STONE AND MASONRY VENEER SHALL BE INSTALLED IN ACCORDANCE WITH R703.7, TABLE 1703.4 AND FIGURE 1703.7. THESE VENEERS INSTALLED OVER A BACKING OF WOOD SHALL BE LIMITED TO THE FIRST STORY ABOVE-GRADE AND SHALL NOT EXCEED 5 INCHES IN THICKNESS. COMPLY WITH SECTION 7602.12 FOR WALL BRACING REQUIREMENTS FOR MASONRY VENEER FOR WOOD FRAMED

R703.6.2 SIDING TO BE PORTLAND CEMENT PLASTER APPLIED TO METAL LATH, THREE COATS - 1/8 INCH THICKNESS ON A VAPOR-PERMEABLE, WATER-RESISTANT BUILDING PAPER OVER SHEATHING AND FRAMING.

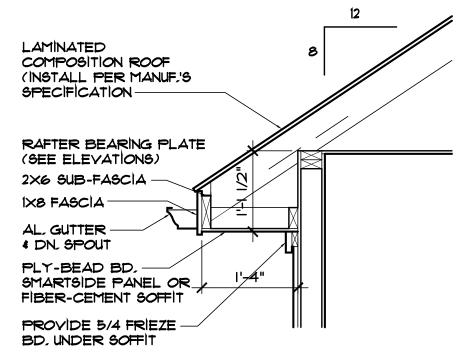
INSTALLATION OF EXTERIOR PLASTER SHALL BE IN COMPLIANCE WITH ASTM C 926 AND ASTM C 1063 AND THE PROVISIONS OF RT03.6.

R703.6.1 LATH. ALL LATH AND LATH ATTACHMENTS SHALL BE OF CORROSION-RESISTANT MATERIALS. EXPANDED METAL OR WOVEN WIRE LATH SHALL BE ATTACHED WITH 7/8" 16 GA. STAPLES SPACED 6" APART.

R703.2 WEATHER-RESISTANT SHEATHING PAPER. ASPHALT SATURATED FELT FREE FROM HOLES AND BREAKS, WEIGHING NOT LESS THAN 14 POUNDS PER 100 SQUARE FEET AND COMPLYING WITH ASTM D 226 OR OTHER APPROVED WEATHER-RESISTANT MATERIAL SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS AS REQUIRED BY TABLE R703.4. SUCH FELT OR MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHES. WHERE JOINTS OCCUR, FELT SHALL BE LAPPED NOT LESS THAN 6 INCHES.

R703.3.I WOOD SIDING. JOINTS IN WOOD, WOOD STRUCTURAL PANEL SIDING SHALL BE MADE AS FOLLOWS UNLESS OTHERWISE APPROVED. VERTICAL JOINTS IN PANEL SIDING SHALL OCCUR OVER FRAMING MEMBERS, UNLESS WOOD OR WOOD STRUCTURAL PANEL SHEATHING IS USED, AND SHALL BE SHIPLAPPED OR COVERED WITH A BATTEN, HORIZONTAL JOINTS IN PANEL SIDING SHALL BE LAPPED A MINIMUM OF I INCH OR SHALL BE SHIPLAPPED OR SHALL BE FLASHED WITH Z-FLASHING AND OCCUR OVER SOLID BLOCKING, WOOD OR WOOD STRUCTURAL PANEL SHEATHING.

FIBER-CEMENT PANELS SHALL COMPLY WITH THE REQUIREMENTS OF ASTM CIIB6, TYPE A, MINIMUM GRADE II. PANELS SHALL BE INSTALLED WITH THE LONG DIMENSION EITHER PARALLEL OR PERPENDICULAR TO FRAMING. VERTICAL AND HORIZONTAL JOINTS SHALL OCCUR OVER FRAMING MEMBERS AND SHALL BE SEALED WITH CAULKING, COVERED WITH BATTENS OR SHALL BE DESIGNED TO COMPLY WITH SECTION R703.I. PANEL SIDING SHALL BE INSTALLED WITH FASTENERS ACCORDING TO TABLE R703.4 OR APPROVED MANUFACTURER'S INSTALLATION INSTRUCTIONS.



SOFFITS SHALL COMPLY W/ SECTION R703.3.1 OR MANUFACTURER'S INSTALLATION INSTRUCTIONS

A EAVE SECTION  SCALE: 3/4" = 1'-0"	8:12 PITCH
SCALE: 3/4" = 1'-0"	

	(ISPSC) tab	LE 608,1 OCCUF	ant load		
ROOM	NET AREA		/OCCUPANT	OCCUPANCY	
EQUIPMENT/STORAGE	176 SQ. FT.	300 SQ.	FT. / PERSON	1	
POOL - WADING AREA	300 SQ. FT.	8 SQ. FT	. / PERSON	37	
POOL - DEEP AREA	1,200 SQ. FT.	10 SQ. F	T. / PERSON	120	
DECK AREA	4,695 SQ. FT.	15 SQ. F7	. / PERSON	3 3	
TOTAL OCCUPANCY				471	
MALE		·		236	
FEMALE				_235	
6092 N	iumber of fixtures (	60921 WATER AR	REA LEGG THAN 7	500 SQ. FT.)	
OCCUPANT	FIXTURES		SECTION 60921	REQUIRED	PROVIDED
MALE	URINAL		1	I - REQUIRED	1
MALE	WATER CLOSETS		1	I - REQUIRED	1
FEMALE	WATER CLOSETS		2	2 - REQUIRED	2
MALE	LAVATORIES		1	I - REQUIRED	1
FEMALE	LAVATORIES		1	I - REQUIRED	I
MALE	DECK SHOWER		1	I - REQUIRED	
FEMALE	DECK SHOWER		I	I - REQUIRED	
(IPC)	TABLE 403.1 MINIMUM N	jumber of Reg	uired Plumbing	FIXTURES	
DRINKING FOUNTAIN			I PER 1,000	I - REQUIRED	I
SERVICE SINK				I - REQUIRED	ı

(IPC) TABLE 403.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES (ISPSC) TABLE 608.1 OCCUPANT LOAD (ISPSC) SECTION 609.2.1

WHISPERING WOODS POOL 1901 SW RIVER RUN DR, LEES SUMMIT, MO 64082

LEGAL DESCRIPTION: TRACT C OF WHISPERING WOODS, IST PLAT

CODE REFERENCE:

2018 INTERNATIONAL BUILDING CODES 2018 INTERNATIONAL FIRE CODE 2018 INTERNATIONAL PLUMBING CODE

2018 INTERNATIONAL ENERGY CONSERVATION CODE 2018 INTERNATIONAL MECHANICAL CODE 2018 INTERNATIONAL FUEL GAS CODE

2017 NATIONAL ELECTRIC CODE NFPA 70 2018 INTERNATION SWIMMING POOL AND SPA CODE 2009 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES ICC/ANSI AIIIT.I

CONSTRUCTION TYPE:

Y-B (PROPOSED POOL HOUSE) NON-SPRINKLERED, SINGLE-STORY BUILDING

OCCUPANCY TYPE: ASSEMBLY A-5 & S-I (PROPOSED POOL HOUSE); PARTICIPATION IN OUTDOOR ACTIVITIES

OCCUPANCY LOAD: (ISPSC) TABLE 608.1 OCCUPANT LOAD TOTAL: 470 USERS

EQUIPMENT/STORAGE - (I USER) 176 SQ. FT. / 300 PER USER POOL DECK - (313 USERS) 4,695 SQ. FT. / 15 S.F. PER USER POOL WADING AREA - (37 USERS) 300 SQ. FT. / 8 S.F. PER USER POOL DEEP AREA - (120 USERS) 1,200 SQ. FT. / 10 S.F. PER USER

ZONING: R-I SINGLE FAMILY RESIDENTIAL

Parking spaces:

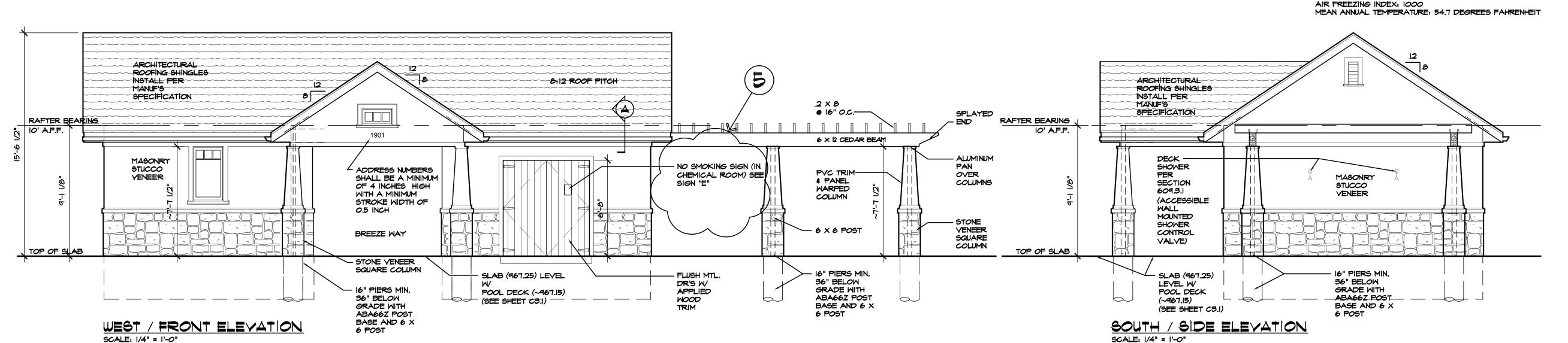
TABLE 8-1 (UNIFIED DEVELOPMENT ORDINANCE OF THE CITY OF LEE'S SUMMIT, MISSOURI) I FOR EVERY 16 LOTS IN SUBDIVISION OR MINIMUM OF 6 PARKINGS TOTAL PROVIDED: II PARKINGS 10 - STANDARD PARKING PROVIDED

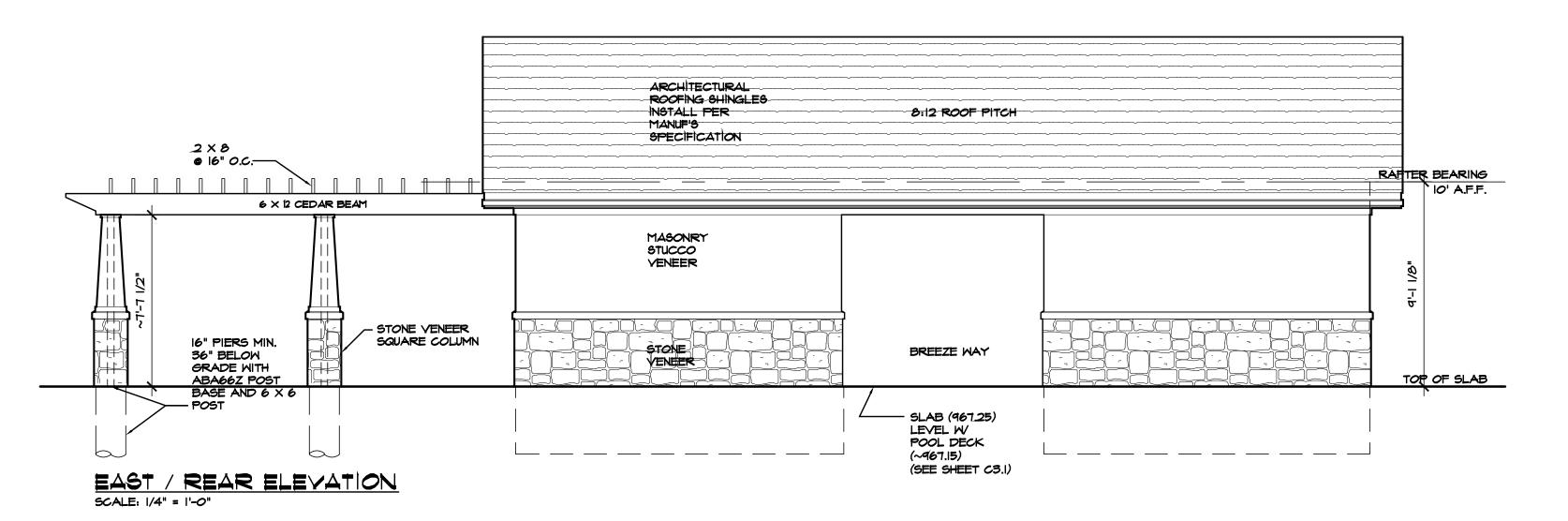
I - VAN ACCESSIBLE PARKING PROVIDED 5 - DESIGNATED GOLF CART PARKING

