ALURA APARTMENTS - VILLAGE AT DISCOVERY PARK POOL HOUSE

ALURA POOL HOUSE - VILLAGE AT DISCOVERY PARK

LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

PROJECT INFORMATION

	SITE	EDATA				
SITE ZONING:	SEE CIVIL)					
SITE SIZE: (
SITE DENSITY:	SEE CIVIL)					
NO. OF PARKING SPACES:	SEE CIVIL)					
BUILI	DING OCC	CUPANT LO	OAD			
DWELLING UNITS	COMPLIANCE WITH	SQUARE FEET OF AREA	SQUARE FEET PER PERSON		OCCUPANT LOAD	
COMMUNITY ROOM	ADA 2010	678	15	45.20	(46) PERSONS	
KITCHENETTE	ADA 2010	104	200	0.52	(1) PERSONS	
MEN'S RESTROOM	ADA 2010	131			.7//	
WOMEN'S RESTROOM	ADA 2010	140				
POOL EQUIPMENT	ADA 2010	216				
TOTAL BUILDING OCCUPANT LOAD:					(47) PERSONS	
	EL PETRONE DEVE DE DESENTE	REGULAT	IONS			1
BLDG. & RELATED CODES:		2018 IECC				
ELECT. CODE: 2 FIRE CODE: 2						
outputs a control to the control to		/ANSI A117.1, FAIR HOUS	EING			
		DERAL, STATE & LOCAL	POMPHINE ST	IC & OPT	DIMANCEG	
Same Composition a	THE RESIDENCE OF THE PROPERTY			VS & UKL	MANCES	
В	UILDING	CODE DA	ľΑ			
USE GROUP:	4-3 (ASSEMBLY)					
CONSTRUCTION TYPE:	/-B					
EXT. WALL CONSTRUCTION:	NON-RATED					
OTHER WALL CONSTRUCTION:	-HR RATED INTERIOR	R WALLS AND CEILING	AT POOL EQI	JIPMENT	ROOM, DRAFTSTOP	PING
	N ATTIC, UNRATED IN	NTERIOR WALLS				
TOTAL ALLOW. AREA:	4-3 = 6,000 SF PER	FLOOR				
TOTAL ACTUAL AREA:						
ALLOW. HEIGHT & FLOORS:	4-3 = 40'-0", 1 STOR	Y				
ACTUAL HEIGHT & FLOORS:	7'-4", 1 STORY					
	NONE REQUIRED, NO					

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ARCHITECT'S JOB NO. 4938

PROJECT LOCATION MAP



SIGNATURE AREAS

NOTE: PROJECT CONSTRUCTION MUST BE IN COMPLIANCE WITH ALL APPLICABLE CODES, ORDINANCES, LAWS, AND REGULATIONS AS ENUMERATED ELSEWHERE IN THE PLANS AND SPECIFICATIONS.

ARCHITECT: WALLACE ARCHITECTS, LLC 302 CAMPUSVIEW DRIVE SUITE 208, COLUMBIA, MO 65201 BY:

BY:

OWNER: THE VILLAGE AT DISCOVERY PARK, LLC

3622 ENDEAVOR AVE., STE. 101, COLUMBIA, MO 65201

BY:

DATE:

CONTRACTOR: INTRINSIC DEVELOPMENT, LLC
3622 ENDEAVOR AVE., STE. 101, COLUMBIA, MO 65201
BY:
DATE:

PM: <u>RS</u> DT: <u>TY</u>
PC: <u>CD</u> QC: <u>MK</u>

PLAN SET NO. ___

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PORTER
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URA POOL HOUSE - VILLAGE AT DISCOVERY PARK LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

MATTECTS L.L.C.

Columbia, MO
P 573-256-7200

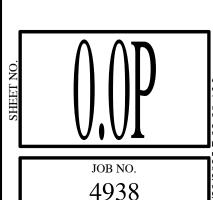
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Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope Prevent contact with materials that could cause discoloration or staining. Pre-Finished Aluminum: ASTM B209 (ASTM B209M); 20 gauge, (0.032 inch) thick; plain finish shop pre-coated with modified silicone coating. General: Provide prefinished aluminum sheet metal flashing at changes in adjacent siding materials and other flashing indicated, color as selected by Owner/Architect. Form sections true to shape, accurate in size, square, and free from distortion or defects. Form material with flat lock seams, except where otherwise indicated; at moving joints, use sealed lapped, bayonet-type or interlocking hooked seams. **COLLECTOR BOXES AND DOWNSPOUT FABRICATION** Collector Boxes: SMACNA (ASMM), Rectangular profile with visable overflow. Collector box and Downspouts: Size for rainfall intensity determined by a storm occurrence of 1 in 10 years in accordance with SMACNA (ASMM). EXTERIOR PENETRATION FLASHING PANELS Flashing Panels for Exterior Wall Penetrations: Premanufactured components and accessories as required to preserve integrity of building envelope; suitable for conduits and facade materials Fasteners: Galvanized steel, with soft neoprene washers. Concealed Sealants: Non-curing butyl sealant. Exposed Sealants: ASTM C920: elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material. Stack material to prevent twisting, bending, or abrasion, and to provide ventilation. Slope to Prevent contact with materials that could cause discoloration, staining, or damage. Pre-Finished Aluminum Sheet: ASTM B209 (ASTM B209M); 0.027 inch thick. Finish: Plain, shop pre-coated with acrylic coating. Downspouts: 3 inch by 4 inch Rectangular profile, minimum. Anchors and Supports: Profiled to suit gutters and downspouts Fasteners: Same material and finish as gutters and downspouts, with soft neoprene washers. Form gutters and downspouts of profiles and size indicated. Form sections square, true, and accurate in size, in maximum possible lengths, free of distortion or defects detrimental to appearance or performance. Allow for expansion at joints. Fabricate gutter and downspout accessories; seal watertight. Acrylic polyester coating: Baked enamel system complying with AAMA 2603. Offset Downspout Adapters: PVC adapter for connecting 3 inch x 4 inch downspouts to 4 inch Non-Sag Sealants: Permits application in joints on vertical surfaces without sagging or BASF Construction Chemicals-Building Systems: www.buildingsystems.basf.com. Dow Chemical Company: www.dow.com. GE Silicones Inc.: www.ge.com Pecora Corporation: www.pecora.com. Sika Corporation: www.usa-sika.com. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com/#sle Do not seal exterior joints unless indicated on drawings as sealed. Seal the following joints: Wall expansion and control joints. Joints between doors, windows, and other frames or adjacent construction. Joints between different exposed materials. Flashing and adjacent building materials. Vertical siding/masonry joints. Sleeves or pipes penetrating exterior walls. Sleeves or pipes penetrating masonry or concrete walls. Openings below ledge angles in masonry. Lap joints in and penetrations through weather barriers. Exterior Siding: Fiber-Cement Siding. Do not seal interior joints indicated on drawings as not sealed. Do not seal gaps and openings in gypsum board and suspended ceilings Seal the following joints: Joints between door frames and window frames and adjacent construction. Gypsum board to wood or masonry. Metal to gypsum board, wood, or masonry. Perimeter of counter tops and vanity tops Perimeter of plumbing fixtures, shower surrounds, drains, or piping. Do not seal the following types of joints Joints where sealant is specified to be furnished and installed by manufacturer of product to be sealed. Joints where sealant installation is specified in other sections. Additional Locations: In addition to locations listed or shown on the Drawings to receive continuous sealant materials, a continuous bead of sealant, appropriate to construction materials and locations, shall be provided/installed at: Horizontal joint between bottom of wood sill plate and top of foundation wall or slab on Horizontal joint(s) between double/triple top plates. Vertical joint(s) between double/triple studs in general framing and at door/window Stud cavities blocked at change in ceiling heights. Penetrations through top and bottom plates. Seam(s) in band joists. Gaps in exterior wall sheathing. Penetrations in exterior wall sheathing. Penetrations in gypsum board of insulated exterior walls. Exterior Joints: Use non-sag polyurethane sealant, unless otherwise indicated. Masonry Expansion Joints: Two-part polyurethane. Metal to Masonry: Two-part polyurethane. Lap Joints in Sheet Metal Fabrications: Two-part polyurethane, non-curing. General Flashing and Flashing to Brick: One-part polyurethane. Sleeves in Walls: One-part polyurethane. Interior Joints: Use non-sag acrylic sealant, unless otherwise indicated. Gypsum Board or Plaster to Masonry or Wood: Acrylic. Metal to Gypsum Board, Plaster or Masonry: Acrylic. Metal to Brick: Two-part polyurethane. Joints between Fixtures in Wet Areas and Floors, Walls, and Ceilings: Mildew-resistant Sealants and Primers: Provide products having lower volatile organic compound (VOC) content than indicated in SCAQMD 1168.

ACCESSORIES

Products:

Sealant Backing Rod, Closed-Cell Type:

Cylindrical flexible sealant backings complying with ASTM C1330 Type C.

Size: 25 to 50 percent larger in diameter than joint width.

Nomaco, Inc; HBR: www.nomaco.com/#sle.

compatible with roofing materials; 6 inches wide; self adhering.

membrane.

Membrane Adhesive: As recommended by membrane manufacturer.

Insulation Adhesive: As recommended by insulation manufacturer.

Surface Conditioner for Adhesives: Compatible with membrane and adhesives.

Thinners and Cleaners: As recommended by adhesive manufacturer, compatible with

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PERFORMANCE REQUIREMENTS

COMPONENTS

Design Pressure (DP): In accordance with applicable codes. Water Penetration Resistance: No uncontrolled leakage on interior face when tested in accordance with ASTM E547 at differential pressure of 15 percent of Performance Grade

Air Leakage: Maximum of 0.30 cu ft/minute/sq ft at 1.57 psf differential pressure, when tested in accordance with ASTM E283.

Thermal Transmittance: U-factor of 0.35, maximum, that includes window glazing, door and frame system based on average window size required for project and determined in accordance with NFRC 100.

Forced Entry Resistance (FER): Tested to comply with ASTM F476 requirements having at least Grade 10 performance for each required swinging door assembly. **FABRICATION**

Fabricate doors in accordance with door quality standard specified.

Cores constructed with stiles and rails: Provide solid blocks at lock edge for hardware reinforcement. Provide solid blocking for other thru-bolted hardware where scheduled.

Factory machine doors for hardware other than surface-mounted hardware, in accordance with hardware requirements and dimensions. Factory fit doors for frame opening dimensions identified on shop drawings, with edge

clearances in accordance with specified quality standard.

SECTION 08 36 13 - SECTIONAL OVERHEAD DOORS SUBMITTALS

Product Data: Show component construction, anchorage method, and hardware. **MANUFACTURERS**

Sectional Overhead Doors:

Clopay Building Products; Value Plus Series, Classic Collection: www.clopaydoor.com. Overhead Door Corp.; Series 183, Traditional Collection: www.overheaddoor.com

fluoropolymer system Color: As selected by Owner from manufacturer's standard range. HARDWARE For each door, include weatherstripping, sill sweep strip, and threshold. Other Door Hardware: Storefront manufacturer's standard type to suit application. For each door, include butt hinges. **SECTION 08 53 13 - VINYL WINDOWS** DELIVERY, STORAGE, AND HANDLING Protect finished surfaces with wrapping. Do not use adhesive papers or sprayed coatings that

bond when exposed to sunlight or weather. FIELD CONDITIONS

Do not install sealants when ambient temperature is less than 40 degrees F. **MANUFACTURERS**

Vinyl Windows: Alside, Inc; Series 1700: www.alside.com. All Temp Windows Inc.; Series 1800: www.alltempwindows.com Jeld-Wen Inc.; Builders Vinyl Series: www.jeldwen.com.

Manufacturers: Basis of Design: Schlage 'B60' & 'B680'. Yale; an Assa Abloy Group company: www.assaabloydss.com. Hager Companies: www.hagerco.com. Schlage, an Allegion brand: www.allegion.com/us. Auxiliary Locks (Deadlocks): Comply with BHMA A156.36, Grade 3. Type: Bored (cylindrical). CLOSERS Manufacturers; Surface Mounted: Basis of Design: Falcon SC93/94: Jamb top. BEST, dormakaba Group; EHD9000: www.bestaccess.com. Sargent, Yale, or AdamsRite; an Assa Abloy Group company: www.assaabloydss.com. Falcon or LCN, an Allegion brand: www.allegion.com/us. Closers: Comply with BHMA A156.4, Grade 3. Type: Surface mounted to door. Provide door closer on each exterior door of the common areas. At outswinging exterior doors, mount closer on interior side of door. Provide adapter plate where required.

AUXILIARY LOCKS (DEADLOCKS)

1 EA Privacy Leverset w/ push-button latching 1 EA Wall-mounted Stop Group No 07: Pool Building secure Interior Doors 3 EA Hinges - 3-1/2 inch x 3-1/2 inch EA Locking Leverset 1 EA Wall-mounted Stop Group No 08: Pool Building Other Interior Doors RESILIENT BASE 3 EA Hinges - 3-1/2 inch x 3-1/2 inch 1 EA Passage Leverset 1 EA Wall-mounted Stop

Minimum Requirements: Comply with ASTM F1700, of Class corresponding to type Mold and Microbial Resistance: Highly resistant when tested in accordance with ASTM Resilient Base: ASTM F1861, Type TV, vinyl, thermoplastic; top set Style B, Cove.

www.shannonspecialtyfloors.com.

D6329; certified in accordance with UL 2824.

Roppe Corporation: www.roppe.com.

Plank Tile Size: 6 by 36 inch

Total Thickness: 0.177 inch.

Height: 4 inches.

Finish: Satin.

Thickness: 0.125 inch.

Wear Layer Thickness: 0.012 inch.

VOC Content Limits: As specified in Section 01 61 16.

Color: To be selected by Owner from manufacturer's full range.

Armstrong World Industries, Inc: www.armstrong.com.

Johnsonite, a Tarkett Company: www.johnsonite.com.

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Commercial Toilet and Shower Accessories: ASI - American Specialties, Inc: www.americanspecialties.com. Bradley Corporation: www.bradleycorp.com. Bobrick Washroom Equipment Inc.: www.bobrick.com. Accessories - General: Shop assembled, free of dents and scratches and packaged complete with anchors and fittings, steel anchor plates, adapters, and anchor components for Stainless Steel Sheet: ASTM A666, Type 304. Galvanized Sheet Steel: Hot-dipped galvanized steel sheet, ASTM A653/A653M, with G90/Z275 coating. Mirror Glass: Annealed float glass, ASTM C1036 Type I, Class 1, Quality Q2, with silvering. protective and physical characteristics complying with ASTM C1503. Adhesive: silicone, waterproof. Fasteners, screws, and bolts: Corrosion resistant or stainless steel. TOILET AND BATHROOM ACCESSORIES Toilet Paper Dispenser: Single roll, surface mounted bracket type, nickel-plated solid brass. Product: Candlestick Park #2209 manufactured by Better Homes Products, or equal. Paper Towel Dispenser: Manual, roll paper type. Cover: High-impact plastic. Capacity: 8 inch diameter roll. Mounting: Surface mounted. Product: Model 2497 manufactured by Bradley, or equal. Soap Dispenser: Liquid soap dispenser, wall-mounted, surface, with stainless steel cover and horizontal stainless steel tank and working parts; push type soap valve, check valve, and window gauge refill indicator, tumbler lock. Model # B4112 manufactured by Bobrick, or equal. Mirrors: Stainless steel framed, 1/4 inch thick annealed float glass; ASTM C1036. Annealed Float Glass: Silvering, protective and physical characteristics in compliance Size: As indicated on drawings. Grab Bars: Stainless steel, textured surface. Standard Duty Grab Bars: Dimensions: 1-1/2 inch outside diameter, minimum 0.05 inch wall thickness, concealed flange mounting, 1-1/2 inch clearance between wall and inside of grab Finish: Safety-grip. Product: Series 832 manufactured by Bradley, or equal. **SECTION 10 44 00 - FIRE PROTECTION SPECIALTIES** Fire Extinguishers: Kidde, a unit of United Technologies Corp: www.kidde.com. Nystrom, Inc: www.nystrom.com. Pyro-Chem, a Tyco Business: www.pyrochem.com. FIRE EXTINGUISHERS Fire Extinguishers - General: Comply with product requirements of NFPA 10 and applicable codes, whichever is more stringent. Multipurpose Dry Chemical Type Fire Extinguishers: Carbon steel tank, with pressure gauge. Stored Pressure Operated: Deep Drawn. Class: A:B:C type. Size: 5 pound; For installation in Community Room and Machine room. DIVISION 11 - FOUIPMENT **SECTION 11 30 13 - RESIDENTIAL APPLIANCES** KITCHEN APPLIANCES Energy Star Rating: Provide Equipment Eligible for Energy Star Rating where available and Refrigerator: Free-standing, side-by-side, and frost-free. Capacity: Total minimum storage of 17.0 cubic ft; minimum 25 percent freezer capacity. Energy Usage: Energy Star Rated. Features: Include glass shelves, automatic icemaker, light in freezer compartment, and ADA compliant front-mounted controls. Exterior Finish: Porcelain enameled steel, color as selected by Owner. Manufacturers: To be selected by Owner. Microwave: Countertop. Capacity: 1.3 cubic fi Power: 1000 watts. Height: 12 inches maximum. Features: Include turntable. Exterior Finish: Painted steel, color as selected by Owner. Manufacturers To be selected by Owner. Convection Oven, : Countertop. Size: 12 inch. Features: pre-programmed cooking fuctions, broil, interior light, non-stick coated racks, Exterior Finish: Painted steel, color black. Manufacturers: **DIVISION 12 - FURNISHINGS SECTION 12 21 13 - HORIZONTAL LOUVER BLINDS** Horizontal Louver Blinds: CACO Inc.: www.cacoinc.com SWFcontract, a division of Spring Window Fashions, LLC.: www.swfcontract.com. Bali Blinds. **Graber Blinds** Description: Horizontal slat louvers hung from full-width headrail with full-width bottom rail. Provide 1 inch 'Mini-Blind' horizontal louver blinds at all Maintenance Building windows. Manual Operation: Control of raising and lowering by counterbalance spring with full range locking; blade angle adjustable by control wand. Plastic Slats: Extruded PVC, square slat corners. Width: 1 inch. Thickness: 0.017 inch. Texture: Smooth. Slat Support: Woven polypropylene cord, ladder configuration. Head Rail: Pre-finished, formed steel box, with end caps; internally fitted with hardware, pulleys, and bearings for operation; same depth as width of slats. Bottom Rail: Pre-finished, formed steel; with end caps. Color: Same as headrail. Lift Cord: Braided nylon, continuous loop with restraining device; comply with WCMA A100.1. Control Wand: Extruded solid plastic; hexagonal shape. SECTION 12 35 30 - RESIDENTIAL CABINETS AND COUNTERTOPS All Wood Cabinetry Inc.; "All Wood": www.allwoodfast.com American Traditions/S&W Cabinets, Inc; Shaker Poplar: www.swcabinets.com Wellborn Cabinet, Inc; Home Concepts - All Plywod: www.wellborn.com/#sle.

FABRICATION Provide back/end splash wherever counter edge abuts vertical surface unless otherwise **SECTION 28 10 00 - ACCESS CONTROL** Notify Architect of any conflicts with or deviations from Contract Documents. Obtain ready for installation. Access Control Units - Basis of Design: DKS Door King; Series 1830. ACCESS CONTROL SYSTEM REQUIREMENTS

Vanity Countertops: Post formed plastic laminate over particle board, coved to back splash. Colors/Patterns: To be selected by Owner from manufacturer's standard line. WINDOW SILLS Self edged plastic laminate over particle board with, square front nosing and self-edged sides.

Shop assemble casework for delivery to site in units easily handled and to permit passage through building openings. Fabricate tops and splashes in the largest sections practicable, with top surface of joints flush.

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

ADMINISTRATIVE REQUIREMENTS

Coordination: Coordinate the work with other installers to provide suitable door hardware as required for both access control functionality and code compliance. Coordinate the work with other installers to provide power for equipment at required

direction before proceeding with work. DELIVERY, STORAGE, AND HANDLING

Receive, inspect, handle, and store products in accordance with manufacturer's instructions. Store products in manufacturer's unopened packaging, keep dry and protect from damage until

MANUFACTURERS

Access Control Units: Bosch Security Systems: www.boschsecurity.us/#sle.

DoorKing, Inc: www.doorking.com/#sle. Honeywell International, Inc: www.honeywellaccess.com/#sle.

Provide new access control system consisting of required equipment, conduit, boxes, wiring, connectors, hardware, supports, accessories, software, system programming, etc. as necessary for a complete operating system that provides the functional intent indicated. Surge Protection:

Provide surge protection for readers and door strikes/locks. Access Control Points:

Exterior Doors: Function: Operational and emergency. Access: Controlled entry, free exit. Peripherals on Secure Side:

Reader/Keypad: Contacless key fob reader. Locking Device: Electric strike. Configuration: Fail-secure.

Computers Required: Workstation Computer(s): Quantity: One. Location(s): Leasing Office. Peripherals required for each workstation computer:

Mouse and keyboard. Monitor(s): One. Alarm/report printer.

Interface with Other Systems: Provide products compatible with other systems requiring interface with access control Interface with electrically operated door hardware as specified in Section 08 71 00.

Provide products listed, classified, and labeled as suitable for the purpose intended. Access Control Units and Readers: Listed and labeled as complying with UL 294.

ACCESS CONTROL UNITS AND SOFTWARE

Provide access control units and software compatible with readers to be connected. Unless otherwise indicated, provide software and licenses required for fully operational system.

Access Control Unit: Control Capability: 15 doors/ 15 readers. Quantity of Access Codes Supported: 8000.

Operating Modes Supported Proximety key fob. Features: Dedicated power loss alarm input.

Supports database and event exporting. Supports database backup. Computers:

Workstation Computers: Unless otherwise indicated, workstation computer hardware and associated peripherals not furnished by access control system manufacturer to be provided by Contractor as part of work of this section, meeting access control system equipment manufacturer's recommended requirements.

Servers: Unless otherwise indicated, server hardware and associated peripherals not furnished by access control system manufacturer to be provided by Contractor as part of work of this section, meeting access control system equipment manufacturer's recommended requirements.

ACCESS CONTROL POINT PERIPHERALS

Provide devices compatible with control units and software. Provide devices suitable for operation under the service conditions at the installed location. Readers and Keypads:

General Requirements: Provide readers compatible with credentials to be used. Proximity Readers

Utilize 125 kHz RF communication with compatible credentials. Proximity Reader:

Read Range: Up to 12 inches. Features: Tamper output.

ACCESSORIES

Unless otherwise indicated, credentials to be provided by Contractor.

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Alura Village Pool House

Lee's Summit, Jackson County, Missouri

GENERAL NOTES

SEE ARCHITECTURAL DRAWINGS OR SITE PLAN FOR FINISH FLOOR ELEVATIONS

DESIGN SPECIFICATIONS

2018 INTERNATIONAL BUILDING CODE

EARTHWORK OPERATIONS SHALL BE PERFORMED UNDER THE DIRECTION OF A PROFESSIONAL TESTING AGENCY TO ASSURE COMPLIANCE WITH THE RECOMMENDATIONS OF THE SOILS REPORT PREPARED BY OLSSON, INC. DATED

CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT ACI 301, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 305 SPECIFICATIONS FOR HOT WATER CONCRETE, AND ACI 306 SPECIFICATIONS FOR COLD WEATHER CONCRETE, WITH THE FOLLOWING ADDITIONAL REQUIREMENTS:

- 1. CONCRETE SHALL DEVELOP THE FOLLOWING 28-DAY MINIMUM COMPRESSIVE STRENGTH:
- FOUNDATIONS CAST-IN-PLACE WALLS
- FLOOR SLAB
- 3. CHLORIDE- BASED ADMIXTURES ARE PROHIBITED IN ALL REINFORCED CONCRETE.
- 4. REINFORCING STEEL SHALL CONFORM TO ASTM A615, A616, OR A617, GRADE 60. 5. ALL CONTINUOUS REINFORCING STEEL THAT MEETS AT A CORNER SHALL BE TIED TOGETHER WITH A
- CORNER BAR THAT HAS SUFFICIENT LAP DISTANCE IN EACH DIRECTION
- 6. CONTINUOUS REINFORCING BARS LAP LENGTH SHALL BE A MINIMUM OF 48 BAR DIAMETERS UNLESS
- 7. CONCRETE SLUMP SHALL BE A MAXIMUM OF 4" +/- 1" (ASTM C- 143) AS DELIVERED IN THE FIELD CONTRACTOR MAY USE CHEMICAL ADMIXTURES TO ATTAIN A MAXIMUM SLUMP OF 8" FOR WORKABILITY. NO WATER MAY BE ADDED TO THE CONCRETE MIX ON SITE UNLESS WATER IS WITHHELD AT THE

BATCHING FACILITY. IF WATER IS WITHHELD AT THE BATCHING FACILITY IT SHOULD BE REFLECTED ON

- THE LOAD TICKET. THE TOTAL AMOUNT OF WATER IN THE MIX SHALL NOT EXCEED WHAT IS NOTED ON THE APPROVED MIXED. THIS SHALL BE NOTED IN THE SPECIAL INSPECTOR'S RECORDS. 8. CONCRETE EXPOSED TO WEATHER, VEHICLES, AND/OR DEICING CHEMICALS SHALL BE AIR-ENTRAINED
- WITH 6% (+/-) 1.5% ENTRAINED AIR BY VOLUME AT POINT OF DISCHARGE, DO NOT ALLOW AIR CONTENT OF TROWELED FINISHED FLOORS TO EXCEED 3%. 9. SUBMIT CONCRETE MIX PROPORTIONS PRIOR TO START OF WORK. DO NOT BEGIN CONCRETE
- PRODUCTION UNTIL MIXES HAVE BEEN REVIEWED AND ARE ACCEPTABLE TO THE ENGINEER. 10.READY MIX CONCRETE SHALL COMPLY WITH REQUIREMENTS OF ASTM C94.
- 11.CONCRETE WORK EXECUTION A. CONSTRUCT FORMS TO CORRECT SIZE, SHAPE, ALIGNMENT, ELEVATION AND POSITION; AND TO
- SUPPORT VERTICAL AND LATERAL LOADS. B. POSITION, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE, UNLESS NOTED OTHERWISE ON THE DRAWINGS:
 - CAST AGAINST AND EXPOSED TO EARTH.......3 INCHES EXPOSED TO EARTH OR WEATHER......2 INCHES
- NOT EXPOSED TO WEATHER OR1 ½ INCHES IN CONTACT WITH EARTH.....
- C. PROVIDE CONTROL JOINTS IN SLABS-ON-GRADE AT NOT GREATER THAN 15 FEET ON CENTER IN EACH DIRECTION. SAW CUT CONTROL JOINTS MINIMUM 1/4 OF SLAB DEPTH, AS SOON AFTER SLAB FINISHING WITHOUT DISLODGING AGGREGATE.
- D. STEEL TROWEL FINISH ALL INTERIOR CONCRETE SLABS, BROOM FINISH ALL EXTERIOR CONCRETE
- E. CURE ALL CONCRETE IN COMPLIANCE WITH ACI 301, USING A LIQUID TYPE MEMBRANE, NON-RESIDUAL, CURING COMPOUND COMPLYING WITH ASTM C309. ASSURE COMPATIBILITY WITH

TIMBER WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT ANSI/AWC NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION WITH 2018 NDS SUPPLEMENT FOR WOOD CONSTRUCTION. WITH THE FOLLOWING SUPPLEMENTAL REQUIREMENTS:

- 1. FOR COMMON MEMBER SIZES, THE SPECIES AND GRADES SHALL BE AS FOLLOWS, UNLESS NOTED
 - A. 2X4 SPF No.1/No.2
- B. 2X6 SPF No.1/No.2
- DF-L No.2
- D. 2X10 DF-L S.S.
- E. 2X12 DF-L S.S.

EQUIVALENT (OR BETTER) GRADES & SPECIES MAY BE SUBMITTED FOR THE ENGINEER'S APPROVAL.

- 2. SIZES SHOWN FOR LUMBER ARE NOMINAL SIZES.
- 3. TIMBER EXPOSED TO WEATHER OR GROUND, OR IN CONTACT WITH CONCRETE OR MASONRY SHALL BE
- PRESSURE-IMPREGNATED BY AN APPROVED PROCESS AND PRESERVATIVE.
- 4. SPLICING OF JOISTS, STUDS, OR HEADERS IS PROHIBITED EXCEPT AS SHOWN. 5. BOLTS SHALL CONFORM TO ASTM A307. HOLES SHALL BE DRILLED PER SECTION 12.1.3 OF THE
- 2018 ANSI/AWC NDS FOR WOOD CONSTRUCTION NDS SUPPLEMENT. 6. LAG SCREWS AND WOOD SCREWS SHALL BE INSTALLED PER SECTIONS 12.1.4 & 12.1.5 RESPECTIVELY,
- OF THE 2018 ANSI/AWC NDS FOR WOOD CONSTRUCTION WITH 2018 NDS SUPPLEMENT.
- 7. COMMON NAILS SHALL BE USED. UNLESS NOTED OTHERWISE. IN ADDITION, NAILS SHALL BE GALVANIZED, IF EXPOSED TO WEATHER OR MOISTURE. TOE-NAILS SHALL BE DRIVEN PER SECTION 12.1.6.3 OF THE 2018 ANSI/AWC NDS FOR WOOD CONSTRUCTION WITH 2018 NDS SUPPLEMENT.
- 8. FASTENING SHALL BE PER THE IBC MINIMUM FASTENING SCHEDULE, TABLE 2304.10.1, UNLESS NOTED
- 9. CONNECTIONS/CONNECTORS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

POST-INSTALLED ANCHORS

- 1. ALL POST-INSTALLED ANCHORS SHALL MEET THE REQUIREMENTS OF THE CODE-CITED EDITION OF ACI 318, APPENDIX "D", AND SHALL BE ACCEPTABLE FOR BOTH CRACKED AND UNCRACKED CONCRETE. 2. EXPANSION ANCHORS HAVE BEEN DESIGNED AS HILTI KWIK BOLT TZ ANCHORS, UNLESS NOTED
- 3. ADHESIVE ANCHORS HAVE BEEN DESIGNED TO USE HILTI HIT HY 200 ADHESIVE IN CONCRETE OR SOLID
- MASONRY, UNLESS NOTED OTHERWISE. 4. EQUIVALENT ANCHORS MAY BE SUBMITTED FOR THE ENGINEER'S APPROVAL. SUBMITTALS ARE THE CONTRACTOR'S RESPONSIBILITY AND MUST INCLUDE ICC ES EVALUATION REPORTS FROM THE
- INTERNATIONAL CODE COUNCIL (ICC). 5. EMBEDMENT DEPTH IS DEFINED AS THE DISTANCE FROM THE SURFACE OF THE LOAD-BEARING BASE MATERIAL TO THE DEEPEST PART OF THE ANCHOR AFTER THE ANCHOR HAS BEEN DRIVEN INTO THE
- HOLE BUT NOT YET EXPANDED. 6. ADHESIVE ANCHORS SHALL BE ACCEPTABLE FOR LONG-TERM LOADING. WHEN BASE MATERIAL TEMPERATURES ARE BELOW 40 DEG F, ONLY NON-EPOXY-BASED ADHESIVES SHALL BE USED.
- 7. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE DRAWINGS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER PRIOR TO USING POST-INSTALLED ANCHORS FOR MISSING OR MISPLACED CAST-IN-PLANE ANCHORS. CARE SHALL BE TAKEN TO AVOID CONFLICTS WITH EXISTING REINFORCING BARS. HOLES SHALL BE DRILLED AND CLEANED PER ANCHOR MANUFACTURER'S SPECIFICATIONS.
- 8. STAINLESS STEEL ANCHORS ARE REQUIRED AT ALL PERMANENTLY EXPOSED WEATHER CONDITIONS.

