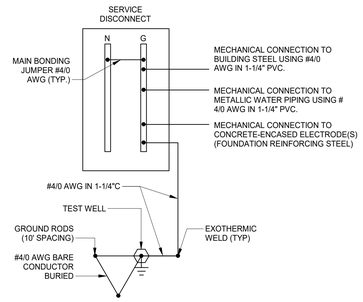
1 SECURITY DOOR ROUGH-IN DETAIL
N.T.S.



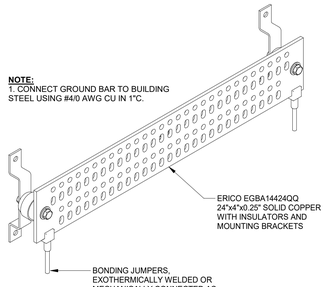
DEVICE MOUNTING HEIGHTS (PER NFPA 72)

NOTES:
1. REFER TO THE PROPER DEVICE INSTALLATION INSTRUCTIONS FOR BACKBOX MOUNTING HEIGHT. NO WIRING DEVICES OR OUTLET BOXES SHALL BE MOUNTED BACK TO BACK.
2. SYNCHRONIZE MORE THAN 2 APPLIANCES IN ANY FIELD OF VIEW.
3. MAGNETIC DOOR HOLDER - POSITION 3" LESS THAN WIDTH OF DOOR.

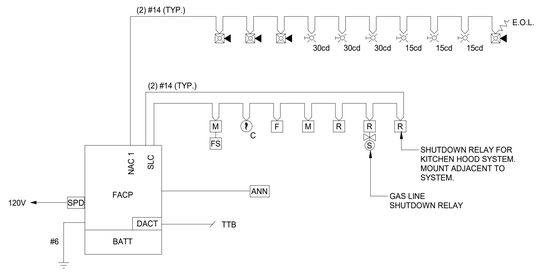
2 FIRE ALARM DEVICE MOUNTING HEIGHTS
N.T.S.



3 SERVICE GROUNDING DETAIL
N.T.S.



4 GROUND BAR DETAIL
N.T.S.

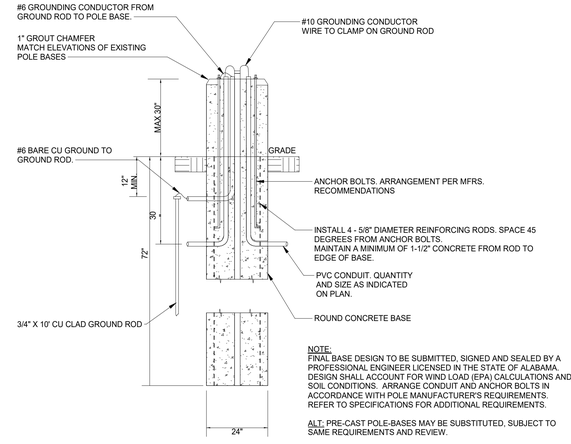


NOTES:
A. DIAGRAM IS REPRESENTATIVE OF SYSTEM OF SIMILAR TYPE AND SCALE, BUT IS NOT INTENDED TO REPRESENT THE ACTUAL DEVICE TYPES OR QUANTITIES NECESSARY. THE ACTUAL DEVICE TYPES, QUANTITIES, AND CIRCUIT ARRANGEMENT SHALL BE INDICATED IN SYSTEM SHOP DRAWINGS.
B. FACP TO BE SUPPLIED BY DEDICATED CIRCUIT WITH SURGE PROTECTION.
C. PROVIDE CABLING TO ANNUNCIATOR IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. LINE VOLTAGE POWER SUPPLY CIRCUIT(S), IF REQUIRED, SHALL NOT BE INSTALLED IN SAME CONDUITS WITH SIGNALING AND COMMUNICATION CIRCUITS.
D. TYPICAL, NOMINAL DEVICE CIRCUITING SHOWN. ACTUAL DEVICE CIRCUIT ARRANGEMENT SHALL BE INDICATED IN SHOP DRAWINGS BASED ON LAYOUTS SHOWN ON FLOOR PLANS AND VOLTAGE DROP CALCULATIONS.
E. AREAS CONTAINING MORE THAN TWO VISUAL NOTIFICATION APPLIANCES SHALL HAVE STROBES SYNCHRONIZED.
F. COORDINATE WIRING BETWEEN DACT AND TELEPHONE/COMMUNICATION SYSTEM WITH OWNER.

5 FIRE ALARM RISER
N.T.S.

	SYSTEM INPUTS	SYSTEM OUTPUTS																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
		ACTIVATE FIRE ALARM SIGNAL LED	ACTIVATE FIRE ALARM SIGNAL	ACTIVATE SUPERVISORY LED	ACTIVATE SUPERVISORY SIGNAL	ACTIVATE TROUBLE LED	ACTIVATE AUDIBLE TROUBLE SIGNAL	TRANSMIT ALS EVACUATION SIGNALS	TRANSMIT FIRE ALARM SIGNAL TO SUPERVISING STATION	TRANSMIT SUPERVISORY SIGNAL TO SUPERVISING STATION	TRANSMIT TROUBLE SIGNAL TO SUPERVISING STATION	ELEVATOR PRIMARY RECALL	ELEVATOR SECONDARY RECALL	LIGHTING CONTROL SYSTEM	SHUNT TRIP BREAKERS SUPPLYING EQUIPMENT UNDER HOOD	CLOSE GAS VALVE SUPPLYING KITCHEN	SHUNT TRIP BREAKERS SUPPLYING HOOD MAKE-UP AIR
1	MANUAL PULL STATIONS	X	X					X	X									
2	HEAT/SMOKE DETECTORS	X	X					X	X									
3	DUCT SMOKE DETECTORS			X	X					X								
4	WATERFLOW INDICATOR (FLOW SWITCH)	X	X					X	X									
5	SPRINKLER CONTROL VALVE (TAMPER SWITCH)			X	X					X								
6	ELEVATOR LOBBY SMOKE DETECTOR - FIRST FLOOR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7	ELEVATOR LOBBY SMOKE DETECTOR - ALTERNATE FLOORS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	ELEVATOR SHAFT HEAT/SMOKE DETECTOR - ALTERNATE FLOORS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	FIRE ALARM AC POWER FAILURE					X	X				X							
10	SLC OR NAC CIRCUIT FAULT					X	X				X							
11	FIRE PUMP SIGNAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	KITCHEN HOOD SIGNAL	X	X	-	-	-	-	-	-	-	-	-	-	-	X	X	X	
13	CARBON MONOXIDE DETECTOR																	
14	----------																	
15	----------																	

LEGEND:
"X" = INPUT/OUTPUT FUNCTION
"-" = INPUT NOT APPLICABLE



NOTE:
FINAL BASE DESIGN TO BE SUBMITTED, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF ALABAMA. DESIGN SHALL ACCOUNT FOR WIND LOAD (EPA) CALCULATIONS AND SOIL CONDITIONS. ARRANGE CONDUIT AND ANCHOR BOLTS IN ACCORDANCE WITH POLE MANUFACTURER'S REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

ALT: PRE-CAST POLE-BASES MAY BE SUBSTITUTED, SUBJECT TO SAME REQUIREMENTS AND REVIEW.