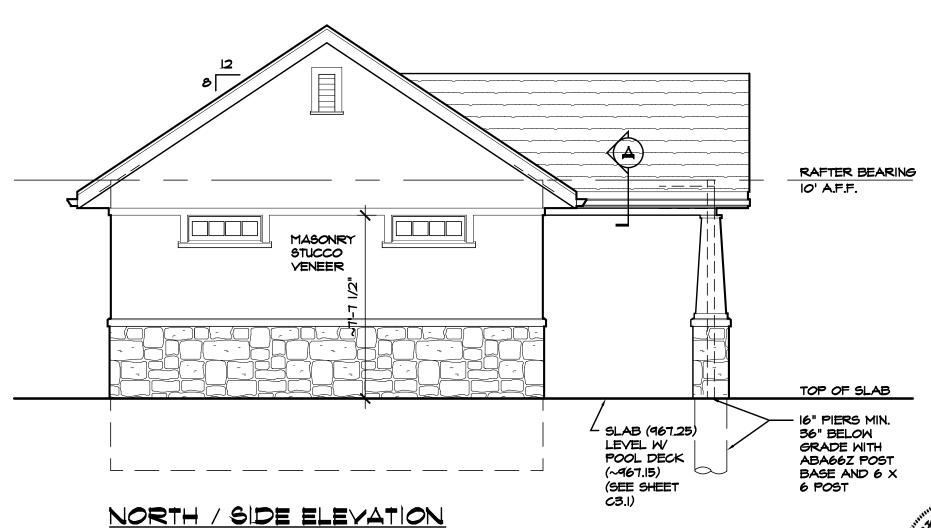
ROOF SNOW LOAD: 20 POUNDS PER SQUARE FOOT WIND SPEED: 115 MILES PER HOUR TOPOGRAPHIC EFFECTS: NO SEISMIC DESIGN CATEGORY: A WEATHERING: SEVERE

FROST LINE DEPTH: 36 INCHES TERMITE: MODERATE TO HEAVY DECAY: SLIGHT TO MODERATE

WINTER DESIGN TEMPERATURE: SIX DEGREES FAHRENHEIT ICE BARRIER UNDERLAYMENT REQUIRED: YES FLOOD HAZARDS: LATEST ADOPTED FIRM AND FBFM DOCUMENTS.







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

ONA AND RNA CODI NTE NG \_ \_ \_  $\circ$   $\circ$ C B N B

**RELEASED FOR** CONSTRUCTION

As Noted on Plans Review

velopment Services Departme Lee's Summit, Missouri

05/03/2023

RUN L HOUSE I SW RIV SUMMIT POOL 1901 : LEE S

SCALE 1/4"=1-0

**DATE** 4-3-23 4-12-23

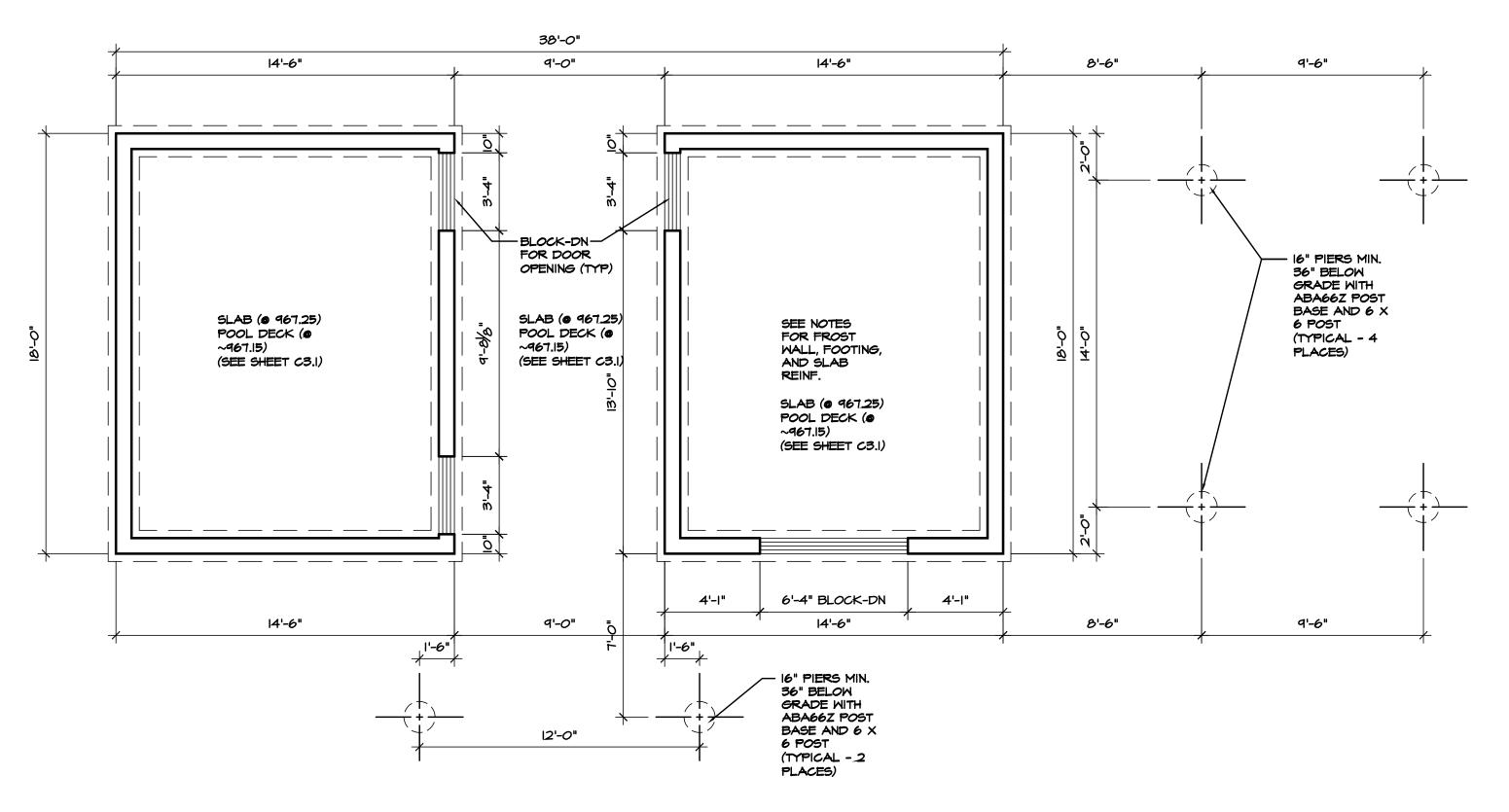
PERMIT NO. PRCOM20226005

> SHEET NO. 1 OF 5

BUILD IN ACCORDANCE V 2018 INTERNATIONAL BUILDING CODE AND LOC CODES

DR

POOL HOUSE 1901 SW RIVER RUN I LEE SUMMIT MO



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

REFERENCE: (ISPSC) TABLE 608.1 OCCUPANT LOAD

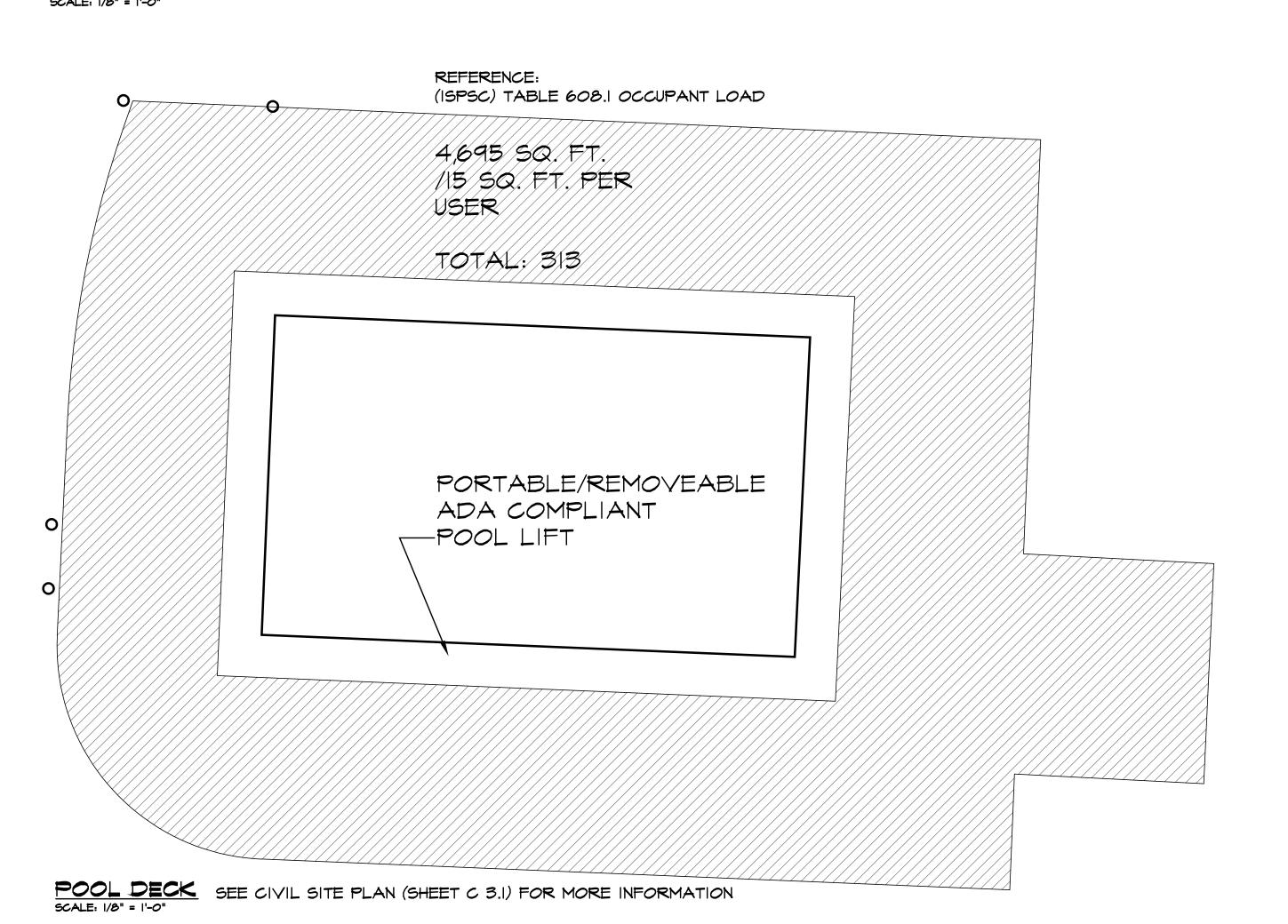
DEEP AREA:
1,200 SQ. FT./
10 SQ. FT. PER
USER

TOTAL: 120

WADING AREA:
300 SQ. FT./
8 SQ. PER USER

TOTAL: 37.5

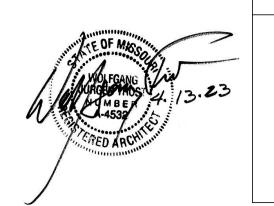
SWIMMING POOL SEE CIVIL SITE PLAN (SHEET C 3.1) FOR MORE INFORMATION SCALE: 1/8" = 1'-0"