PREFABRICATED WOOD TRUSSES

- 1. FLOOR & ROOF TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE TRUSS PLATE INSTITUTE (TPI) DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES, AND THE ANSI/AWC
- 2. PROVIDE TEMPORARY AND PERMANENT BRACING ON ALL TRUSSES, AS REQUIRED TO PROVIDE MEMBER
- 3. FLOOR & ROOF TRUSSES SHALL BE DESIGNED AND CONSTRUCTED FOR A MAXIMUM TOTAL LOAD
- A. DEAD, LIVE, SNOW, WIND, EARTHQUAKE: SEE PROJECT DESIGN DATA ON COVER SHEET.
- LBS HUNG ANYWHERE ALONG THE BOTTOM CHORD.
- FRAMING, SUCH AS THAT WHICH FORMS VALLEYS AND HIPS ON ROOFS. D. DRIFTED SNOW LOAD: TRUSSES SHALL BE DESIGNED TO SUPPORT DRIFTED SNOW LOADS IN
- ACCORDANCE WITH THE APPROPRIATE BUILDING CODE.
- E. IN-PLANE LATERAL LOADS: TRUSSES SHALL BE DESIGNED TO SUPPORT ANY LATERAL LOADS
- 4. GABLED END TRUSSES SHALL HAVE VERTICAL MEMBERS SPACED AT 16" O.C. MAXIMUM.
- 5. SUBMITTALS SHALL INCLUDE THE FOLLOWING:
- A. SHOP DRAWINGS PREPARED UNDER THE SUPERVISION OF, AND SIGNED AND SEALED BY, A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS BUILT. THESE CAMBER, CONFIGURATION, AND SPACING FOR EACH TYPE OF TRUSS REQUIRED; TYPE, SIZE, MATERIAL, FINISH, AND LOCATION OF METAL CONNECTOR PLATES; AND BEARING DETAILS. SHOW TRUSS LAYOUT AND ALL REQUIRED TEMPORARY AND PERMANENT BRACING AFFECTING THE STRUCTURAL CAPACITY OF THE TRUSSES.

PROVIDE COMPLETE ENGINEERING DESIGN CALCULATIONS THAT INCLUDE DESIGN VALUES, DESIGN ANALYSIS INDICATING LOADING, ASSUMED ALLOWABLE STRESSES, STRESS DIAGRAMS, AND CALCULATIONS, AND ANY QUALIFIED PROFESSIONAL ENGINEER WHO IS REGISTERED IN THE STATE WHERE THE PROJECT IS BUILT AND

SPECIAL INSPECTIONS

THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.

- a. CONCRETE GROUT DESIGN MIX (PERIODIC)
- c. POST INSTALLED ANCHORS IN CONCRETE (CONTINUOUS)
- d. IN-SITU SOILS, EXCAVATIONS, FILLING & COMPACTION (PERIODIC)
- e. WOOD FRAMING:
- e.a. SHEAR WALLS; WALL SIZE, CONFIGURATION, BLOCKING, PANEL GRADE, PANEL THICKNESS, AND FASTENING. (PERIODIC)
- e.c. FRAMING MEMBERS AND DETAILS (PERIODIC)
- e.d. MATERIAL GRADE (PERIODIC)
- e.f. PRE-ENGINEERED TRUSSES; FRAMING, CONNECTIONS, BRIDGING (PERIODIC) THE CONTRACTOR SHALL REQUEST SPECIAL INSPECTION OF THE ITEMS LISTED ABOVE PRIOR TO THOSE ITEMS

- NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION.
- DEFLECTION OF L/360 AND TO SAFELY SUPPORT THE FOLLOWING LOADS:
- B. MECHANICAL PIPE LOAD: TRUSSES SHALL BE DESIGNED FOR A CONCENTRATED LOAD OF 250
- C. OVER-FRAMING LOAD: TRUSSES SHALL ALSO BE DESIGNED TO SUPPORT ADDITIONAL OVERBUILD
- CARRIED AXIALLY IN THE PLANE OF THE TRUSS, AS SHOWN ON THE PLANS.

OTHER INFORMATION NEEDED FOR REVIEW. THE CALCULATIONS SHALL HAVE BEEN SIGNED AND SEALED BY A WHO IS RESPONSIBLE FOR PREPARATION OF THE CALCULATIONS.

- b. PLACING OF CONCRETE AND REINFORCING STEEL (CONTINUOUS OF CONCRETE SAMPLING / PERIODIC OF REINFORCING)

- e.b. DIAPHRAGMS (FLOOR AND ROOF SHEATHING): SIZE, CONFIGURATION, BLOCKING, PANEL GRADE, PANEL THICKNESS, AND FASTENING. (PERIODIC)
- e.e. CONNECTIONS; HANGERS, HOLD DOWNS, BUILT-UP COLUMNS, BUILT-UP BEAMS (PERIODIC)
- BECOMING INACCESSIBLE AND UNOBSERVABLE DUE TO PROGRESSION OF THE WORK.

	DESIGN DATA	A	
2018 INTERNATIONAL BUILD	DING CODE / ASCE 7-16		
BUILDING OCCUPANCY CAT	EGORY	1	
ROOF LOAD DATA			
LIVE LOAD		20	
ASPHALT SHINGLES + FE	ELT	4.0	
5/8" OSB ROOF SHEATH	IING	2.5	
PRE-ENGINEERED WOOD	O TRUSSES @ 2"-0" O.C.	4.0	
INSULATION (BLOWN)		1.5	
MECHANICAL ALLOWAN	ICE	5.0	
5/8" GYP. CEILING		3.0	
SOLAR		5.0	
TOTAL TO TRUSSES		45 lbs	/sq.ft
RAIN LOADING DATA			
15 MINUTE RAIN INT	ENSITY	7.49 in/	nr
60 MINUTE RAIN IN	TENSITY	3.52 in/	nr
ROOF SNOW LOAD DATA*	(*UNBALANCED & DRIFTING IN ADDITION TO UNIFORM I		
ρ_g =		20 lbs	/sq.ft
C _e =		1.0	(0.04) * 7000
/ _s =		1.0	
$C_t =$		1.0	
p_f =		14.00 lbs	/sq.ft
WIND DESIGN DATA			
V _{ult} =		109 M.F	P.H. (3-SECOND (
RISK CATEGORY		ı	
EXPOSURE		В	
INTERNAL PRESSURE CO	OEFFICIENT =	± 0.18	
MAXIMUM COMPONENTS	& CLADDING WIND	+/-24.97 lbs	/sq.ft
EARTHQUAKE DESIGN DAT	А		
RISK CATEGORY		I	
<i>I_E</i> =		1.0	
S _S =		0.1	
S ₁ =		0.068	
SITE CLASS		С	
S _{DS} =		0.086	
S _{Df} =		0.068	
SEISMIC DESIGN CATEGO		В	
BASIC SEISMIC-FORCE-F LIGHT-FRAME (WC SHEAR RESISTAN	OOD) WALLS SHEATHED WIT	H WOOD STRUCTURA	_ PANELS RATE
R=		6.5	
$\Omega_o =$		3.0	
C_d =		4.0	
DESIGN BASE SHEAR		V = 0.013 W	
EQUIVALENT LATERAL F	FORCE PROCEDURE		

INDEX OF SHEETS COVER / GENERAL STRUCTURAL DATA PS100 FOUNDATION PLAN PS200 PS210 FOUNDATION DETAILS PS300 ROOF FRAMING PLAN ROOF FRAMING DETAILS PS310-PS311

THIS SHEET HAS BEEN SIGNED,

Hous 8 D Villa Ø Alur

DRAWING INCLUDES:

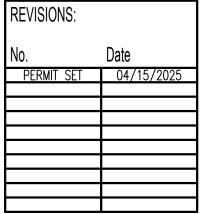
STRUCTURAL DATA

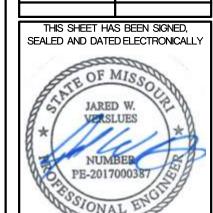
DESIGNED: JWV SEH PROJECT NO.:

NOTE:
ALL DIMENSIONS ARE FROM FACE OF FOUNDATION WALL OR FRAMING;
EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE
OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.



REENTRANT CORNER BARS, REFER TO TYPICAL CRACK CONTROL REINFORCING DETAIL ON SHEET S210.







INTRINSIC
DEVELOPMENT
3622 ENDEAVOR AVE.
COLUMBIA, MISSOURI

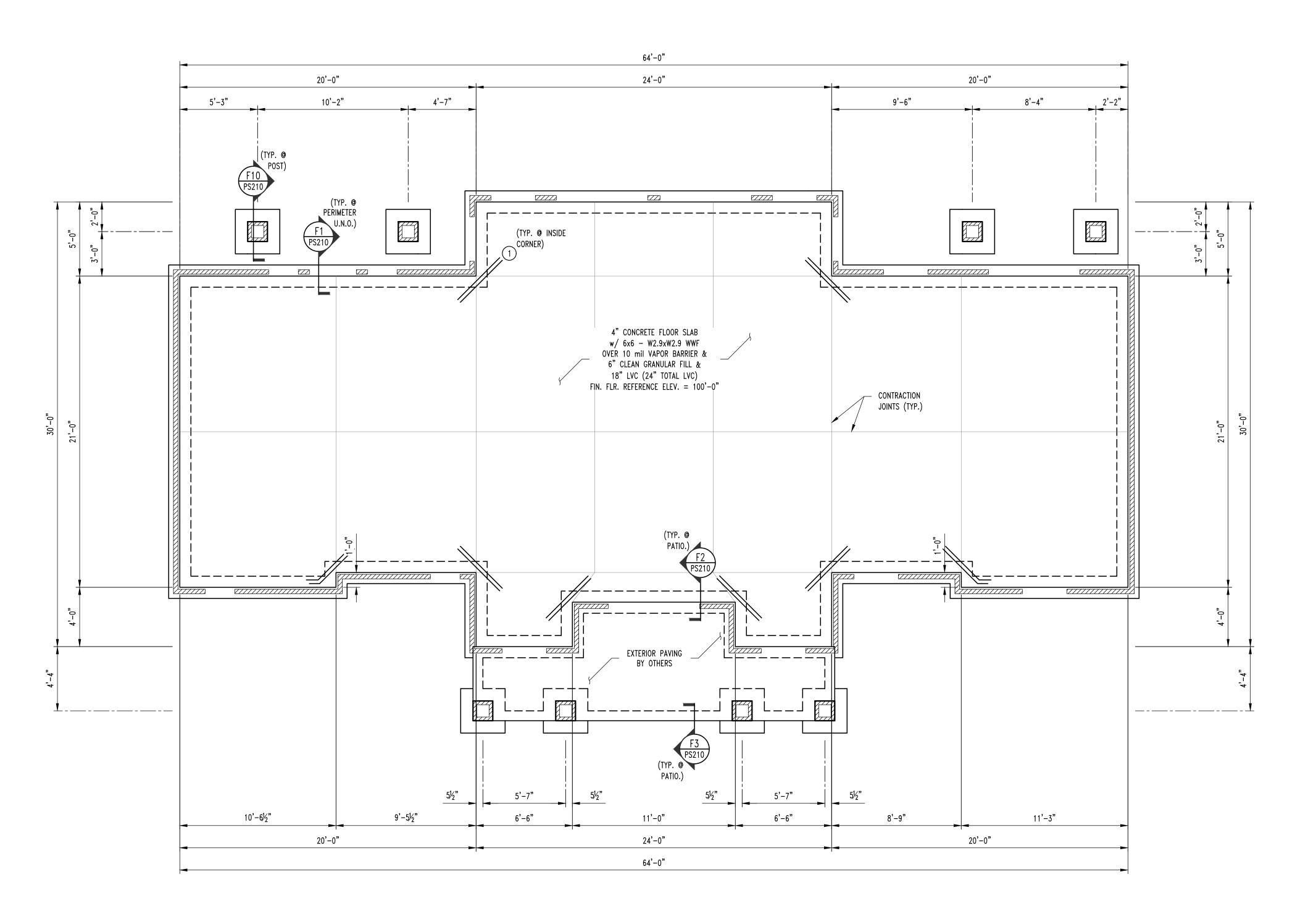
age Pool House

Alura Village Pool

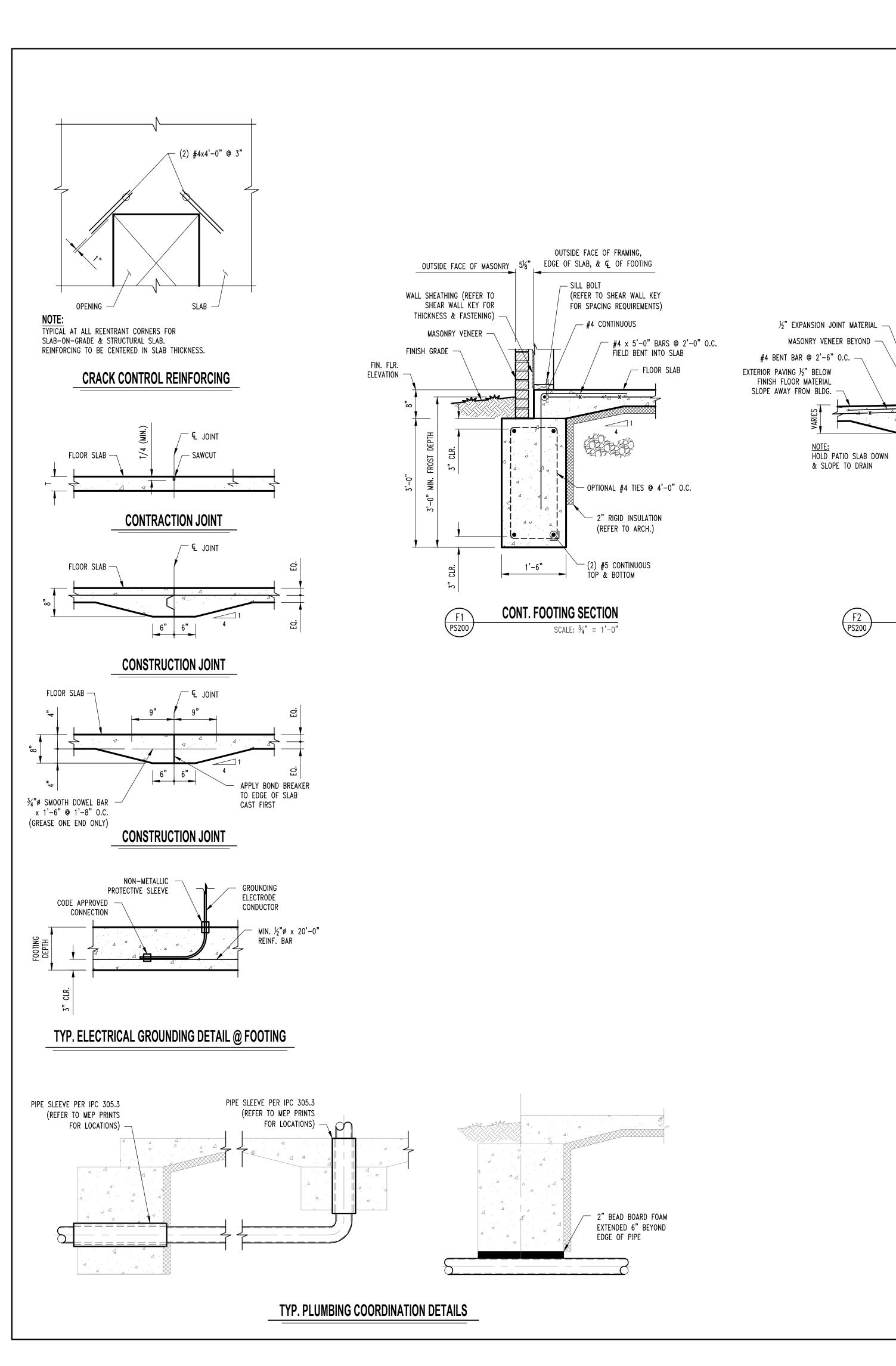
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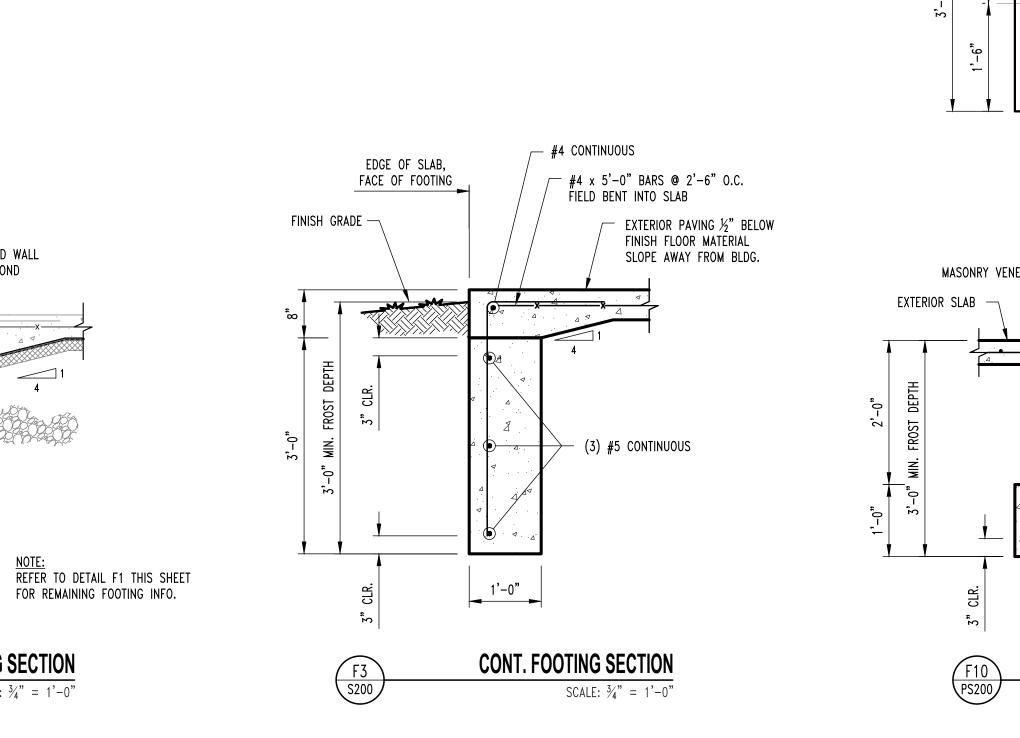
FOUNDATION PLAN

DESIGNED:	JWV
DRAWN:	SEH
PROJECT NO.:	230286
SHEET:	
PS:	200





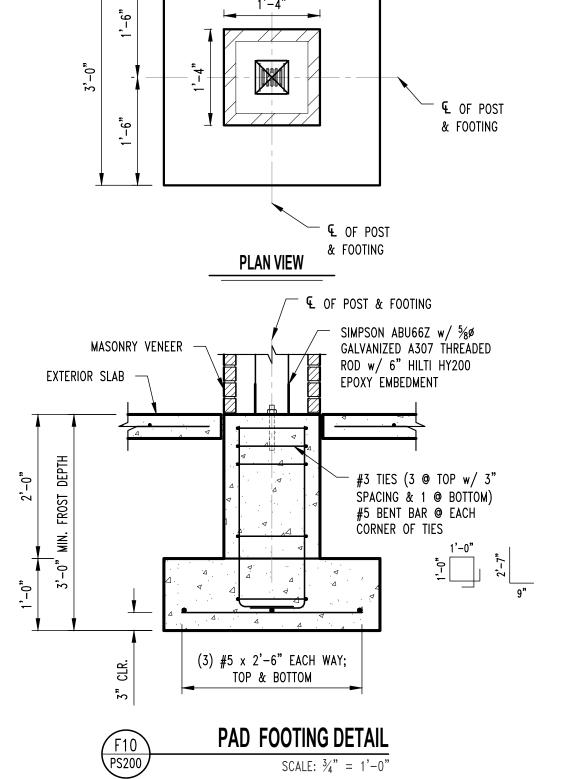


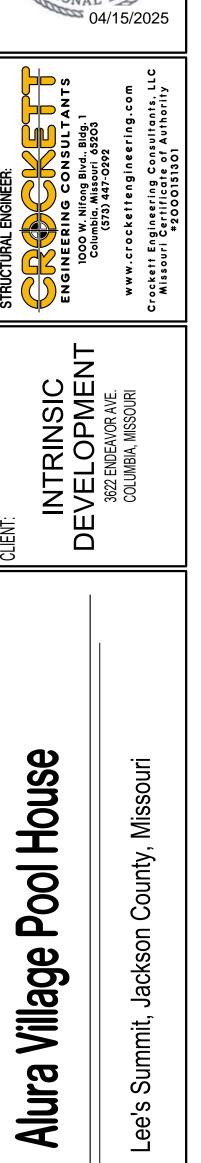


FOR REMAINING FOOTING INFO.

PATIO FOOTING SECTION

SCALE: $\frac{3}{4}$ " = 1'-0"





DRAWING INCLUDES:

DESIGNED:

PROJECT NO.:

SHEET:

FOUNDATION DETAILS

PS210

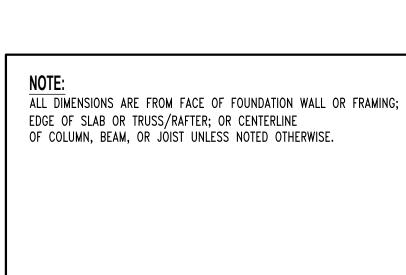
JWV

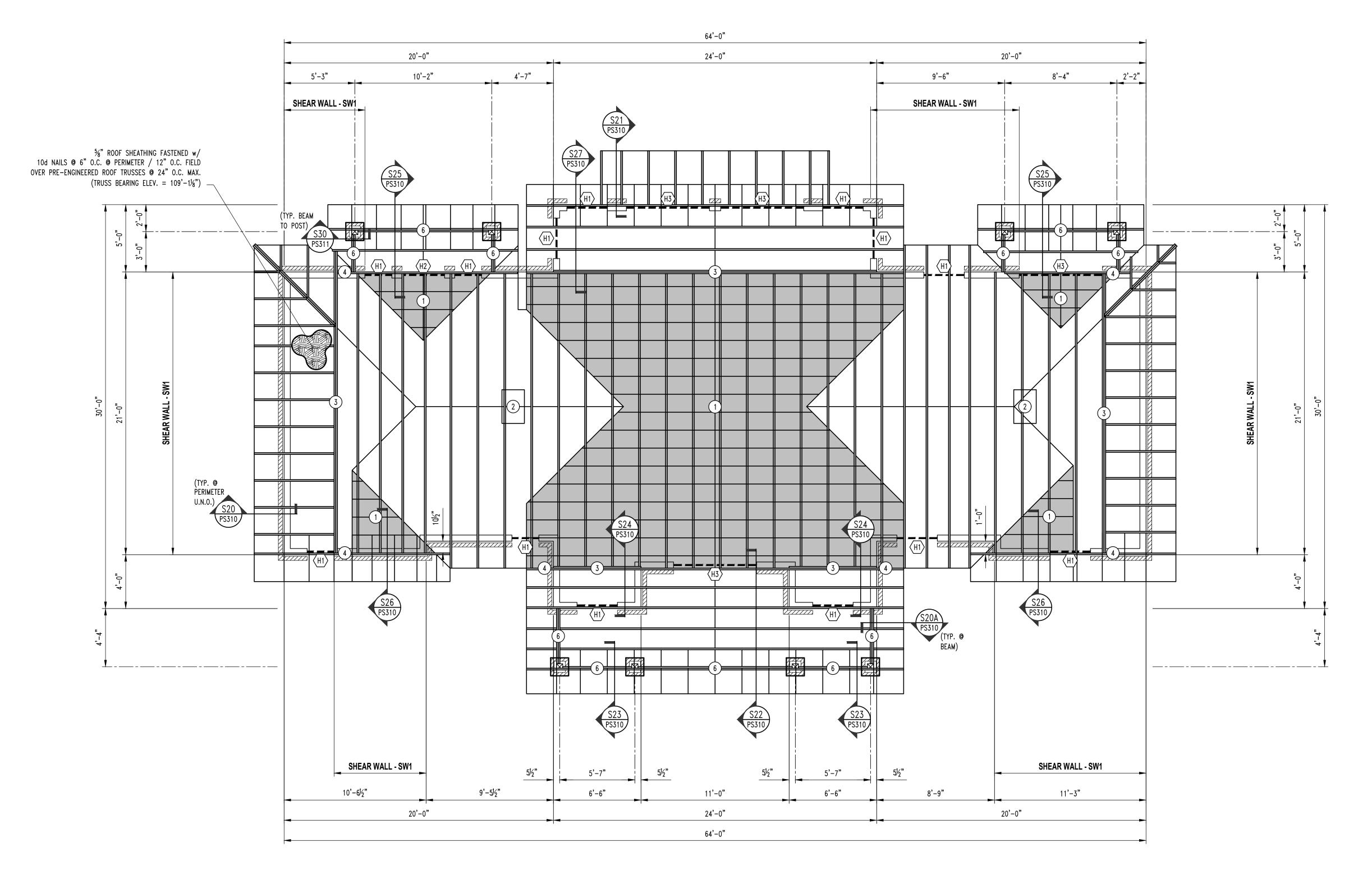
SEH

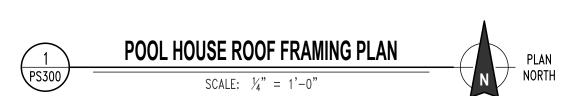
REVISIONS:

PERMIT SET 04/15/2025

SEALED AND DATED ELECTRONICALLY







	BRICK LINTEL SCHEDULE
LENGTH	MEMBER SIZE (GALVANIZED)
L ≤ 4'-0"	L4x4x3/8 WTH 6" BEARING EACH END
L ≤ 6'-6"	L6x4x3/8 (LLV) WITH 6" BEARING EACH END

	HEA	ADER SCHEDULE		
BEL	HEADER	CRIPPLE/JACK	JAMB/KING	
H1"	2 Ply 2x6 SPF No.1/No.2	Single Ply 2x6 SPF No.1/No.2	Single Ply 2x6 SPF No.1/No.2	
H1"	2 Ply 2x8 Doug. Fir No.2	Single Ply 2x6 SPF No.1/No.2	Single Ply 2x6 SPF No.1/No.2	
H2"	2 Ply 2x10 Doug. Fir Sel. Struct	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2	

ROOF FRAMING NOTES

- TRAME ROOF OVER PRE-ENGINEERED TRUSSES TO CREATE RIDGE, VALLEY, OR HIP AS SHOWN w/ 2x SPF No.1/No.2 RAFTERS @ 16" O.C. OR PRE-ENGINEERED TRUSSES @ 2'-0" O.C. MAX. (SHADED AREA)
- 2 ATTIC ACCESS; REFER TO ARCHITECTURALS FOR ADDITIONAL INFORMATION.
- 3 GIRDER TRUSS
- 4 3-PLY BUILT-UP POST BENEATH GIRDER TRUSS
 THIS LEVEL TO FLOOR SLAB
 CONNECTIONS ARE AS FOLLOWS:
 FLOOR SLAB: SIMPSON LTTP2.
 ROOF TRUSS: BY TRUSS MANUFACTURER
- 5 REFER TO TYPICAL SHEAR WALL DETAIL ON SHEET S310.
- 6 (2) TREATED So. PINE No.2 2x10's.

NO. Date			
PERMIT SET	04/15/2025		
	S BEEN SIGNED, ED ELECTRONICALLY		

REVISIONS:

THIS SHEET HAS BEEN SIGNED,
SEALED AND DATED ELECTRONICALLY

OF MIS

JARED W.
WEASLUES

NUMBER
PE-2017000387

NUMBER PE-2017000387
04/15/2025

ENGINEERING CONSULTANT

1000 W. Nifong Bivd.. Bidg. 1

Columbia, Missouri 65203

(573) 447-0292

www.crockettengineering.com

INTRINSIC
DEVELOPMENT
3622 ENDEAVOR AVE.
COLUMBIA, MISSOURI

Village Pool House

Alura

DRAWING INCLUDES:

ROOF FRAMING PLAN

DESIGNED: JWV

DRAWN: SEH

PROJECT NO.: 230286

PS300

TYPICAL SHEAR WALL UNLESS NOTED

7/16" OSB SHEATHING EASTENE

SHEAR WALL KEY

FIRST FLOOR:

SW1 SHEAR WALL

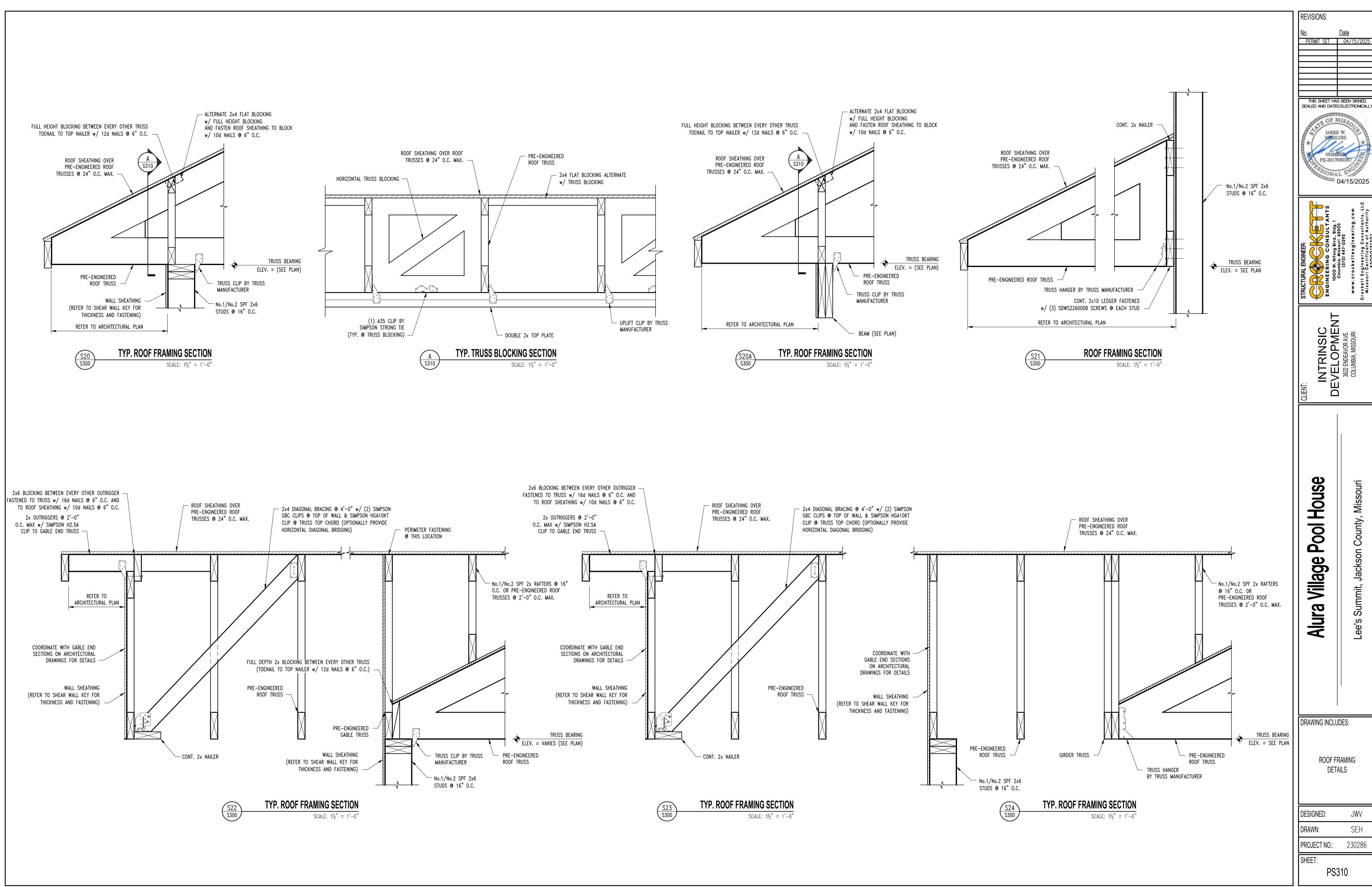
7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C.
FIELD

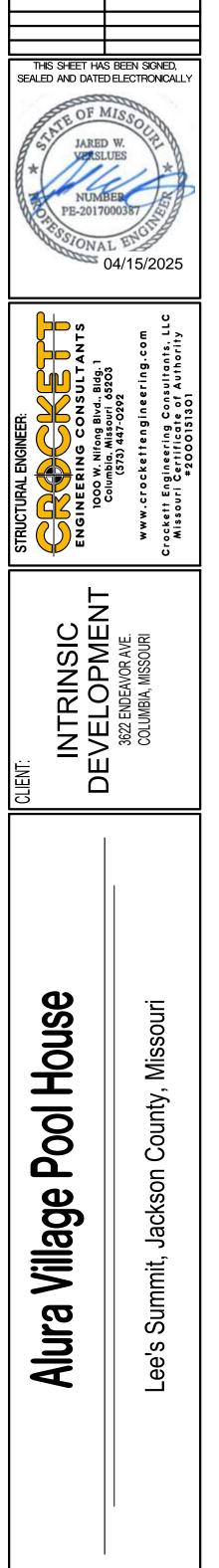
1/2" DIAMETER X 6" SIMPSON TITEN HD ANCHOR SCREWS @ 3'-0" O.C.