6 POLE BASE REFERENCE DETAIL
N.T.S.

GMC

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ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA
01/09/2026
ENGINEER
JOHN DANIELSON, JR.

ELECTRICAL DETAILS

E5.00

TEMPLATE VERSION: 2025.1
1/9/2026 7:48:02 AM

3-WIRE FEEDER SCHEDULE (MIN. SIZES INDICATED)		
TAG	**3-WIRE CU FEEDERS**	**3-WIRE AL FEEDERS**
50.3	(3) #8, #10 GND; 3/4"C	-- USE CU FEEDERS --
60.3	(3) #6, #10 GND; 3/4"C	-- USE CU FEEDERS --
70.3	(3) #4, #8 GND; 1"C	-- USE CU FEEDERS --
80.3	(3) #4, #8 GND; 1"C	-- USE CU FEEDERS --
90.3	(3) #3, #8 GND; 1"C	-- USE CU FEEDERS --
100.3	(3) #3, #8 GND; 1"C	(3) #1, #6 GND; 1-1/4"C
110.3	(3) #2, #6 GND; 1-1/4"C	(3) #1/0, #4 GND; 1-1/2"C
125.3	(3) #1, #6 GND; 1-1/4"C	(3) #2/0, #4 GND; 1-1/2"C
150.3	(3) #1/0, #6 GND; 1-1/2"C	(3) #3/0, #4 GND; 2"C
175.3	(3) #2/0, #6 GND; 1-1/2"C	(3) #4/0, #4 GND; 2"C
200.3	(3) #3/0, #4 GND; 2"C	(3) #250, #4 GND; 2-1/2"C
225.3	(3) #4/0, #4 GND; 2"C	(3) #300, #2 GND; 2-1/2"C
250.3	(3) #250 KCMIL, #4 GND; 2-1/2"C	(3) #350, #2 GND; 2-1/2"C
300.3	(3) #350 KCMIL, #4 GND; 2-1/2"C	(3) #500, #2 GND; 3"C
350.3	(3) #400 KCMIL, #3 GND; 3"C	(3) #750, #1 GND; 3-1/2"C
400.3	(3) #500 KCMIL, #3 GND; 3"C	(2) SETS: (3) #250 KCMIL, #1 GND; 2-1/2"C

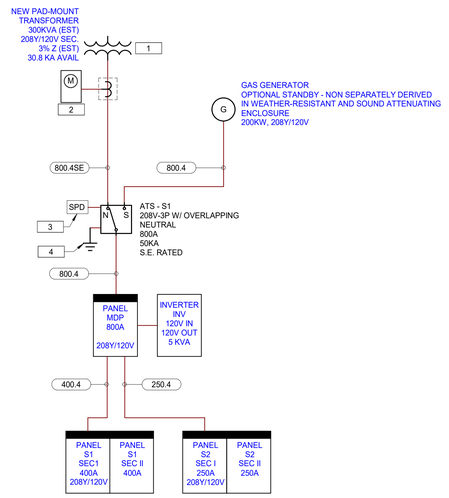
4-WIRE FEEDER SCHEDULE (MIN. SIZES INDICATED)		
TAG	**4-WIRE CU FEEDERS**	**4-WIRE AL FEEDERS**
50.4	(4) #8, #10 GND; 3/4"C	-- USE CU FEEDERS --
60.4	(4) #6, #10 GND; 1"C	-- USE CU FEEDERS --
70.4	(4) #4, #8 GND; 1-1/4"C	-- USE CU FEEDERS --
80.4	(4) #4, #8 GND; 1-1/4"C	-- USE CU FEEDERS --
90.4	(4) #3, #8 GND; 1-1/4"C	-- USE CU FEEDERS --
100.4	(4) #3, #8 GND; 1-1/4"C	(4) #1, #6 GND, 1-1/2"C
110.4	(4) #2, #6 GND; 1-1/4"C	(4) #1/0, #4 GND; 1-1/2"C
125.4	(4) #1, #6 GND; 1-1/2"C	(4) #2/0, #4 GND; 2"C
150.4	(4) #1/0, #6 GND; 1-1/2"C	(4) #3/0, #4 GND; 2"C
175.4	(4) #2/0, #6 GND; 2"C	(4) #4/0, #4 GND; 2-1/2"C
200.4	(4) #3/0, #4 GND; 2"C	(4) 250 KCMIL, #4 GND; 2-1/2"C
225.4	(4) #4/0, #4 GND; 2-1/2"C	(4) 300 KCMIL, #2 GND; 3"C
250.4	(4) 250 KCMIL, #4 GND; 2-1/2"C	(4) 350 KCMIL, #2 GND; 3"C
300.4	(4) 350 KCMIL, #4 GND; 3"C	(4) 500 KCMIL, #2 GND; 3"C
350.4	(4) 400 KCMIL, #3 GND; 3"C	(4) 700 KCMIL, #1 GND; 4"C
400.4	(4) 500 KCMIL, #3 GND; 3"C	2 SETS: (4) 250 KCMIL, #1 GND; 2-1/2"C
500.4	2 SETS: (4) 250 KCMIL, #2 GND; 2-1/2"C	2 SETS: (4) 350 KCMIL, #1/0 GND; 3"C
600.4	2 SETS: (4) 350 KCMIL, #1 GND; 3"C	2 SETS: (4) 500 KCMIL, #2/0 GND; 3-1/2"C
800.4	2 SETS: (4) 600 KCMIL, #1/0 GND; 3-1/2"C	3 SETS: (4) 400 KCMIL, #3/0 GND; 3"C
900.4	2 SETS: (4) 750 KCMIL, #2/0 GND; 4"C	3 SETS: (4) 500 KCMIL, #4/0 GND; 3-1/2"C
1000.4	3 SETS: (4) 400 KCMIL, #2/0 GND; 3"C	3 SETS: (4) 600 KCMIL, #4/0 GND; 3-1/2"C
1200.4	3 SETS: (4) 600 KCMIL, #3/0 GND; 3-1/2"C	4 SETS: (4) 500 KCMIL, 250 KCMIL GND; 3-1/2"C
1600.4	4 SETS: (4) 600 KCMIL, #4/0 GND; 3-1/2"C	5 SETS: (4) 600 KCMIL, 350 KCMIL GND; 4"C
2000.4	5 SETS: (4) 600 KCMIL, 250 KCMIL GND; 4"C	-- USE CU FEEDERS --
2500.4	6 SETS: (4) 600 KCMIL, 350 KCMIL GND; 4"C	-- USE CU FEEDERS --
3000.4	7 SETS: (4) 750 KCMIL, 400 KCMIL GND; 4"C	-- USE CU FEEDERS --
3200.4	7 SETS: (4) 750 KCMIL, 500 KCMIL GND; 4"C	-- USE CU FEEDERS --
4000.4	9 SETS: (4) 750 KCMIL, 500 KCMIL GND; 4"C	-- USE CU FEEDERS --