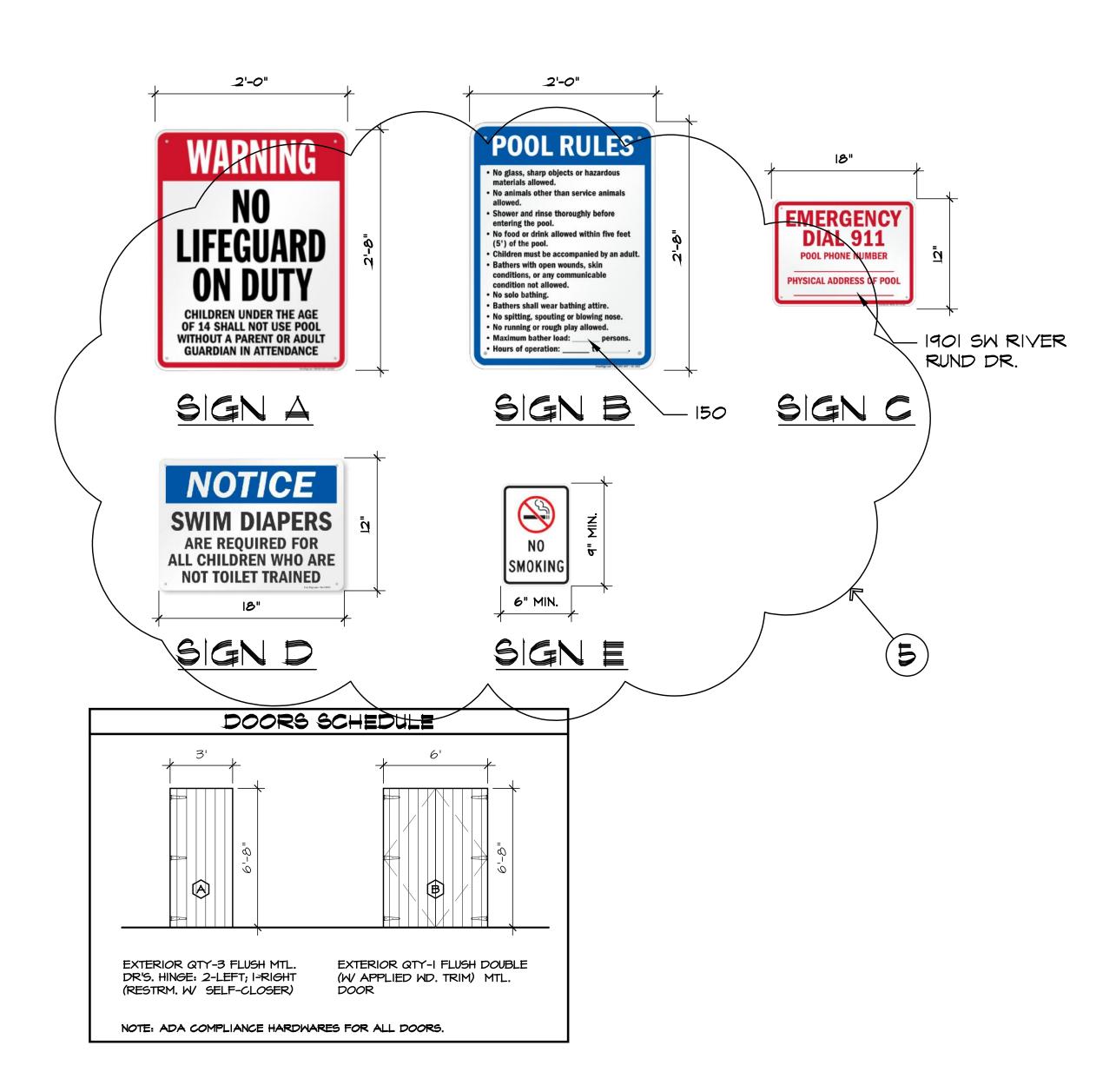
SCALE 1/4"=1-0

DATE 4-3-23 4-12-23

PERMIT NO. PRCOM20226005

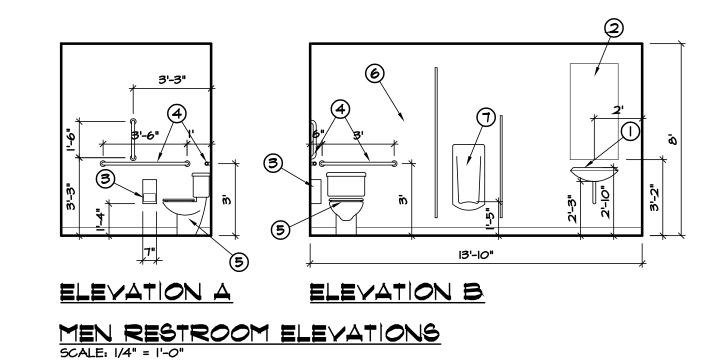


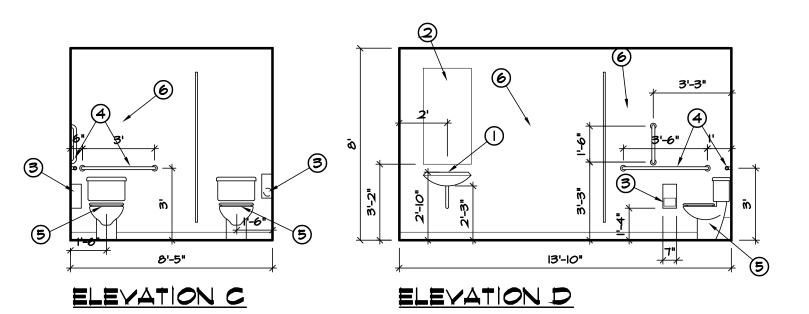
SHEET NO. 2 OF 5



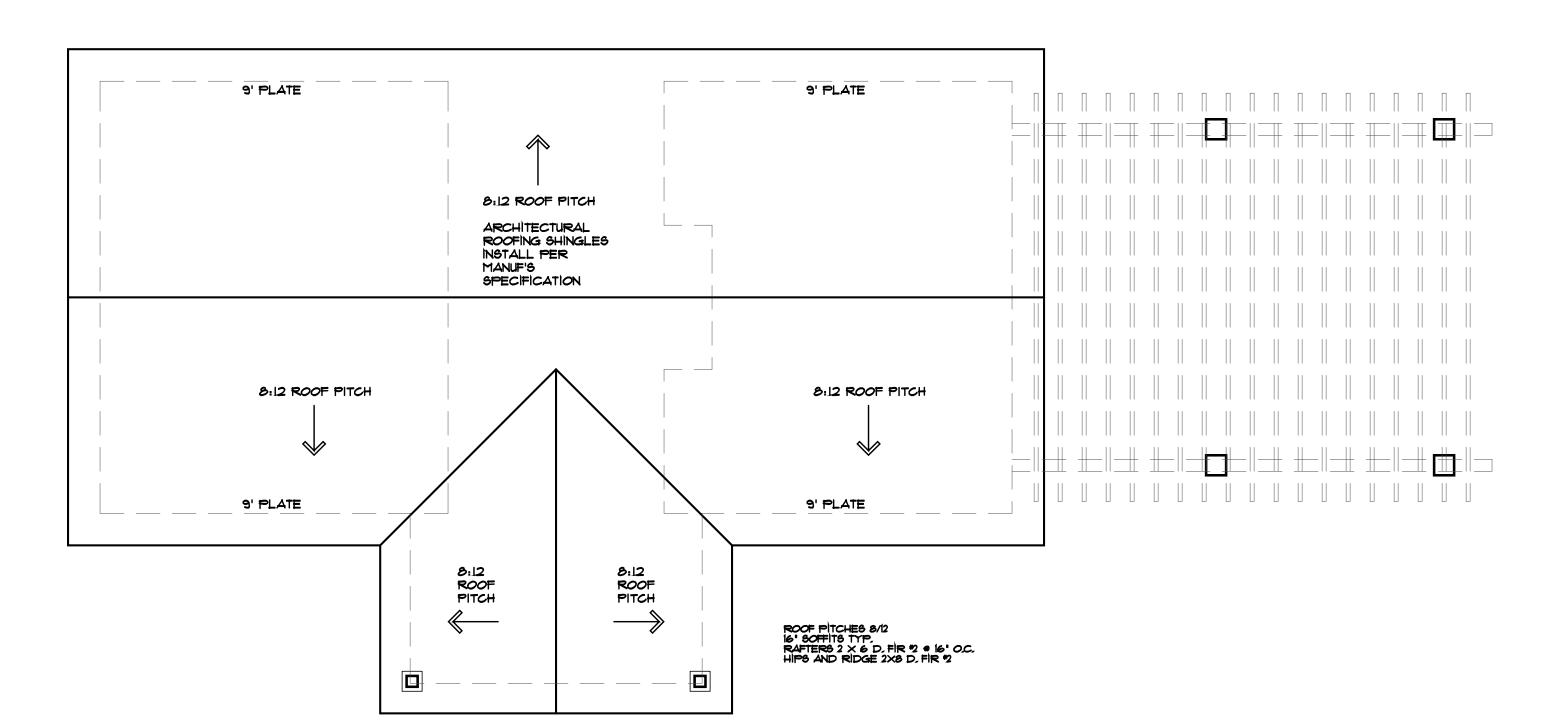
# RESTROOM FIXTURE LEGEND

- WALL MOUNTED LAVATORY W INSULATED PIPING BELOW
   MIRROR
- 3 DUAL ROLL TOILET PAPER DISPENSER.
- 4) STAINLESS STEEL GRAB BAR per ANSI SPEC'S.
- 5 FLOOR MOUNTED ACCESSIBLE WATER CLOSET
- 6 EPOXY PAINT AS REQ.
- 7 WALL MOUNTED URINAL
- TOILET (ADA COMPLIANCE UNIT)
- WALL MOUNTED LAVATORY (ADA COMPLIANCE UNIT)
  WALL MOUNTED URINAL (ADA COMPLIANCE UNIT)

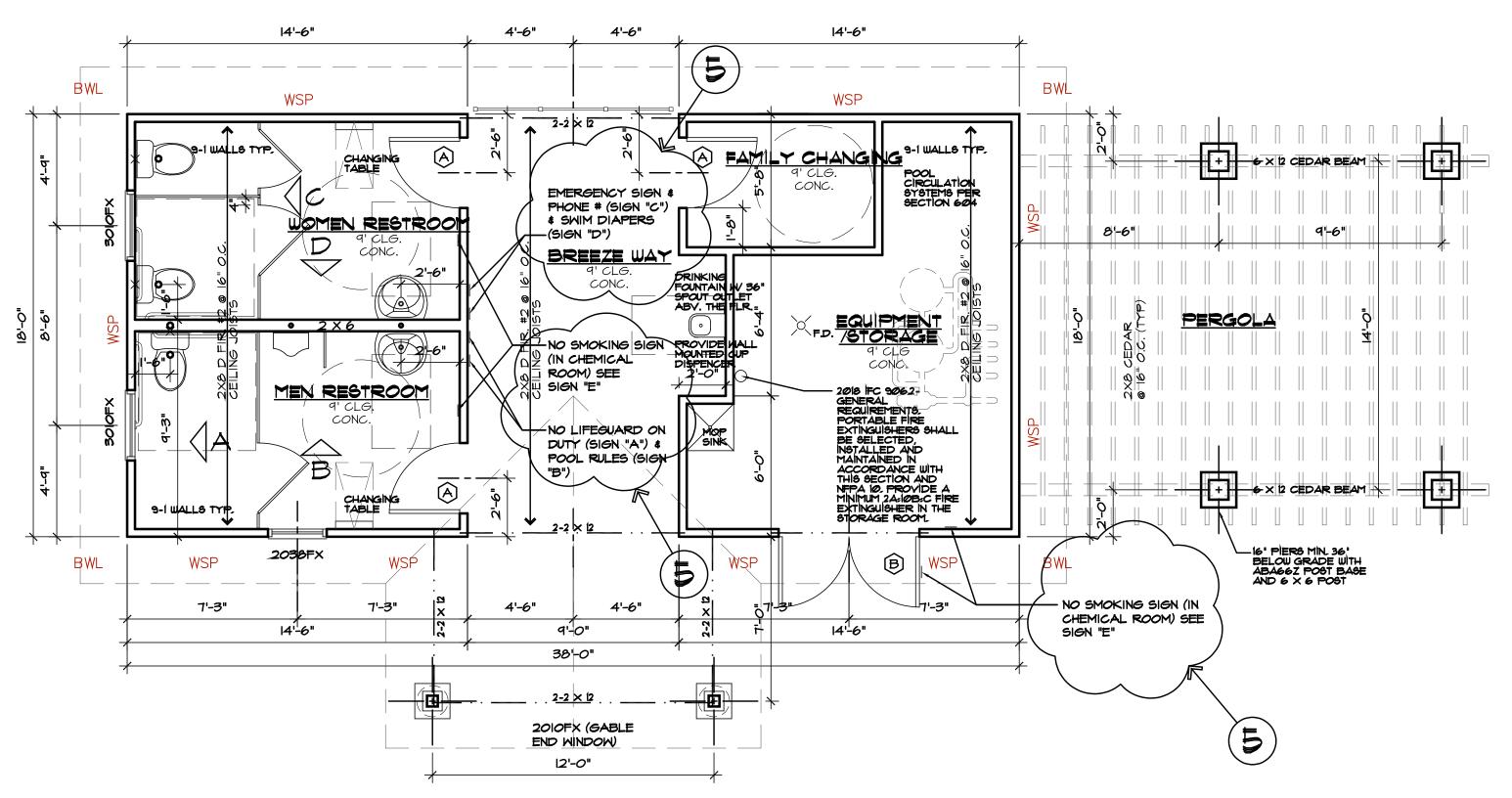




WOMEN RESTROOM ELEVATIONS
SCALE: 1/4" = 1'-0"