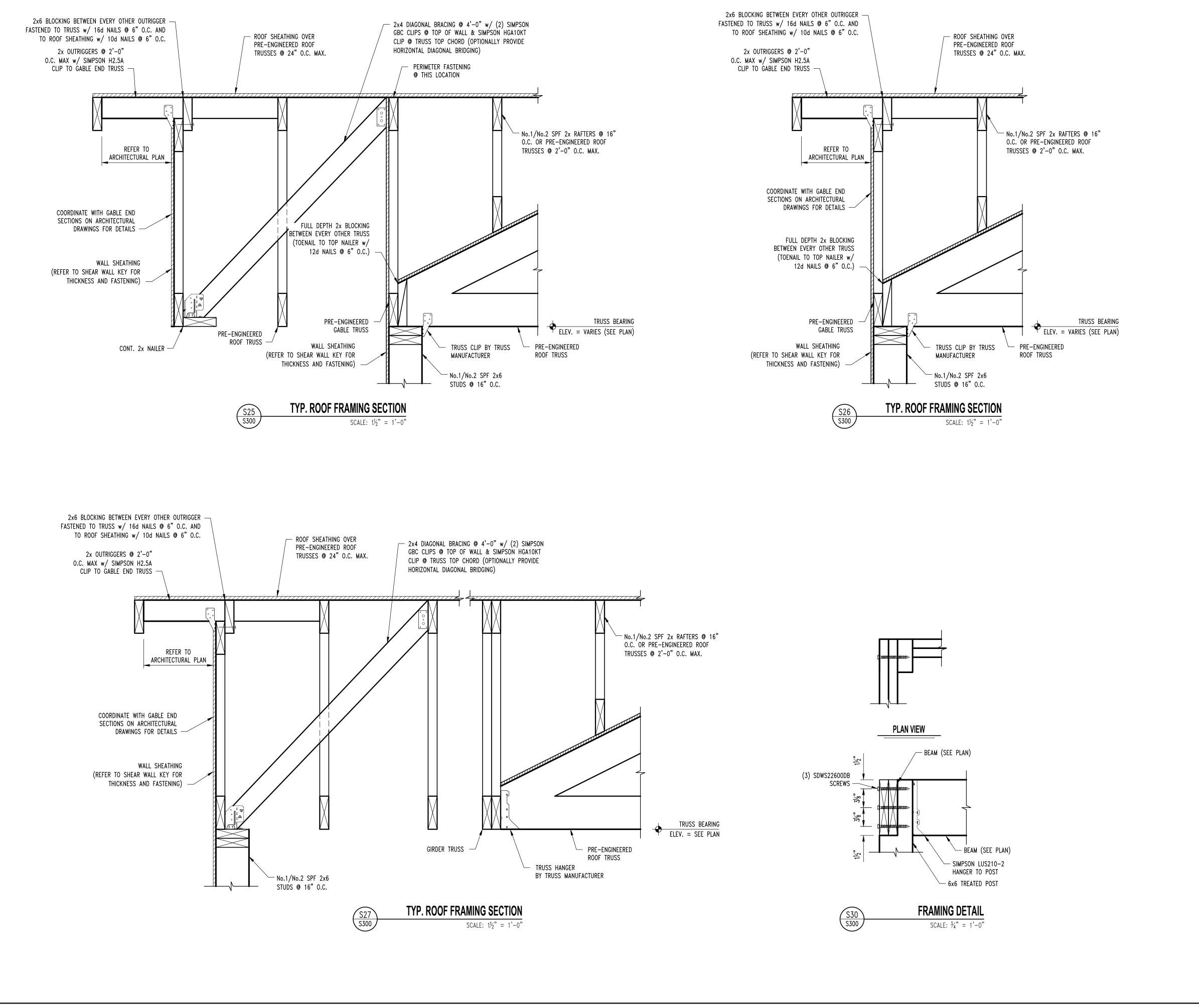
7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C.

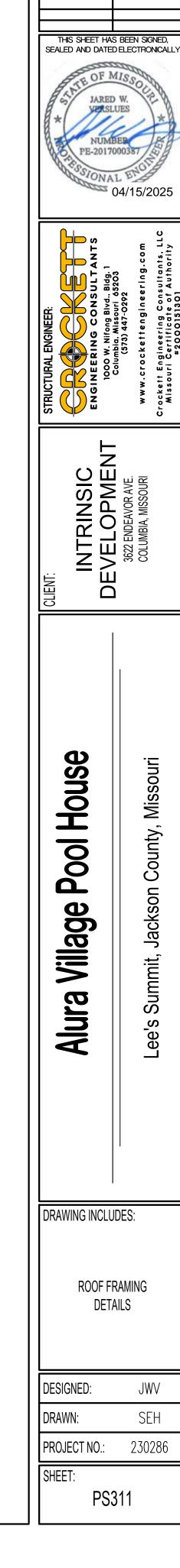
 REQUIRES SIMPSON DTT2Z-SDS2.5 HOLDOWN FASTENED TO 2-PLY STUDS W/ (8) 1/4" X 1-1/2" SDS SCREWS W/ 1/2" DIAMETER A307 THREADED ROD W/ 16" TOTAL (8" INTO FOOTING) SIMPSON "AT-3G" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

- 1/2" DIAMETER X 6" SIMPSON TITEN HD ANCHOR SCREWS @ 3'-0" O.C.
- NO HOLDDOWNS REQUIRED









REVISIONS:

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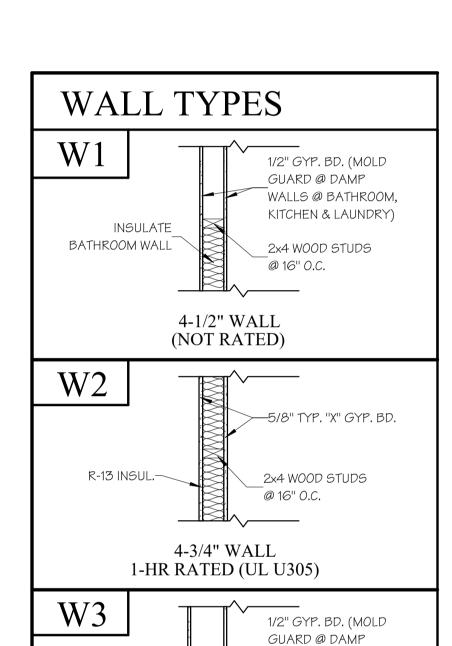
TEN Gl	MPERED		
TO" MIN.	10" MIN.		
A	В	\mathbf{C}	D

AIR SEALING NOTES:

- BEFORE SHEETROCK • SEAL ALL RIM/BAND JOIST AND INCLUDE AN AIR BARRIER. THE USE OF
- SPRAY FOAM IS RECOMMENDED. • SEAL ALL PENETRATIONS IN BOTTOM AND TOP PLATES.
- SEAL SHEETROCK WITH A CONTINUOUS BEAD OF ACOUSTIC SEALANT OR DRYWALL ADHESIVE AT BOTH BOTTOM AND TOP PLATES OF ALL INTERIOR AND EXTERIOR WALLS. THIS SHOULD GO IN-BETWEEN THE PLATE AND
- DRYWALL TO CREATE A GASKET. SPACE BEHIND ALL WALL ELECTRICAL BOXES SHOULD BE INSULATED AND AIR SEALED BEING SURE TO SEAL ELECTRICAL KNOCKOUTS. SPRAY FOAM IS RECOMMENDED FOR THIS APPLICATION.
- SEAL ALL PENETRATION IN HVAC CLOSET.
- SEAL ALL PLENUM TO AHU CONNECTIONS.
- SEAL ALL SEAMS IN DUCTWORK WITH MASTIC. • TAPE OR CAULK EXTERIOR SHEATHING SEAMS.
- SPRAY FOAM WINDOWS TO FILL GAPS BETWEEN WINDOW/DOOR AND ROUGH
- PROVIDE ATTIC KNEEWALL INSULATION WITH SEALED ATTIC-SIDE AIR
- IF ELECTRIC PANEL IS INSTALLED ON EXTERIOR WALL, AN AIR BARRIER SHALL EXTEND BEHIND BOX OR AIR-SEALED BOX SHALL BE INSTALLED.
- INSTALL WIND WASH BAFFLE AND DAM FOR AIR-PERMEABLE INSULATION.

• INSTALL INSULATION AND SEALED AIR BARRIER BEHIND TUB/SHOWERS ON

- AFTER SHEETROCK • GAPS AROUND ALL HVAC BOOTS WHERE THEY PENETRATE THE
- CEILING/SOFFIT DRYWALL SHOULD BE SEALED.
- PLUMBING PENETRATIONS BELOW SINKS, BEHIND SHOWERHEADS, MECHANICAL CLOSET AND BEHIND TOILET WATER LINES SHALL BE SEALED.
- WATER LINES BEHIND REFRIGERATOR SHALL BE SEALED. • HOLE BEHIND KITCHEN RANGE SHALL BE SEALED.
- GAP AT DRYWALL AROUND WASHER/DRYER BOX SHALL BE SEALED.
- ALL INTERIOR AND EXTERIOR PLUG IN AND SWITCH BOXES SHALL BE SEALED
- WHERE THE BOX PENETRATES THE SHEETROCK. • GAPS AROUND CEILING LIGHT BOXES SHALL BE SEALED.
- ATTIC ACCESSES SHALL BE SEALED. • GAPS UNDER BASEBOARDS SHALL BE CAULKED IF SHEETROCK IS NOT
- SEALED TO PLATES AS STATED ABOVE. • GAPS AROUND EXHAUST FANS WHERE THE HOUSING PENETRATES THE SHEET ROCK IS SEALED.
- TUB TO FLOOR CONNECTION SHALL BE SEALED.
- FIREPLACE HOUSINGS SHALL BE SEALED TO FINISHED SURFACE.
- GAPS AROUND ALL KITCHEN VENTS SHALL BE SEALED. • ALL OTHER HOLES IN THE SHEETROCK SHALL BE SEALED.



INSULATE

BATHROOM WALL

WALLS @ BATHROOM,

KITCHEN & LAUNDRY)

2x6 WOOD STUDS

6-1/2" WALL

(NOT RATED)

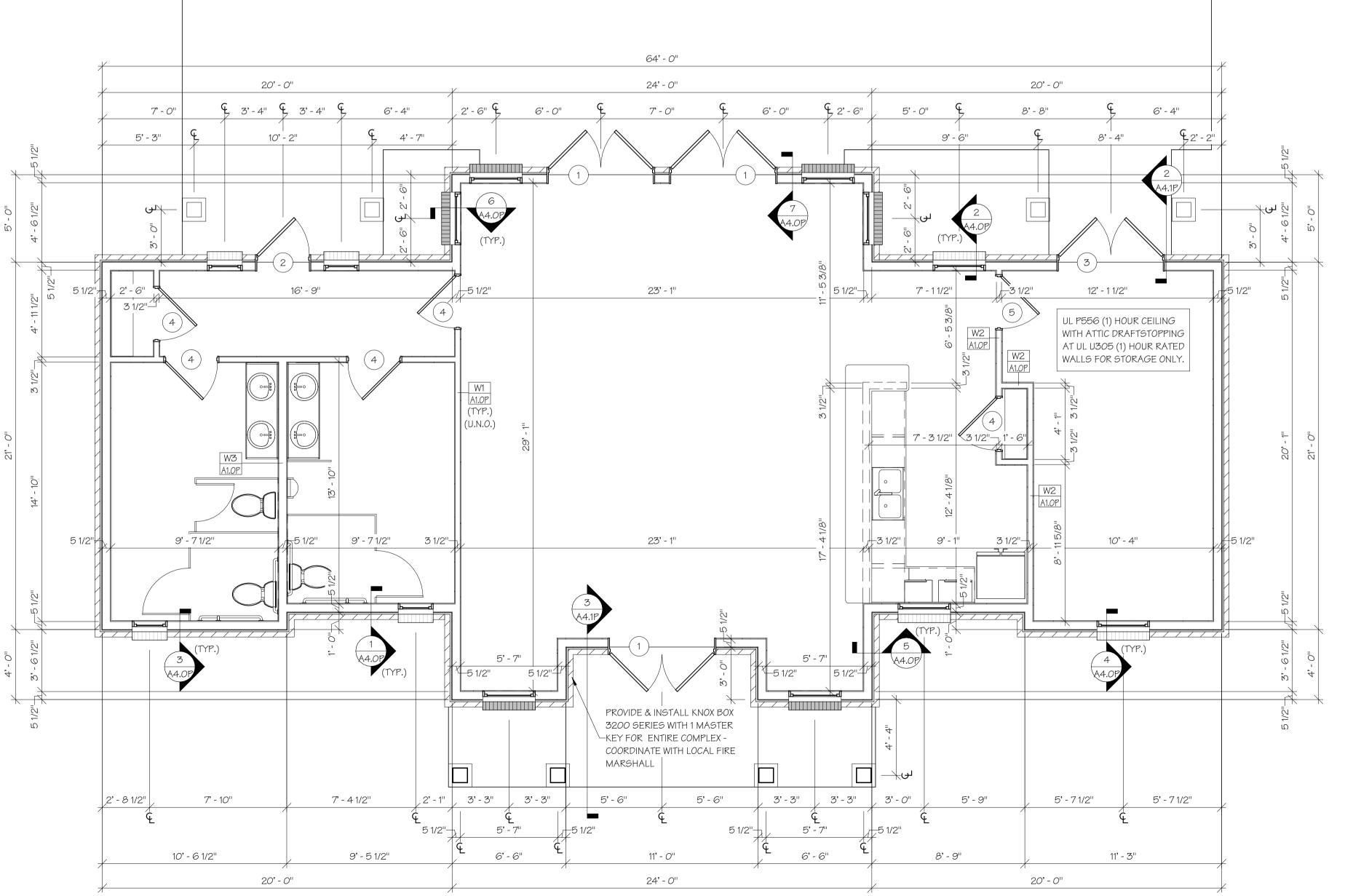
DOOR NOTES ALL DOORS TO HAVE LEVER HANDLE HARDWARE. (U.N.O) ALL ENTRY DOORS SHALL COMPLY WITH ANSI A117.1 ACCESSIBILITY REQUIREMENTS. PROVIDE 1/2" HIGH MAX., 1:2 SLOPE THRESHOLD AT ALL ENTRY DOORS. CONTRACTOR TO PROVIDE & INSTALL DOOR STOPS @ ALL DOORS. CAULK/SEAL ALL EXTERIOR THRESHOLDS.

WALL NOTES

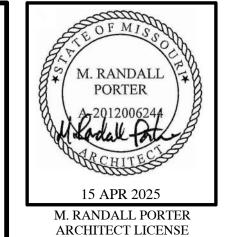
- DIMENSIONS ARE STUD FACE TO STUD FACE UNLESS NOTED OTHERWISE.
- PROVIDE SOLID BLOCKING BEHIND GRAB BARS, CURTAIN RODS, ALL CABINETS AND ALL SOFFITS. ALL EXTERIOR WALLS FRAMED W/ 2x6'S 16" O.C. & COVERED W/ (1) LAYER OF 5/8" GYP. BD. AT INTERIOR. PER WALL SECTION
- ALL INTERIOR WALLS FRAMED WITH 2x4'S OR 2X6'S (ALL PLUMBING WALLS) 16" O.C. AND COVERED WITH (1) LAYER 1/2" GYP. BD. (EACH SIDE).
- 1-HR STORAGE WALL FRAMED WITH 2x4'S 16" O.C. AND COVERED WITH (1) LAYER 5/8" TYPE "X" GYP. BD. (EACH SIDE).

GENERAL NOTES

- CONTRACTOR SHALL FURNISH & INSTALL 4" BUILDING NUMBERS FOR POOL HOUSE AS REQUIRED BY CITY OR LOCAL POSTMASTER.
- CLOSETS SHALL HAVE EPOXY-COATED WIRE SHELVING.
- PRIME & PAINT WALLS BEHIND MILLWORK.
- APPLY SILICONE CAULK BETWEEN CONCRETE AND BOTTOM OF THE DRYWALL.
- SEAL CONCRETE FLOOR TO REDUCE MOISTURE PENETRATION.
- APPROPRIATELY SIZED BLINDS SHALL BE PROVIDED AND INSTALLED FOR EACH GLAZED OPENING INCLUDING PAIRED WINDOWS (PROVIDED WITH TWO SETS) AND DOOR GLAZING WHERE HALF LITE



POOL HOUSE DIMENSION PLAN



#A-2012006244

WALLACE ARCHITECTS, LLC MISSOURI STATE CERTIFICATE OF AUTHORITY: 2003019614

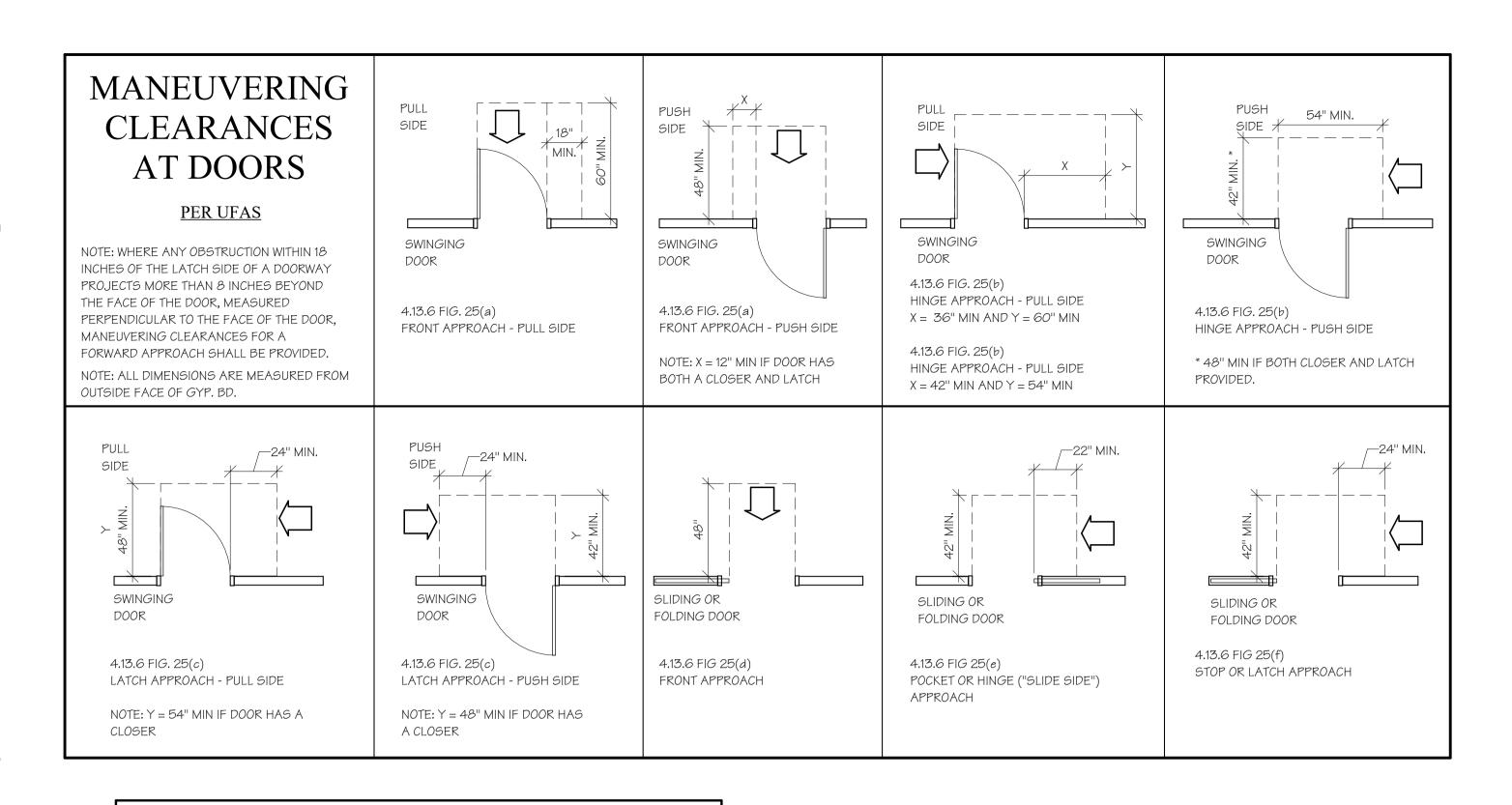
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ISSUE/REVISIONS 15 APR 2025 ISSUE SET

A1.0P SCALE: 1/4" = 1'-0"

ISSUE SET

4938





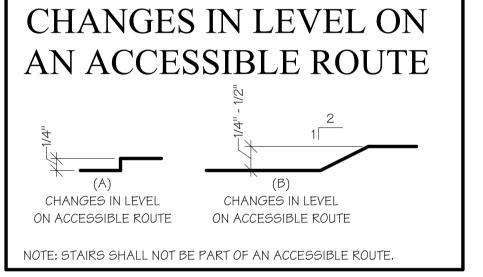
- INSTALL GRAB BARS WITH ROUND HEAD SCREWS.
- PROVIDE & INSTALL (1) 36" HORIZONTAL GRAB BAR BEHIND & (1) 42" HORIZONTAL GRAB BAR BESIDE WATER CLOSET ON WALL @ 34" A.F.F. & (1) 18" VERTICAL GRAB BAR BESIDE WATER CLOSET ON WALL @ 40" FROM REAR WALL. (SEE BATH ELEVATIONS SHEET A7.0)
- BOTTOM OF MIRROR TO REST ON COUNTERTOP BACKSPLASH.
- VANITY SINK FAUCET TO BE LEVER TYPE, & EXPOSED PIPING TO BE WRAPPED W/ PIPE WRAP.
- EXTEND VINYL FLOORING BENEATH LAV. SPACE.

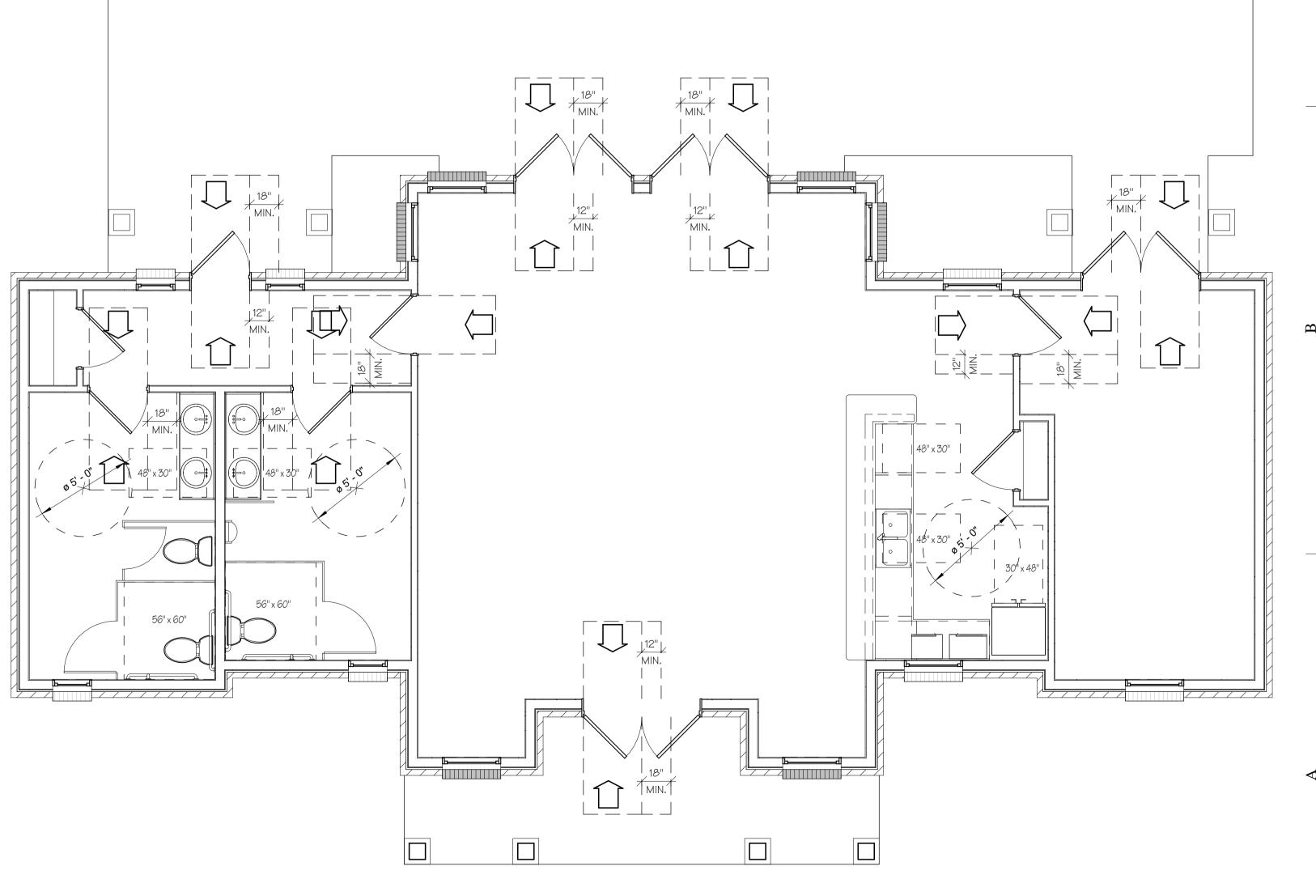
POOL HOUSE KITCHEN NOTES

- COUNTER HEIGHT SHALL BE 34" A.F.F. TO TOP OF SINK.
- EXTEND VINYL FLOORING BENEATH SINK SPACE AND THE 30" WORKSPACE.

INSULATE EXPOSED PIPING BELOW KITCHEN SINK W/ PIPE WRAP.

- ADD SWITCHES FOR CONTROL OF LIGHT OVER SINK & GARBAGE DISPOSAL.





POOL HOUSE ACCESSIBILITY PLAN

A1.1P SCALE: 1/4" = 1'-0"

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ATTIC COMPARTMENT VENTILATION				
		TOTAL REQ'D VENT.	SOFFIT VENT	ROOF VENT
NAME	AREA	(SQ. IN.)	(SQ. IN.)	(SQ. IN.)
ATTIC AREA 1	1650 SF	792	396	396
ATTIC AREA 2	338 SF	162	81	81

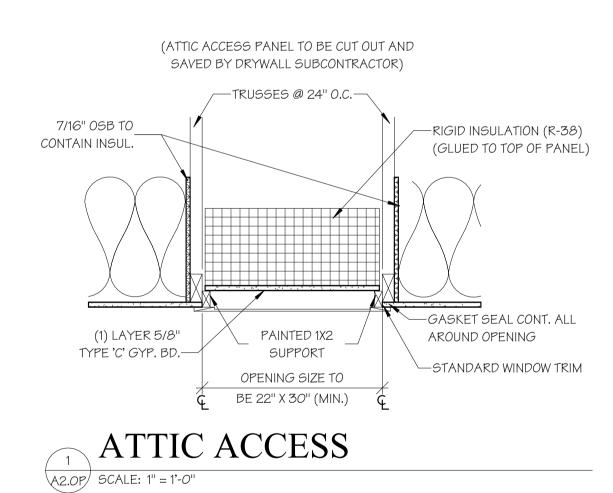
GENERAL ATTIC VENTILATION NOTES

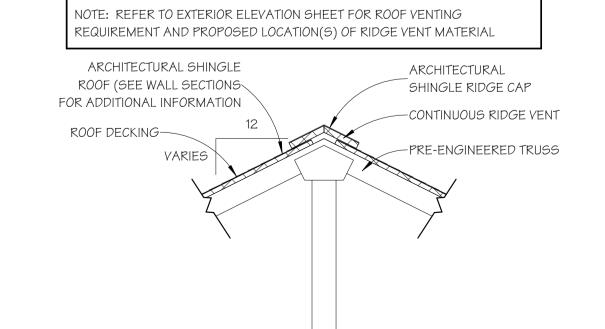
- TOTAL FREE AREA SHALL EQUAL 1/300 OF ATTIC AREAS W/50% OF VENT AREA WITHIN 3' VERTICAL OF ROOF PEAK AND 50% AT SOFFITS.
-) SPECIFIED RIDGE VENT LENGTHS BASED ON 18 SQ. IN. FREE AREA PER LINEAL FOOT. ADJUST VENT LENGTH AS REQUIRED BASED ON FREE AREA OF SPECIFIC VENTILATOR USED.
- SPECIFIED VENTILATION POD QUANTITY BASED ON 50 SQ. IN FREE AREA PER POD. ADJUST QUANTITY AS REQUIRED BASED ON FREE AREA OF SPECIFIC VENTILATION POD USED.