SERVICE ENTRANCE CONDUCTORS (MIN. SIZES INDICATED)		
TAG	**3- AND 4-WIRE CU SERVICES**	**3- AND 4-WIRE AL SERVICES**
200.3SE	(3) #3/0; 2"C	(3) 250 KCMIL; 2"C
200.4SE	(4) #3/0; 2"C	(4) 250 KCMIL; 2-1/2"C
250.3SE	(3) 250 KCMIL; 2-1/2"C	--
300.3SE	(3) 350 KCMIL; 2-1/2"C	(3) 500 KCMIL; 3"C
300.4SE	(4) 350 KCMIL; 3"C	(4) 500 KCMIL; 3"C
400.3SE	(3) 500 KCMIL; 3"C	2 SETS: (3) 250 KCMIL; 2"C
400.4SE	(4) 500 KCMIL; 3"C	2 SETS: (4) 250 KCMIL; 2-1/2"C
600.4SE	2 SETS: (4) 350 KCMIL; 3"C	2 SETS: (4) 500 KCMIL; 3"C
800.4SE	2 SETS: (4) 600 KCMIL; 3-1/2"C	3 SETS: (4) 400 KCMIL; 3"C
1000.4SE	3 SETS: (4) 400 KCMIL; 3"C	3 SETS: (4) 500 KCMIL; 3"C
1200.4SE	3 SETS: (4) 600 KCMIL; 3-1/2"C	4 SETS: (4) 500 KCMIL; 3"C
1600.4SE	4 SETS: (4) 600 KCMIL; 3-1/2"C	5 SETS: (4) 600 KCMIL; 3-1/2"C
2000.4SE	5 SETS: (4) 600 KCMIL; 4"C	-- USE CU FEEDERS --
2500.4SE	6 SETS: (4) 600 KCMIL; 4"C	-- USE CU FEEDERS --
3000.4SE	7 SETS: (4) 750 KCMIL; 4"C	-- USE CU FEEDERS --
3200.4SE	7 SETS: (4) 750 KCMIL; 4"C	-- USE CU FEEDERS --
4000.4SE	9 SETS: (4) 750 KCMIL; 4"C	-- USE CU FEEDERS --

SEPARATELY DERIVED FEEDERS (MIN. SIZES INDICATED)		
TAG	**CU FEEDERS**	**AL FEEDERS**
100.4S	(4) #2, #8 GND; 1-1/4"C	(4) #1, #6 GND; 1-1/2"C
150.4S	(4) #1/0, #6 GND; 1-1/2"C	(4) #3/0, #4 GND; 2"C
250.4S	(4) 250 KCMIL, #2 GND; 2-1/2"C	(4) 350 KCMIL, #1/0 GND; 3"C
400.4S	(4) 600 KCMIL, #1/0 GND; 3-1/2	2 SETS: (4) 250 KCMIL, #1/0 GND; 2-1/2"C
500.4S	2 SETS: (4) 250 KCMIL, #1/0 GND; 2-1/2"C	2 SETS: (4) 350 KCMIL, #3/0 GND; 3"C
800.4S	2 SETS: (4) 600 KCMIL, #3/0 GND; 3-1/2"C	3 SETS: (4) 400 KCMIL, #4/0 GND; 3"C

OVERSIZED/SPECIALTY FEEDERS (MIN. SIZES INDICATED)		
TAG	**CU FEEDERS**	**AL FEEDERS**
100.4X	(4) #1; #6 GND; 1-1/2"C	-
150.4X	(4) #2/0, #4 GND; 2"C	-
250.3X	(3) 250 KCMIL, #2 GND; 2-1/2"C	-
250.4X	(4) 350 KCMIL, #1 GND; 3"C	-
400.4X	(4) 600 KCMIL, #1/0 GND, 3-1/2	-
500.4X	2 SETS: (4) 350 KCMIL, #2/0 GND; 3"C	-
800.4X	2 SETS: (4) 600 KCMIL, #3/0 GND; 3-1/2"C	

NOTES:
1. TABLES ASSUME EQUIPMENT IS MARKED FOR 75C. IF UNMARKED, COMPLY WITH NEC 110.14.
2. TABLES ASSUME TYPICAL FIELD INSTALLATION SITUATIONS, USING EMT, RMC, OR SCH. 40 PVC. TABLES DO NOT ACCOUNT FOR UNUSUAL AND MORE RESTRICTIVE CONDUITS, SOLAR HEATING OR OTHER HIGH AMBIENT TEMPERATURES, DUCTBANK HEATING, OR OTHER CONDITIONS THAT MAY REQUIRE DERATING CONDUCTOR AMPACITY.
3. SEPARATELY DERIVED FEEDERS ARE ASSUMED TO ORIGINATE IN TRANSFORMERS. TAP CONDUCTORS AND SECONDARIES: COMPLY WITH NEC 240.21.



1 ONE LINE DIAGRAM
N.T.S.

ONE LINE DIAGRAM GENERAL NOTES:

A. ALL CONDUCTORS INDICATED ARE COPPER UNLESS OTHERWISE NOTED.

B. INCREASE SIZE OF FEEDER CONDUCTORS, AND ASSOCIATED CONDUITS, AS REQUIRED TO LIMIT VOLTAGE DROP TO 2%. CONTRACTOR MAY OPT TO USE ALUMINUM CONDUCTORS FOR FEEDERS GREATER THAN 100A. CONTRACTOR IS RESPONSIBLE FOR RESIZING ALL RESPECTIVE CONDUIT, BOXES, ETC. FOR A CODE COMPLIANT INSTALLATION.

C. CONTRACTOR SHALL OBTAIN CONTRIBUTING FAULT CURRENT FROM SERVING UTILITY COMPANY. CONTRACTOR SHALL VERIFY SWITCHBOARD AND PANELBOARD AIC RATINGS ARE APPROPRIATE FOR THE ACTUAL CONTRIBUTING FAULT CURRENT PRIOR TO ORDERING EQUIPMENT. CONTACT ENGINEER IF NEEDED ONCE UTILITY INFORMATION IS RECEIVED.

D. REFER TO PANEL SCHEDULES FOR FEEDERS NOT SHOWN ON SINGLE LINE DIAGRAM.

E. WIRE AMPACITY SIZE FOR 100A CIRCUITS AND BELOW SHALL BE BASED ON NEC TABLE 310.16, 60°C COLUMN FOR AMPACITY. WIRE AMPACITY SIZE FOR OVER 100A SHALL BE BASED ON NEC TABLE 310.16, 75°C COLUMN FOR AMPACITY.

F. AVAILABLE FAULT CURRENT VALUES SHOWN ARE ESTIMATED, AND ASSUME INFINITE PRIMARY FAULT CURRENT AND ESTIMATED TRANSFORMER IMPEDANCE, UNLESS OTHER WISE NOTED. AVAILABLE FAULT CURRENTS BELOW 10KA ARE NOT INDICATED.

