

OSAGE CLUBHOUSE

2025 SW M 150 HWY
LEE'S SUMMIT, MISSOURI

PERMIT SET: AUGUST 5, 2020



AERIAL VIEW



SITE MAP



ARCHITECT
B+A ARCHITECTURE
100 W 31ST STREET, SUITE 100
KANSAS CITY, MO 64108
PH: 816-753-6100

CIVIL ENGINEER
OLSSON
1301 BURLINGTON STREET, SUITE 100
NORTH KANSAS CITY, MO 64116
PH: 816-361-1177

STRUCTURAL ENGINEER
PACKARD ENGINEERING
21021 OAK DRIVE
BELTON, MO 64012
PH: 816-767-7222

MEP ENGINEER
PKMR ENGINEERS
13300 W. 98TH STREET
LENEXA, KS 66215
PH: 913-312-0151

DEVELOPER
SUMMIT HOMES
120 SE 30TH STREET
LEE'S SUMMIT, MO 64082
PH: 816-246-6700

SEAL:



08.05.2020

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CODE INFORMATION

OCCUPANCY USE GROUP: A-2
TYPE OF CONSTRUCTION: V-B

	REQUIRED/ALLOWED	PROVIDED	
SQUARE FOOTAGE			
PER STORY	6,000 SQ.FT.	1,480 SQ.FT.	
TOTAL BUILDING AREA	6,000 SQ.FT.	1,480 SQ.FT.	
NUMBER OF STORY	1	1	
BUILDING HEIGHT	40'	21'-5 1/4"	
BUILDING ELEMENT FIRE RESISTANCE RATING			
PRIMARY STRUCTURAL FRAME	0 HR	0 HR	
BEARING WALL - EXTERIOR	0 HR	0 HR	
BEARING WALL - INTERIOR	0 HR	0 HR	
NONBEARING WALL AND PARTITIONS - EXTERIOR	0 FOR X >= 30	0 HR	
NONBEARING WALL AND PARTITIONS - INTERIOR	0 HR	0 HR	
FLOOR CONSTRUCTION	0 HR	0 HR	
ROOF CONSTRUCTION	0 HR	0 HR	
FIRE PROTECTION AND RESISTANCE REQUIREMENTS			
FIRE BARRIERS - STAIR ENCLOSURES	N/A	N/A	
FIRE PARTITIONS - DEMISING WALL	0 HR (IBC 708.3)	0HR	
FIRE PARTITIONS - HOR. ASSEMBLIES	N/A	N/A	
FIRE PARTITIONS - CORRIDOR WALLS	0 HR (IBC 1018.1 EX. 4)	0HR	
FIRE PARTITIONS - AREA SEPARATIONS	N/A (IBC TABLE 508.4)	N/A	
FIRE PROTECTION SYSTEM	AUTOMATIC SPRINKLER SYSTEM	N/A (IBC 903.2.1.2)	
FIRE ALARM AND DETECTION	A MANUAL FIRE ALARM	N/A (IBC 907.2.1)	
EGRESS			
OCCUPANT LOAD			
	TYPE	SF/LOAD FACTOR	OCCUPANCY LOAD
CLUBHOUSE	(1) ASSEMBLY	776/15	52
	(2) STORAGE	235/300	1
	TOTAL		53 (A)
	ADDITIONAL OCCUPANT LOADS		
	TYPE	SF/LOAD FACTOR	OCCUPANCY LOAD
TOTAL	(1) POOL	2,698/50	54
	(2) POOL DECK	4,312/50	87
	(3) PATIO / OUTDOOR	609/15	41
	TOTAL		182 (B)
TOTAL			235 (A+B)
EGRESS WIDTH - STAIRS (IBC 1005.3)			N/A
EGRESS WIDTH - CLUBHOUSE (PER IBC 1005.3)			53 x 0.2' = 10.6' MIN. 72" (EXIT DOORS)
NUMBER OF EXITS - CLUBHOUSE			2 (PER IBC 1006.2.1) 2
EGRESS WIDTH - POOL DECK (PER IBC 1005.3)			182 x 0.2' = 36.4' MIN. 72" (EXIT DOORS)
NUMBER OF EXITS - POOL DECK			2 (PER IBC 1006.2.1) 2
MAX. TRAVEL DISTANCE TO EXIT			200' MAX. (PER IBC 1017.2) 38'-0"
ROOF COVER CLASSIFICATION			B
ACCESSIBILITY			
ACCESSIBILITY WHEELCHAIR SPACES (PER 1108.2.2.1)			N/A
PLUMBING FIXTURES			
	TYPE - REQUIRED	MALE	FEMALE
TOTAL	WATER CLOSET	(235/2)/75=1.57 (~2)	(235/2)/75=1.57 (~2)
	LAVATORIES	235/200=1.18 (~2)	
	SERVICE SINK	1	
	WATER FOUNTAIN	1 PER 500	
	TYPE	REQUIRED	PROVIDED
TOTAL	WATER CLOSET	4	4
	LAVATORIES	2	5
	URINAL	N/A	1
	SERVICE SINK	1	1
	WATER FOUNTAIN	1	1

APPLICABLE BUILDING CODES

- 2018 INTERNATIONAL BUILDING CODE
- 2018 INTERNATIONAL MECHANICAL CODE
- 2018 INTERNATIONAL PLUMBING CODE
- 2018 INTERNATIONAL FUEL GAS CODE
- 2018 INTERNATIONAL FIRE CODE
- 2017 NATIONAL ELECTRIC CODE
- ICC/ANSI A117.1-2017

DESIGN LOADS

- ROOF LIVE LOAD: 20PSF MIN.
- ROOF SNOW LOAD: 20PSF (GROUND SNOW LOAD)
- WIND: 93MPH, EXP. B

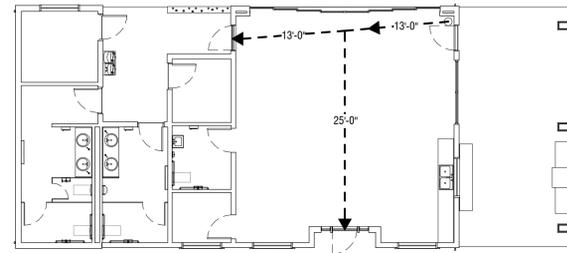
SAFETY NOTES:

1. 2018 IFC 1004.3- POSTING OF OCCUPANT LOAD. EVERY ROOM OR SPACE THAT IS AN ASSEMBLY OCCUPANCY SHALL HAVE THE OCCUPANT LOAD OF THE ROOM OR SPACE POSTED IN A CONSPICUOUS PLACE, NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY FROM THE ROOM OR SPACE. POSTED SIGNS SHALL BE OF AN APPROVED LEGIBLE PERMANENT DESIGN AND SHALL BE MAINTAINED BY THE OWNER OR AUTHORIZED AGENT.
- POST OCCUPANT LOAD SIGNS IN CLUBHOUSE AND OUTSIDE IN THE POOL AREA.

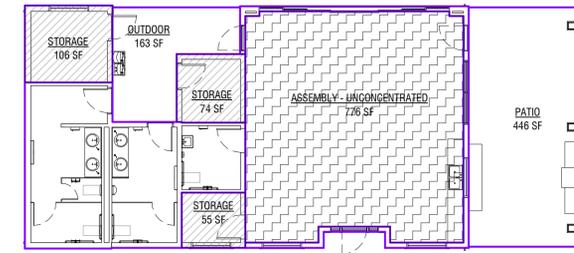
2. 2018 IFC 407.2- MATERIAL SAFETY DATA SHEETS. MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL HAZARDOUS MATERIALS SHALL BE READILY AVAILABLE ON THE PREMISES AS A PAPER COPY, OR WHERE APPROVED, SHALL BE PERMITTED TO BE READILY RETRIEVABLE BY ELECTRONIC ACCESS.

LEGEND

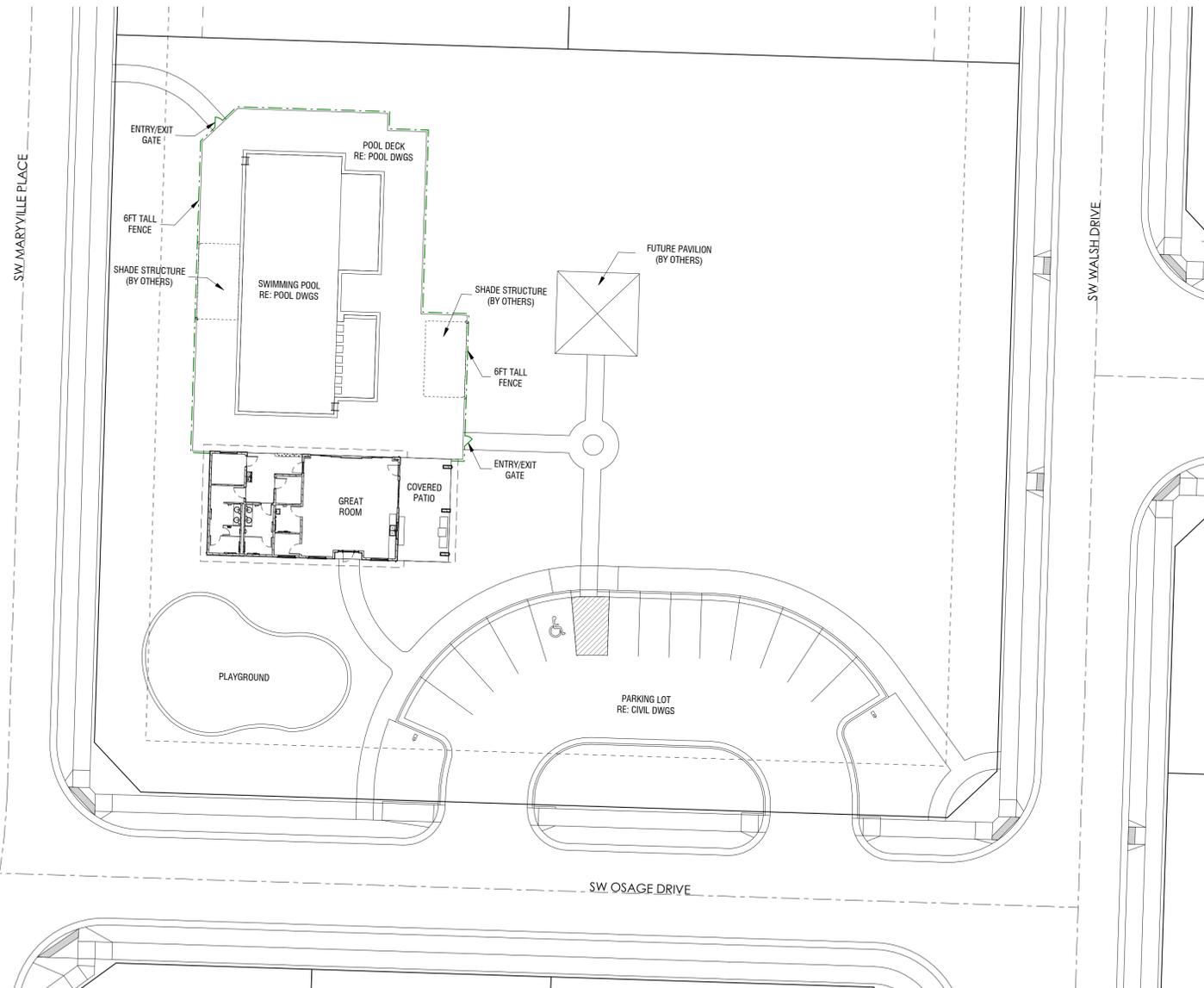
- ASSEMBLY: 776 SQ.FT. OR 52 OCC. LOAD
- STORAGE: 235 SQ.FT. OR 1 OCC. LOAD



1 FIRE EXITING PLAN
3/32" = 1'-0"



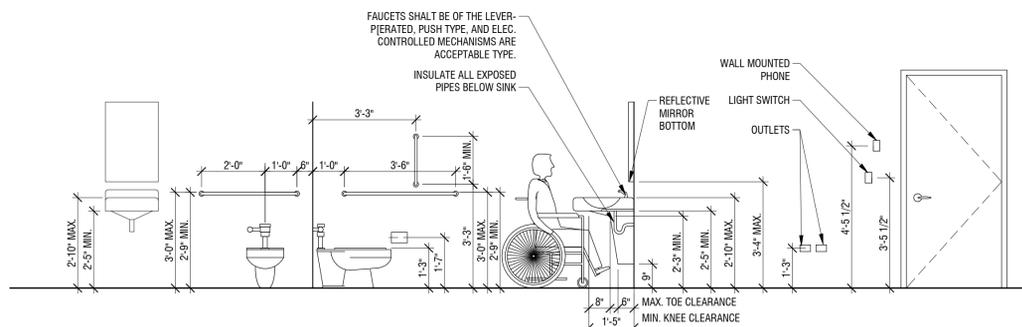
2 AREA & OCCUPANT LOAD DIAGRAM
3/32" = 1'-0"



4 SITE PLAN
3/64" = 1'-0"



3 ADA GUIDELINES
3/8" = 1'-0"



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LANDSCAPE ARCHITECT
JASON MEIER
15245 METCALF AVE
OVERLAND PARK, KS 66223
PH: 913-787-2817

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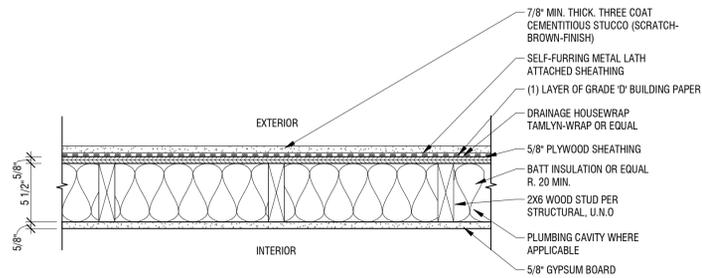
DESIGNED BY: FCR
DRAWN BY: FCR
CHECKED BY: TT/DMB

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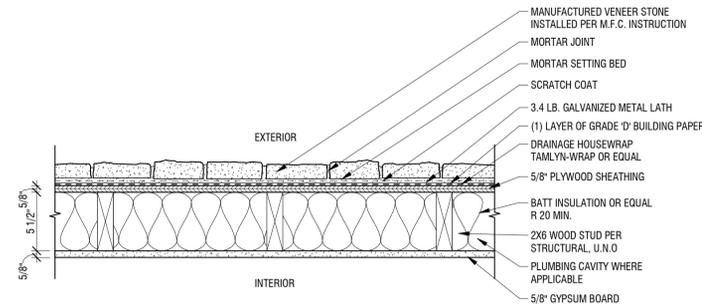
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PROJECT INFORMATION

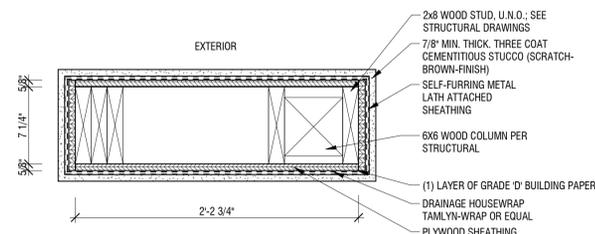
A001



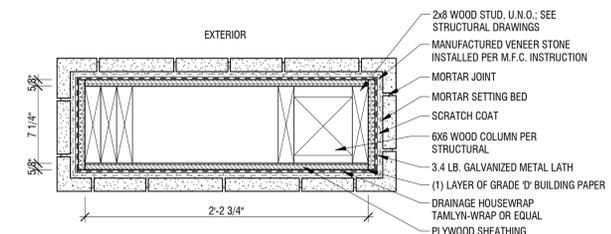
1 WALL TYPE 'E1' - EXTERIOR WALL - STUCCO
1 1/2" = 1'-0"



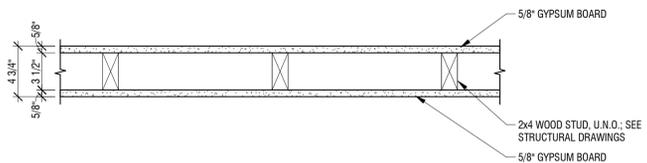
2 WALL TYPE 'E2' - EXTERIOR WALL - STONE VENEER
1 1/2" = 1'-0"



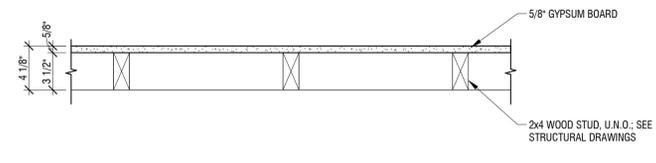
3 WALL TYPE 'E3' - PATIO WOOD COLUMN
1 1/2" = 1'-0"



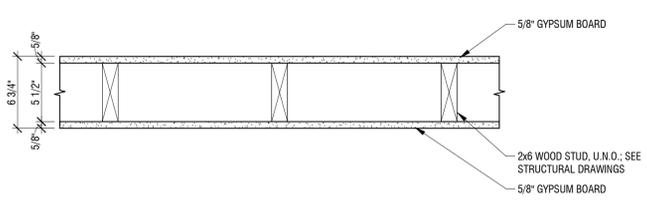
4 WALL TYPE 'E3' - PATIO WOOD COLUMN - BASE
1 1/2" = 1'-0"



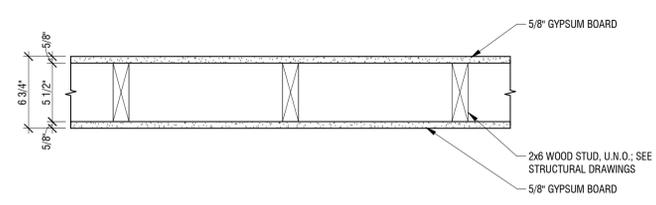
5 WALL TYPE 'P1' - INTERIOR WALL 2X4 STUD - TYPICAL
1 1/2" = 1'-0"



6 WALL TYPE 'P2' - INTERIOR WALL - ONE SIDE FINISH
1 1/2" = 1'-0"



7 WALL TYPE 'P3' - INTERIOR WALL 2X6 STUD - TYPICAL
1 1/2" = 1'-0"



8 WALL TYPE 'P4' - INTERIOR WALL 2X6 STUD - PLUMBING
1 1/2" = 1'-0"



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WALL TYPES
A002

SPECIFICATIONS:

A. GENERAL NOTES

- The Contractor shall not make any changes from these plans without the Owner's written approval prior to the start of the work.
- The Contractor shall submit any price changes to the Owner for review and approval prior to making any changes in the work that would require a change in cost.
- The Contractor shall be responsible for picking up permits required by City of Lee's Summit, Missouri.
- The Contractor shall field verify all conditions and report any discrepancies or concerns to the Owner prior to starting construction.
- All demolition materials and construction debris shall be the responsibility of each subcontractor and shall be disposed of in a dumpster provided by the General Contractor.
- The Sub-Contractor shall be responsible for all concrete testing required in the specifications.
- The Contractor shall field verify site conditions before starting construction. Re: Civil drawings
- The Contractor shall verify the location of all site utilities shown with local utility companies. Utility lines damaged will be replaced at no cost to the owner.
- All sidewalks, driveway aprons and parking paving on the street right-of-way shall conform to the public works requirements of City of Lee's Summit, Missouri
- If any unforeseen hazardous materials not identified within these construction documents are encountered in the construction process, immediately notify the Owner and stop work at the area of concern and wait for further instruction.
- The Contractor shall check all plans before pouring foundation or concrete slabs to verify that all utility lines, beam pockets, anchor bolts and/or any other embedded or cast in place items are properly located and in place.

B. SITE CLEARING

- Project Conditions:
 - Remove trees, shrubs, grass, and other vegetation, improvements, or obstructions, as required to permit installation of new construction.
 - Completely remove stumps, roots, and other debris protruding through ground surface.
- Disposal of Waste Materials:
 - Remove waste materials from Owner's property.
 - Burning is not permitted on Owner's property.
 - Transport removed materials to a City approved "dump site".

C. EARTHWORK

- Rough Grading: Grade and rough contour site.
- Excavation:
 - Bearing capacity 1,500 psi minimum
 - Excavate for building foundations.
 - Provide shoring where required.
- Trenching:
 - Excavate trenches for utilities
 - Compacted bed and compacted fill over utilities.
- Backfilling: Provide all backfilling and such grading around the new construction as is necessary to prevent water from standing or draining against the building.
- Site Filling & Compacting:
 - Prepare sub-grade ready for sod, sidewalks and paving.
 - Provide compacted aggregate base course for paved area.
- Finish Grading: Place and level topsoil materials prior to landscaping work.
- Classification of Excavated Materials: Excavation materials for this project shall be considered firm soil. Removal of concealed foundation, rock excavation, landfill areas, are not included in this contract. If these items are discovered, the Owner will provide testing and engineering to resolve this issue.
- Protections:
 - Protect all trees, shrubs, and/or other features remaining as a part of the final landscaping.
 - Protect above and below grade utilities which are to remain.
 - Grade excavation top perimeter to prevent surface water runoff into excavation.
- Surplus Materials: Dispose of unsatisfactory excavated material and surplus satisfactory excavated materials away from the site.
- Borrow: Obtain material required for fill or embankment in excess of that produced within the grading limits of the Work from borrow areas selected and paid for by the Contractor and approved by the Owner's representative.
- Excavating for Structures: In excavating for footings and foundations, take care not to disturb bottom of excavation.
 - Excavate by hand tools to final grade just before concrete is placed;
 - Trim bottoms to required lines and grades to leave solid base to receive concrete.
- Filling & Backfilling: Backfill excavations as promptly as progress of the Work permits, but not until completion of the following:
 - Acceptance of construction below finish grade including, where applicable, dampproofing and waterproofing.
 - Inspecting, testing, approving, and recording locations of underground utilities.
 - Removal of concrete formwork.
 - Removal of shoring and bracing, and backfilling of voids with satisfactory materials.
 - Removal of trash and debris.
 - Placement of horizontal bracing on horizontally supported walls or setting of first floor joists and decking.
 - Placement of foundation drainage system.
- Expansion Joints: Provide pre-molded joint filler for expansion joints abutting concrete curbs, structures, walks and other fixed objects.
- Concrete Finishing: After completion of floating and when excess moisture or surface sheen has disappeared, complete troweling and finish surface as follows:
 - Broom finish by drawing a fine-hair broom across concrete surface perpendicular to line of traffic. Repeat operation if required to provide a fine line texture acceptable to the Owner's representative.
 - On inclined slab surfaces, provide a coarse, non-slip finish by scoring surface with a stiff-bristled broom, perpendicular to line of traffic.

D. SODDING

Sod: Sod shall contain a good cover of living and growing grasses, must contain 80% good quality native blue grass and 90% free from all noxious weeds and annual grasses and strongly netted. Sod delivered to the job site must not be lifted more than 24 hours in advance of being laid.

E. CONCRETE WORK (RE: STRUCTURAL NOTES)

F. STRUCTURAL STEEL (RE: STRUCTURAL NOTES)

G. ROUGH CARPENTRY

- Sizing, and Dimension: All dimension lumber and plywood shown on the Drawings or required to accomplish the work shall be of nominal dimensions unless shown otherwise on the Drawings.
 - Moisture Content: All dimension lumber and plywood shall be kiln dried having a moisture content of not more than 15% unless otherwise noted or hereinafter specified.
 - Framing Lumber:
 - Plates, blocking, bracing, nailers and general utility purposes: SPF, standard or better.
 - General framing, joists: SPF#2 or better.
 - Rim Joist - Rimboard or approved equal
 - Plywood:
 - Floor Sheathing: 4'-0" x 8'-0" x 3/4" thick tongue & groove plywood, APA performance rated panels, interior grade C-D with exterior glue, or OSB - Contractor's option.
 - Exterior Soffits: Hardie board or approved equal
 - Pressure Treated Wood: For all plates in contact with the foundation.
 - Provide pressure treated wood (ground contact) for all wood in contact with concrete.
 - Rough Hardware:
 - Joist Hangers: As required and as manufactured by Kant-Sag, Simpson, Teco or approved equal.
 - Wood to Steel Beam Connectors: Power actuated fasteners; 5/32" diameter standard velocity fastening system.
 - Post Bases: Simpson or approved equal.
 - General Framing:
 - Install wood blocking and backing required for the work of other trades. Contractor to coordinate
 - Fabricate headers full thickness of framing using pieces of stud material set on edge with spacers, or solid lumber of equivalent size.
 - Provide double top plates. Lap members minimum 2 feet.
 - Bridging: Install wood cross bridging per truss manufacturer's instructions, and as required by current adopted IRC.
- ### H. INTERIOR ARCHITECTURAL WOODWORK
- Shelving: Provide wood pole and shelf at all closets unless noted otherwise, or approved equal.
 - Trim: Case molding, base trim and stair trim in standard shapes, finish grade wood. Type: Colonial or Princeton as selected by owner.
 - Quality Standard:
 - Install woodwork to comply with AWI Section 1700.
 - Install all work plumb, level, true, and straight with no distortions. Shim as required with concealed shims. Install to a tolerance of 1/4" in 8'-0" for plumb and level and with no variations in flushness of adjoining surface.
 - Scribe and cut woodwork to fit adjoining work and refinish cut surfaces or repair damaged finish at cuts.
 - Anchor all work to blocking built in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk, concealed fasteners and blind nailing as required for a complete installation.

I. THERMAL INSULATION

- Batt Insulation: in thickness as indicated on drawings. Comply with FH HH-I-521F, Type II, densities of not less than 0.5 lb per cubic ft. in manufacturer's standard lengths and width as required to coordinate with spaces to be insulated. Provide units with fire rating of 25 per ASTM E84 as manufactured by Certain-Teed Products Corp., Owens Corning Fiberglass Corp., or approved equal.
 - Installation:
 - Extend insulation full thickness as shown over entire area to be insulated. Cut and fit tightly around obstructions, and fill voids with insulation. Remove projections which interfere with placement.
 - Apply a single layer of insulation or required thickness, unless otherwise shown or required to make up total thickness.
 - Ceiling/ Roof Insulation: Fiberglass Batt Insulation: R-38 or better
 - Wall Insulation: R-20 or better
 - Comply with current adopted IECC
- ### J. ROOFING
- Shingles:
 - Conform to UL "Prepared Roofing Materials "Shingles Class A" and Federal Specification SSS-291d.
 - Tamko, Heritage Premium Roofing Products, Inc. or approved equal, 50 warranty.
 - Color to be selected
 - Edge Trims & Flashing: Prefinished metal.
 - Installation:
 - Apply one layer 15 Lb asphalt saturated roofing felt, over sound decking with a minimum 12" headlap and a 24" minimum side lap.
 - Install roofing prior to installation of gutting.
 - Standing Seam Metal Roof: Install per MFG instructions.

K. JOINT SEALERS

- Applications:
 - Where exterior paving abuts vertical structures.
 - Exterior building wall joints including at windows, louvers, and exterior doors.
 - Flashing joints.
 - All joints between dissimilar materials.
- General:
 - Prime or seal the joint surfaces wherever shown or recommended by the sealant manufacturer.
 - Install sealant to depths as recommended by the sealant manufacturer.
 - Set all flashings, thresholds, sills and similar items in full bed of sealant.
- Exterior & Interior Horizontal Joints: Where joints of surfaces are subject to traffic, use two-part polyurethane based, elastomeric sealant as follows:
 - Self leveling, complying with ASTM C9820-79, grade P, class 25, "Vulkem 45", one-part.
- Interior Joints: Manufacturer's standard, one-part, no sag, mildew resistant, acrylic emulsion sealant complying with ASTM C 834.
- Joint Fillers: provide resilient and non-extruding type pre-molded bituminous impregnated fiberboard where interior and exterior concrete slabs meet walls and similar isolation joints.
- Bond Breaker Tape: Polyethylene tape or other plastic tape as recommended by the sealant manufacturer.

L. WOOD DOORS & FRAMES

- Interior doors shall be manufactured in accordance with NWWDA 1.S.1. 1-87, sec. 3.7.3 (B) and shall be faced with Craftsman Ceermont door facings as manufactured by Masonite in accordance with Basic Hardboard Product Standard ANSI/AHA 135.4-1982 (reaffirmed, 1988).

2. Fitting:

- Pre-fit door to provide maximum clearance of 1/8" at sides and top and 3/4" at bottom unless otherwise specified.
- Within four days of fitting each door, seal affected area with at least two coats of water white lacquer.

M. WINDOWS AND SLIDING GLASS DOORS

Aluminum-Clad Wood Windows: Architectural Collection E-Series by Andersen or approved equal
Sliding Glass Doors: Series 7600 by Western Window System or approved equal.

N. STORE-FRONT SYSTEM

- General requirements
 - Scope: This section includes all labor, material and equipment necessary to complete all work specified herein and as indicated within the construction documents. The work of this section includes, but is not limited to; the furnishing and installation of all aluminum fixed systems.
- Materials
 - Aluminum Fixed System: MANKO 2450FS storefront and 150 series front set glazed, fixed system with a poured-in-place thermal break with color to be determined by architect. Aluminum fixed system shall conform to the criteria of ANSI/AAMA 101-I.S2-97.
 - Glazing: PPG solarban 60. All glazing stops to be snap-in type.
- Installation:
 - Use only skilled tradesman for the installation of the aluminum fixed system and components specified within this section.
 - Bring any discrepancies between the project plans and field conditions to the attention of the General Contractor prior to the commencement of any work in the area in question.
 - Erect the aluminum fixed system and components square and true in strict accordance with the manufacturer's published installation instructions. The installer is to furnish adequate anchoring to maintain position and integrity of the fixed system when subjected to normal building movement and the specified wind load.
 - Furnish and apply sealants in accordance with the manufacturer's published installation instructions

O. GYPSUM DRYWALL

- Exposed Gypsum Drywall:
 - Thickness of 1/2" where stud or rafter spacing is 16", 5/8" where stud or rater spacing exceeds 16".
 - Sheet size to be maximum length available which will minimize end joints.
 - Stapling: Stapling of trim accessories will not be permitted.
- Plastic Edge Trim: Plastic edge trim will not be permitted.
- Installation:
 - Stagger the boards so that corners of any four boards will not meet at a common point except in vertical corners.
 - Install the gypsum wallboard to studs at right angles, making end joints, where required, over framing or furring members.
 - Install ceiling drywall boards in the direction and manner which will minimize the number of end butt joints, and which will avoid end joints in the central area of each ceiling. Stagger end joints at least 1'-0".
- Ceilings: Spray texture ceiling surfaces with medium texture popcorn finish. Paint or as approved by owner.

P. PAINTING

- Preparation: Wood Surfaces: Clean wood surfaces to be painted of all dirt, oil, or other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Sand smooth those finished surfaces exposed to view, and dust off.
- Application:
 - Provide the best quality grade of the various types of coating as regularly manufactured by acceptable paint manufacturers, i.e., Sherwin-Williams Paint Company or approved equal.
 - Sand and dust between coats to remove defects visible to the unaided eye from a distance of five feet.
 - Allow sufficient drying time between coats.
 - Where spray application is used, apply each coat to provide the hiding equivalent of brush oats.
 - Do not double back with spray equipment to build up film thickness of two coats in one pass.
- Gypsum Drywall Systems (Walls): two (2) coats interior latex.
- Wood Finish: by owner as selected

Q. CERAMIC/PORCELAIN TILE

- General requirements
 - Scope: This section includes all labor, material and equipment necessary to complete all work specified herein and as indicated within the construction documents. The work of this section includes, but is not limited to, the following areas; floors, walls, shower walls and floors, countertops, decks and balconies, patios and walkways.
 - Quality Assurance: All workmanship and material shall be in conformance with applicable portions of ANSI Specifications and Standards and Handbook for Ceramic Tile Installation by the Tile Council of America, current edition.
- Materials
 - Tile: Refer to the construction documents, see plans, finish schedule and interior elevations for areas receiving tile.
 - Tile Backer Board: GEORGIA PACIFIC BUILDING PRODUCTS DensShield Tile Backer.
 - Membranes: Cleavage Membrane: 15# roofing felt or approved equal; Moisture Barrier: 15# roofing felt; Waterproof Membrane: hot mopped felt, or approved equal.
 - Mortar Bed: CUSTOM BUILDING PRODUCTS Custom-Float Bedding Mortar mixed with water and Acrylic Mortar Admix. Metal lath - 2.5 lbs/yard self furred expanded metal.
 - Tile Adhesives: CUSTOM BUILDING PRODUCTS Master-Blend mixed with Custom-Flex latex.
 - Grout: CUSTOM BUILDING PRODUCTS Polyblend Sanded Colored Tile Grout - for joints 1/8" - 1/2". All grout colors shall be selected by the Owner.
 - Elastomeric Joint Caulk: All joints between floors and walls and at all joints between tile and dissimilar materials. CUSTOM BUILDING PRODUCTS Polyblend Ceramic Tile Caulk. Texture and color shall match adjacent grout.
 - Tile Sealer: as recommended by CUSTOM BUILDING PRODUCTS and approved by Owner. Apply sealer per manufacturer's specifications.
 - Preformed Shower Recesses: NOBLE Niches & Curbs #301 Square Niche, install per locations shown within the construction drawings.

3. Installation

- Examine surfaces which are to receive tile or stone. Verify that surfaces to receive tile are stable, flat, firm, dry, clean and free of oil, waxes and curing compounds. Do not proceed with work until defects or conditions which would adversely affect quality, execution and permanence of finish work are corrected. All concrete substrates shall be at least 28 days old, completely cured and free of hydrostatic conditions and/or moisture problems. Protect adjacent surfaces prior to beginning tile work.
- Installation Methods:
 - Over Wood Subfloor: Thin-set over glass mesh mortar units. Attach glass mesh mortar units to subfloor per manufacturer's recommendations.
 - Walls (Dry Locations): Thin-set over glass mesh mortar units.
 - Lay tile in grid pattern unless otherwise indicated on plans or directed by Architect. Terminate tile neatly at obstructions, edges and corners without disruption of pattern or joint alignment. Where tile cuts are necessary cuts shall be neat and scribed. Provide expansion joints, control joints, etc. as shown on plans and elsewhere as required.
- Install grout in accordance with manufacturer's directions.
- Clean and seal tile and grout in accordance with product manufacturer's recommendations.

R. EXTERIOR SIDING

- Stone Veneer
 - Stone veneer by Grand Canyon stone or approved equal
 - Installation: Cover the wall surface with a weather resistant barrier. Lap joints by applying felt horizontally with the upper layer lapped over the lower layer not less than 2" and end laps not less than 6". Barrier to be equal to U.S.C standard number 14-1. Install 2.5 lbs diamond mesh expanded metal lath. Use galvanized lath for exterior and black metal lath (non-galvanized) may be used for interior. Lap lath sides not less than 1/2" and end laps not less than 1". (It is important to attach lath with the small diamonds pointing upwards.) On inside and outside corners turn the corner 16" minimum each way. (This is an important step.) Barrier to be equal to ASTM C-847.
- Mortar mix designs:
Grouted joint installation

PARTS BY VOLUME	PORTLAND CEMENT OR BLENDED	MASONRY CEMENT TYPE (N)	HYDRATE LIME OR LIME PUTTY	SAND
-	2	-	1	5 TO 7
S	3	-	-	5 TO 7
N	-	1	1 1/2 TO 1 1/2	2 1/2 TO 3
N	-	1	-	2 1/2 TO 3

Mix for dry-stack series

PARTS BY VOLUME	PORTLAND CEMENT OR BLENDED		SAND
-	3	* 2 PARTS THINSET MORTAR	7
-	2	BONDING AGENT 1 TO 1 (WITH WATER)	7
S	3	BONDING AGENT 1 TO 1 (WITH WATER)	7

* MUST BE LATEX MODIFIED THINSET FOR EXTERIOR USE MEETING ANS A118.4

- Setting coat: Select mortar type to be used from mortar chart. Mix per instructions and apply to wall in areas not to exceed 10 square feet or in areas that will not setup before stone is applied. Application method is the same as scratch coat.
 - Weather conditions: In hot weather conditions it may become necessary to moisten the wall before applying the setting coat. Weather conditions may also require moistening the back of each stone. This is best done using a fine spray of water or a wet brush. This step is important to prevent excessive absorption or moisture from the mortar. Application must be protected from freezing temperatures by sheltering the wall as mortar will not set up properly under such conditions. Do not use anti-freeze compounds to lower the freezing point of mortar.
- Stucco
 - Stucco system to be Dryvit systems. INC commercial Cement Plaster 3 or approved equal
 - Description: Commercial Cement Plaster 3 consists of Dryvit Backstop NT air/water-resistive barrier, Dryvit CCP Base-Sanded or Concentrate, Dryvit acrylic primer and Dryvit acrylic coating or finish. CCP Base is applied directly to the properly installed paper backed metal lath (as required).
 - Substrates shall comply with local code requirement and practices for use under cement plaster and shall be: Wood or metal framed wall assemblies sheathed with approved substrates.
 - Sealant: shall meet ASTM C 190 & approved by stucco MFG.
 - Flashing shall be provided at all roof-wall intersections, windows, doors, chimneys, decks, balconies, and other areas as necessary to prevent water penetration behind Commercial Cement Plaster 3.
 - Project conditions: as recommended by MFG
 - Prior to installation of Commercial Cement Plaster 3, it is the contractor's responsibility to ensure that the surfaces to receive stucco have been inspected to meet the requirement of the MFG.
 - Installation per MFG recommendations

S. TOILET ACCESSORIES

- Scope: This section includes all labor, material and equipment necessary to complete all work specified herein and as indicated within the construction documents. This section of work includes, but is not limited to; tissue dispenser, coat hooks, grab bars, etc. See Toilet Accessory schedule sheet A400
- Installation: Install per manufacturer's instructions

T. PLUMBING (See sheet P101)

U. CABINETS

- Kitchen Cabinets & Restroom Vanities:
 - Plumbed interior. 11 inch adjustable shelves in uppers. Shelves in bases.
 - Manufacturer: Profile Cabinet or equal
 - Stained the same color as the door. See interior finish schedule and legend

V. FINISH HARDWARE: Bright brass. See Door Hardware Schedule for details

W. ELECTRICAL (See sheet E 201)

X. EXTERIOR ACCESSORIES:

- Scope: This section includes all labor, material and equipment necessary to complete all work specified herein and as indicated within the construction documents. This section of work includes, but is not limited to; eaves, wall vents, out door restroom signs, grill, bench, etc.
- Installation: Install per manufacturer's instructions



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SPECIFICATIONS

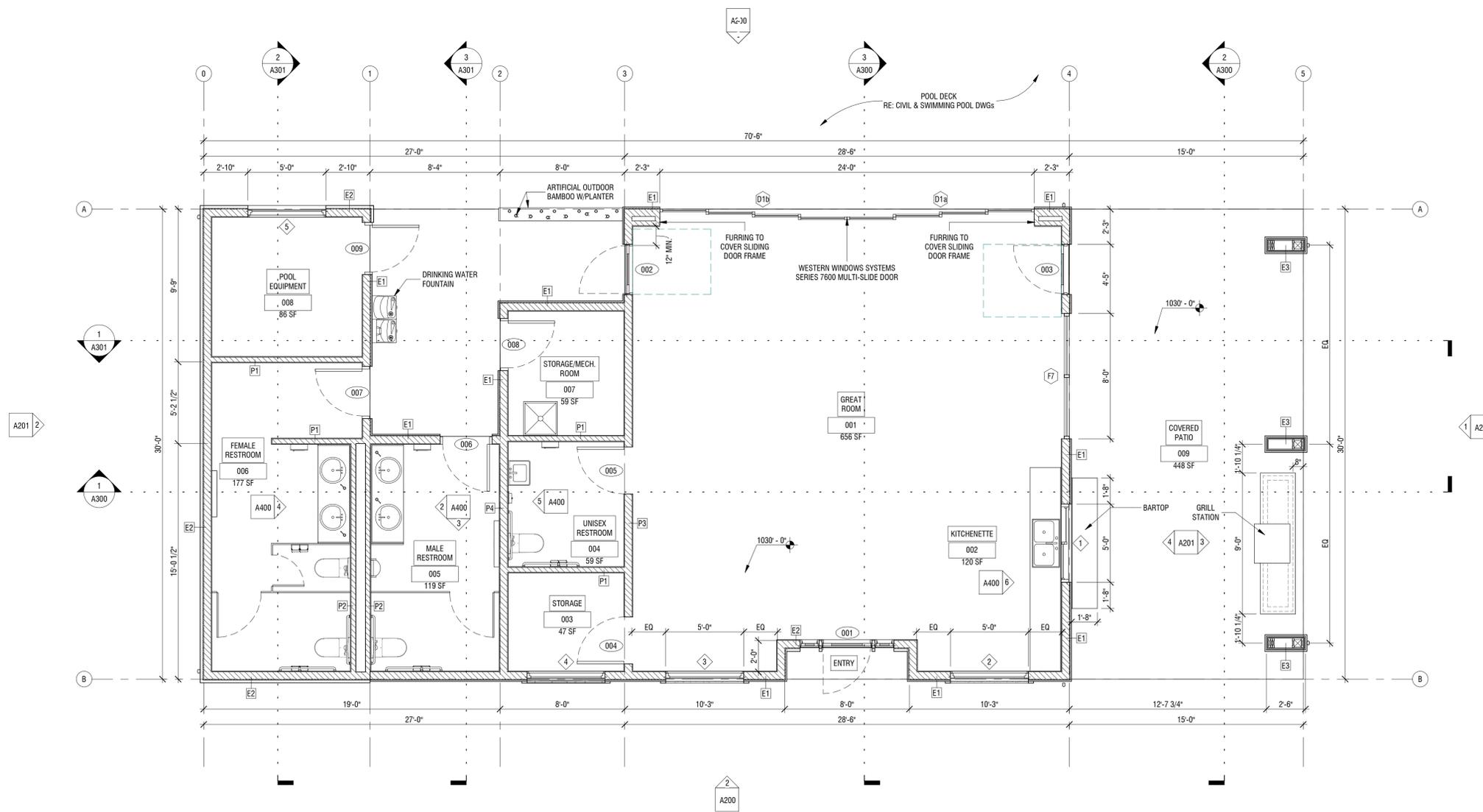
A003

GENERAL NOTES

1. ALL PLAN DIMENSIONS GIVEN ARE TO FACE OF STUD OR MASONRY, U.N.O.
2. REFER TO STRUCTURAL DRAWINGS FOR FRAMING INFORMATION
3. ALL DOOR OPENINGS TO BE LOCATED 4" FROM NEAREST WALL CORNER, U.N.O.
4. SEE FINISH SCHEDULE ON SHEET A800 FOR MATERIAL INFORMATION
5. SEE DOOR/WINDOW SCHEDULE ON SHEET A800
6. SEE SHEET A400 FOR ENLARGED FLOOR PLANS

WALL TYPES

- | | |
|---|--|
| E1— EXTERIOR WALL, 2X6 WOOD STUD, STUCCO FINISHING, INSULATED
RE: DETAIL 1 / A002 | P1— TYPICAL INTERIOR WALL, 2X4 WOOD STUD, GYP. BOARD FINISHING
RE: DETAIL 5 / A002 |
| E2— EXTERIOR WALL, 2X6 WOOD STUD, STONE VENEER FINISHING, INSULATED
RE: DETAIL 2 / A002 | P2— TYPICAL INTERIOR WALL, 2X4 WOOD STUD, 1 SIDE GYP. BOARD FINISHING
RE: DETAIL 6 / A002 |
| E3— EXTERIOR COLUMN WRAP, WOOD COLUMN, STUCCO FINISHING / STONE VENEER BASE
RE: DETAILS 3 & 4 / A002 | P3— TYPICAL INTERIOR WALL, 2X8 WOOD STUD, GYP. BOARD FINISHING
RE: DETAIL 7 / A002 |
| | P4— TYPICAL INTERIOR WALL, 2X6 WOOD STUD, GYP. BOARD FINISHING - PLUMBING
RE: DETAIL 8 / A002 |



1 FLOOR PLAN
1/4" = 1'-0"

- | | | | |
|--|---|--|-------------------------------|
| | SECTION:
SECTION IDENTIFICATION
SHEET DESIGNATION | | DOOR DESIGNATION |
| | DETAIL:
DETAIL IDENTIFICATION
SHEET DESIGNATION | | WALL TYPE DESIGNATION |
| | ELEVATION:
ELEVATION IDENTIFICATION
SHEET DESIGNATION | | WINDOW/STOREFRONT DESIGNATION |
| | | | SPOT ELEVATION |
| | | | ELEVATION |