ATTIC DRAFTSTOPPING NOTES

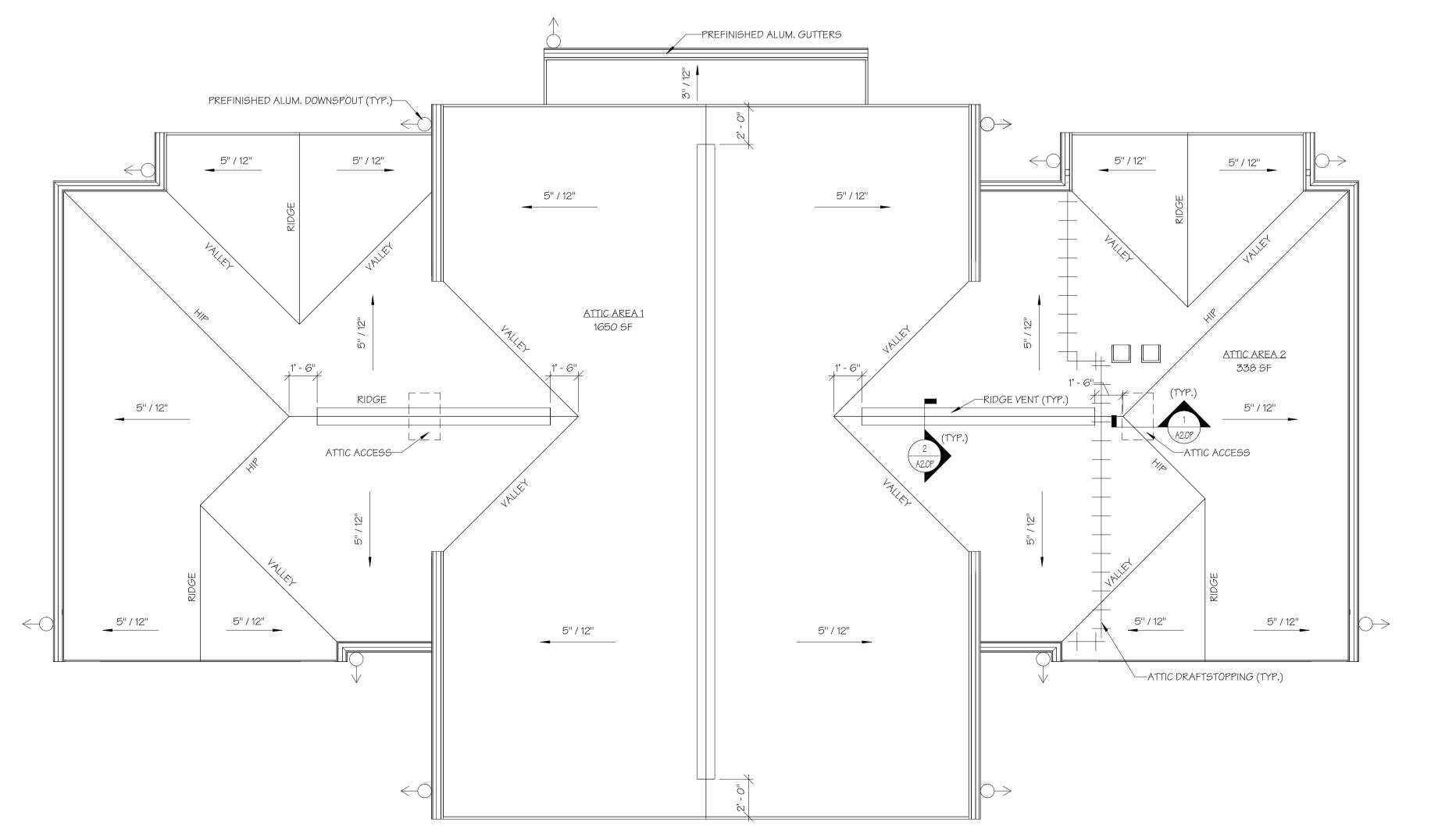
- DRAFTSTOPPING MATERIALS SHALL NOT BE LESS THAN 1/2" GYPSUM BOARD, 3/8" WOOD STRUCTURAL PANEL, 3/8" PARTICLEBOARD, 1" NOMINAL LUMBER, CEMENT FIBERBOARD, BATTS OR BLANKETS OF MINERAL WOOL OR GLASS FIBER, OR OTHER APPROVED MATERIALS ADEQUATELY SUPPORTED.
- DRAFTSTOPPING SHALL BE PROVIDED IN ATTICS, OVERHANGS, OR OTHER CONCEALED ROOF SPACES.
- THE ATTIC SPACE SHALL BE SUBDIVIDED BY DRAFTSTOPS INTO AREAS NOT EXCEEDING 3,000 SF.

LEGEND DOWNSPOUT LOCATIONS POD VENT +++++++++ ATTIC DRAFTSTOPPING





ROOF VENT DETAIL A2.0P SCALE: 3/4" = 1'-0"



POOL HOUSE ROOF PLAN

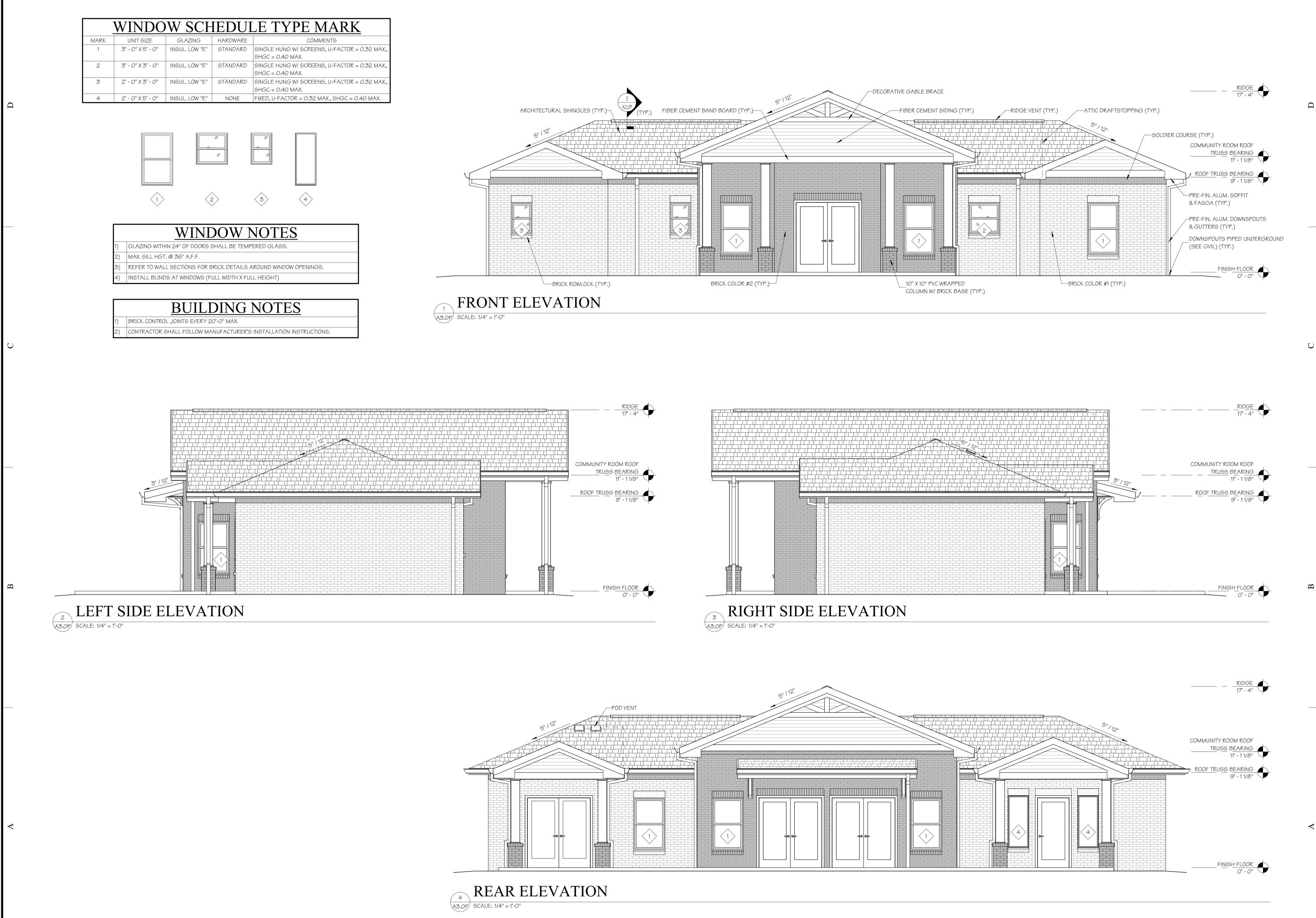
SCALE: 1/4" = 1'-0"

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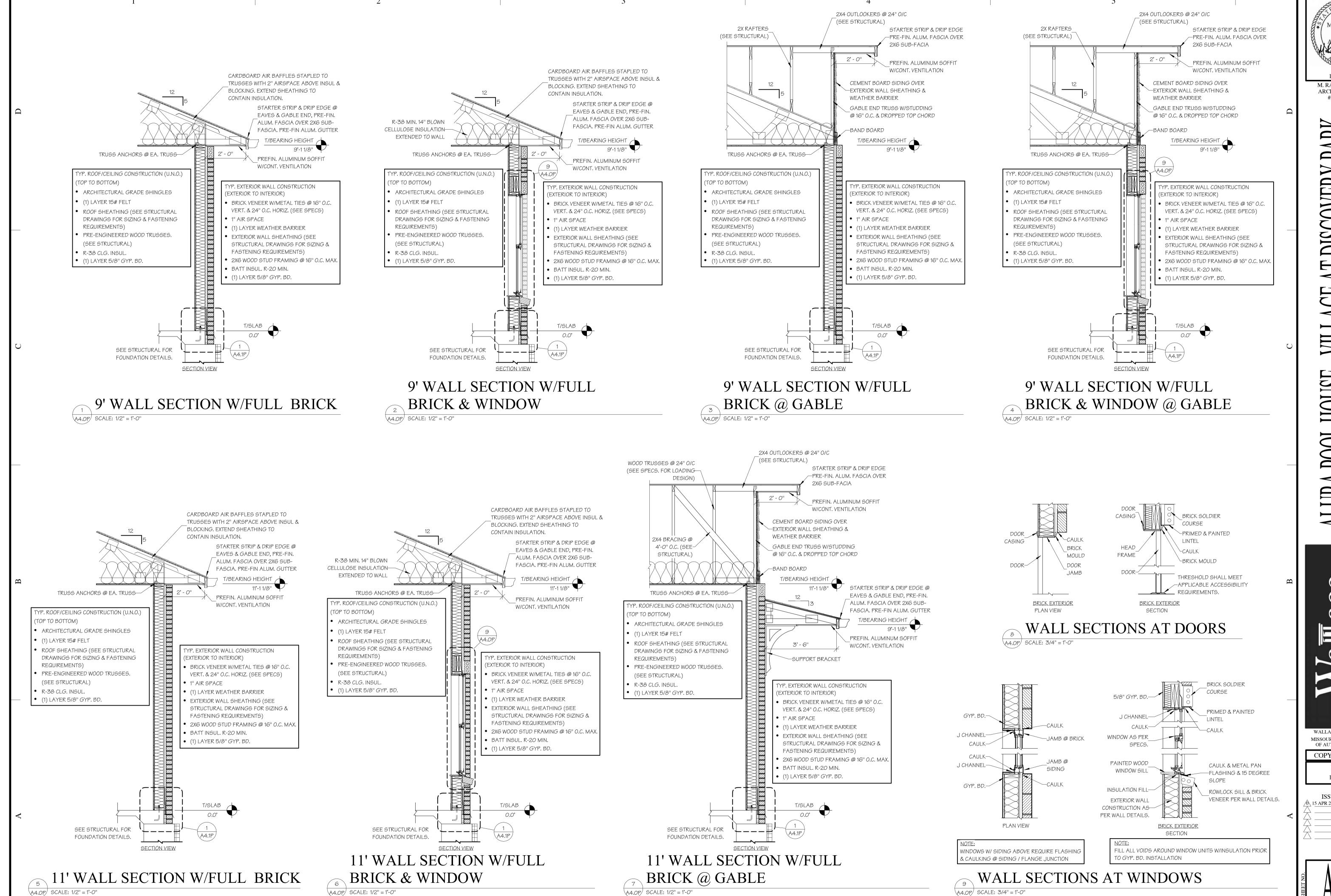
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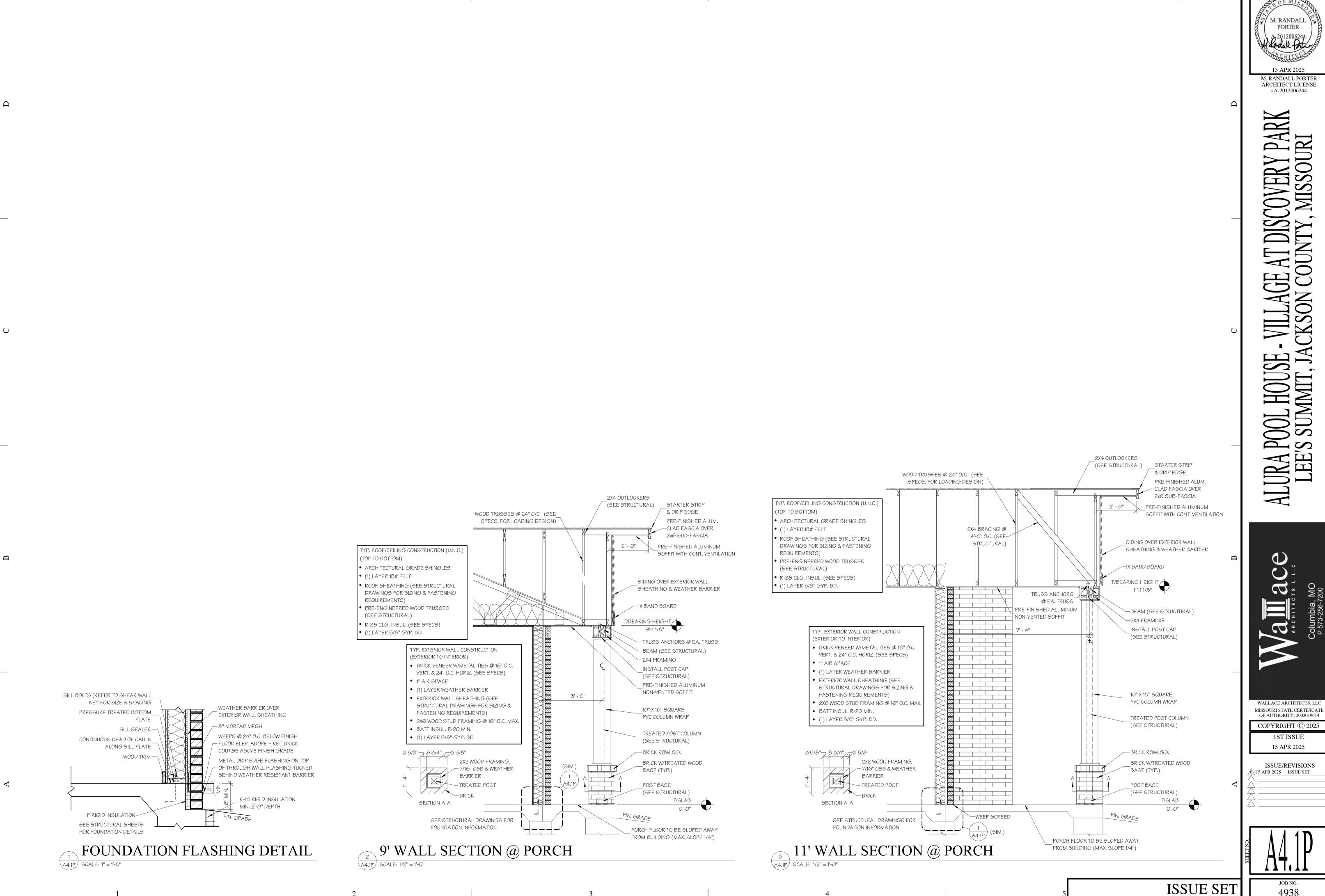
WALLACE ARCHITECTS, LLC

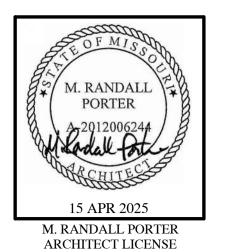
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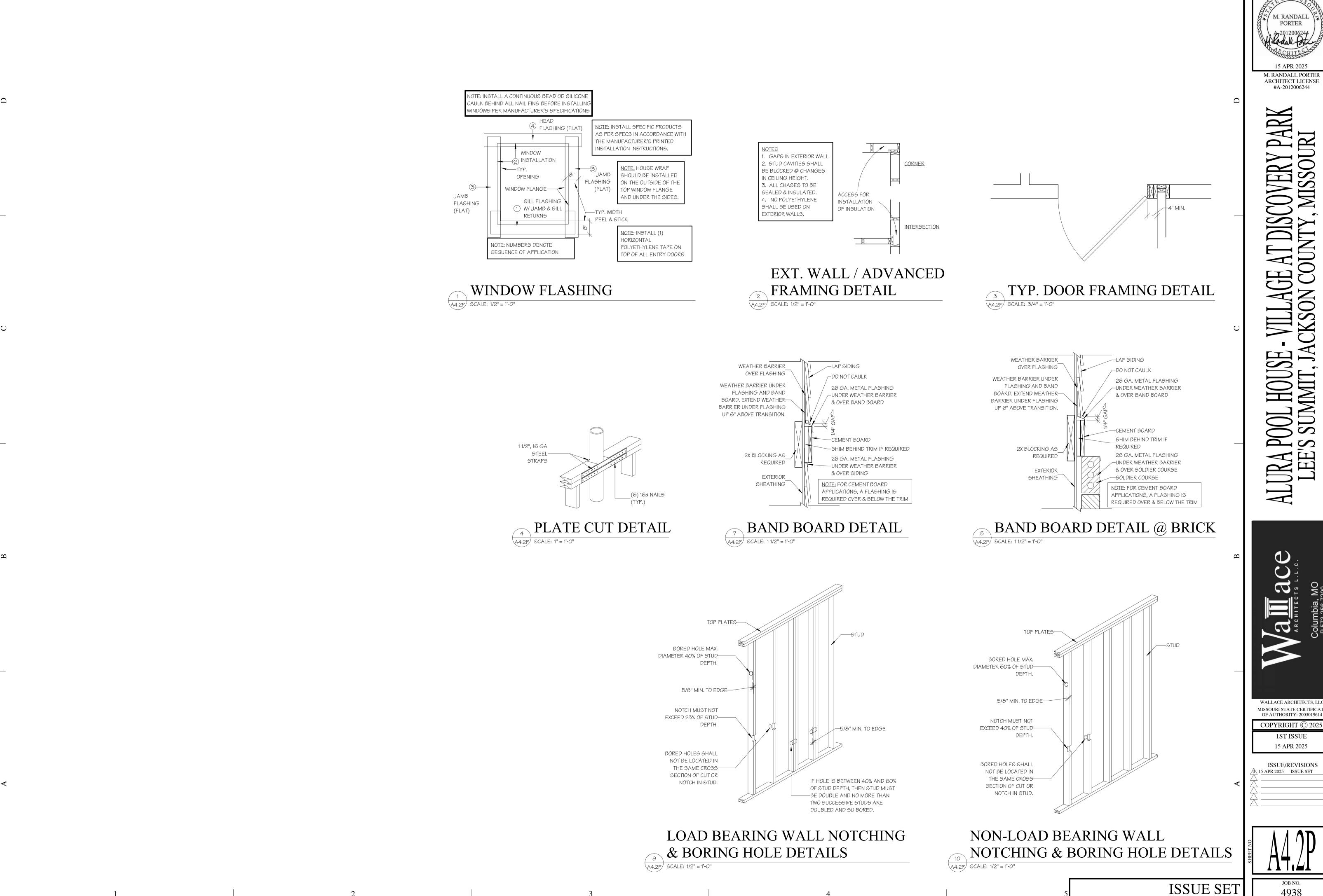


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WALLACE ARCHITECTS, LLC

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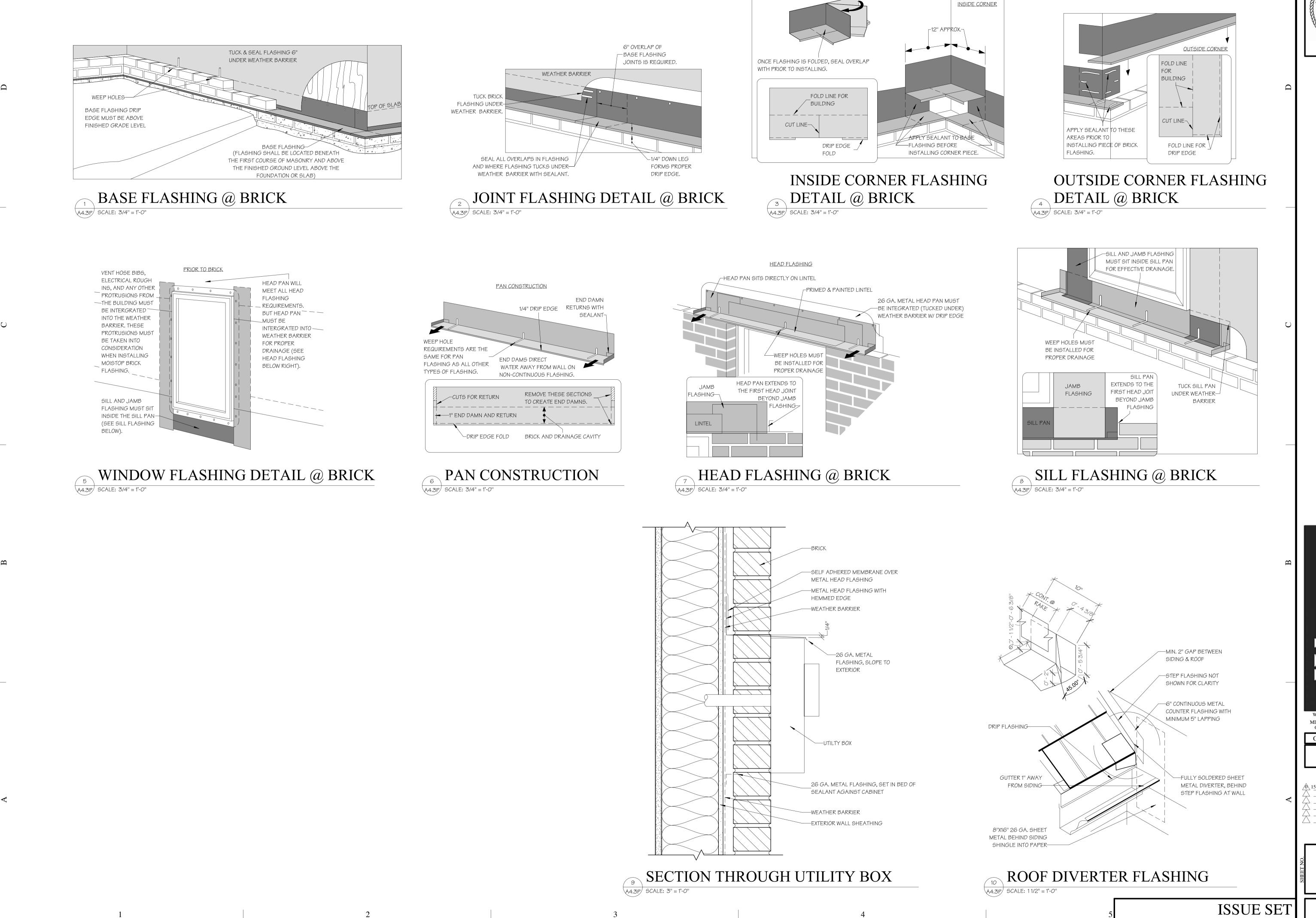
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M. RANDALL PORTER



Design No. U305

December 7, 2021 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

USG BORAL DRYWALL SFZ LLC — Types C, SCX, SGX (finish rating 24 min). used — See Guide BXUV or BXUV7

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

1. Wood Studs — Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped.

2. Joints and Nail-Heads — Joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape. Nailheads exposed or covered with joint compound.

3. Gypsum Board* — 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths other than 48 in., gypsum panels are to be installed horizontally. For an alternate method of attachment of gypsum panels, refer to Items 6 through 6F. Steel Framing Members*.

When Items 6, 6B, 6C, 6D, 6E, or 6F, Steel Framing Members*, are used, gypsum panels attached to furring channels with 1 in. long Type S buglehead 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 buglehead steel screws spaced 12 in. OC. All joints in face layers staggered with joints in base layers. One layer of gypsum board attached to opposite side of wood stud without furring channels as described in Item 3.

When Item 7, resilient channels are used, 5/8 in. thick, 4 ft wide gypsum panels applied vertically. Screw attached furring channels with 1 in. long,

UNITED STATES GYPSUM CO — Type USGX (finish rating 22 min.) self-drilling, self-tapping Type S or S-12 steel screws spaced 8 in. OC, vertical joints located midway between studs.

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

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

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

CERTAINTEED GYPSUM INC — Type C, Type X or Type X-1 (finish rating 26 min); Type EGRG or GlasRoc (finish rating 23 min), GlasRoc-2, Type Habito (finish rating 26 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)

CERTAINTEED GYPSUM INC — Type LGFC6A (finish rating 34 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX (finish rating 21 min), Type CLLX (finish rating 24 min)

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 25 min), Type 7 (finish rating 26 min), Type 8 (finish rating 26 min), Type 9 (finish rating 26 min), Type 9 (finish rating 26 min), Type 9 (finish rating 26 min), Type 10 26 min), Type DGG (finish rating 20 min), Type GPFS1 (finish rating 20 min), Type GPFS2 (finish rating 20 min), Type GPFS6 (finish rating 20 min), Type GPFS Type DS, Type DAP, Type DD (finish rating 20 min), Type DA, Type DAPC, Type LS (finish rating 23 min), Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, Type LWX (finish rating 22 min), Veneer Plaster Base-Type LWX (finish rating 22 min), Water Rated-Type LWX (finish rating 22 min), Sheathing Type-LWX (finish rating 22 min), Soffit-Type LWX (finish rating 22 min), Type DGLW (finish rating 22 min), Water Rated-Type DGLW (finish rating 22 min), Sheathing Type- DGLW (finish rating 22 min), Soffit-Type DGLW (finish rating 22 min), Type LWX (finish rating 22 min), Type LW2X (finish rating 22 min), Veneer Plaster Base - Type LW2X (finish rating 22 min), Water Rated - Type LW2X (finish rating 22 min), Sheathing - Type LW2X (finish rating 22 min), Soffit - Type LW2X (finish rating 22 min), Type DGL2W (finish rating 22 min), Water Rated - Type DGL2W (finish rating 22 min), Sheathing - Type DGL2W (finish rating 22 min)

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

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

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

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

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

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

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

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

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

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

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

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

CGC INC — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type IP-AR (f 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 SCX (finish rating 24 min), Type SGX (finish rating 24 min), Type C (finish rating 24 min), Type SGX (rating 24 min). Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type 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 MEXICO S A DE C V — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (fi 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) 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 3R. **Gypsum Board*** — (As an alternate to Items 3, For use with Item 5H) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 3 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

OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. 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

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 CGC INC — Type USGX (finish rating 22 min)

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

S-12 bugle head steel screws spaced as described in Item 4.

RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

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

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

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

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

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

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

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

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

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

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

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

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

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

51. Fiber, Sprayed* — (Not Shown — Not for use with Item 6) — As an alternate to Batts and Blankets (Item 5) - Spray-applied 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

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. AMERICAN GYPSUM CO — Types AGX-1

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

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 545

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

JNITED 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

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.

JOHNS MANVILLE

KNAUF INSULATION LLC MANSON INSULATION INC

CERTAINTEED CORP

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

ROCKWOOL MALAYSIA SDN BHD — Type Acoustical Fire Batts

ROCK WOOL MANUFACTURING CO - Delta Board

THERMAFIBER INC — Type SAFB, SAFB FF

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

U S GREENFIBER L L C — INS735, INS745, INS750LD and SANCTUARY for use with wet or dry application. INS515LD, INS541LD, INS735, INS765LD, and INS773LD are to be used for dry application only

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

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

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,

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

AMERICAN ROCKWOOL MANUFACTURING, LLC — Type Rockwool Premium Plus

5H. **Foamed Plastic*** — (Optional -For use with Item 3R) — Spray applied, foamed plastic insulation, at any thickness from partial fill 9. **STC Rating** — The STC Rating of the wall assembly is 56 when it is constructed as described by Items 1 through 6, except: to completely filling stud cavity SES FOAM INC — Nexseal™ 2.0 or Nexseal™ 2.0 LE Spray Foam and Sucraseal Spray Foam.

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/ft³. APPLEGATE HOLDINGS L L C — 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. GACO WESTERN L L C — Types GacoEZSpray F4500, GacoProFill FR6500R, Gaco 052N, GacoOnePass F1850, GacoOnePass Low GWP F1880, and

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 Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCX, SealTite Pro No Trim

6. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below: a. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in, and secured together with two self-tapping #6 framing screws, min. 7/16 in, long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members* — Used to attach furring channels (Item 6a) to studs. Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring

PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75)

21, SealTite Pro One Zero, Foamsulate Closed Cell, Foamsulate OCX, Foamsulate 70, and Foamsulate HFO.

6A. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members on one side of studs as

a. Furring Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Batts and Blankets placed in stud cavity as described in Item 5. Two layers of gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members* — Used to attach furring channels (Item 6Aa) to one side of studs only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips KINETICS NOISE CONTROL INC — Type Isomax

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

b. Steel Framing Members* — Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in, coarse drywall screw through the center hole. Furring channels are friction fitted into clips. PLITEQ INC — Type Genie Clip

6C. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below: a. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members* — Used to attach furring channels (Item 6Ca) to studs. Clips spaced 48 in. OC., and secured to studs with No. 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips. STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6D. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below: a. Furring Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with a double strand of No. 18 AWG twisted steel wire. Gypsum board attached to furring channels as described in Item 3.

No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.

KEENE BUILDING PRODUCTS CO INC - Type RC+ Assurance Clip

REGUPOL AMERICA — Type SonusClip 6E. Steel Framing Members* — (Optional, Not Shown) — Resilient channels and Steel Framing Members as described below a. Resilient Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss

b. Steel Framing Members* — Used to attach furring channels (Item 6Da) to studs. Clips spaced 48 in. OC., and secured to studs with

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.

screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 3.

6F. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below: a. Furring Channels — Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. or 1-1/2 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.