ONE LINE DIAGRAM KEYED NOTES:

1. NEW PAD MOUNT TRANSFORMER. RATINGS SHOWN ARE ASSUMED - CONFIRM ACTUAL SIZE/RATINGS TO BE INSTALLED WITH UTILITY.
2. INSTALL WIRING, CABINETS, CONDUITS, C.T.'S AND OTHER METERING EQUIPMENT IN ACCORDANCE WITH UTILITY COMPANY SERVICE STANDARDS. INSTALL 1" CONDUIT FROM METER ENCLOSURE TO BUILDING TTB FOR REMOTE METER READING SERVICE. UNLESS OTHERWISE DIRECTED BY UTILITY CO.
3. FOR SURGE PROTECTIVE DEVICES, PROVIDE CIRCUIT BREAKER AND WIRE SIZE AS RECOMMENDED BY MANUFACTURER. SPD CONDUCTORS SHALL BE AS SHORT AS POSSIBLE, LIMITING BENDS, WITH A MAXIMUM LENGTH OF 2 FEET.
4. REFER TO SERVICE GROUNDING DETAIL.

ROCKET MEP LLC
MECHANICAL - ELECTRICAL - PLUMBING ENGINEERS
256-203-4373 INFO@ROCKETMEP.COM
1300 MERIDIAN ST, SUITE 302, HUNTSVILLE, AL 35801 AL CERT OF AUTH: ECA50597

GMC

Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
GMCNETWORK.COM

ISSUE DATE
CONSTRUCTION DOCUMENTS 01/09/2026

DRAWN BY: REA
CHECKED BY: JTD

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ONE LINE DIAGRAM

E6.00

TEMPLATE VERSION: 2025.1
1/9/2026 7:48:08 AM

COMcheck Software Version COMcheckWeb
Interior Lighting Compliance Certificate

Project Information

Energy Code: 90.1 (2013) Standard
Project Title: Ashville Fire Station
Project Type: New Construction

Construction Site: Owner/Agent: Designer/Contractor:

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-First Floor (Fire Station)	13214	0.67	8853
		Total Allowed Watts =	8853

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
1-First Floor (Fire Station)				
LED: A1: 2' X 4': Other:	1	41	40	1640
LED: A1E: 2' X 4': Other:	1	7	40	280
LED: A2E: 2' X 4': Other:	1	6	40	240
LED: A3: 2' X 2': Other:	1	15	35	525
LED: A3E: 2' X 2': Other:	1	13	35	455
LED: D4: 4" DOWNLIGHT: Other:	1	19	20	380
LED: D4E: 4" DOWNLIGHT: Other:	1	9	20	180
LED: D4W: 4" DOWNLIGHT: Other:	1	4	20	80
LED: D4WE: 4" DOWNLIGHT: Other:	1	1	20	20
LED: F1: 4' STRIP: Other:	1	10	40	400
LED: F1E: 4' STRIP: Other:	1	8	40	320
LED: F2E: 4' STRIP: Other:	1	5	40	200
LED: H2: HIGH BAY: Other:	1	17	130	2210
LED: H2E: HIGH BAY: Other:	1	3	130	390
LED: V1: VANITY LIGHT: Other:	1	5	11	55
LED: X1: EXIT SIGN: Other:	1	15	5	75
		Total Proposed Watts =		7450

Interior Lighting PASSES: Design 16% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 90.1 (2013) Standard requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Project Title: Ashville Fire Station Report date: 01/08/26
Data filename: Page 1 of 7

Name - Title Signature Date

Project Title: Ashville Fire Station Report date: 01/08/26
Data filename: Page 2 of 7

COMcheck Software Version COMcheckWeb
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 90.1 (2013) Standard
Project Title: Ashville Fire Station
Project Type: New Construction
Exterior Lighting Zone 3 (Other (LZ3))

Construction Site: Owner/Agent: Designer/Contractor:

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Entry canopy	306 ft2	0.4	Yes	122
Other door (not main entry)	4 ft of door	20	Yes	80
Other door (not main entry)	4 ft of door	20	Yes	80
Other door (not main entry)	4 ft of door	20	Yes	80
Other door (not main entry)	4 ft of door	20	Yes	80
Other door (not main entry)	4 ft of door	20	Yes	80
Other door (not main entry)	4 ft of door	20	Yes	80
Main entry	7 ft of door	30	Yes	210
Illuminated length of facade wall or surface	68 ft	3.75	No	255
Illuminated length of facade wall or surface	68 ft	3.75	No	255
Illuminated length of facade wall or surface	63 ft	3.75	No	236
Illuminated length of facade wall or surface	78 ft	3.75	No	292
Parking area	5992 ft2	0.1	Yes	599
			Total Tradable Watts (a) =	1412
			Total Allowed Watts =	2450
			Total Allowed Supplemental Watts (b) =	750

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 750 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Entry canopy (306 ft2): Tradable Wattage				
LED: D4WE: 4" DOWNLIGHT: Other:	1	2	20	40
LED: D4W: 4" DOWNLIGHT: Other:	1	2	20	40
Other door (not main entry) (4 ft of door width): Tradable Wattage				
LED: W1E: EM WALLPACK: Other:	1	1	20	20
LED: W1E: EM WALLPACK: Other:	1	1	20	20
LED: W1E: EM WALLPACK: Other:	1	1	20	20
LED: W1E: EM WALLPACK: Other:	1	1	20	20
LED: W1E: EM WALLPACK: Other:	1	1	20	20
LED: W1E: EM WALLPACK: Other:	1	1	20	20
Main entry (7 ft of door width): Tradable Wattage				
LED: W1E: EM WALLPACK: Other:	1	2	20	40
Illuminated length of facade wall or surface (68 ft): Non-tradable Wattage				
LED: W2: SCONCE: Other:	1	4	20	80
LED: W2: SCONCE: Other:	1	3	20	60
Illuminated length of facade wall or surface (63 ft): Non-tradable Wattage				
LED: W2: SCONCE: Other:	1	3	20	60
Illuminated length of facade wall or surface (78 ft): Non-tradable Wattage				
LED: W1: WALLPACK: Other:	1	1	20	20
Parking area (5992 ft2): Tradable Wattage				
LED: PLA: POLE LIGHT: Other:	1	3	170	510
			Total Tradable Proposed Watts =	750

Exterior Lighting PASSES: Design 65% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 90.1 (2013) Standard requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title Signature Date

Project Title: Ashville Fire Station Report date: 01/08/26
Data filename: Page 3 of 7

Project Title: Ashville Fire Station Report date: 01/08/26
Data filename: Page 4 of 7

1/9/2026

PANEL: MDP

LOCATION: IT/ELECT. 108 | **SYSTEM VOLTAGE:** 208Y/120V | **A.I.C. RATING:** 42 KAIC
SUPPLIED FROM: UTILITY | **PHASES:** 3 | **MAINS TYPE:** MLO
MOUNTING: SURFACE | **WIRES:** 4 | **MAINS RATING:** 800 A
ENCLOSURE TYPE: TYPE 1 | **NEUTRAL RATING:** 100.00%