### POOL HOUSE ROOF PLAN SCALE: 1/4" = 1'-0"



POOL HOUSE FLOOR PLAN SEE CIVIL SITE PLAN (SHEET C 3.1) FOR MORE INFORMATION SCALE: 1/4" = 1'-0"

BUILD IN ACCORDANCE WITH 2018 INTERNATIONAL BUILDING CODE AND LOCAL CODES

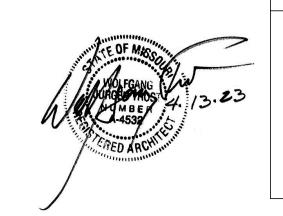
> POOL HOUSE 1901 SW RIVER RUN DR LEE SUMMIT MO

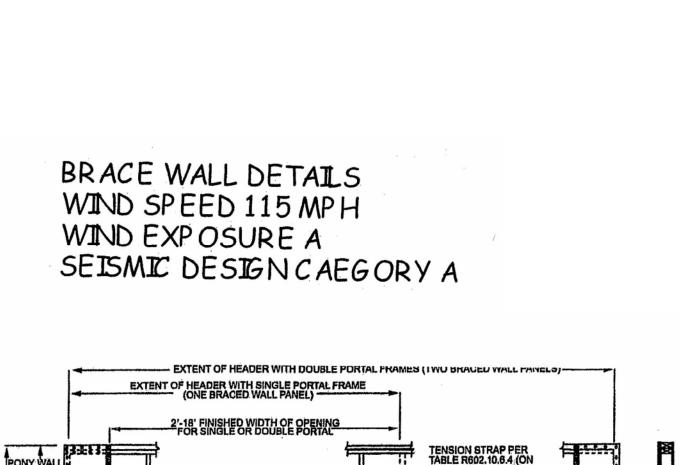
SCALE 1/4"=1-0

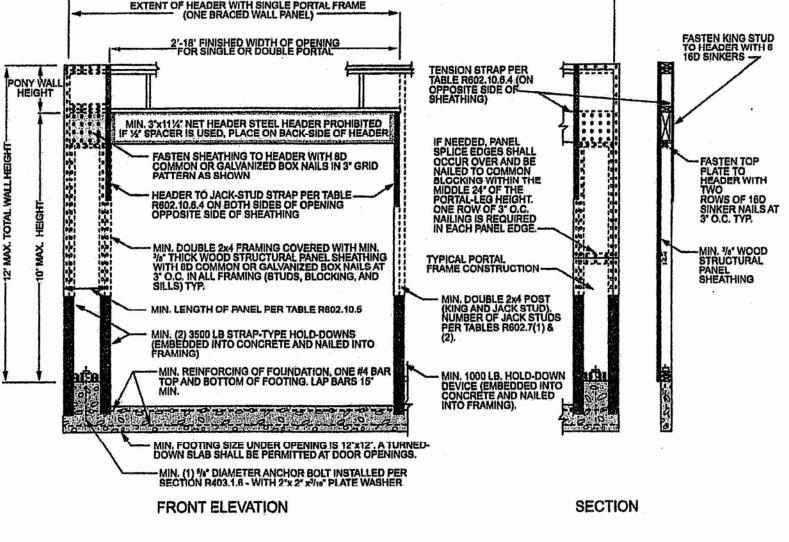
DATE 4-3-23 4-12-23

PERMIT NO. PRCOM20226005

> SHEET NO. 3 OF 5







4 mm, 1 foot = 304.8 mm.

### FIGURE R602.10.6.2 METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

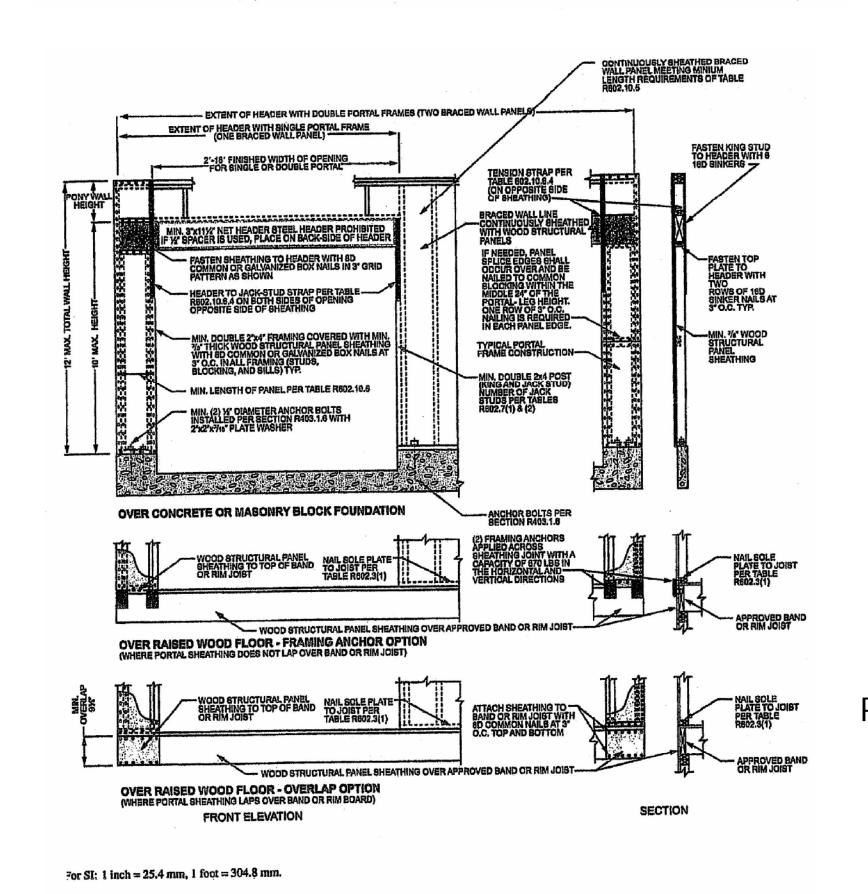


FIGURE R602.10.6.4 METHOD CS-PF-CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

ONA \_ NA OD NG \_ \_ \_  $O \subset O$ C B 2 B

> RUN NMM POOL 1901 LEE S S

SCALE 1/4"=1-0

**DATE** 4-3-23 4-12-23

PERMIT NO. PRCOM20226005

> SHEET NO. 4 OF 5

MIN. 3/8" WOOD STRUCTURAL PANEL —— SHEATHING ON ONE FACE FOR PANEL SPLICE (IF NEEDED) ADJOINING PANEL EDGES SHALL MEET OVER AND BE FASTENED TO COMMON 8D COMMON OR GALV. BOX NAILS @ 6-O.C. AT PANEL EDGES, FOR SINGLE STORY AND @ 4- O.C. PANEL EDGES FOR THE FIRST OF 2 STORIES STUDS UNDER HEADER AS REQUIRED 8D COMMON OR GALV. BOX NAILS @ 12" PANEL MUST BE ATTACHED TO CONCRETE FOOTING OR CONCRETE FOUNDATION WALL CONTINUOUS OVER BRACED WALL LINE IIN. REINFORCING OF FOUNDATION ONE #4 BAR TOP AND BOTTOM, LAP BARS 15" MINIMUM. (2) 1/2" DIAMETER ANCHOR BOLTS LOCATED BETWEEN MINIMUM FOOTING SIZE UNDER OPENING IS 12" X 12". A TURNED DOWN SLAB SHALL BE PERMITTED AT DOOR 6" AND 12" OF EACH END OF

FIGURE R602.10.6.1 METHOD ABW---ALTERNATE BRACED WALL PANEL

TABLE R602.10.4

			BRACING METH	ODS			
			FIGURE :	CONNECTION CRITER	ilA" '		
ME	THODS, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Spacing		
	LIB	1 × 4 wood or approved metal straps at 45° to 60° angles for		Wood: 2-8d common nails or 3-8d (2 <sup>1</sup> / <sub>2</sub> " long x 0.113" dia.) nails	Wood: per stud and top and bottom plates		
	Let-in-bracing	maximum 16" stud spacing		Metal strap: per manufacturer	Metal: per manufacturer		
	DWB Diagonal wood boards	<sup>3</sup> / <sub>4</sub> " (1" nominal) for maximum 24" stud spacing		2-8d $(2^{1}/_{2}" \text{ long} \times 0.113" \text{ dia.})$ nails or $2 - 1^{3}/_{4}" \text{ long staples}$	Per stud		
	WSP Wood	³/ <sub>8</sub> "		Exterior sheathing per Table R602.3(3)	6" edges 12" field		
	structural panel (See Section R604)	'8		Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener		
Methods	BV-WSP* Wood structural panels with stone or masonry veneer (See Section R602.10.6.5)	7/ <sub>16</sub> "	See Figure R602.10.6.5	8d common (2 <sup>1</sup> / <sub>2</sub> " × 0.131) nails	4" at panel edges 12" at intermediate supports 4" at braced wall panel end posts		
Intermittent Bracing Methods	SFB Structural fiberboard sheathing	1/2" or 25/32" for maximum 16" stud spacing		$1^{1}/_{2}$ " long × 0.12" dia. (for $^{1}/_{2}$ " thick sheathing) $1^{3}/_{4}$ " long × 0.12" dia. (for $^{25}/_{32}$ " thick sheathing) galvanized roofing nails	3" edges 6" field		
ntermitte	GB	'/ <sub>2</sub> "		Nails or screws per Table R602.3(1) for exterior locations	For all braced wall panel locations: 7" edges (including top		
П	Gypsum board	2		Nails or screws per Table R702.3.5 for interior locations	and bottom plates) 7" field		
	PBS Particleboard sheathing (See Section R605)	<sup>3</sup> / <sub>8</sub> " or <sup>1</sup> / <sub>2</sub> " for maximum 16" stud spacing		For ${}^3/{}_8$ ", 6d common (2" long × 0.113" dia.) nails For ${}^1/{}_2$ ", 8d common (2' ${}^1/{}_2$ " long × 0.131" dia.) nails	3" edges 6" field		
	PCP Portland cement plaster  HPS Hardboard panel siding  ABW Alternate braced wall  See Section R703.7 for maximum 16" stud spacing  7/16" for maximum 16" stud spacing  3/8"			$1\frac{1}{2}$ long, 11 gage, $\frac{7}{16}$ dia. head nails or $\frac{7}{8}$ long, 16 gage staples	6" o.c. on all framing members		
				0.092" dia., 0.225" dia. head nails with length to accommodate 11/2" penetration into studs	4" edges 8" field  See Section R602.10.6.1		
				See Section R602.10.6.1			

1	MINIMUM LE	indiii Oi		NIMUM LEN			T		
	FTUOR			CONTRIBUTING LENG					
	ETHOD ble R602.10.4)			Wall Heigh	nt .		(Inches)		
		8 feet	9 feet	10 feet	11 feet	12 feet			
DWB, WSP, SFB, F	PBS, PCP, HPS, BV-WSP	48	48	48	53	58	Actual <sup>b</sup>		
	GB	48	48	48	53	58	Double sided = Actu Single sided = 0.5 × Ac		
	LIB	55	62	69	NP	NP	Actual <sup>b</sup>		
ABW	SDC A, B and C, ultimate design wind speed < 140 mph	28	32	34	38	42	48		
λυ"	SDC D <sub>0</sub> , D <sub>1</sub> and D <sub>2</sub> , ultimate design wind speed < 140 mph	32	32	34	NP	NP			
	CS-G	24	27	30	33	36	Actual <sup>b</sup>		
	Adjacent clear opening height (inches)								
	≤ 64	24	27	30	33	36			
	68	26	27	30	33	36	]		
	72	27	27	30	33	36	]		
	76	30	29	30	33	36	]		
	80	32	30	30	33	36			
	84	35	32	32	33	36			
	88	38	35	33	33	36			
	92	43	37	35	35	36			
CC WCD CC CED	96	48	41	38	36	36			
CS-WSP, CS-SFB	100		44	40	38	38	A		
	104 108		49 54	43 46	40	39 41	Actual <sup>b</sup>		
	112		34	50	45	43	4		
	116			55	48	45	4.		
	120			60	52	48	-		
	124		<del>                                     </del>		56	51	. ti		
	128		<del>-</del>		61	54	-		
	132				66	58	1		
	136					62	i		
	140					66			
	144					72			
M		Po	rtal header l	height					
(See Tal	ole R602,10.4)	8 feet	9 feet	10 feet	11 feet	12 feet			
PFH	Supporting roof only Supporting one story and roof	16 24	16 24	16	Note c	Note c	48		
	PFG	24	27	30	Note d	Note d	1.5 × Actual <sup>h</sup>		
CS-PF	SDC A, B and C	16	18	20	Note e	Note e	1.5 × Actual <sup>b</sup>		
Co-PF	SDC D <sub>0</sub> , D <sub>1</sub> and D <sub>2</sub>	16	18	20	Note e	Note e	Actual <sup>b</sup>		