5D. Glass Fiber Insulation — (As an alternate to Item 5C) — 3 in. thick glass fiber batts bearing the UL Classification Marking as to b. Steel Framing Members* — Used to attach furring channels (Item 6Fa) to studs. Clips spaced 48 in. OC. Clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. CLARKDIETRICH BUILDING SYSTEMS — Type ClarkDietrich Sound Clip

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

7. Furring Channel — Optional — Not Shown — For use on one side of the wall - Resilient channels, 25 MSG galv steel, spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used, insulation, Items 5C or 5D is required.

8. Caulking and Sealants — (Not Shown, Optional) — A bead of acoustical sealant applied around the partition perimeter for sound

A. Item 2, above — Nailheads Shall be covered with joint compound.

B. Item 2, above — Joints As described, shall be covered with fiber tape and joint compound.

insulation batts measuring 6-1/4 in. thick and 15-1/4 in. wide. D. Item 6, above — Steel Framing Members* Type RSIC-1 clips shall be used to attach gypsum board to studs on either side of

E. Item 8, above — Caulking and Sealants (Not Shown) A bead of acoustical sealant shall be applied around the partition

C. Item 5, above — Batts and Blankets* The cavities formed by the studs shall be friction fit with R-19 unfaced fiberglass

the wall assembly.

F. Steel Corner Fasteners (Item 4), Fiber, Sprayed (Items 5A and 5B) and Steel Framing Members (Item 6A), not evaluated as

10. Wall and Partition Facings and Accessories* — (Optional, Not Shown) — Nominal 1/2 in, thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified

1. Cementitious Backer Units* — (Optional Item Not Shown — For Use On Face Of 1 Hr Systems With All Standard Items Required)

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-500 and QR-510

perimeter for sound control.

Gypsum Board.

alternatives for obtaining STC rating.

a minimum equal to the depth of the bearing wall.

layer(s) of UL Classified Gypsum Board.

HOMASOTE CO — Homasote Type 440-32

- 7/16 in., 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, min. 32 in. wide. Applied vertically or horizontally with vertical joints centered over studs. Fastened to study and runners with cement board screws of adequate length to penetrate stud by a minimum of 3/8 in, for steel framing members, and a minimum of 3/4 in. for wood framing members spaced a max of 8 in. OC. When 4 ft. wide boards are used, horizontal joints need not be backed by framing. NATIONAL GYPSUM CO — Type DuraBacker, PermaBase, DuraBacker Plus, or PermaBase Plus

with two 3 in, long 10d nails spaced a max, 16 in, OC, vertically and fastened to one side of the minimum 2 by 4 in, stud with 3 in, long 10d nails spaced a max. 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall

13. Mesh Netting — (Not Shown) — Any thin, woven or non-woven fibrous netting material attached with staples to the outer face of one row of studs to facilitate the installation of the sprayed fiber from the opposite row. 14. Mineral and Fiber Board* — (Optional, Not Shown) — For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with 2 in. long Type W steel screws, spaced

12 in. OC. The required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except

that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required

12. Non-Bearing Wall Partition Intersection — (Optional) —Two nominal 2 by 4 in. studs or nominal 2 by 6 in. studs nailed together

partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in.

OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at

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

14B. Glass Fiber Insulation — (For use with Item 14A) — 3-1/2 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) categories for names of Classified companies.

14C. Batts and Blankets* — (As an alternate to Item 14B, For use with Item 14A), 3 in. thick mineral wool batts, placed to fill interior

of wall, attached to the 3-1/2 in, face of the studs with staples placed 24 in, OC. THERMAFIBER INC — Type SAFB, SAFB FF 14D. Adhesive — (For use with Item 14A) — Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in, wide beads

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

CERTAINTEED GYPSUM INC — Type C

AMERICAN GYPSUM CO — Type AG-C

CGC INC — Types C, IP-X2, IPC-AR

CERTAINTEED GYPSUM INC — Type LGFC-C/A

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

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

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

joint compound. Screw heads covered with joint compound. Finish Rating 30 Min.

PANEL REY S A — Type PRC THAI GYPSUM PRODUCTS PCL — Type C

USG BORAL DRYWALL SFZ LLC - Type C

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

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR 14F. Mineral and Fiber Board — (Optional, Not Shown) — For optional use as an additional layer on one side of wall - Nom 1/2 in. thick, 4 ft wide, square edge fiber boards applied vertically to studs on one side of the wall in between the wood studs and the UL Classified Gypsum Board (Item 3). Fiber boards installed with 1-1/4 in. long, Type W, bugle head, coarse thread gypsum board screws spaced 12 in. OC max, with the last screws spaced 2 in. and 6 in. from edge of board. Gypsum board (Item 3) installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification

Last Updated on 2021-12-07

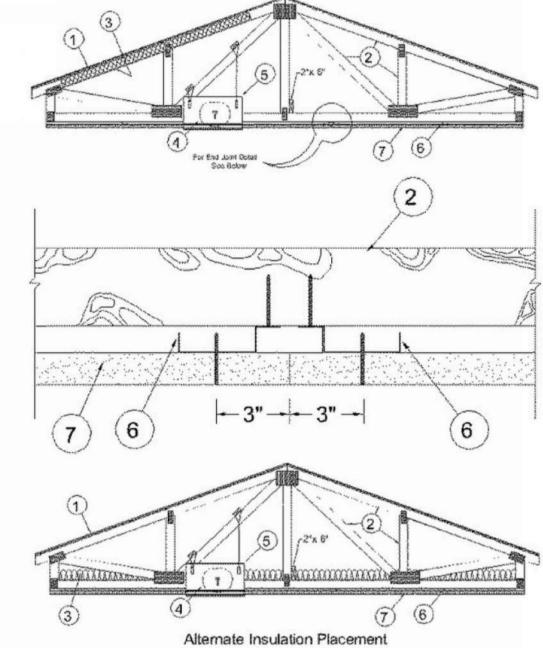
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ISSUE SET

BLUE RIDGE FIBERBOARD INC — SoundStop

(such as Canada), respectively.

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



1. Roofing System* — Any UL Class A, B or C Roofing System (TGFU) or Prepared Roof Covering (TFWZ) acceptable for use over nom 15/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Nom 15/32 in. thick wood structural panels secured to trusses with No. 6d ringed shank nails. Nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Construction adhesive is optional and may be used with either nails or staples.

2. Trusses — Pitch or Parallel chord trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Truss members secured together min.0.0356 in. thick galv steel plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The

top half of each tooth has a twist for stiffness. The pairs are repeated on approximately 7/8 in. centers with four rows of teeth per inch the min truss depth shall be 5-1/4 in. with a min roof slope of 3/12 and a min. average depth of 18 in.. Where the truss intersects with below: ne interior face of the exterior walls, the min truss depth may be reduced to 3 in, if the batts and blankets (Item 3) are used as shown. in the above illustration (Alternate Insulation Placement) and are firmly packed against the intersection of the bottom chords and the

3. Batts and Blankets* — (Optional) -Glass fiber insulation, secured to the wood structural panes with staples spaced 12 in. OC or to the trusses with 0.090 in, diam galy steel wires spaced 12 in, OC. Any glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance, having a min density of 0.5 pcf. As an option, the insulation may be fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. The Finish Rating is 24 min. when the insulation is draped over the resilient channels and gypsum board ceiling membrane and 25 min. when it is installed on underside of the plywood deck or when it is

3A. Loose Fill Material* — As an alternate to Item 3 — Any thickness of loose fill material bearing the UL Classification Marking for Surface Burning Characteristics, having a min density of 0.5 pcf, fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. The finished rating when loose fill material is used has not been determined.

3B. Fiber, Sprayed* — As an alternate to Items 3 and 3A (not evaluated for use with Items 6B, 6C, 6D and 6E) — Any thickness of spray-applied cellulose insulation material, having a min density of 0.5 lb/ft3, applied with water, over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Fiber, Sprayed is applied with moisture in accordance with the application instructions supplied with the product. The finish rating when Fiber Sprayed is used has not been determined. Alternate application method: The fiber is applied without water or adhesive in accordance with the application instructions supplied with a minimum density of 0.5 lb/ft3 over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Alternate application method: The fiber is applied without water or adhesive to a nominal density of 3.5 lb/ft3 behind netting (Item 9) stapled to the rafters. The netting is stapled at both lower edges of the rafters creating a cavity to accept the cellulose fiber. APPLEGATE GREENFIBER ACQUISITION LLC — Insulmax and SANCTUARY for use with wet or dry application, INS510LD, INS515LD, and INS541LD are to be used for dry application only.

3C. Foamed Plastic* — (As an alternate to Item 3 - Not Shown) — Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft3 density, while maintaining a minimum 8-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board (Item 7) to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a ceiling radiation damper in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. . Limited to resilient channels, Item 6 only, no Item 6 alternates. The finished rating when this insulation is used has not been determined. SES FOAM INC — Sucraseal

3D. Foamed Plastic* — (As alternate to Item 3 - Not Shown) — Spray foam insulation applied directly to the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft3 or 2.0 lb/ft3 density, depending on the product installed. When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) spaced maximum 3 in. away from gypsum butt joints. Gypsum board (Item 7) to be installed using minimum 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a ceiling radiation damper in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Limited to resilient channels, Item 6 only, no Item 6 alternates. The finished rating when this insulation is used has not been

BASF CORP — Enertite® NM, Enertite® G, FE178®, Spraytite® 178, Spraytite® 81206, Walltite® 200, Walltite® US, Walltite® US-N, and Walltite® HP+

3E. Foamed Plastic* — (As an alternate to Item 3 - Not Shown) — Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 17 in. at a nominal 0.5 lb/ft³ density, while maintaining a minimum 1-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in, OC, with channels adjacent to butt joints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board (Item 7) to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 through 5B) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. . Limited to resilient channels, Item 6 only, no Item 6 alternates. The finished rating when this insulation is used has not been determined.

3F. Foamed Plastic* — (As an alternate to Item 3 - Not Shown) — Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 17 in. at a nominal 0.5 lb/ft³ density, while maintaining a minimum 1-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board (Item 7) to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 through 5B) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. Limited to resilient channels, Item 6 only, no Item 6 alternates. The finished rating when this insulation is used has not been runners hung a min of 2 in. from bottom chord of trusses with 12 SWG galv steel wire. Wires located a max of 48 in. OC.

EVEREST SYSTEMS LLC — Opticell 0.5

4. Air Duct* — For use with Ceiling Dampers* - Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions

5. Ceiling Damper* — Max 14 in. long by 14 in. wide by 18 in. high ceiling damper with boot or box assembly, fabricated from galv steel. The aggregate area of the register opening(s) through the ceiling membrane shall not exceed 98 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions. AIRE TECHNOLOGIES INC — Model 50 w/Boot, 50EA w/Boot, 51 w/Boot, 50 w/Box, 50EA w/Box or 51 w/Box.

AIRVAC INDUSTRIES — Series AVI-50 w/Boot, AVI-50EA w/Boot, AVI-51 w/Boot, AVI-50 w/Box, AVI-50EA w/Box, AVI-51 w/Box.

5A. Alternate Ceiling Damper* — Max 12 in. diameter damper and insulated register box assembly. The maximum size of the register box assembly is nom. 20 in. long by 20 in. wide and 4 in. high fabricated from galv. Steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions. AIRE TECHNOLOGIES INC — Series 57

AIRVAC INDUSTRIES - Model AVI-57IB

5B. Alternate Ceiling Damper* — Max 20 in. long by 16 in. wide by 4 in. high rectangular damper with duct board plenum box assembly. The maximum outer dimensions of the plenum box assembly is 23-1/2 in. long by 19-1/2 in, wide and 17 in, high fabricated from 6pcf, 1-1/2 to 2 in. thick Knauf Air Duct Board M*. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 160 sq in. per 100 sq ft ceiling area. Damper assembly installed in accordance with the manufacturers installation

AIRE TECHNOLOGIES INC — Series 58

5C. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 4.) — For use with min. 18 in. deep trusses. Max 7-11/32 in. long by 7-11/16 in, wide fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 28.5 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions.

AIRE TECHNOLOGIES INC - Models ITG-CRD2.

5D. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 4.) — For use with min. 18 in. deep trusses. Max 9-11/16 in long by 9-1/16 in. wide fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 44.5 sq in.

When batt insulation (Item 3, 3A or 3B) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions.

AIRE TECHNOLOGIES INC — Models SIG-CRD2

5E. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 4.) — For use with min. 18 in. deep trusses. Max 10-13/32 in. long by 10-22/32 in, wide fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 56 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions. AIRE TECHNOLOGIES INC — Models SMT-CRD2

5F. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 4.) — For use with min. 18 in. deep trusses. Max 8-13/16 in. wide and 8-1/2 in, long fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 37.5 sg in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions. AIRE TECHNOLOGIES INC — Models GBR-CRD2

6. Furring Channels — Resilient channels formed of 25 MSG galv steel, spaced 16 in. OC, installed perpendicular to trusses. When batt and blanket material, Item 3, is draped over the resilient channel/gypsum board ceiling membrane, the spacing shall be 12 in. OC. Channels secured to each truss with 1-1/4 in. long Type S steel screws. Channels overlapped 4 in. at splices. Channels oriented opposite at board butt joints (spaced 6 in, OC) as shown in the above illustration.

of plate width. Minimum parallel chord truss depth shall be 18 in. Where the truss intersects with the interior face of the exterior walls.

6A. Steel Framing Members* - (Not Shown) — As an alternate to Item 6, furring channels and Steel Framing Members* as described

perpendicular to trusses. When batt insulation (Item 3) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses 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 trusses (Item 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to alternating trusses 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 trusses 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, as described in Item 7. PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75).

6B. Steel Framing Members* — (Not Shown) - As an alternate to Items 6 and 6A.

a. Furring Channels — Hat-shaped furring channels, 7/8 in. deep by 2-5/8 in. wide at the base and 1-1/4 in. wide at the face, formed from No. 25 ga. galv steel, spaced max 16 in. OC perpendicular to trusses and Cold Rolled Channels (Item 6Bb). Furring channels secured to Cold Rolled Channels at every intersection with a 1/2 in. pan head self-drilling screw through each furring channel leg. Ends of adjoining channels overlapped 4 in. and tied together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlan Supplemental furring channels at base layer and outer layer gypsum board butt joints are not required. Batts and Blankets draped over furring channels as described in Item 3. Two layers of gypsum board attached to furring channels as described in Item 7.

fitted into the channel caddy on the Steel Framing Members (Item 6Bd). Adjoining lengths of cold rolled channels lapped min. 6 in. and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.

c. Blocking — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 6 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the truss (Item 2) at the top and bottom of the blocking at each Steel Framing Member (Item 6Bd) location.

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

6C. Steel Framing Members* — (Not Shown) - As an alternate to Items 6, 6A and 6B.

a. Furring Channels — Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep installed perpendicular to wood structural members. Channels spaced a max of 16 in. OC when no insulation (Item 3, 3A or 3B) is fitted in the concealed space or a max of 12 in. OC when insulation (Item 3, 3A or 3B) is fitted in the concealed space. Channels secured to trusses as described in Item 6Cb. Ends of adjoining channels overlapped 6 in, and tied together with double strand of No. 18 AWG galvanized steel wire near each end of

b. Steel Framing Members* — Used to attach furring channels (Item 6Ca) to trusses (Item 2). Clips secured to the bottom chord of each truss (24 in. OC) with one No. 8 by 2-1/2 in. long coarse drywall screw through center grommet. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item 6Ca. 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, as described in Item 7. PLITEQ INC — Type Genie Clip

6D. Steel Framing Members* — (Not Shown) - As an alternate to Items 6, 6A, 6B and 6C.

a. Main runners — Installed perpendicular to trusses — Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft OC. Main

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

c. Wall angles or channels — Used to support steel framing member ends and for screw-attachment of the gypsum board — Min 0.016 in. thick painted or galvanized steel angle with 1 in. legs or min. 0.016 in. thick painted or galvanized steel channel with a 1 by 1-1/2 by 1 in. profile, attached to walls at perimeter of ceiling with fasteners 16 in. OC. CGC INC — Type DGL or RX.

USG INTERIORS LLC — Type DGL or RX.

6E. Alternate Steel Framing Members* — (Not Shown) - As an alternate to items 6, 6A, 6B, 6C and 6D, furring channels and Steel Framing Members as described below a. Furring Channels — Formed of No. 25 MSG galv steel, 2-5/8 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When batt insulation (Item 3, 3A or 3B) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b.

b. Steel Framing Members* — Used to attach furring channels (Item a) to the wood trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 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 7. STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6F. Steel Framing Members* — (Not Shown) - As an alternate to Items 6 through 6E- Not for use with Items 3, 3A, or 3B. Main runners nom 12 ft long, spaced 72 in. OC. Main runners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC. Cross tees, nom 6 ft long, installed perpendicular to main runners and spaced 24 in. OC. Additional 6 ft long cross tees required at each gypsum board end joint with butted gypsum board end joints centered between cross tees spaced 8 in. OC. The main runners and

cross tees may be riveted or screw attached to the wall angle or channel to facilitate the ceiling installation. USG INTERIORS LLC — Type DGL or RX

6G. Alternate Steel Framing Members* — (Not Shown) - As an alternate to items 6 through 6F 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 trusses. spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b.

b. Steel Framing Members* — Used to attach furring channels (Item a) to the wood trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses 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 7. REGUPOL AMERICA — Type SonusClip

6H. Furring Channels — For use with American Gypsum Co. Type AG-C gypsum board only. Resilient channels formed of 25 MSG galv steel, spaced 16 in. OC, installed perpendicular to trusses. When insulation material, Item 3, 3A or 3B, is applied over the resilient channel/gypsum board ceiling membrane, the spacing may remain at 16 in. OC. Channels secured to each truss with 1-1/4 in. long Type S steel screws. Channels overlapped 4 in. at splices. Channels oriented opposite at gypsum board butt joints (spaced 6 in. OC) as shown in the above illustration.

7. Gypsum Board* — One layer of nom 5/8 in. thick, 48 in. wide, installed with long dimension perpendicular to resilient channels with 1 in, long Type S screws spaced 12 in, OC and located a min of 1/2 in, from side joints and 3 in, from the end joints. At end joints, two resilient channels are used, extending a min of 6 in. beyond both ends of the joint. When insulation (Item 3, 3A, 3B) is draped over the resilient channel/gypsum board ceiling membrane, screws shall be installed at 8 in. OC.

When Steel Framing Members* (Item 6A or 6C) are used, sheets installed with long dimension perpendicular to furring channels and side joints of sheet located beneath trusses. Gypsum board screws are driven through channel spaced 12 in. OC in the field when no insulation (Item 3, 3A, 3B) is fitted in the concealed space, or 8 in. OC in the field when insulation (Item 3, 3A, 3B) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Gypsum board butt joints shall be staggered min. 2 ft within the assembly, and occur between the mair furring channels. At the gypsum board butt joints, each end of the gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in, on each end. The furring channels shall be spaced approximately 3-1/2 in, OC, and be attached to the trusses with one clip at each end of the channel. Screw spacing along the butt joint to attach the gypsum board to the furring channels shall be 8 in. OC. Second (outer) layer of gypsum board required when furring channels (Item 6A, a) are spaced 24 in. OC and insulation is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Outer layer of gypsum board attached to the furring channels using 1-5/8 in, long Type S bugle-head screws spaced 8 in, OC at butted joints and 12 in, OC in the field. Butted end joints of outer layer to be offset a minimum of 8 in, from base layer end joints. Butted side joints of outer layer to be offset minimum 18 in, from butted side joints of base

When Steel Framing Members (Item 6B) are used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimensions perpendicular to furring channels (Item 6Ba). Base layer attached to the furring channels using 1 in. long Type S bugle head steel screws spaced 8 in. OC along butted end joints and 12 in. OC in the field of the board. Butted end joints centered on the continuous furring channels. Butted base layer end joints to be offset a min of 16 in. in adjacent courses. Outer layer attached to the furring channels using 1-5/8 in. long Type S bugle head steel screws spaced 8 in. OC at butted end joints and 12 in. OC in the field. Butted end joints centered on the continuous furring channels and offset a min of 16 in, from butted end joints of base layer. Butted side joints of outer layer to be offset min 16 in, from butted side joints of base

When Steel Framing Members (Item 6E) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in, long Type S bugle-head steel screws spaced 8 in, OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in, and centered over main furring channels. At the 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 end joint. Screw spacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Butt joing furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel.

When Steel Framing Members* (Item 6F) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board sheets installed with long dimension b. Cold Rolled Channels — 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction— (side joints) perpendicular to the 6 ft long cross tees with the end joints staggered min 4 ft and centered between cross tees which are spaced 8 in. OC. Gypsum board side joints may occur beneath or between main runners. Prior to installation of the gypsum board sheets, backer strips consisting of nom 7-3/4 in. wide pieces of gypsum board are to be laid atop the cross tee flanges and centered over each butted end joint location. The backer strips are to be secured to the flanges of the cross tees at opposite corners of the backer strip with hold down clips to prevent the backer strips from being uplifted during screw-attachment of the gypsum board sheets. Gypsum board fastened to cross tees with 1 in, drywall screws spaced 1 in, and 4 in, from the side joints and max 8 in, OC in the field of the board. The butted end joints are to be secured to the backer strip with No. 10 by 1-1/2 in. long Type G laminating screws located 1 in. from each side of the butted end joint and spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board.

When Steel Framing Members (Item 6G) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in, long Type S bugle-head steel screws spaced 8 in, OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in, and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one SonusClip at every truss involved with

FIRESTOPPING SPECIAL INSPECTION:

1. FOR R-2 OCCUPANCIES >250 OCCUPANTS, SPECIAL INSPECTION IS REQUIRED FOR FIRESTOPPING INCLUDEING THROUGH-PENETRATIONS, MEMBRANE PENETRATION FIRESTOPS, FIRE-RESISTANT JOINT SYSTEMS AND PERIMETER FIRE CONTAINMENT SYSTEMS

2. PENETRATION FIRESTOPS ARE REQUIRED TO BE TESTED, LISTED AND INSPECTED BY AN APPROVED AGENCY IN ACCORDANCE WITH ASTM E2174.

3. FIRE-RESISTANT JOINT SYSTEMS ARE REQUIRED TO BE TESTED, LISTED AND INSPECTED BY AN APPROVED AGENCY IN ACCORDANCE WITH ASTM E2393.

AMERICAN GYPSUM CO — Types AG-C

CGC INC — Types C, IP-X2, IPC-AR.

CERTAINTEED GYPSUM INC — Type C

CERTAINTEED GYPSUM INC — Type LGFC-C/A

GEORGIA-PACIFIC GYPSUM L L C - Type TG-C

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

THAI GYPSUM PRODUCTS PCL - Type C

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

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

USG BORAL DRYWALL SFZ LLC - Type C

7A. Gypsum Board* — For use with Steel Framing Members (Item 6D) when Batts and Blankets* (Item 3) are not used - One layer of nom 5/8 in. thick by 48 in. wide boards, installed with long dimension parallel to the main runners. Gypsum board fastened to each cross tee or channel with five gypsum board screws, with one screw located at the midspan of the cross tee or channel, one screw located 12 in, from and on each side of the cross tee or channel mid span and one screw located 1-1/2 in, from each gypsum board side joint. Except at gypsum board end joints, gypsum board screws shall be located on alternating sides of cross tee flange. At gypsum board end joints, gypsum board screws shall be located 1/2 in. from the joint. Gypsum board fastened to main runners with gypsum board screws 1/2 in. from side joints, midway between intersections with cross tees or channels (16 in. OC). End joints of adjacent gypsum board sheets shall be staggered not less than 32 in. Gypsum board sheets screw attached to leg of wall angle with gypsum board screws spaced 12 in. OC. Joints treated as described in Item 7. For use with Steel Framing Members* (Item 6D) when Batts and Blankets* (Item 3) are used - 5/8 in. thick, 4 ft wide; installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Fastened to cross tees with 1 in. long steel gypsum board screws spaced 8 in. OC in the field and 8 in. OC along end joints. Fastened to main runners with 1 in. long gypsum board screws spaced midway between cross tees. Screws along sides and ends of boards spaced 3/8 to 1/2 in. from board edge. End joints of the sheets shall be staggered with spacing between joints on adjacent boards not less than 4 ft OC. CGC INC — Type C or IP-X2.

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

USG BORAL DRYWALL SFZ LLC - Type (

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

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

UNITED STATES GYPSUM CO — ULIX

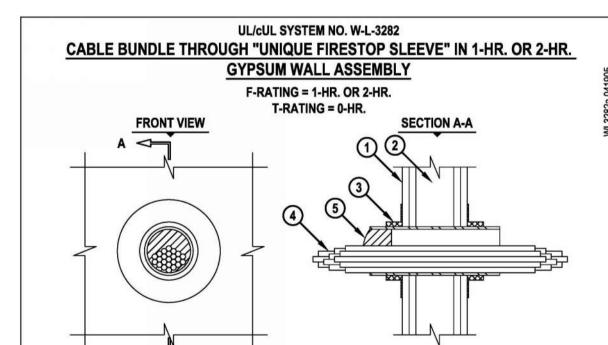
7C. Gypsum Board* — (As an alternative to Item 7) — For use when no insulation is used. Nom 5/8 in, thick, 48 in, wide gypsum board, installed as described in item 7 with resilient channels (Item 6) spaced 24 in OC.

AMERICAN GYPSUM CO — Type AG-C

8. Finishing System — (Not Shown)— Vinyl, dry or premixed joint compound, applied in two coats 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 veneer plaster may be applied to the entire surface of gypsum board.

9. Netting — (Not Shown) - For use when Sprayed Fiber* (Item 3B) is used - Woven netting material fastened to underside of each truss with staples, with side joints overlapped.

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



2. [NOT SHOWN] WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER. STEEL STUDS TO BE MINIMUM 3-1/2" WIDE. 3. UNIQUE FIRESTOP PRODUCTS, DIVISION OF "IT'S UNIQUE" INC. SMOOTH SLEEVE, THREADED SLEEVE, OR SPLIT SLEEVE (2" AND 4" SIZES).

I. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300, U400 OR V400 SERIES) (1-HR. OR 2-HR.

4. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING: A. MAXIMUM 300 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.

B. MAXIMUM 750 KCMIL POWER CABLE WITH PVC JACKET.

C. MAXIMUM 7/C NO. 12 AWG POWER CABLE WITH PVC JACKET. D. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (MAXIMUM 24 FIBER). E. MAXIMUM 3/C NO. 12 AWG METAL-CLAD CABLE WITH PVC JACKET. F. MAXIMUM 1" DIAMETER METAL-CLAD TEK CABLE WITH PVC JACKET.

G. MAXIMUM 2/0 ALUMINUM SER CABLE. H. TYPE RG 59/U COAXIAL CABLE WITH PVC JACKET

5. ONE HILTI CP 658T FIRESTOP PLUG CUT TO FIT AROUND THE CABLE BUNDLE AND INSTALLED TIGHTLY WITHIN SLEEVE SUCH THAT THE OUTER CIRCUMFERENCE OF THE DOME SHAPED PLUG IS FLUSH WITH EITHER END OF SLEEVE. WHEN SPLIT SLEEVE IS USED, INSTALL TWO HILTI CP 658T FIRESTOP PLUGS, FLUSH WITH BOTH ENDS OF SLEEVE.

> NOTES: 1. MAXIMUM DIAMETER OF OPENING IN WALL FOR 2-7/16" AND 4-1/2" SIZES ARE 2-1/4", AND 4-1/2", RESPECTIVELY. 2. CABLES TO FILL MAXIMUM 50% OF CROSS-SECTIONAL AREA OF OPENING 3. ANNULAR SPACE = MINIMUM 0". MAXIMUM 3".

HILTI, Inc. Tulsa, Oklahoma USA (918) 252-6000

1 of 1 9/64" = 1" Saving Lives through Innovation and Education

APR. 19, 2005

ISSUE SET

Drawing No.

3282a

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15 APR 2025

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M. RANDALL PORTER

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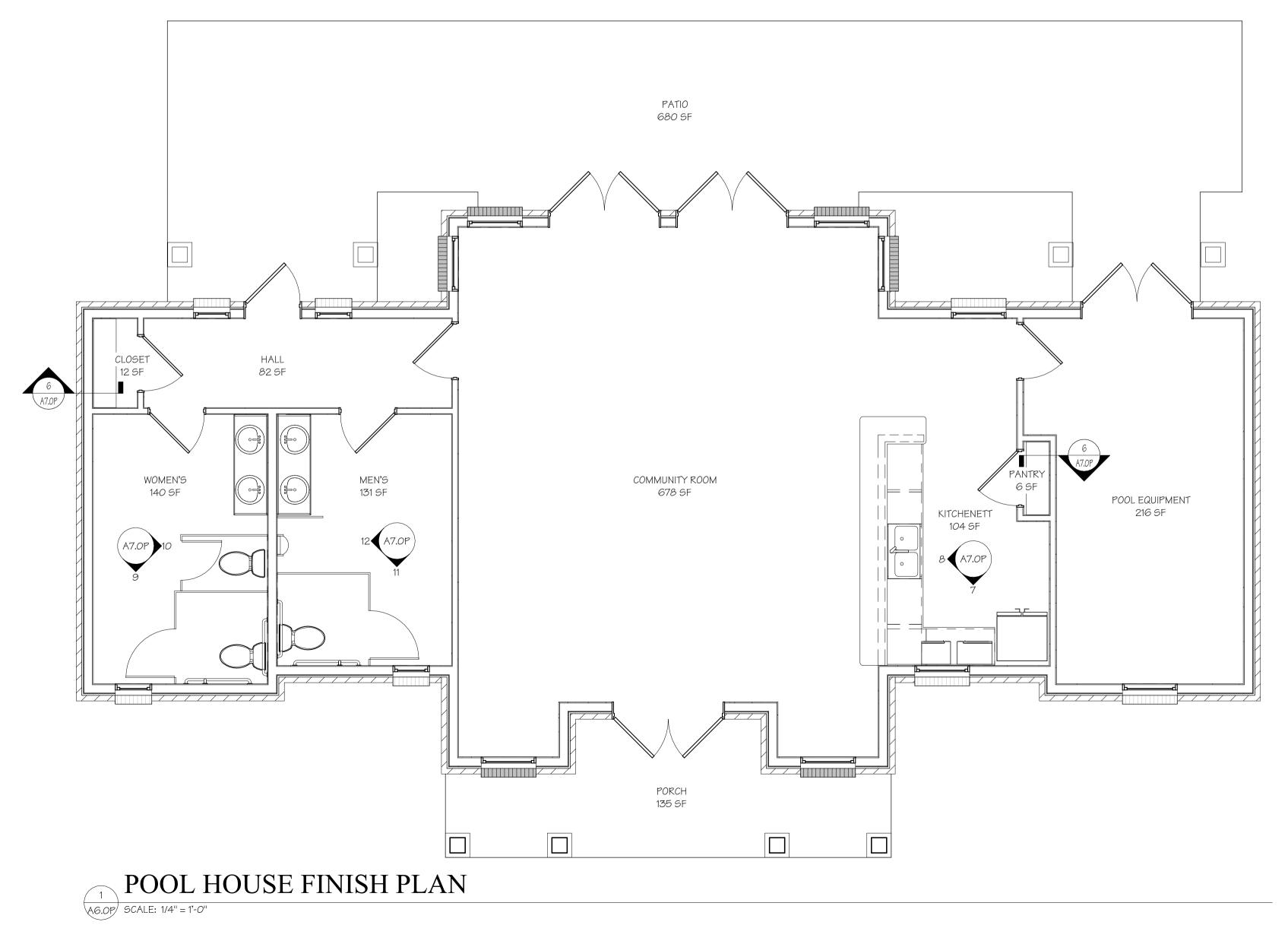
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	FII	NISH SCHI	EDULE	
NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	CEILING FINISH
POOL HOUSE				
CLOSET	VINYL PLANK	WOOD BASE	PAINTED GYP. BD.	PAINTED GYP. BD.
COMMUNITY ROOM	VINYL PLANK	WOOD BASE	PAINTED GYP. BD.	PAINTED GYP. BD.
HALL	VINYL PLANK	WOOD BASE	PAINTED GYP. BD.	PAINTED GYP. BD.
KITCHENETT	VINYL PLANK	WOOD BASE	PAINTED GYP. BD.	PAINTED GYP. BD.
MEN'S	PORCELAIN	4" COVE BASE	PAINTED GYP. BD.	PAINTED GYP. BD.
PANTRY	VINYL PLANK	WOOD BASE	PAINTED GYP. BD.	PAINTED GYP. BD.
PATIO	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH
POOL EQUIPMENT	SEALED CONCRETE	WOOD BASE	PAINTED GYP. BD.	PAINTED GYP. BD.
PORCH	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH
WOMEN'S	PORCELAIN	4" COVE BASE	PAINTED GYP. BD.	PAINTED GYP. BD.