(G) = GROUND FAULT CIRCUIT INTERRUPTER, (A) = ARC FAULT CIRCUIT INTERRUPTER, (L) = LOCKABLE, (R) = RED, (S) = SHUNT TRIP

NOTE	CKT	DESCRIPTION	TRIP	POL	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	POL	TRIP	DESCRIPTION	CKT	NOTE
	1	INV	50 A	1	(2) #6, #10G, 1"C	2.49 / ...							2	
	3						22.08 / ...		-	3	400 A	PANEL S1	4	1
1	5	PANEL S2	250 A	3	-			21.02 / ...					6	
	7					19.9 / 1.83							8	
	9						3.33 / 1.83		(3) #8, #10G, 3/4"C	3	35 A	VAV 1-05, 1-06	10	
	11	MAU-01 (ROOF)	45 A	3	(3) #6, #10G, 1"C			3.33 / 1.83					12	
	13					3.33 / 4							14	
	15						4.67 / 4		(3) #6, #10G, 1"C	3	50 A	VAV 1-01, 1-02, 1-03, 1-04	16	
	17	RTU-01 (ROOF)	50 A	3	(3) #6, #10G, 1"C			4.67 / 4					18	
	19					4.67 / 0							20	
	21						4.67 / 0			3	50 A	SPARE	22	
	23	RTU-02 (ROOF)	50 A	3	(3) #6, #10G, 1"C			4.67 / 0					24	
	25					4.67 / 0				1	20 A	SPARE	26	
	27	SPACE	--	1			0 / 0			1	20 A	SPARE	28	
	29	SPACE	--	1				0 / 0		1	20 A	SPARE	30	
	31	SPACE	--	1		0 / 0				1	--	SPACE	32	
	33	SPACE	--	1			0 / 0			1	--	SPACE	34	
	35	SPACE	--	1				0 / 0		1	--	SPACE	36	
	37	SPACE	--	1		0 / 0							38	
	39	SPACE	--	1			0 / 0			3	30 A	SPD	40	
	41	SPACE	--	1				0 / 0					42	
					TOTAL LOAD (KVA):	73.2	73.2	68.8						
					TOTAL CURRENT (AMPS):	616 A	615 A	573 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	EST. DEMAND	PANEL TOTALS	
Electric Clothes Dryer	5 kVA	100.00%	5 kVA		
Equipment	152.02 kVA	100.00%	152.02 kVA	**TOTAL CONN. KVA**	215.2 kVA
HVAC	1 kVA	100.00%	1 kVA	**TOTAL EST. DEMAND KVA**	198 kVA
Receptacle	48.64 kVA	60.28%	29.32 kVA	**DEMAND W/ 25% SPARE**	247.48 kVA
Lighting	8.93 kVA	125.00%	11.17 kVA	**TOTAL CONN. CURRENT**	597 A
				TOTAL DEMAND CURRENT	550 A
				DEMAND CURRENT W/ SPARE	687 A

NOTES:
1. REFER TO ONE LINE DIAGRAM FOR CONDUCTOR AND CONDUIT SIZES.

INVERTER: INV

LOCATION: IT/ELECT. 211 | **SYSTEM VOLTAGE:** 120V-1PH | **INVERTER RATING:** 5 KVA
SUPPLIED FROM: MDP | **PHASES:** 1 | **RUN TIME AT FULL LOAD:** 90 MIN.
MOUNTING: Surface | **WIRES:** 2

(G) = GROUND FAULT CIRCUIT INTERRUPTER, (A) = ARC FAULT CIRCUIT INTERRUPTER, (L) = LOCKABLE, (R) = RED, (S) = SHUNT TRIP

NOTE	CKT	DESCRIPTION	TRIP	POL	BRANCH CIRCUIT	A	BRANCH CIRCUIT	POL	TRIP	DESCRIPTION	CKT	NOTE
	1	EM LIGHTING - EXTERIOR	20 A	1	(2) #10, #10G, 3/4"C	0.2 / 0.8	(2) #10, #10G, 3/4"C	1	20 A	EM LIGHTING - LVL 1	2	
	3	EM LIGHTING - LVL 2	20 A	1	(2) #10, #10G, 3/4"C	1 / 0.4	(2) #10, #10G, 3/4"C	1	20 A	EM LIGHTING - APP BAY	4	
	5	SPARE	20 A	1		0 / 0		1	20 A	SPARE	6	
					TOTAL LOAD (KVA):	2.5						
					TOTAL CURRENT (AMPS):	21 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	EST. DEMAND	PANEL TOTALS	
Lighting	2.49 kVA	125.00%	3.11 kVA		
				TOTAL CONN. KVA	2.5 kVA
				TOTAL EST. DEMAND KVA	3.1 kVA
				DEMAND W/ 25% SPARE	3.88 kVA
				TOTAL CONN. CURRENT	21 A
				TOTAL DEMAND CURRENT	26 A
				DEMAND CURRENT W/ SPARE	32 A

NOTES:

PANEL: S1 — SECTION 1

LOCATION: IT/ELECT. 108 | **SYSTEM VOLTAGE:** 208Y/120V | **A.I.C. RATING:** 42 KAIC
SUPPLIED FROM: MDP | **PHASES:** 3 | **MAINS TYPE:** MCB
MOUNTING: SURFACE | **WIRES:** 4 | **MAINS RATING:** 400 A
ENCLOSURE TYPE: TYPE 1 | **NEUTRAL RATING:** 100.00%