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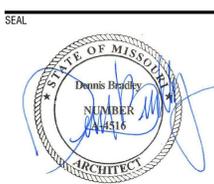
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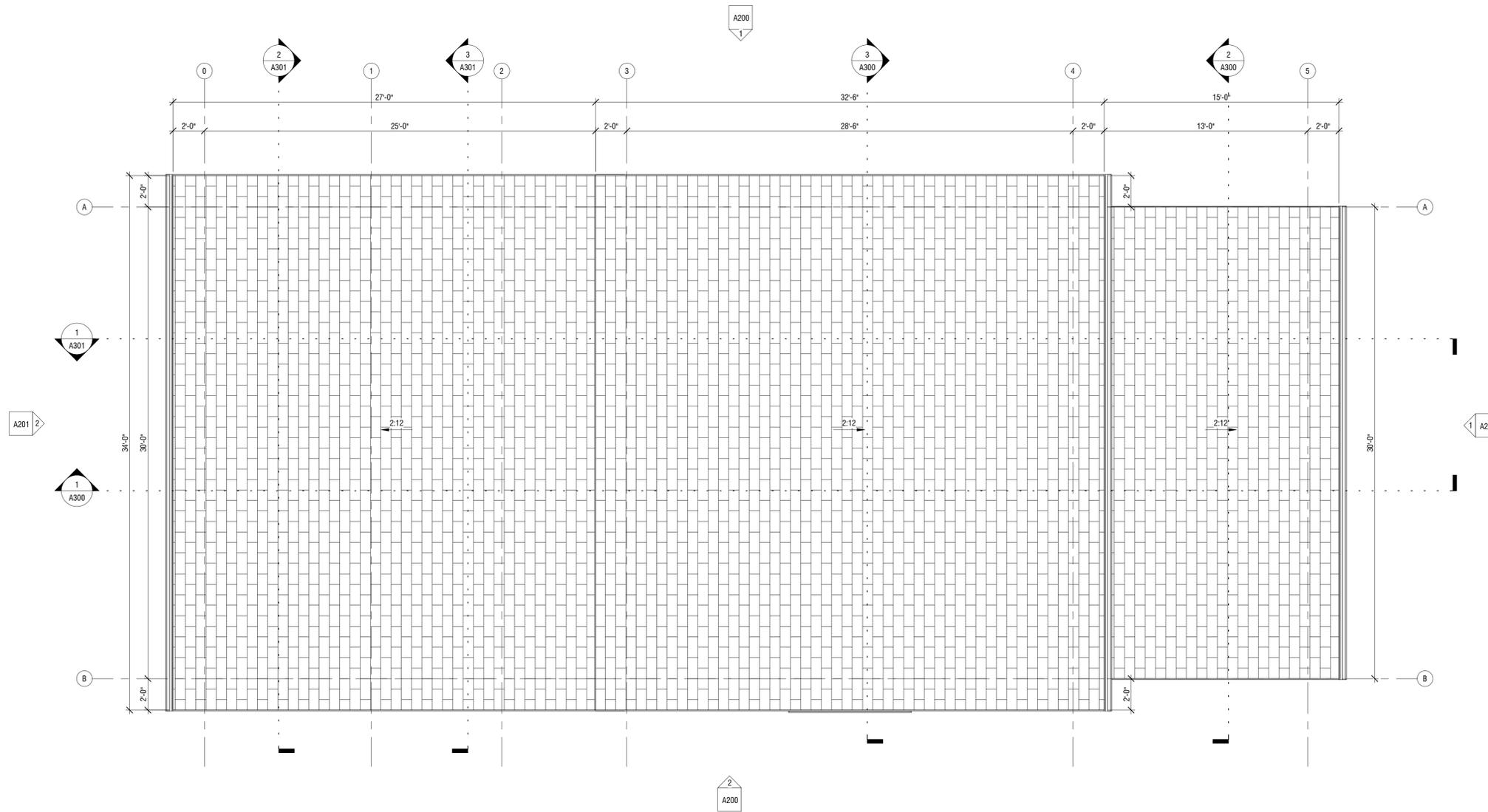
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FLOOR PLAN
A100

GENERAL NOTES

1. REFER TO STRUCTURAL DRAWINGS FOR FRAMING INFORMATION
2. INSTALL ALL ROOF PENETRATIONS AND EQUIPMENT (IE, VENT PIPES, ROOF VENTILATORS) ON THE REAR SIDE OF THE ROOF, TO THE GREATEST EXTENT POSSIBLE
3. REFER TO PLUMBING DRAWINGS FOR ROOF DRAINS AND OVERFLOW DRAINS



1 ROOF PLAN
1/4" = 1'-0"



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ROOF PLAN
A101

GENERAL NOTES

1. EXTERIOR COLORS ARE INDICATED BY MATERIAL MANUFACTURERS
2. ALL EXTERIOR MATERIAL TRANSITION, SILLS AND HEADERS WHICH ARE NOT CALLED OUT, MATCH TO WALL TRIM COLOR.
3. SPLIT SYSTEM W/ GROUND MOUNTED CONDENSORS TO BE SCREENED FROM VIEWS BY LANDSCAPING
4. INSTALL ALL ROOF PENETRATIONS AND EQUIPMENT (IE: VENT PIPES; ROOF VENTILATORS) ON THE REAR SIDE OF THE ROOF, TO THE GREATEST EXTENT POSSIBLE



COMPOSITION SHINGLES



STONE VENEER



PT-1: SW9170



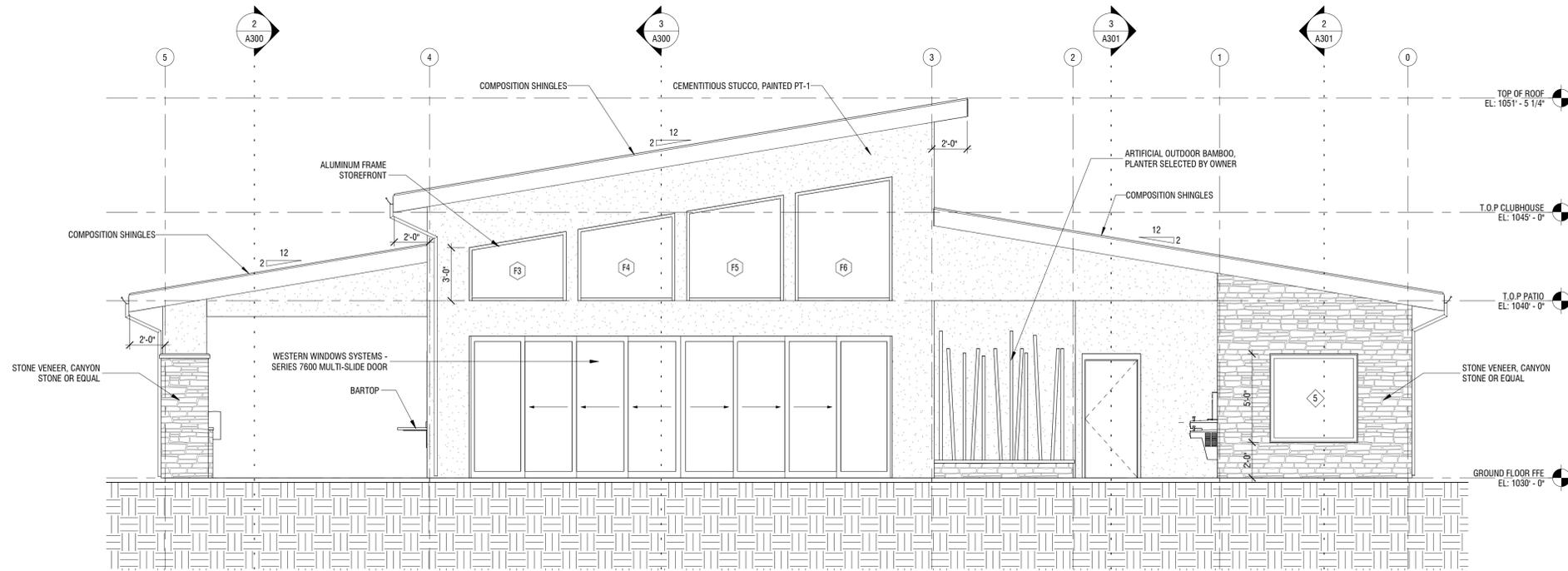
PT-2: SW7020



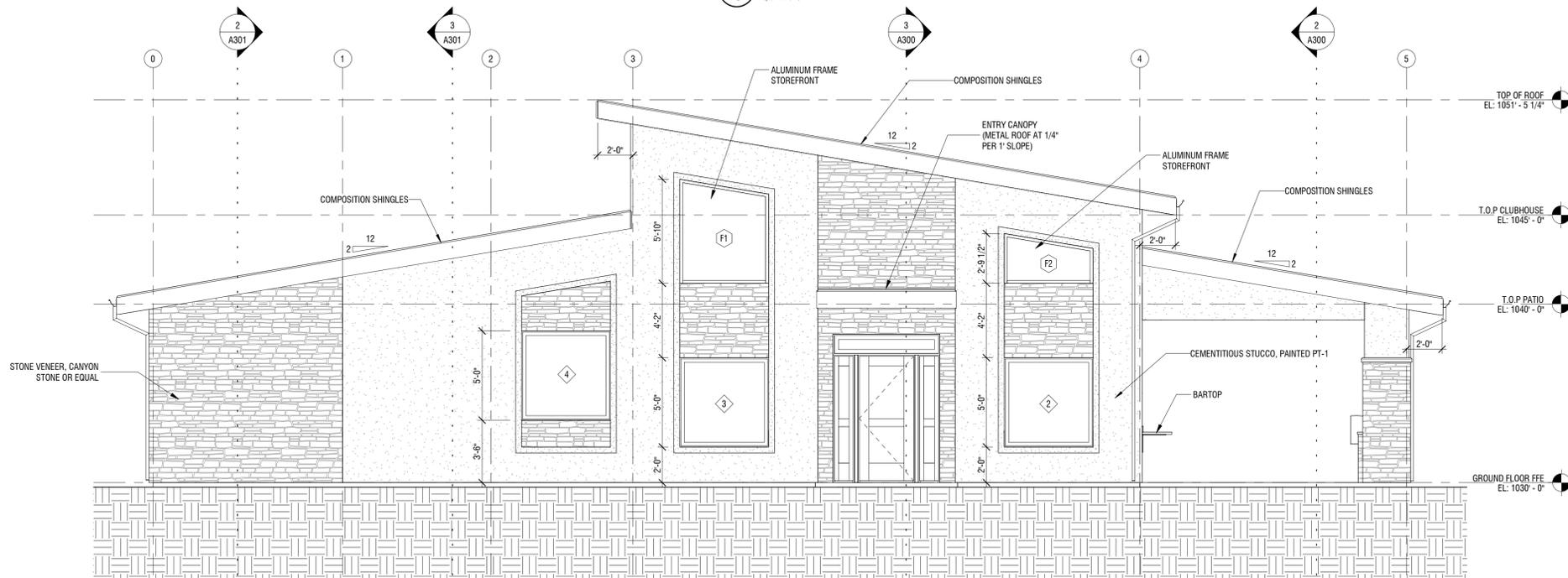
PT-3: SW7068

EXTERIOR FINISHING SCHEDULE

NO.	MATERIAL/ITEMS	DESCRIPTION	COLOR/FINISH
1	COMPOSITION SHINGLES	TAMKO, HERITAGE PREMIUM OR EQUAL	WEATHERED WOOD
2	STONE VENEER	CANYON STONE OR EQUAL	CANYON LEDGE/ COLOR: MOUNTAIN
3	CEMENTITIOUS STUCCO	DRYVIT, "OUTSULATION PLUS" OR EQUAL	PT-1: ACIER SW9170
4	FASCIA	SMART TRIM, LP OR EQUAL	PT-2: BLACK FOX SW7020
5	SOFFIT	SMART TRIM, LP OR EQUAL	COLOR: PT-2
6	TRIM	STUCCO FOAM TRIM	PT-3: GRIZZLE GRAY SW7068
7	GUTTER	24 GA. STEEL	MATCH TO WINDOW COLOR
8	WINDOWS	ANDERSEN ARCH. COLLECTION OR EQUAL	METAL - MATTE BLACK
9	EXTERIOR DOORS	METAL PANEL, PAINTED	MATCH TO WINDOW COLOR



1 NORTH ELEVATION
1/4" = 1'-0"



2 SOUTH ELEVATION
1/4" = 1'-0"



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ELEVATIONS
A200

GENERAL NOTES

1. EXTERIOR COLORS ARE INDICATED BY MATERIAL MANUFACTURERS
2. ALL EXTERIOR MATERIAL TRANSITION, SILLS AND HEADERS WHICH ARE NOT CALLED OUT, MATCH TO WALL TRIM COLOR.
3. SPLIT SYSTEM W/ GROUND MOUNTED CONDENSORS TO BE SCREENED FROM VIEWS BY LANDSCAPING
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COMPOSITION SHINGLES



STONE VENEER



PT-1: SW9170



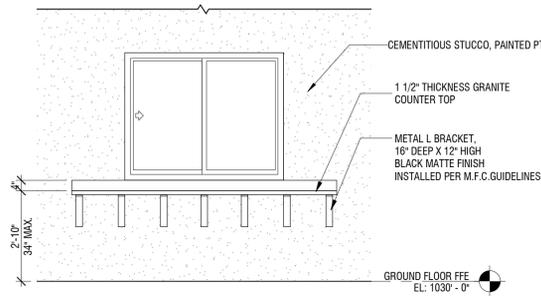
PT-2: SW7020



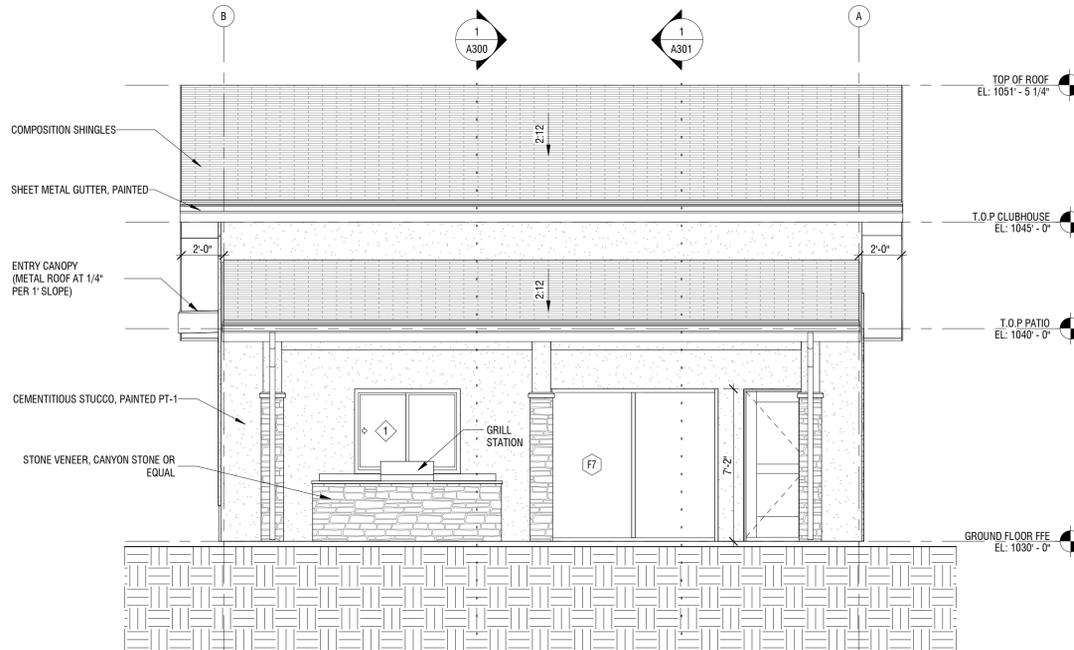
PT-3: SW7068

EXTERIOR FINISHING SCHEDULE

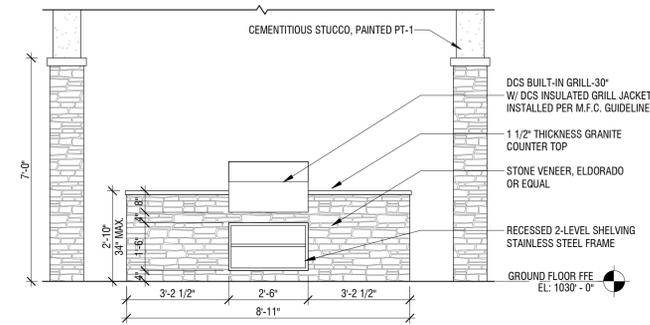
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2	STONE VENEER	CANYON STONE OR EQUAL	CANYON LEDGE/ COLOR: MOUNTAIN
3	CEMENTITIOUS STUCCO	DRYVIT, "OUTSULATION PLUS" OR EQUAL	PT-1: ACIER SW9170
4	FASCIA	SMART TRIM, LP OR EQUAL	PT-2: BLACK FOX SW7020
5	SOFFIT	SMART TRIM, LP OR EQUAL	COLOR: PT-2
6	TRIM	STUCCO FOAM TRIM	PT-3: GRIZZLE GRAY SW7068
7	GUTTER	24 GA. STEEL	MATCH TO WINDOW COLOR
8	WINDOWS	ANDERSEN ARCH. COLLECTION OR EQUAL	METAL - MATTE BLACK
9	EXTERIOR DOORS	METAL PANEL, PAINTED	MATCH TO WINDOW COLOR



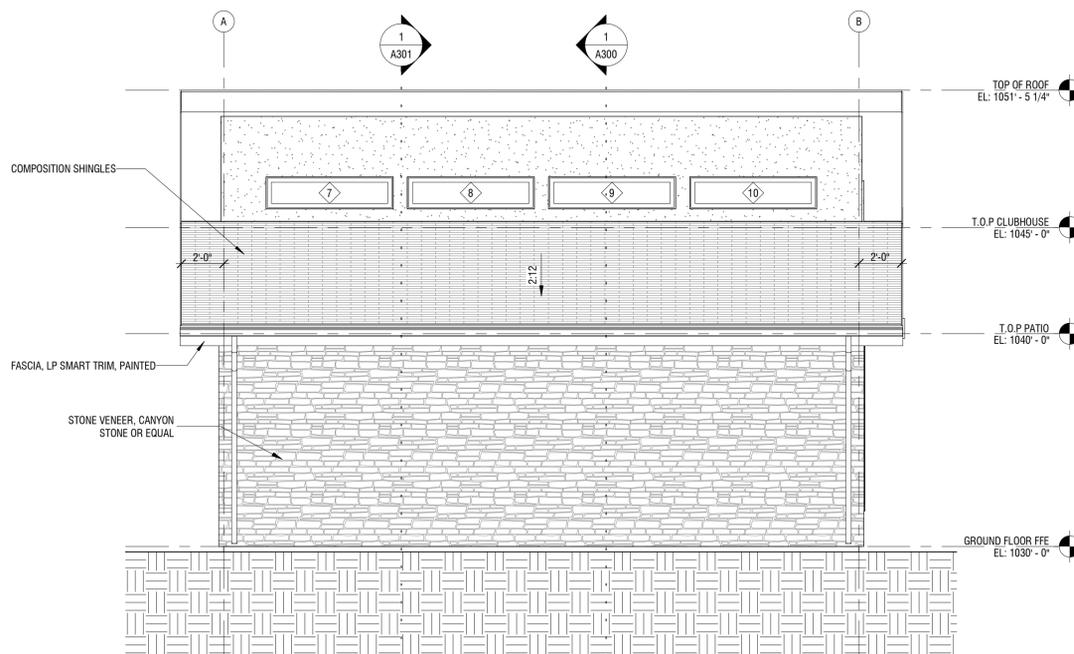
4 BAR - ELEVATION
3/8" = 1'-0"



1 EAST ELEVATION
1/4" = 1'-0"



3 GRILL STATION - ELEVATION
3/8" = 1'-0"



2 WEST ELEVATION
1/4" = 1'-0"



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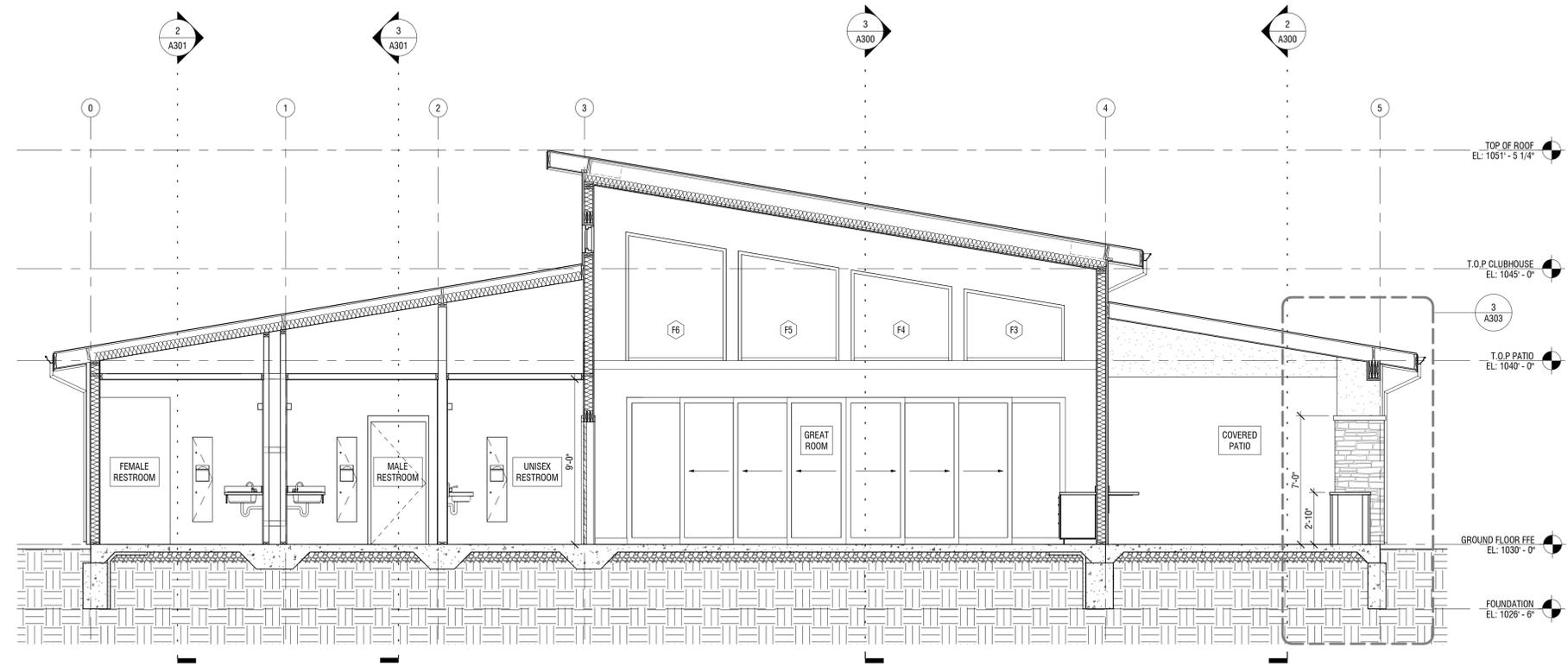
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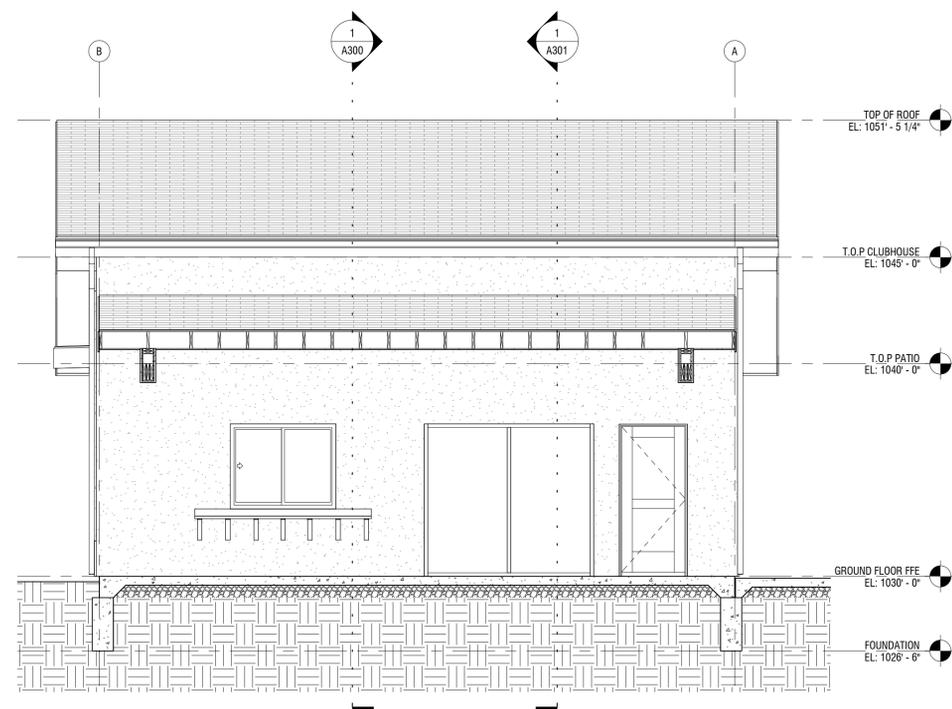
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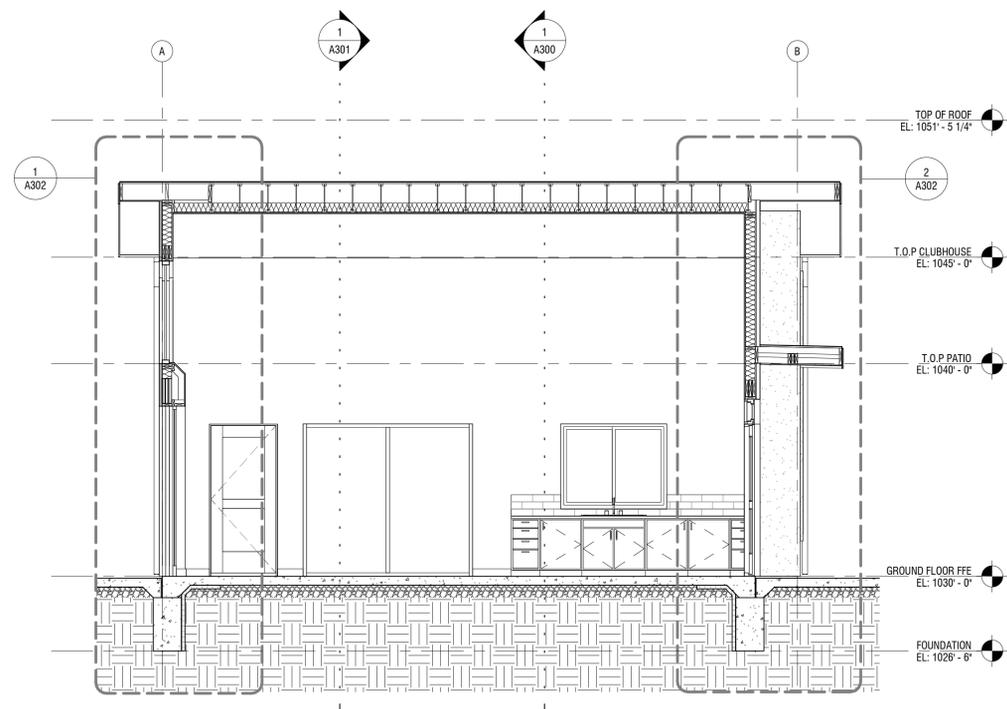
ELEVATIONS
A201



1 BUILDING SECTION 1
 1/4" = 1'-0"

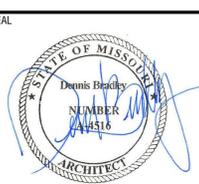


2 SECTION @ COVERED PATIO
 1/4" = 1'-0"



3 SECTION @ GREAT ROOM
 1/4" = 1'-0"

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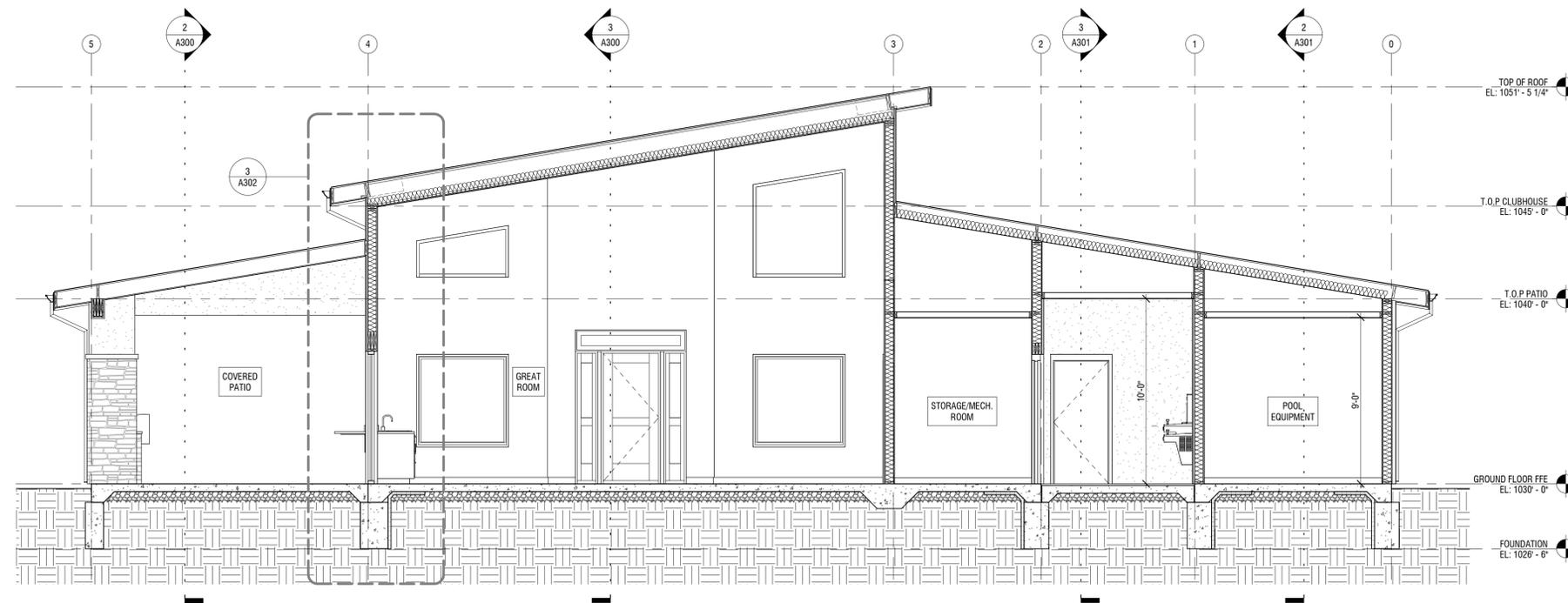
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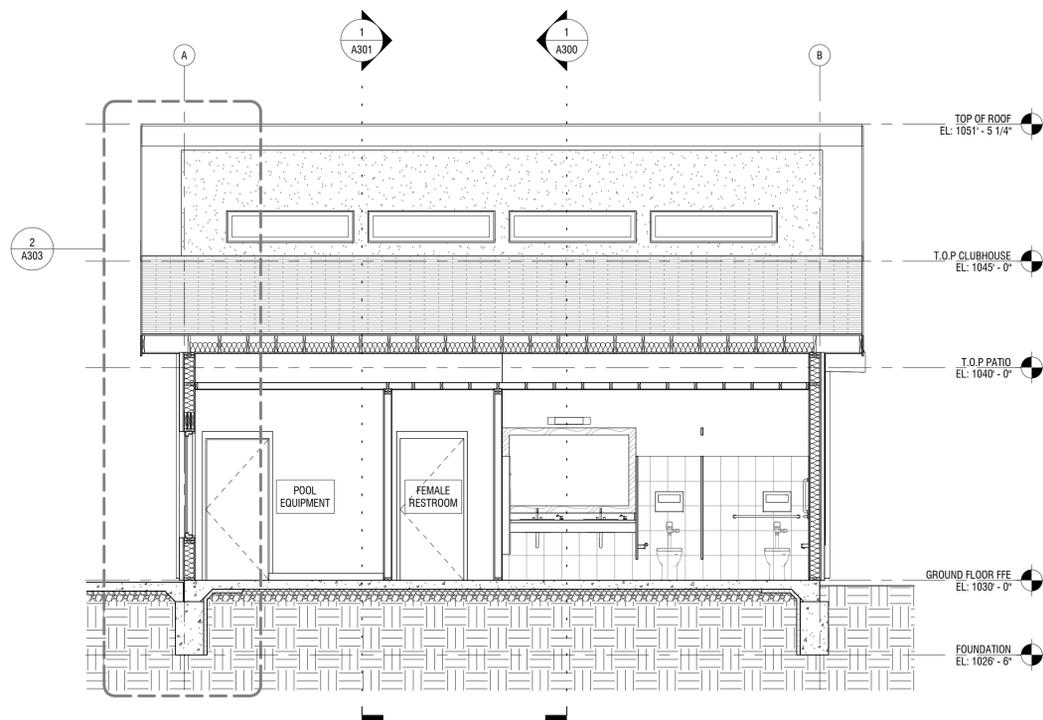
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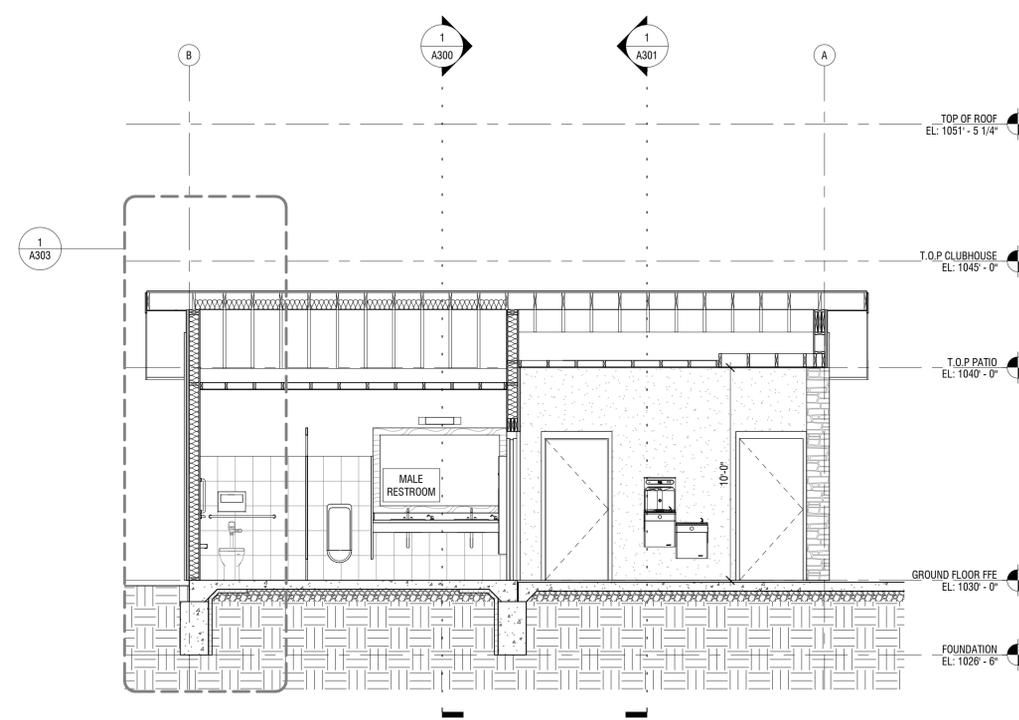
BUILDING SECTIONS
A300



1 BUILDING SECTION 2
 1/4" = 1'-0"



2 SECTION @ POOL EQUIPMENT
 1/4" = 1'-0"



3 SECTION @ BREEZEWAY
 1/4" = 1'-0"

OSAGE CLUBHOUSE
 2025 SW M 150 HWY
 LEES SUMMIT, MISSOURI 64082

SEAL



08.05.2020

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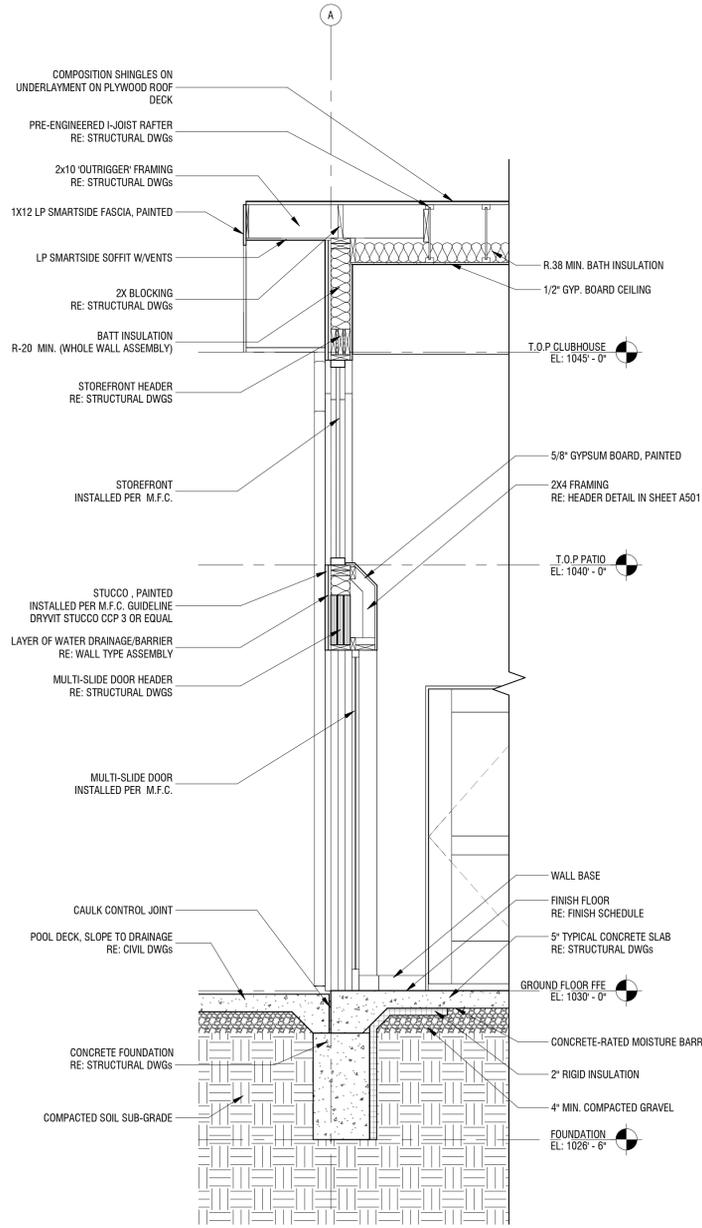
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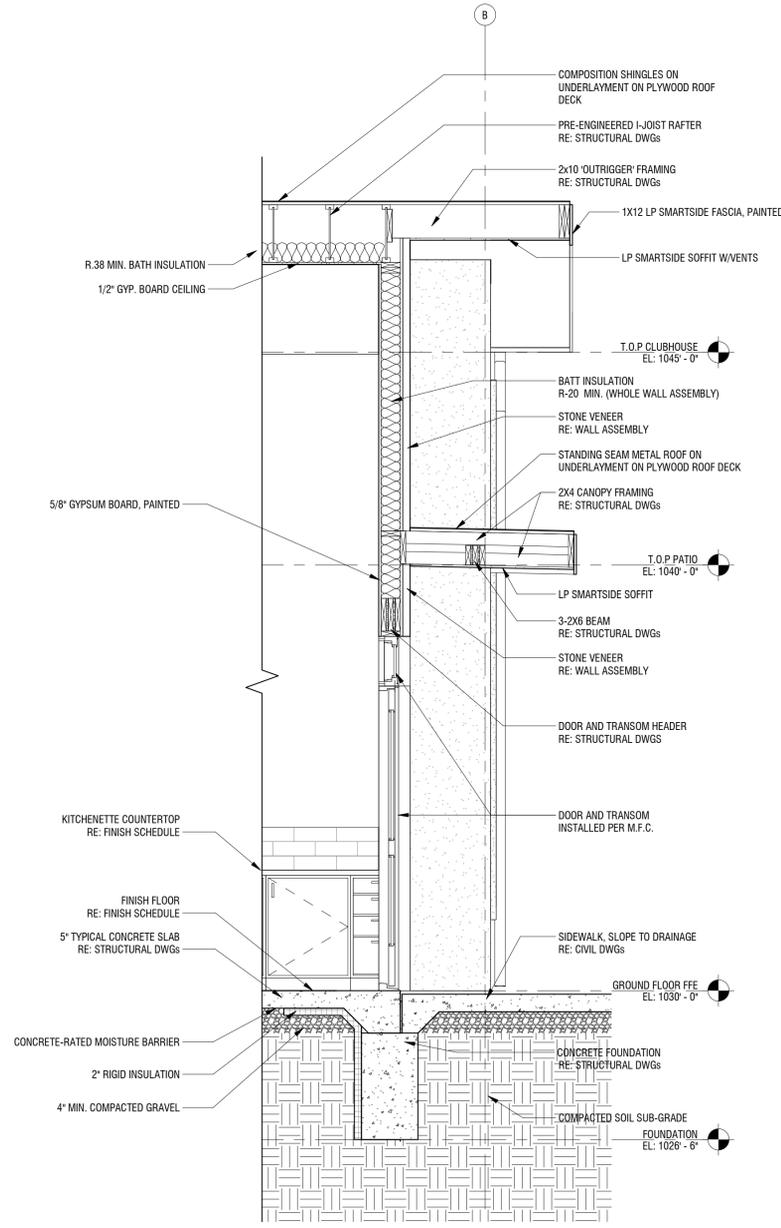
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BUILDING SECTIONS
A301

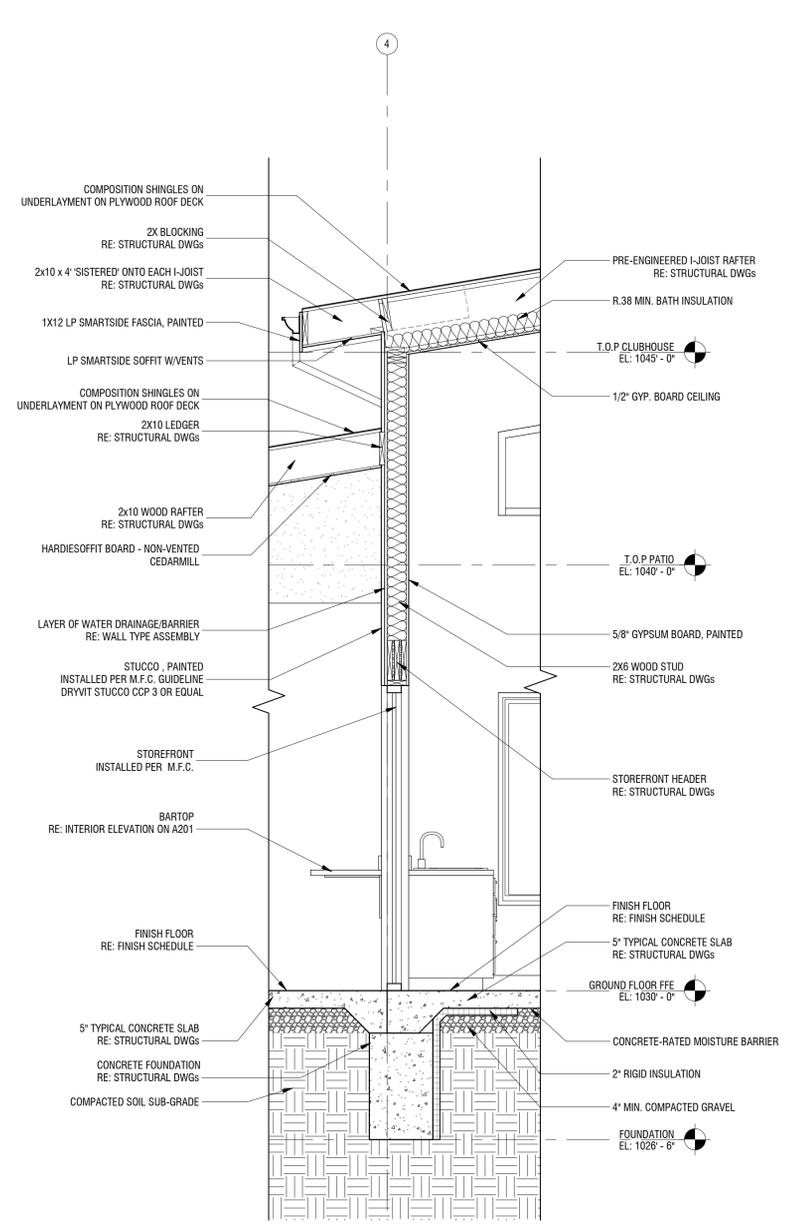
OSAGE CLUBHOUSE
 2025 SW M 150 HWY
 LEES SUMMIT, MISSOURI 64082