	POOL HOUSE BATH NOTES
1)	INSTALL GRAB BARS WITH ROUND HEAD SCREWS.
2)	PROVIDE & INSTALL (1) 36" HORIZONTAL GRAB BAR BEHIND & (1) 42" HORIZONTAL GRAB BAR BESIDE WATER CLOSET ON WALL @ 34" A.F.F. & (1) 18" VERTICAL GRAB BAR BESIDE WATER CLOSET ON WALL @ 40" FROM REAR WALL. (SEE BATH ELEVATIONS SHEET A7.0)
3)	BOTTOM OF MIRROR TO REST ON COUNTERTOP BACKSPLASH.
4)	VANITY SINK FAUCET TO BE LEVER TYPE, & EXPOSED PIPING TO BE WRAPPED W/ PIPE WRAP.
5)	EXTEND VINYL FLOORING BENEATH LAV. SPACE.

	POOL HOUSE KITCHEN NOTES
)	COUNTER HEIGHT SHALL BE 34" A.F.F. TO TOP OF SINK.
2)	EXTEND VINYL FLOORING BENEATH SINK SPACE AND THE 30" WORKSPACE.
3)	TOE KICK SPACE @ BOTTOM OF BASE CABINETS SHALL REMAIN 4" MIN. (STANDARD)
1)	ADD SWITCHES FOR CONTROL OF LIGHT OVER SINK & GARBAGE DISPOSAL.
5)	INSULATE EXPOSED PIPING BELOW KITCHEN SINK W/ PIPE WRAP.

	GENERAL NOTES
)	CONTRACTOR SHALL FURNISH & INSTALL 4" BUILDING NUMBERS FOR POOL HOUSE AS REQUIRED BY CITY OR LOCAL POSTMASTER.
2)	CLOSETS SHALL HAVE EPOXY-COATED WIRE SHELVING.
3)	PRIME & PAINT WALLS BEHIND MILLWORK.
1)	APPLY SILICONE CAULK BETWEEN CONCRETE AND BOTTOM OF THE DRYWALL.
5)	SEAL CONCRETE FLOOR TO REDUCE MOISTURE PENETRATION.
ē)	APPROPRIATELY SIZED BLINDS SHALL BE PROVIDED AND INSTALLED FOR EACH GLAZED OPENING INCLUDING PAIRED WINDOWS (PROVIDED WITH TWO SETS) AND DOOR GLAZING WHERE HALF LITE OR LARGER.

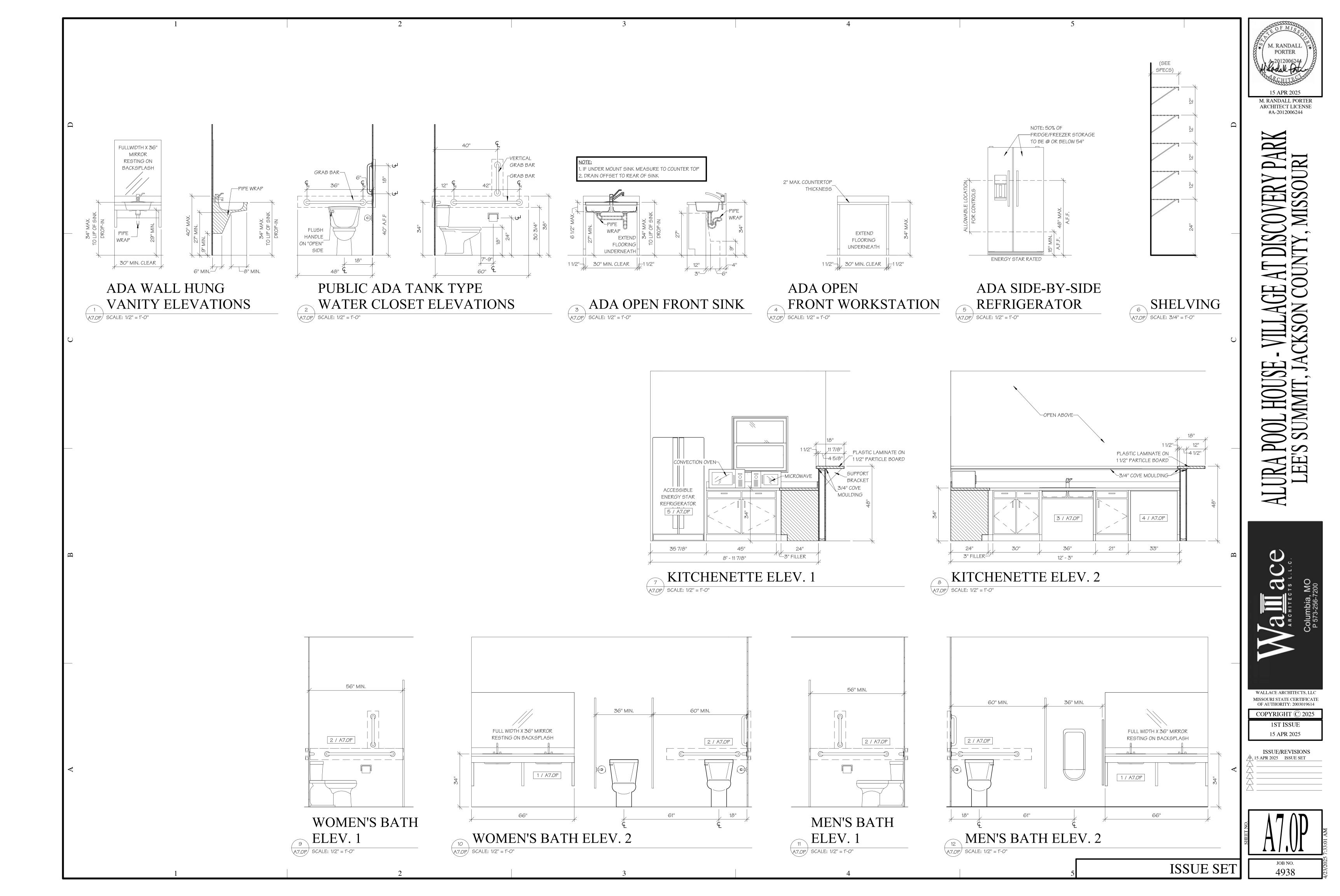


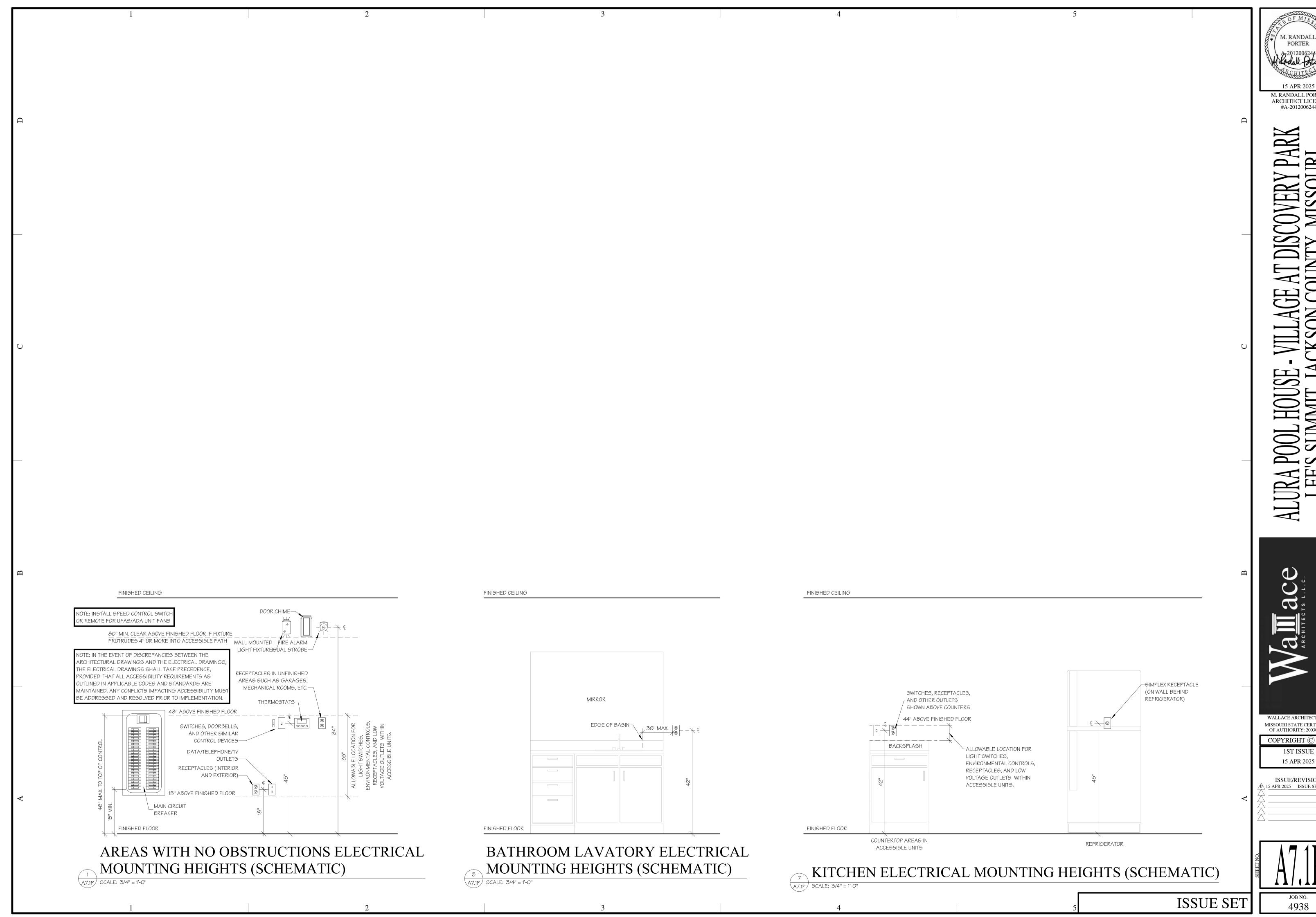
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1ST ISSUE 15 APR 2025

ISSUE/REVISIONS 15 APR 2025 ISSUE SET

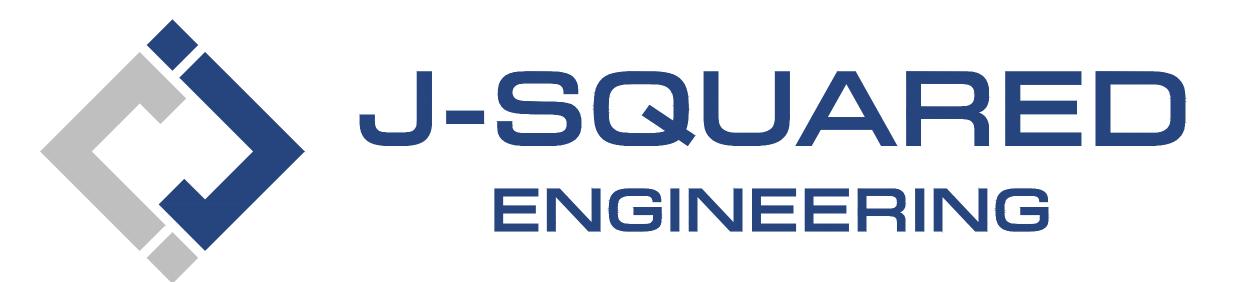




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15 APR 2025 ISSUE/REVISIONS 15 APR 2025 ISSUE SET



MECHANICAL - ELECTRICAL - PLUMBING DESIGN DRAWINGS FOR:

The Village at Discovery Park Alura Apartments Pool House

Northeast Douglas Street Lee's Summit, Jackson County, Missouri

GENERAL MEP SPECIFICATIONS

- OR SPECIFICATIONS.
- LAYOUT OF SYSTEMS SHOWN ON PLANS ARE APPROXIMATE AND SCHEMATIC IN NATURE. ALL SYSTEMS WILL NEED TO BE FIELD-COORDINATED. CONTRACTOR SHALL INCLUDE THIS COORDINATION IN THEIR SCOPE AND INCLUDE ALL COSTS OF MODIFYING LAYOUT AS REQUIRED IN THEIR BID. PLANS ARE NOT INTENDED TO BE SHOP DRAWINGS FROM WHICH MATERIALS CAN BE ORDERED, FABRICATED, OR INSTALLED WITHOUT ADDITIONAL FIELD MEASUREMENTS AND COORDINATION.
- NOT ALL SPECIFIC PIECES AND COMPONENTS OF EACH SYSTEM ARE DETAILED OR OUTLINED ON PLANS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY PARTS AND LABOR TO PRODUCE A COMPLETE AND FULLY OPERATIONAL SYSTEM UNLESS STATED OTHERWISE ON PLANS. CONTRACTOR IS TO PROVIDE AND INCLUDE ALL EQUIPMENT AND MATERIAL NEEDED TO COMPLETE WORK ASSOCIATED WITH THEIR BID UNLESS ANY ITEMS ARE SPECIFICALLY NOTED ON PLANS AS PROVIDED BY OTHERS, ALL MATERIALS TO BE NEW, FIRST CLASS, AND INSTALLED PER MANUFACTURER'S PUBLISHED INSTRUCTIONS.
- WHERE CONFLICTS EXIST BETWEEN MEP PLANS AND CIVIL, ARCHITECTURAL, OR STRUCTURAL PLANS, NOTIFY MEP ENGINEER OF DISCREPANCIES FOR CLARIFICATION PRIOR TO PERFORMING ANY WORK THAT MAY CONTRADICT INFORMATION ELSEWHERE IN THE PROJECT PLANS.
- THESE PLANS ARE NOT TO BE SCALED. SEE ARCHITECTURAL PLANS FOR DIMENSIONS. WHERE THERE IS A CONFLICT BETWEEN ARCHITECTURAL DIMENSIONS AND MEP DIMENSIONS, ARCHITECTURAL SHALL
- CONTRACTOR IS TO INCLUDE IN THEIR SCOPE THE COST OF ALL PERMITS, INSPECTIONS, METERING, TAPS, ETC. ASSOCIATED WITH THEIR WORK.
- CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, CUTTING, CORING, PATCHING, AND BACKFILL
- REQUIRED TO COMPLETE THEIR WORK, UNLESS NOTED OTHERWISE ON PLANS. SPECIFIC EQUIPMENT MANUFACTURERS AND/OR MODEL NUMBERS LISTED ON PLANS ARE TO ESTABLISH A BASIS-OF-DESIGN FOR QUALITY AND PERFORMANCE, VERIFY THAT SUBSTITUTIONS WILL BE ACCEPTABLE PRIOR TO PURCHASE & INSTALLATION.
- NOTIFY ENGINEER OF ANY MAJOR PLAN DISCREPANCIES OR CONFLICTS PRIOR TO PROVIDING BIDS OR
- 1.11. SEE DISCIPLINE SHEETS FOR ADDITIONAL TRADE SPECIFIC SPECIFICATIONS.
- WHERE SHUTDOWN OF ANY EXISTING UTILITY OR SERVICE TO BUILDING IS REQUIRED FOR COMPLETION OF WORK, COORDINATE OUTAGE WITH OWNER AS TO NOT DISRUPT TYPICAL

- SYSTEMS SHALL BE INSTALLED IN A FIRST-CLASS MANNER USING BEST ACCEPTABLE METHODS AND
- ALL SYSTEMS SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO BUILDING ORIENTATION. COMPONENTS SHALL BE INSTALLED LEVEL AND PLUMB WITH ATTENTION GIVEN TO OVERALL
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING EQUIPMENT LOCATIONS AND SYSTEM ROUTING WITH OTHER TRADES PRIOR TO INSTALLATION.
- CONTRACTOR TO GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE THE COMPLETED PROJECT IS RELEASED TO THE OWNER, UNLESS NOTED OTHERWISE ON
- DURING INSTALLATION OF MATERIALS OR ACTIVITIES IN NEW WORK SCOPE, AVOID DAMAGING EXISTING SURFACES AND EQUIPMENT TO REMAIN. ANY DAMAGE TO EXISTING SURFACES OR EQUIPMENT SHALL BE CORRECTED AT NO COST TO OWNER.

DEFERRED SUBMITTAL NOTES

- FIRE ALARM SYSTEM COMPONENTS SHOWN (IF APPLICABLE) ARE GENERAL AND SCHEMATIC IN NATURE SHOWN FOR APPROXIMATE ROUGH-IN LOCATIONS AND QUANTITIES ONLY. CONTRACTOR TO VERIFY EXACT DEVICE LOCATIONS AND REQUIREMENTS WITH FIRE ALARM SYSTEM DESIGNER OF RECORD PRIOR TO ROUGH-IN.

2. FIRE SPRINKLER SYSTEM

- 1.1. FIRE SPRINKLER CONTRACTOR TO PROVIDE DEFERRED SUBMITTAL PACKAGE FOR FIRE SPRINKLER SYSTEM. SUBMITTAL SHALL INCLUDE HYDRAULIC CALCULATIONS AND SPRINKLER SYSTEM DRAWINGS SEALED BY A QUALIFIED DESIGN PROFESSIONAL LICENSED BY THE STATE.
- WHERE COMBINED FIRE & DOMESTIC WATER SUPPLY LINES ARE SHOWN ON PLANS, INSTALLING CONTRACTOR SHALL VERIFY WITH FIRE SPRINKLER CONTRACTOR THAT INCOMING LINE SIZE IS ADEQUATE FOR FIRE SUPPRESSION SYSTEM.

REFERENCED CODES IN EFFECT

BEEN DESIGNED IN COMPLIANCE WITH THE FOLLOWING CODES LISTED BELOW. BUT THIS IS NOT AN PROJECT SHALL COMPLY WITH ALL APPLICABLE CODES, STANDARDS, AND LOCAL REQUIREMENT

- 2018 INTERNATIONAL PLUMBING CODE 2018 INTERNATIONAL FUEL GAS CODE
- 2018 INTERNATIONAL FIRE CODE
- 2017 NATIONAL ELECTRIC CODE

FIRE RATED PENETRATION NOTES

- THIS BUILDING CONTAINS FIRE RATED ASSEMBLIES. SEE ARCHITECTURAL PLANS FOR LOCATIONS AND DETAILS. A UL-LISTED FIRESTOP SYSTEM SHALL BE INSTALLED AT EACH PENETRATION OF A HORIZONTAL OR VERTICAL
- RATED ASSEMBLY IN ACCORDANCE WITH ASTM E814 OR UL 1479.
- EACH CONTRACTOR IS RESPONSIBLE FOR PROVIDING PROTECTION FOR THEIR PENETRATIONS THRU RATED
- GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING A CATALOG OF ALL UL LISTED FIRESTOP ASSEMBLIES. AND KEEPING A PHYSICAL COPY OF DETAILS FOR EACH USED FIRESTOP ASSEMBLY ON

SHEET LIST TABLE

SHEET TITLE MECHANICAL ELECTRICAL PLUMBING COVER SHEET

SITE LIGHTING PLAN M501 **HVAC DETAILS & SCHEDULES**

ELECTRICAL PLAN FIRE PROTECTION PLAN **ELECTRICAL DETAILS & SCHEDULES**

PLUMBING PLAN



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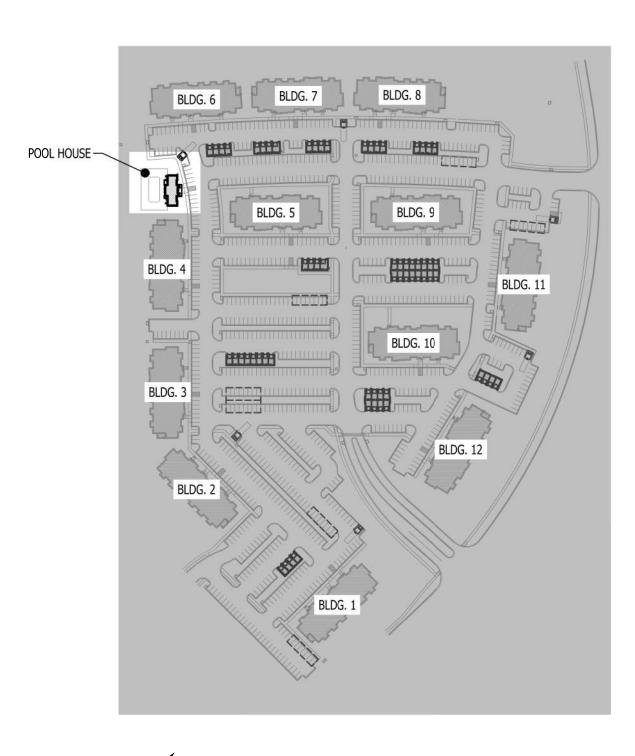
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MECHANICAL ELECTRICAL PLUMBING COVER SHEET





SITE UTILITIES PLAN SYMBOL LEGEND

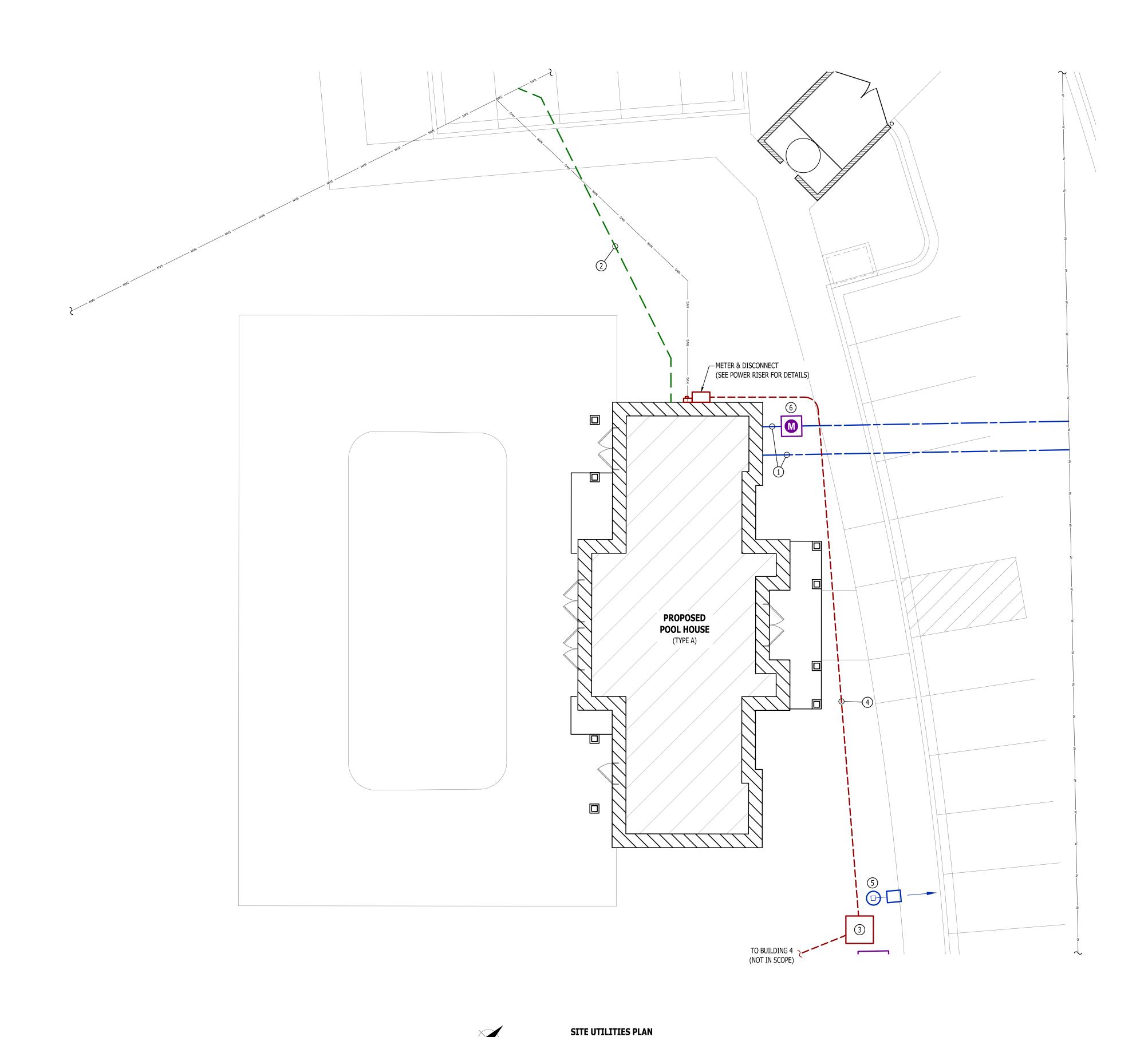
— — SANITARY SEWER PIPING ———— COLD WATER LINE WATER METER GAS METER TIE INTO EXISTING **————** ELECTRIC

SITE UTILITIES PLAN GENERAL NOTES:

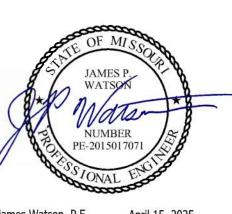
- 1. REFER TO CIVIL PLANS FOR EXACT UTILITY LOCATIONS, CONNECTIONS, DETAILS, ETC.
- 2. COORDINATE EXACT LOCATIONS OF ALL ELECTRICAL CONDUITS & EQUIPMENT WITH EVERGY.

SITE UTILITIES PLAN KEY NOTES:

- \bigcirc 6" UN-METERED SPRINKLER LINE & $1\frac{1}{2}$ " CW DOMESTIC LINE TO POOL EQUIPMENT ROOM (SEE PLUMBING PLANS FOR CONTINUATION).
- 2) 4" SAN (SEE PLUMBING PLANS FOR DETAILS).
- 3 PROPOSED PAD-MOUNTED TRANSFORMER (SEE POWER RISER FOR DETAILS).
- 4) UNDERGROUND SECONDARY CONDUIT/CONDUCTORS (SEE POWER RISER FOR DETAILS).
- 5) POLE LIGHT (SEE SITE LIGHTING PLANS FOR DETAILS).
- 6 $1\frac{1}{2}$ " CW DOMESTIC LINE TO METER IN PIT (SEE WATER RISER DETAILS).



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



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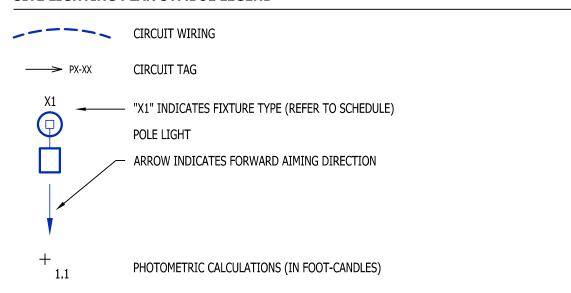
SITE UTILITIES

PLAN

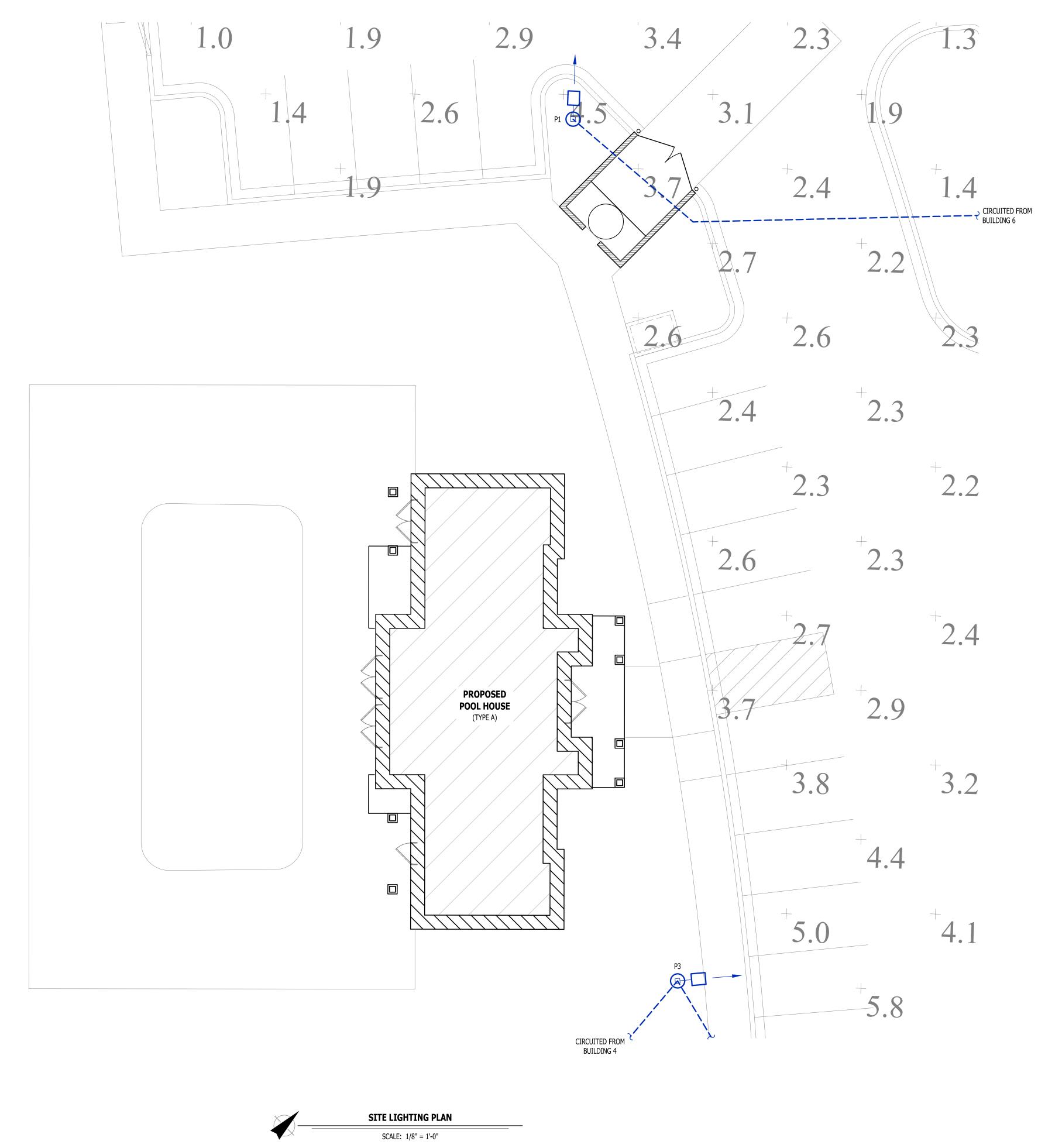
SITE LIGHTING PLAN GENERAL NOTES:

- SITE PHOTOMETRIC VALUES SHOWN HAVE BEEN CALCULATED PER SPECIFIED LIGHT FIXTURES AT INDICATED
 MOUNTING HEIGHTS. ANY CHANGES OR ALTERATIONS TO LIGHTING LAYOUT SHOWN WILL REQUIRE
 RECALCULATING SITE PHOTOMETRICS AND WILL THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR /
 EQUIPMENT SUPPLIER.
- 2. PHOTOMETRIC CALCULATIONS SHOWN DO NOT INCLUDE EXISTING LIGHT FIXTURE(S), ONLY NEW POLE LIGHT FIXTURE(S) SHOWN. CALCULATIONS ALSO INCLUDE NEW POLE LIGHT FIXTURES ON ADJACENT LOTS AS PART OF THIS DEVELOPMENT. REFER TO ADJACENT BUILDING SITE LIGHTING AND MASTER SITE LIGHTING PLANS FOR DETAILS & CALCULATIONS SUMMARIES.