(G) = GROUND FAULT CIRCUIT INTERRUPTER, (A) = ARC FAULT CIRCUIT INTERRUPTER, (L) = LOCKABLE, (R) = RED, (S) = SHUNT TRIP

NOTE	CKT	DESCRIPTION	TRIP	POL	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	POL	TRIP	DESCRIPTION	CKT	NOTE
	1	(G) RECEPT - EWC	20 A	1	(2) #12, #12G, 3/4"C	0.18 / 0.5			(2) #12, #12G, 3/4"C	1	20 A	(L,R) FIRE ALARM	2	
	3	RECEPT - GEN	20 A	1	(2) #12, #12G, 3/4"C		0.18 / 0.5		(2) #12, #12G, 3/4"C	1	20 A	LCP	4	
	5	LVR-01A	20 A	1	(2) #10, #10G, 3/4"C			0.25 / 0.6	(2) #10, #10G, 3/4"C	1	20 A	SITE LIGHTING	6	
	7	LVR-01B	20 A	1	(2) #10, #10G, 3/4"C	0.25 / 1			(2) #12, #12G, 3/4"C	1	20 A	GEN - BATTERY CHRG	8	
	9	RECEPT - APP BAY	20 A	1	(2) #12, #12G, 3/4"C		0.54 / 0.9		(2) #10, #10G, 3/4"C	1	20 A	RECEPT - EXTERIOR	10	
	11	RECEPT - AV/IT	20 A	1	(2) #12, #12G, 3/4"C			0.72 / 1.04	(2) #10, #10G, 3/4"C	1	20 A	LIGHTING - APP BAY	12	
	13	RECEPT - PROJECTOR	20 A	1	(2) #10, #10G, 3/4"C	1 / 1.08			(2) #10, #10G, 3/4"C	1	20 A	RECEPT - TRAINING	14	
	15	LIGHTING - APP BAY	20 A	1	(2) #10, #10G, 3/4"C		1.17 / 1.26		(2) #10, #10G, 3/4"C	1	20 A	RECEPT - CORRIDOR	16	
	17	GEN - JACKET HTR	20 A	2	(2) #12, #12G, 3/4"C			0.5 / 0.36	(2) #12, #12G, 3/4"C	1	20 A	RECEPT - LOBBY	18	
	19					0.5 / 0.36			(2) #12, #12G, 3/4"C	1	20 A	RECEPT - RISER, ELEC	20	
	21	RECEPT - APP BAY	20 A	1	(2) #12, #12G, 3/4"C		0.36 / 0.72		(2) #12, #12G, 3/4"C	1	20 A	RECEPT - OFFICE	22	
	23	RECEPT - TRAINING	20 A	1	(2) #12, #12G, 3/4"C			0.54 / 0.72	(2) #12, #12G, 3/4"C	1	20 A	RECEPT - TRIAGE	24	
	25	RECEPT - APP BAY	20 A	1	(2) #12, #12G, 3/4"C	0.54 / 0.72			(2) #12, #12G, 3/4"C	1	20 A	RECEPT - OFFICE	26	
	27	RECEPT - OFFICE	20 A	1	(2) #12, #12G, 3/4"C		0.72 / 0.72		(2) #12, #12G, 3/4"C	1	20 A	RECEPT - DECON, SH	28	
	29	RECEPT - GEAR RM, RR	20 A	1	(2) #12, #12G, 3/4"C			0.72 / 0.9	(2) #10, #10G, 3/4"C	1	20 A	RECEPT - TRAINING	30	
	31	RECEPT - AV/IT	20 A	1	(2) #12, #12G, 3/4"C	0.72 / 0.9			(2) #10, #10G, 3/4"C	1	20 A	RECEPT - EXTERIOR	32	
	33	RECEPT - OFF, RR	20 A	1	(2) #12, #12G, 3/4"C		0.9 / 0			1	20 A	SPARE	34	
	35	SPACE	--	1				0 / 0		1	20 A	SPARE	36	
	37	SPACE	--	1		0 / 0				1	20 A	SPARE	38	
	39	SPACE	--	1			0 / 0			1	20 A	SPARE	40	
	41	SPACE	--	1				0 / 0		1	20 A	SPARE	42	

THIS SECTION TOTAL:	**Total KVA**	7.75 kVA	7.92 kVA	6.29 kVA
	Total Amps	66 A	68 A	52 A
TOTAL CONNECTED TO FEED THROUGH LUGS SECTION:	**Total KVA**	24.71 kVA	24.68 kVA	22.97 kVA
	Total Amps	208 A	208 A	191 A
PANEL GRAND TOTAL:	**Total KVA**	32.46 kVA	32.59 kVA	29.25 kVA
	Total Amps	275 A	276 A	244 A

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	EST. DEMAND	PANEL TOTALS	
Equipment	61.7 kVA	100.00%	61.7 kVA		
Receptacle	28.2 kVA	67.73%	19.1 kVA	**TOTAL CONN. KVA**	94.3 kVA
Lighting	4.62 kVA	125.00%	5.78 kVA	**TOTAL EST. DEMAND KVA**	86.3 kVA
				DEMAND W/ 25% SPARE	107.88 kVA
				TOTAL CONN. CURRENT	262 A
				TOTAL DEMAND CURRENT	240 A
				DEMAND CURRENT W/ SPARE	299 A

NOTES:

PANEL: S2 — SECTION 1

LOCATION: IT/ELECT. 211 | **SYSTEM VOLTAGE:** 208Y/120V | **A.I.C. RATING:** 42 KAIC
SUPPLIED FROM: MDP | **PHASES:** 3 | **MAINS TYPE:** MCB
MOUNTING: SURFACE | **WIRES:** 4 | **MAINS RATING:** 250 A
ENCLOSURE TYPE: TYPE 1 | **NEUTRAL RATING:** 100.00%

(G) = GROUND FAULT CIRCUIT INTERRUPTER, (A) = ARC FAULT CIRCUIT INTERRUPTER, (L) = LOCKABLE, (R) = RED, (S) = SHUNT TRIP

NOTE	CKT	DESCRIPTION	TRIP	POL	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	POL	TRIP	DESCRIPTION	CKT	NOTE
	1	(G) RECEPT - KITCHEN	20 A	1	(2) #12, #12G, 3/4"C	0.36 / 1.2			(2) #10, #10G, 3/4"C	1	20 A	(S) KEH-01	2	
	3	LIGHTING - 2ND FLOOR	20 A	1	(2) #10, #10G, 3/4"C		0.51 / 0			1	--	SHUNT TRIP	4	
	5	RECEPT - PANTRY	20 A	1	(2) #12, #12G, 3/4"C			0.54 / 0.72	(2) #12, #12G, 3/4"C	1	20 A	(A) RECEPT - BUNK 204	6	
	7	(A) RECEPT - BUNK 207	20 A	1	(2) #10, #10G, 3/4"C	0.9 / 1.08			(2) #12, #12G, 3/4"C	1	20 A	RECEPT - OFFICE	8	
	9	RECEPT - STORAGE	20 A	1	(2) #12, #12G, 3/4"C		0.54 / 1.32		(2) #10, #10G, 3/4"C	1	20 A	LIGHTING - 2ND FLOOR	10	
	11	(G) RECEPT - RESTRMS	20 A	1	(2) #10, #10G, 3/4"C			0.9 / 0.36	(2) #12, #12G, 3/4"C	1	20 A	(G) RECEPT - KITCHEN	12	
	13	(G) RECEPT - KITCHEN	20 A	1	(2) #12, #12G, 3/4"C	0.18 / 0.72			(2) #12, #12G, 3/4"C	1	20 A	RECEPT - CORRIDOR	14	
	15	(G) RECEPT - KITCHEN	20 A	1	(2) #12, #12G, 3/4"C		0.18 / 0.72		(2) #12, #12G, 3/4"C	1	20 A	RECEPT - IT RM QUADS	16	
	17	RECEPT - IT RM QUADS	20 A	1	(2) #12, #12G, 3/4"C			0.72 / 0.72	(2) #12, #12G, 3/4"C	1	20 A	RECEPT - KITCHEN	18	
	19	(A) RECEPT - BUNK 209	20 A	1	(2) #12, #12G, 3/4"C	0.72 / 0.72			(2) #10, #10G, 3/4"C	1	20 A	(A) RECEPT - BUNK 205	20	
	21	(A) RECEPT - BUNK 210	20 A	1	(2) #12, #12G, 3/4"C		0.72 / 0.72		(2) #10, #10G, 3/4"C	1	20 A	(A) RECEPT - BUNK 206	22	
	23	(A) RECEPT - BUNK 208	20 A	1	(2) #12, #12G, 3/4"C			0.72 / 1	(2) #12, #12G, 3/4"C	1	20 A	(G) WASHER	24	
	25	(G) MICROWAVE	20 A	1	(2) #12, #12G, 3/4"C	1 / 1.2			(2) #12, #12G, 3/4"C	1	20 A	(G) DISHWASHER	26	
	27	(G) MICROWAVE	20 A	1	(2) #10, #10G, 3/4"C		1 / 1.2		(2) #10, #10G, 3/4"C	1	20 A	(G) REFRIGERATOR	28	
	29	(G) RECEPT - KITCHEN	20 A	1	(2) #12, #12G, 3/4"C			0.18 / 1.67					30	
	31	SPARE	20 A	1		0 / 1.67			(3) #10, #10G, 3/4"C	3	30 A	(G) DRYER	32	
	33	SPARE	20 A	1			0 / 1.67						34	
	35	SPARE	20 A	1				0 / 0		1	20 A	SPARE	36	
	37	SPACE	--	1		0 / 0				1	20 A	SPARE	38	
	39	SPACE	--	1			0 / 0			1	20 A	SPARE	40	
	41	SPACE	--	1				0 / 0		1	20 A	SPARE	42	