1 WALL SECTION 1
 1/2" = 1'-0"



2 WALL SECTION 2
 1/2" = 1'-0"



3 WALL SECTION 3
 1/2" = 1'-0"

SEAL



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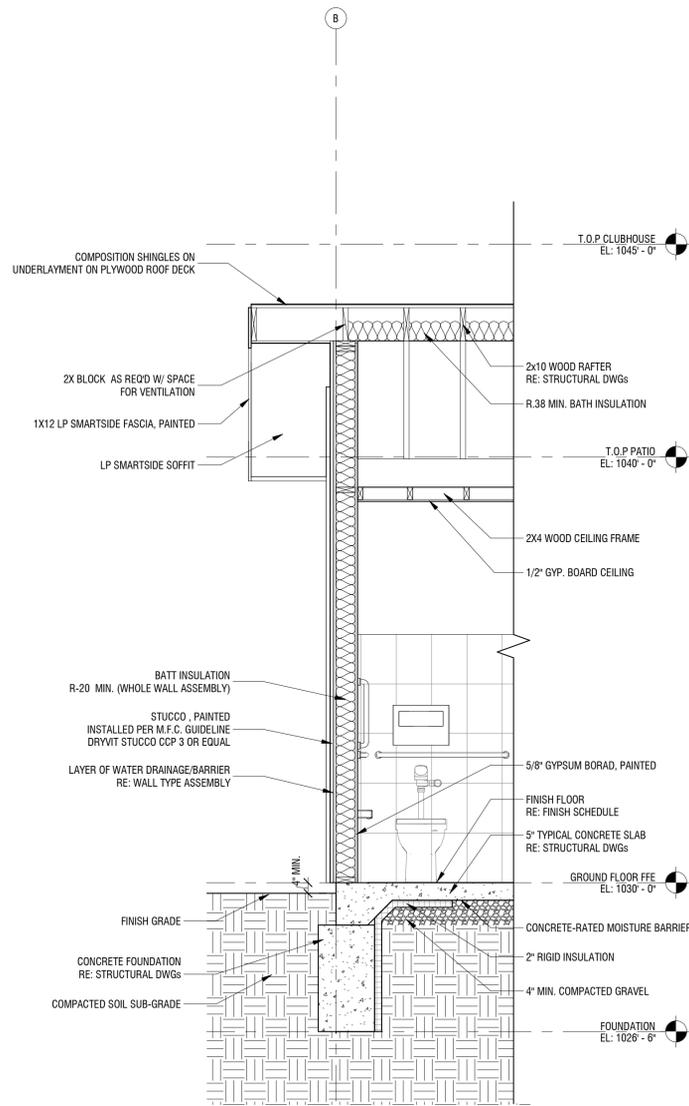
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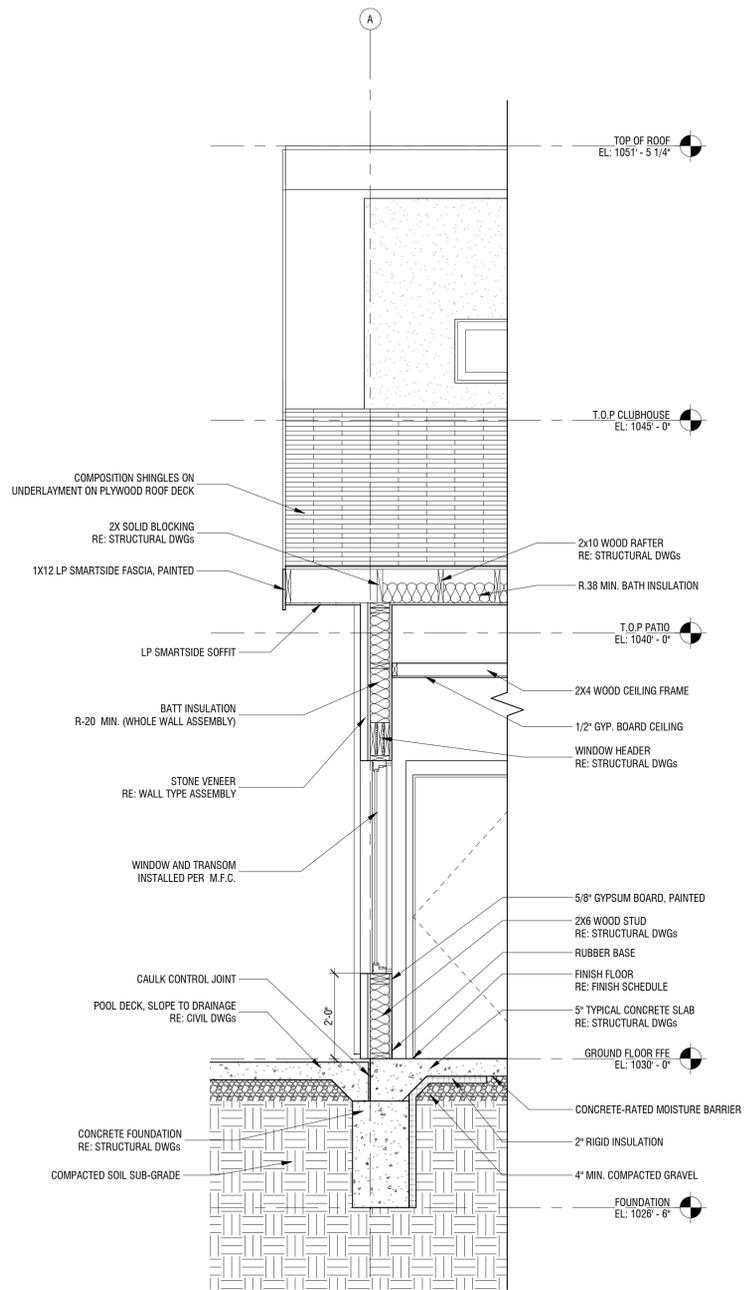
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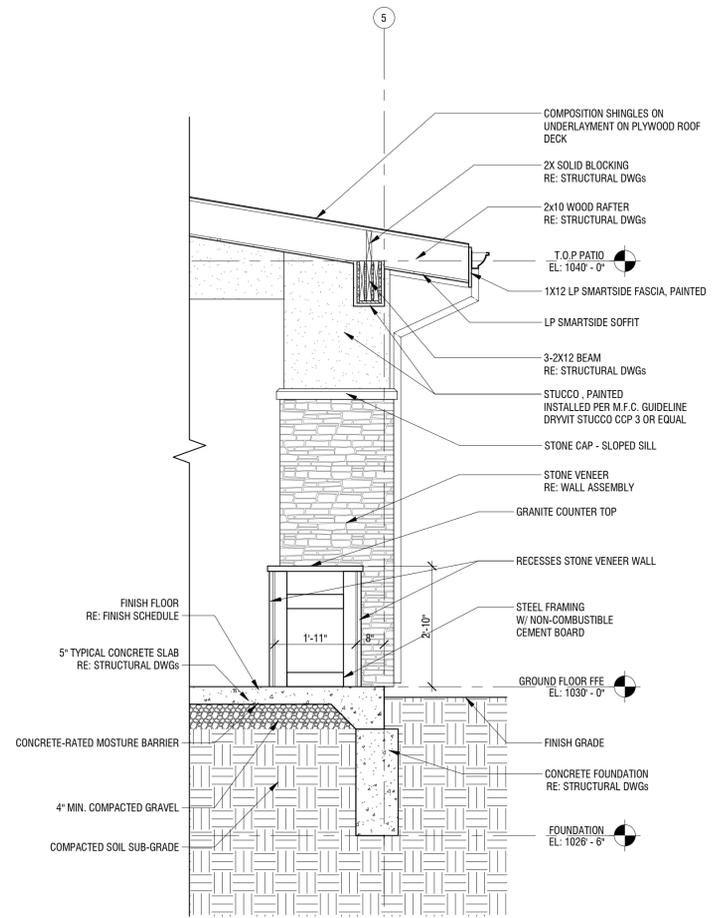
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1 WALL SECTION 4
 1/2" = 1'-0"



2 WALL SECTION 5
 1/2" = 1'-0"



3 WALL SECTION 6
 1/2" = 1'-0"

OSAGE CLUBHOUSE
 2025 SW M 150 HWY
 LEES SUMMIT, MISSOURI 64082

SEAL

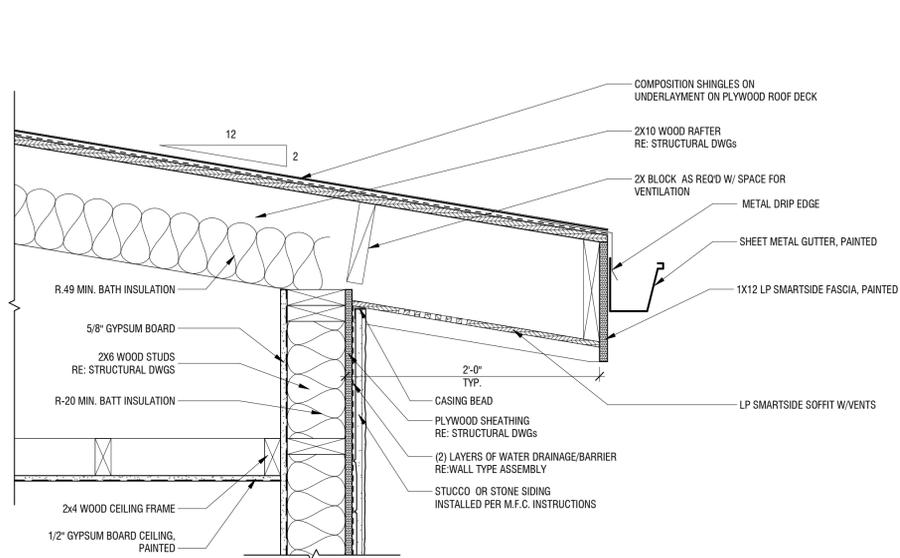


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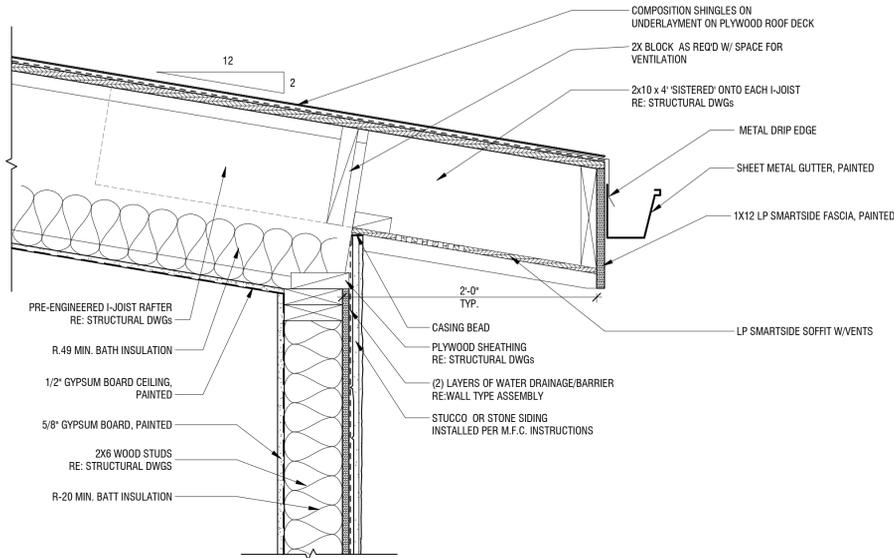
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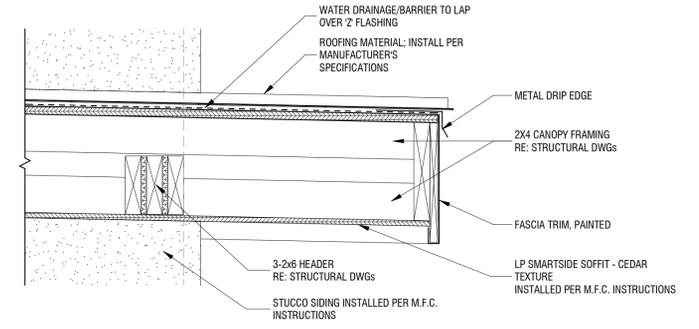
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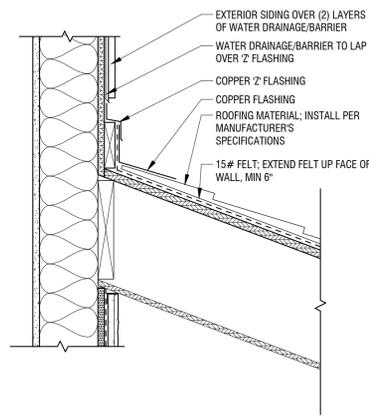
8 SECTION DETAIL - TYPICAL ROOF EAVE
 1 1/2" = 1'-0"



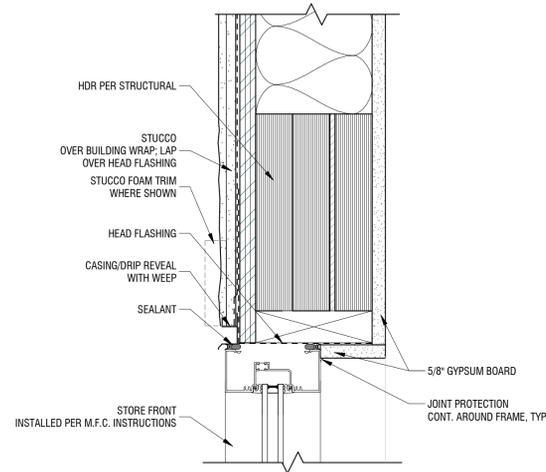
10 SECTION DETAIL - ROOF EAVE @ GREAT ROOM
 1 1/2" = 1'-0"



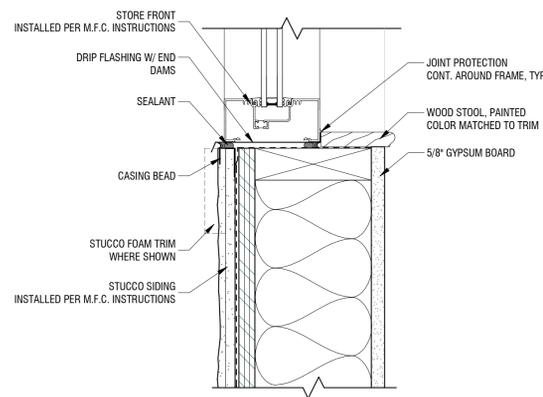
11 SECTION DETAIL - METAL ROOF @ MAIN ENTRY
 1 1/2" = 1'-0"



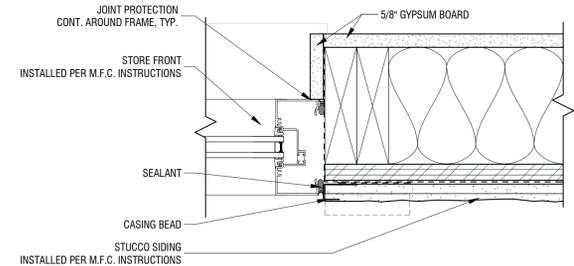
9 SECTION DETAIL - ROOF AT WALL
 1 1/2" = 1'-0"



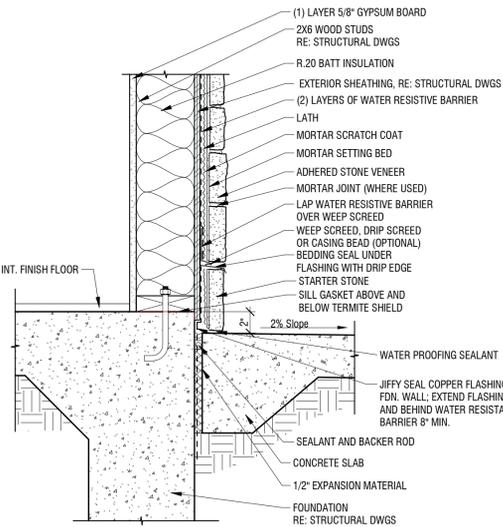
5 SECTION DETAIL - STORE-FRONT HEAD AT EXT. WALL
 3" = 1'-0"



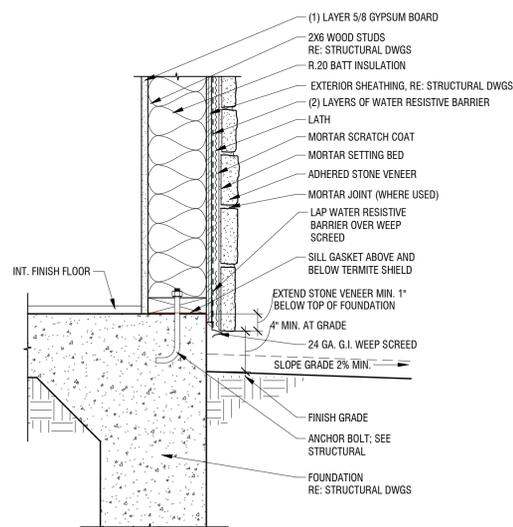
6 SECTION DETAIL - STORE-FRONT SILL AT EXT. WALL
 3" = 1'-0"



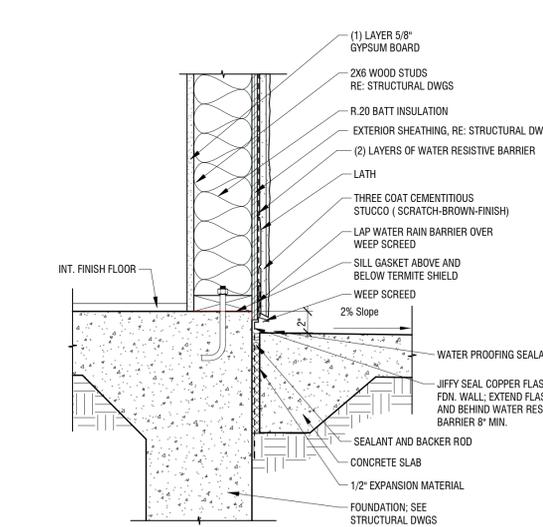
7 SECTION DETAIL - STORE-FRONT JAMB AT EXT. WALL
 3" = 1'-0"



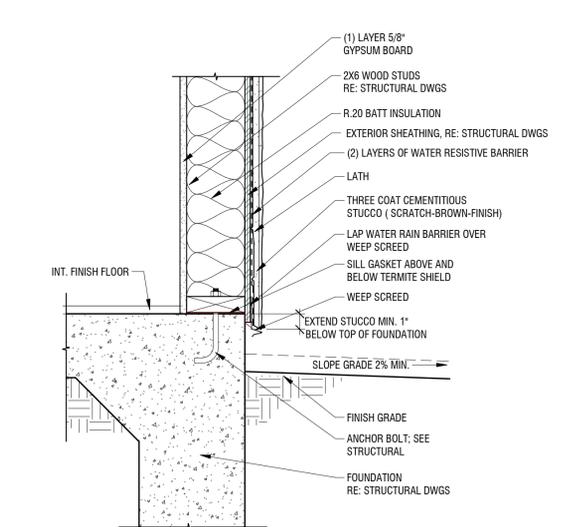
1 SECTION DETAIL - STONE WALL @ CONCRETE SLAB
 1 1/2" = 1'-0"



2 SECTION DETAIL - STONE WALL @ GRADE
 1 1/2" = 1'-0"

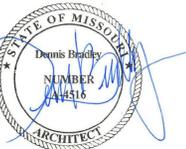


3 SECTION DETAIL - STUCCO WALL @ CONCRETE SLAB
 1 1/2" = 1'-0"



4 SECTION DETAIL - STUCCO WALL @ GRADE
 1 1/2" = 1'-0"

SEAL



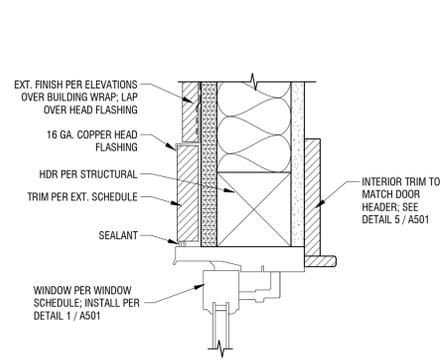
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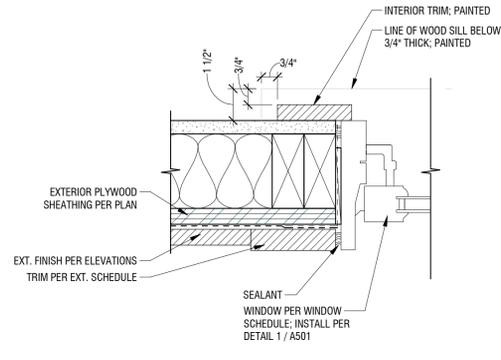
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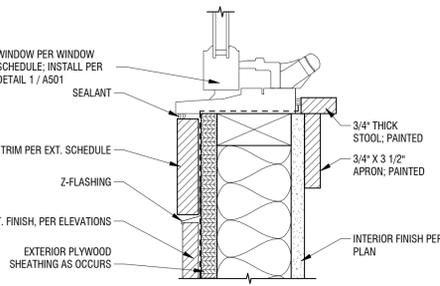
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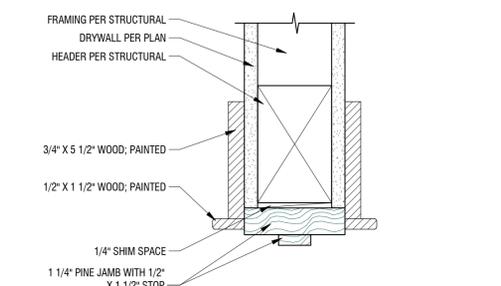
2 SECTION DETAIL - WINDOW HEAD EXT. WALL
 3" = 1'-0"



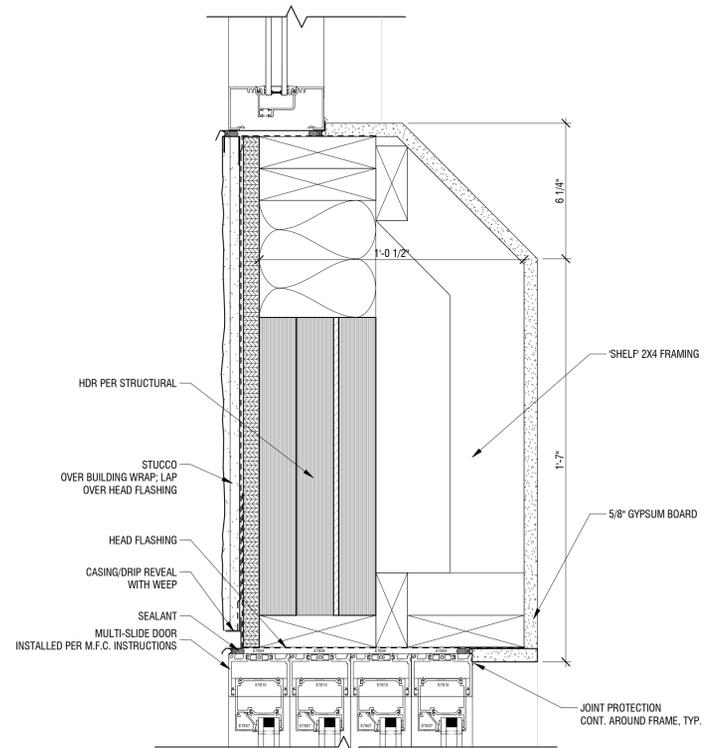
4 SECTION DETAIL - WINDOW JAMB AT EXT. WALL
 3" = 1'-0"



3 SECTION DETAIL - WINDOW SILL AT EXT. WALL
 3" = 1'-0"



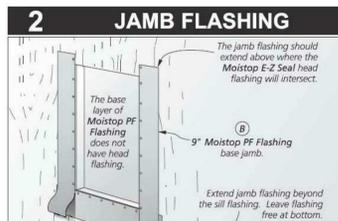
5 SECTION DETAIL - WOOD TRIM AT DOOR JAMB/HEADER
 3" = 1'-0"



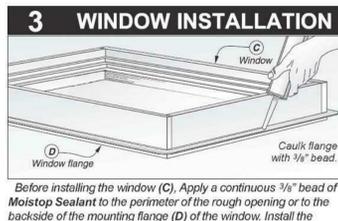
7 SECTION DETAIL - MULTI-SLIDE DOOR HEADER
 3" = 1'-0"



1 SILL FLASHING
 Install Moistop PF Flashing flush with the sill of the rough opening.
 9" Moistop PF Flashing base sill.
 Once the rough opening is prepared, proceed by attaching Moistop PF Flashing (A) flush along the bottom of the rough opening. Be sure not to fasten the lower edge of the flashing so that Jumbo Tax, Fortify or WeatherSmart™ may be slipped up underneath the flashing in a weather-board fashion, extend the flashing beyond the jamb flashing to be applied later.



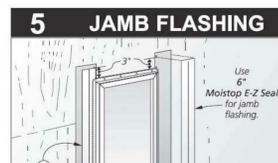
2 JAMB FLASHING
 The base layer of Moistop PF Flashing does not have head flashing.
 9" Moistop PF Flashing base jamb.
 Extend jamb flashing beyond the sill flashing. Leave flashing free at bottom.
 Cut a strip of Moistop PF Flashing long enough to extend beyond sill flashing already in place, and above where the Moistop E-Z Seal head flashing will intersect. Next attach the jamb flashing (B) flush to the edge of the rough opening leaving the bottom free. Repeat above steps for the remaining jamb.



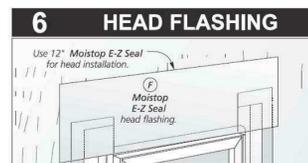
3 WINDOW INSTALLATION
 Before installing the window (C), Apply a continuous 3/16" bead of Moistop Sealant to the perimeter of the rough opening or to the backside of the mounting flange (D) of the window. Install the window according to the window manufacturer's instructions.



4 SURFACE PREPARATION
 Wipe the window flange (D) and base Moistop PF Flashing (B) layer clean before applying Moistop E-Z Seal. Cut the desired length of Moistop E-Z Seal with a sharp knife. Pull off the release paper and place the Moistop E-Z Seal on top of the window flange. Apply firm pressure along the entire self adhesive strip to ensure a continuous seal.

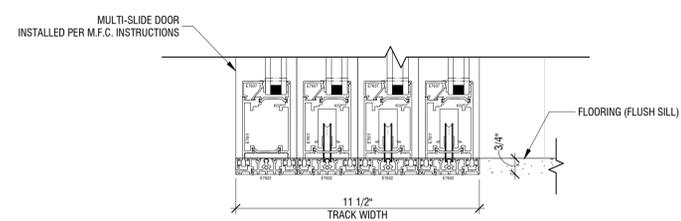


5 JAMB FLASHING
 Use 6" Moistop E-Z Seal for jamb flashing.
 6" Moistop E-Z Seal jamb flashing.
 Cut a strip of Moistop E-Z Seal for the jamb (E) of the window, extending beyond the flange (3" minimum top and bottom). Place the Moistop E-Z Seal on top of the flange (D) of the window and seal by applying pressure along the strip. Repeat for other jamb.

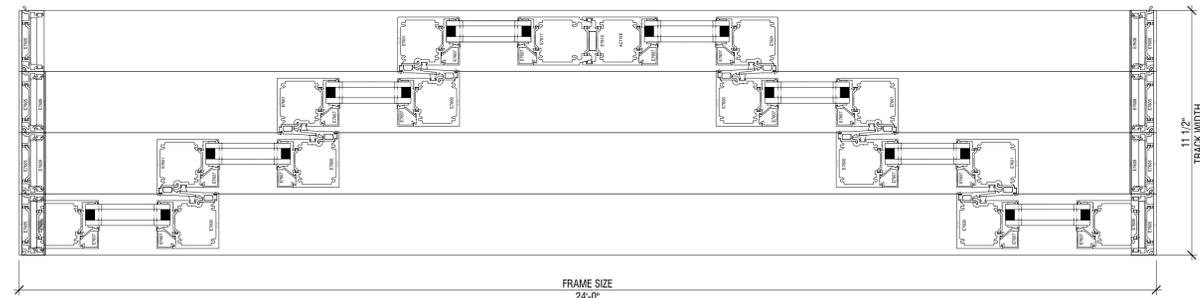


6 HEAD FLASHING
 Use 12" Moistop E-Z Seal for head installation.
 12" Moistop E-Z Seal head flashing.
 Cut a strip of Moistop E-Z Seal for the Head (F) of the window, extending beyond the jamb flashing in place. Place the Moistop E-Z Seal on top of the flange (D) of the window and seal by applying pressure along the strip.

1 TYPICAL WINDOW INSTALLATION
 N.T.S.



8 SECTION DETAIL - MULTI-SLIDE DOOR SILL
 3" = 1'-0"



6 MULTI-SLIDE DOOR FRAME
 3" = 1'-0"

SEAL



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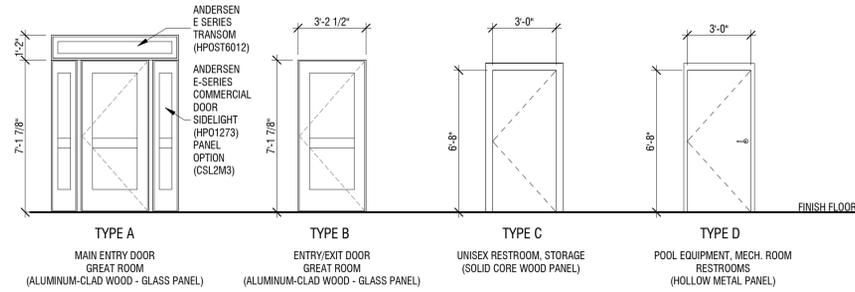
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DOOR ELEVATIONS



DOOR SCHEDULE												
NO.	TYPE	SIZE		OPERATION	MATERIAL	DOOR		GLASS	FRAME		HARDWARE SET	REMARKS
		WIDTH	HEIGHT			FINISH	FIRE RATING		MATERIAL	FINISH		
001	A	3'-2 1/2"	7'-1 7/8"	SW	ALUM. CLAD WOOD	COLOR TO MATCH WINDOW FRAMES	-	LOW E-4 GLASS	ALUM.	COLOR TO MATCH WINDOW FRAMES	BY DOOR MANUFACTURER, INCLUDE PANIC HARDWARE	ANDERSEN DOORS, E-SERIES, COMMERCIAL DOOR (ADA SILL), CONCEALED PANIC SYSTEM (CPS) CPSP273, PANEL OPTION CP2M3. ACCESS BY AUTHORIZED CARD CREDENTIAL OR MANUAL KEY. ALWAYS FREE EGRESS.
002	B	3'-2 1/2"	7'-1 7/8"	SW	ALUM. CLAD WOOD	MATCH DOOR 001	-	LOW E-4 GLASS	ALUM.	* SEE REMARKS	MATCH DOOR 001	MATCH DOOR 001
003	B	3'-2 1/2"	7'-1 7/8"	SW	ALUM. CLAD WOOD	MATCH DOOR 001	-	LOW E-4 GLASS	ALUM.	* SEE REMARKS	BY DOOR MANUFACTURER	MATCH DOOR 001, NOT AN EGRESS DOOR.
004	C	3'-0"	6'-8"	SW	S.C. WOOD	* SEE REMARKS	-	-	WOOD	* SEE REMARKS	8	COLOR MATCH TO PT-5
005	C	3'-0"	6'-8"	SW	S.C. WOOD	* SEE REMARKS	-	-	WOOD	* SEE REMARKS	8	COLOR MATCH TO PT-5
006	D	3'-0"	6'-8"	SW	H.M.	* SEE REMARKS	-	-	H.M.	* SEE REMARKS	4	RE: EXTERIOR MATERIAL SCHEDULE FOR COLOR
007	D	3'-0"	6'-8"	SW	H.M.	* SEE REMARKS	-	-	H.M.	* SEE REMARKS	4	RE: EXTERIOR MATERIAL SCHEDULE FOR COLOR
008	D	3'-0"	6'-8"	SW	H.M.	* SEE REMARKS	-	-	H.M.	* SEE REMARKS	2	RE: EXTERIOR MATERIAL SCHEDULE FOR COLOR
009	D	3'-0"	6'-8"	SW	H.M.	* SEE REMARKS	-	-	H.M.	* SEE REMARKS	2	RE: EXTERIOR MATERIAL SCHEDULE FOR COLOR

ABBREVIATION LEGEND

SW	SWING	H.M.	HOLLOW METAL	S.C. WOOD	SOLID CORE WOOD
OH	OVERHEAD	K.D.	KNOCK DOWN	ALUM.	ALUMINUM

DOOR NOTES

1. SEE EXTERIOR MATERIAL SCHEDULE FOR EXTERIOR DOOR FINISH COLOR
2. FOR INTERIOR DOOR COLOR, SEE DOOR SCHEDULE

DOOR HARDWARE SCHEDULE

SET: 1.0 (NOT USED)

SET: 2.0
DOORS: 008, 009

3	HINGE (HEAVY WEIGHT)	T4A3386 NRP 4-1/2" X 4-1/2"	US32D	MK
1	STOREROOM LOCK	PBR 8805FLC	630	YA
1	CYLINDER RIMMORTISE	AS REQUIRED (MATCH EXISTING KEY SYSTEM)		NO
1	SURFACE CLOSER, HO	7500H	689	NO
1	THRESHOLD	2005AT		PE
1	GASKETING	2891AS		PE
1	RAINGUARD	346C		PE
1	SWEEP	315CN		PE

SET: 3.0 (NOT USED)

SET: 4.0
DOORS: 006, 007

3	HINGE (HEAVY WEIGHT)	T4A3386 4-1/2" X 4-1/2"	US32D	MK
1	BATHROOM LOCK	PBR 8862FL IND	630	YA
1	SURFACE CLOSER	7500	689	NO
1	DOOR STOP	441	US26D	RO
1	THRESHOLD	171A		PE
1	GASKETING	S88D		PE

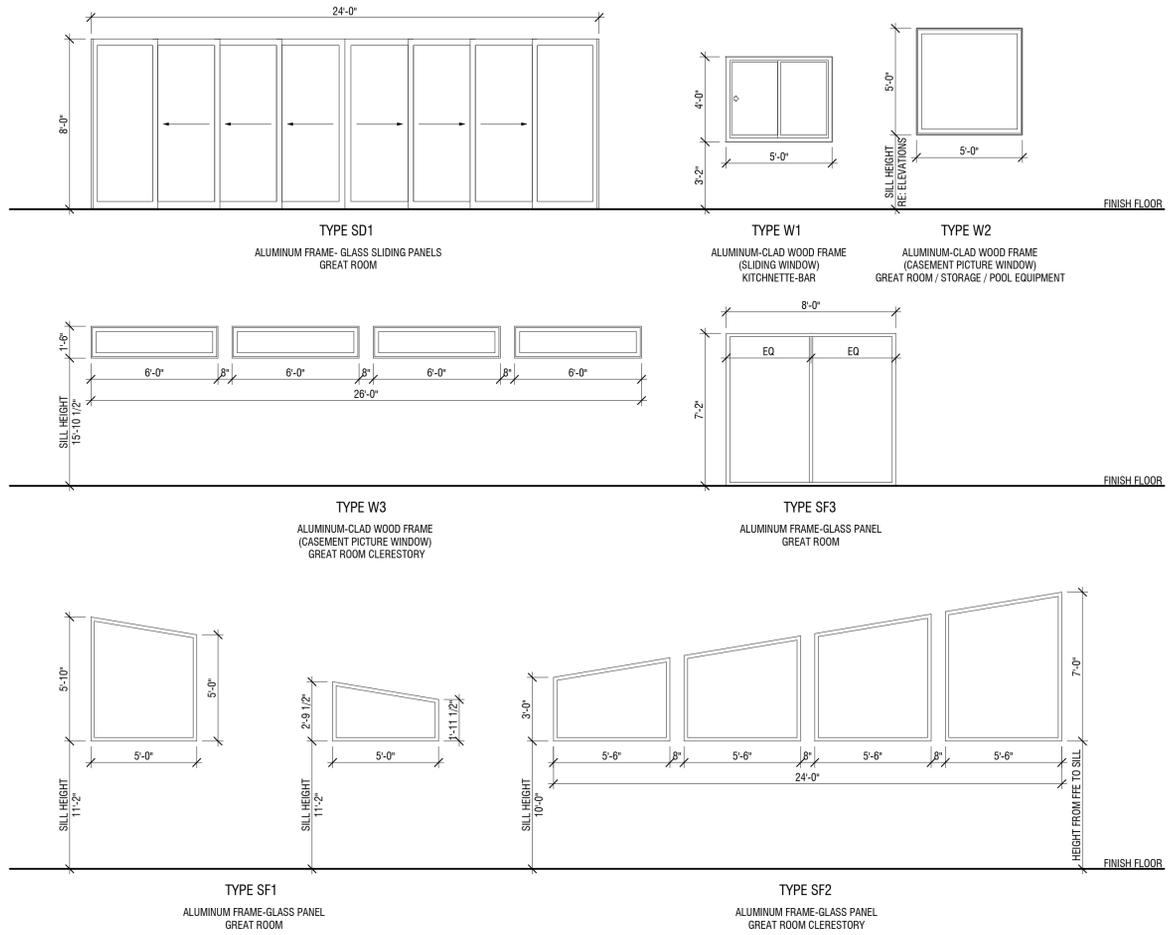
DOOR HARDWARE TYPES

NOTE: SEE HARDWARE SPECIFICATIONS FOR MORE INFO; SEE HARDWARE SCHEDULE BELOW FOR MORE INFO

POOL GATE NOTES

1. POOL GATE FINISH COLOR AND STYLE WILL MATCH POOL FENCE.
2. 6FT TALL, BLACK METAL MOUNTAGE STYLE
3. POOL GATES WILL HAVE EXTPANIC HARDWARE.
4. POOL GATES WILL BE SET UP FOR FREE EGRESS.

STOREFRONT/ WINDOW ELEVATIONS



SLIDING DOOR SCHEDULE						
NO.	TYPE	SIZE		FRAME	GLASS	REMARKS
		WIDTH	HEIGHT			
D1a	SD1	12'-0"	8'-0"	ALUM. PAINTED, MATCH WINDOW FRAME	WESTERN WINDOW SYSTEMS, SERIES 7600 MULTI-SLIDE DOOR, FLUSH SILL/STANDARD LOW E-GLASS (06X0)	
D1b	SD1	12'-0"	8'-0"	ALUM. PAINTED, MATCH WINDOW FRAME	WESTERN WINDOW SYSTEMS, SERIES 7600 MULTI-SLIDE DOOR, FLUSH SILL/STANDARD LOW E-GLASS (06X0)	

STOREFRONT SCHEDULE							
NO.	WIDTH	HEIGHT	SILL HEIGHT	TYPE MARK	GLASS	FRAME FINISH	REMARK
F2	5'-0"	2'-9 1/2"	11'-2"	SF1	DOUBLE PANE	ALUM./PAINTED	COLOR MATCH TO WINDOW FRAME
F3	5'-6"	3'-0"	10'-0"	SF2	DOUBLE PANE	ALUM./PAINTED	COLOR MATCH TO WINDOW FRAME
F4	5'-6"	4'-0"	10'-0"	SF2	DOUBLE PANE	ALUM./PAINTED	COLOR MATCH TO WINDOW FRAME
F5	5'-6"	5'-0"	10'-0"	SF2	DOUBLE PANE	ALUM./PAINTED	COLOR MATCH TO WINDOW FRAME
F6	5'-6"	7'-0"	10'-0"	SF2	DOUBLE PANE	ALUM./PAINTED	COLOR MATCH TO WINDOW FRAME
F7	8'-0"	7'-2"	0'-0"	SF4	DOUBLE PANE	ALUM./PAINTED	COLOR MATCH TO WINDOW FRAME

GENERAL NOTES

1. U-VALUES SHALL COMPLY WITH TABLE 502.3 OF IECC
2. REFER TO STORE FRONT/ WINDOW/ SLIDING DOOR SPECIFICATIONS
3. GLAZING TO BE PPG SOLARBAN 60:
SOLAR HEAT GAIN COEFFICIENT: 0.40
VISIBLE LIGHT TRANSMITTANCE: 72%
U-VALUE: 0.25
ULTRAVIOLET ENERGY: 20%

WINDOW SCHEDULE

NO.	SIZE		TYPE	GLASS	FINISH	REMARKS
	WIDTH	HEIGHT				
1	5'-0"	4'-0"	ALUM.-CLAD WOOD GLIDING WINDOW	LOW E-4 GLASS	INTERIOR/EXTERIOR: DARK BRONZE COLOR	ANDERSEN, ARCHITECTURAL COLLECTION E-SERIES - SLD5040
2	5'-0"	5'-0"	ALUM.-CLAD WOOD FIXED CASEMENT WINDOW	LOW E-4 GLASS	INTERIOR/EXTERIOR: DARK BRONZE COLOR	ANDERSEN, ARCHITECTURAL COLLECTION E-SERIES - CMP5050
3	5'-0"	5'-0"	ALUM.-CLAD WOOD FIXED CASEMENT WINDOW	LOW E-4 GLASS	INTERIOR/EXTERIOR: DARK BRONZE COLOR	ANDERSEN, ARCHITECTURAL COLLECTION E-SERIES - CMP5050
4	5'-0"	5'-0"	ALUM.-CLAD WOOD FIXED CASEMENT WINDOW	LOW E-4 GLASS	INTERIOR/EXTERIOR: DARK BRONZE COLOR	ANDERSEN, ARCHITECTURAL COLLECTION E-SERIES - CMP5050
5	5'-0"	5'-0"	ALUM.-CLAD WOOD FIXED CASEMENT WINDOW	LOW E-4 GLASS	INTERIOR/EXTERIOR: DARK BRONZE COLOR	ANDERSEN, ARCHITECTURAL COLLECTION E-SERIES - CMP5050
7	6'-0"	1'-6"	ALUM.-CLAD WOOD FIXED CASEMENT WINDOW	LOW E-4 GLASS	INTERIOR/EXTERIOR: DARK BRONZE COLOR	ANDERSEN, ARCHITECTURAL COLLECTION E-SERIES
8	6'-0"	1'-6"	ALUM.-CLAD WOOD FIXED CASEMENT WINDOW	LOW E-4 GLASS	INTERIOR/EXTERIOR: DARK BRONZE COLOR	ANDERSEN, ARCHITECTURAL COLLECTION E-SERIES
9	6'-0"	1'-6"	ALUM.-CLAD WOOD FIXED CASEMENT WINDOW	LOW E-4 GLASS	INTERIOR/EXTERIOR: DARK BRONZE COLOR	ANDERSEN, ARCHITECTURAL COLLECTION E-SERIES
10	6'-0"	1'-6"	ALUM.-CLAD WOOD FIXED CASEMENT WINDOW	LOW E-4 GLASS	INTERIOR/EXTERIOR: DARK BRONZE COLOR	ANDERSEN, ARCHITECTURAL COLLECTION E-SERIES



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OSAGE CLUBHOUSE
 2025 SW M 150 HWY
 LEES SUMMIT, MISSOURI 64082



08.05.2020

DATE ISSUED: AUGUST 05, 2020		
NO.	REVISION	DATE

DESIGNED BY: FCR
DRAWN BY: FCR
CHECKED BY: TT/DMB

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DOOR/WINDOW SCHEDULES
A600

GENERAL STRUCTURAL NOTES:

DESIGN LIVE LOADS: (Per 2018 International Building Code, Unfactored ASD values shown)

- a. Roof----- 20psf (min.); Ground Snow =20psf
- b. Floor-----100 psf (assembly)
- c. Storage & Mechanical----- 125 psf
- d. Corridor, Exits & Patio----- 100 psf
- e. Wind Load----- ASD Wind Speed<93mph; Risk Cat=II; Iw=I.0; Exp. C; GCpi=0.18 (0.55 Patio)
- f. Earthquake Load----- R.C.=II; Ie=1.00; Ss = 0.1g; S1 = 0.068g; Assumed Site Class D; Sds=0.107; Sd1=0.109; S.D.C. = B; Wood Shear Walls R=6.5

FIELD VERIFICATION:

- a. Contractor shall thoroughly inspect and survey the existing site and related infrastructure to verify conditions, dimensions, elevations, framing, etc. which affect the work shown on the drawings.
- b. Report any variations or discrepancies to the Architect and Engineer before proceeding.

FOUNDATION DESIGN:

(spread footings)

- a. Design of foundations is based upon an assumed allowable vertical bearing pressure of 1500 psf for continuous, and individual spread footings (net, for full dead plus live loads), on suitable existing soil or shallow compacted structural fill 16" below existing interior slab or 36" below exterior grade (min).
- b. Field verify all bearing soils meet assumption (per a KS registered Geotech'l Engineer) prior to placing rebar.
- c. Overexcavate 12" (min) and provide a "cushion" of structural fill for 20' along new wall footings in the natural soils beyond all transitions of bearing wall footings from natural soil bearing to structural fill bearing.
- d. Bearing surfaces should be protected from either inundation or excessive drying during the excavation process. Provide good surface drainage during construction.
- e. All loose soils or soils softened due to moisture concentration in the excavation should be removed prior to pouring concrete for foundations. Replace such unsuitable soils with structural fill as needed.
- f. If soils with moderate to high shrink/swell potential are exposed in excavations for slab or foundation bearing, undercut and replace such unsuitable soil with at least 2 feet (vert & lateral) of structural fill.
- g. All structural fill shall be appropriate for use on this project site and exhibit less than moderate shrink/swell potential. The structural fill shall not contain rocks larger than 5" and shall be placed in loose lifts that are 8" thick (or less) compacted to 95% (min) of the maximum density as determined by Standard Proctor Procedures (ASTM D 698). Moisture content shall be controlled to within a range of -3 to +2 percent around the optimum.

REINFORCED CONCRETE:

- a. All concrete design is based on current edition of the "Building Code Requirements for Reinforced Concrete" (ACI 318).
- b. All structural concrete shall have minimum 28-day compressive strength of 4000 psi (except footings, which may be 3,000 psi).
- c. Concrete shall be proportioned utilizing Type I or I/II cement (except, concrete exposed directly to soil with high sulfate content shall use Type II cement). Concrete susceptible to freezing shall be formulated for maximum frost resistance in accordance with the ACI Manual of Concrete Practice.
- d. Contractor shall notify Architect of cold joint locations prior to or during concrete forming if they differ from those shown on the plans.
- e. Cold or hot weather concreting procedures shall be provided as recommended in the ACI Manual of Concrete Practice.
- f. All exposed edges and corners shall be chamfered 0.75".
- g. All anchor bolts for beam and column bearing plates shall be placed with setting templates into forms before concrete is poured.

REINFORCING STEEL:

- a. All detailing, fabrication, and placement of reinforcing steel shall be in accordance with the ACI Manual of Concrete Practice.
- b. Reinforcing bars shall conform to the current ASTM Specification A615 and shall be grade 60, except ties, field bent bars where permitted by note on plan, or bars to be welded which shall be grade 40 or weldable grade 60.
- c. Unless noted otherwise: At splices in concrete, lap bars 36 diameters. At splices in masonry, lap bars 42 diameters. At corners, make horizontal bars continuous or provide corner bars. Around openings in walls and slabs, provide 2-#4's, extending 2'-0" beyond each edge of opening, each way.
- d. Except as noted on the drawings, minimum concrete protection for reinforcement shall be in accordance with ACI 318.
- e. Welded wire fabric shall conform to ASTM Specification A-185.