SITE LIGHTING PLAN SYMBOL LEGEND



POLE HEIGHT	"X" DEPTH			
10ft - 14ft	4'-6"			
15ft - 20ft	6'-0"			
21ft - 25ft	7'-0"			
26ft - 30ft	8'-0"			BLDG. 6 BLDG. 7 BLDG. 8
POLE MUST MEET EPA RATING FOR 80MPH WIND (ASCE 7-93) WITH SPECIFIED HEAD CONFIGURATION PVC CONDUIT STUBBED UP ADJACENT TO HANDHOLE (NUMBER & SIZE REQUIRED)		- HANDHOLE @ COVER PLATE - POLE ANCHOR BOLTS PER MANUFACTURER RECOMMENDATIONS - ½" CHAMFER ALL EDGES 24" MIN. TO	POOL HOUSE	BLDG. 5 BLDG. 9 BLDG. 11
CONCRETE TO BE MIN. 3000psi	4"0	CIRCUIT CONDUIT & CONDUCTORS TO POWER SOURCE / NEXT POLE ATTACH COPPER EQUIPMENT GROUND CONDUCTOR TO INTERNAL LUG WELDED TO INTERIOR OF POLE TYP. POLE BASE REINFORCING: #3 HORIZONTAL TIES (20") AT 12" O.C. W/ #4 VERTICAL BARS AT PERIMETER AT 6" O.C.		BLDG. 12 BLDG. 12
				SITE KEY PLAN
TYPICAL LIG	IT POLE DETAII	<u>. </u>		SCALE: 1" = 200 ft





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at Discovery Park Alura Apart

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IFET TITLE

SITE LIGHTING PLAN

SHEET NUMBER

MEP3

HVAC PLAN SYMBOL LEGEND EQUIPMENT TYPE (REFER TO EQUIPMENT SCHEDULE)

EQUIPMENT REFERENCE NUMBER DIFFUSER/GRILLE TYPE (REFER TO SCHEDULE)

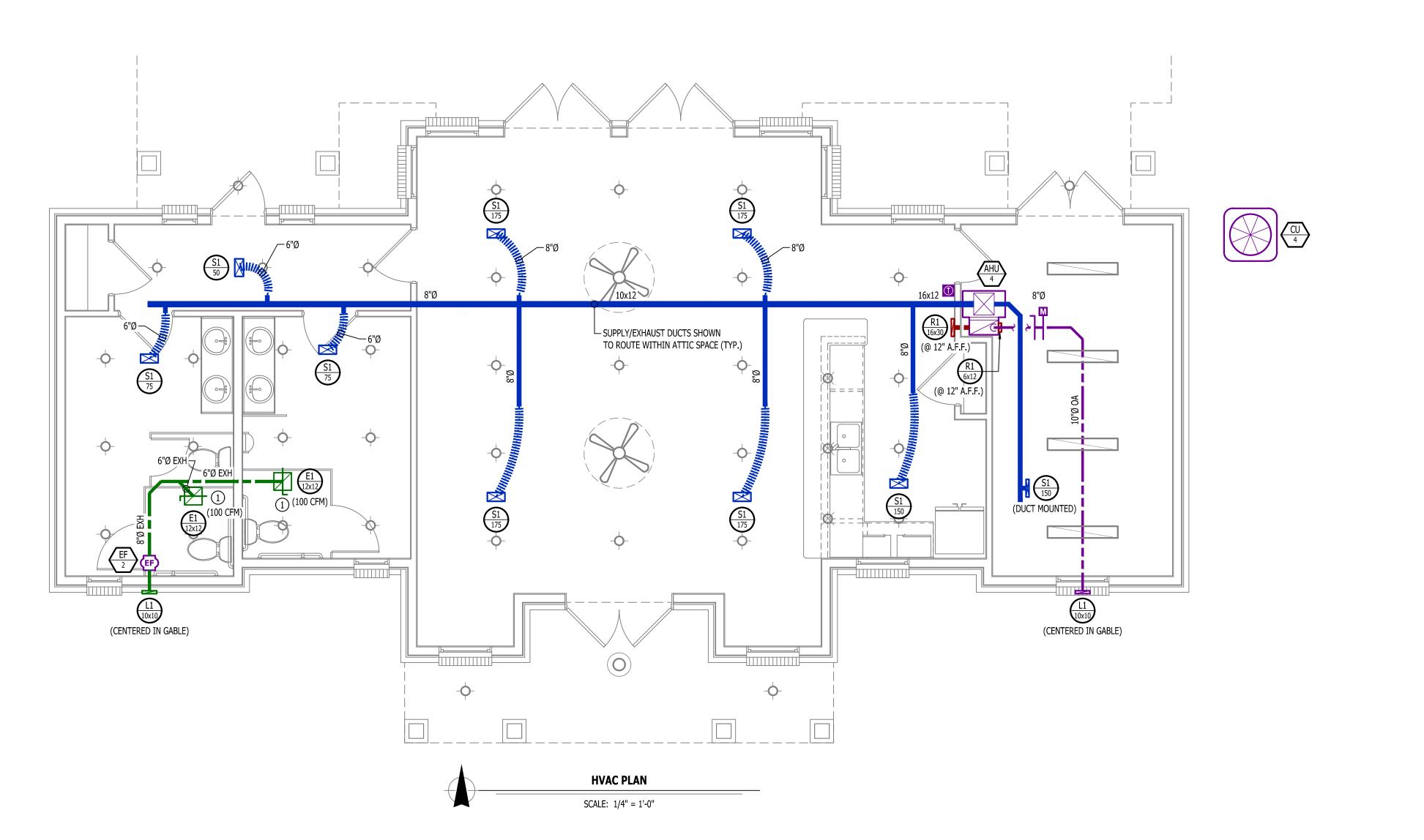
CUBIC FEET PER MINUTE (CFM) / FACE SIZE SUPPLY DUCTWORK RETURN DUCTWORK EXHAUST DUCTWORK FLEX DUCT SUPPLY DIFFUSER (HATCH INDICATES "NO FLOW ZONE") RETURN DIFFUSER BALANCE DAMPER MOTORIZED DAMPER CEILING RADIATION DAMPER BACK DRAFT DAMPER THERMOSTAT

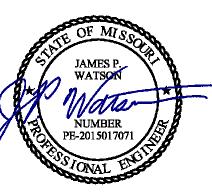
HVAC PLAN GENERAL NOTES:

 SEE M500 & M600 SERIES SHEETS FOR HVAC SCHEDULES, DETAILS, REQUIREMENTS, ETC.
 SUPPLY DUCTWORK FROM AHU AT FLOOR/CEILING PENETRATION SHALL BE PROTECTED BY A FIRE DAMPER. INSTALL PER MANUFACTURER'S SPECIFICATIONS.

HVAC PLAN KEY NOTES:

1) BALANCE EXHAUST FLOW TO AMOUNT SHOWN (XXX CFM).





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Discover

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HVAC PLAN

M101

HVAC SPECIFICATIONS

1.1. REFER TO GENERAL MEP SPECIFICATIONS SECTION FOR ADDITIONAL REQUIREMENTS.

- COORDINATE WITH ALL OTHER TRADES SO THAT HVAC EQUIPMENT AND DUCT WORK DOES NOT BLOCK REQUIRED ACCESS OR CLEARANCE TO ANY EQUIPMENT, ACCESS PANELS, ELECTRICAL JUNCTION BOXES, ELECTRICAL PANELS, ETC.
- ALL HVAC EQUIPMENT IS TO BE INSTALLED PER MANUFACTURER'S PUBLISHED RECOMMENDATIONS
- AND/OR INSTALLATION INSTRUCTIONS.
- ALL EQUIPMENT TO BE INSTALLED LEVEL AND PLUMB, PARALLEL OR PERPENDICULAR TO BUILDING
- ROOFTOP MOUNTED RTU'S & EXHAUST FANS SHALL BE INSTALLED ON CURBS PER MANUFACTURER'S INSTRUCTIONS. CURB HEIGHT SHALL PROVIDE A MINIMUM OF 12" BETWEEN EQUIPMENT AND TOP OF
- GRADE MOUNTED RTUS, CONDENSING UNITS, AND HEAT PUMPS TO BE INSTALLED ON 4" REINFORCED CONCRETE PAD EXTENDING 4" BEYOND EACH EDGE OF THE EQUIPMENT, OR A MANUFACTURER
- APPROVED PRE-MANUFACTURED BASE. APPROPRIATE ATTENTION SHALL BE GIVEN TO INDOOR AIR QUALITY THROUGHOUT CONSTRUCTION; PROTECT INSIDE OF NEW DUCTWORK & AIR-HANDLING EQUIPMENT FROM DUST, DIRT, DEBRIS, PAINT, MOISTURE, ETC. INSULATION SHALL BE REPLACED IF EXPOSED TO MOISTURE. AN INDEPENDENT, PROFESSIONAL DUCT CLEANING COMPANY SHALL CLEAN ALL NEW DUCTWORK IF EQUIPMENT WAS USED
- DURING CONSTRUCTION, AND EQUIPMENT/COILS SHALL ALSO BE THOROUGHLY CLEANED. FIELD COORDINATE LOCATIONS OF ALL DIFFUSERS, GRILLES, REGISTERS, ETC. WITH LIGHT FIXTURE LOCATIONS AND ADJUST AS NECESSARY.

- ALL EQUIPMENT SHOWN ON MECHANICAL PLANS SHALL BE PROVIDED & INSTALLED BY MECHANICAL
- CONTRACTOR UNLESS NOTED OTHERWISE. ALL EQUIPMENT MUST PROVIDE PERFORMANCE AS SPECIFIED ON PLANS, WHERE SPECIFIC MANUFACTURERS AND/OR MODELS ARE INDICATED ON PLANS, CONTRACTOR TO PROVIDE MODEL INDICATED OR APPROVED EQUAL. VERIFY SUBSTITUTION APPROVAL PRIOR TO PURCHASE OR
- INSTALLATION OF EQUIPMENT. CONTRACTOR TO SUPPLY SUBMITTALS FOR ALL EQUIPMENT FOR REVIEW BY ARCHITECT AND ENGINEER.
- FORMAL APPROVAL SHALL BE RECEIVED BY CONTRACTOR PRIOR TO EQUIPMENT PURCHASE. CONTRACTOR TO SHARE APPROVED EQUIPMENT SUBMITTALS WITH ANY PERTINENT ELECTRICAL OR PLUMBING REQUIREMENTS WITH RESPECTIVE CONTRACTORS WITHIN TWO WEEKS OF RECEIVING
- APPROVED SUBMITTALS FROM ARCHITECT/ENGINEER. ALL EQUIPMENT SHOWN ON PLANS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS WITH
- ADEQUATE ACCESS AND CLEARANCE FOR SERVICING OR REPLACEMENT. ALL HORIZONTAL FURNACES WITH AC COILS SHALL BE EQUIPPED WITH CORROSION RESISTANT DRAIN PAIN. DRAIN PAN TO DISCHARGE TO SANITARY WASTE VIA INDIRECT CONNECTION WITH AIR GAP. DRAIN PAN TO PROVIDE SECONDARY OVERFLOW OR FLOAT SWITCH INTERLOCKED WITH UNIT TO SHUT
- DOWN UNIT ON HIGH WATER SIGNAL. ALL EXTERIOR REFRIGERANT COILS TO BE PROTECTED BY FACTORY EQUIPPED HAIL GUARDS.
- REFRIGERANT PIPING TO BE ACR COPPER OR TYPE L COPPER.
- ALL AIR HANDLING EQUIPMENT SHALL BE EQUIPPED WITH MERV-8 FILTRATION AT RETURN OPENING UNLESS OTHERWISE NOTED.
- ALL AIR FILTERS SHALL BE SIZED FOR A MAXIMUM FACE VELOCITY OF 500FPM.
- PROVIDE & INSTALL ALL EQUIPMENT FLUES/VENTS PER MANUFACTURER'S SPECIFICATIONS. TERMINATIONS SHALL BE AT LEAST 10' FROM ANY FRESH AIR INTAKE.
- PROVIDE NEW AIR FILTERS IN ALL EQUIPMENT PRIOR TO TESTING & BALANCING AND BEFORE TURNING OVER SYSTEM(S) TO OWNERSHIP.
- 3.13. IF ANY EXISTING EQUIPMENT IS TO BE REUSED, CLEAN AND INSPECT EQUIPMENT PRIOR TO BEGINNING WORK. VERIFY THAT EQUIPMENT IS IN GOOD WORKING CONDITION, REPORT ANY DEFICIENCIES TO

4. **DUCTWORK**

- 4.1. DUCTWORK TO BE GALVANIZED STEEL, SEAL CLASS B, CONSTRUCTED PER SMACNA STANDARDS. 4.2. DUCTWORK THICKNESS:
- 4.2.1. 26 GA. MINIMUM UP TO 16" DUCT 4.2.2. 24 GA. UP TO 20"
- 4.2.3. 22 GA. UP TO 24"
- 4.2.4. 20 GA. UP TO 28"
- 4.2.5. 18 GA. UP TO 36" TURNING VANES SHALL BE PROVIDED AND INSTALLED AT ALL 90° BENDS AND TEES.
- ALL DUCT DIMENSIONS LISTED ARE TO INTERIOR OF DUCT LINER UNLESS NOTED OTHERWISE ON
- 4.5. BALANCE DAMPERS MUST BE PROVIDED TO ALLOW ADJUSTMENT AT EACH AIR TERMINAL,
- WHERE BRANCH TAKEOFF IS ACCESSIBLE (ABOVE LAY-IN CEILING OR EXPOSED DUCT), BALANCE DAMPER IS TO BE INSTALLED AT TAKEOFF.
- WHERE TAKEOFF IS INACCESSIBLE (IN ATTIC OR SOFFIT), BALANCE DAMPER IS TO BE LOCATED SUCH THAT IT IS ACCESSIBLE FROM FACE OF AIR DEVICE.
- HVAC CONTRACTOR RESPONSIBLE FOR ALL DUCTWORK TRANSITIONS AND FITTINGS AS REQUIRED FOR
- FINAL CONNECTIONS TO HVAC EQUIPMENT. UNLESS NOTED OTHERWISE ON PLANS, FLEXIBLE DUCT CONNECTIONS MAY USED FROM BRANCH DUCTS
- TO FINAL AIR DEVICES, BUT SHALL NOT EXCEED 8'-0" IN LENGTH. FLEXIBLE DUCT CONNECTORS MUST BE SUPPORTED PER PLAN DETAILS.

5. <u>INSULATION</u>

- 5.1. DUCTWORK SEE "TYPICAL DUCT INSULATION DIAGRAM" FOR INSTALLATION SPECIFIC REQUIREMENTS.
- INTERNAL DUCT LINER TO BE EQUAL TO 'JOHNS MANVILLE LINACOUSTIC R-300'. EXTERNAL DUCT WRAP TO INCLUDE VAPOR BARRIER. EQUAL TO 'JOHNS MANVILLE MICROLITE'
- WITH FSK JACKET. WHERE INSULATION IS REQUIRED IN "TYPICAL DUCT INSULATION DIAGRAM", INCLUDE
- INSULATION ON ALL FITTINGS, INCLUDING CANVAS FLEX CONNECTION FITTINGS. REFRIGERANT PIPING
- SPLIT SYSTEM (SUCTION LINE ONLY) 1" CLOSED CELL ELASTOMERIC FOAM (EQUAL TO
- 'ARMAFLEX AP'). VRV/VRF SYSTEMS (BOTH SUCTION AND HOT GAS LINES) 1 ½" EPDM (EQUAL TO 'AEROFLEX AEROCEL

AC') WITHIN CONDITIONED SPACES & 2" EDPM (EQUAL TO 'AEROFLEX AEROCEL AC') IN UNCONDITIONED

- SPACES, AND WITH BANDED ALUMINUM SHIELDING IN EXTERIOR SPACES. 5.4. CONDENSATE PIPING
- SPLIT SYSTEMS WHERE CONDENSATE PIPING IS LOCATED IN UNCONDITIONED SPACE, INSULATE WITH ½" ELASTOMERIC. NO INSULATION REQUIRED WITHIN CONDITIONED SPACES.

VRV/VRF - INSULATE WITH $\frac{1}{2}$ " ELASTOMERIC.

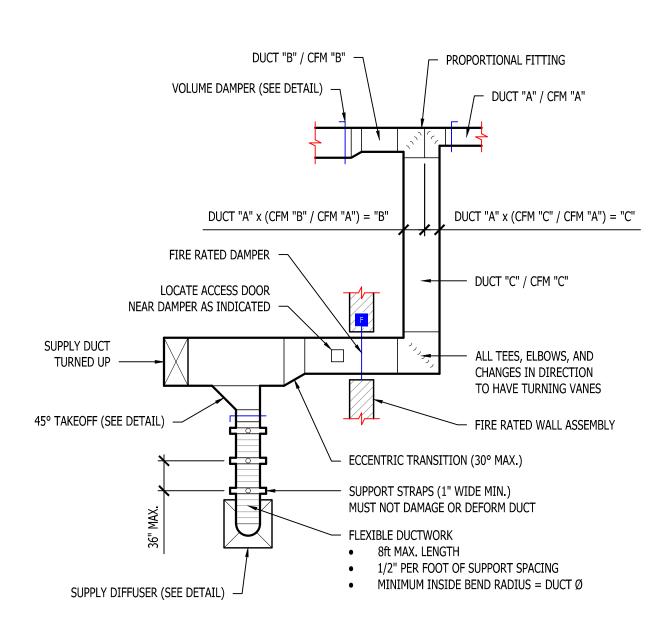
- 6. TESTING AND BALANCING 6.1. ALL SYSTEMS MUST BE BALANCED TO WITHIN 10% OF VALUES INDICATED ON PLAN.
- HVAC CONTRACTOR TO PROVIDE WRITTEN BALANCE REPORT INCLUDING FLOW VALUES INDICATED ON
- PLANS, INITIAL MEASURED FLOW VALUES, AND FINAL MEASURED VALUES. THIRD PARTY CERTIFIED TEST AND BALANCE NOT REQUIRED UNLESS OTHERWISE NOTED ON PLANS OR WITHIN PROJECT MANUAL.

 SUPPLY = RETURN = EXHAUST = OUTSIDE AIR = 	1" LINER 1" LINER NONE 2" WRAP	 SUPPLY = RETURN = EXHAUST = OUTSIDE AIR = 	1" LINER & 1½" WRAP 1" LINER & 1½" WRAP 1½" WRAP NONE
ROUND		ROUND	
• SUPPLY =	1½" WRAP	• SUPPLY =	2" WRAP
• RETURN =	NONE	• RETURN =	2" WRAP
• EXHAUST =	NONE	• EXHAUST =	1½" WRAP
OUTSIDE AIR =	2" WRAP	• OUTSIDE AIR =	NONE
SPIRAL		SPIRAL	
SUPPLY =	NONE	• SUPPLY =	2" WRAP
RETURN =	NONE	• RETURN =	2" WRAP
EXHAUST =	NONE	• EXHAUST =	1½" WRAP
• OUTSIDE AIR =	2" WRAP	• OUTSIDE AIR =	NONE

RECTANGULAR

RECTANGULAR





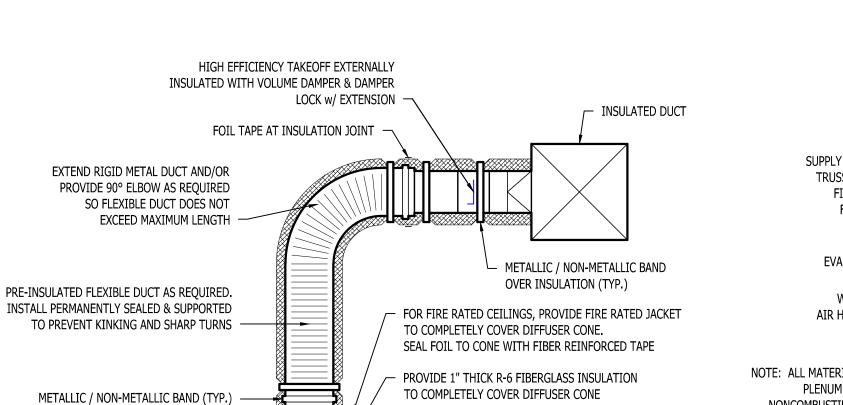
ITPICAL DUCTWORK DETAIL	TYPICAL DUCTWORK DETAIL	
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	SPLIT SYSTEM SCHEDULE - POOL HOUSE														
TAG	EQUIPMENT DESCRIPTION	" I ADEA CEDVEN I	SIZE	ORIENTATION TOTAL AIRFLOW (CFM)	t IARMOW	OA A IRFLOW	HEATING	HEATING (IA: 80 D		COOLING (IA: 80 DB/67 WB, OA: 95 DB)		ELECTRICA L			NOTES
IAG			(TONS) URLE		I MAY/MINE	ELECTRIC (KW) 240V (208V)	SENSIBLE (KBTU)	TOTAL (KBTU)	MIN EFF. (SEER)	VOLTS/PH MCA OCP					
AHU-4	AIR HANDLER	POOL HOUSE	3.0	UPFLOW	1200	220 / 0	15 (10.8)	-	-	-	208/1	51 / 22	60 / 25	1, 2, 5	
CU-4	CONDENSING UNIT	POOL HOUSE	3.0	-	-	-	-	24.5	33.6	13	208/1	19	30	3, 4	
]							-			

- 1. PROVIDE AND INSTALL 7 DAY PROGRAMABLE HONEYWELL THERMOSTAT. COORDINATE EXACT MOUNTING LOCATION WITH OWNER.
- 2. INCLUDE CORROSION RESISTANT DRAIN PAN WITH OVERFLOW SWITCH WIRED TO SHUT DOWN UNIT.
- 3. WITH FACTORY HAIL GUARD.
- 4. LOW AMBIENT PACKAGE FOR OPERATION TO 0° F.
- 5. WITH MOTORIZED OUTSIDE AIR DAMPER TO OPEN DURING OCCUPIED HOURS SET THRU THERMOSTAT SCHEDULE

AIR DEVICE SCHEDULE								
TAG	SERVICE	MANUFACTURER (OR EQUAL)	MODEL (OR EQUAL)	SIZE	COLOR / FINISH	NOTES		
L1	OA / EXH	POTTORFF	EFD	AS INDICATED	PRIMED	PAINT TO MATCH EXTERIOR		
R1	RETURN	PRICE	530	AS INDICATED	WHITE			
S1	SUPPLY	PRICE	520	12x6	WHITE			
E1	EXHAUST	PRICE	530	AS INDICATED	WHITE			

1. VERIFY AIR DEVICE FINISHES WITH OWNER/ARCHITECT PRIOR TO INSTALLATION

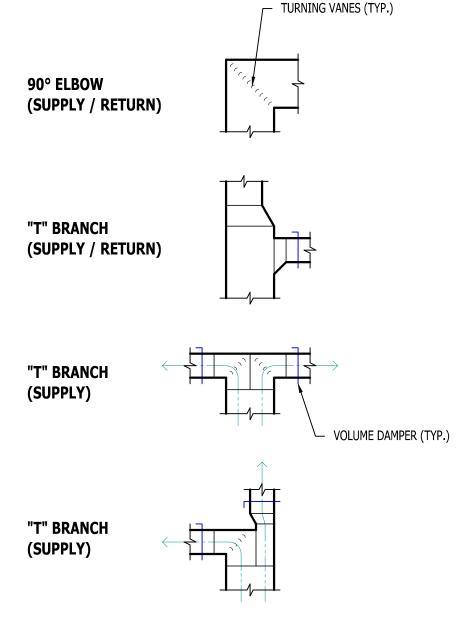


WHERE SCHEDULED OR NOTED.

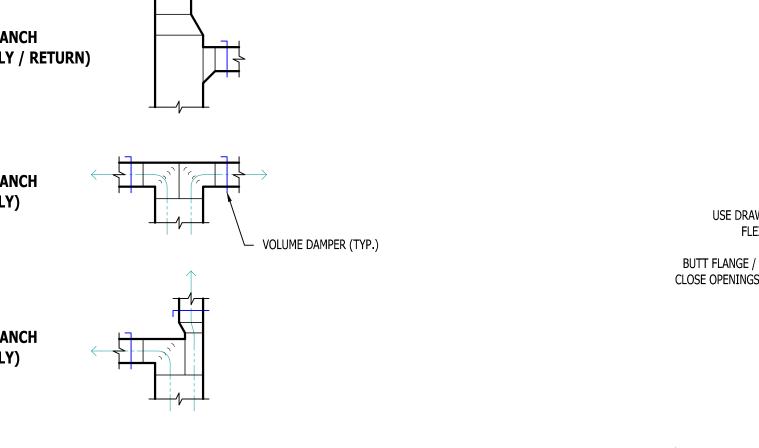
CEILING

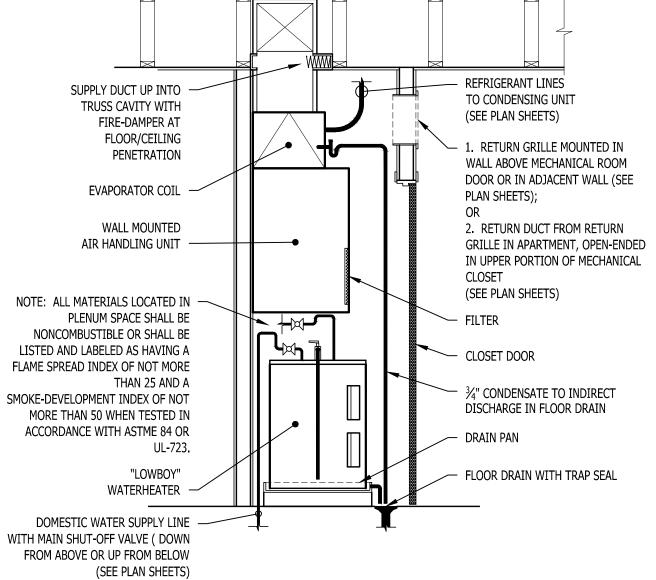


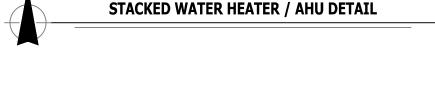
CEILING DIFFUSER PER SCHEDULE

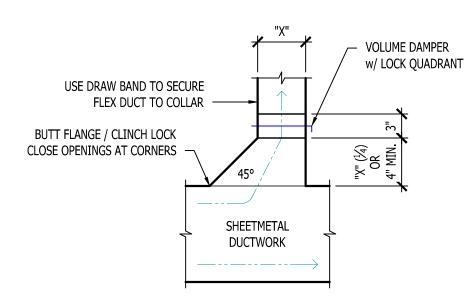


TYPICAL DUCTWORK FITTINGS DETAIL









TYPICAL 45° TAKEOFF DETAIL

James Watson, P.E. April 15, 2025 PE-2015017071 MO Certificate of Authority # 2018029680



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04 - 15 - 2025

Q A

AHJ APPROVAL STAMP

HVAC DETAILS &

SCHEDULES

SHEET NUMBER

M501

POWER PLAN GENERAL NOTES:

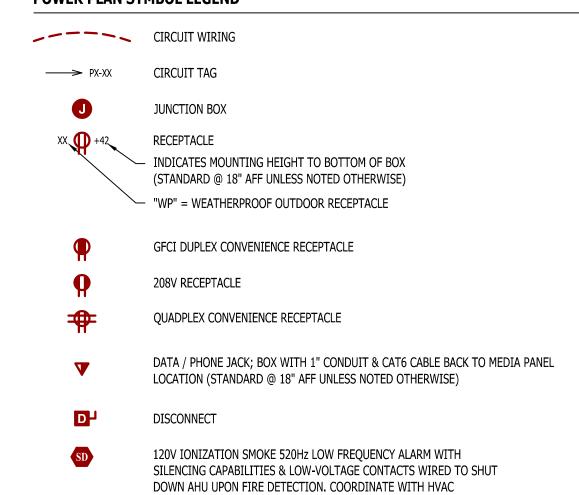
1. SEE E500 & E600 SERIES SHEETS FOR POWER SCHEDULES, DETAILS, REQUIREMENTS, ETC.

POWER PLAN KEY NOTES:

1 POWER FOR ACCESS CONTROL; COORDINATE EXACT LOCATION & REQUIREMENTS WITH DOOR HARDWARE SUPPLIER/INSTALLER.

② WIRE THRU OCCUPIED HOURS TIMER.