11.
1.
1.
1

BRACING	TABLE R602-10.3(1) REQUIREMENTS BASED ON WIND SPEED
EXPOSURE CATEGORY B SD-FOOT MEAN ROOF HEIGHT 10-FOOT WALL HEIGHT 2 BRACED WALL LINES	MINIMUM TOTAL LENGTH (FE REQUIRED ALONG EA

EXPOSURE C/     30-FOOT MEAI     10-FOOT WAL     2 BRACED WA	ATEGORY B N ROOF HEIGHT L HEIGHT		MINIMUM	TOTAL LENGTH (FE	ET) OF BRACED WALL CH BRACED WALL LIN	. PANELS E'
Ultimate Design Wind Speed (mph)	Story Location	Braced Wall Line Spacing <sup>o</sup> (feet)	Method LIB <sup>b</sup>	Method QB	Methods DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP, ABW, PFH, PFC, CS-SFB	Methods CS-WSP, CS-G, CS-PF
		10	3.5	3.5	2.0	2.0
		20	6.5	6,5	3.5	3.5
		30	9.5	9.5	5.5	4.5
		40	12.5	12.5	7.0	6.0
		50	15.0	15.0	9.0	7.5
		60	18.0	18.0	10.5	9.0
		10	7.0	7.0	4,0	3.5
	$\wedge$	20	12.5	12.5	7.5	6.5
≤ 115	$\wedge$ $\Pi$ $\mid$	30	18.0	18.0	10.5	9.0
2113	<b>行 屬</b>	40	23.5	23.5	13.5	11.5
		50	29.0	29.0	16.5	14.0
		60	34.5	34.5	20.0	17.0
		10	NP	10.0	6.0	5.0
	$\triangle$	20	NP	18.5	11.0	9.0
		30	NP	27.0	15.5	13.0
		40	NP	35.0	20.0	17.0
		50	NP	43.0	24.5	21.0
		60	NP	51.0	29.0	25.0

VAULT INSULATION DETAIL

R-38 HIGH DENSITY

INSULATION

COMP. SHINGLES OVER

RATED ROOF

15# FELT

1" AIR SPACE WITH FOAM AIR

ROOF IS DESIGNED FOR 25

P.S.F. SNOW LOAD MIN.

2 X 6 DF NO. 2

R-10 RIGID INSULATION

EXCEED MIN. FROST DEPTH OF 36" ASSUMED SOIL

ALL POINT LOADS SHALL HAVE A MINIMUM OF 2 STUDS UNLESS NOTED 10-0 WALL 9.5" #4@ 12" O.C.

BOARD 2" 2-0 LONG

AT 16" OC

2-2 X 10 DF NO 2

AT 16" OC

8 X 16 FOOTING WITH TWO NO 4

BARS HORIZONTAL 3" FROM THE

BOTTOM, ALL FOOTINGS TO

MIN. STAIR HEADROOM 6-8

WINDOW SAFETY GLAZING PER 308

EXCESS OF 9 SQUARE FEET OR THE BOTTOM EDGE OF THE GLAZING

SAFETY GLAZING REQUIRD WHERE THE NEAREST EXPOSED EDGE OF

THE GLAZING IS WITHIN 24 INCHES OF EITHER VERTICAL EDGE OF

EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A WALKING SURFACE, SAFETY OR TEMPERED GLAZING IS REQUIRED.

WINDOWS ARE TO HAVE FALL PROTECTION PER IRC 312.2

THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM

SAFETY GLAZING REQUIRED ALONG WALKING SURFACES AND

IS LESS THAN 18 INCHES ABOVE THE FINISHED FLOOR.

HEADERS TYP. U.N.O.

2 X 4 DF NO. 2

1/2 GYP. BOARD

ENERGY CONSERVATION CODE

R-10 IN CRAWL SPACE WALLS

R-15 IN WALLS

R-49 IN ATTICS

R-38 IN VAULTS

PF AREA

THE FOLLOWING VALUES ARE NEEDED.

R-30 REDUCTION FOR VAULTS IS ONLY FOR 500 SF

R-19 IN FLOORS OVER UNCONDITIONED SPACES

SLABS SHALL BE R-10 FOR A DEPTH OF 2 FOOT

A WINDOW U FACTOR OF .35 OR BETTER

DUCTWORK NEEDS TO HAVE AN R-8 VALUE

RIDGE BOARDS AND HIPS ARE TO BE 2

PROVIDE RAFTER TIES PER SECTION 802.3

AND 802.3.1 WHEN UNABLE TO CONNECT

GARAGE SHALL HAVE 5/8 TYPE X SHEET ROCK

X MATERIAL, AND NOT LESS THAN

RAFTERS TO CEILING JOISTS

CEILING AND WALLS

ALL STUDS GO FROM FLOOR TO

CEILING OR RAFTER DIAFRAM TYP.

2,500 PSI BASEMENT FLOOR SLABS UNDISTURBED GRADE

3,000 PSI FOR FOOTINGS, FOUNDATION WALLS, AND OTHER VERTICAL

3,500 PSI FOR CARPORT AND GARAGE FLOOR SLABS ON UNDISTURBED GRADE,

WALLS OVER 10-2 TO 18-0

STUDS SHALL BE 2 X 6 DF NO 2 @ 16" O.C. TYP.

SPREAD FOOTING MIN 8" DEEP X 16" WIDE WITH TWO NO 4 REBAR

4" CONCRETE SLAB WITH NO

4 BARS AT 2-0 OC EACH WAY

OVER 6 ML VAPOR BARRIOR

AND STRUCTURAL FLOOR SLABS

RADON VENTING OF SLAB

ALL STAIRS

MIN. RUN 10"

MAX. RISE 7-3/4"

OVER CRUSHED ROCK

THE END CUT OF RAFTER

BASEMENT WALLS R-13 CAVITY OR R-10 CONTINOUS

2 X 10 VAULT RAFTER

INTERCONNECTED HARD WIRED SMOKE

DETECTORS SHALL BE INSTALLED IN EACH

ALL PLUMBING IF EXISITING SHALL BE CAPPED

AND AIR TESTED PRIOR TO ROUGH-IN

INSPECTION FOR LEAK VERIFICATION

ICE & WATER SHEILD REQUIRED ON ALL

RAFTERS AND CEILING

ACCORDANCE IRC 802.3

DRIP EDGE AND GUTER

JOISTS CONNECTIONS IN

7/16 APA RATED SIDING OVER

1/2 " ANCHOR BOLTS AT 5-0 OC MIN. , AND BE

LOCATED WITHIN 12" FROM THE ENDS OF EACH

PLATE SECTION. SHALL EXTEND A MINIMUM OF

7" INTO CONCRETE

2 X4 TREATED PLATE OVER

REINFORCEMENT

10-0 # 4 @ 8" O.C.

TYPICAL WALL SECTION

FROM THE FLOOR

STAIRS LOCATED WITHIN 36 INCHES HORIZONTALLY OF THE STEPS.

SAFETY GLAZING REQUIRED IF EXPOSED SINGLE PANEL IS IN

WINDOW IS 34 INCH CLEAR WIDTH MIN. AND 24 INCH CLEAR HEIGHT MIN. WITH A CLEAR OPENABLE AREA OF 5.7 SQUARE FEET

VERTICAL REBAR SPACING

6-0 OR LESS #4 @ 24" O.C. 8-0 # 4@ 16" O.C. 9-0 # 4@ 12" O.C.

WALL HEIGHT IN FEET

WATER RESISTIVE HOUSE WRAP IN

COMPLIANCE WITH SECTION 703.2

1 X 8 FASCIA

OVER 2 X 6 SUBFASCIA

SOFFIT

VENTS

SUPPLEMENTAL

REINFORCEMNT AT CORNERS OF OPENINGS

AND STEP DOWNS

REQUIRE 1 # 4 BAR 48"

WITHIN 6" OF THE EDGE

LONG AT 45 DEGREE

OF INSIDE CORNERS

7.5" CONCRETE WALL WITH NO 4 BARS HORT. EVERY 18" OF WALL HEIGHT WITH # 4 BAR WITHIN 6" OF TOP AND BOTTOM OF WALL,

HORT. REBAR SHALL BE INSTALLED ON SOIL SIDE OF VERTICAL

VERTICAL REBAR SHALL BE WITHIN 8" OF THE TOP OF THE WALL,

AND POSITIONED 2" FROM THE INSIDE FACE OF WALL

ALL REBAR GRADE 40 TYP.

WINDOW EGRESS

REQUIREMENTS

A CASEMENT OR SLIDER WINDOW MINIMUMS ARE 20 INCH CLEAR

WIDTH MINIMUM AND 41 INCH CLEAR HEIGHT MINIMUM. WITH A

BEDROOM WINDOW EGRESS MINIMUM FOR A DOUBLE HUNG

MINIMUM 5.7 SQUARE FOOT OF OPENABLE AREA.

OPENING OF EGRESS WINDOW NOT MORE THAN 42"

ANGLE AT CORNERS,

WITH

BEDROOM AND OUTSIDE OF EACH BEDROOM

2 X 2 NAILED TO BOTTOM OF

RAFTERS 12" O.C. WITH 12 D

PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS SHALL BE

THICK OR 20 MINUTE RATED DOORS, WITH SELF CLOSING DEVICES

REQUIRED FOR GARAGE / DWELLING SEPERATION DOORS R302.5.1

4. STEEL COLUMNS SHALL BE MINIMUM SCHEDULE 40 R407.3

5. DECK SHALL BE BUILT PER TABLES 507.2 , 507.2.1, 507.3, 507.6,

6. STUDS SHALL BE CONTINUOUS BETWEEN FLOOR, CEILING AND OR

8. NEW PROVISIONS FOR ATTACHMENT OF RAFTERS, TRUSSES AND

9. INSULATION REQUIRED FOR ALL BASEMENT WALLS (INCLUDING

10. EXTERIOR WINDOWS/DOORS SHALL HAVE U-FACTOR 0.35 AND

GLAZING SHALL HAVE SOLAR HEIGHT GAIN FACTOR OF 0.40 N1102.1

11. HOUSE LEAKAGE AND DUCT LEAKAGE PERFORMANCE STANDARDS EFFECTIVE JANUARY 1, 2014. A SAMPLE TESTING PROGRAM WILL BE

CAN LIGHTS IN ATTIC ) SHALL BE IC- RATED, LEAKAGE- RATED AND

14. AIR HANDLERS SHALL BE RATED FOR MAXIMUM 2 % AIR LEAKAGE

15. BUILDING CAVITIES USED AS RETURN AIR PLENUMS SHALL BE

16. CERTAIN HOT WATER PIPES SHALL BE INSULATED N1103.4

SEALED TO PREVENT LEAKAGE ACROSS THE THERMAL ENVELOPE KCBRC

17. ALL EXHAUST FANS SHALL TERMINATE TO THE BUILDING EXTERIOR

18. MAKEUP AIR SYSTEM REQUIRED FOR KITHCHEN EXHAUST HOODS

19. BUILDING CAVITIES IN A THERMAL ENVELOPE WALL (INCLUDING

20. AN AIR HANDLING SYSTEM SHALL NOT SERVE BOTH THE LIVING

21. A CONCRETE- ENCASED GROUNDING ELECTRODE ( 'UFER' GROUND )

CONNECTION SHALL BE PROVIDED TO THE ELECTRICAL SERVICE E3608.1

22. COMPLIANCE WITH THE REQUIRMENT AND SHOW CONNECTION AS NEEDED FOR ROOF BEAM, TRUS, RAFTER, AND GIRDER CONNECTION FOR

UPLIFT PER IRC 802.11. ALL RAFTERS BE IN COMPLIANCE WITH IRC 502.11

USE LSTA24 RIDGE STRAPS

ON ALL VAULTS AT RIDGE

OR COLLAR TIES

STUDS OVER 10-0 SHALL HAVE

BLOCKING ALONG WALL MAX

OVERHEAD GARAGE DOORS

OR IRC 2018 REQUIRMENTS

MUST MEET DASMA 115 MPH

OF 6-0 O.C.