GROUT:

- a. All grout used beneath bearings shall be non-shrink, non-metallic w/ 28 day f'c = 5,000 psi.

POST-INSTALLED ANCHORS:

- a. Resin Adhesive Anchors (called for or to replace cast-in anchor bolts called for) shall be "HILTI HIT-ICE or HIT HY-200", "Ramsset/Red Head - Epcon", or approved equivalent, with these embeds for general bolts in concrete: 9" for 3/4" dia bolts, 7 1/2" for 5/8" dia and 6" for 1/2" dia

SHOP DRAWINGS (DEFERRED SUBMITTALS):

- a. Furnish pdf copy by email of each set of shop and erection drawings for: I-Joists and reinforcing bars to Architect and Structural Engineer for review and acceptance prior to fabrication.

STRUCTURAL ERECTION AND BRACING REQUIREMENTS:

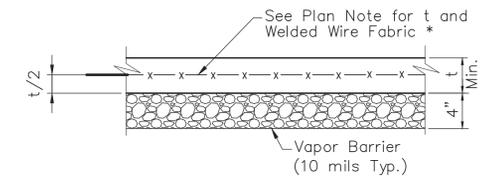
- a. The structural drawings illustrate the completed structure with all elements in their final positions, properly supported and braced.
- b. The Contractor, in the proper sequence, shall provide shoring and bracing as may be required during construction to achieve the final completed structure.

SPECIAL INSPECTIONS (Structural Only):

- a. Special Inspections per the IBC (2012 Chapter 1705) that may be required for this project by the governing agency's Building Official include, but may not be limited to, the following (that are not 'lined-out'):
 1. Periodic inspections of any excavated foundation bearing soil/rock depth and material
 2. Periodic inspections/tests of any structural fill material and base preparation
 3. Continuous inspections of any structural fill density, placement, and compaction
 4. Periodic inspections of any reinforcing steel (rebar) material and placement
 5. Continuous inspections of concrete sampling and placement
 6. Periodic inspections of concrete mix design, form work, and curing
 7. Periodic inspections of anchor bolt material and placement
 8. Periodic inspections of any post-installed anchors and placement in concrete
 9. Quality Assurance (QA) for structural steel system erection per AISC 360-10, Chapter N
 10. Periodic inspections of cold-formed steel decking material, placement and fastening
 11. Periodic inspections of prefabricated wood I-Joist material, placement, bridging and fastening
- b. Special Inspector for the work noted above shall be 'third party' agent provided by Owner and approved by the governing agency's Building Official (B.O.).
- c. Quality Assurance (QA) for structural steel fabrication shall be provided per AISC 360-10, Chapter N by the fabricator's agent/inspector (if req'd by the B.O. - ref Section N7).
- d. Quality Control (QC) for structural steel fabrication and erection shall be provided per AISC 360-10, Chapter N by the respective agent/inspector for the fabricator and/or erector.

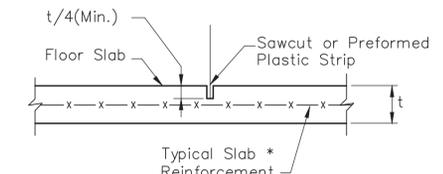
ABBREVIATIONS	
ABC = Aggregate Base Course	T.O.S. = Top of Steel
G.S.N. = General Structural Notes	T.O.W. = Top of Wall
UNO = Unless Noted Otherwise	F.V. = Field Verify
WWF = Welded Wire Fabric	T&B = Top & Bottom
E.W. = Each Way	O.H. = Opposite Hand
O.C. = On Center	SIM = Similar
PSF = Pounds Per Square Foot	NTS = Not to Scale
O.F. = Outside Face	E.F. = Each Face
I.F. = Inside Face	

LEGEND	
	INDICATES TRENCHED CONCRETE FOOTING
	INDICATES THICKENED SLAB CONCRETE FOOTING
	INDICATES COLUMN (WOOD)
	INDICATES OPNG IN FLR OR ROOF. VERIFY SIZE & LOCATION w/ ARCH'L & MECH'L DWGS. MOST OPNGS & OPNG FRMG ARE NOT SHOWN ON PLAN
	INDICATES WOOD RAFTER/JOIST
	INDICATES BUILT-UP WOOD HEADER
	INDICATES WOOD BEAM



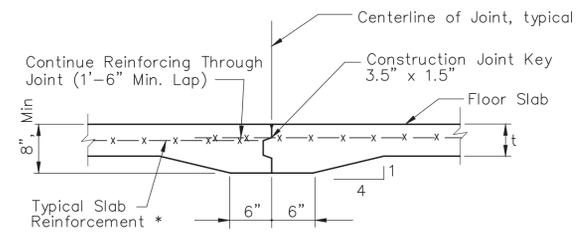
TYPICAL SLAB-ON-GRADE SECTION

Reinforced Concrete Slab on 4" Aggregate Base Course
* - WWF MUST BE PLACED AT SLAB MID-DEPTH



CONTRACTION JOINT

* - WWF MUST BE PLACED AT SLAB MID-DEPTH



CONSTRUCTION JOINT

* - WWF MUST BE PLACED AT SLAB MID-DEPTH

SLAB-ON-GRADE & CONTROL JOINTS

Provide a control joint where indicated per plan, typical.



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OSAGE CLUBHOUSE
 2025 SW M150 HIGHWAY
 LEE'S SUMMIT, MISSOURI
 General Structural Notes and Slab Details

SEAL (DANIEL J. PACKARD, P.E., d.b.a. PACKARD ENGINEERING)



ISSUED: JULY 31, 2020

NO.	REVISION	DATE

DESIGNED BY DJP
 DRAWN BY DJP
 CHECKED BY DJP

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PLAN KEY NOTES:

- 1 TRENCHED FOOTING 16" WIDE X 30" DEEP, TYPICAL AT BUILDING SLAB EDGES. TOP OF FOOTING IS 12", MINIMUM, BELOW SLAB SURFACE. REINF w/ 2 - #5 CONT, TOP & BOTTOM.
- 2 WIDEN TRENCHED FOOTING AT THIS EXTERIOR WALL TO 1'-6" WIDE. PROVIDE TYPICAL TRENCHED FOOTING HORIZONTAL REINFORCING THROUGH WIDER FOOTING.
- 3 PROVIDE EXTERIOR PIER OVER THE FOOTING AT THIS 'PATIO COLUMN' ELEMENT = 12" WIDE X 2'-8" LONG. SEE THE APPLICABLE DETAIL/SECTION.
- 4 P.T. 6X6 COLUMN w/ SIMPSON MPB66Z BASE EMBEDDED INTO PIER/FOOTING PER DETAIL.
- 5 APPROXIMATE LOCATIONS OF SLAB-ON-GRADE CRACK CONTROL JOINTS ARE SHOWN THUS
- 6 DON'T CONNECT SLAB-ON-GRADE AT PATIO TO STEM WALLS AND ENCLOSED BUILDING SLAB EDGES, TYPICAL. PROVIDE CONT 1/2" EXPANSION JOINT MATERIAL
- 7 PROVIDE A DIAGONAL #4 BAR X 32" AT MID-DEPTH OF SLAB AND CENTERED NEAR EACH INSIDE CORNER OF STEM WALL-TO-SLAB JOINT, TYPICAL.
- 8 DASHED LINE WHERE SHOWN THUS INDICATES SHEAR WALL SHEATHING AT WALL FACE ABOVE PER APPLICABLE GENERAL FRAMING NOTE. SHEATH WALL ABOVE AND BELOW ANY WINDOWS INCLUDED WITHIN THE WALL LENGTH INDICATED.
- 9 THICKENED SLAB FOUNDATION PER APPLICABLE DETAIL/SECTION.

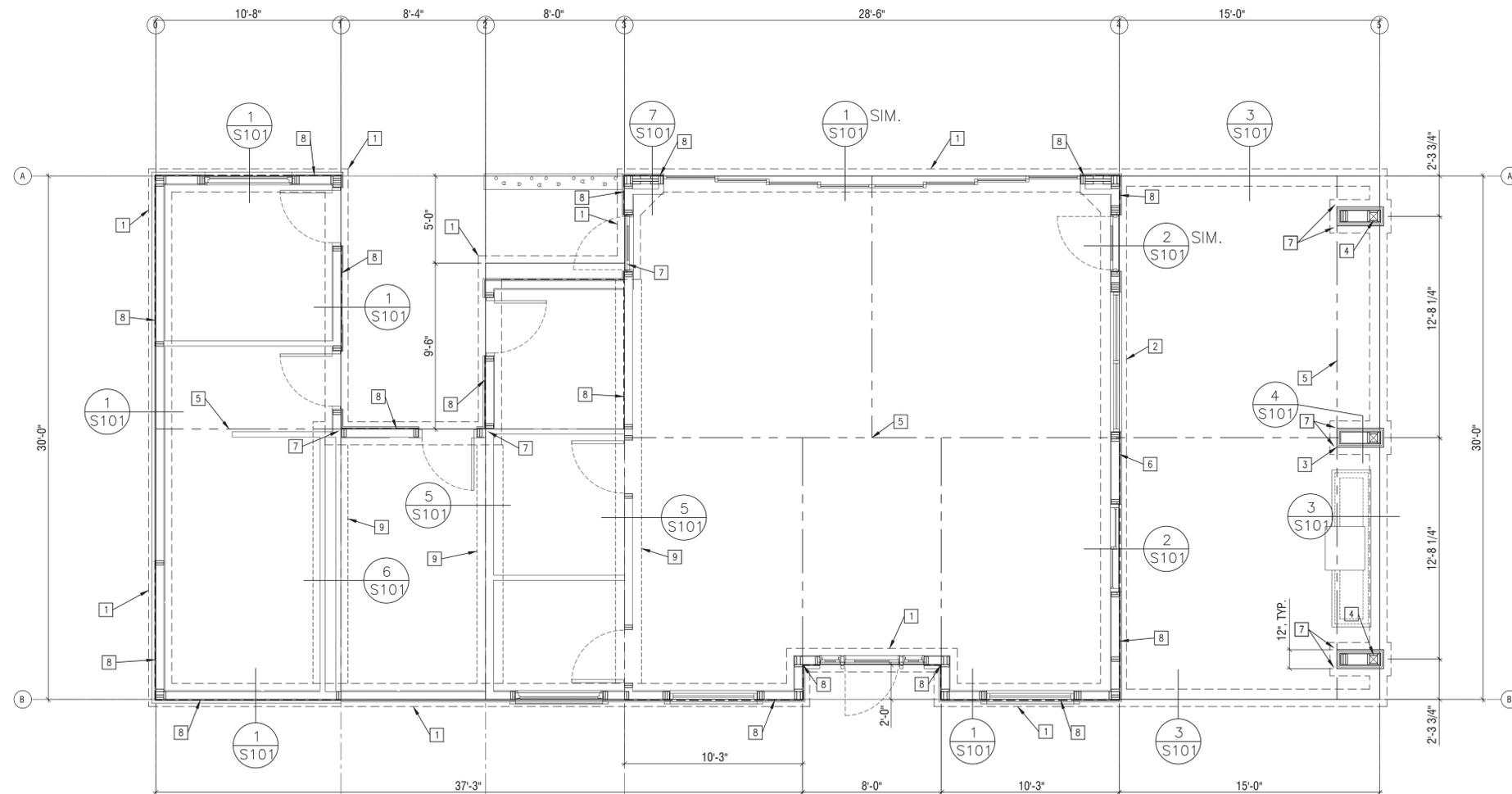
FASTEN THIS SHEAR WALL'S SHEATHING PANELS TO SUPPORTING FRAMING w/ 8d NAILS @ 4" O.C. ALONG PANEL EDGES AND @ 8" O.C. OTHERWISE.

GENERAL WALL FRAMING NOTES:

1. ALL FRAMING TO BE LEFT EXPOSED OR IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED SOUTHERN PINE #1, OR BETTER.
2. ALL INTERIOR WOOD FRAMING MEMBERS SHALL BE #2 (FOR HORIZ) OR STUD (FOR VERT) GRADE KILN DRIED SOUTHERN PINE, OR BETTER, UNO. FRAMING SHALL BE CLOSELY FITTED, ACCURATELY SET TO REQUIRED LINES AND HEIGHTS AND SECURELY FASTENED IN PLACE. PROVIDE SOLID BLOCKING AT HORIZONTAL JOINTS OF PANEL EDGES IN SHEAR WALLS. ALL CONNECTIONS IN FRAMING TO BE FASTENED IN ACCORDANCE WITH THE "RECOMMENDED FASTENING SCHEDULE" IN TABLE 2304.9.1 OF THE INTERNATIONAL BUILDING CODE. SEE ARCH'L DRAWINGS FOR BLOCKING REQUIRED AT WALLS FOR ATTACHMENT OF MISCELLANEOUS ITEMS LIKE HANDRAILS, GRAB BARS, FURNACE SHELVES, ETC.
3. BEAMS & COLUMNS THAT ARE BUILT-UP w/ MULTIPLE MEMBERS MUST BE ATTACHED BY GLUE & 2 ROWS OF 16d NAILS AT 12" O.C. FOR EACH PIECE
4. CONTRACTOR SHOULD PLACE EARLY ORDERS FOR SIMPSON OR APPROVED EQUIVALENT PRODUCTS. COSTS FOR REMEDIAL DESIGNS DUE TO UN-APPROVED ALTERNATE MATERIALS/CONNECTORS WILL BE BORNE BY CONTRACTOR.
5. SHEATH ALL INDICATED WALL STUD FACES AT SHEAR WALLS WITH 15/32", MIN, APA RATED (32/16) EXT OR EXP1 PANELS. NAIL w/ 8d @ 6" O.C. AT PANEL EDGES ON SUPPORTS AND DOUBLE THAT SPACING ON OTHER/INTERMEDIATE SUPPORTS, EXCEPT WHERE DETAILED OR NOTED OTHERWISE. BLOCK ALL PANEL EDGES NOT SUPPORTED BY STUDS. PROVIDE 2 - 2X6 STUDS (MIN.) AT EACH END OF EACH SHEATHED/SHEAR WALL.
6. SEE SHEET S200 FOR BUILT UP COLUMNS TO BE PROVIDED IN WALL FRAMING UNDER BEAMS AND HEADERS ABOVE, TYPICAL UNLESS NOTED OTHERWISE.

GENERAL FOUNDATION NOTES:

1. CONCRETE SLAB-ON-GRADE TO BE 4", MIN, THICK REINFORCED w/ WWF 6X6- W2.1XW2.1 AT MID-DEPTH. ALL INTERIOR FLOOR SLABS TO BE UNDERLAIN BY 10 MIL, MIN, VAPOR BARRIER AND 4", MIN, CRUSHED STONE BASE COURSE OVER COMPACTED NATIVE SOIL OR STRUCTURAL FILL ADEQUATE FOR ALLOWABLE NET BEARING STRENGTH OF 1500 PSF.
2. SEE ARCHITECTURAL DRAWINGS FOR BUILDING DIMENSIONS AND TO VERIFY DIMENSIONS SHOWN (WHICH ARE TO OUTSIDE FACE OF STUD OR 'STOREFRONT' WALL OR COLUMN CENTERLINE).
3. SEE DETAILS ON SHEET S001 FOR CRACK CONTROL JOINTS TO BE SAWN OR FORMED (AT CONTRACTOR'S OPTION) INTO SLAB-ON-GRADE WHERE SHOWN



1 FOUNDATION AND WALL PLAN
SCALE = 1/4" = 1'-0"



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OSAGE CLUBHOUSE

2025 SW M150 HIGHWAY
LEES SUMMIT, MISSOURI

Foundation and Wall Framing Plan and Notes

SEAL (DANIEL J. PACKARD, P.E., d.d.a.
PACKARD ENGINEERING)



JULY 31, 2020

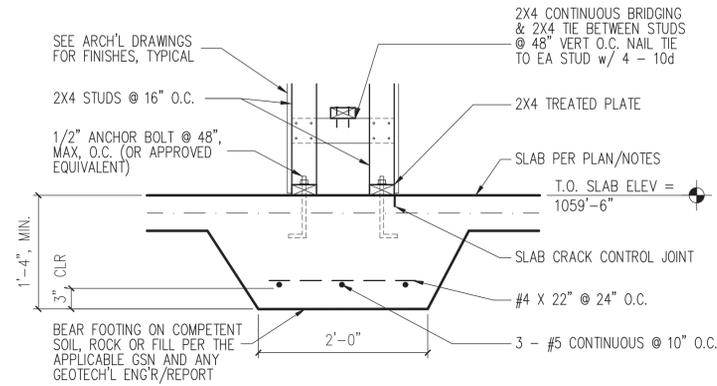
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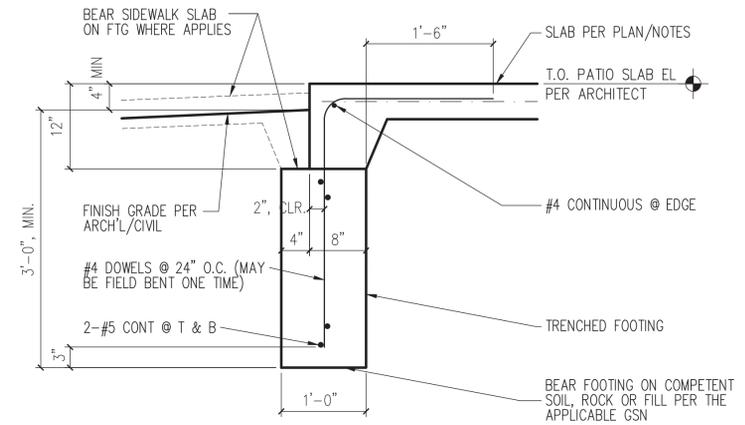
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S100



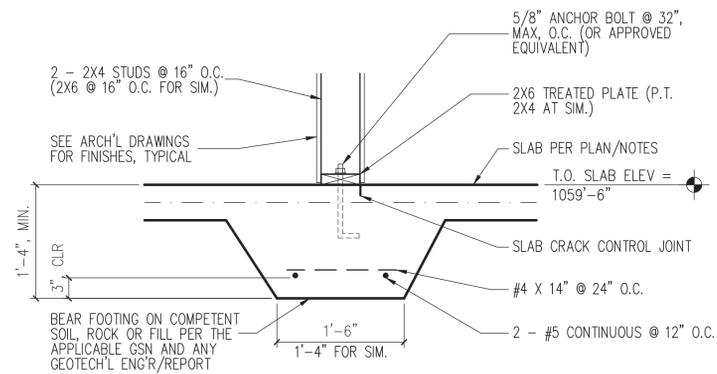
6 THICKENED SLAB 2-WALL FOUNDATION SECTION

SCALE = NONE



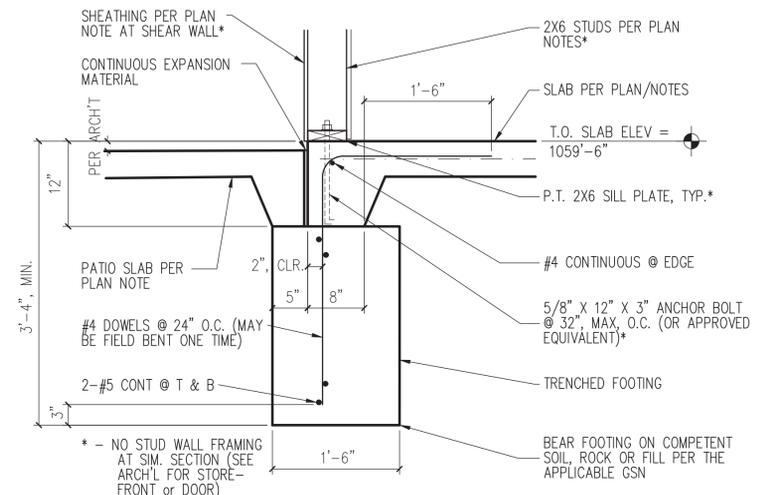
3 PATIO SLAB EDGE FOUNDATION SECTION

SCALE = NONE



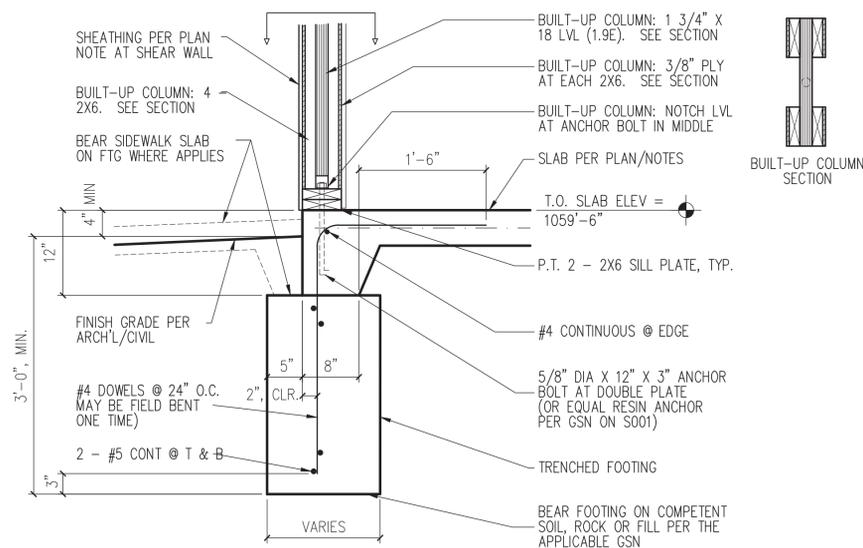
5 THICKENED SLAB WALL FOUNDATION SECTION

SCALE = NONE



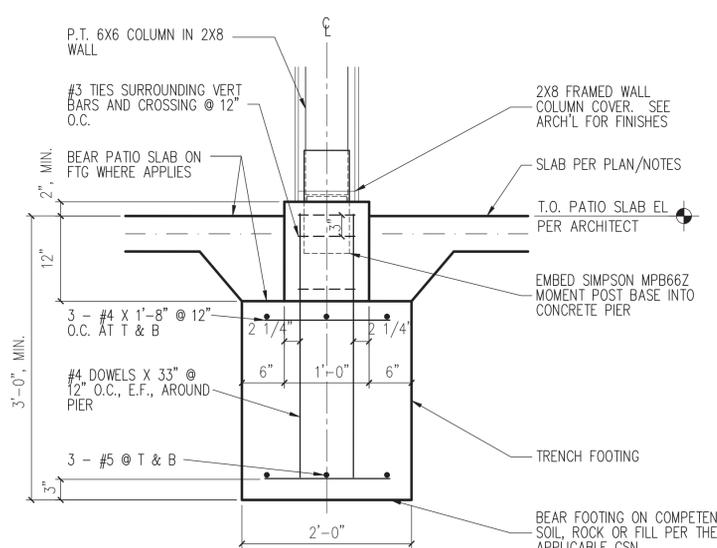
2 EXT'R WALL AT PATIO FOUNDATION SECTION

SCALE = NONE



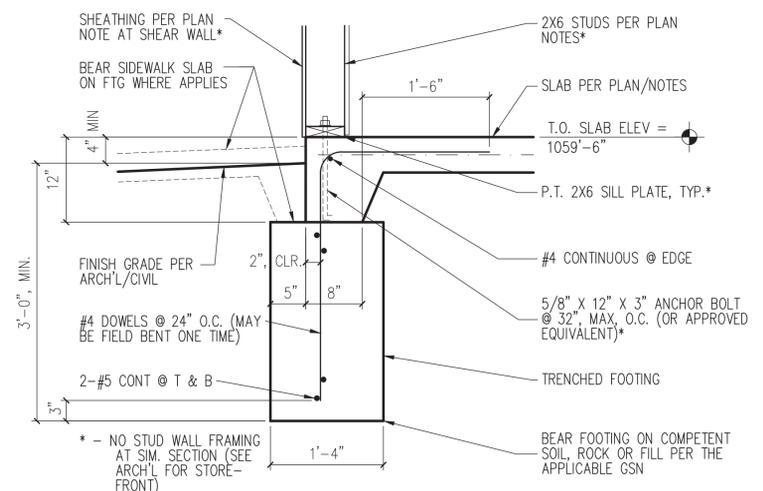
7 SHEAR FRAME COLUMN FOUNDATION SECTION

SCALE = NONE



4 PATIO TIMBER COLUMN FOUNDATION SECTION

SCALE = NONE



1 EXTERIOR WALL FOUNDATION SECTION

SCALE = NONE

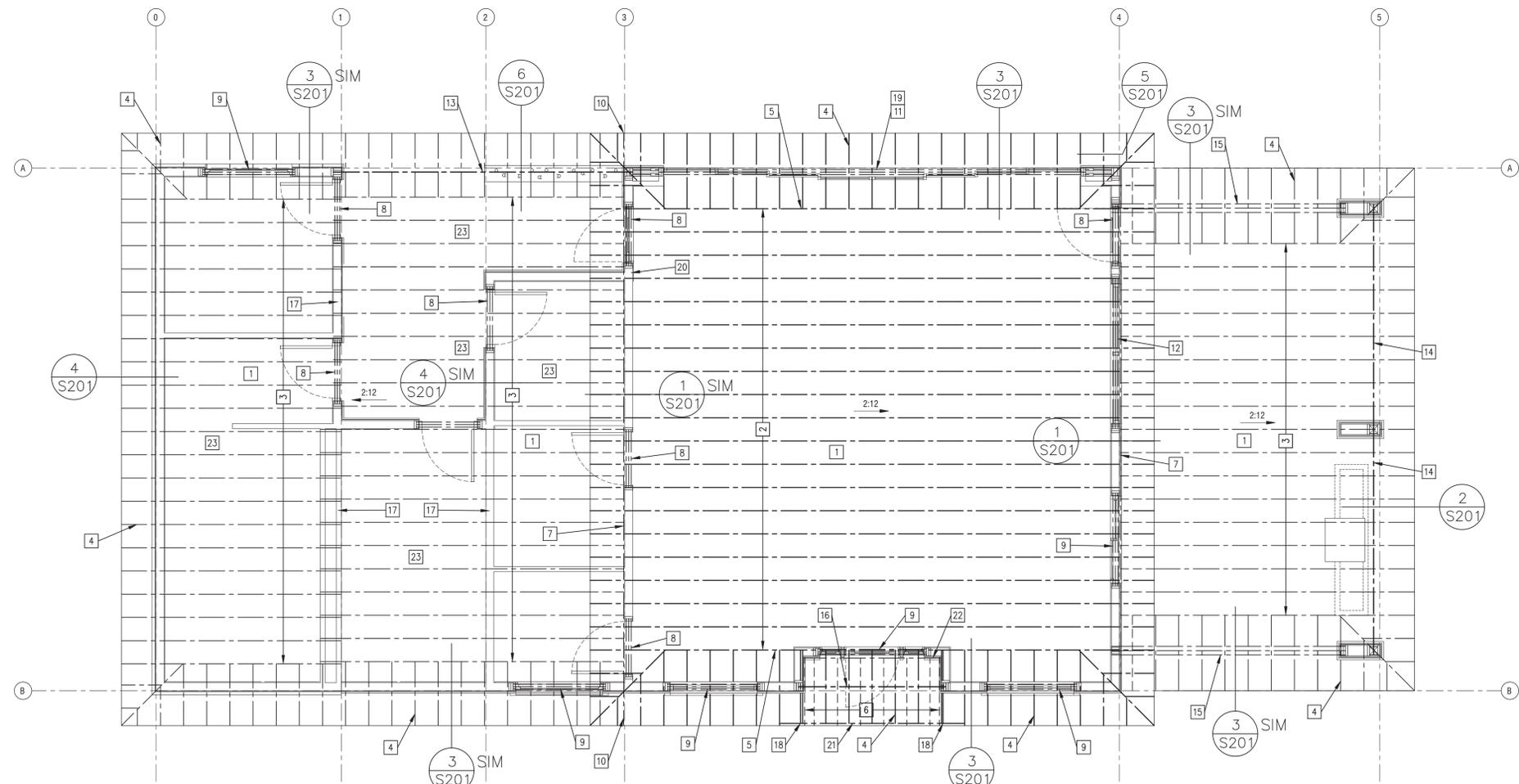
NO.	REVISION	DATE

PLAN KEY NOTES:

- 1 TYPICAL ROOF DECKING = 15/32", MIN, APA RATED (32/16) EXT, OR EXP 1, SHEATHING. CLIP OR BLOCK ALL UNSUPPORTED PANEL EDGES. NAIL w/ 8d @ 6" O.C. AT PANEL EDGES ON SUPPORTS AND @ 12" O.C. ON INTERMEDIATE SUPPORTS.
- 2 14" PRE-ENGINEERED WOOD I-JOIST @ 16" O.C. AT ROOF OVER GREAT ROOM. ALIGN TO BEAR DIRECTLY OVER STUD(S) AT EXTERIOR FRAMED WALLS.
- 3 2X10 RAFTERS @ 16" (+/-) O.C., TYPICAL WHERE SHOWN THUS (UNLESS NOTED OTHERWISE). ALIGN TO BEAR DIRECTLY OVER STUD(S) AT EXTERIOR FRAMED WALLS, TYPICAL.
- 4 2X10 'OUTRIGGER' FRAMING @ 16" O.C. TO BE USED AT MONOSLOPE SIDE OVERHANG FRAMING, TYPICAL.
- 5 FASTEN CONTINUOUS SOLID NAILER TO EXTERIOR SIDE OF WOOD I-JOIST WEB FOR FASTENING OF 'OUTRIGGER' FRAMING, TYPICAL.
- 6 2X4 'CANOPY' FRAMING @ 16" (MAX) O.C. CANTILEVER OVER 'CANOPY' BEAM AT ENTRY ALCOVE. FASTEN EACH TO BEAM w/ SIMPSON H2.5A.
- 7 2X10 LEDGER w/ LEDGERLOKS INTO STUDS @ 16" O.C. AT LOWER ROOF CONNECTION TO TALLER EXTERIOR WALL. FACE HANG RAFTERS FROM LEDGER w/ SIMPSON LUS210 AT EACH.
- 8 HEADER = 3 - 2X8 (MIN), TYPICAL UNLESS NOTED OTHERWISE. BEAR EACH END IN WALL ON 1 - 2X6 JACK STUD (WITH 1 - 2X6 KING STUD). KING STUDS TO BE FULL HEIGHT OF WALL.
- 9 HEADER = 3 - 2X10. BEAR EACH END IN WALL ON 1 - 2X6 JACK STUD (WITH 2 - 2X6 KING STUDS). KING STUDS TO BE FULL HEIGHT OF WALL.
- 10 EXTEND END OF 2X10 LEDGER TO LOWER OVERHANG EDGE HERE. FASTEN 2X10 LEDGER TO WALL CORNER STUDS w/ 3 - LEDGERLOKS
- 11 HEADER = 3 - 1 3/4"x14" LVL (1.9E). BUILD EACH END INTO 2'-3" SHEAR FRAME COLUMN PER DETAIL.
- 12 HEADER = 3 - 2X12. BEAR EACH END IN WALL ON 2 - 2X6 JACK STUDS (WITH 2 - 2X6 KING STUDS). KING STUDS TO BE FULL HEIGHT OF WALL.
- 13 P.T. 3 - 2X12 w/ 2 - 1/2" PLYS BEAM. BEAR EACH END IN WALL ON 3 - 2X6 (MIN.) BUILT-UP STUD COLUMN. ALSO PROVIDE 2 - 2X6 FULL HEIGHT STUDS ALONGSIDE SOUTH FACE OF BEAM AT EACH BEARING (GLUE AND FACE-NAIL LAPPING 2X6 TO BEAM w/ 16d @ 2" O.C., EACH WAY).
- 14 P.T. 3 - 2X12 w/ 2 - 1/2" PLYS BEAM. BEAR EACH END ON TREATED 6X6 COLUMN w/ SIMPSON AC6 CAP. ALSO PROVIDE A 2X8 FULL HEIGHT STUD ALONGSIDE EAST AND WEST FACES OF COLUMN AND BEAM AT EACH BEARING (GLUE AND FACE-NAIL EACH LAPPING 2X8 TO COLUMN AND EACH BEAM w/ 16d @ 4" O.C.).
- 15 3 - 2X10 HEADER OVER PATIO END OPENING. BEAR AT EAST ON 2 - 2X8 JACK STUDS (w/ 1 - 2X8 KING STUD). BEAR AT WEST IN WALL ON 3 - 2X6 (MIN.) STUDS.
- 16 3 - 2X6 w/ 2 - 1/2" PLYS 'CANOPY' BEAM OVER ENTRY ALCOVE. BEAR ON 2 - 2X6, MIN., IN WALL CORNER AT EACH END. PROVIDE 2 - KING STUDS AT EACH END ALSO.
- 17 PROVIDE SOLID BLOCKING BETWEEN JOISTS OVER THIS BEARING WALL, TYPICAL.
- 18 DOUBLE 2X10 ROOF 'OUTRIGGER' OVER EACH SIDE WALL OF ENTRY ALCOVE AND FASTEN TO DOUBLED 2X10 RIM w/ INVERTED SIMPSON LUS210-2.
- 19 HEADERS ABOVE STOREFRONT WINDOWS = 3 - 2X8 (MIN). BEAR EACH END IN WALL ON 1 - 2X6 JACK STUD (WITH 1 - 2X6 KING STUD). KING STUDS TO BE FULL HEIGHT OF WALL ABOVE MULTI-DOOR LVL HEADER.
- 20 PROVIDE HEADERS OVER CLERESTORY WINDOWS AT THIS WALL (NOT SHOWN) PER KEY NOTE 9 ABOVE.
- 21 DOUBLE THE HIGH ROOF 2X10 RIM X 10'-6 1/2" ACROSS/OVER THE ENTRY ALCOVE.
- 22 2X10 LEDGER w/ LEDGERLOKS INTO STUDS @ 16" O.C. AT CANOPY ROOF CONNECTION TO TALLER EXTERIOR WALL. FACE HANG RAFTERS FROM LEDGER w/ SIMPSON LUS24 AT EACH.
- 23 PROVIDE CEILING JOISTS BELOW @ 16" O.C. USING 2X4s AT SPAN UP TO 9'-0"; 2X6s AT SPAN UP TO 14'-0" AND 2X8s AT SPAN UP TO 17'-6". SEE ARCH'L DRAWINGS FOR CEILINGS.

GENERAL ROOF FRAMING NOTES:

1. WOOD 2X FRAMING AT PATIO ROOF, AND ANY TO BE LEFT EXPOSED OTHERWISE, SHALL BE PRESSURE TREATED SOUTHERN PINE #1, OR BETTER.
2. INTERIOR WOOD FRAMING MEMBERS SHALL BE #2 KILN DRIED SOUTHERN PINE OR BETTER, UNO. FRAMING SHALL BE CLOSELY FITTED, ACCURATELY SET TO REQUIRED LINES AND HEIGHTS AND SECURELY FASTENED IN PLACE. PROVIDE SOLID BLOCKING AT ALL JOINTS IN WALL SHEATHING MATERIALS. UNSUPPORTED ROOF DECKING JOINTS MUST BE CLIPPED IF NOT BLOCKED. ALL CONNECTIONS IN FRAMING TO BE FASTENED IN ACCORDANCE WITH THE "RECOMMENDED FASTENING SCHEDULE" IN TABLE 2304.9.1 OF THE INTERNATIONAL BUILDING CODE.
3. "LVL" = MICROLLAM (1.9E LAMINATED VENEER LUMBER); "LSL" = TIMBERSTRAND (1.55E LAMINATED STRAND LUMBER) AND "PSL" = PARALLAM (2.0E PARALLEL STRAND LUMBER). ALL ARE BY ILEVEL/WEYERHAEUSER. I-JOISTS MAY BE PER GEORGIA PACIFIC OR WEYERHAEUSER. APPROVED EQUIVALENTS MAY BE USED.
4. BEAMS & COLUMNS THAT ARE BUILT-UP w/ MULTIPLE MEMBERS MUST BE ATTACHED BY GLUE & 2 ROWS OF 16d NAILS AT 12" O.C. FOR EACH PIECE
5. CONTRACTOR SHOULD PLACE EARLY ORDERS FOR LVL, LSL, PSL, I-JOIST, SIMPSON OR APPROVED EQUIVALENT PRODUCTS. COSTS FOR REMEDIAL DESIGNS DUE TO UN-APPROVED ALTERNATE MATERIALS/CONNECTORS WILL BE BORNE BY CONTRACTOR.
6. SEE ARCHITECTURAL DRAWINGS FOR BUILDING DIMENSIONS AND TO VERIFY DIMENSIONS SHOWN (WHICH ARE TO OUTSIDE FACE OF STUD).



1 ROOF FRAMING PLAN
SCALE = 1/4" = 1'-0"



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OSAGE CLUBHOUSE
 2025 SW M150 HIGHWAY
 LEE'S SUMMIT, MISSOURI
 Roof Framing Plan and Notes

SEAL (DANIEL J. PACKARD, P.E., d.d.a. PACKARD ENGINEERING)

ISSUED: JULY 31, 2020

NO.	REVISION	DATE

DESIGNED BY DJP
 DRAWN BY DJP
 CHECKED BY DJP

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ELECTRICAL SYMBOL LEGEND

SOME SYMBOLS AND ABBREVIATIONS ON THIS LEGEND MAY NOT BE USED

CIRCUITING		POWER DEVICES		FIRE ALARM	
	HOME RUN (2#12 1#12G UNO)		DUPLEX RECEPTACLE		MANUAL PULL STATION
	INDICATES 2 PHASE, 1 N, & 1 GND CONDUCTOR		LINE THRU DEVICE INDICATES ABOVE COUNTER		CEILING SMOKE DETECTOR
	HOME RUN: INDICATES SHARED CIRCUIT		SPECIAL DUPLEX RECEPTACLE (GFCI, ISOLATED GROUND, ETC.)		DUCT SMOKE DETECTOR
	HOME RUN: INDICATES #10 CONDUCTORS ENTIRELY		QUADPLEX RECEPTACLE		HEAT DETECTOR
UTILITIES			SIMPLEX RECEPTACLE W/NEMA CONFIG AS NOTED		WATERFLOW SWITCH
	UNDERGROUND ELECTRICAL		MULTI-POLE RECEPTACLE W/NEMA CONFIG AS NOTED		TAMPER SWITCH
	OVERHEAD ELECTRICAL		CEILING MOUNTED RECEPTACLE		WALL-MOUNTED FA HORN
	TELECOMMUNICATIONS CONDUIT		RECEPTACLE/DEVICE MOUNTED IN "TOMBSTONE"		WALL-MOUNTED FA SPEAKER
	UNDERGROUND TELECOMMUNICATIONS CONDUIT		POKE-THRU WITH POWER		WALL-MOUNTED FA HORN/STROBE WITH CANDEILA RATING: 15cd UNLESS OTHERWISE NOTED ON PLANS.
LIGHTING			POKE-THRU WITH TELECOMMUNICATIONS		WALL-MOUNTED FA SPEAKER/STROBE WITH CANDEILA RATING: 15cd UNLESS OTHERWISE NOTED ON PLANS.
	GRID-MOUNTED TROFFER LIGHT FIXTURE		POKE-THRU W/POWER AND TELECOM		CEILING-MOUNTED FA STROBE WITH CANDEILA RATING: MINIMUM OF 15cd RATING.
	STRIP LIGHT FIXTURE		DIVIDED POWER POLE		CEILING-MOUNTED FA SPEAKER
	SURFACE/RECESSED LIGHT FIXTURE		CLOCK RECEPTACLE		CEILING-MOUNTED FA HORN/STROBE WITH CANDEILA RATING: MINIMUM OF 15cd RATING.
	WALL-MOUNTED LIGHT FIXTURE		PLUG MOLD / WIRE MOLD AS SPECIFIED		CEILING-MOUNTED FA SPEAKER/STROBE WITH CANDEILA RATING: MINIMUM OF 15cd RATING.
	POLE-MOUNTED LIGHT FIXTURE		JUNCTION BOX		RELAY
	EXIT LIGHT		THERMOSTAT - ELECTRIC		FIRE ALARM CONTROL PANEL
	BATTERY-OPERATED EMERGENCY LIGHT (WALL MTD)		PUSH BUTTON		FIRE ALARM ANNUNCIATOR PANEL
	BATTERY-OPERATED EMERGENCY LIGHT (CEILING MTD)		MOTOR		REMOTE ANNUNCIATOR PANEL
	WALL-MOUNTED COMBINATION EXIT LIGHT / BATTERY-OPERATED EMERGENCY LIGHT	TELEPHONE/DATA			FIRE ALARM EXTENDER CABINET
	LIGHT SWITCH - SINGLE POLE		TELEPHONE OUTLET (SINGLE-GANG BOX WITH (1) 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING)		DOOR HOLDER
	LIGHT SWITCH - 3-WAY		LINE THRU DEVICE INDICATES ABOVE COUNTER		SINGLE / MULTI-STATION 120V SMOKE ALARM
	LIGHT SWITCH - 4-WAY		DATA OUTLET (DOUBLE-GANG BOX WITH (2) 3/4" CONDUITS TO ABOVE ACCESSIBLE CEILING)		ZONE ADDRESSABLE MODULE
	LIGHT SWITCH - DIMMER		TELEPHONE/DATA OUTLET (DOUBLE-GANG BOX WITH (2) 3/4" CONDUITS TO ABOVE ACCESSIBLE CLG.)		INDIVIDUAL ADDRESSABLE MODULE
	LIGHT SWITCH - PILOT LIGHT		PHONE OUTLET WITH NUMBER OF PHONE JACKS AS INDICATED - SEE DETAILS FOR ADD'L. INFO.		KITCHEN HOOD FIRE SUPPRESSION SYSTEM PANEL
	LIGHT SWITCH - 2 POLE		DATA OUTLET WITH NUMBER OF PHONE JACKS AS INDICATED - SEE DETAILS FOR ADD'L. INFO.		KITCHEN HOOD REMOTE PULL STATION
	LIGHT SWITCH - 3-WAY DIMMER		PHONE/DATA OUTLET WITH NUMBER OF PHONE/DATA JACKS AS INDICATED - SEE DETAILS FOR ADD'L. INFO.		AREA OF RESCUE ASSISTANCE STATION
	WALL-MOUNTED MOTION SWITCH		WALL-MOUNTED WIRELESS INTERNET TRANSMITTER		AREA OF RESCUE ASSISTANCE MASTER STATION
	CEILING-MOUNTED MOTION SWITCH	AUDIO/VISUAL			FIXED CAMERA
	SWITCHBANK - REFER TO DETAILS		TELEVISION OUTLET (SINGLE GANG BOX WITH (1) 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING)		PAN/TILT/ZOOM CAMERA
	DIMMER BOARD		REVERSE TELEVISION OUTLET - CABLE TO HEAD END		PROXIMITY TYPE CARD READER
	REMOTE CONTROL SWITCH AS SCHEDULED		RECESSED COMBINATION AV AND POWER OUTLET COORD LOCATION OF DEVICE WITH TV MOUNT		SWIPE CARD READER
	TIMECLOCK - REFER TO PLANS / DETAILS		TEACHER'S DESK CONNECTIONS - RE: DETAILS		ELECTRIC STRIKE
EQUIPMENT			WALL SPEAKER		KEYPAD / MAG LOCK
	DISCONNECT SWITCH. RE: PLANS FOR INFORMATION.		CEILING SPEAKER		BUTTON / MAG LOCK
	MAGNETIC MOTOR STARTER		WALL SPEAKER - HORN TYPE	SECURITY	
	COMBINATION DISCONNECT SWITCH / MOTOR STARTER		CEILING SPEAKER - HORN TYPE		FIXED CAMERA
	TOGGLE-TYPE DISCONNECT. FURNISH WITH THERMAL MOTOR PROTECTION WHERE SERVING FANS/PUMPS.		CEILING SPEAKER - SUBWOOFER		PAN/TILT/ZOOM CAMERA
	SURFACE PANELBOARD		CEILING SPEAKER - SOUND SYSTEM		PROXIMITY TYPE CARD READER
	RECESSED PANELBOARD		VOLUME CONTROL		SWIPE CARD READER
	DISTRIBUTION PANELBOARD		INTERCOM CALL STATION		ELECTRIC STRIKE
	SWITCHBOARD, FEEDER/MAIN CIRCUIT BREAKER SECTION AND DISTRIBUTION SECTION.		INTERCOM HANDSET		KEYPAD / MAG LOCK
GENERAL SYMBOLS			SOUND SYSTEM AUDIO JACK		BUTTON / MAG LOCK
	INDICATES CONNECT TO EXISTING		REMOTE MICROPHONE CONTROL	ABBREVIATIONS	
	INDICATES ELEVATION		PUBLIC ADDRESS SYSTEM AMPLIFIER	A/E	ARCHITECT / ENGINEER
	EQUIPMENT TAG. REFER TO CONNECTIONS SCHEDULE FOR ELECTRICAL CONNECTIONS AND LOAD INFO FOR KITCHEN, SHOP, ETC. EQUIPMENT		INTERCOM MASTER STATION	AFF	ABOVE FINISHED FLOOR

ABBREVIATIONS

A/E	ARCHITECT / ENGINEER	ELEV	ELEVATION	MH	MANHOLE
AFF	ABOVE FINISHED FLOOR	EM	EMERGENCY FIXTURE/DEVICE	MLO	MAIN LUGS ONLY
AFG	ABOVE FINISHED GRADE	EWT	ENTERING WATER TEMPERATURE	NFA	NET FREE AREA
AG	ABOVE GRADE	EX	EXISTING ITEM	NL	NIGHT LIGHT
AHJ	AUTHORITY HAVING JURISDICTION	FFA	FROM FLOOR ABOVE	OA	OUTSIDE AIR
AHU	AIR HANDLING UNIT	FFB	FROM FLOOR BELOW	ORD	OVERFLOW ROOF DRAIN
ARCH	ARCHITECT	FFCO	FINISHED FLOOR CLEAN OUT	P/C	PLUMBING CONTRACTOR
BFP	BACKFLOW PREVENTER	FFCQ	FLUSH GRADE CLEAN OUT	PSI	POUNDS PER SQUARE INCH
BG	BELOW GRADE	FL	FLOOR LINE	PVC	POLYVINYLCHLORIDE
BLDG	BUILDING	FLR	FLOOR	RA	RETURN AIR
BMS	BUILDING MANAGEMENT SYSTEM	FP	FIRE PROTECTION	RE/REF	REFER / REFERENCE
C	CANDELA	FFM	FEET PER MINUTE	RF	REFLECT FAN
CD	CANDELA	FFWD	FLUSH WALL CLEAN OUT	RL	RELOCATED ITEM
CD	COLD DECK	G	GROUND / GANG	RPZ	REDUCED PRESSURE ZONE
CLG	COOLING	G/C	GENERAL CONTRACTOR	RR	RESTROOM
CM	COORDINATE MOUNTING HEIGHT	GFI	GROUND FAULT CIRCUIT INTERRUPTER	SA	SUPPLY AIR
CO	CLEAN OUT	GFP	GFI-PROTECTED DEVICE	SPD	SURGE PROTECTIVE DEVICE
CTE	CONNECT TO EXISTING	GPM	GALLONS PER MINUTE	ST	SHAWN TRIP
DCVA	DOUBLE CHECK VALVE ASSEMBLY	HD	HOT DECK	TA	TRANSFER AIR
DCW	DOMESTIC COLD WATER	HG	HEAD	TA	TO FLOOR ABOVE
DDC	DIRECT DIGITAL CONTROLS	IG	ISOLATED GROUND	TB	TO FLOOR BELOW
DF	DRINKING FOUNTAIN	JB	JUNCTION BOX	TP	TAMPERPROOF
DHW	DOMESTIC HOT WATER	LED	LIGHT EMITTING DIODE	TYP	TYPICAL
DHWR	DOMESTIC HOT WATER RETURN	LWT	LEAVING WATER TEMPERATURE	UNO	UNLESS NOTED OTHERWISE
DA	DIAMETER	M/C	MECHANICAL CONTRACTOR	VRF	VARIABLE REFRIGERANT FLOW
DN	DOWN	MA	MIXED AIR	VTR	VENT THROUGH ROOF
E/C	ELECTRICAL CONTRACTOR	MAU	MAKE UP AIR UNIT	WCO	WALL CLEANOUT
EA	EXHAUST AIR	MCB	MAIN CIRCUIT BREAKER	WC	WIRE GUARD
EDF	ELECTRIC DRINKING FOUNTAIN	MEDC	MECHANICAL	WP	WEATHERPROOF

FIRE SEALING NOTES

- COORDINATE CONSTRUCTION OF OPENINGS AND PENETRATING ITEMS TO ENSURE THAT THROUGH-PENETRATION FIRESTOP SYSTEMS ARE INSTALLED ACCORDING TO SPECIFIED AND APPLICABLE UL REQUIREMENTS.
- COORDINATE SIZING OF SLEEVES, OPENINGS, CORE-DRILLED HOLES, OR CUT OPENINGS TO ACCOMMODATE THROUGH-PENETRATION FIRESTOP SYSTEMS.
- DO NOT COVER UP THROUGH-PENETRATION FIRESTOP SYSTEM INSTALLATIONS UNTIL EXAMINED BY INSPECTOR, IF REQUIRED BY AUTHORITIES HAVING JURISDICTION.
- COMPATIBILITY: PROVIDE THROUGH-PENETRATION FIRESTOP SYSTEMS THAT ARE COMPATIBLE WITH ONE ANOTHER: WITH THE SUBSTRATES FORMING OPENINGS; AND WITH THE ITEMS, IF ANY, PENETRATING THROUGH-PENETRATION FIRESTOP SYSTEMS, UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.
- PROVIDE COMPONENTS FOR EACH THROUGH-PENETRATION FIRESTOP SYSTEM THAT ARE NEEDED TO INSTALL FILL MATERIALS. USE ONLY COMPONENTS SPECIFIED BY THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURER AND APPROVED BY QUALIFIED TESTING AND INSPECTING AGENCY FOR FIRESTOP SYSTEMS INDICATED.
- PROVIDE SLEEVES THROUGH ALL FIRE-RATED WALLS AND FILL VOIDS SURROUNDING SLEEVES AND INTERIOR TO SLEEVES AROUND PIPING WITH FIRE STOP PUTTY WITH U.L. LISTED 3 HOUR RATING INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.
- FIRE SEAL ALL PIPING, CONDUIT, CABLE, ETC PENETRATIONS ROUTED THROUGH FIRE RATED WALLS.
- PROVIDE FIRE RATED ENCLOSURES OR WRAPS ON LIGHT FIXTURES AND OTHER ITEMS PENETRATING FIRE RATED CEILING, FLOOR/CEILING/ CEILING/ROOF ASSEMBLIES TO MAINTAIN UL LISTING FOR CONSTRUCTION.