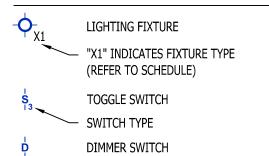
POWER PLAN SYMBOL LEGEND



CONTRACTOR. SMOKE DETECTOR MUST BE LOCATED AT LEAST 3' FROM CEILING FAN BLADES AND AT LEAST 10' FROM ANY COOKING APPLIANCE

LIGHTING PLAN SYMBOL LEGEND

(FIELD-COORDINATE)

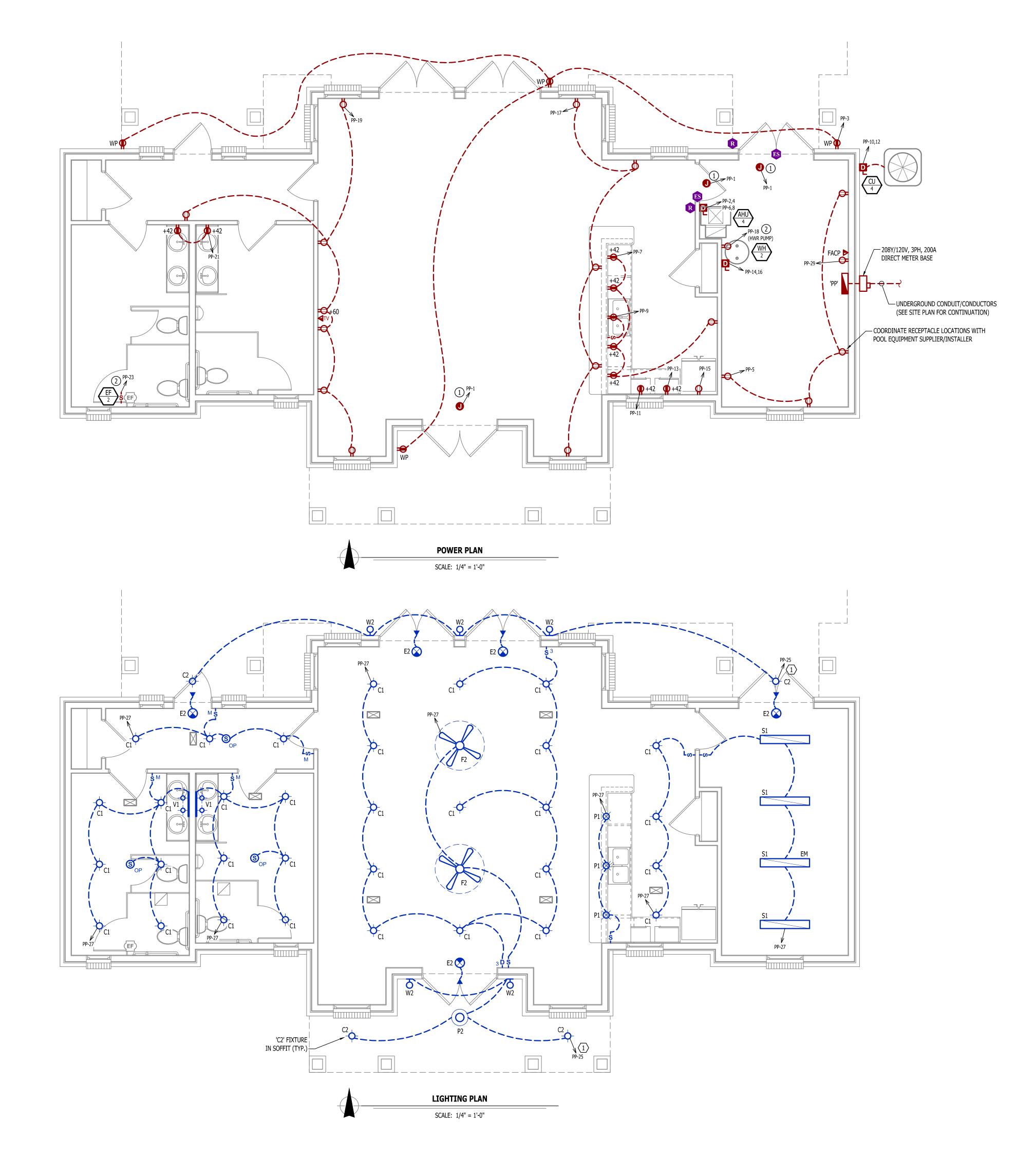


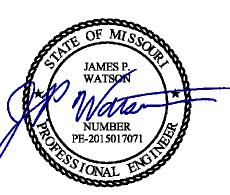
LIGHTING PLAN GENERAL NOTES:

1. SEE E500 & E600 SERIES SHEETS FOR ADDITIONAL ELECTRICAL NOTES, DETAILS, & SCHEDULES.

LIGHTING PLAN KEY NOTES:

1 WIRE THRU EXTERIOR PHOTOCELL.





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Discover

AHJ APPROVAL STAMP

ELECTRICAL PLAN

E101

DEFERRED SUBMITTAL NOTES

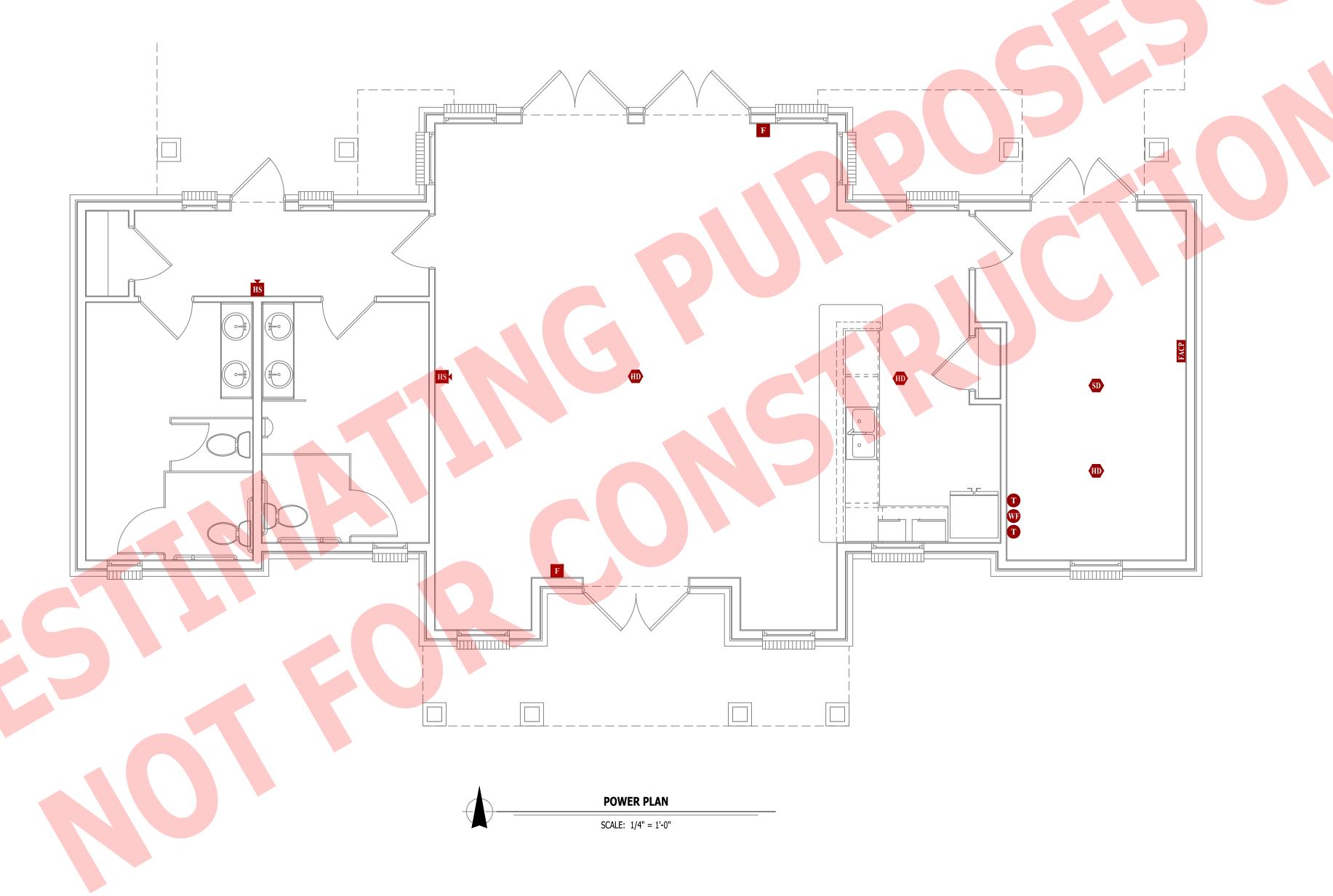
- 1. FIRE ALARM CONTRACTOR SHALL PROVIDE DEFERRED SUBMITTAL PACKAGE FOR FIRE ALARM SYSTEM. SUBMITTAL SHALL INCLUDE BATTERY CALCULATIONS, **VOLTAGE DROP CALCULATIONS, EQUIPMENT SPECIFICATIONS FOR DEVICES AND** PANELS, ETC. DESIGN SHALL BE SEALED BY A QUALIFIED DESIGN PROFESSIONAL LICENSED BY THE STATE.
- 2. FIRE ALARM SYSTEM COMPONENTS SHOWN (IF APPLICABLE) ARE GENERAL AND SCHEMATIC IN NATURE, SHOWN FOR APPROXIMATE ROUGH-IN LOCATIONS AND QUANTITIES ONLY. CONTRACTOR TO VERIFY EXACT DEVICE LOCATIONS AND REQUIREMENTS WITH FIRE ALARM SYSTEM DESIGNER OF RECORD PRIOR TO ROUGH-IN.

FIRE ALARM SYSTEM SPECIFICATIONS

- 1. FIRE ALARM SYSTEM SHALL BE AN ADDRESSABLE SYSTEM THAT IS NONCODED, UL-LISTED, WITH MULTIPLEX SIGNAL TRANSMISSION AND HORN/STROBE EVACUATION.
- 2. EVERY FIRE ALARM SYSTEM COMPONENT SHALL BE UL-LISTED AND UL-CERTIFIED, TESTED BY MANUFACTURERS AS A COMPLETE SYSTEM, AND MEET ALL APPLICABLE REQUIREMENTS OF NFPA 72.
- 3. ALL FIRE ALARM WIRING TO BE PLENUM RATED.
- 4. ALL INITIATING DEVICES INSTALLED IN UNCONDITIONED SPACES SHALL BE CONVENTIONAL DEVICES SUITABLE FOR USE IN EXTREME HIGH AND LOW TEMPERATURES AND HIGH HUMIDITY. SUCH DEVICES SHALL BE SUPERVISED BY ADDRESSABLE MONITOR MODULES LOCATED IN CONDITIONED SPACES.
- 5. QUANTITIES, TYPES, AND LOCATIONS OF INITIATING DEVICES AND OUTPUT MODULES FOR INTERCONNECTION WITH FIRE SUPPRESSION MUST BE COORDINATED WITH CONTRACTORS THAT ARE RESPONSIBLE FOR THOSE SYSTEMS.



FIRE ALARM ANNUNCIATOR





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FIRE PROTECTION PLAN

FP101

		PO	OL-HO	JSE P	ANEL	' PP '	SCHED	ULE			
	PA NEL SPECIFICA TIONS								TOTAL CONNEC	TED LO	AD
VC	OLTAGE: 120/208V 3-PH	NEMA RATIN	G: 1	1					PHA SE "A" LOAD:	125.5	AMPS
AMI	PACITY: 225A MCB	PANEL MOUNTIN	SURFACE						PHA SE "B" LOA D: 125		AMPS
AIC-I	RATING: 22kA								PHA SE "C" LOA D: 66		AMPS
CIRCUIT NUMBER	DESCRI	IPTION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE	D	DESCRIPTION I		CIRCUIT NUMBER
1	ACCESS C	ONTROLS	20-1	3	Α	51	60-2		AHU-4		2
3	EXTERIOR	RECEPTS.	20-1	6	В	51	-		-		4
5	POOL EQUIPMENT	ROOM RECEPTS.	20-1	6	С	22	25-2		AHU-4		6
7	KITCHENETTE AREA	COUNTER RECEPTS.	20-1	6	Α	22	-		-		8
9	KITCHENETTI	E DISPOSAL	20-1	8	В	19	30-2		CU-4		10
11	KTICHENETTE	E APPLIANCE	20-1	8	С	19	-		-		12
13	KITCHENETTE	E APPLIANCE	20-1	8	Α	22	30-2	WATE	ER HEATER WH-2		14
15	KITCHENETTE	E APPLIANCE	20-1	8	В	22	-		-		16
17	OPEN AREA	RECEPTS.	20-1	7.5	С	1	20-1		HWR PUMP		18
19	OPEN AREA	RECEPTS.	20-1	10.5	Α		20-1		SPARE		20
21	RESTROOM	RECEPTS.	20-1	3	В		20-1		SPARE		22
23	EXHAUST	FAN EF-2	20-1	1	С		20-1		SPARE		24
25	EXTERIOR	LIGHTING	20-1	3	Α				OPEN		26
27	INTERIOR	LIGHTING	20-1	8	В				OPEN		28
29	FAC	CP .	20-1	1.5	С				OPEN		30
31	SPA	.RE	20-1		Α				OPEN		32
33	SPA	.RE	20-1		В				OPEN		34
35	SPA	.RE	20-1		С				OPEN		36
37	SPA	.RE	20-1		Α				OPEN		38
39	SPA	RE	20-1		В				OPEN		40
41	SPA	.RE	20-1		С				OPEN		42

B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.

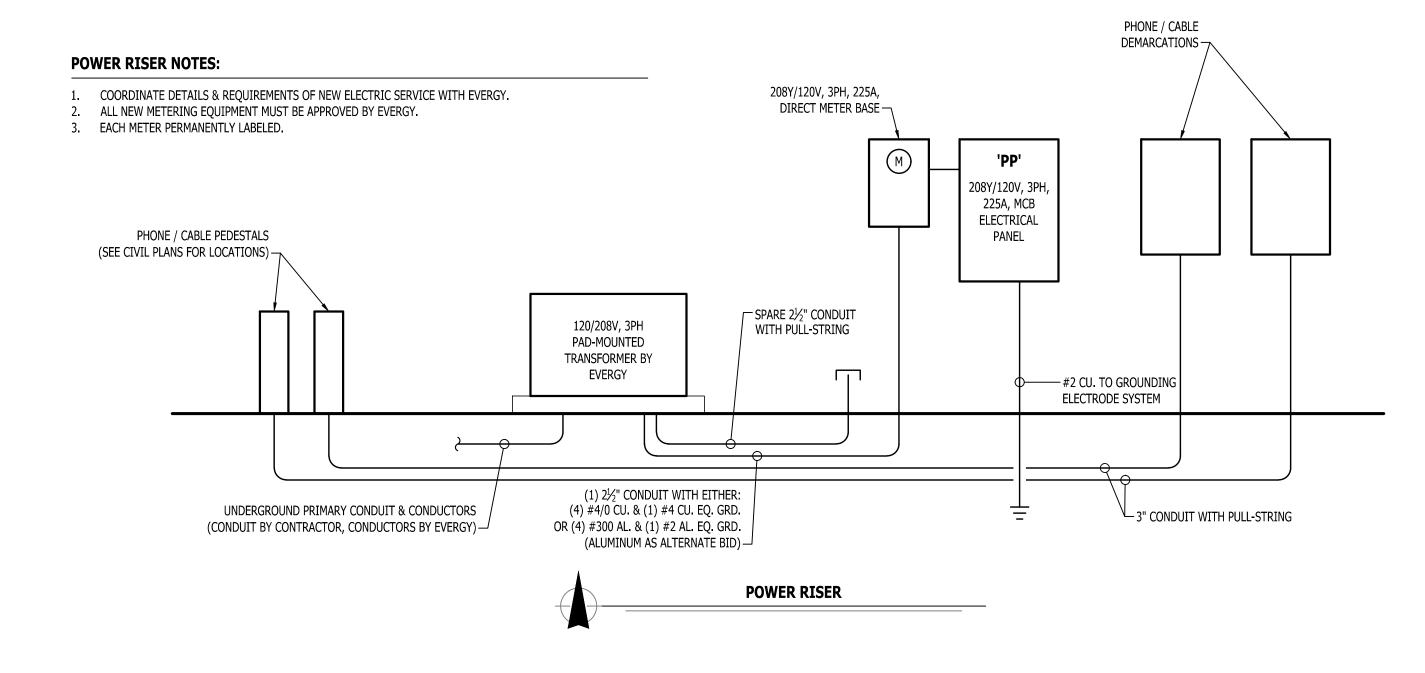
	LIGHT FIXTURE SCHEDULE									
TAG	MANUFACTURER (OR EQUAL)	MODEL NUMBER (OR EQUAL)	DESCRIPTION	MOUNTING	LUMEN OUTPUT	CCT (°K)	CRI	VOLTS	WATTS	NOTES
C1	HALO	HLCE6129FS1E	6" LED SURFACE CAN	SURFACE / CEILING	1,200	3000	90	120	15	
C2	HALO	SLD6129S1EMW	6" LED SURFACE CAN	SURFACE / CANOPY	1,200	4000	90	120	16	WITH PAINTABLE TRIM - PAINT TO MATCH ADJACENT MATERIAL
E2	SURE LITES	APCH7RG WITH APWR2	INTERIOR EXIT LIGHT WITH EXTERIOR REMOTE HEAD	CEILING	-	-	-	120	1	WITH RED LETTERS
F2	-	-	CEILING FAN	SURFACE / CEILING	-	-	-	120	50 MAX	SELECTED BY OWNER
P1	ROYAL PACIFIC	4430-BN	LED PENDANT	SURACE / CEILING	600	3000	80	120	8	
P2	-	-	DECORATIVE PENDANT	SURFACE / PENDANT	-	-	-	120	50 MAX	SELECTED BY OWNER
S1	METALUX	4SNX-SL3-LW-UNV-CC83-CD-1-FKO-U	4' LED STRIP	SURFACE / CEILING	4,511	4000	70	120	38	WITH 'EL14W' EMERGENCY BATTERY BACKUP WHERE INDICATED
V1	ROYAL PACIFIC	4904-BN-4	LED VANITY	SURFACE / WALL	2,110	3000	80	120	30	
W2	TECH LIGHTING	7000WVEX9404ZUNV	UP / DOWN WALL SCONCE	EXTERIOR WALL	554	4000	90	120	19	

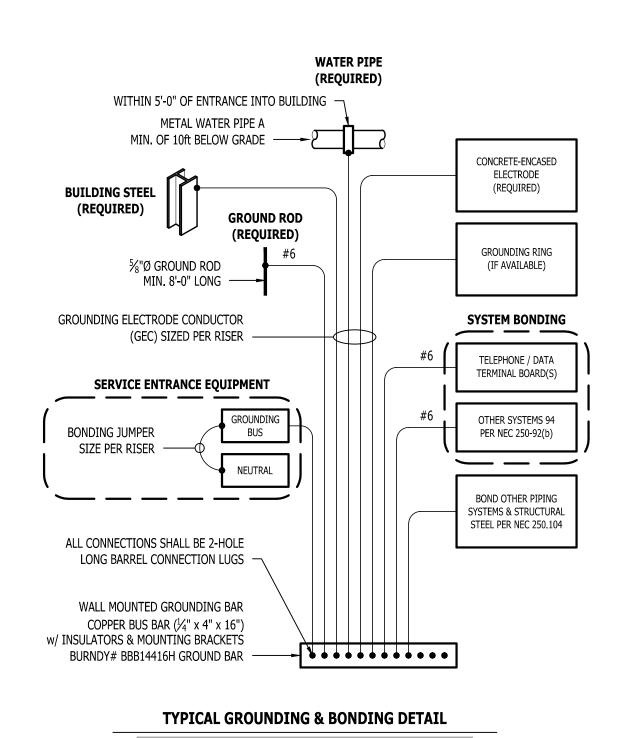
A: PANEL SHALL BE EQUAL TO SQUARE D MODEL "QO"

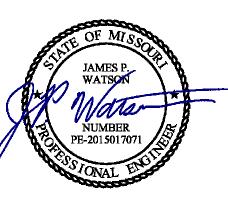
1. LIGHT FIXTURES PROVIDED BY OWNER THRU NATIONAL ACCOUNT AND INSTALLED BY ELECTRICAL CONTRACTOR.

C: AFTER COMPLETION OF WORK, ELECTRICAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.

- 2. ALL FIXTURE QUANTITIES TO BE VERIFIED BY ELECTRICAL CONTRACTOR PRIOR TO ORDERING.
- 3. CONTACT JUSTIN HATFIELD (573) 289-0880 (JHATFIELD@LAIWEB.NET) OR PAUL WARNER (314) 531-3500 (PWARNER@LAIWEB.NET) AT LIGHTING ASSOCIATES FOR NATIONAL ACCOUNT DETAILS.
- 4. CONTACT TRAVIS VOGT (417) 621-5210 (TVOGT@CED1135.COM) AT CED-PHILLIPS & COMPANY FOR NATIONAL ACCOUNT DETAILS.







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A

Dis

AHJ APPROVAL STAMP

Village

ELECTRICAL DETAILS & SCHEDULES

SHEET NUMBER

DRY VENT DETAIL

1. SIZES SHOWN ABOVE ARE TYPICAL UNLESS NOTED OTHERWISE ON PLANS

PIPING TURNED DOWN / TURNED UP

TIE INTO EXISTING

SANITARY SEWER PLAN SYMBOL LEGEND

— SANITARY SEWER PIPING

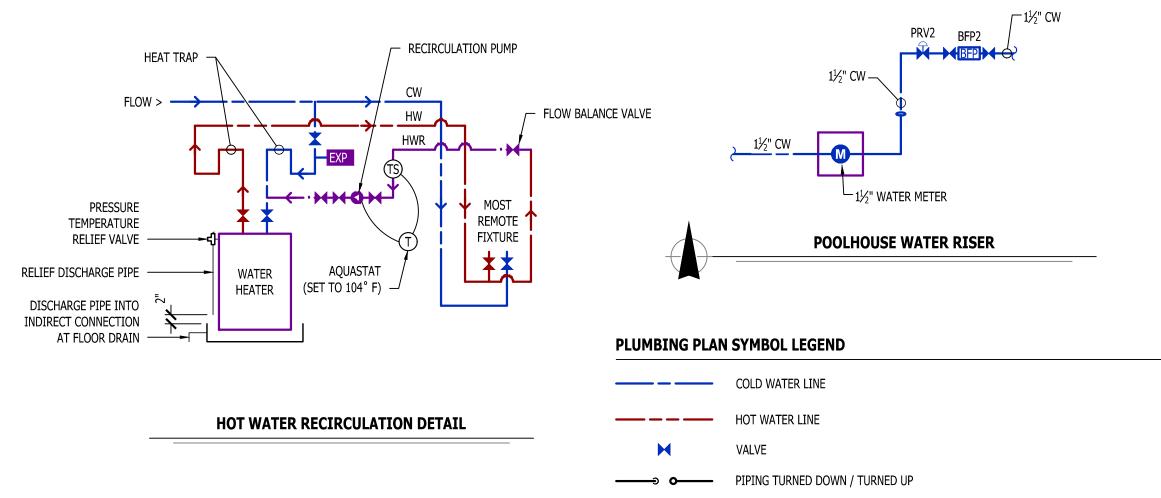
———— VENT PIPING

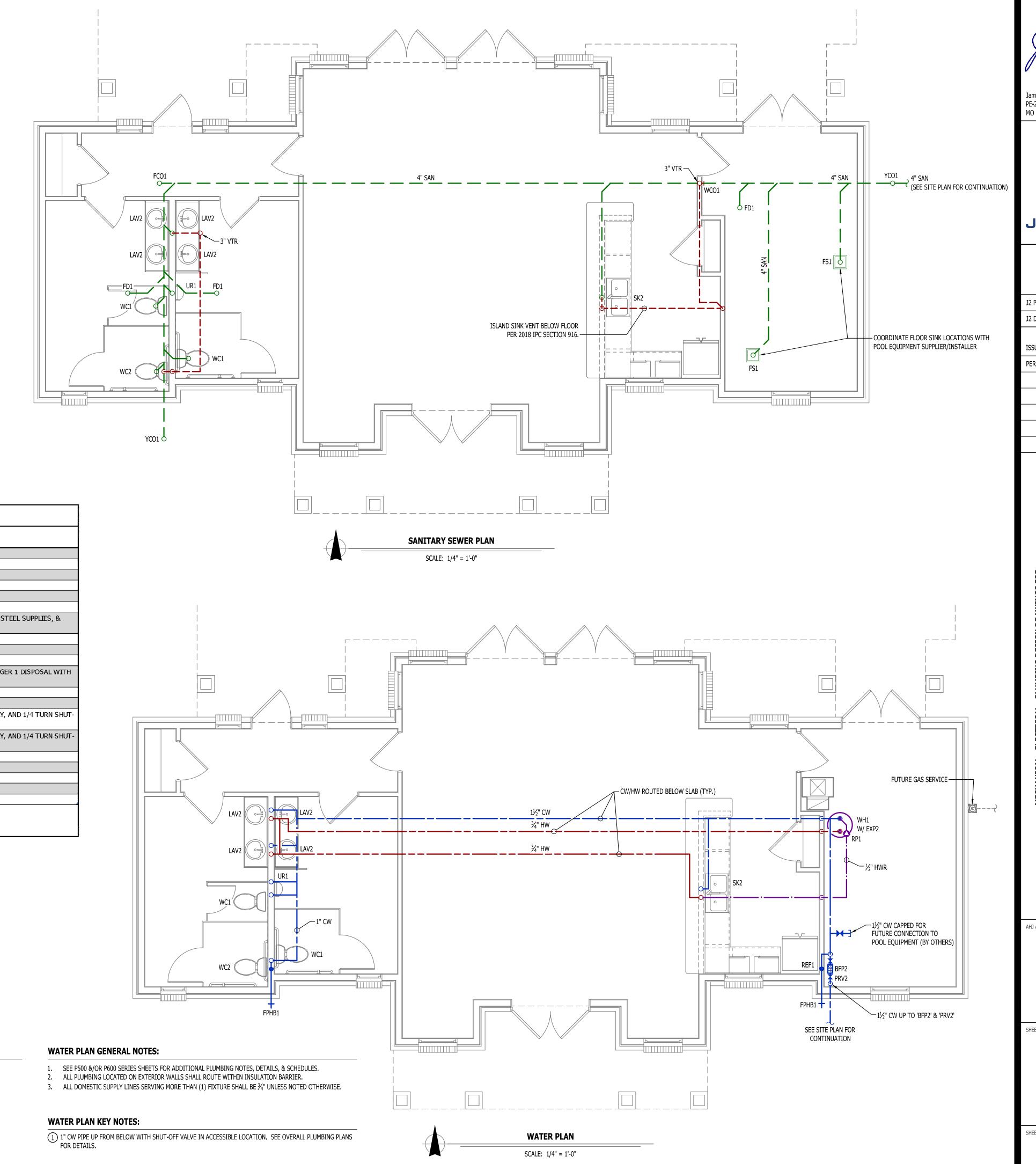
SANITARY SEWER PLAN GENERAL NOTES:

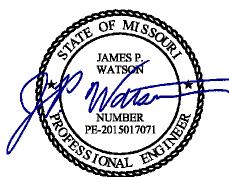
- 1. REFER TO P500 AND/OR P600 SERIES SHEETS FOR ADDITIONAL PLUMBING NOTES, DETAILS,
- REQUIREMENTS, AND SCHEDULES.
- 2. PLUMBING CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS AND COORDINATE LOCATION OF ALL EQUIPMENT, PIPING, HANGERS / SUPPORTS, ETC. WITH HVAC AND
- LOCATION OF ALL EQUIPMENT, PIPING, HANGERS / SUPPORTS, ETC. WITH HVAC AND ELECTRICAL TRADES BEFORE INSTALLATION OF ANY MATERIAL. ADDITIONAL COSTS ASSOCIATED WITH LACK OF COORDINATION WILL NOT BE REIMBURSED.

FIXTURE	SA NITA F	Y PIPING	SUPPLY PIP IN G			
ТҮРЕ			VENT CONNECTION	COLD WATER CONNECTION	HOT WATER CONNECTION	
DRINKING FOUNTAIN	DF	1-1/2"	1-1/4"	1/2"	-	
FLOOR DRAIN	FD	3"	2"	-	1	
HAND / HAIR SINK	HS / SK	2"	1-1/4"	1/2"	1/2"	
HOSE BIBB	НВ	-	-	3/4"	ı	
LAVATORY	LAV	1-1/2"	1-1/4"	1/2"	1/2"	
MOP SINK	MS	3"	1-1/2"	1/2"	1/2"	
ICE MAKER OUTLET BOX	REF	-	-	1/2"	-	
SHOWER	SH	3"	1-1/2"	1/2"	1/2"	
URINAL	UR	2"	1-1/4"	3/4"	-	
WATER CLOSET (FLUSH TANK)	WC	3"	2"	1/2"	-	
WATER CLOSET (FLUSH VALVE)	WC	3"	2"	1"	-	

TAG	DESCRIPTION	MANUFACTURER (OR EQUAL)	MODEL (OR EQUAL)	NOTES
BFP2	BACKFLOW PREVENTER	WILKINS	975XL2	RPZ - 3/4"
EXP2	EXPANSION TANK	WATTS	PLT-5	
FCO1	FLOOR CLEAN OUT	ZURN	Z1400	
FD1	FLOOR DRAIN	ZURN	Z415-BZ	WITH Z1072 TRAP SEAL
FPHB1	FROST PROOF HOSE BIB	WOODFORD	MODEL 67	
FS1	FLOOR SINK	ZURN	FD2370	
LAV2	LAVATORY (DROP-IN W/ MANUAL FAUCET)	AMERICAN STANDARD	0475.028	WITH ZURN Z81104-XL FAUCET, 1/4 TURN STOPS, BRAIDED STAINLESS STEEL SUPPLIES, & 'TMV1'
PRV2	PRESSURE REDUCING VALVE	ZURN	600XL	1-1/2"
REF1	REFRIGERATOR BOX	SIOUX CHIEF	696-G1000	
RP1	RECIRCULATION PUMP	GRUNDFOS	UP10-16 AUTO	
SK2	DOUBLE COMPARTMENT SINK W/DISPOSAL (33x22x7)	ELKAY	CR3322	WITH TWO HANDLED ZURN Z871C4-XL FAUCET AND INSINKERATOR BADGER 1 DISPOSAL WITH POWER CORD
TMV1	THERMOSTATIC MIXING VALVE - POINT OF USE	WATTS	LFUSG	
UR1	URINAL - MANUAL FLUSH	AMERICAN STANDARD	6550.001	WITH ZURN Z6003AV-WS1 MANUAL FLUSH VALVE (1.0 GPM/FLUSH)
WC1	WATER CLOSET - STANDARD HEIGHT - TANK	AMERICAN STANDARD	215CA.004	WITH CHURCH 7200SLEC SEAT AND COVER, STAINLESS BRAIDED SUPPLY, AND 1/4 TURN SHUT-OFF.
WC2	WATER CLOSET - ADA HEIGHT - TANK	AMERICAN STANDARD	215 AA .004	WITH CHURCH 7200SLEC SEAT AND COVER, STAINLESS BRAIDED SUPPLY, AND 1/4 TURN SHUT-OFF.
WCO1	WALL CLEAN OUT			
WH1	WATER HEATER - ELECTRIC - LOWBOY	AO SMITH	ECLB-40	38 GALLON, 208V 1PH, 4500W; WITH 'EXP1'
YCO1	YARD CLEAN OUT	ZURN	Z1400	







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J2 DESIGN: ACW

ISSUE TITLE DATE

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CAL - PLUMBING DESIGN DRAWINGS FOR: VERY Park Alura Apartme

Village at Discovery Park Alura

AHJ APPROVAL STAMP

PLUMBING PLAN

SHEET NUMBER

P101