THE WALL BETWEEN THE HOUSE AND GARAGE ) SHALL NOT BE USED AS

IMPLEMENTED OCTOBER 1, 2012 KCBRC N1102.4.1.2 N1103.2.2

SEALED TO THE GYPSUM WALLBOARD N1102.4.4

13.PROGRAMMABLE THERMOSTAT REQUIRED N1103.1.1

7. ADDED REQUIREMENTS FOR WINDOW FALL PROTECTION R312.2

ANY DWELLING IN COMPLIANCE WITH IRC M 1505 3. CARBON MONOXIDE DETECTORS REQUIRED IRC R 315

507.5.1(1)&(2), 507.5, AND 507.6

ROOF BEAMS R802.3.1. R802.11

UNFINISHED BASEMENTS) N1102.1

M1507.2

THAT EXCEED 400 CFM M1503.4

SPACE AND THE GARAGE M1601.6

RETURN AIR PLENUMS

AMENDED RAYMORE CODE

WEATHER GARAGE SLABS FOOTINGS WALLS AND FLATWORK

PIER PADS

WITH# 4 REBAR, 6 EACH WAY

TYP. U.N.O. 3-0 X 3-0 X 12" PEIR PADS MIN.

WITHLADDER

MUST HAVE 6% AIR ENTRAINMENT

ROOF DIAPHRAGMS R602.3

EQUIPPED WITH SOLID WOOD OR STELL DOORS NOT LESS THAN 1-3/8"

2. WHOLE HOUSE MECHANICAL VENTILATION SYSTEM IS REQUIRED FOR

<− 3'-0"->

EGRESS WINDOW WELL AS NEEDED

PER SECTION 308 MIN 3-0 X 3-0

	METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION	CONNECTION CRITERIA				
	METHODS, MAJERIAL	mitimosi Trickiess	FIGURE	Fasteners	6pecing				
g Methods	PFH Portal frame with hold-downs	³/ <sub>8</sub> ″		See Section R602.10.6.2	See Section R602.10.6.2				
Interm	PPG 7/16"		See Section R602.10.6.3	See Section R602.10.6.3					
Continuous Sheathing Methods	CS-WSP Continuously sheathed	3/8"		Exterior sheathing per Table R602.3(3)	6" edges 12" field				
	wood structural panel	78		Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener				
	CS-G <sup>b,c</sup> Continuously sheathed wood structural panel adjacent to garage openings			See Method CS-WSP	See Method CS-WSP				
	CS-PF Continuously sheathed portal frame	Continuously sheathed 7/16"		See Section R602.10.6.4	See Section R602.10.6.4				
	CS-SFB <sup>d</sup> Continuously sheathed structural fiberboard  1/2" or 25/22" for maximum 16" stud spacing			$1^{1}/_{2}$ " long × 0.12" dia. (for $\frac{1}{2}$ " thick sheathing) $1^{3}/_{2}$ " long × 0.12" dia. (for $\frac{25}{22}$ " thick sheathing) galvanized roofing nails	3" edges 6" field				

a. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, Do, D, and D2. Applies to panels next to garage door opening where supporting gable end wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories D<sub>0</sub>, D<sub>1</sub> and D<sub>2</sub> roof covering dead load shall not exceed 3 psf. c. Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with Table R602.7(1). A full-height clear opening shall not be permitted adjacent to a Method CS-G panel.

d. Method CS-SFB does not apply in Seismic Design Categories D<sub>0</sub>, D<sub>1</sub> and D<sub>2</sub>.
 e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D<sub>0</sub> through D<sub>2</sub> only.

BUILD IN ACCORDANCE WITH 2018 INTERNATIONAL BUILDING CODE AND LOCAL CODES

> POOL HOUSE 1901 SW RIVER RUN DR LEE SUMMIT MO

SCALE 1/4"=1-0

DATE 4-3-23 4-12-23

PERMIT NO. PRCOM20226005

SHEET NO 5 OF 5

VOLFGANG JURGED HOS JURGED HOS JURGED HOS

	EXHAUST FAN SCHEDULE														
										ELECT	ELECTRICAL				
MARK	AREA SERVED	MANUFACTURER	MODEL	TYPE	CFM	ESP (IN)	DRIVE	POWER	OPERATION	VOLTS PHASE		WEIGHT			
EF-1	MEN R.R.	PANASONIC	FV-08-11VFL5	CEILING	110	0.25	DIRECT	26.5w	LIGHT SWITCH	120	1	12			
EF-2	WOMEN R.R.	PANASONIC	C FV-08-11VFL5 CEILI		110	0.25	DIRECT	26.5w	LIGHT SWITCH	120	1	12			
EF-3	EQUIPMENT ROOM	FANTECH	FR-160	IN-LINE	225	0.5	DIRECT	125w	BREAKER	120	1	8			

# MECHANICAL & PLUMBING SPECIFICATIONS

### 1. GENERAL PROVISIONS:

AUTHORITIES.

- A. PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE COMPLETE INSTALLATION OF THE PLUMBING SYSTEMS
- B. OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATIONS OF COMPLIANCE OR APPROVAL AS REQUIRED BY
- C. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS OF THE GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE.
- D. PROVIDE ALL NECESSARY CUTTING AND PATCHING OF WALLS, FLOORS, CEILINGS, AND ROOFS AS NECESSARY. PATCH AROUND ALL OPENINGS SHALL MATCH ADJACENT AREA. COORDINATE ALL ROOFING WORK WITH OWNER OR RESPONSIBLE PARTY, SO THAT
- THE EXISTING ROOFING WARRANTY WILL BE MAINTAINED. E. CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECT FOR A PERIOD OF ONE YEAR FROM FINAL
- F. INSPECTION OF THE SITE: THIS CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE MEP DRAWINGS, SPECIFICATIONS, DETAIL, AND THE SITE. THIS CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY SPECIAL OR UNUSUAL PROBLEMS, CONFLICTS,
- OR OBSTRUCTIONS THAT AFFECT HIS BID. G. FOR THE PURPOSE OF CLEARNESS AND LEGIBILITY, THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS AND FITTINGS REQUIRED FOR INSTALLATION. DO NOT SCALE DRAWINGS. THE SIZE AND LOCATION OF EQUIPMENT IS SHOWN TO SCALE WHEREVER POSSIBLE. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DATA AS INDICATED ON THE
- DRAWINGS AND IN THE SPECIFICATION SECTIONS WHERE MECHANICAL WORK INTERFACES WITH OTHER TRADES. H. INCLUDE ALL BASIC MATERIALS AND CONSTRUCTION METHODS INCLUDING PIPES, PIPE FITTINGS, AND SPECIALTIES AND SUPPORTING DEVICES, VALVES, PIPE AND VALVE IDENTIFICATION, PUMPS, VIBRATION ISOLATION, ETC.

### 2. PLUMBING

- A. PROVIDE AND APPROVED WATER HAMMER ARRESTOR FOR EACH PLUMBING FIXTURE SUPPLY AS REQUIRED BY FIXTURE MANUFACTURER.
- B. ALL EXPOSED PIPE SHALL BE CHROME PLATED BRASS PIPE, NO FERROUS PIPE.
- C. PROVIDE CLEANOUTS AT EACH CHANGE IN DIRECTION AND AT 100 FOOT INTERVALS IN STRAIGHT RUNS.
- D. PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES AND TRAPS. E. CLEANOUTS:
- 1. UNFINISHED FLOOR (FCO): JR SMITH #4020, OR EQUAL.
- 2. WALL (WCO): JR SMITH #4472, OR EQUAL, 24" ABOVE THE FLOOR.
- 3. GRADE (GCO): JR SMITH #4256, OR EQUAL, WITH HEAVY DUTY CAST IRON BODY AND COVER. F. PROVIDE DIELECTRIC UNIONS WITH APPROPRIATE END CONNECTION TO MATCH THE PIPE SYSTEM IN WHICH INSTALLED (SCREWED, SOLDERED, OR FLANGED). PROVIDE DIELECTRIC UNIONS ON ALL PIPING CONNECTIONS TO HOT WATER HEATERS AND EXPANSION
- G. ALL SEWER PIPING LOCATED INSIDE THE BUILDING SHALL BE INSTALLED WITH THE FOLLOWING SLOPES.
- 1. INSTALL 2-1/2" AND SMALLER PIPE AT 1/4" PER FOOT FALL.
- 2. INSTALL 3" AND LARGER PIPE AT 1/8" PER FOOT FALL. F. ALL SEWER PIPING LOCATED EXTERIOR TO THE BUILDING SHALL BE INSTALLED WITH THE FOLLOWING SLOPES.
- 1. INSTALL 4" AND SMALLER PIPE AT A MINIMUM OF 2% SLOPE.
- 2. INSTALL 6" AND LARGER PIPE AT A MINIMUM OF 1% SLOPE.

- 3. PIPING
  A. DOMESTIC COLD, AND HOT. 1. TYPE L HARD DRAWN COPPER TUBING, ASTM B-88 WITH WROUGHT BRONZE SOLDERED FITTINGS.
- BALL VALVE: CRANE #932 OR EQUAL.
- B. SANITARY SEWER AND VENTS. 1. SCHEDULE 40 PVC SOLID PLASTIC PIPE WITH DWV FITTINGS.

### 4. INSULATION: A. ALL INSULATIONS AND ACCESSORIES SHALL HAVE A FIRE HAZARD CLASSIFICATION WITH A FLAME SPREAD RATING OF NOT OVER 25, A FUEL CONTRIBUTION RATING OF NOT OVER 50, AND A SMOKE DEVELOPMENT RATING OF NOT OVER 50, IN ACCORDANCE

- WITH NFPA. B. PIPE INSULATION (ABOVE GRADE): THE PIPE INSULATION USED SHALL HAVE A THERMAL CONDUCTIVITY OF 0.27 BTU PER IN/HR\*SQ-FT\*\*F OR LESS.
- 2. FLEXIBLE CLOSED CELL ELASTOMERIC THERMAL INSULATION, UNSLIT OR PRESLIT WITH PRÉSSURE SENSITIVE ADHESIVE SYSTEM FOR CLOSURE AND VAPOR SEALING, EQUAL TO ARMSTRONG AP ARMAFLEX OR ARMAFLEX 2000.
- 3. INSULATION SCHEDULE: a. DOMESTIC HOT WATER:

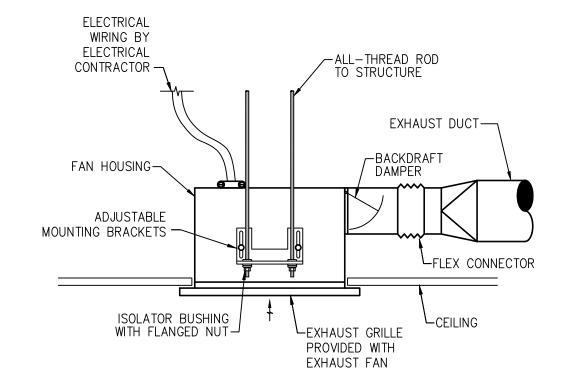
### 5. TESTING, BALANCING AND CLEANING:

- A. ALL PIPING SHALL BE TESTED FOR LEAKS BEFORE BEING CONCEALED IN WALL CONSTRUCTION OR COVERED WITH INSULATION. B. SEWER AND VENT PIPING SHALL BE HYDROSTATICALLY TESTED WITH NO LESS THAN 10 FEET OF HEAD FOR A PERIOD OF NOT LESS THAN 15 MINUTES, PER THE LOCAL PLUMBING CODE, WITH NO LEAKS.
- C. DOMESTIC WATER PIPING SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF NOT LESS THAN 1-1/2 TIMES THE OPERATING PRESSURE, BUT NOT LESS THAN 60 PSI, FOR A PERIOD OF NOT LESS THAN 2 HOURS, WITH NO LEAKS.