MECHANICAL AND PLUMBING SYMBOL LEGEND

SOME SYMBOLS AND ABBREVIATIONS ON THIS LEGEND MAY NOT BE USED

SHEET METAL		PLUMBING PIPING	
	HIGH EFFICIENCY ROUND DUCT TAKEOFF (WITH & WITHOUT MANUAL DAMPER)		DOMESTIC COLD WATER
	SPIN-IN ROUND DUCT TAKEOFF (WITH & WITHOUT MANUAL DAMPER)		DOMESTIC HOT WATER
	CONICAL BELLMOUTH ROUND TAKEOFF		RECIRCULATING DOMESTIC HOT WATER
	ROUND DUCT RUNOUT WITH FLEX DUCT		WASTE ABOVE GRADE OR FLOOR
	DUCTWORK ELBOW (WITH & WITHOUT TURNING VANES)		WASTE BELOW GRADE OR FLOOR
	FD-FIRE DAMPER FS-FIRE/SMOKE DAMPER SD-SMOKE DAMPER BD-BACKDRAFT DAMPER (GRAVITY)		PLUMBING VENT
	AUTOMATIC MOTORIZED DAMPER		WATER SERVICE
	SUPPLY DIFFUSER AND DIFFUSER CALLOUT (NECK SIZE, TYPE AND CFM)		GAS (NATURAL)
	RETURN GRILLE OR EXHAUST REGISTER	PIPING SPECIALTIES	
	SUPPLY AIR FLOW INDICATOR		PRESS/ TEMP GAUGE WITH COOK
	RETURN AND EXHAUST AIR FLOW INDICATOR		THERMOMETER
	THERMOSTAT		PRESSURE REDUCING VALVE
	TEMPERATURE SENSOR		RELIEF VALVE
	HUMIDISTAT		WATER HAMMER ARRESTOR
	CONTROL WIRING	PLUMBING FIXTURES/EQUIPMENT	
PLUMBING PIPING			1/2" HOSE BIBB
	1/2" DOMESTIC COLD WATER		1/2" WALL HYDRANT
	1/2" DOMESTIC HOT WATER		CLEAN OUT
	RECIRCULATING DOMESTIC HOT WATER		REDUCED PRESSURE BACKFLOW PREVENTER
	WASTE ABOVE GRADE OR FLOOR		DOUBLE CHECK BACKFLOW PREVENTER
	WASTE BELOW GRADE OR FLOOR		PLUMBING FIXTURE AND CALLOUT
	PLUMBING VENT		FD: FLOOR DRAIN, AD: AREA DRAIN, FS: FLOOR SINK, RD: ROOF DRAIN, ORD: OVERFLOW ROOF DRAIN
	WATER SERVICE	MECHANICAL PIPING	
	GAS (NATURAL)		REFRIGERANT LIQUID
PIPING SPECIALTIES			REFRIGERANT SUCTION
	PRESS/ TEMP GAUGE WITH COOK		DRAIN (CONDENSATE)
	THERMOMETER	GENERAL NOTES	
	PRESSURE REDUCING VALVE	1. SOME ROOM NAMES MAY NOT BE SHOWN FOR PURPOSE OF CLARIFYING PLAN. REFER TO ARCHITECTURAL PLANS FOR REFERENCE TO ROOM NAMES NOT SHOWN.	
	RELIEF VALVE	2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND KEEP AT THE JOB SITE, AN UP TO DATE SET OF RECORD DRAWINGS SHOWING ALL CHANGES FROM THE ORIGINAL PLANS. THE CONTRACTOR SHALL DELIVER THE "RECORD DRAWINGS" TO THE ENGINEER AT THE CONCLUSION OF THE PROJECT ELECTRONICALLY.	
	WATER HAMMER ARRESTOR	3. THESE DRAWINGS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS (NEW AND EXISTING), DIMENSIONS, AND CLEARANCES PRIOR TO THE COMMENCEMENT OF WORK AND SHALL INCLUDE ALL COSTS, EQUIPMENT, MATERIAL, ACCESSORIES, ETC. REQUIRED FOR A FULLY COMPLETE, FUNCTIONAL AND CODE COMPLIANT INSTALLATION.	
MECHANICAL PIPING		4. FINAL LOCATIONS OF ALL DEVICES, LIGHT FIXTURES, EQUIPMENT ETC SHALL BE INDICATED ON THE ARCHITECTURAL DRAWINGS. ALL DIMENSIONAL INFORMATION SHALL BE OBTAINED FROM ARCHITECTURAL PLANS. NO DIMENSIONAL INFORMATION SHALL BE OBTAINED FROM MEP DRAWINGS.	
	REFRIGERANT LIQUID	5. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS, APPROVALS, LICENSES, ETC. AS NEEDED FOR THE COMPLETE INSTALLATION AND PROJECT. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR ALL FEES AND DATA NEEDED FOR THIS.	
	REFRIGERANT SUCTION	6. WHEREVER WORK INTERCONNECTS WITH WORK OF OTHER TRADES, COORDINATE WITH THOSE TRADES TO ENSURE THAT ALL SUBCONTRACTORS HAVE THE INFORMATION NECESSARY SO THAT THEY MAY PROPERLY INSTALL ALL CONNECTIONS AND EQUIPMENT. IDENTIFY ALL ITEMS OF WORK THAT REQUIRE ACCESS SO THAT THE CEILING TRADE WILL KNOW WHERE TO INSTALL ACCESS DOORS AND PANELS.	
	DRAIN (CONDENSATE)	7. COORDINATE PROJECT AND SCHEDULE WORK WITH OTHER TRADES IN ACCORDANCE WITH THE CONSTRUCTION SEQUENCE.	

GEN. MECHANICAL NOTES

- COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED VERSION OF THE INTERNATIONAL MECHANICAL CODE, LOCAL AND STATE CODES, AND REQUIREMENTS OF THE AHJ.
- ANY POWER FOR CONTROL SYSTEMS TO BE PROVIDED BY E/C IS INDICATED ON ELECTRICAL PLANS. ANY ADDITIONAL LINE VOLTAGE OR LOW VOLTAGE POWER REQUIRED BY THE M/C OR SUBCONTRACTORS TO HAVE A FULLY FUNCTIONING SYSTEM SHALL BE PROVIDED BY THE M/C CONTRACTOR OR SUBS.
- ALL EQUIPMENT SHALL BE ADEQUATELY AND PROPERLY SUPPORTED AND FASTENED FROM STRUCTURE.
- ALL EQUIPMENT AND ACCESSORIES INSTALLED IN CONCEALED SPACES REQUIRING ACCESS SHALL BE PROVIDED WITH ACCESS DOORS MEETING ANY FIRE REQUIREMENTS OF THE WALL/CEILING THEY ARE INSTALLED.
- EACH AIR HANDLING UNIT OVER 2000CFM SHALL BE PROVIDED WITH A SMOKE DETECTOR TO SHUT DOWN THE UNIT PER IMC 606 AS REQUIRED BY AHJ. COORDINATE WITH OTHER TRADES.
- START UP AND ADJUST ALL EQUIPMENT AND VERIFY ALL MECHANICAL SYSTEMS IN OPERATE IN ACCORDANCE WITH THEIR INTENDED PURPOSES. SUBMIT BALANCE AND START UP REPORTS TO THE A/E. REFER TO SPECIFICATIONS FOR ANY ADDITIONAL REQUIREMENTS.

COORDINATION NOTES

- COORDINATE REQUIREMENTS FOR INSTALLATION OF SYSTEMS AND EQUIPMENT WITH ALL OTHER TRADES.
- THE CONTRACTOR SHALL COORDINATE THE ROUTING AND PATH OF ALL SYSTEMS, CONDUITS, PIPES, DUCTS, ETC WITH THE POSITION AND LAYOUT OF THE STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING NECESSARY OFFSETS, TURNS, RISERS AND DRIPS FOR SYSTEMS AND COMPONENTS AS NEEDED TO INSTALL THE MEP SYSTEMS TO CLEAR STRUCTURE, CEILING, ETC AND OTHER SYSTEMS IN POTENTIAL CONFLICT WITH ROUTING.
- COORDINATE WORK WITH OTHER TRADES TO INSTALL SYSTEMS ABOVE CEILING HEIGHTS INDICATED ON ARCHITECTURAL PLANS.
- CHECK SPACE REQUIREMENTS WITH OTHER TRADES AND STRUCTURE/CONSTRUCTION TO ENSURE THAT ALL MATERIALS AND EQUIPMENT CAN BE INSTALLED IN THE SPACE ALLOTTED INCLUDING FINISHED SUSPENDED CEILING AND OTHER SPACES, CHASES, ETC WITHIN THE BUILDING. MAKE MODIFICATIONS THERETO AS REQUIRED AND APPROVED.
- TRANSMIT TO OTHER TRADES ALL INFORMATION REQUIRED FOR WORK TO BE PROVIDED UNDER THEIR RESPECTIVE SECTIONS IN AMPLIE TIME FOR INSTALLATION.
- WHEREVER WORK INTERCONNECTS WITH WORK OF OTHER TRADES, COORDINATE WITH THOSE TRADES TO ENSURE THAT ALL SUBCONTRACTORS HAVE THE INFORMATION NECESSARY SO THAT THEY MAY PROPERLY INSTALL ALL CONNECTIONS AND EQUIPMENT. IDENTIFY ALL ITEMS OF WORK THAT REQUIRE ACCESS SO THAT THE CEILING TRADE WILL KNOW WHERE TO INSTALL ACCESS DOORS AND PANELS.
- COORDINATE PROJECT AND SCHEDULE WORK WITH OTHER TRADES IN ACCORDANCE WITH THE CONSTRUCTION SEQUENCE.
- DRAWINGS SHOW THE GENERAL RUNS OF CONDUITS, PIPING AND DUCTWORK AND APPROXIMATE LOCATION OF OUTLETS. ANY SIGNIFICANT CHANGES IN LOCATION OF ITEMS NECESSARY IN ORDER TO MEET FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/ENGINEER AND RECEIVE HIS APPROVAL BEFORE SUCH ALTERATIONS ARE MADE. ALL SUCH MODIFICATIONS SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND REPAIR OF SURFACES, AREAS AND PROPERTY THAT MAY BE DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES.
- ADJUST LOCATION OF PIPING, DUCTWORK, ETC. TO PREVENT INTERFERENCES, BOTH ANTICIPATED AND UNANTICIPATED. DETERMINE THE EXACT ROUTE AND LOCATION OF EACH ITEM PRIOR TO FABRICATION. MAKE OFFSETS, TRANSITIONS AND CHANGES IN DIRECTION IN SYSTEMS AS REQUIRED TO MAINTAIN ADEQUATE CLEARANCES AND HEADROOM.
- WHEREVER THE WORK IS OF SUFFICIENT COMPLEXITY, PREPARE ADDITIONAL COORDINATION DRAWINGS AND ORGANIZE ON-SITE MEETINGS WITH ALL RELATED SUBCONTRACTORS TO COORDINATE THE WORK BETWEEN TRADES. DRAWINGS SHALL CLEARLY SHOW THE WORK AND ITS RELATION TO THE WORK OF OTHER TRADES, AND BE SUBMITTED FOR REVIEW PRIOR TO COMMENCING SHOP FABRICATION OR ERECTION IN THE FIELD.
- COORDINATE WITH LOCAL UTILITY PROVIDERS FOR THEIR REQUIREMENTS FOR SERVICE CONNECTIONS AND PROVIDE ALL NECESSARY PAYMENTS, MATERIALS, LABOR AND TESTING TO ACCOMPLISH THE WORK.
- COORDINATE THE MOUNTING OF SUSPENDED LIGHT FIXTURES UTILIZING INDIRECT LIGHT SO THAT CONDUIT, DUCTWORK, STRUCTURAL MEMBERS, ETC. ARE NOT LOCATED DIRECTLY ABOVE THE LIGHT FIXTURE. MAINTAIN A MINIMUM OF 24" CLEARANCE FROM THESE ITEMS WHENEVER POSSIBLE.

GENERAL PLUMBING NOTES

- COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED VERSION OF THE INTERNATIONAL PLUMBING CODE, LOCAL AND STATE CODES, AND REQUIREMENTS OF THE AHJ.
- NO PIPING SHALL BE INSTALLED WHERE IT WILL SUBJECT TO FREEZING TEMPERATURES. PIPING IN EXTERIOR WALLS SHALL BE INSTALLED ON THE WARM SIDE OF BUILDING INSULATION, INSULATED AND THE CHASE SHALL BE VENTILATED WITH GRILLES ALLOWING INDOOR AMBIENT CONDITIONS TO CIRCULATE THROUGH THE CHASE.
- PROVIDE CLEANOUTS IN THE FOLLOWING LOCATIONS:
 - IN ALL HORIZONTAL DRAINS (WITHIN THE BUILDING) NOT MORE THAN 100 FEET APART.
 - IN BUILDING SEWERS LOCATED NO MORE THAN 100 FEET APART MEASURED FROM THE UPSTREAM ENTRANCE OF THE CLEANOUT.
 - EACH CHANGE OF DIRECTION OF THE BUILDING DRAIN OR HORIZONTAL WASTE OR SOIL LINES GREATER THAN 45 DEGREES WHERE MORE THAN ONE CHANGE OF DIRECTION OCCURS IN A RUN OF PIPING, ONLY ONE CLEANOUT SHALL BE REQUIRED FOR EACH 40 FEET OF DEVELOPED LENGTH OF THE DRAINAGE PIPING.
 - AT THE BASE OF EACH WASTE OR SOIL STACK.
 - NEAR THE JUNCTION OF THE BUILDING DRAIN AND BUILDING SEWER.

GENERAL ELECTRICAL NOTES

- COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE, LOCAL AND STATE CODES, AND REQUIREMENTS OF THE AHJ.
- COORDINATE LOCATIONS OF RECEPTACLES, SWITCHES, ETC. WITH ARCHITECTURAL CASEWORK AND ELEVATIONS.
- REFER TO MOUNTING HEIGHTS DETAIL FOR MOUNTING HEIGHTS OF ALL DEVICES NOT INDICATED OTHERWISE.
- PROVIDE ALL EMPTY CONDUITS WITH PULL STRINGS AND BUSHED ENDS.
- CONTRACTOR SHALL CONCEAL ALL CONDUIT, FITTINGS, AND DEVICES FROM VIEW WHERE REASONABLY POSSIBLE.

SHEET INDEX

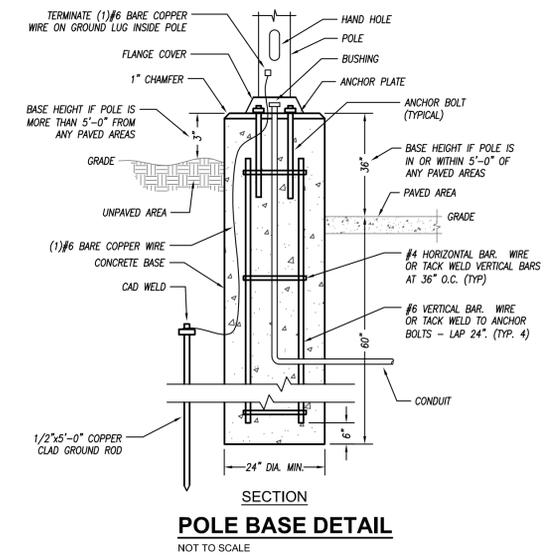
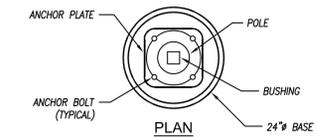
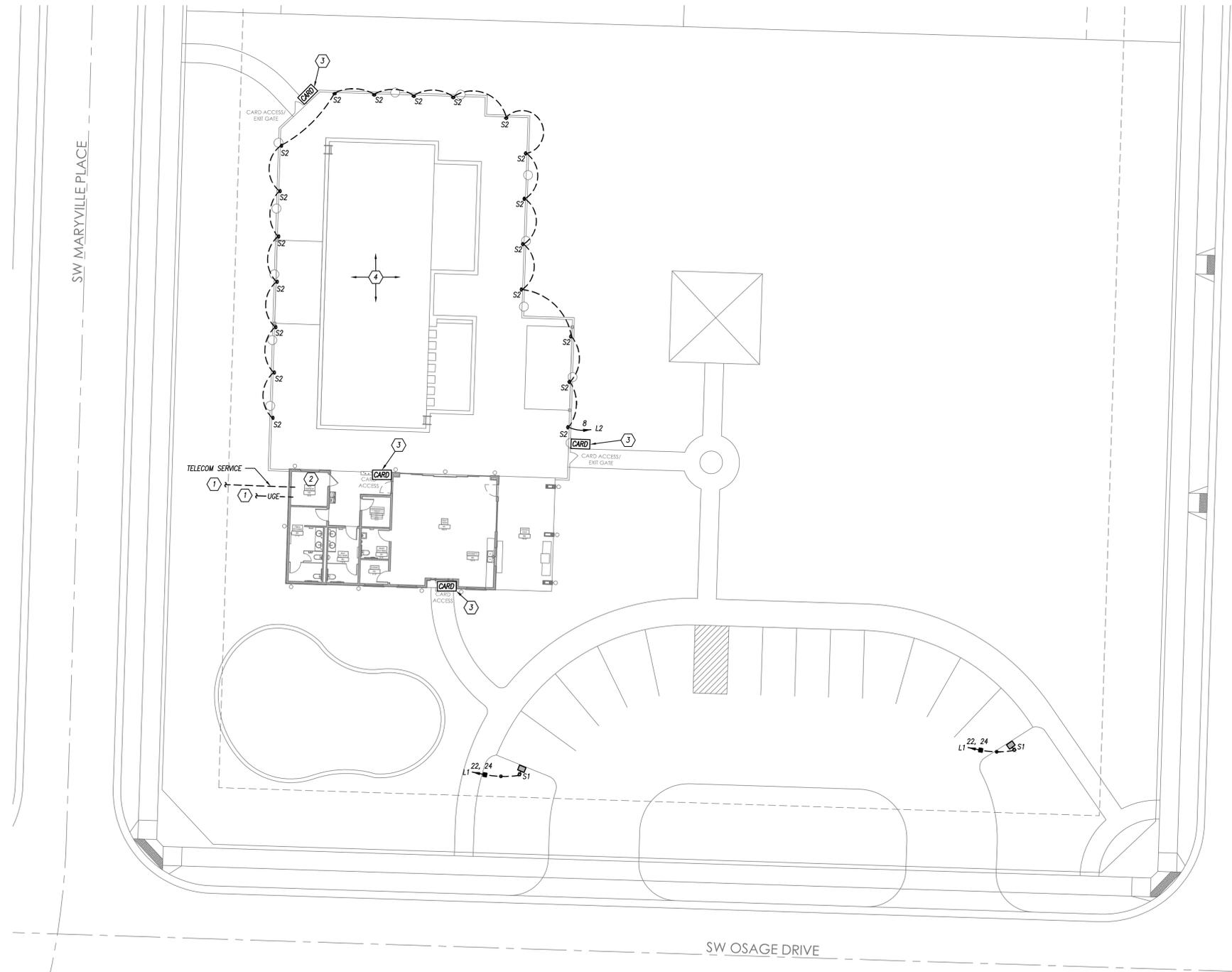
MEP001	COVER SHEET
MEP101	SITE PLAN
MEP201	MECHANICAL SPECIFICATIONS
MEP202	ELECTRICAL SPECIFICATIONS
M101	HVAC PLAN
M201	MECHANICAL SCHEDULES AND DETAILS
P101	PLUMBING PLAN
P201	PLUMBING SCHEDULES AND DETAILS

GENERAL SITE PLAN NOTES

1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. REFER TO CIVIL PLANS FOR CONTINUATION OF SERVICES BEYOND 5'-0" FROM BUILDING UNLESS OTHERWISE SHOWN.
3. REFER TO RESPECTIVE FLOOR PLANS FOR CONTINUATION OF SERVICES INSIDE BUILDING AND/OR EXACT LOCATIONS OF EQUIPMENT.
4. CONTACT UTILITY LOCATING SERVICE TO LOCATE EXACT LOCATION OF ALL EXISTING UTILITIES BELOW GRADE.

SITE PLAN KEYED NOTES

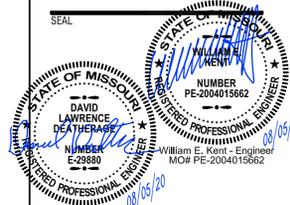
- 1 REFER TO CIVIL DRAWINGS FOR CONTINUATION.
- 2 PROVIDE CONDUIT AND CONDUCTORS TO ROUGH-IN LOCATIONS OF POOL LIGHT & DECK FIXTURES. COORDINATE EXACT REQUIREMENTS AND ROUGH-IN LOCATIONS WITH POOL DRAWINGS. (TYPICAL)
- 3 CARD READER. COORDINATE EXACT LOCATION AND ALL CONNECTION REQUIREMENTS WITH OWNER SPECIFIED SYSTEM. PROVIDE ROUGH-IN AND 1" CONDUIT BACK TO STORAGE ROOM.
- 4 REFER TO POOL DRAWINGS FOR IN-POOL LIGHTING AND BONDING REQUIREMENTS.



POLE BASE DETAIL
NOT TO SCALE

MECHANICAL/ELECTRICAL - SITE PLAN
1/16" = 1'-0"

OSAGE POOL CLUBHOUSE
2025 SW M 150 HWY
LEE'S SUMMIT, MO 64082



DATE ISSUED: August 05, 2020

NO.	REVISION	DATE

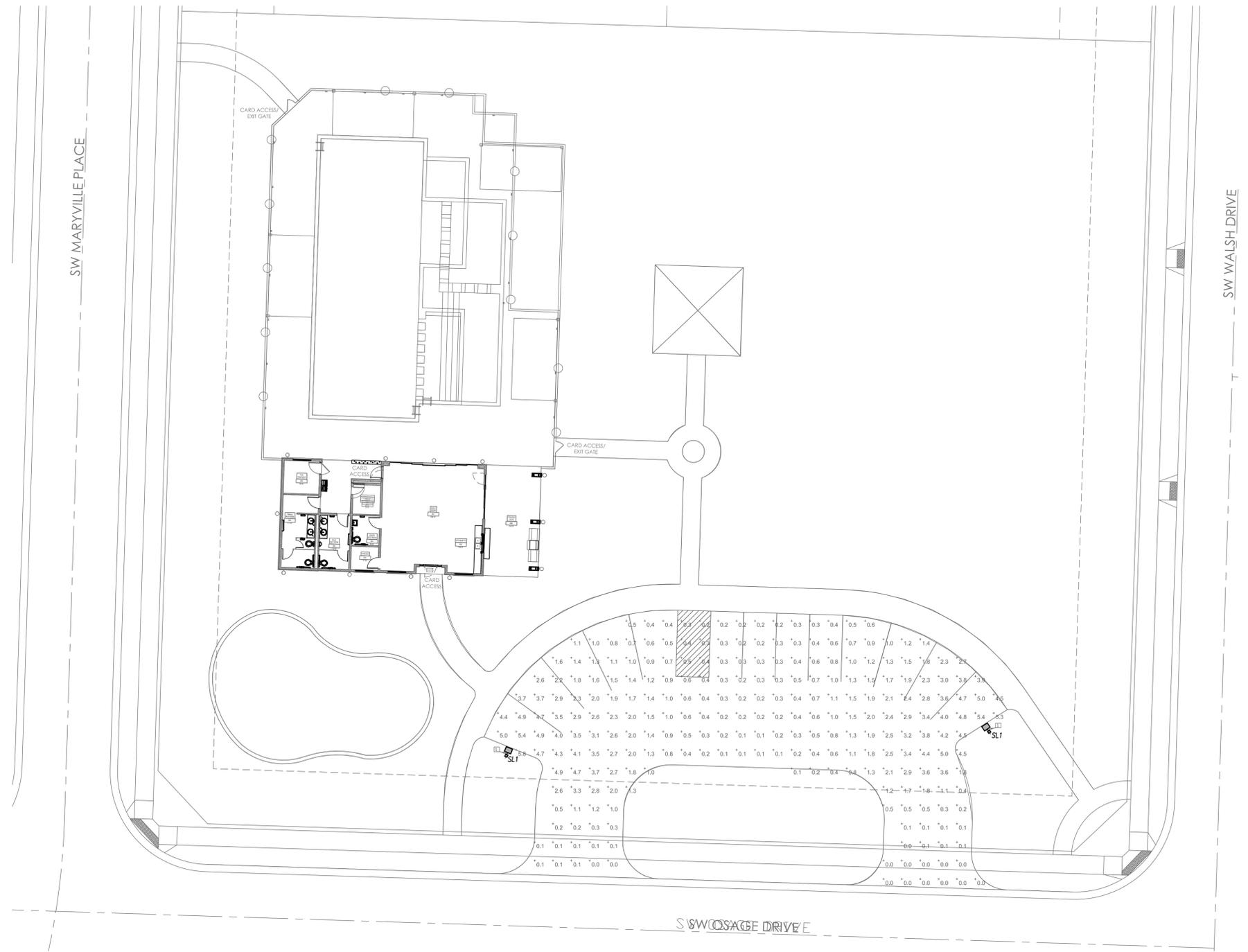
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OSAGE POOL CLUBHOUSE

2025 SW M 150 HWY
LEE'S SUMMIT, MO 64082

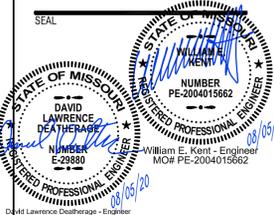


SITE PLAN - PHOTOMETRIC
1/16" = 1'-0"

DESCRIPTION	MAINTAINED LIGHTING LEVELS			UNIFORMITY	
	AVG. (F.C.)	MAX. (F.C.)	MIN. (F.C.)	MAX. / MIN.	AVG. / MIN.
PARKING LOT STATISTICS	1.3	7.0	0.0	N/A	N/A

NOTES:
1. NUMBERS INDICATE FOOTCANDLE LEVELS AT GRADE.
2. CALCULATIONS PERFORMED USING VISUAL 2.05.
3. THERE SHALL BE NO DIRECT ILLUMINATION OF RESIDENTIAL PROPERTIES ADJACENT TO THIS PROPERTY OR ACROSS PUBLIC RIGHT-OF-WAY.

LIGHT FIXTURE SCHEDULE - SITE LIGHTING				
FIXTURE TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMP NUMBER / DESCRIPTION
S1	McGraw-Edison	GALLEON LED	GLEON-AF-02-LED-E1-SL2- GALLEON LED FIXTURE. DARK BRONZE FINISH. POLE FIXTURE AT 15'-0" AFF MOUNTING HEIGHT	129W, 1,3088 LUMEN LED MODULE 4000K



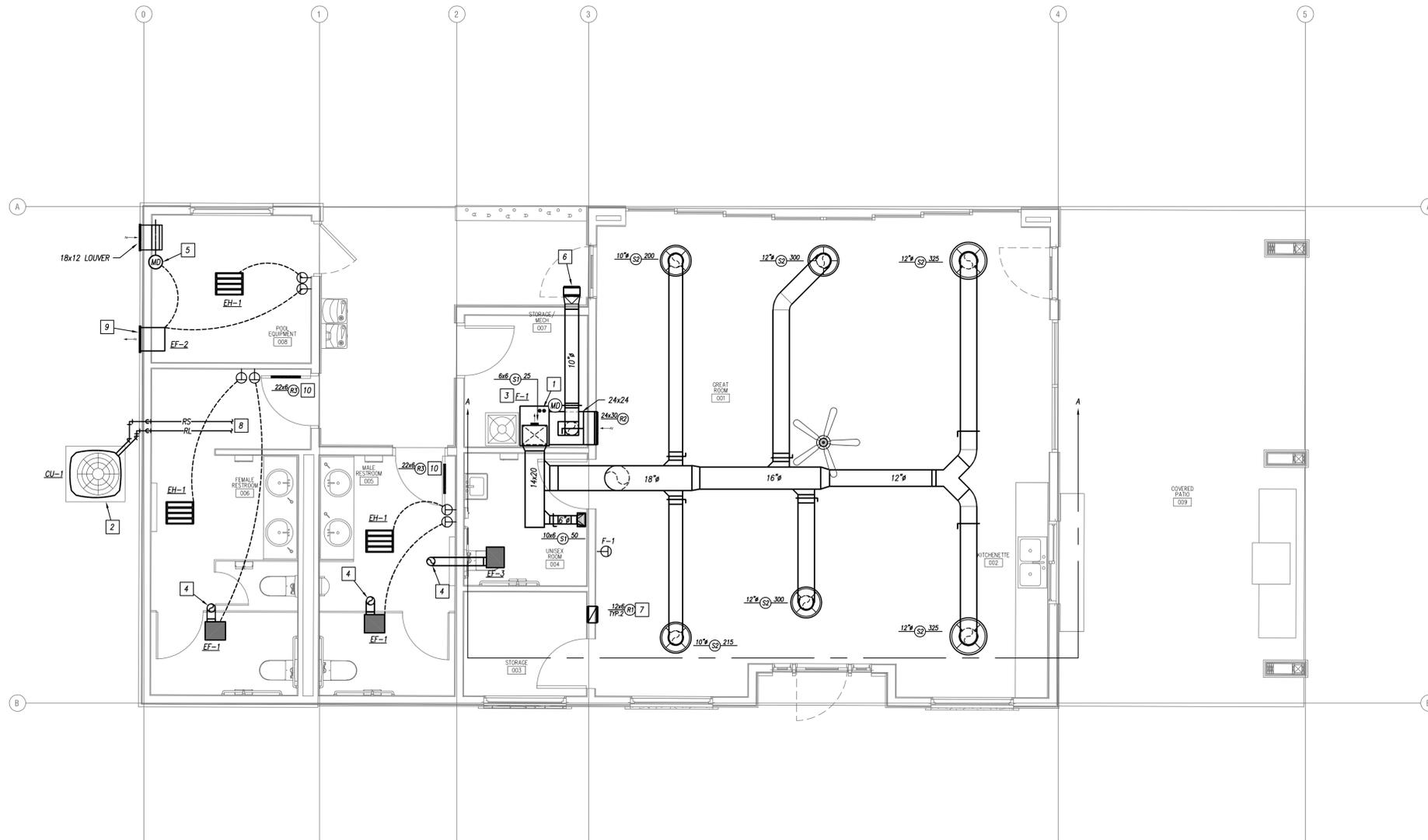
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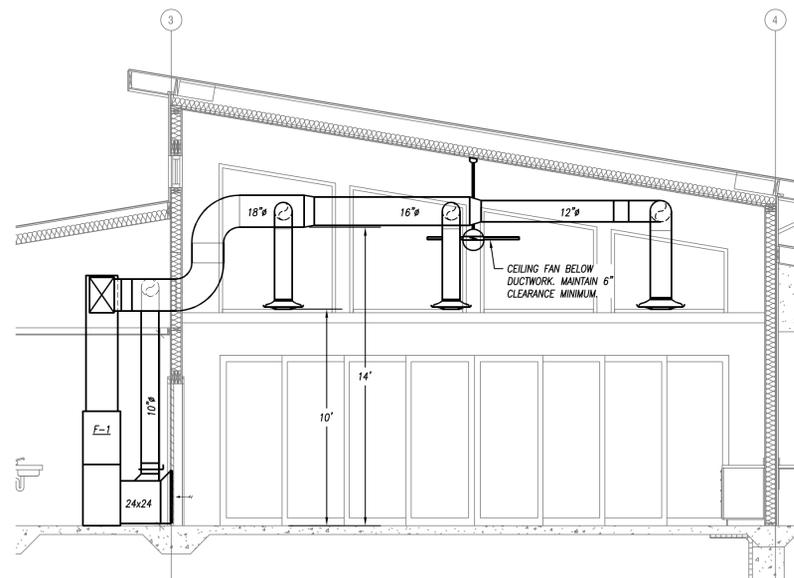
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FLOOR PLAN - HVAC
1/4" = 1'-0"



HVAC - SECTION VIEW A
1/4" = 1'-0"

GENERAL HVAC NOTES

1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. ROUND BRANCH DUCT RUNOUTS AND FLEXIBLE DUCT SHALL BE THE SAME SIZE AS THE DIFFUSER NECK UNLESS NOTED OTHERWISE.
3. MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 5'-0".
4. ALL AIR DISTRIBUTION DEVICES SHALL HAVE LOCKABLE VOLUME CONTROL DEVICES.
5. ALL 90 DEGREE TURNING ELBOWS SHALL BE SMOOTH ROUND OR SQUARE WITH TURNING VANES.
6. DUCT SIZES SHOWN ON PLANS ARE INSIDE FREE AREA.
7. PROVIDE ACCESS DOORS IN DUCTS AHEAD OF ALL AUTOMATIC, FIRE, AND SMOKE DAMPERS.
8. FOR BALANCING THE OUTSIDE AIRFLOW QUANTITIES, REFER TO HVAC SCHEDULES.

HVAC PLAN KEYED NOTES

1. ROUTE INTAKE AND EXHAUST DUCT UP THROUGH ROOF. TERMINATE WITH CONCENTRIC ROOF CAP. REFER TO DETAIL.
2. INSTALL CU-1 ON A 4" CONCRETE HOUSEKEEPING PAD.
3. ROUTE CONDENSATE DRAIN TO JANITOR'S SINK. REFER TO PLUMBING PLANS FOR EXACT LOCATION.
4. TERMINATE EXHAUST DUCT WITH 6" ROOF CAP AND MAINTAIN 10' CLEARANCE FROM ALL O.A. INLETS.
5. INSTALL O.A. LOUVER 12" BELOW CEILING, MAINTAIN 10' CLEARANCE FROM ALL EXHAUST TERMINATIONS, AND INTERLOCK DAMPER ACTUATOR WITH FAN OPERATION.
6. 10" OUTSIDE AIR DUCT. TERMINATE 12"x18" WALL LOUVER.
7. INSTALL RETURN AIR TRANSFER ABOVE DOOR. PROVIDE WITH SOUND ATTENUATION DEVICE BY TAMARACK OR SIMILAR.
8. ROUTE REFRIGERANT LINES THRU ATTIC TO F-1.
9. INSTALL PACKAGED WALL FAN 12" BELOW CEILING AND MAINTAIN 10' CLEARANCE FROM ALL O.A. INLETS.
10. INSTALL RETURN GRILLE LOW ON DOOR 12" A.F.F.



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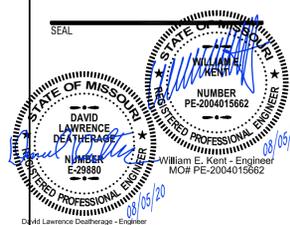
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OSAGE POOL CLUBHOUSE
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HVAC PLAN
M101

GRILLE, REGISTER & DIFFUSER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	MATERIAL	DESCRIPTION	MOUNT TYPE	FACE SIZE (IN)	NECK SIZE (IN)	VOLUME DAMPER	FINISH COLOR	REMARKS
SUPPLY										
S1	TITUS	300RL	STEEL	GRILLE WITH 3/4" SPACING AND 35° DEFLECTION	SURFACE/WALL	NECK SIZE + 2-1/2"	AS INDICATED	NO	WHITE	1
S2	TITUS	TMR4	STEEL	ADJUSTABLE ROUND CONCENTRIC CONE DIFFUSER	DUCT	AS INDICATED	AS INDICATED	YES - O.B.	PAINTABLE	2
RETURN										
R1	TITUS	350RL	STEEL	35 DEG SINGLE DEFLECTION AEROBLADE 3/4" SPACING	WALL	AS INDICATED	AS INDICATED	NO	WHITE	
R2	TITUS	350RS	STEEL	35 DEG SINGLE DEFLECTION AEROBLADE 3/4" SPACING	WALL	AS INDICATED	AS INDICATED	NO	WHITE	
R3	TITUS	T-700	STEEL	INVERTED V-BLADE SIGHT PROOF	WALL	AS INDICATED	AS INDICATED	NO	WHITE	3

- GENERAL REMARKS:
- PROVIDE WITH ALL NECESSARY MOUNTING HARDWARE.
 - COORDINATE FINISH WITH ARCHITECT. PROVIDE GALVANIZED OR MILL FINISH WHERE DUCTWORK IS NOT TO BE PAINTED. PROVIDE PRIMED PAINTABLE FINISH WHEN DUCTWORK IS TO BE PAINTED.
 - PROVIDE WITH AUXILIARY FRAME WHEN INSTALLED IN DOOR FOR INSIDE FINISH.

FURNACE SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	CFM	O.A. CFM	FAN DATA E.S.P. (IN) HP	COIL MODEL	COOLING CAPACITY (MBH)	HEATING INPUT (MBH)	HEATING OUTPUT (MBH)	EFF.	ELECTRICAL	REMARKS
F-1	DAKIN	DM92SS0805	1,990	300	0.5" 1/2	CAPP4860	60.0	80.0	73.6	92.0%	120V / 1PH	1

- REMARKS:
- HIGH EFFICIENCY FURNACE.

HVAC PIPING MATERIAL SCHEDULE

PIPING SYSTEM	SIZE	TYPE/SCHED	MATERIAL	ACCEPTABLE FITTINGS	FIELD TEST PRESSURE/TIME	ALLOWABLE IN PLENUMS	INSULATION TYPE	THICKNESS
CONDENSATE DRAIN INTERIOR	1/2" - 2"	L	COPPER	SOLDER, PRO-PRESS	10 FT - 1/2HR	YES	FIBERGLASS W/ ASJ	1/2" (PLENUM ONLY)
REFRIGERANT LINES	1/2" - 2"	ACR	COPPER	BRAZED		YES	ELASTOMERIC	3/4"

- NOTES:
- ALL PIPING AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE RATING OF 25/50.
 - ALL INSULATION THICKNESSES SHALL MEET ASHRAE 90.1 - 2007 REQUIREMENTS AT A MINIMUM.
 - REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION.

EXHAUST FAN SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	TYPE	SERVICE	CFM	E.S.P. (IN)	HP	DRIVE	RPM	ELECTRICAL	CONTROL	REMARKS
EF-1	COOK	GC-148	CEILING CABINET	BATHROOM	132	0.250	46W	DIRECT	1,075	120V / 1PH	THERMOSTAT	2
EF-2	COOK	10XP24D1.33	WALL FAN	POOL EQUIP.	400	0.125	1/2	DIRECT	1,300	120V / 1PH	THERMOSTAT	2
EF-3	COOK	GC-128	CEILING CABINET	BATHROOM	63	0.250	30W	DIRECT	750	120V / 1PH	THERMOSTAT	1

- REMARKS:
- UNIT OPERATION SHALL BE INTEGRATED WITH LIGHT SWITCH.
 - PROVIDE WITH LINE VOLTAGE THERMOSTAT.

DUCTWORK INSULATION SCHEDULE

PURPOSE	DUTY	LOCATION	STYLE	INSULATION			NOTES
				MATERIAL	APPLICATION	THICKNESS	
SUPPLY	LOW PRESSURE/VELOCITY	CONCEALED	RECTANGULAR	FIBERGLASS	LINED	1/2"	---
		CONCEALED	RECTANGULAR	MINERAL FIBER	WRAPPED	1-1/2"	---
		EXPOSED	ROUND	FIBERGLASS	LINED	1"	3
RETURN	LOW PRESSURE/VELOCITY	UNCONDITIONED ATTICS	ALL	MINERAL FIBER	WRAPPED	1-1/2"	4
		CONCEALED	RECTANGULAR	FIBERGLASS	LINED	1/2"	---
		CONCEALED	ROUND	MINERAL FIBER	WRAPPED	1-1/2"	---
EXHAUST	LOW PRESSURE/VELOCITY	CONCEALED	RECTANGULAR	FIBERGLASS	LINED	1/2"	---
		CONCEALED	ROUND	FIBERGLASS	LINED	1/2"	1
OUTSIDE AIR	ALL	CONCEALED OR MECH. SPACE	ROUND	MINERAL FIBER	WRAPPED	1-1/2"	---

- GENERAL REMARKS (APPLICABLE TO ALL TYPES):
- 1) ALL DUCTWORK, INSULATION AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE RATING OF 25/50.
 - 2) ALL INSULATION THICKNESSES SHALL MEET ASHRAE 90.1 - 2010 REQUIREMENTS AT A MINIMUM.
 - 3) REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION FOR INSULATION PRODUCTS AND SYSTEMS.