THIS SECTION TOTAL:	**Total KVA**	9.75 kVA	8.5 kVA	7.53 kVA
	Total Amps	82 A	72 A	63 A
TOTAL CONNECTED TO FEED THROUGH LUGS SECTION:	**Total KVA**	12.33 kVA	12.53 kVA	12.37 kVA
	Total Amps	103 A	104 A	103 A
PANEL GRAND TOTAL:	**Total KVA**	22.08 kVA	21.02 kVA	19.9 kVA
	Total Amps	185 A	177 A	166 A

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	EST. DEMAND	PANEL TOTALS	
Electric Clothes Dryer	5 kVA	100.00%	5 kVA		
Equipment	34.82 kVA	100.00%	34.82 kVA	**TOTAL CONN. KVA**	63 kVA
HVAC	1 kVA	100.00%	1 kVA	**TOTAL EST. DEMAND KVA**	58.2 kVA
Receptacle	20.44 kVA	74.46%	15.22 kVA	**DEMAND W/ 25% SPARE**	72.76 kVA
Lighting	1.83 kVA	125.00%	2.28 kVA	**TOTAL CONN. CURRENT**	175 A
				TOTAL DEMAND CURRENT	162 A
				DEMAND CURRENT W/ SPARE	202 A

NOTES:

PANEL: S1 — SECTION 2

LOCATION: IT/ELECT. 108 | **SYSTEM VOLTAGE:** 208Y/120V | **A.I.C. RATING:** 42 KAIC
SUPPLIED FROM: S1 | **PHASES:** 3 | **MAINS TYPE:** MLO
MOUNTING: SURFACE | **WIRES:** 4 | **MAINS RATING:** 400 A
ENCLOSURE TYPE: TYPE 1 | **NEUTRAL RATING:** 100.00%

(G) = GROUND FAULT CIRCUIT INTERRUPTER, (A) = ARC FAULT CIRCUIT INTERRUPTER, (L) = LOCKABLE, (R) = RED, (S) = SHUNT TRIP

NOTE	CKT	DESCRIPTION	TRIP	POL	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	POL	TRIP	DESCRIPTION	CKT	NOTE
	43	LIGHTING - 1ST FLOOR	20 A	1	(2) #10, #10G, 3/4"C	0.72 / 1.2			(2) #10, #10G, 3/4"C	1	20 A	RECEPT - VENDING	44	
	45	VEH EXH CTRL PANEL	20 A	1	(2) #12, #12G, 3/4"C		0.5 / 1		(2) #12, #12G, 3/4"C	1	20 A	RECEPT - FITNESS	46	
	47	LIGHTING - 1ST FLOOR	20 A	1	(2) #10, #10G, 3/4"C			0.81 / 1.2	(2) #10, #10G, 3/4"C	1	20 A	RECEPT - VENDING	48	
	49					2.5 / 1			(2) #10, #10G, 3/4"C	1	20 A	RECEPT - FITNESS	50	
	51	BREATHING AIR TANK	30 A	2	(3) #10, #10G, 3/4"C		2.5 / 2.5						52	
	53	VAV 1-07	20 A	1	(2) #12, #12G, 3/4"C			1 / 2.5	(3) #10, #10G, 3/4"C	2	30 A	WASHER/EXTRACTOR (G)	54	
	55	RECEPT - FITNESS	20 A	1	(2) #12, #12G, 3/4"C	1 / 1			(2) #10, #10G, 3/4"C	1	20 A	RECEPT - CORD REEL	56	
	57	RECEPT - FITNESS	20 A	1	(2) #10, #10G, 3/4"C		1 / 1		(2) #10, #10G, 3/4"C	1	20 A	RECEPT - CORD REEL	58	
	59	RECEPT - FITNESS	20 A	1	(2) #10, #10G, 3/4"C			1 / 1	(2) #10, #10G, 3/4"C	1	20 A	RECEPT - CORD REEL	60	
	61	NO2/CO SENSOR	20 A	1	(2) #10, #10G, 3/4"C	1 / 1.18			(2) #10, #10G, 3/4"C	1	20 A	RECEPT - FITNESS	62	
	63	NO2/CO SENSOR	20 A	1	(2) #10, #10G, 3/4"C		1 / 1		(2) #10, #10G, 3/4"C	1	20 A	RECEPT - FITNESS	64	
	65	RECEPT - CORD REEL	20 A	1	(2) #12, #12G, 3/4"C			1 / 0.36	(2) #10, #10G, 3/4"C	1	20 A	RECEPT - FITNESS	66	
	67					0.17 / 1							68	
	69	HVLS-01	20 A	3	(3) #10, #10G, 3/4"C		0.17 / 1		(3) #12, #12G, 3/4"C	3	20 A	UH-2	70	
	71							0.17 / 1					72	
	73					1 / 1.1							74	
	75	UH-3	20 A	3	(3) #12, #12G, 3/4"C		1 / 1.1		(3) #12, #12G, 3/4"C	3	20 A	UH-1	76	
	77							1 / 1.1					78	
	79					1.8 / 1.8							80	
	81	MOTORIZED DOOR	30 A	3	(3) #10, #10G, 3/4"C		1.8 / 1.8		(3) #10, #10G, 3/4"C	3	30 A	MOTORIZED DOOR	82	
	83							1.8 / 1.8					84	
	85	LIGHTING - EXTERIOR	20 A	1	(2) #10, #10G, 3/4"C	0.08 / 1.8							86	
	87	LIGHTING - EXTERIOR	20 A	1	(2) #10, #10G, 3/4"C		0.12 / 1.8		(3) #10, #10G, 3/4"C	3	30 A	MOTORIZED DOOR	88	
	89	LIGHTING - EXTERIOR	20 A	1	(2) #10, #10G, 3/4"C			0.08 / 1.8					90	
	91					1.8 / 1.8							92	
	93	MOTORIZED DOOR	30 A	3	(3) #10, #10G, 3/4"C		1.8 / 1.8		(3) #10, #10G, 3/4"C	3	30 A	MOTORIZED DOOR	94	
	95							1.8 / 1.8					96	
	97					1.8 / 1			(2) #10, #10G, 3/4"C	1	20 A	RECEPT - FITNESS	98	
	99	MOTORIZED DOOR	30 A	3	(3) #10, #10G, 3/4"C		1.8 / 0			1	--	SPACE	100	
	101							1.8 / 0		1	--	SPACE	102	
	103	SPACE	--	1		0 / 0				1	--	SPACE	104	
	105	SPACE	--	1			0 / 0			1	--	SPACE	106	
	107	SPACE	--	1				0 / 0		1	--	SPACE	108	
	109	SPACE	--	1		0 / 0				1	--	SPACE	110	
	111	SPACE	--	1			0 / 0			1	--	SPACE	112	
	113	SPARE	20 A	1				0 / 0		1	20 A	SPARE	114	
	115	SPARE	20 A	1		0 / 0				1	20 A	SPARE	116	
	117	SPARE	20 A	1			0 / 0			1	20 A	SPARE	118	
	119	SPARE	20 A	1				0 / 0		1	20 A	SPARE	120	
	121	SPARE	20 A	1		0 / 0				1	20 A	SPARE	122	
	123	SPARE	20 A	1			0 / 0			1	20 A	SPARE	124	
	125	SPARE	20 A	1				0 / 0		1	20 A	SPARE	126	
					TOTAL LOAD (KVA):	24.7	24.7	23						
					TOTAL CURRENT (AMPS):	208 A	208 A	191 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	EST. DEMAND	PANEL TOTALS	
Equipment	59.7 kVA	100.00%	59.7 kVA		
Receptacle	10.94 kVA	95.70%	10.47 kVA	**TOTAL CONN. KVA**	72.4 kVA
Lighting	1.81 kVA	125.00%	2.26 kVA	**TOTAL EST. DEMAND KVA**	72.3 kVA
				DEMAND W/ 25% SPARE	90.4 kVA
				TOTAL CONN. CURRENT	201 A
				TOTAL DEMAND CURRENT	201 A
				DEMAND CURRENT W/ SPARE	251 A