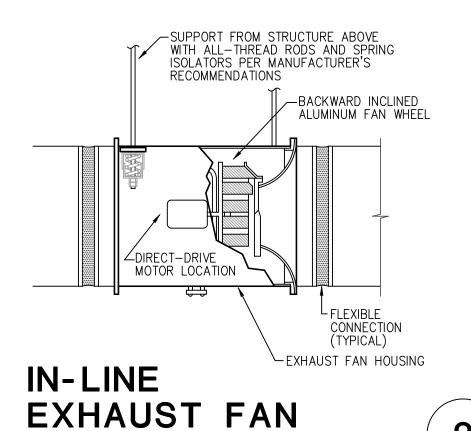
- A. DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF WORK. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER AND/OR OWNER OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
- B. COORDINATE INSTALLATION OF MECHANICAL SYSTEM WITH OTHER TRADES TO ENSURE A NEAT AND ORDERLY INSTALLATION AND AVOID CONFLICTS. INSTALL DUCTWORK AND PIPING AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE INSTALLATION OF DUCTWORK AND PIPING TO AVOID CONFLICTS WITH ELECTRICAL PANELS, LIGHTING FIXTURES, ETC. VERIFY DUCT SPACE AVAILABLE ABOVE ALL CEILINGS PRIOR TO ANY FABRICATION OF INSTALLATION.
- C. ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCED ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.
- D. THE ELECTRICAL SYSTEM DESIGN IS BASED IN PART ON THE SPECIFIED HVAC EQUIPMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE ELECTRICAL REQUIREMENTS OF THE HVAC EQUIPMENT BEING FURNISHED. ANY CHANGES TO THE ELECTRICAL SYSTEM DUE TO HVAC EQUIPMENT OTHER THAN THE SPECIFIED EQUIPMENT BEING FURNISHED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

# **# KEYED PLAN NOTES**

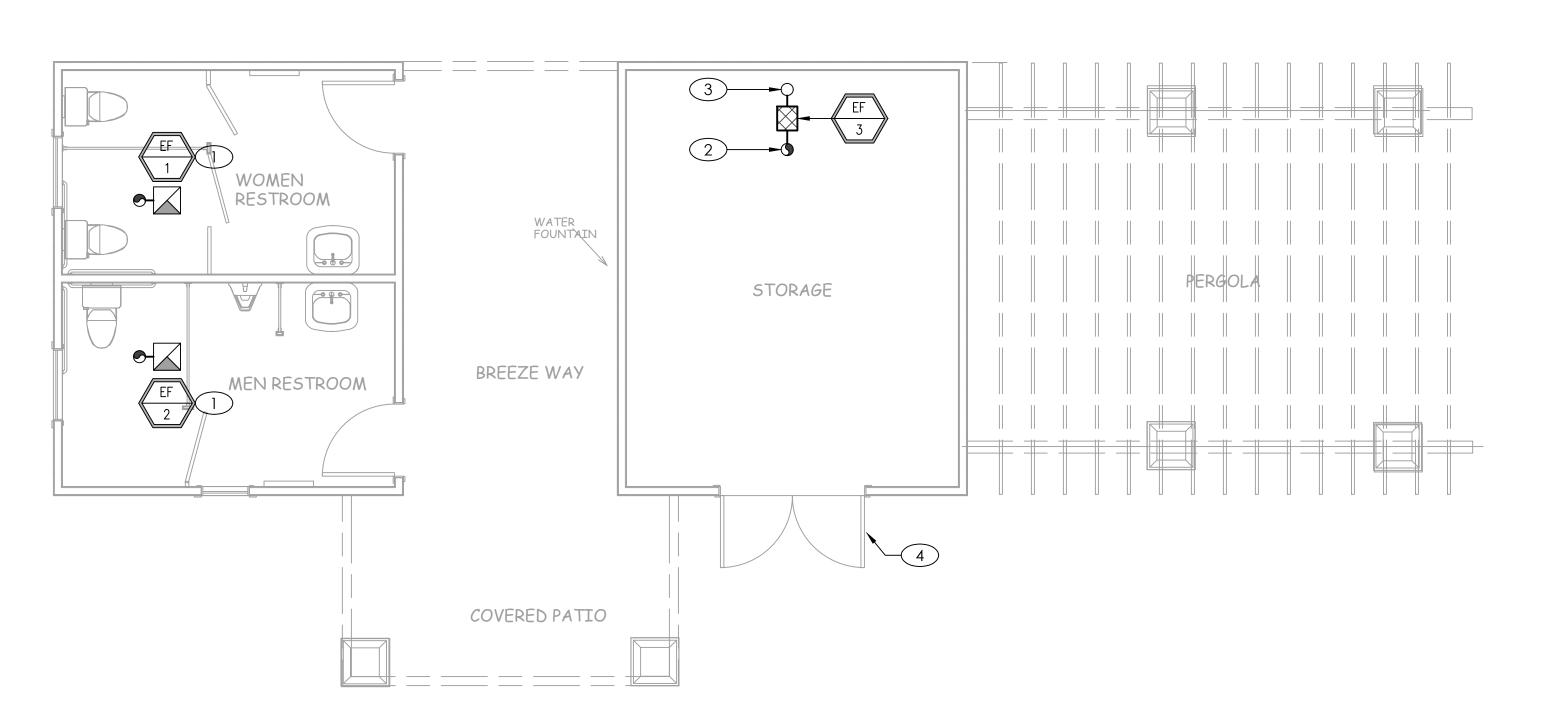
- 1. CEILING MOUNT EXHAUST FAN WITH 4"Ø DUCT UP THROUGH ROOF. DUCT SHALL TERMINATE 16" ABOVE ROOF WITH WEATHERPROOF RAIN CAP. SEAL ROOF PENETRATION WEATHER TIGHT.
- 2. 6"ø PVC EXHAUST DUCT UP THROUGH ROOF. DUCT SHALL TERMINATE 16" ABOVE ROOF WITH PVC WEATHER CAP.
- 3. 6"Ø PVC EXHAUST DUCT DOWN. TERMINATE EXHAUST DUCT 12" A.F.F. COVER OPENING WITH 1/4"X1/4" WIRE MESH SCREEN. COORDINATE LOCATION WITH POOL CONSULTANT.
- 4. LOUVERED DOOR BY GENERAL CONTRACTOR.



# **CEILING MOUNTED EXHAUST FAN** SCALE: NO SCALE



SCALE: NO SCALE



MECHANICAL PLAN

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





SUMMIT,

RELEASED FOR CONSTRUCTION As Noted on Plans Review

**JSC** 

**ENGINEERS** 

MO COA NO. 2012006786 / KS COA NO. E-2818

1925 CENTRAL ST. SUITE #201

KANSAS CITY, MO 64108

phone: (816) 272-5289

email: jsmothers@jscengineers.com

JUSTIN R.

SMOTHERS

NUMBER

RE-20120035684

05-20-2022

REVISIONS: DATE / DESCRIPTION

Copyright 2021 ISSUED:

PERMIT

MECHANICAL PLAN AND **SPECIFICATIONS** 

DATE: 05.20.2022 JOB NO.: 22-133 SHEET:

	PLUMBING FIXTURE SCHEDULE
LAV	HANDICAP ACCESSIBLE WALL MOUNT LAVATORY WITH CARRIER, PROFLO MODEL PF5411WH, VITREOUS CHINA, WHITE, SELF-RIMMING COUNTER TOP, PROFLOW PFWS3006 ADA COMPLIANT FAUCET, SS FLEX SUPPLY RISERS WITH CHROME PLATED STOP VALVES, P-TRAP WITH CLEANOUT AND ESCUTCHEONS. INSULATE WITH "HANDI-LAV-GLUARD" MODEL 102, OR EQUAL.
WC	FLOOR-MOUNTED ADA WATER CLOSET: PROFLO MODEL PF1503WH, HANDICAP ACCESSIBLE, VIREOUS CHINA, 1.28 GPF, ELONGATED BOWL, FLOOR MOUNTED, WHITE, VITREOUS CHINA TANK AND COVER CONTAINING FLUSHOMETER/TANK WITH BUILT-IN PRESSURE REGULATOR AND BACKFLOW PREVENTER, WHITE OPEN FRONT SEAT, CHROME STOPS, C.P. FLEXIBLE RISER TUBE, BOLT CAPS, AND ESCUTCHEON
FD	FLOOR DRAIN: SOUIX CHIEF 842-3PNR, FLOOR DRAIN, PVC BODY AND CLAMPING COLLAR, ADJUSTABLE 5-1/2" ROUND NICKEL BRONZE STRAINER. PROVIDE WITH PROSET SYSTEMS "TRAP GUARD" INSERT FOR ACTUAL FLOOR DRAIN MODEL AND SIZE PROVIDED.
FS	FLOOR SINK, JOSAM 49420-LF-NB SERIES SQUARE CAST IRON 12-1/4" DEEP SUPER FLO-SEPTOR® FLOOR SINK WITH ACID-RESISTING INTERIOR, BOTTOM OUTLET, ALUMINUM INTERNAL DOME STRAINER, NIKALOY SANITARY SLOPED RIM AND NIKALOY, LIGHT-DUTY, ANTI-TILTING, SUPER-FLO® GRATE. 16x16 SQUARE TOP, 4" OUTLET.
DF	DRINKING FOUNTAIN. ELKAY EZH20. ELECTRIC WATER COOLER WITH BOTTLE FILLING STATION. ADA COMPLIANT. COLOR BY OWNER/ARCHITECT. MOUNT AT HEIGHT DETERMINED BY ARCHITECT. 115V/1PH, 4.2 FLA, 370 WATTS, 71 LBS.
RPZ1	REDUCED PRESSURE ZONE BACKFLOW PREVENTER: 1", WATTS # LF009QT, MEETING ASSE 1013, LEAD FREE CAST BRONZE BODY, QUARTER TURN TESTING COCKS, QUARTER TURN BALL VALVES, AND # 909AG AIR GAP FITTING.
RPZ2	REDUCED PRESSURE ZONE BACKFLOW PREVENTER: 3/4", WATTS # LF009QT, MEETING ASSE 1013, LEAD FREE CAST BRONZE BODY, QUARTER TURN TESTING COCKS, QUARTER TURN BALL VALVES, AND # 909AG AIR GAP FITTING.
FPWH	FREEZE-PROOF WALL HYDRANT: PRIER PRODUCTS #C-6341, 3/4" FPT INET, 3/4" THREADED HOSE CONNECTION, LOOSE KEY HANDLE HYDRANT LENGTH AS REQUIRED FOR INSTALLATED WALL THICKNESS, ADJUSTABLE WALL CLAMP, BRASS BOX WITH SATIN NICKEL PLATED FINISH AND INTEGRAL ASSE 1052 DOUBLE CHECK VACUUM BREAKER.
UR1	URINAL: SLOAN WEUS1000.1001, WHITE, VITREOUS CHINA, WASHOUT WALL URINAL, 0.1 GALLONS PER FLUSH, 27"H X 17"W, FURNISH WITH FLUSHOMETER, VANDAL RESISTANT CHROME PLATED HOUSING, ADJUSTABLE TAILPIECE AND VANDAL RESISTANT OUTLET STRAINER. MOUNT NON-ADA AT 24" FROM

FINISHED FLOOR, MOUNT ADA URINAL 17" FROM FINISHED FLOOR. TRIM:

POINT OF USE WATER HEATER. SET HW SUPPLY TEMP SET TO 110F.

POINT OF USE WATER HEATER. SET HW SUPPLY TEMP SET TO 110F.

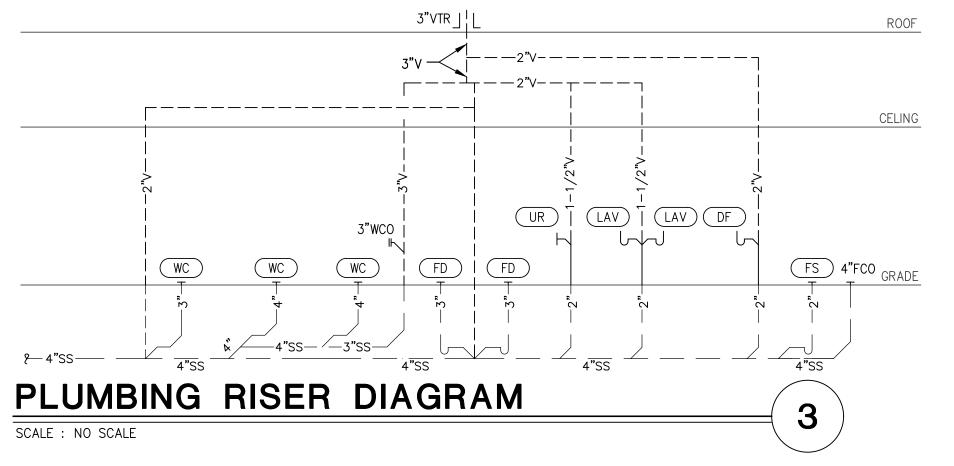
ELECTRIC WATER HEATER, EEMAX, MODEL SP2412, 2.4KW, 20 AMP, 110 VOLT,