CONDENSING UNIT SCHEDULE

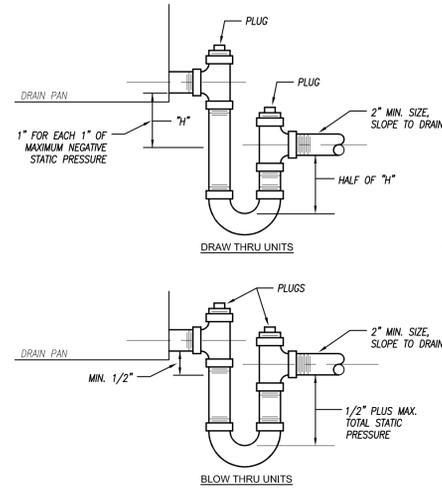
PLAN MARK	MANUFACTURER	MODEL NUMBER	CAPACITY (MBH)	MINIMUM SEER	AMBIENT TEMP. (°F)	ELECTRICAL VOLTS / PH	M.C.A.	M.O.C.P.	REMARKS
CU-1	DAKIN	DX14SN060	60.0	14.0	105°	230V / 1PH	32.8	50	1,2

- REMARKS:
- COOLING CAPACITY BASED ON A SUCTION TEMPERATURE OF 49F.
 - PROVIDE WITH 4" CONCRETE PAD.

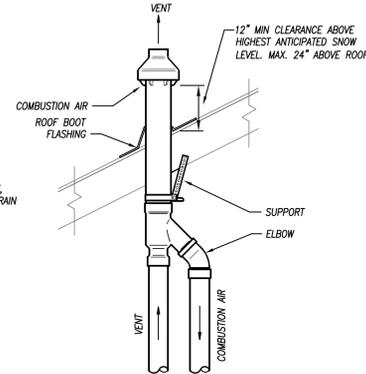
ELECTRIC HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	TYPE	CFM	KW	VOLTAGE	REMARKS
EH-1	QMARK	CD-SE	CEILING HEATER	300	2.0	240	1,2,3

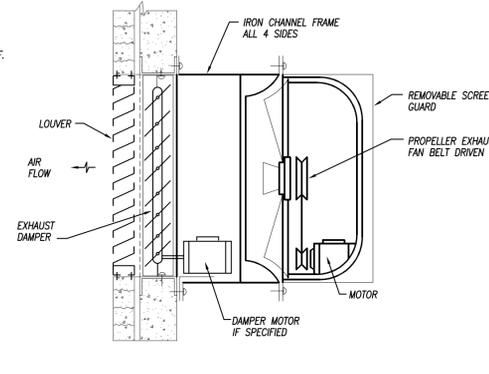
- REMARKS:
- PROVIDE WITH INTEGRAL THERMOSTAT AND DISCONNECT.
 - PROVIDE WITH ALL NECESSARY SUPPORTS, HANDERS, ETC.
 - INSTALL WITH CLEARANCES PER MANUFACTURER'S RECOMMENDATIONS.



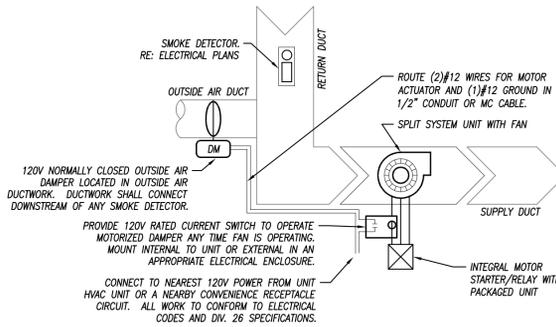
CONDENSATE TRAP DETAIL
NOT TO SCALE



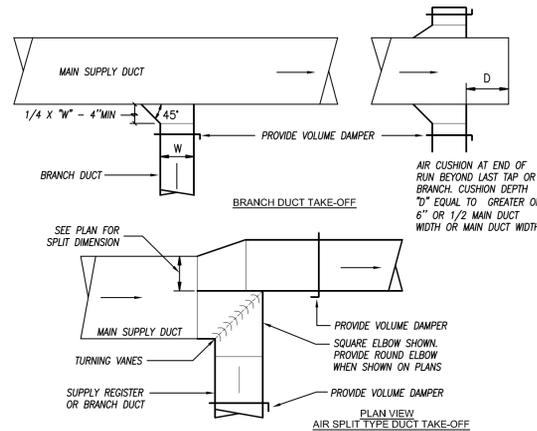
CONCENTRIC ROOF VENT
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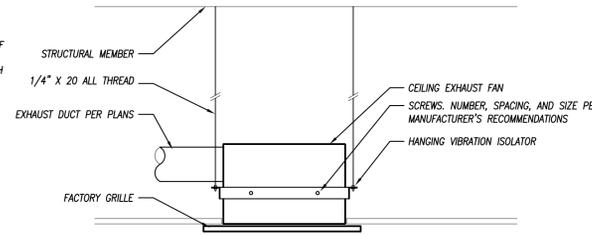
PROPELLER EXHAUST FAN DETAIL
NOT TO SCALE



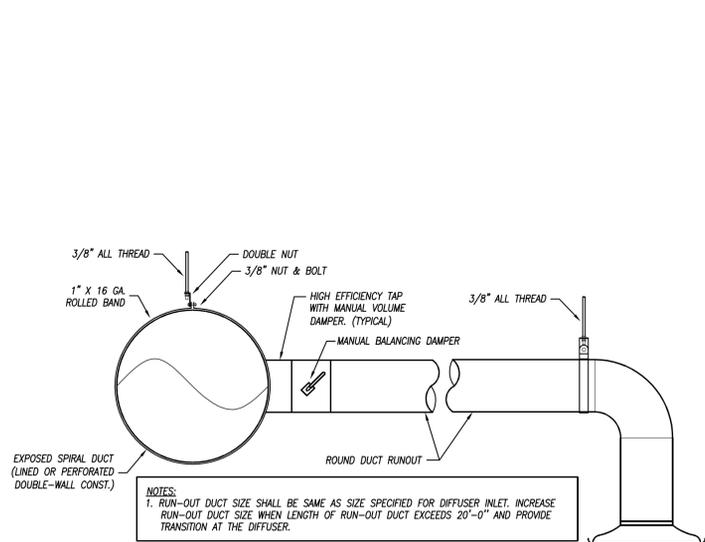
OUTSIDE AIR DAMPER WIRING SCHEMATIC
NOT TO SCALE



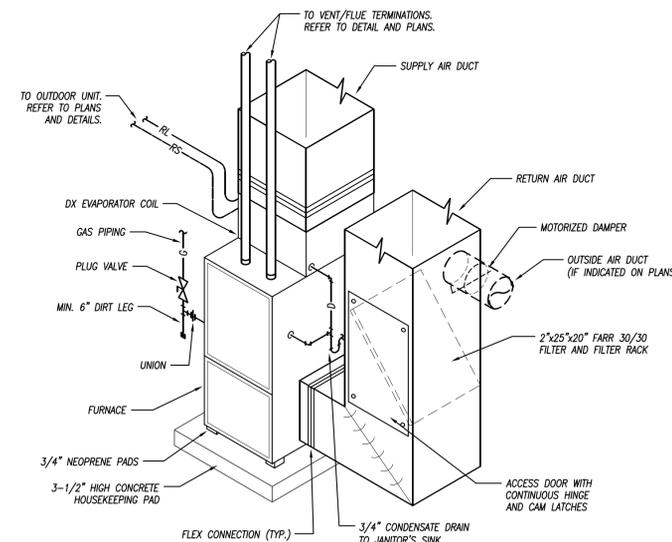
DUCTWORK TAKEOFFS
NOT TO SCALE



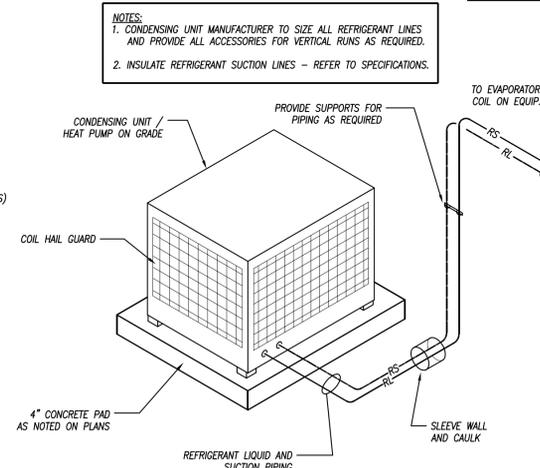
CABINET EXHAUST FAN MOUNTING DETAIL
NOT TO SCALE



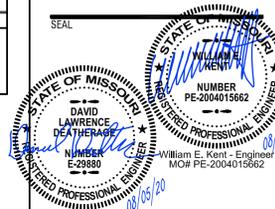
DUCT CONNECTION TO SPIRAL DUCT MOUNTED DIFFUSER DETAIL
NOT TO SCALE



HIGH-EFFICIENCY FURNACE DETAIL
NOT TO SCALE



CONDENSING UNIT / HEAT PUMP DETAIL
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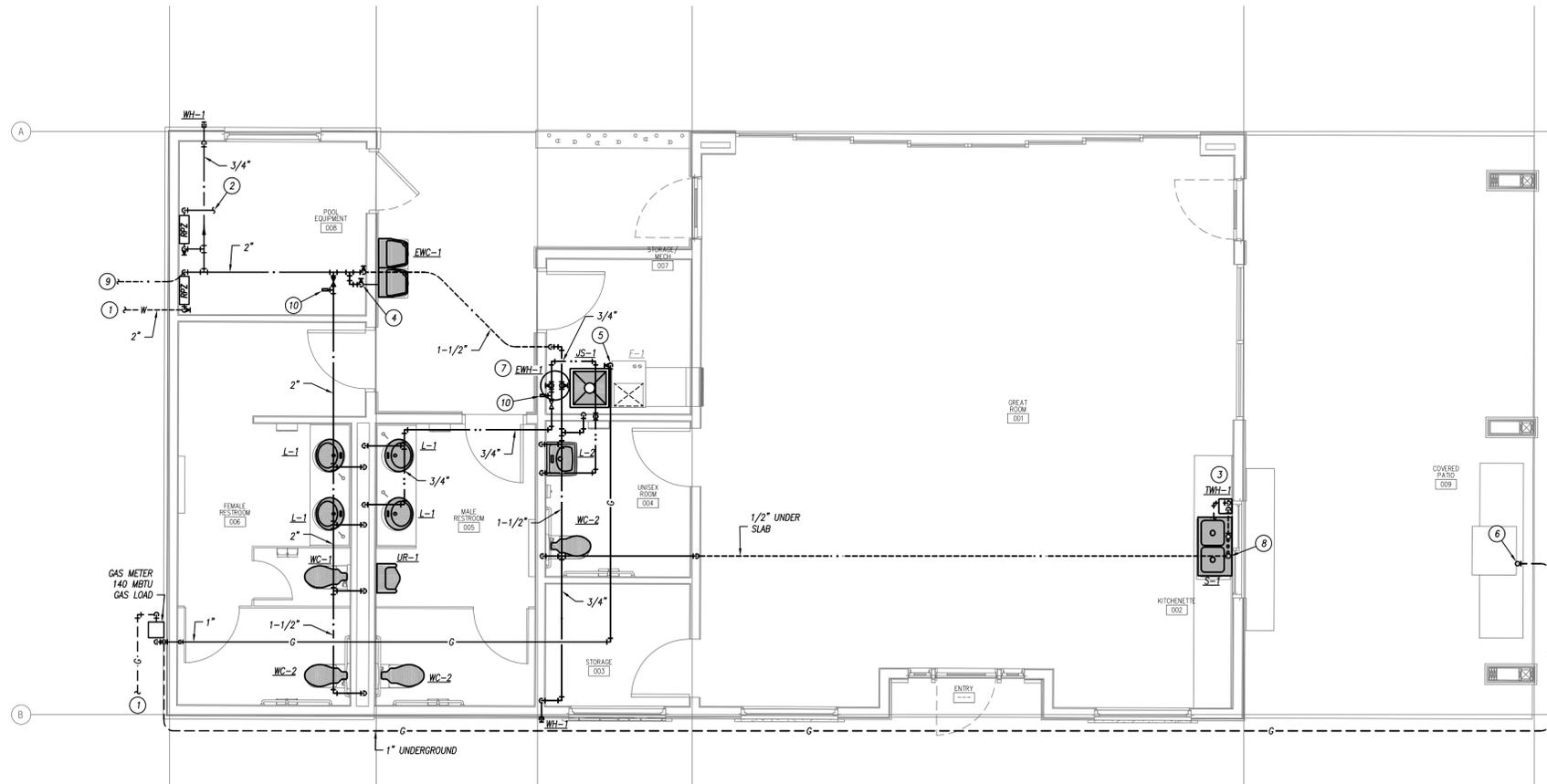
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MECHANICAL SCHEDULES AND DETAILS

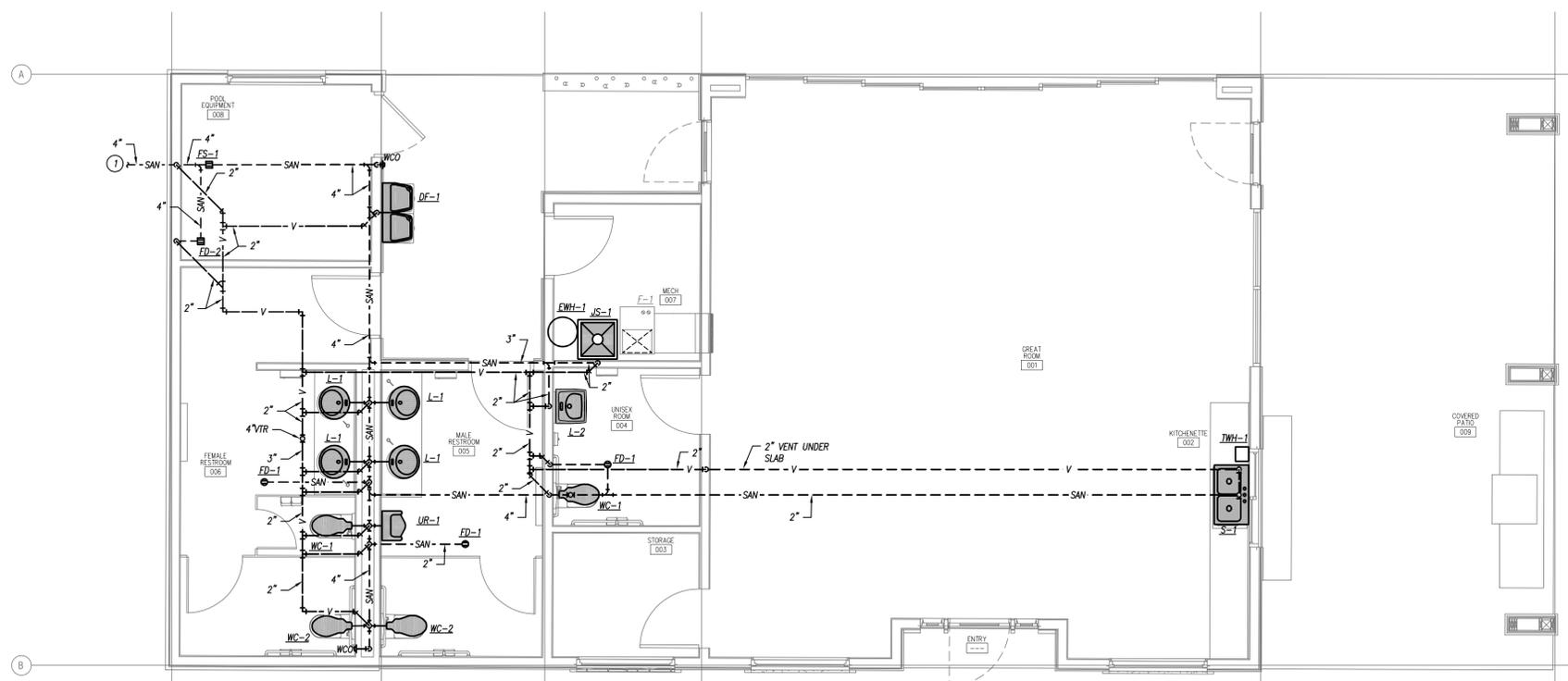
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FLOOR PLAN - DOMESTIC
1/4" = 1'-0"



FLOOR PLAN - SANITARY & VENT
1/4" = 1'-0"

GENERAL PLUMBING NOTES

1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. REFER TO PLUMBING FIXTURE / DRAIN SCHEDULES FOR PIPING SIZES FOR INDIVIDUAL CONNECTIONS TO FIXTURES AND RISERS NOT SHOWN ON PLANS.
3. NO SANITARY OR VENT PIPING BELOW GRADE SHALL BE LESS THAN 2".
4. NO DOMESTIC WATER PIPING SHALL BE SMALLER THAN 3/4" UNLESS NOTED OTHERWISE.
5. ALL VENT PIPING SHOWN IS DIAGRAMMATIC. USE APPROPRIATE FITTINGS FOR VENT PIPING BELOW FLOOD RIM OF FIXTURE.
6. NOT ALL INTERIOR CLEANOUTS ARE SHOWN FOR DRAWING CLARITY. CONTRACTOR SHALL INSTALL ALL CODE-REQUIRED CLEANOUTS (RE: GENERAL NOTES ON COVER SHEET). COORDINATE EXACT LOCATIONS OF CLEANOUTS WITH ARCHITECT.
7. PROVIDE 1/2" TRAP PRIMER PIPING FOR ALL FLOOR DRAINS TO NEAREST TRAP PRIMER VALVE. PIPING SHALL BE TYPE "M" SOFT COPPER SEAMLESS WITH NO JOINTS FROM VALVE TO DRAIN.

PLUMBING PLAN KEYED NOTES

- 1 REFER TO CIVIL PLANS FOR CONTINUATION, COORDINATE EXACT LOCATION WITH PLANS.
- 2 3/4" POOL WATER MAKE-UP LINE. REFER TO POOL PLANS FOR CONNECTION.
- 3 INSTALL TANKLESS WATER HEATER UNDER COUNTER. ROUTE HOT WATER TO SINK BELOW COUNTER.
- 4 ROUTE DOW SUPPLY TO EWC-1 UNDER COUNTER TO AND LOCATE SHUT-OFF VALVE IN AN ACCESSIBLE LOCATION UNDER COUNTER TOP FOR EXTERIOR DRINKING FOUNTAIN WINTERIZATION.
- 5 EXTEND 1" NG PIPING DOWN TO FURNACE. REFER TO MECHANICAL PLANS FOR EXACT LOCATION OF FURNACE.
- 6 1" GAS LINE UP THROUGH SLAB WITH SHUT OFF VALVE CONCEALED IN GRILL STATION.
- 7 INSTALL WATER HEATER ON SHELF ABOVE JANITOR'S SINK. SHOWN HERE FOR CLARITY.
- 8 DOW STUB UP THRU FLOOR TO SERVE S-1 AND TWH-1.
- 9 TO IRRIGATION SYSTEM. COORDINATE SIZE, LOCATION, AND CONTINUATION WITH IRRIGATION CONTRACTOR OR ARCHITECT.
- 10 PROVIDE COMPRESSED AIR QUICK CONNECT FOR WINTERIZATION.



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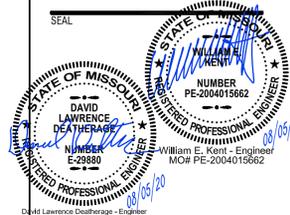
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PLUMBING PLAN
P101

PLUMBING FIXTURE SCHEDULE		FITTINGS AND TRIM		REMARKS	PLUMBING FIXTURE PIPE SIZES				
MARK	FIXTURE MODEL	FIXTURE DESCRIPTION	FITTINGS MODEL		FITTINGS AND DESCRIPTION	WASTE	VENT	DCW	DHW
EW-1	HALSEY-TAYLOR H4C8FSBLQ	ADA-COMPLIANT, DUAL-HEIGHT, BARRIER-FREE, ELECTRIC WATER COOLER. PROVIDES 8.0 GPM OF 50°F WATER AT 90°F AMBIENT. ADA-COMPLIANT FRONT AND SIDE PUSHBARS. LEAD FREE. MOUNT WITH MIN. 27" KNEE CLEARANCE AND SPOUT AT NO MORE THAN 36" A.F.F.	---	---	4	2"	2"	1/2"	---
WH-1	ZURN Z1310	EXPOSED, AUTOMATIC DRAINING, NON-FREEZE, ANTI-SIPHON WALL HYPHANT COMPLETE WITH INTEGRAL BACKFLOW PREVENTER. BRASS CASING. ALL-BRONZE INTERIOR PARTS. NON-TURNING OPERATING ROD WITH FREE-FLOATING COMPRESSION CLOSURE VALVE. REPLACEABLE BRONZE SEAT AND SEAT WASHER. COMBINATION 3/4" FEMALE AND 1" MALE IP INLET CONNECTION STANDARD. INCLUDES OPERATING KEY.	---	---	---	---	---	3/4"	---
JS-1	FIAT MSB-2424	JANITORS SINK: 24"X24"X10", WHITE, ONE-PIECE MOLDED STONE MOP BASIN. UNIT SHALL BE ONE HOMOGENEOUS PIECE. STAINLESS STEEL INTEGRAL DRAIN BODY WITH CALKED CONNECTION FOR 3" PIPE. PROVIDE STAINLESS STEEL BUMPER AND WALL GUARDS, MOP BRACKETS, HOSE RACK.	CHICAGO FAUCET 897-CP	C.P. SERVICE SINK FITTING WITH VACUUM BREAKER, 3/4" HOSE THREAD ON SPOUT, ADJUSTABLE WALL BRACE, PAIL HOOK, AND 1/2" FLANGED FEMALE ADJUSTABLE ARMS WITH INTEGRAL STOPS. CALK BETWEEN WALL AND FLANGE WITH GE SILICONE SEALANT. 3" C.I. "P" TRAP	---	3"	2"	1/2"	1/2"
L-1	AMERICAN STANDARD 0475.028	ADA-COMPLIANT, COUNTER TOP-MOUNTED LAVATORY. 16" OVAL, WHITE VITREOUS CHINA, SELF-RIMMING BASIN WITH FAUCET HOLES ON 4" CENTERS. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.	CHICAGO 2200-4-2300-4KABCP	FAUCET: SINGLE HANDLE CHROME PLATED CAST BRASS MIXING FAUCET, 4" CENTERS, 4-3/4" SPOUT, 2.2GPM MANDAL PROOF AERATOR, 4-5/8" METAL LEVER HANDLE. CERAMIC VOLUME CONTROL & HOT WATER LIMIT STOP CARTRIDGE. NO POP UP.	1,2,7	2"	2"	1/2"	1/2"
L-2	AMERICAN STANDARD 0355.012	ADA-COMPLIANT WALL-HUNG LAVATORY. 20"X18" WHITE VITREOUS CHINA BOWL WITH 4" BACK FOR USE WITH CONCEALED ARM HANGER. FAUCET HOLES COORDINATED WITH FAUCET AND TRIM. PROVIDE CONCEALED ARM CARRIER. MOUNT TOP OF RIM AT 34" A.F.F.	CHICAGO 2200-4-2300-4KABCP	FAUCET: SINGLE HANDLE CHROME PLATED CAST BRASS MIXING FAUCET, 4" CENTERS, 4-3/4" SPOUT, 2.2GPM MANDAL PROOF AERATOR, 4-5/8" METAL LEVER HANDLE. CERAMIC VOLUME CONTROL & HOT WATER LIMIT STOP CARTRIDGE. NO POP UP.	1,2,3,4,5	2"	1-1/2"	1/2"	1/2"
S-1	ELKAY LR-3322	33" X 22" DOUBLE COMPARTMENT STAINLESS STEEL SINK. EACH BOWL DIMENSIONS ARE 13-1/2" X 16" X 8-1/8" SELF-RIMMING WITH 1-3/4" IN. RADIUS COVED CORNERS. SEAMLESS #18 GAUGE, TYPE 302 NICKEL-BEARING STAINLESS STEEL. LK-6K-H SATIN FINISH. FULLY UNDERCOATED. FAUCET HOLES COORDINATED WITH FAUCET AND TRIM. MINIMUM 36" CABINET SIZE REQUIRED.	CHICAGO 200-ALBACP	DECK-MOUNTED FAUCET WITH 9-1/2" SWING L-TYPE SPOUT. 2-3/4" METAL LEVER HANDLES WITH QUARTER CARTRIDGE. POLISHED CHROME FINISH. PROVIDE WITH SIDE SPRAY. 2.2GPM. PROVIDE BASKET STRAINER	2,3,5,8	2"	2"	1/2"	1/2"
IN-SINK-ERATOR	BAOGER 5	GARBAGE DISPOSAL. 1/2 HP MOTOR, STAINLESS STEEL GALVANIZED STEEL CONSTRUCTION AND GRINDING ELEMENTS. PERMANENTLY LUBRICATED BEARINGS. PROVIDE WITH STAINLESS STEEL SINK FLANGE AND STOPPER.	---	---	---	---	---	---	---
UR-1	AMERICAN STANDARD 6561.017	WALL-HUNG URINAL. WHITE VITREOUS CHINA. 3/4" TOP SPUD. 1.0 GALLON SIPHON JET FLUSHING ACTION. MOUNT FIXTURE RIM AT 24" A.F.F. PROVIDE FLOOR-MOUNTED, HEAVY-DUTY TUBULAR STEEL UPRIGHTS, ADJUSTABLE CARRIER, PLATED HANGER, AND ALL OTHER REQUIRED MOUNTING HARDWARE.	SLOAN G2 8186-1	EXPOSED URINAL FLUSH VALVE. BATTERY POWERED CHROME-PLATED, 3/4" I.P.S. SCREWDRIVER BACK-CHECK ANGLE STOP WITH PROTECTIVE CAP. ADJUSTABLE TAILPIECE. 1.0 GALLON, VACUUM BREAKER FLUSH CONNECTION AND SPUD COUPLING FOR 3/4" TOP SPUD. PROVIDE WALL AND SPUD FLANGES. MAXIMUM HANDLE HEIGHT PER ADA STANDARDS.	6	2"	2"	1"	---
WC-1	AMERICAN STANDARD MADERA 2234.001	1.6 GALLON, FLOOR-MOUNTED FLUSH VALVE WATER CLOSET. TOP SPUD AND FLAT BOLT COVERS. WHITE VITREOUS CHINA ELONGATED BOWL. 15" HIGH.	SLOAN G2 8111	EXPOSED WATER CLOSET FLUSH VALVE. BATTERY POWERED CHROME-PLATED. HANDS FREE OPERATION. 1" I.P.S. SCREWDRIVER BACK-CHECK ANGLE STOP WITH PROTECTIVE CAP. ADJUSTABLE TAILPIECE. 1.6 GPM. VACUUM BREAKER FLUSH CONNECTION AND SPUD COUPLING FOR 1-1/2" TOP SPUD. PROVIDE WALL AND SPUD FLANGES. MOUNTING HEIGHT PER MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH ADA GUIDELINES.	6	4"	2"	1-1/4"	---
WC-2	AMERICAN STANDARD MADERA 3043.001	ADA-COMPLIANT, 1.6 GALLON, FLOOR-MOUNTED FLUSH VALVE WATER CLOSET. TOP SPUD AND FLAT BOLT COVERS. WHITE VITREOUS CHINA ELONGATED BOWL. 16-1/2" HIGH.	SLOAN G2 8111	EXPOSED WATER CLOSET FLUSH VALVE. BATTERY POWERED CHROME-PLATED. HANDS FREE OPERATION. 1" I.P.S. SCREWDRIVER BACK-CHECK ANGLE STOP WITH PROTECTIVE CAP. ADJUSTABLE TAILPIECE. 1.6 GPM. VACUUM BREAKER FLUSH CONNECTION AND SPUD COUPLING FOR 1-1/2" TOP SPUD. PROVIDE WALL AND SPUD FLANGES. MOUNTING HEIGHT PER MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH ADA GUIDELINES.	6	4"	2"	1-1/4"	---

PIPING MATERIAL & INSULATION SCHEDULE									
PIPING SYSTEM	SIZE	TYPE/SCHED	MATERIAL	ACCEPTABLE FITTINGS	FIELD TEST PRESSURE/TIME	ALLOWABLE IN PLENUMS	INSULATION		
							TYPE	THICKNESS	
DOMESTIC COLD WATER	1/2"-2-1/2"	L	COPPER	SOLDER, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASJ	1/2"	
DOMESTIC HOT WATER & HW RETURN	1/2"-2-1/2"	L	COPPER	SOLDER, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASJ	1"	
DOM. HOT & COLD BELOW GRADE	1/2"-1-1/4"	K	COPPER	CONTINUOUS TUBING, BRAZED	130 PSI - 1/2HR	YES	ELASTOMERIC	3/4" (HOT ONLY)	
NATURAL GAS - ABOVE GRADE	1/2"-2"	SCH. 40	STEEL - SEAMLESS	THREADED IRON	75 PSI - 1HR	YES	----	----	
NATURAL GAS BELOW GRADE	ALL	SDR-11	POLYETHYLENE	FUSION JOINTS	100 PSI - 1HR	NO	----	----	
SOIL & WASTE BELOW GRADE	2"-8"	SCH. 40	PVC	SOLVENT JOINED	10 FT - 1/2HR	NO	----	----	
DRINKING FOUNT. DRAIN	ALL	----	----	----	----	YES	ELASTOMERIC	1/2"	
RPZ AND SIMILAR EXPOSED DRAIN LINES	ALL	L	COPPER	SOLDER, PRO-PRESS	10 FT - 1/2HR	YES	----	----	
CONDENSATE DRAIN INTERIOR	1/2"-2"	L	COPPER	SOLDER, PRO-PRESS	10 FT - 1/2HR	YES	FIBERGLASS W/ ASJ	1/2" (PLENUM ONLY)	
DOM. WATER SERVICE BELOW GRADE	1"-3"	K	COPPER	CONTINUOUS TUBING, BRAZED	130 PSI - 1/2HR	YES	----	----	

NOTES:
 1. ALL PIPING AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE RATING OF 25/50.
 2. ALL INSULATION THICKNESSES SHALL MEET ASHRAE 90.1 - 2007 REQUIREMENTS AT A MINIMUM.
 3. REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION.

WATER HEATER SCHEDULE - ELECTRIC											
PLAN MARK	MANUFACTURER	MODEL NUMBER	GALLONS	USE	STYLE	HT (IN)	# HTG. ELEMENTS	WATTS	RECOVERY @ 90°F RISE	VOLTAGE/ PHASE	REMARKS
WH-1	STATE	EN6	28	RESIDENTIAL	LOW BOY	30	2	4,500	21	240V / 1PH	1,2

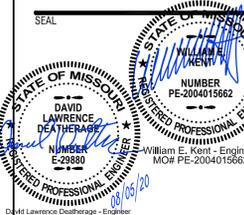
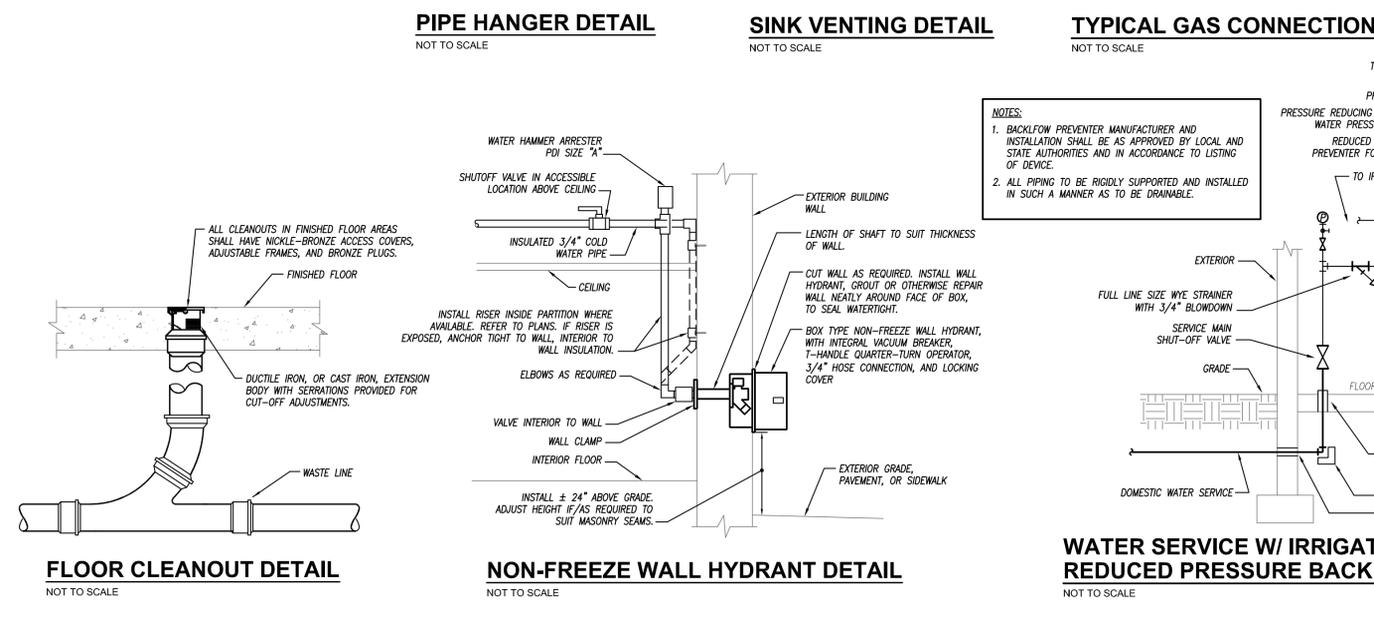
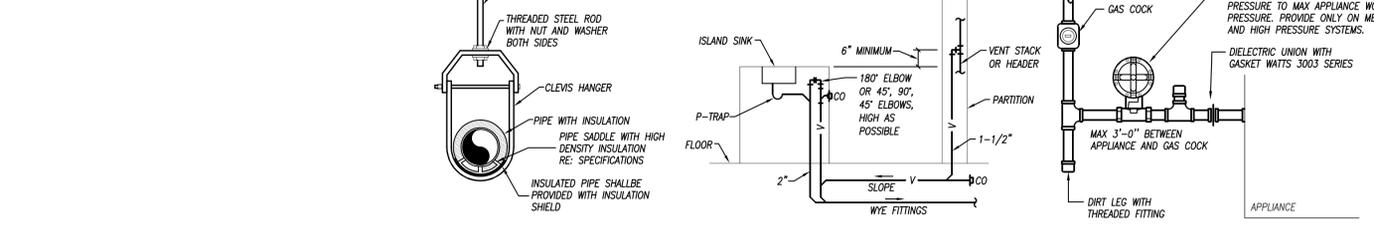
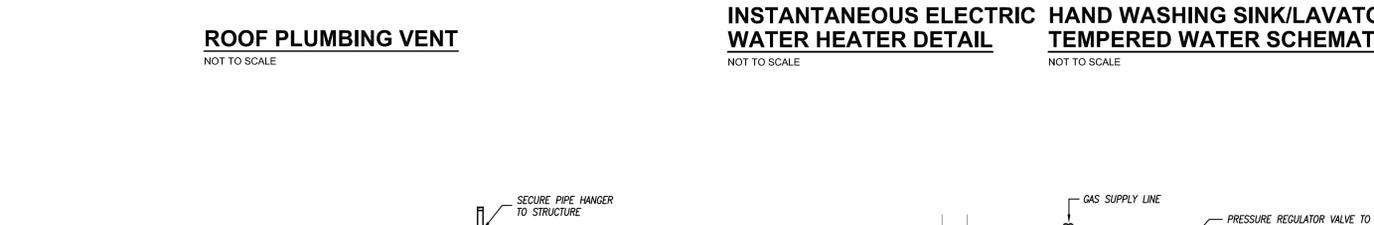
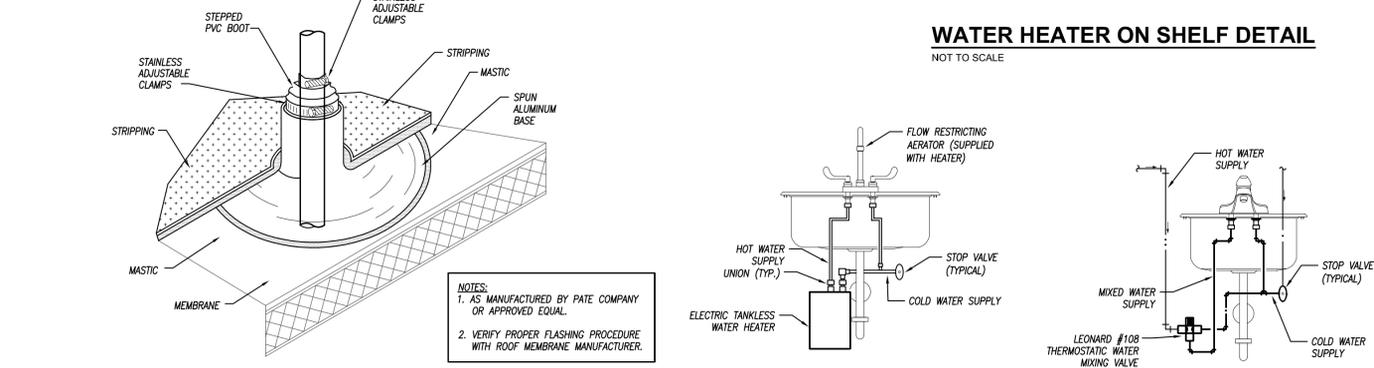
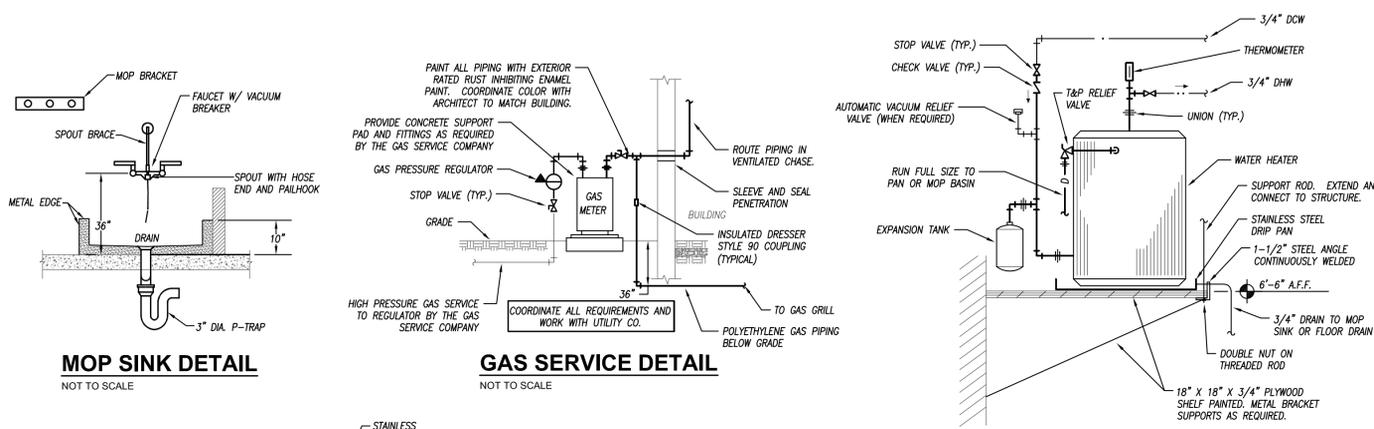
REMARKS:
 1. "LOWBOY"-TYPE WATER HEATER.
 2. MOUNT ON SHELF. REFER TO DETAIL.

TANKLESS WATER HEATER SCHEDULE - ELECTRIC										
PLAN MARK	MANUFACTURER	MODEL NUMBER	USE	STYLE	# HTG. ELEMENTS	WATTS	RECOVERY @ 90°F RISE	VOLTAGE/ PHASE	REMARKS	
WH-1	EMAX	MT010240	LIGHT COMM.	TANKLESS	1	9500	0.73 GPM	240V / 1PH	1	

REMARKS:
 1. INSTANTANEOUS-TYPE WATER HEATER. MOUNT BELOW CABINETRY AND INSTALL 0.5 GPM AERATOR PROVIDED WITH HEATER ON SINK FAUCET.

FLOOR / ROOF DRAIN SCHEDULE						
PLAN MARK	MANUFACTURER	MODEL NUMBER	SERVICE	TOP/GRATE SIZE	WASTE SIZE	REMARKS
FD-1	WATTS	FD-100L-6-2	FLOOR DRAIN	6"Ø	2"	1
FD-2	WATTS	FD-100L-8-4	FLOOR DRAIN	8"Ø	4"	1
FS-1	WATTS	FS-714	FLOOR SINK	8"x8"	2"	1

REMARKS:
 1. PROVIDE WITH NICKEL BRONZE TOP.



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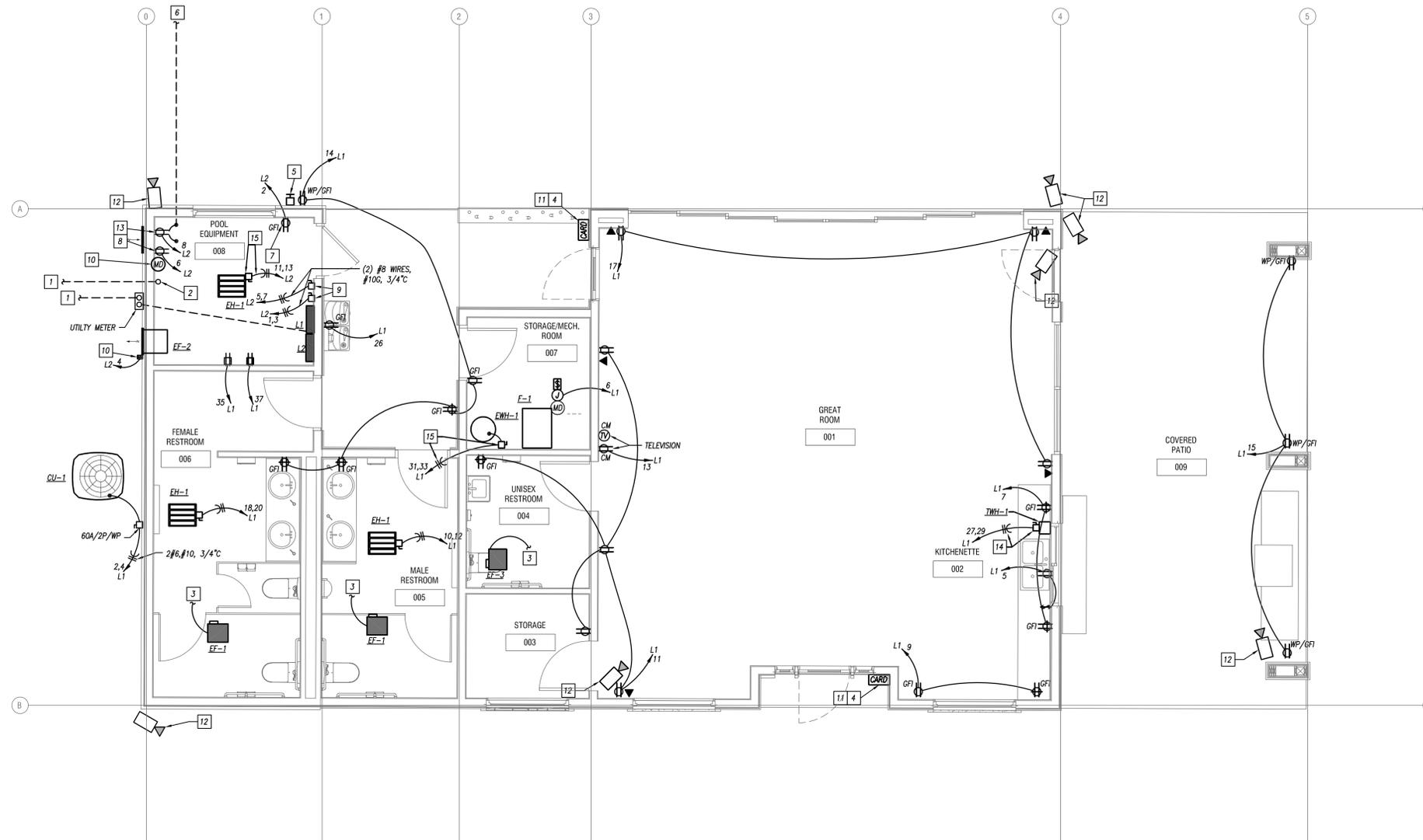
PLUMBING SCHEDULES AND DETAILS
P201

GENERAL POWER NOTES

1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. COORDINATE EXACT NEMA CONFIGURATIONS OF RECEPTACLES SERVING EQUIPMENT WITH EXACT EQUIPMENT BEING FURNISHED.
3. REFER TO THE SPECIFICATIONS FOR ADDITIONAL LOCATIONS/REQUIREMENTS FOR RECEPTACLES, INCLUDING GFCI, WEATHER-RESISTANT, HOSPITAL-GRADE, AND TAMPER-RESISTANT RECEPTACLES.
4. EXACT MECHANICAL EQUIPMENT LOCATIONS MAY NOT BE SHOWN FOR CLARITY. COORDINATE EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT, DUCT DETECTORS, ETC. WITH MECHANICAL DRAWINGS AND CONTRACTOR.
5. COORDINATE EXACT LOCATIONS OF SMOKE DETECTORS WITH CEILING FANS, HVAC DIFFUSERS, SPRINKLER HEADS, ETC. PER NFPA REQUIREMENTS.