NOTES:

PANEL: S2 — SECTION 2

LOCATION: IT/ELECT. 211 | **SYSTEM VOLTAGE:** 208Y/120V | **A.I.C. RATING:** 42 KAIC
SUPPLIED FROM: S2 | **PHASES:** 3 | **MAINS TYPE:** MLO
MOUNTING: SURFACE | **WIRES:** 4 | **MAINS RATING:** 250 A
ENCLOSURE TYPE: TYPE 1 | **NEUTRAL RATING:** 100.00%

(G) = GROUND FAULT CIRCUIT INTERRUPTER, (A) = ARC FAULT CIRCUIT INTERRUPTER, (L) = LOCKABLE, (R) = RED, (S) = SHUNT TRIP

NOTE	CKT	DESCRIPTION	TRIP	POL	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	POL	TRIP	DESCRIPTION	CKT	NOTE
	43	(G) GARBAGE DISPOSAL	20 A	1	(2) #12, #12G, 3/4"C	0.18 / 0.72			(2) #10, #10G, 3/4"C	1	20 A	EF-01	44	
	45	RECEPT - EWC	20 A	1	(2) #12, #12G, 3/4"C		0.18 / 0.72		(2) #10, #10G, 3/4"C	1	20 A	RECEPT - ROOF	46	
	47	EF-03	20 A	1	(2) #10, #10G, 3/4"C			0.4 / 0.54	(2) #12, #12G, 3/4"C	1	20 A	RECEPT - DAYROOM	48	
	49	(G) ICE MAKER	20 A	1	(2) #10, #10G, 3/4"C	1 / 1			(2) #10, #10G, 3/4"C	1	20 A	GUH-01	50	
	51	KEF-01	20 A	1	(2) #12, #12G, 3/4"C		1.2 / 1		(2) #10, #10G, 3/4"C	1	20 A	GUH-02	52	
	53	CP-01	20 A	1	(2) #12, #12G, 3/4"C			1 / 1	(2) #12, #12G, 3/4"C	1	20 A	GWH-01 CONTROLS	54	
	55					0.9 / 1.2							56	
	57	EF-02	20 A	3	(3) #10, #10G, 3/4"C		0.9 / 1.2		(3) #10, #10G, 3/4"C	3	20 A	VEF-01	58	
	59							0.9 / 1.2					60	
	61					3.67 / 3.67							62	
	63	VAV 2-05, 2-06, 2-07, 2-08, 2-09, 2-10, 2-11	40 A	3	(3) #8, #10G, 3/4"C		3.67 / 3.67		(3) #8, #10G, 3/4"C	3	40 A	VAV 2-01, 2-02, 2-03, 2-04	64	
	65							3.67 / 3.67					66	
	67	SPACE	--	1		0 / 0				1	--	SPACE	68	
	69	SPACE	--	1			0 / 0			1	--	SPACE	70	
	71	SPACE	--	1				0 / 0		1	--	SPACE	72	
	73	SPARE	20 A	1		0 / 0				1	--	SPACE	74	
	75	SPARE	20 A	1			0 / 0			1	--	SPACE	76	
	77	SPARE	20 A	1				0 / 0		1	--	SPACE	78	
	79	SPARE	20 A	1		0 / 0				1	--	SPACE	80	
	81	SPARE	20 A	1			0 / 0			1	--	SPACE	82	
	83	SPARE	20 A	1				0 / 0		1	--	SPACE	84	
					TOTAL LOAD (KVA):	12.3	12.5	12.4						
					TOTAL CURRENT (AMPS):	103 A	104 A	103 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	EST. DEMAND	PANEL TOTALS	
Equipment	33.62 kVA	100.00%	33.62 kVA		
HVAC	1 kVA	100.00%	1 kVA	**TOTAL CONN. KVA**	37.2 kVA
Receptacle	2.62 kVA	100.00%	2.62 kVA	**TOTAL EST. DEMAND KVA**	37.2 kVA
				DEMAND W/ 25% SPARE	46.55 kVA
				TOTAL CONN. CURRENT	103 A
				TOTAL DEMAND CURRENT	103 A
				DEMAND CURRENT W/ SPARE	129 A

NOTES:

ROCKET MEP LLC
MECHANICAL - ELECTRICAL - PLUMBING ENGINEERS
256-203-4373 | 1300 MERIDIAN ST, SUITE 302, HUNTSVILLE, AL 35801
INFO@ROCKETMEP.COM | AL CERT OF AUTH: ECA50597

GMC

Goodwyn Mills Cawood, LLC
117 Jefferson Street North
Huntsville, AL 35801
T 256.539.3431
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ISSUE DATE
CONSTRUCTION DOCUMENTS 01/09/2026

DRAWN BY: REA
CHECKED BY: JTD

ASHVILLE FIRE STATION #2
222 7TH Avenue North
Ashville, AL 35953

GMC # AHUN250003

ALABAMA — 01/09/2026 — ENGINEER — JOHN DANIELSON, JR.

PANEL SCHEDULES

E7.00

TEMPLATE VERSION: 2025.1
1/9/2026 7:48:11 AM