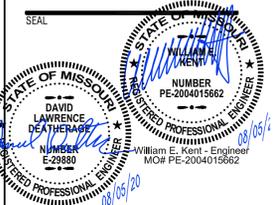
POWER PLAN KEYED NOTES

- 1 REFER TO SITE PLAN FOR CONTINUATION.
- 2 2" CONDUIT FOR COMMUNICATIONS SERVICE(S).
- 3 CONNECT TO SWITCHED LIGHTING CIRCUIT IN ROOM.
- 4 PROVIDE JUNCTION BOX CONCEALED ABOVE ACCESSIBLE CEILING (OR FLUSH MOUNTED IN HARD CEILING) WITH 3/4" CONDUIT TO A 4X4 RECESSED WALL MOUNTED JUNCTION BOX WITH SINGLE GANG TRIM RING FOR CARD READER AND 3/4" CONDUIT STUBBED INTO DOOR FRAME FOR ACCESS CONTROL WIRING. COORDINATE EXACT ROUGH-IN AND POWER REQUIREMENTS WITH SECURITY CONTRACTOR.
- 5 PROVIDE RED MUSHROOM STYLE PUSH BUTTON IN WATERPROOF ENCLOSURE WITH THE FOLLOWING INSCRIPTION: "POOL EQUIPMENT SHUT DOWN." PROVIDE CONTROL WIRING TO MAIN BREAKER IN PANEL L2.
- 6 EXTEND POOL BONDING GRID TO CIRCULATION PUMP ENCLOSURE, PER NEC. REFER TO POOL BONDING DRAWING FOR ADDITIONAL INFORMATION.
- 7 PROVIDE RECEPTACLE FOR CHEMICAL CONTROLLER. VERIFY EXACT LOCATION WITH POOL EQUIPMENT PROVIDER.
- 8 PROVIDE 120V CIRCUIT TO POOL DECK LIGHTING. ROUTE TO HOMERUN PANEL VIA TIMECLOCK CONTROL. TIMER SHALL BE TWO CHANNEL, 7-DAY DIGITAL HOLIDAY TYPE, WITH 20A RATED CONTACTS, 120V CONTROL POWER.
- 9 PROVIDE ELECTRICAL CONNECTION TO POOL PUMPS. STARTERS BY POOL EQUIPMENT PROVIDER.
- 10 PROVIDE ELECTRICAL CONNECTION TO FAN AND INTERLOCK WITH MOTORIZED DAMPER.
- 11 CARD READER. COORDINATE EXACT LOCATION AND ALL CONNECTION REQUIREMENTS WITH OWNER SPECIFIED SYSTEM. PROVIDE ROUGH-IN AND 1" CONDUIT BACK TO STORAGE ROOM.
- 12 CAMERA. COORDINATE EXACT LOCATION AND ALL CONNECTION REQUIREMENTS WITH OWNER SPECIFIED SYSTEM. PROVIDE ROUGH-IN AND 1" CONDUIT BACK TO STORAGE ROOM.
- 13 LOCATE TRANSFORMERS FOR LOW VOLTAGE POOL LIGHTING IN STORAGE ROOM.
- 14 TWH-1. PROVIDE A 80A 2P DISC. SWITCH, FUSE PER MANUFACTURER REQUIREMENTS. 1 SET OF 3 #4, & #10 GRD. IN 1" C.
- 15 PROVIDE A 30A 2P DISC. SWITCH, FUSE PER MANUFACTURER REQUIREMENTS. 1 SET OF 3 #10, & #10 GRD. IN 3/4" C.



FLOOR PLAN - POWER
1/4" = 1'-0"

OSAGE POOL CLUBHOUSE
2025 SW M 150 HWY
LEES SUMMIT, MO 64082



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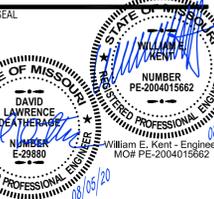
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POWER PLAN
E201



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LIGHT FIXTURE SCHEDULE						
FIXTURE TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMP NUMBER / DESCRIPTION	VOLTAGE	REMARKS
CF2	BARN LIGHT ELECTRIC	22ALT	52" DIAMETER 3-BLADE CEILING FAN VARIABLE SPEED MOTOR. BRUSHED ALUMINUM HOUSING. THREE (3) ALUMINUM REVERSIBLE BLADES. 12" DOWNROD SUSPENSION. FURNISH WITH SOLID STATE WALL SPEED CONTROLLER.	-	120	1
CL1	DMF LIGHTING	DCD1	6" ROUND RECESSED DOWNLIGHT. DIE-CAST ALUMINUM FRAME WITH ADJUSTABLE-HEIGHT BUTTERFLY MOUNTING BRACKETS AND INTEGRAL GALVANIZED STEEL JUNCTION BOX. COORDINATE MOUNTING TYPE WITH CEILING. SELF-FLANGED, SEMI-SPECULAR LOW IRIDESCENT FINISH ALUMINUM REFLECTOR WITH MEDIUM BEAM ANGLE/DISTRIBUTION. UL LISTED FOR WET LOCATIONS. INTEGRAL LED DRIVER PRE-WIRED FOR 0-10V DIMMING APPLICATIONS.	ONE (1) 29 WATT, 2000 LUMEN, LED MODULE. 3000K CCT.	120	1
CL1A	DMF LIGHTING	DRD3	SIMILAR TO TYPE 'CL1' EXCEPT PROVIDE WITH SLOPED CEILING ADAPTOR AND IC-RATED FOR DIRECT CONTACT WITH INSULATION. 360 DEGREE DIRECTIONAL AIM, 40 DEGREE ADJUSTABLE TILT.	-	-	-
CL2	DMF LIGHTING	DCD1	SAME AS FIXTURE TYPE 'CL1' EXCEPT FURNISH WITH 4" TRIM RING DIFFERENT LED MODULE.	ONE (1) 19.5 WATT, 1500 LUMEN, LED MODULE. 3000K CCT.	120	1
CL2A	DMF LIGHTING	DRD3	SIMILAR TO TYPE 'CL2' EXCEPT PROVIDE WITH SLOPED CEILING ADAPTOR AND IC-RATED FOR DIRECT CONTACT WITH INSULATION. 360 DEGREE DIRECTIONAL AIM, 40 DEGREE ADJUSTABLE TILT.	-	-	-
CL3	KUZCO LIGHTING	CHARLIE FM6012	FLUSH ARCHITECTURAL FIXTURE. 11.5" DIAMETER X 3.5" TALL. WHITE OPAL ACRYLIC DIFFUSER WITH BRUSHED NICKEL TRIM RING. ELECTRONIC DRIVER DIMMABLE VIA ELV.	ONE (1) 19 WATT, 1300 LUMEN, LED MODULE. 3000K CCT.	120	1
CL4	WILLIAMS	SERIES 75R	4"-0" LONG STRIP FIXTURE. SURFACE MOUNT. FURNISH WITH ROUNDED ACRYLIC LENS. ALL PARTS PAINTED WHITE AFTER FABRICATION. ELECTRONIC DRIVER PRE-WIRED FOR NON-DIMMING APPLICATIONS.	ONE (1) 23 WATT, 3200 LUMEN, LED MODULE. 3000K CCT.	120	1
CL5	DMF LIGHTING	DCD1	SAME AS FIXTURE TYPE 'CL2' EXCEPT FURNISH WITH BLACK TRIM RING.	ONE (1) 19.5 WATT, 1500 LUMEN, LED MODULE. 3000K CCT.	120	1
E	SIMKAR	DLM SERIES	LOW-PROFILE EMERGENCY LIGHTING UNIT. FLAME-RATED, UV-STABLE THERMOPLASTIC HOUSING. TWO (2) SEMI-RECESSED, ADJUSTABLE "EYEBALL" HEADS WITH GLASS LENS. WHITE FINISH. MAINTENANCE-FREE BATTERY FOR 90 MINUTE OPERATION OF LAMPS. INTEGRAL TEST SWITCH AND AC-ON INDICATOR. FURNISH WITH REMOTE CAPACITY WHERE INDICATED.	TWO (2) 1 WATT LED	120	1
UC1	WAC LIGHTING	WA-LED SERIES	2-3/4" X 1" X 24" UNDERCABINET LIGHT FIXTURE. EXTRUDED ALUMINUM HOUSING WITH ACRYLIC LENS. WHITE POWER COAT FINISH. FURNISH WITH INTERCONNECTING CABLES AND CONNECTORS.	ONE (1) 12.7 WATT, 700 LUMEN, LED MODULE. 3000K CCT.	120	1
S1	McGraw-Edison	GALLEON LED	GLEON-AF-02-LED-E1-SL2- GALLEON LED FIXTURE. DARK BRONZE FINISH. POLE FIXTURE AT 15'-0" AFF MOUNTING HEIGHT	129W, 13088 LUMEN LED MODULE 4000K	208	1
S2	GARDEN LIGHT LED	DL-II MICRO DECK LIGHT	2.4" W, 1.3" T, 1.3" D DECK LIGHT. ALUMINUM/BRASS BODY AND FINISH SELECTION BY ARCHITECT. INTERNAL DRIVER, 130 DEGREE BEAM SPREAD. UL 1838 LISTED.	1W/2VA, 115 LUMEN LED MODULE, 3000K	120	1
WL1	DMF	DCC2 SERIES	EXTERIOR WALL-MOUNTED LED CYLINDER. WET LOCATION, DARK BRONZE FINISH.	19.5 WATT, 1500 LUMEN, 3000K	120	1
WL2	GALA	JADE 2 C - 38279	GLASS AND CHROME WALL MOUNT INTERIOR VANITY LIGHT	9 WATT, 1500 LUMEN, 3000K	120	1
XEM	SIMKAR	SLCD SERIES	COMBINATION EMERGENCY LIGHTING UNIT / EXIT LIGHT. UV-STABLE THERMOPLASTIC HOUSING. FINISH WHITE. ADJUSTABLE EYEBALL STYLE LIGHTING HEADS WITH GLASS LENS FOR EMERGENCY LIGHT. EXIT SIGN TO HAVE RED LETTERS WITH DIRECTIONAL ARROWS AS INDICATED ON THE PLANS. MAINTENANCE-FREE NICKEL-CADMIUM BATTERY FOR 90 MINUTE OPERATION OF LAMPS AND EXIT SIGN. FULLY AUTOMATIC, SOLID-STATE CHARGER WITH TEST SWITCH AND AC-ON LIGHT. FURNISH WITH REMOTE CAPACITY WHERE INDICATED. BLACK REMOTE WEATHERPROOF HEAD.	TOTAL POWER CONSUMPTION: 5.25 WATTS. EMERGENCY: HIGH OUTPUT LEADS EXIT: FOUR (4) HIGH-OUTPUT LEADS.	120	1
RH	SIMKAR	DLM SERIES	-	-	-	-

REMARKS:
1. FURNISH WITH AND INSTALL ALL NECESSARY HARDWARE AND MOUNTING BRACKETS.

SINGLE-SECTION PANELBOARD SCHEDULE											
PANEL DESIGNATION: L1		MOUNTING: SURFACE		LOCATION: MECH RM		CIRCUIT #		MAIN LUG AMPS: 400		MAIN BREAKER: 300	
DESCRIPTION	PHASE		C/B		CIRCUIT #	C/B		PHASE		DESCRIPTION	
	A	B	TRIP	POLE		POLE	TRIP	A	B		
PANELBOARD L2	7047		100	2	1 2	2 50				CONDENSING UNIT	
DISPOSAL	1200	7047			3 4			3149		FURNACE F-1	
REC - KITCHEN		360	20	1	5 6	1 20		864		REC - STORAGE ROOM	
REC - KITCHEN		360	20	1	7 8	1 20		360			
REC - GREAT ROOM		540	20	1	9 10	2 20		1000		EH-1	
REC - GREAT ROOM TV	1080		20	1	11 12	1 20		1000		REC - RR/EXTERIOR	
REC - COVERED PATIO		540	20	1	13 14	1 20		900		BUILDING LIGHTING	
REC - GREAT ROOM		540	20	1	15 16	1 20		1000		EH-1	
SPARE			20	1	17 18	2 20		1000			
LTD - INTERIOR	1080		20	1	19 20			1000			
LTD - GREAT ROOM		720	20	1	21 22	2 20		226		POLE LIGHTING	
REC - FLEXIBLE ROOM		720	20	1	23 24	1 20		950		REC: DRINKING FOUNTAIN	
TWH-1	4750		50	2	27 28	1 20				SPARE	
	2250		30	2	29 30	1 20				SPARE	
WH-1		2250	30	2	31 32	1 20				SPARE	
CAMERA SYSTEM		360	20	1	33 34	1 20				SPACE	
CARD READERS		360	20	1	35 36	1 20				SPACE	
SPACE			20	1	37 38	1 20				SPACE	
SPACE			20	1	39 40	1 20				SPACE	
SPACE			20	1	41 42	1 20				SPACE	
TOTALS	19387	16567						8089	6135	TOTALS	

PANELBOARD SIZING LOAD			
LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN. (VA)
LIGHTS	3,321	1.25	4,151
RECEPTACLES	9,470	10kVA + 50% REST	9,470
MOTORS	11,088	1.25 x LARGEST + SUM OF REST	12,108
AIR CONDITIONING	6,298	1.00	6,298
SPACE HEATING	6,000	0.00	0
CONTINUOUS	0	1.25	0
NON-CONTINUOUS	0	1.00	0
MISC. LOADS 1	14,000	1.00	14,000
MISC. LOADS 2	0	1.00	0
SIZING LOAD:			46,027
SIZING LOAD (AMPS):			192

CONNECTED PHASE LOADS		
PHASE	VA	AMPS
A	27,476	229.0
B	22,702	189.2
TOTALS	50,177	209.1

REMARKS:
1. SQUARE D NO TYPE PANELBOARD OR EQUAL.
2. 'C' = GFCI TYPE BREAKER.

SINGLE-SECTION PANELBOARD SCHEDULE											
PANEL DESIGNATION: L2		MOUNTING: -		LOCATION: POOL EQUIP RM		CIRCUIT #		MAIN LUG AMPS: 125		MAIN BREAKER: 100	
DESCRIPTION	PHASE		C/B		CIRCUIT #	C/B		PHASE		DESCRIPTION	
	A	B	TRIP	POLE		POLE	TRIP	A	B		
POOL PUMP (3 HP)	2040		40	2	1 2	1 20		1200		CHEMICAL CONTROLLER	
		2040			3 4	1 20		864		EF-2	
POOL PUMP (3 HP)	2040		40	2	5 6	1 20		500		IN-POOL LIGHTING	
		2040			7 8	1 20		100		POOL DECK LIGHTING	
POOL FILTER	1200		20	1	9 10	1 20		69		POOL ROOM LIGHTING	
EH-1		1000	20	2	11 12	1 20				SPARE	
SPARE			20	1	13 14	1 20				SPARE	
SPARE			20	1	15 16	1 20				SPARE	
SPARE			20	1	17 18	1 20				SPACE	
SPACE			20	1	19 20	1 20				SPACE	
SPACE			20	1	21 22	1 20				SPACE	
SPACE			20	1	23 24	1 20				SPACE	
TOTALS	6280	5080						1769	964	TOTALS	

PANELBOARD SIZING LOAD			
LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN. (VA)
LIGHTS	669	1.25	836
RECEPTACLES	1,200	10kVA + 50% REST	1,200
MOTORS	10,224	1.25 x LARGEST + SUM OF REST	11,244
AIR CONDITIONING	0	0.00	0
SPACE HEATING	2,000	1.00	2,000
CONTINUOUS	0	1.25	0
NON-CONTINUOUS	0	1.00	0
MISC. LOADS 1	0	1.00	0
MISC. LOADS 2	0	1.00	0
SIZING LOAD:			15,280
SIZING LOAD (AMPS):			64

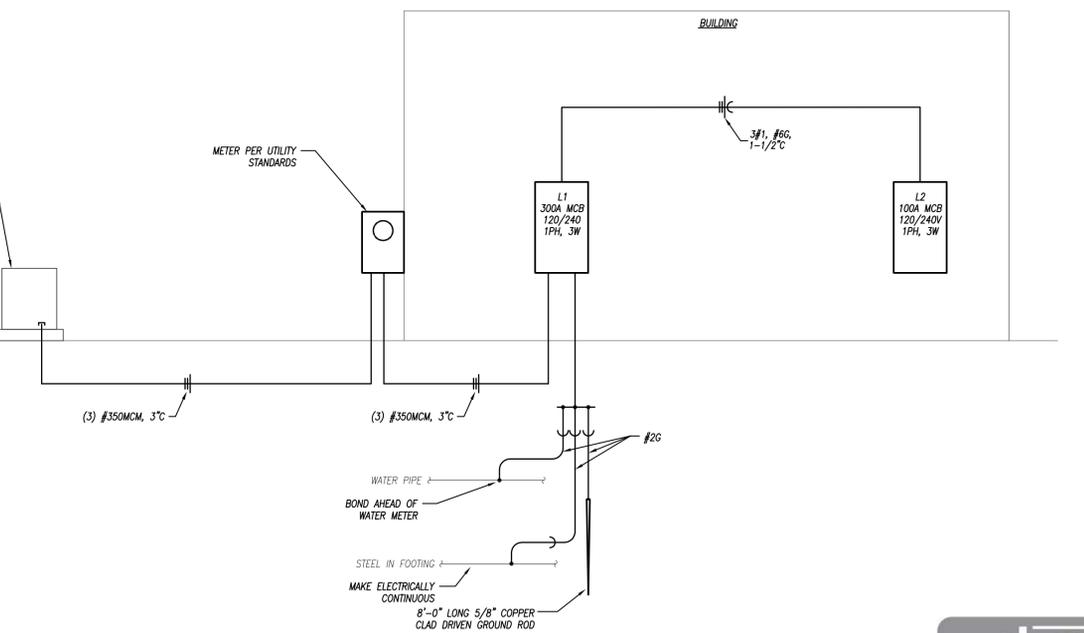
CONNECTED PHASE LOADS		
PHASE	VA	AMPS
A	8,049	67.1
B	6,044	50.4
TOTALS	14,093	58.7

REMARKS:
1. SQUARE D NO PANELBOARD OR EQUAL.
2. PROVIDE SHUNT TRIP MAIN BREAKER WITH ACTUATION BY MUSHROOM PUSHBUTTON ON OUTSIDE WALL.
3. 'C' = GFCI TYPE BREAKER.

EQUIPMENT FAULT CURRENT RATING SCHEDULE			
EQUIPMENT	SCA	AIC	NOTES
PANELBOARD L1	18,980	22,000	1
PANELBOARD L2	11,498	22,000	2

NOTES:
1. RATING BASED ON A FAULT AT UTILITY CO. TRANSFORMER OF 25,000 AIC, PER KCPL.
2. CALCULATIONS PERFORMED USING BUSSMANN POINT-TO-POINT METHOD.

UTILITY TRANSFORMER. FIELD VERIFY EXACT LOCATION PRIOR TO BID AND COORDINATE WITH LOCAL UTILITY

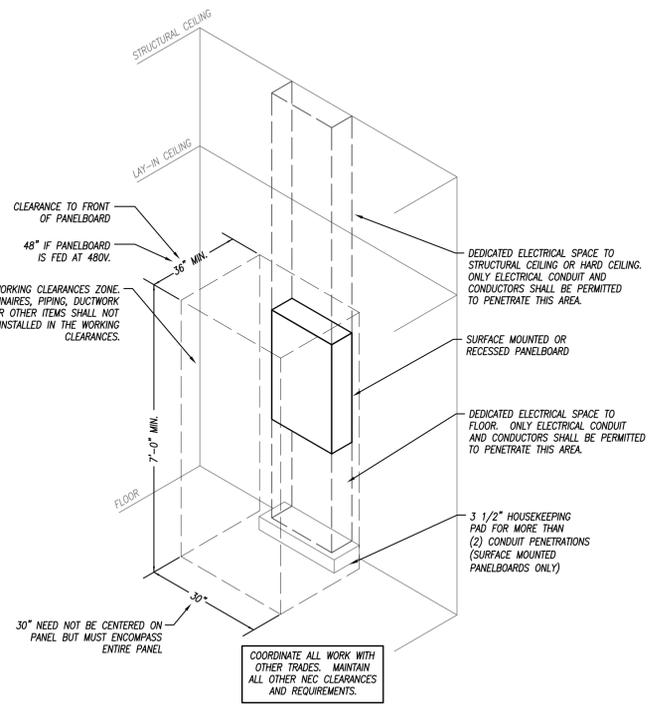


ELECTRICAL RISER DIAGRAM

NOT TO SCALE

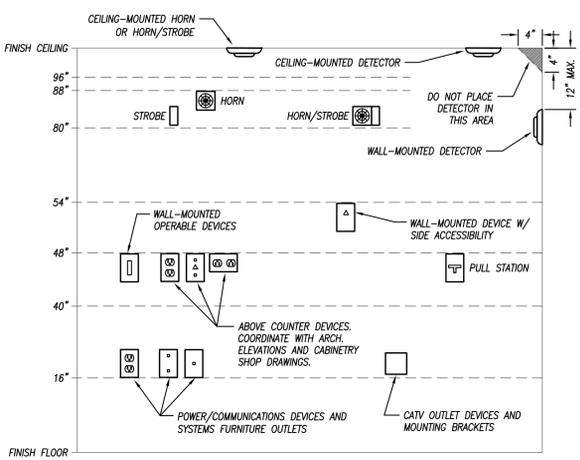


PEARSON KENT MCKINLEY RAAF ENGINEERS LLC
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LENEXA, KS 66215
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WWW.PKMRENG.COM
MO State Certificate of Authority PE-2002020886



TYPICAL PANELBOARD INSTALLATION DETAIL

NOT TO SCALE



GENERAL NOTES:
1. MOUNTING HEIGHTS SHOWN IN THIS DETAIL ARE TYPICAL UNLESS OTHERWISE NOTED ON THE PLANS.
2. SEE ARCHITECTURAL ELEVATIONS FOR SPECIAL CONDITIONS. NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS.
3. ALL INSTALLATIONS SHALL COMPLY WITH ADA.

POWER/COMMUNICATION DEVICES:
OUTLETS SHALL BE LOCATED AT 16" A.F.F. TO THE BOTTOM OF THE BOX. ABOVE COUNTER DEVICES SHALL BE LOCATED AT 2" ABOVE THE BACKSPASH OF THE COUNTER TO THE BOTTOM OF THE DEVICES. VERIFY WITH ARCHITECTURAL DETAILS.

WALL-MOUNTED OPERABLE DEVICES:
OPERABLE DEVICES SHALL BE LOCATED AT 48" A.F.F. TO THE TOP OF THE OPERABLE PORTION OF THE DEVICE.

WALL-MOUNTED OPERABLE DEVICES INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
LIGHT SWITCHES, DIMMERS, CONTROLS, ETC.
PUSH BUTTONS
NURSE/PATIENT CALL DEVICES (INCLUDING THOSE FOR STAFF USE)
OTHER CONTROL OR "CALL" DEVICES

VISUAL FIRE ALARM NOTIFICATION DEVICES (STROBE)
LOCATE DEVICE SO THE BOTTOM OF THE DEVICE IS BETWEEN 80" AND 96" A.F.F. (NFPA) OR 6" BELOW CEILING, WHICHEVER IS LOWER. (ADA 2010).

AUDIBLE FIRE ALARM NOTIFICATION DEVICES (HORN)
LOCATE DEVICE SO THAT THE TOP OF UNIT IS NOT MORE THAN 50" A.F.F. AND NOT LESS THAN 6" BELOW CEILING (NFPA)

FIRE ALARM ACTIVATION DEVICES (PULL STATION)
LOCATE FRONT-APPROACH DEVICES SO THAT THE HIGHEST OPERABLE PORTION OF THE DEVICE IS NOT MORE THAN 48" A.F.F. (ADA 2010) AND NOT LESS THAN 42" A.F.F. (NFPA).

MOUNTING HEIGHTS FOR WALL-MOUNTED DEVICES

NOT TO SCALE

GENERAL NOTES - POOL

STRUCTURE

- PROVIDE A NON-SLIP FINISH TO THE POOL BOTTOM.
- THE SLOPE OF THE POOL BOTTOM (LESS THAN 5 FEET DEEP) SHALL BE NO GREATER THAN 1" PER FOOT AND NOT LESS THAN .2" PER FOOT.
 - EXCEPTION: IN POOLS SMALLER THAN 800 SQUARE FEET, THE SLOPE OF THE FLOOR IN THE SHALLOW PORTION SHALL NOT EXCEED 1 FOOT IN 12 FEET.
- THE FRONT SLOPE OF THE DEEP END OF THE POOL BOTTOM (GREATER THAN 5 FEET DEEP) SHALL BE NO GREATER THAN 4" PER FOOT. OTHER SLOPES OF THE DEEP END OF THE POOL SHALL NOT EXCEED 1" PER FOOT.
- THE MAXIMUM DEPTH AT THE SHALLOW END SHALL NOT EXCEED 42".
- PROVIDE RECESSED DEVICE FOR FASTENING SAFETY ROPES AT TRANSITION POINTS IN THE POOL OR WHERE THE WATER DEPTH REACHES 5 FEET. LOCATE FASTENING DEVICES 1 FOOT TOWARD THE SHALLOW SIDE.
- PROVIDE COVE RADIUS OF 1" MINIMUM TO 8" MAXIMUM WHERE THE WATER DEPTH IS 6 FEET OR LESS.

PLASTER

- PROVIDE SOUTHERN GROUTS AND MORTARS, INC / SGM DIAMOND BRITE (TM) EXPOSED AGGREGATE FINISH, MADE WITH 100% QUARTZ AGGREGATE AND POLYMER MODIFIED CEMENT.
- COLOR TO BE SELECTED BY OWNER, COLOR SHALL BE LIGHT REFLECTIVE MEETING CITY OF LEE'S SUMMIT, MISSOURI STANDARDS. COLOR SELECTED BY OWNER IS SUPER BLUE.
- INSTALL PLASTER SYSTEM PER MANUFACTURERS REQUIREMENTS BY AN EXPERIENCED INSTALLER

WALKWAYS & DECKS

- PROVIDE A CLEAR UNOBSTRUCTED WALK OR DECK AROUND THE ENTIRE PERIMETER OF THE POOL.
 - SLOPE THE DECK AWAY FROM THE POOL A MINIMUM OF 1/4" PER FOOT.
 - WHERE DECK DRAINS ARE USED, THE TRIBUTARY AREA SHALL NOT EXCEED 400 SQUARE FEET OF DECK SURFACE.
 - USE CLASS A CONCRETE (A6) THROUGHOUT. FC = 4,000 PSI, BROOM FINISH SURFACE, TOOLED JOINTS.
 - EXPANSION AND CONTRACTION JOINTS TO BE SPACED AT A MAXIMUM 10' ON CENTER, UNLESS SHOWN OTHERWISE.
- ### POOL LADDERS AND STAIRS
- PROVIDE 2 MEANS OF EGRESS LOCATED AT OPPOSITE ENDS OF THE POOL.
 - PROVIDE 4 MEANS OF EGRESS WHERE POOL WIDTHS ARE 30 OR GREATER.
 - THE DISTANCE FROM ANY POINT IN THE SWIMMING POOL TO A MEANS OF EGRESS SHALL NOT EXCEED 50 FEET.
 - STEPS OR LADDER TREADS SHALL BE NON-SLIP.
 - STEPS SHALL HAVE 12" MINIMUM TREADS AND HAVE 10" MAXIMUM RISERS IN ACCORDANCE WITH ANS/APSP-1 2003 STANDARD FOR PUBLIC SWIMMING POOLS.
 - STEPS SHALL BE PROVIDED WHERE THE WATER DEPTH IS 42 INCHES OR LESS.
 - PROVIDE ONE HANDRAIL PER 12 FEET OF STEP WIDTH OR FRACTION THEREOF.

ELECTRICAL

- ALL ELECTRICAL WIRING SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, 2011 EDITION.
- UNDERWATER LIGHTING SHALL PROVIDE 0.5 WATTS PER SQUARE FOOT OF POOL SURFACE AREA, LIGHTING ALL PORTIONS OF THE POOL, LIGHTING CIRCUIT TO BE GFCI.
- PROVIDE DECK LIGHTING OF 0.6 WATTS PER SQUARE FOOT OF DECK AREA IF POOL LIGHTING IS USED AND 2.0 WATTS PER SQUARE FOOT OF DECK AREA IF POOL LIGHTING IS NOT USED.
- ALL ELECTRICAL LIGHTING FIXTURES, RECEPTACLES, SWITCHES, ETC. SHALL COMPLY WITH SECTION 680-6 OF NEC, 2011.
- UNDERWATER LIGHTING FIXTURES SHALL COMPLY WITH SECTION 680-6 OF NEC, 2011.
- GROUND SHALL COMPLY WITH SECTION 680-24 AND 680-25 OF NEC, 2011.
- A RECEPTACLE THAT PROVIDES POWER FOR POOL OR ASSOCIATED EQUIPMENT SHALL BE PERMITTED BETWEEN 5 FEET AND 10 FEET FROM THE INSIDE WALL OF THE POOL OR HOT TUB, AND WHERE SO LOCATED, SHALL BE OF THE LOCKING (TWO-LOCK) AND GROUNDING TYPES AND SHALL BE PROTECTED BY A GROUND FAULT CIRCUIT INTERRUPTER (GFCI). ALL OTHER RECEPTACLES SHALL BE AT LEAST 10 FEET FROM THE INSIDE WALL OF THE POOL OR HOT TUB.
- AN ADDITIONAL 125-VOLT GFCI CONVENIENCE RECEPTACLE IS REQUIRED TO BE INSTALLED WITHIN 20 FEET BUT NOT CLOSER THAN 10 FEET TO THE INSIDE WALL OF A POOL OR HOT TUB. CORD LENGTHS FOR PERMANENT POOLS SHALL NOT BE LONGER THAN 3 FEET IN LENGTH.
- A DISCONNECTING MEANS SHALL BE PROVIDED AND BE ACCESSIBLE (LOCATED WITHIN SIGHT FROM ALL POOLS AND HOT TUB EQUIPMENT) AND SHALL NOT BE LOCATED WITHIN 5 FEET FROM THE INSIDE WALL OF THE POOL OR HOT TUB.
- ELECTRICAL INSTALLATIONS OVER THE TOP OF A POOL OR HOT TUB OR OVER THE AREA EXTENDING 5 FEET FROM THE EDGE OF THE POOL OR HOT TUB INCLUDING UTILITIES SHALL BE REVIEWED WITH AN ELECTRICAL INSPECTOR PRIOR TO ISSUANCE OF THE PERMIT. ELECTRICAL INSTALLATIONS (INCLUDING UNDERGROUND) ARE NOT ALLOWED WITHIN 5 FEET OF A POOL.

BONDING

- BONDING OF THE POOL SHALL COMPLY WITH SECTION 680-022 OF NEC, 2011.
- ALL METAL PARTS OF A POOL AND ITS ASSOCIATED METALLIC EQUIPMENT, METAL PIPING, RACEWAYS, FIXED METAL LADDERS, TOWERS, PLATFORMS, DIVING STRUCTURES, DOOR FRAMES, ETC. THAT ARE NOT SEPARATED FROM THE POOL BY A PERMANENT BARRIER AND LOCATED WITHIN 5 FEET OF THE POOL, MUST BE BONDED WITH A #8 SOLID COPPER CONDUCTOR. THIS CONDUCTOR IS NOT REQUIRED TO BE EXTENDED OR ATTACHED TO ANY REMOTE PANEL, BOARD, SERVICE EQUIPMENT OR ELECTRODE (GROUND ROD) IT IS ONLY INTENDED TO BOND THESE METALLIC PIECES TOGETHER.

POOL OUTLETS

- POOL OUTLETS OPENINGS MUST BE COVERED BY GRATING THAT CAN ONLY BE REMOVED WITH THE USE OF A TOOL. COMPLYING WITH ANS/APSP-7 2006, STANDARD FOR SUCTION ENTRAPMENT AVOIDANCE AND THE VIRGINIA GRASSIE BAKER POOL AND SPA SAFETY ACT (VGB ACT) AND CURRENT CONSUMER PRODUCT SAFETY COMMISSION (CPSC) INTERPRETATIONS.
- MAIN DRAIN DISCHARGE PIPING SHALL BE SUFFICIENT FOR REMOVAL OF THE WATER THROUGH IT AT A RATE OF AT LEAST 50% OF THE SWIMMING POOL DESIGN RECIRCULATION FLOW RATE.

- PROVIDE VALVES IN THE PIPING SYSTEM TO PERMIT FLOW ADJUSTMENT.
- PROVIDE ADJUSTABLE DIRECTION SKIMMERS.
- PROVIDE A MINIMUM OF 1 SKIMMER FOR EVERY 400 SQUARE FEET OF POOL SURFACE AREA.
- THE VELOCITY OF FLOW THROUGH SKIMMERS SHALL BE IN THE RANGE OF 10-15 FEET/SECOND.

POOL INLETS

- PROVIDE ADJUSTABLE FLOW INLETS.
- THE VELOCITY OF FLOW THROUGH ANY INLET ORIFICE SHALL BE IN THE RANGE OF 5-15 FEET/SECOND.
- LOCATE INLETS A MINIMUM OF 12 INCHES BELOW THE DESIGNED WATER LEVEL IF LOCATED ON THE POOL WALL.
- PROVIDE A MINIMUM OF 1 INLET FOR EVERY 300 SQUARE FEET OF POOL SURFACE AREA.

PUMPING EQUIPMENT

- PUMPS SHALL BE CAPABLE OF SUPPLYING A MINIMUM BACKWASH RATE OF 15 GALLONS PER SQUARE FOOT OF FILTER AREA PER MINUTE.
 - THE RECIRCULATING PUMP AND MOTOR SHALL HAVE SUFFICIENT CAPACITY TO PROVIDE THE TURNOVER REQUIRED AGAINST THE MAXIMUM HEAD LOSS WHICH MAY DEVELOP UNDER NORMAL OPERATING CONDITIONS.
 - PROVIDE A SELF-PRIMING PUMP WHERE THE PUMP IS LOCATED AT AN ELEVATION HIGHER THAN THE POOL WATER LINE.
 - PROVIDE A STRAINER BASKET AT THE PUMP TO FILTER HAIR AND LARGE PARTICLES.
- ### FILTERS
- PROVIDE REMOVABLE FILTER HEADS FOR INSPECTION AND REPLACEMENT OF FILTER MEDIA.
 - THE MAXIMUM SHUT-OFF HEAD OF THE PUMP SHALL NOT BE LESS THAN 50 POUNDS PER SQUARE INCH.
 - MARK VALVES FOR EASY IDENTIFICATION.
 - VALVE FILTER PIPING TO ALLOW FOR REPAIRS WHILE OTHER UNITS ARE IN SERVICE.
 - PROVIDE CARTRIDGE FILTER SYSTEM.

PIPING SYSTEM

- ALL POOL PIPING SHALL BE OF MATERIAL APPROVED FOR POTABLE WATER USE BY THE AMERICAN WATER WORKS ASSOCIATION.
- BRANCH WATER UTILITY SERVICE LINES 2" AND SMALLER SHALL CONFORM TO THE LATEST FEDERAL SPECIFICATIONS FOR TYPE "K" FLEXIBLE COPPER TUBING.
- POOL SERVICE LINES LARGER THAN 2" SHALL BE SCHEDULE 80 PVC
- ALL WATER INSTALLATIONS INCLUDING BACKFLOW DEVICES ARE SUBJECT TO FIELD VERIFICATION AND APPROVAL BY THE WATER DEPARTMENT OR BUILDING INSPECTOR.
- PIPING SHALL HAVE THE ABILITY TO WITHSTAND FOUR TIMES THE OPERATING PRESSURE.
- PIPING SHALL BE PROPERLY SLOPED FOR ADEQUATE DRAINAGE AND SUPPORTED AN INTERVALS TO PREVENT SAGGING BETWEEN SUPPORTS.
- PROVIDE FOR EXPANSION OF PIPES.
- PROVIDE FOR CLEANOUTS IN THE CIRCULATION SYSTEM.
- ALL PLASTIC (PVC) PIPING MUST HAVE THE NATIONAL SANITATION FOUNDATION (NSF) SEAL IMPRINTED ON IT.
- USE FLANGE JOINTS OR UNION FOR EXPOSED PIPING IN THE FILTER ROOM.
- COLOR CODE PIPING AS FOLLOWS:
 - POTABLE WATER LINES: DARK BLUE
 - RECIRCULATION:
 - FILTERED: AQUA
 - SKIMMER: OLIVE GREEN
 - MAIN DRAIN: BLACK
 - WASTE LINES:
 - BACKWASH WASTE: DARK BROWN
 - SEWER: DARK GRAY
- MAKEUP WATER SHALL BE ADDED TO THE POOL BY FREE-FALL DISCHARGE DIRECT TO THE POOL WITH AN AIR GAP OF TWO TIMES THE PIPE DIAMETER OR 6 INCHES MINIMUM ABOVE THE COPING. THE DISCHARGE SHALL BE THROUGH PIPING WITH AN APPROVED VACUUM BREAKER PROTECTION.

DISINFECTANT SYSTEMS

- PROVIDE A MECHANICAL UNIT FOR FEED OF A CHEMICAL FOR PH CONTROL.
- PROVIDE A POSITIVE DISPLACEMENT TYPE CHEMICAL FEEDER TO MAINTAIN PH OF POOL WATER WITHIN THE RANGE OF 7.2 TO 7.6.

SIGNAGE

- RULES AND REGULATIONS: POST INSTRUCTIONS TO BATHERS AT ENTRANCE TO DRESSING ROOMS PROVIDING THE FOLLOWING:
 - ADMISSION TO THE POOL IS REFUSED TO ALL PERSONS HAVING ANY CONTAGIOUS DISEASE, INFECTIOUS CONDITION SUCH AS COLDS, FEVER, RINGWORM, FOOT INFECTIONS, SKIN LESIONS, CARBUNCLES, BOILS, INFLAMED EYES, EAR DISCHARGES OR ANY OTHER CONDITION WHICH HAS THE APPEARANCE OF BEING INFECTIOUS, PERSONS WITH EXCESSIVE SUNBURN, ABRASIONS THAT HAVE NOT HEALED, CORN PLASTERS BUNION PADS, ADHESIVE TAPE, RUBBER BANDAGES OR BANDAGES OF ANY KIND MAY NOT BE PERMITTED, A PERSON UNDER THE INFLUENCE OF ALCOHOL OR EXHIBITING ERRATIC BEHAVIOR SHALL NOT BE PERMITTED IN THE POOL AREA.
 - NO FOOD, DRINK, GUM OR TOBACCO WILL BE ALLOWED IN OTHER THAN SPECIFICALLY DESIGNATED AND CONTROLLED SECTIONS OF THE POOL AREA.
 - PERSONAL CONDUCT WITHIN THE POOL FACILITY MUST BE SUCH THAT THE SAFETY OF SELF AND OTHERS IS NOT JEOPARDIZED. NO RUNNING, BOISTEROUS OR ROUGH PLAY, EXCEPT SUPERVISED WATER SPORTS, IS PERMITTED.
 - SPLITTING, SPOUTING OF WATER, BLOWING THE NOSE OR OTHERWISE INTRODUCING CONTAMINANTS INTO THE POOL IS NOT PERMITTED.
 - GLASS, SOAP, LOTION OR OTHER MATERIAL, WHICH MIGHT CREATE HAZARDOUS CONDITIONS OR INTERFERE WITH EFFICIENT OPERATION OF THE SWIMMING POOL, SHALL NOT BE PERMITTED IN THE SWIMMING POOL OR ON THE POOL DECK.
 - ALL APPAREL WORN IN THE POOL SHALL BE CLEAN AND SANITARY. STREET ATTIRE OR CUTOFFS ARE NOT ALLOWED IN THE POOL.
 - CHILDREN WHO ARE NOT TOILET TRAINED SHALL WEAR TIGHT FITTING PLASTIC UNDERWEAR OR SWIM DIAPERS.
 - DIVING IS NOT PERMITTED IN SHALLOW WATER.

- ALL ANIMALS, BIRDS AND DOMESTIC FOUL ARE PROHIBITED FROM ENTERING THE POOL AREA.
 - THE POOL SHALL CLOSE AT 10:00 PM. CHILDREN UNDER THE AGE OF 12 WITHOUT ADULT SUPERVISION WILL NOT BE ALLOWED.
 - THE POOL LIFELINE SHALL NOT BE REMOVED WITHOUT PERMISSION FROM THE POOL MANAGEMENT.
- BATHER LOAD - POST A SIGN IN A CONSPICUOUS LOCATION WITHIN THE POOL ENCLOSURE STATING: "BATHER LOAD: 216"

ADDITIONAL SIGNS

- WARNING - NO LIFE GUARD ON DUTY
- NO DIVING (SIGN TO BE POSTED ON WALL AND DECK)
- EMERGENCY USE ONLY (SIGN TO BE POSTED ABOVE SAFETY EQUIPMENT)
- 911 (SIGN POSTED ABOVE EMERGENCY TELEPHONE)
- HOURS OF OPERATION:
- POOL PERMIT
- ADDITIONAL SIGNAGE MAY BE REQUIRED BY THE OWNER, COORDINATE ALL SIGNAGE WITH THE OWNER PRIOR TO FABRICATION
- DEPTH MARKERS
 - DEPTH MARKERS SHALL BE IN NUMERALS FOLLOWED BY THE LETTERS "FT" TO INDICATED FEET. MARKERS SHALL BE 4" MINIMUM IN HEIGHT AND BE A COLOR CONTRACTING WITH THE BACKGROUND.
 - DEPTH MARKERS SHALL BE SET IN INLAID TILE.
 - MARKERS SHALL BE LOCATED ON BOTH SIDES AND BOTH ENDS OF THE POOL.
 - MARKERS SHALL BE LOCATED AT OR ABOVE THE WATER LINE ON THE POOL WALL AND ON THE COPING.
 - MARKERS SHALL BE LOCATED AT MAXIMUM AND MINIMUM DEPTH POINTS OF THE POOL AND AT THE POINTS OF BREAK BETWEEN THE DEEP AND SHALLOW PORTIONS AT INTERMEDIATE INCREMENTS OF DEPTH, SPACE AT NOT MORE THAN 25 FOOT INTERVALS, OR AS NOTED ON PLANS.

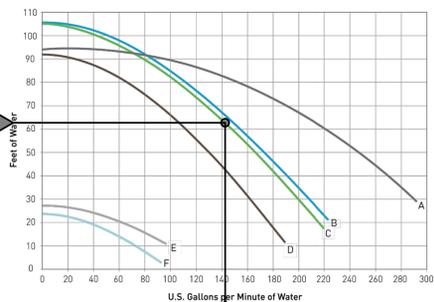
CONDUIT

FOR FLEXIBLE CONNECTIONS TO SWIMMING POOL, SPA, AND HOT TUB MOTORS PER NEC680.21(A)(3) & 680.42(A)(1)

TITAN TYPE CB IS MANUFACTURED WITH A SPIRAL-WOUND STRIP OF HEAVY GAUGE, CORROSION RESISTANT, HOT-DIPPED GALVANIZED STEEL. FOR 3/8" THROUGH 1-1/4" TRADE SIZES, THE CORE IS CONSTRUCTED WITH A SQUARE-LOCKED STEEL STRIP WITH AN INTEGRAL COPPER-BONDING STRIP ENCLOSED WITHIN THE STEEL CONVOLUTIONS. FOR 1-1/2" THROUGH 4" TRADE SIZES, THE CORE IS CONSTRUCTED WITH A FULLY-INTERLOCKED STEEL STRIP. A RUGGED, JACKET-RETARDANT, FLEXIBLE PVC JACKET IS EXTRUDED OVER THE STEEL CORE. THE BLUE JACKET RESISTS OILS, MILD ACIDS, AND EXPOSURE TO SUNLIGHT. OTHER JACKET COLORS ARE AVAILABLE.

- BLUE COLOR, A PROTECTIVE THERMOPLASTIC OUTER JACKET WHICH SEALS OUT WATER, LIQUIDS, ABRASIVES, ALCOHOL, COOLANTS, CORROSIVE FUMES AND GASES, DIRT, GREASE, MINERAL ACIDS, NON-CONCENTRATED FIXED ALKALINES, PETROLEUM OILS, SALT AIR AND SPRAY, AND WEATHER.
 - SMOOTH METAL INTERIOR FOR EASY WIRE PULLING
 - UV SUNLIGHT-RESISTANT JACKET
 - RATED FOR TEMPERATURE RANGE OF -30°C TO +80°C, 60°C OIL (-22°F TO +176°F, 140°F OIL)
 - ACCEPTS STANDARD METALLIC LIQUID TIGHT FITTINGS
 - RATED FOR DIRECT BURIAL APPLICATIONS
- ### STANDARDS
- NEC TYPE DESIGNATION - TYPE LFMC (LIQUID TIGHT FLEXIBLE METAL CONDUIT)
 - ANSI/NFPA-70, NEC ARTICLE 350
 - UL LISTED TO UNDERWRITERS LABORATORIES STANDARD ANSI/UL-360 FOR LIQUID TIGHT FLEXIBLE STEEL CONDUIT
 - CSA LISTED TO CSA 22.2 NO.56 FOR USE PER THE CANADIAN ELECTRICAL CODE C22.1 SECTION 12-1300

PERFORMANCE CURVES



BUILDING DATA

- PROJECT DESCRIPTION: SWIMMING POOL
- CITY OF LEE'S SUMMIT, MISSOURI APPLICABLE CODES, STANDARDS AND ORDINANCES
 - INTERNATIONAL BUILDING CODE, 2018 EDITION
 - INTERNATIONAL MECHANICAL CODE, 2018 EDITION
 - INTERNATIONAL PLUMBING CODE, 2018 EDITION
 - INTERNATIONAL FIRE CODE, 2018 EDITION
 - NATIONAL ELECTRICAL CODE, 2017 EDITION
 - INTERNATIONAL ENERGY CONSERVATION CODE, 2018 EDITION
 - INTERNATIONAL FUEL GAS CODE, 2018 EDITION
 - ANSI/APSP-1 2003 STANDARD FOR PUBLIC SWIMMING POOLS
 - ICC/ANSI-A117.1: PROVIDING ACCESSIBILITY AND USABILITY FOR PHYSICALLY HANDICAPPED PEOPLE, 2017 EDITION.

CODE ANALYSIS

CONSTRUCTION TYPE:	V-8
OCCUPANCY GROUP/POOL:	A-2
OCCUPANCY GROUP/POOL HOUSE:	RE: BUILDING PLANS
OCCUPANT LOAD FOR POOL:	RE: POOL CALCULATIONS
ALLOWABLE NUMBER OF STORIES:	N/A
ACTUAL NUMBER OF STORIES:	0
REQUIRED NUMBER OF EXITS:	2
ACTUAL NUMBER OF EXITS:	RE: BUILDING PLANS
ALLOWABLE BUILDING HEIGHT:	N/A
ACTUAL BUILDING HEIGHT:	N/A
ALLOWABLE EXIT TRAVEL DISTANCE:	200 FT.
ACTUAL TRAVEL DISTANCE:	RE: BUILDING PLANS
REQUIRED EXIT WIDTH:	RE: POOL CALCULATIONS
ACTUAL EXIT WIDTH:	RE: BUILDING PLANS
SEPARATED OR NON-SEPARATED DESIGN:	N/A
SPRINKLERED:	N/A
FIRE SEPARATION DISTANCE:	N/A
PLUMBING FIXTURES REQUIRED:	RE: POOL CALCULATIONS NOTE: REFER TO BUILDING PLANS FOR LOCATION AND SIZE OF RESTROOMS

POOL FINISHES

WATER LINE TILE SELECTION : 6" X 6" FROST PROOF , COLOR SELECTED BY OWNER
TOTAL STEP TILE: 2" X 2" COLOR SELECTED BY OWNER
TOTAL COPING PERIMETER: 248 L.F. PRECAST CONCRETE

PLUMBING / POOL EQUIPMENT (NSF APPROVED)

- NOTE: ALL EQUIPMENT WILL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- INLETS: STA-RIGHT- 08417-0000
SKIMMERS: STA-RIGHT - 08650-1403
VACUUM CLEANING SYSTEM- MANUAL VACUUM CLEANING SYSTEM
CONNECTED TO THE SKIMMERS
CHLORINATOR: PENTAIR INTELLICHLOR IC40
ACID FEEDER: PENTAIR INTELLICHEM
TEST KIT: LAMOTTE 2056 COLORQ PRO 7
POOL FILTER: PENTAIR CLEAN AND CLEAR PLUS CARTRIDGE FILTER SYSTEM - CCP420
CARTRIDGE (PROVIDE SECONDARY CARTRIDGE TO ENSURE PROMPT REPLACEMENT WHEN NECESSARY
VALVES: (TELEDYNE LAARS -JANDY VALVE - 2 1/2 X 2")
FLOW METER: 4" FLOW METER #3040P, 125-500 GMP MAX, NSF-50 LISTED
POOL PUMP: PENTAIR WHISPERFO XFE-12, 3 HP
POOL HEATER: NOT PROVIDED
MAIN DRAIN POOL: AQUASTAR Model # W4V9WR0008
HYDROSTATIC RELIEF VALVE: PENTAIR - 542020
LIGHTS: 500 WATT, 12 VOLT, 50FT CORD (PENTAIR INTELLIBRITE - 601306) WHITE POOL LIGHTS
300 WATT, 12 VOLT, 100FT CORD (PENTAIR GLOBRITE - 602106) WHITE LED LIGHTS
HANDRAILS: (S.R.SMITH - 3HR-6-065)
HANDRAIL ANCHOR: (S.R.SMITH - AS-100C 3" BRONZE ANCHOR)
LADDER: S.R.SMITH - LF-24-3B SEALED STEEL, SALT/WATER FRIENDLY
ESCUTCHEON PLATES: (6) (S.R.SMITH,INC. - EP-100F)
BACKWASH TO: NOT REQUIRED, CARTRIDGE FILTERS ARE USED
FRESHWATER SOURCE: IN-LINE FILL WITH USFC APPROVED RPZ BACKFLOW PREVENTER
DELUXE CLEANING KIT: (1) - (TALOR - COMPLETE (K-2005)
LIFE SAVER EQUIPMENT:
LIFE HOOK: (1) - (RAINBOW - R221026)
PERMANENTLY ATTACHED TO 16" POLE
RING BODY: (1) - WITH 50 FT LINE (CAL-JUNE - #GW 20)
FIRST AID KIT: (1) (E.R.B ADVANCED SAFETY - #25EP)

DECKING

NOTE: THE POOL DECK WILL BE NON-SLIP AND SLOPE 1/4" PER FOOT AWAY FROM THE POOL.
DECK TYPE: CONCRETE WITH LIGHT BROOM FINISH
STRIP DRAIN: NIC - RE: CIVIL DRAWINGS FOR LOCATION AND TYPE
DRAIN PIPE: SDR 80 PVC (4")
IRRIGATION SLEEVES (4"): N/A

Performance Curve	Model	Description
A	XFE-20	5 HP, High Efficiency
A	XFK-20	5 HP, 3-Phase, TEFC Motor
B	XFE-12	3 HP, High Efficiency
C	XF-12	3 HP, Standard Efficiency
B,E	XFDS-12	3 HP, 2-Speed
B	XFK-12	3 HP, 3-Phase, TEFC Motor
D	XFE-8	2 HP, High Efficiency
D	XF-8	2 HP, Standard Efficiency
D,F	XFDS-8	2 HP, 2-Speed
D	XFE-30	2.5 HP, High Efficiency, Uprated
D	XF-30	2.5 HP, Standard Efficiency, Uprated
D,F	XFDS-30	2.5 HP, 2-Speed, Uprated
D	XFK-8	2 HP, 3-Phase, TEFC Motor

1 POOL PUMP

SCALE: NTS

POOL CALCULATIONS - OSAGE

POOL MEASUREMENTS			
Description	Area (SF)	Avg Depth (FT)	Volume (GAL)
Deep Pool	2100	4	63,000.00
Kid Pool	276	1.5	3,105.00
Sun Shelf	322	1	2,415.00
Total Area (SF)			2,698
Total Volume (GAL)			68,520
Total Volume (cubic FT)			9,136
Perimeter (LF)			252

POOL PLUMBING			
Pool Capacity (GAL)			68,520
Average Turnover Rate (min)			240
Clean Rate			360
Min. Flow Rate (GPM)			286
flow rate per pump	2		143.00
RETURN INLETS	Inlet Rate (gpm)	No. Inlets	
	30	10	
SKIMMERS	Skimmer Rate (gpm)	No. Skimmers	
based on gpm	45	7	
based on sf of surface area	400	6,745	

ESTIMATED HEAD CALCULATIONS			
FLOW RATE (GPM)	286	Friction Loss	
PIPE LENGTH AND RISE	/100 FT		
Feet of Head			5
3" Pipe - LF*	7.96	1.9	15.12
VALVES AND TURNS	QTY		
90deg Elbow*	28	1.3	36.40
45deg Elbow*	49	0.35	17.15
Gate Valve*	7	4.5	31.50
Tee*	10	0.4	4.00
CARTRIDGE FILTER	2	7.5	15.00
HEATER	0	7.5	0.00
* estimated count		TOTAL	124.17
PUMPS	2	PER PUMP	62.09

POOL EQUIPMENT			
POOL PUMP	Pump Rate (GPM)	No. Pumps	
PENTAIR XFE-12, 3 HP	145	2	
FILTER TYPE	Filtration Rate	Filter Area-Min.	
Cartridge Filter	0.375	762.67	
PENTAIR CCP - 420	420	sf of area	2
CHLORINATOR	Capacity (Gal.)	Cells	
PENTAIR INTELLICHLOR IC40	40,000	2	

POOL LIGHTING			
FIXTURE	WATTS	QTY	
PENTAIR INTELLIBRITE	500	3	1500
PENTAIR GLOBRITE	300	4	1200
		WATTS/SF	1.00

OCCUPANT LOAD AND EXITING			
BATHER LOAD	Area (SF)	Ratio	Bather Load
Deep area (>5')	0	1/30	0
Shallow Area (<=5')	2,698	1/15	180
Total Bather Load			180
OCCUPANT LOAD	Area (SF)	SF/person	Occ. Load
In Pool	2,698	50	54
In Deck	4,312	50	87
Total Occupant Load			141
Occupant Load per Sex			71



POOL DESIGNER:
B&A ARCHITECTURE
100 W 31ST STREET, SUITE 100
KANSAS CITY, MO 64108
PH: 816-753-6100

CLIENT:
SUMMIT HOMES

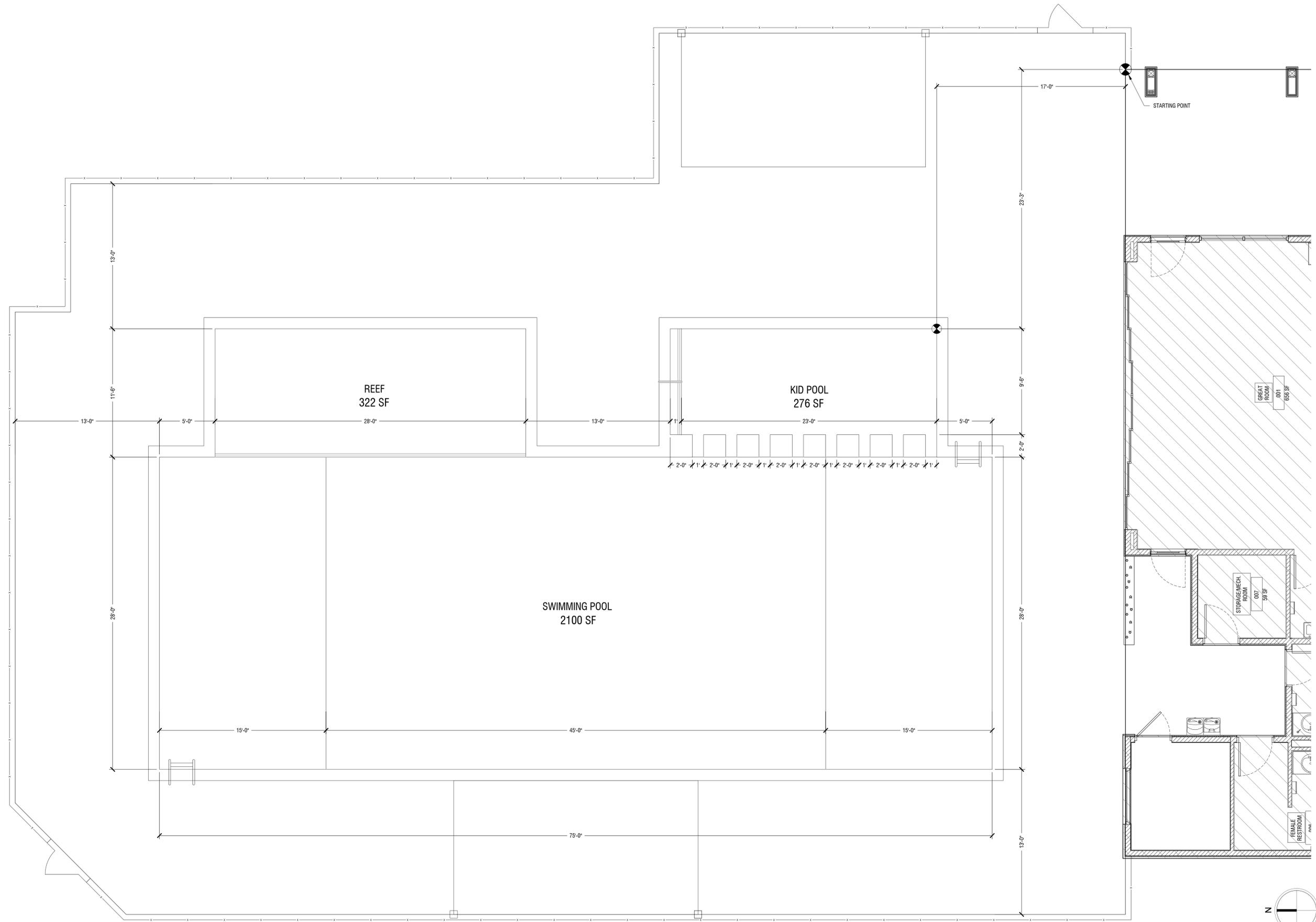
OSAGE SWIMMING POOL
2025 SW M 150 HWY
LEE'S SUMMIT, MISSOURI

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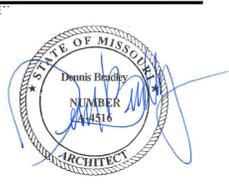


ISSUED:	REVISION	DATE
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**OSAGE
SWIMMING POOL**
2025 SW M 150 HWY
LEE'S SUMMIT, MISSOURI



1 DIMENSIONED POOL PLAN
SCALE: 1/4" = 1'-0"



ISSUED:	NO.	REVISION	DATE
JULY 31, 2020			

DESIGNED BY DMB
DRAWN BY DMB
CHECKED BY DMB

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GENERAL NOTES

1. THE WORK SHALL CONFORM TO THE APPLICABLE BUILDING CODE, AND OTHER ORDINANCES, CODES AND REGULATIONS LISTED IN THE SPECIFICATIONS OR ON THE DRAWINGS, AND REQUIRED BY LOCAL BUILDING AUTHORITIES. THE GOVERNING CODES, RULES AND REGULATIONS ARE COLLECTIVELY REFERRED TO AS 'THE CODE'. THE CONTRACTOR SHALL REPORT ANY INCONSISTENCIES, CONFLICTS OR OMISSIONS THEY MAY DISCOVER TO THE ARCHITECT FOR INTERPRETATION PRIOR TO PERFORMING THE WORK.
2. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL PROVIDE PUBLIC PROTECTION AS NECESSARY AND REQUIRED BY GOVERNING CITY AGENCIES.
3. THE GENERAL CONTRACTOR IS RESPONSIBLE TO COORDINATE WORK OF ALL SUB-CONTRACTORS AND SHALL PERFORM SUCH MISCELLANEOUS WORK AS MAY BE NECESSARY FOR THEM TO COMPLETE THEIR WORK.
4. THE GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS ON THE JOB SITE AND REPORT ANY AND ALL DISCREPANCIES AND/OR UNUSUAL CONDITIONS TO THE ARCHITECT PRIOR TO FINALIZING BIDS OR COMMENCEMENT OF ANY CONSTRUCTION.
5. ALL REQUIRED PERMITS MUST BE OBTAINED FROM THE PUBLIC WORKS, BUILDING, AND HEALTH DEPARTMENTS PRIOR TO START OF CONSTRUCTION.
6. THE GENERAL CONTRACTOR SHALL OBTAIN ALL PERMITS FOR ALL SITE DEVELOPMENT WORK, PAY ALL FEES FOR PERMITS, AND CHECK ALL OVERNING AUTHORITIES' SPECIFICATIONS FOR GUTTERS, SIDEWALKS, POLES, AND OTHER STRUCTURES, INCLUDING REMOVAL OR RELOCATION OF EXISTING UTILITIES OR OTHER PHYSICAL OBJECTS SHOWN ON PLANS OR OTHERWISE NOTED OR REQUIRED.
7. DO NOT SCALE THESE DRAWINGS. SHOULD ANY DIMENSIONAL DISCREPANCIES BE ENCOUNTERED, CLARIFICATIONS SHALL BE OBTAINED FROM THE ARCHITECT.
8. UNLESS OTHERWISE NOTED ON THESE DRAWINGS OR IN THE SPECIFICATIONS AS BEING N.I.C. OR EXISTING, ALL ITEMS, MATERIALS, ETC., AND THE INSTALLATION OF SAME ARE A PART OF THE CONTRACT DEFINED BY THESE DRAWINGS AND SPECIFICATIONS.
9. THE SITE AND BUILDINGS SHALL BE ACCESSIBLE TO AND FUNCTIONAL FOR THE PHYSICALLY HANDICAPPED.
10. ALL RAMPS SHALL HAVE A NON-SLIP FINISH.
11. DETAILS ARE INTENDED TO SHOW THE INTENT OF THE DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT THE FIELD DIMENSIONS OF CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK OF THE CONTRACT.
12. THE CLIENT, ARCHITECT, CONSULTANTS AND ALL INSPECTIONS FROM PERTINENT AGENCIES SHALL BE PERMITTED ACCESS TO THE JOB SITE AT ALL TIMES DURING NORMAL WORKING HOURS.
13. THE CONTRACTOR SHALL VERIFY INSERTS AND EMBEDDED ITEMS WITH ALL APPLICABLE DRAWINGS BEFORE POURING CONCRETE.
14. REFER MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL DRAWINGS FOR UTILITY SERVICES AND SITE DEVELOPMENT WORK.

THE SCOUT™ POOL LIFT

24V INTEGRATED BATTERY & CONTROL BOX
24V ACTUATOR
DUAL FLIP-UP ARMRESTS SAFETY BELT

SELF-LOCKING BASE FOR 1.9" X 6" ANCHOR POST
 [15.2 cm] 6"
 [30.5 TO 91cm] 12" TO 36"

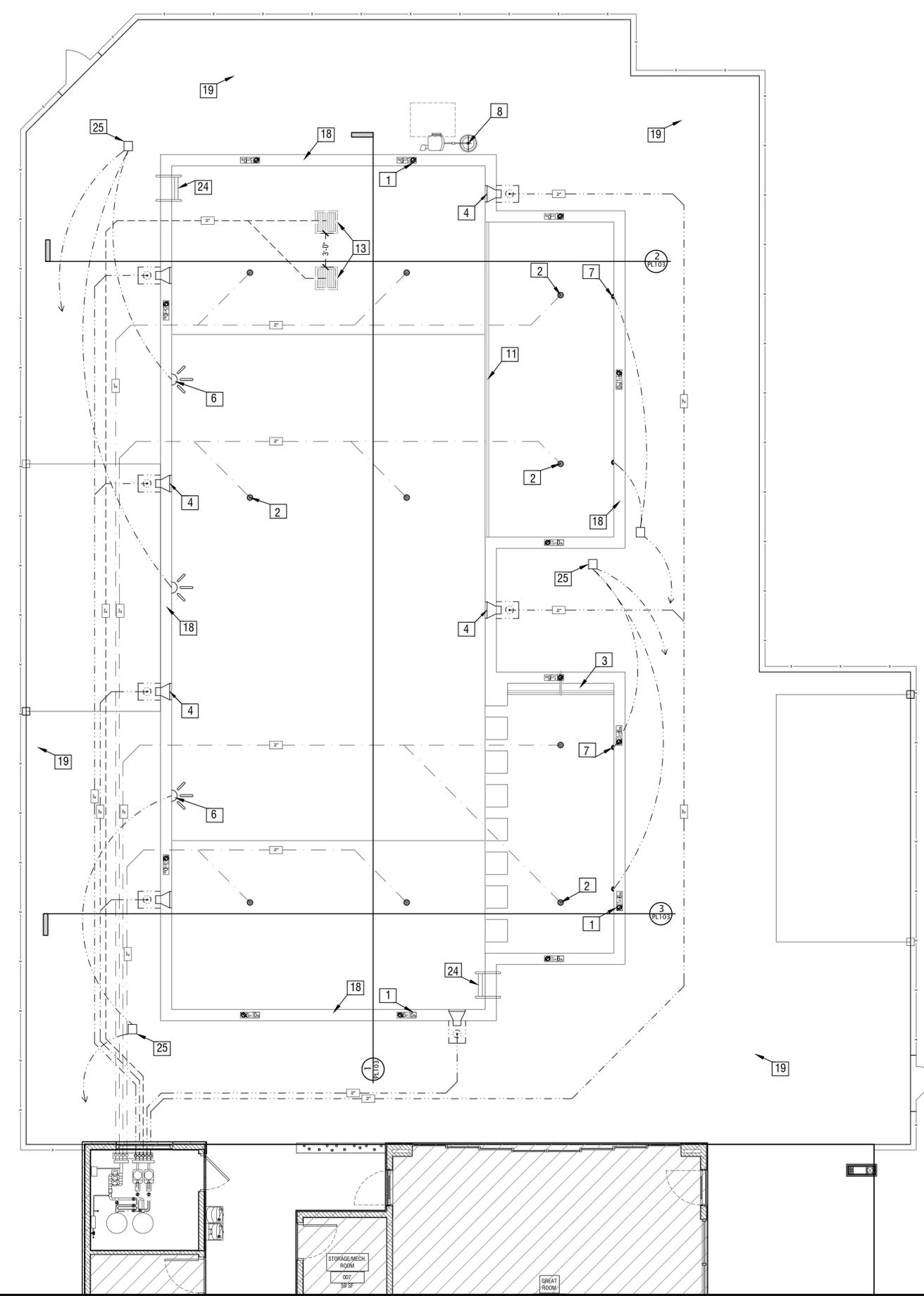
SPECIFICATIONS:
 THE AQUA CREEK PRODUCTS' SCOUT POOL LIFT SHALL BE A 24VDC ACTUATED IN-GROUND POOL OR SPA LIFT. ALL METAL COMPONENTS SHALL BE MADE FROM TYPE 304 STAINLESS STEEL. FOR ADDED CORROSION PROTECTION, ALL METAL PARTS SHALL BE EPONY-POWDER-COATED. THE LIFT SHALL HAVE A DYNAMIC LIFTING CAPACITY OF 350 LBS* [159 kg]. THE SCOUT POOL LIFT SHALL HAVE A RANGE OF 40" [102cm]. THE SCOUT POOL LIFT SHALL FIT INTO A STANDARD 61" X 61" DEEP ANCHOR. IT SHALL HAVE A SELF-LOCKING BASE TO PREVENT ROTATION. IT SHALL COME STANDARD WITH AN 18" [45.7 cm] WIDE SEAT, AND SHALL BE CAPABLE OF BEING FULLY SELF-OPERABLE. IT SHALL ALSO COME WITH A SAFETY BELT, ADJUSTABLE FOOTREST AND DUAL FLIP-UP ARMRESTS. A LIMITED LIFETIME WARRANTY IS STANDARD.

*THE SCOUT LIFT IS AVAILABLE WITH AN ANCHOR [F-800SC] OR WITHOUT [F-802SCNA]. *THE LIFTING CAPACITY IS 300 LBS [136 kg] IF USED WITH PLASTIC-SLEEVE 1.9" ANCHOR.

9889 GARRYMORE LANE
 MISSOULA, MT 59808
 (406) 549-9709
 FAX (406) 549-2602

MODEL: F-800SC
 PRICE: F-800SC-1
 SCALE: 1:24 DATE: 7/27/11
 REVISED: DS BY: C

Aqua Creek Products
 The Total Solution for Pool and Spa Access



GENERAL NOTES

1. DEPTH MARKERS W/ NO DIVING TILE ON COPING (HORIZ SURFACE) AND POOL WALL FACE (VERT. SURFACE)
2. FLOOR RETURNS
3. POOL STEPS
4. SKIMMERS
5. FIBERGLASS POOL SLIDE W/ LADDER, BY OTHERS
6. 12" LED 120V
7. PENTAIR LED GLO-BRITES
8. HANDI-CAP LIFT
9. LANE LINE W/ CUP ANCHORS AT EACH END
10. LANE MARKING PORCELAIN TILE, 6 X 6, COLOR SELECTED BY OWNER
11. 2" CONTRASTING TILE ON FACE AND TOP EDGE AT STEPS AND WHERE ELEVATION CHANGE OCCURS IN POOL TILE COLOR SELECTED BY OWNER FROM STANDARD NON-SLIP COLORS
12. STAINLESS STEEL HANDRAIL WITH PVC SLEEVES
13. ANTI-VORTEX DUAL FLOOR DRAINS
14. #4 REBAR AT 12" O.C.E.W.
15. 12" OF 1/2" CLEAN GRAVEL
16. 6X6 WATER LINE TILE
17. BOND BEAM 12" X 20", MIN. UNLESS NOTED OTHERWISE
18. BULLNOSE CANTILEVERED PRECAST CONCRETE COPING
19. DECK BY OTHERS, SLOPE AWAY FROM POOL
20. 6" CONCRETE BLOCK
21. POOL PLASTER
22. WATER TARGET AT EACH END OF SWIMMING LANES
23. HYDROSTATIC RELIEF VALVE
24. STAINLESS STEEL POOL LADDER
25. J-BOX FOR POOL LIGHTING

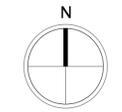
NOTES
 IBC 2012 SECTION 3109: SWIMMING POOL ENCLOSURES AND SAFETY DEVICES
 3109.5 ENTRAPMENT AVOIDANCE
 SUCTION OUTLETS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ANSI/APSP-7.

NOTES
 THE POOL CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING, VERIFYING, SUPPLYING AND INSTALLING THE EQUIPMENT, INCLUDING PUMPS, FILTERS, PIPING, INLETS, SKIMMERS, DRAINS, APPROPRIATELY SIZED FOR THE SIZE OF POOL DESIGNED. THE EQUIPMENT SHALL BE SIZED TO OPTIMIZE THE LIFE OF THE EQUIPMENT AND EFFICIENCY OF THE SYSTEM AND STILL MEET THE REQUIREMENTS OF A SAFE AND CLEAN POOL.
 THE POOL CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT, MISSOURI; JACKSON COUNTY HEALTH DEPARTMENT, AND THE STATE OF MISSOURI ORDINANCES AND CODES REGARDING THE CONSTRUCTION OF PUBLIC SWIMMING POOLS.

NOTES
 WINTERIZATION OF POOL OR DRAINING OF POOL FOR MAINTENANCE: POOL SHALL BE DE-CHLORINATED PRIOR TO DRAINING FOR WINTER MONTHS. STOP ADDING CHLORINE TO THE POOL FOR A PERIOD OF 4-5 DAYS, MONITOR THE CHLORINE LEVEL WITH A SWIMMING POOL CHLORINE TEST KIT. WHEN THERE IS NO LONGER ANY DETECTABLE CHLORINE IN THE SWIMMING POOL IT IS SAFE TO DISCHARGE THE WATER. USING A SUBMERSIBLE PUMP, DRAIN POOL TO LANDSCAPED AREAS. THE DISCHARGE AREA SHALL BE IDENTIFIED ON THE CIVIL SITE DRAWINGS.

NOTE: THE POOL LIFT WILL BE REQUIRED TO BE INSTALLED BY TEMPORARY CERTIFICATE OF OCCUPANCY (TCO) RELEASE.

1 DETAILED POOL PLAN
 SCALE: 3/16" = 1'-0"



POOL DESIGNER:
B&A ARCHITECTURE
 100 W 31ST STREET, SUITE 100
 KANSAS CITY, MO 64108
 PH: 816-753-6100

CLIENT:
 SUMMIT HOMES

OSAGE SWIMMING POOL
 2025 SW M 150 HWY
 LEE'S SUMMIT, MISSOURI

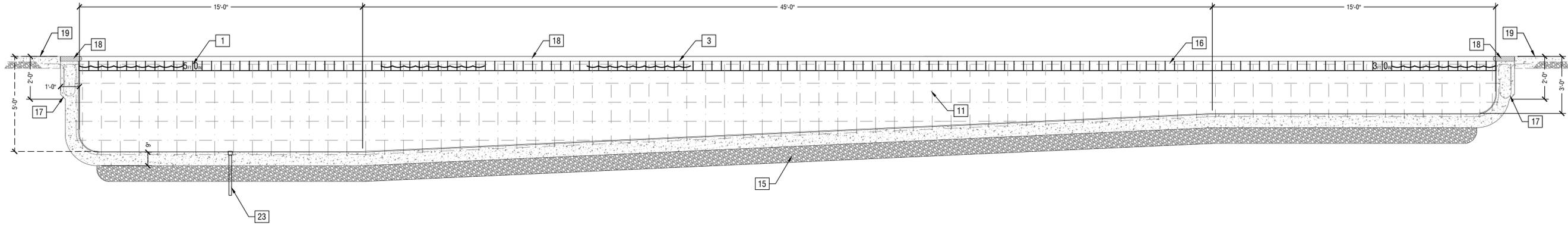


NO.	REVISION	DATE

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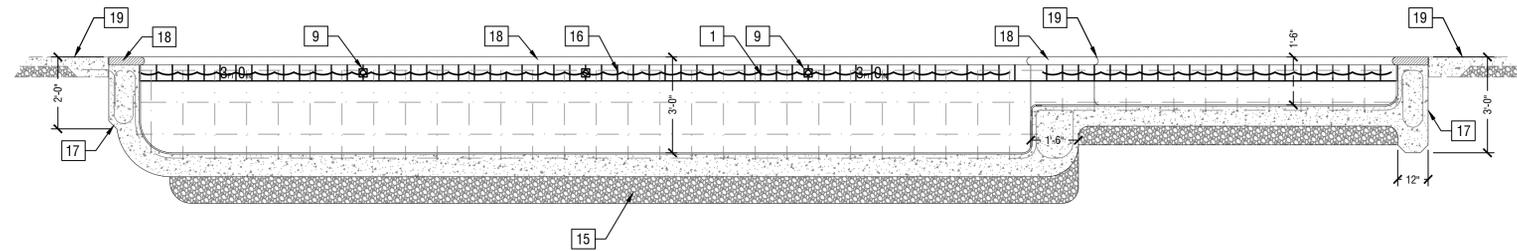
DETAILED POOL PLAN
PL102



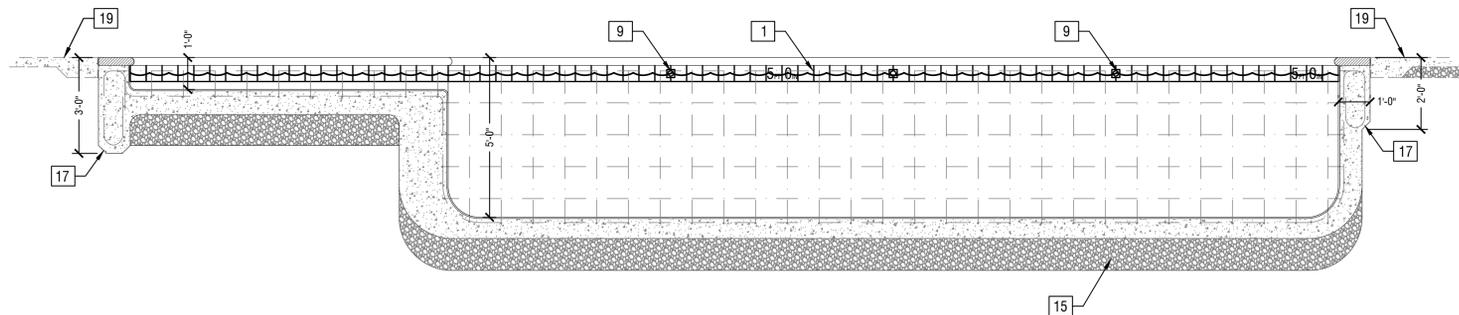
1 POOL SECTION
 SCALE: 3/8" = 1'-0"

GENERAL NOTES

- 1. DEPTH MARKERS W/ NO DIVING TILE ON COPING (HORIZ SURFACE) AND POOL WALL FACE (VERT. SURFACE)
- 2. FLOOR RETURNS
- 3. POOL STEPS
- 4. SKIMMERS
- 5. FIBERGLASS POOL SLIDE W/ LADDER, BY OTHERS
- 6. 12" LED 120V
- 7. PENTAIR LED GLO-BRITES
- 8. HANDI-CAP LIFT
- 9. LANE LINE W/ CUP ANCHORS AT EACH END
- 10. LANE MARKING PORCELAIN TILE, 6 X 6, COLOR SELECTED BY OWNER
- 11. 2" CONTRASTING TILE ON FACE AND TOP EDGE AT STEPS AND WHERE ELEVATION CHANGE OCCURS IN POOL TILE COLOR SELECTED BY OWNER FROM STANDARD NON-SLIP COLORS
- 12. STAINLESS STEEL HANDRAIL WITH PVC SLEEVES
- 13. ANTI-VORTEX DUAL FLOOR DRAINS
- 14. #4 REBAR AT 12" O.C.E.W.
- 15. 12" OF 1/2" CLEAN GRAVEL
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- 25. J-BOX FOR POOL LIGHTING

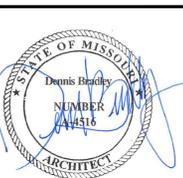


2 POOL SECTION
 SCALE: 3/8" = 1'-0"



3 POOL SECTION
 SCALE: 3/8" = 1'-0"

OSAGE SWIMMING POOL
 2025 SW M 150 HWY
 LEE'S SUMMIT, MISSOURI



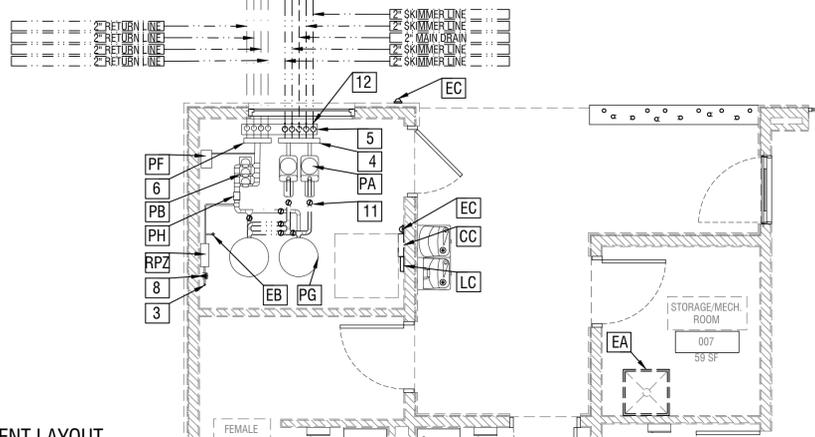
ISSUED: JULY 31, 2020

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1 DIAGRAMMATIC POOL EQUIPMENT LAYOUT
SCALE: N.T.S.

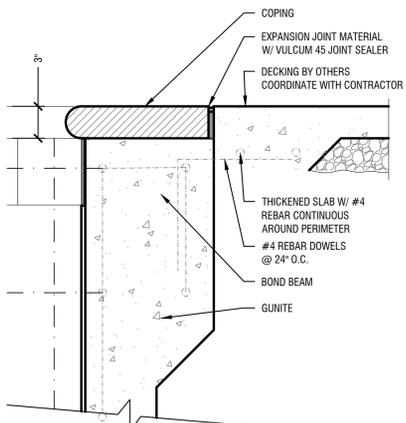
NOTE:
GENERAL CONTRACTOR SHALL COORDINATE WITH THE POOL CONTRACTOR THE LOCATION AND SIZE OF THE BLOCK OUTS IN THE CONCRETE FOOTINGS AND THE FLOOR SLAB FOR THE POOL PIPING PRIOR TO THE INSTALLATION OF THE FOOTINGS.

OSAGE - LEE'S SUMMIT, MISSOURI						
WATER BODY	LOCATION	TAG	QTY	EQUIPMENT	DESCRIPTION	
POOL EQUIPMENT ROOM		PA	2	RECIRCULATING PUMP	PENTAIR WHISPERFLO XFE-12 - 3HP	
		PB	2	CHLORINATOR	PENTAIR INTELICHLOR, IC40	
		PH	1	FLOW METER	4" FLOW METER #F-3040P 125-500 GPM MAX BY FLOWVIS, NSF-50 LISTED	
		PF	1	ACID FEEDER	PENTAIR INTELICHEM	
		PG	2	FILTER	PENTAIR CCP - 420 FILTER	
		PI	1	TEMPERATURE	2" FACE THERMOMETER 32% °D - 248% °D FAHRENHEIT	
		LC	1	PANEL	LIGHTING CONTROL PANEL	
		CC	1	PANEL	ELECTRICAL SERVICE PANEL	
		EA	1	FLOOR SINK	RE: PLUMBING DRAWINGS	
		EB	1	HOSE BIBB	1 1/2" POTABLE WATER HOSE BIBB W/ VACUUM BREAKER	
		EC	1	ELECTRIC DISCONNECT	ELECTRICAL DISCONNECT FOR PUMPS	
		RPZ	1	BACKFLOW PREVENTER	USC APPROVED REDUCED PRESSURE BACKFLOW PREVENTER	

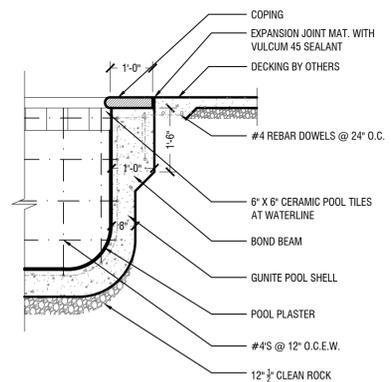
POOL EQUIPMENT ROOM NOTES

- 1 NOT USED
- 2 NOT USED
- 3 1/2" WATER SERVICE LINE SUPPLY MANIFOLD
- 4 BLOCK OUT IN CONCRETE FOR POOL LINES, COORDINATE WITH POOL CONTRACTOR
- 5 RETURN MANIFOLD
- 6 NOT USED
- 7 3/4" COLD WATER SHUT OFF VALVE
- 8 JUNCTION BOX IN DECK FOR POOL LIGHTING
- 9 PROVIDE VENTILATION DIRECT TO EXTERIOR AND COMBUSTION AIR
- 10 RE: MECHANICAL DRAWINGS
- 11 VALVE, TYP.
- 12 VAC ALERT VA-2000
- 13 SVRS @ EACH SUCTION LINE
- 14 NOT USED
- 15 RE: ELECTRICAL DRAWINGS FOR ELECTRICAL SERVICE PANEL AND POWER FOR THE POOL EQUIPMENT.
- 16 RE: PLUMBING DRAWINGS FOR DOMESTIC WATER CONNECTIONS AND WASTE LINES FOR POOL EQUIPMENT.
- 17 THE MECHANICAL CONTRACTOR WILL BE RESPONSIBLE FOR THE INSTALLATION OF THE VENT AND COMBUSTION AIR PIPING FOR THE POOL HEATER. THE INSTALLATION OF THE VENT AND COMBUSTION AIR PIPING SHALL BE PER THE REQUIREMENTS OF THE HEATER MANUFACTURER SO AS TO NOT VOID THE WARRANTY OF THE POOL HEATER. THE VENT TERMINATION MUST BE A MINIMUM OF 4' HORIZONTALLY FROM THE DOOR OR A MINIMUM OF 12" ABOVE THE DOOR.
- 18 PROVIDE A FLOOR DRAIN AT THE BACKFLOW PREVENTER.

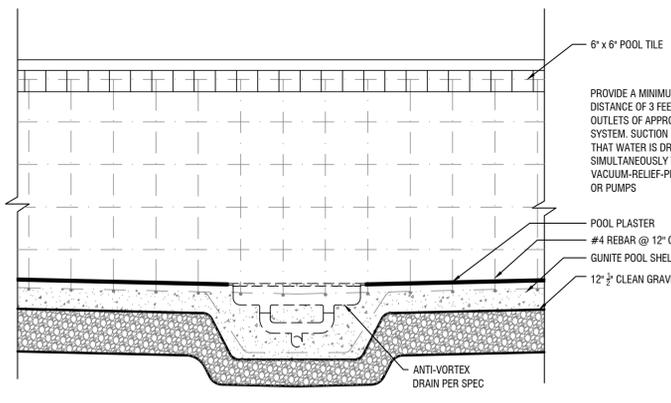
- NOTES**
- RECIRCULATION POOL PUMP MUST PROVIDE A TURNOVER RATE OF WATER IN SIX (6) HOURS OR LESS
 - THE POOL CONTRACTOR WILL FURNISH A MSDS SHEET UPON FINAL INSPECTION.
 - RETURN LINES AND SUPPLY LINES TO THE POOL SHALL BE SCHEDULE 80.
 - POOL PUMP EQUIPMENT SHALL BE BONDED PER NEC 2011 680B.26(6)



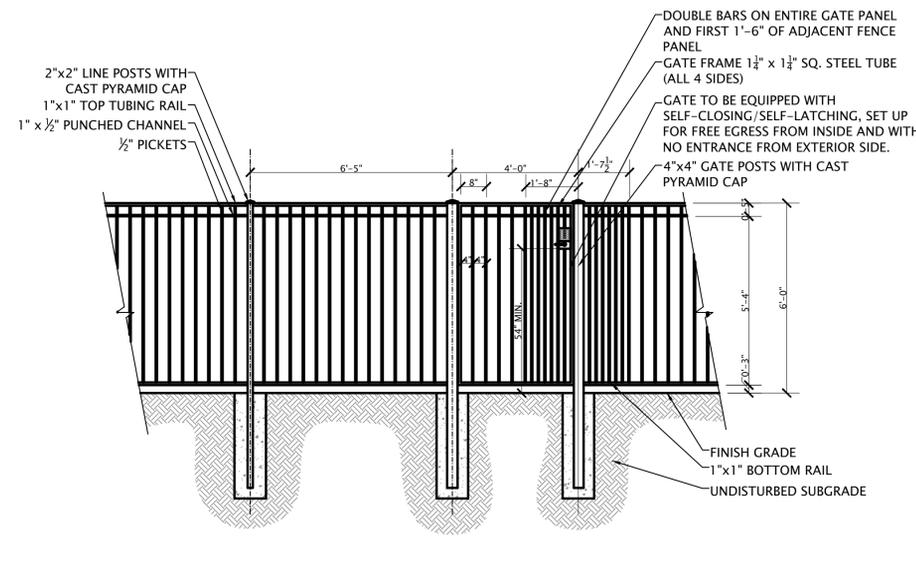
2 COPING DETAIL
SCALE: 1-1/2" = 1'-0"



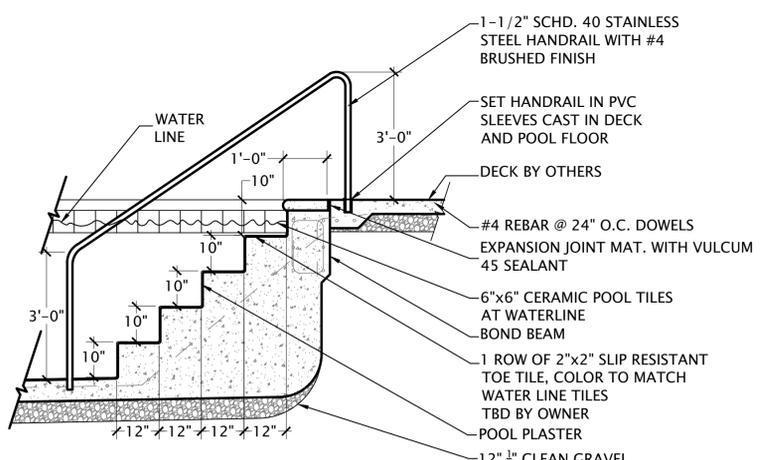
3 POOL WALL DETAIL
SCALE: 1/2" = 1'-0"



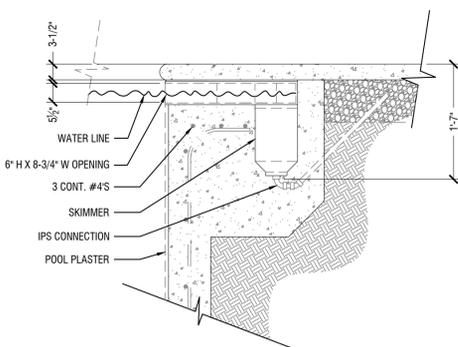
4 SECTION AT DRAIN
SCALE: 1/2" = 1'-0"



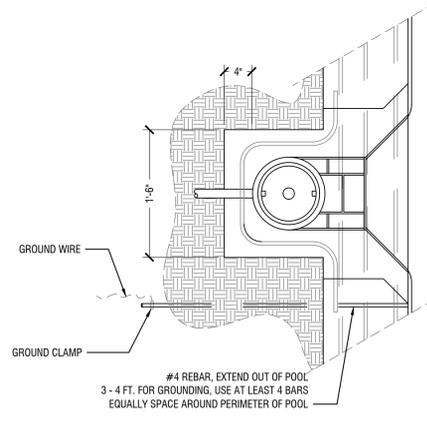
5 FENCE AND GATE DETAIL
SCALE: 3/8" = 1'-0"



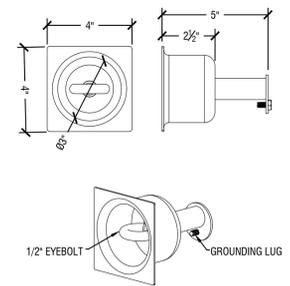
6 STEP DETAIL
SCALE: 1/2" = 1'-0"



7 SKIMMER DETAIL
NOT TO SCALE



8 SKIMMER PLAN
NOT TO SCALE



10 SS CUP ANCHOR
SCALE: 3" = 1'-0"



POOL DESIGNER:
B&A ARCHITECTURE
100 W 31ST STREET, SUITE 100
KANSAS CITY, MO 64108
PH: 816-753-6100

CLIENT:
SUMMIT HOMES

OSAGE SWIMMING POOL
 2025 SW M 150 HWY
 LEE'S SUMMIT, MISSOURI



NO.	REVISION	DATE

ISSUED: JULY 31, 2020
 DESIGNED BY DMB
 DRAWN BY DMB
 CHECKED BY DMB

POOL DETAILS
PL104