ELECTRIC WATER HEATER, EEMAX, MODEL SP2412, 2.4KW, 20 AMP, 110 VOLT,

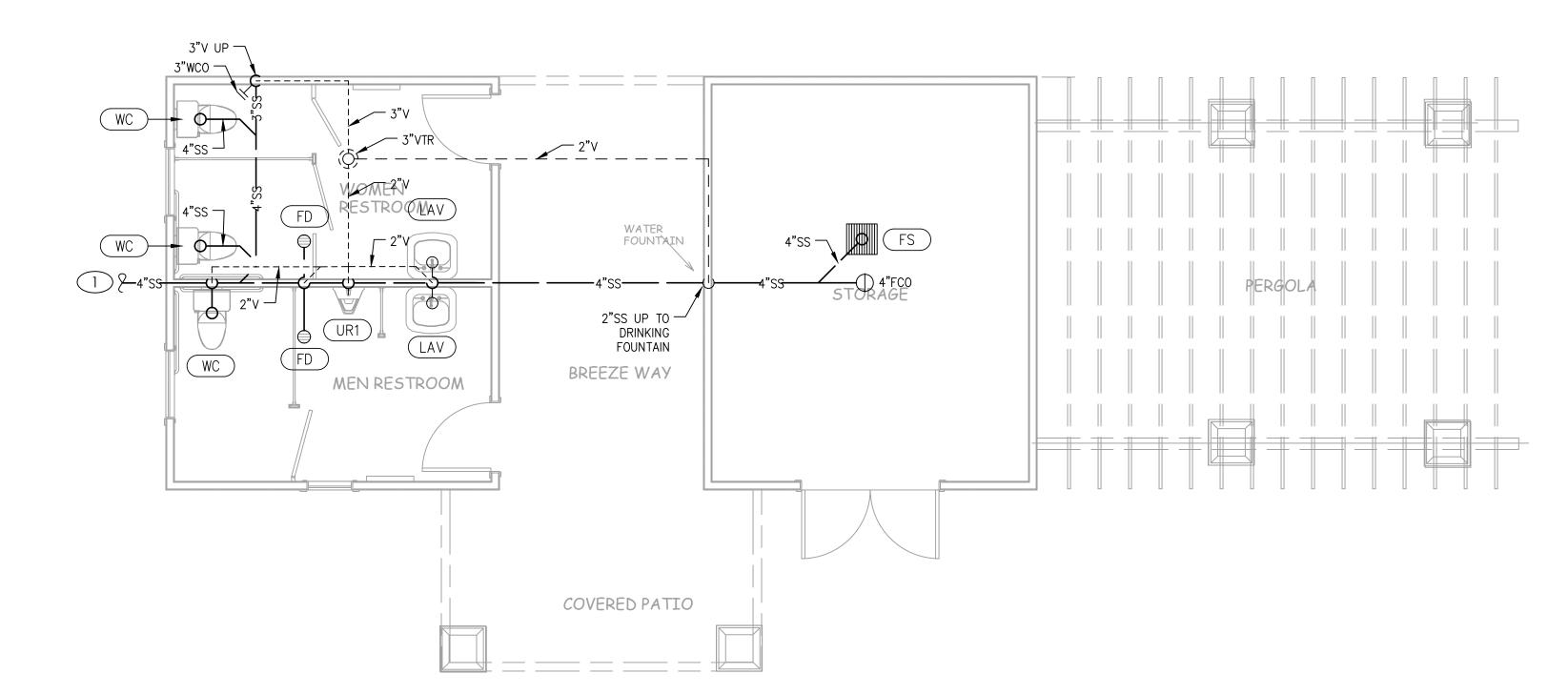
SUITABLE CARRIER WITH STANCHIONS TO FLOOR.

EWH1

EWH2



- 1. 4" SANITARY TO UTILITY SERVICE. CONTRACTOR SHALL WORK WITH LOCAL WASTE WATER AUTHORITY FOR INSTALLATION OF A NEW SEWER LINE CONNECTING INTO THE SEWER MAIN FOR A COMPLETE INSTALLATION. REFER TO CIVIL PLANS FOR CONTINUATION. COORDINATE INVERT ELEVATION WITH SITE CIVIL CONTRACTOR PRIOR TO START OF WORK.
- 2. 1" DOMESTIC COLD WATER TO UTILITY SERVICE. CONTRACTOR SHALL WORK WITH THE WATER COMPANY FOR THE INSTALLATION OF A NEW WATER MAIN ENTRANCE, INCLUDING TAP, METER, METER PIT, PIPING, ETC. FOR A COMPLETE INSTALLATION. REFER TO CIVIL PLANS FOR CONTINUATION.
- 3. 1"CW VALVED AND CAPPED FOR FUTURE USE BY POOL EQUIPMENT.
- 4. 1/2"CW TO WATER CLOSET.
- 5. 1/2" CW DOWN IN WALL. PROVIDE 1/2"CW TO LAV AND 1/2"CW TO INSTANTANEOUS WATER HEATER UNDER SINK. CONTINUE WITH 1/2"HW TO LAV. SET HW SUPPLY TEMPERATURE TO 110°F.
- 6. 1/2" CW TO DRINKING FOUNTAIN.
- 7. COORDINATE PLACEMENT OF RPZ WITH POOL CONSULTANT PRIOR TO INSTALLATION. ALSO COORDINATE WITH ELECTRICAL CONTRACTOR. DO NOT ROUTE PIPING ABOVE OR WITHIN WORKING SPACE OF ELECTRICAL PANEL.
- 8. 3/4CW DOWN TO URINAL.

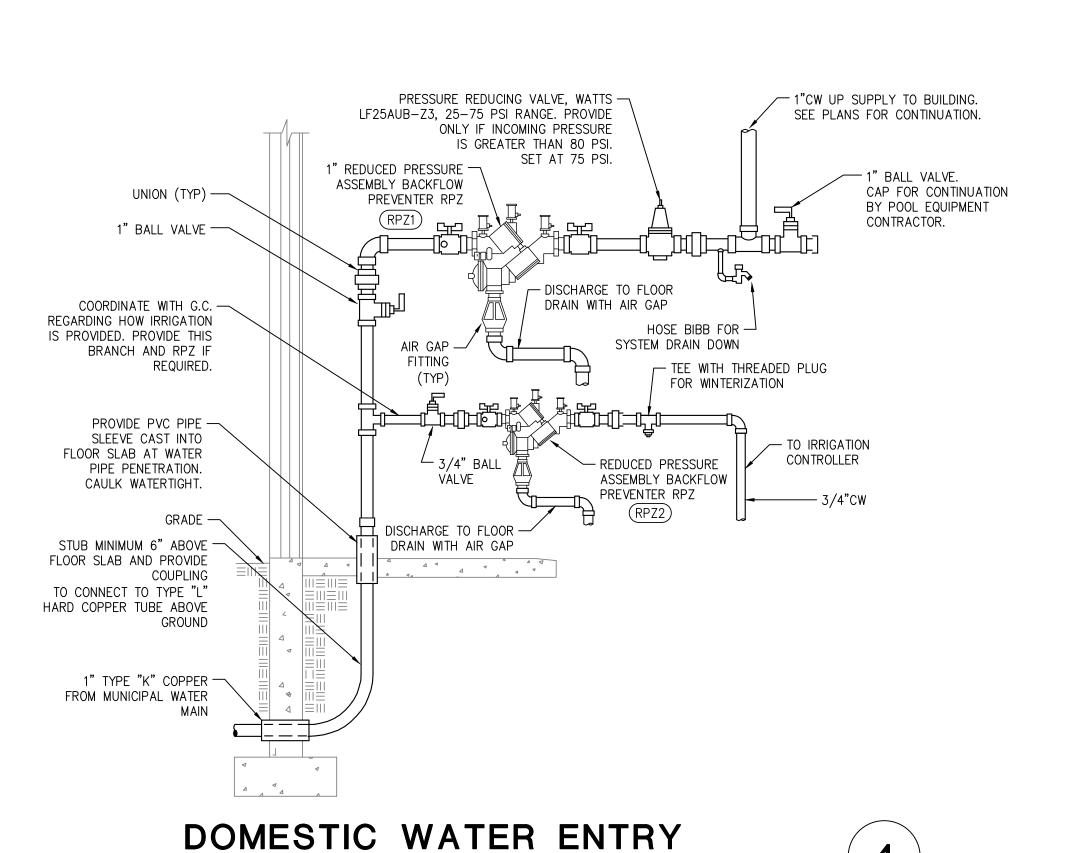


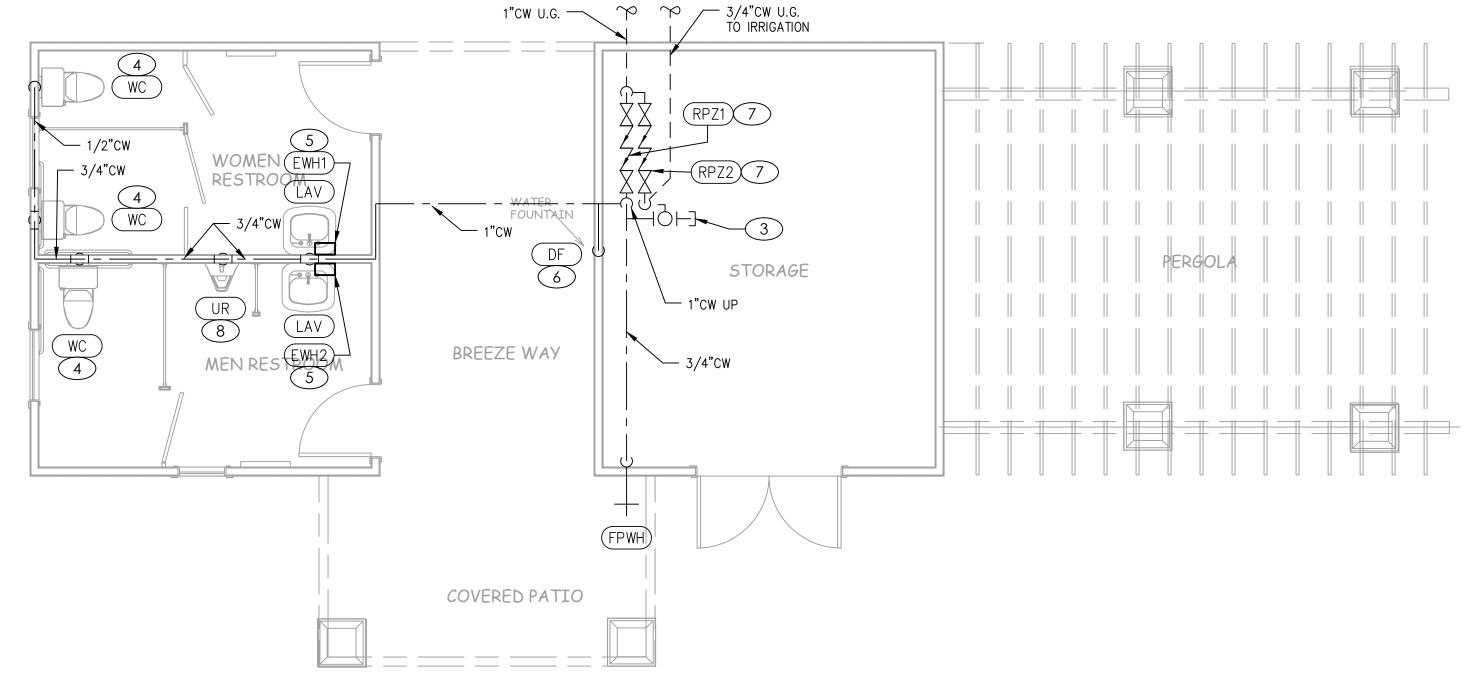
WASTE & VENT PLAN

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

WATER PLAN

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





DATE: 05.20.2022

JOB NO.: 22-133

SHEET:

DATE: 05.20.2022
JOB NO.: 22-133
SHEET:

MMIT

SU

REVISIONS: DATE / DESCRIPTION

PERMIT

Copyright 2021

SHEET TITLE:

ISSUED:

CONSTRUCTION
As Noted on Plans Review

**JSC** 

**ENGINEERS** 

MO COA NO. 2012006786 / KS COA NO. E-2818

1925 CENTRAL ST. SUITE #201

KANSAS CITY, MO 64108 phone: (816) 272-5289

email: jsmothers@jscengineers.com

JUSTIN R.

SMOTHERS

FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT TRACK LIGHT

DOWNLIGHT FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT

PENDANT MOUNTED FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT

O DOWNLIGHT FIXTURE

PENDANT MOUNTED FIXTURE

SINGLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS -

UNIVERSAL MTD

DUAL HEADED EMERGENCY UNIT

SINGLE POLE SWITCH @ +48" UNLESS NOTED

LETTER INDICATES FIXTURE CONTROLLED 3-WAY SWITCH @ +48" UNLESS NOTED

MANUAL MOTOR STARTER

LIGHTING CONTROLS CEILING MOUNT OCCUPANCY SENSOR

LIGHTING CONTROLS POWER PACK

TIMECLOCK

## **POWER DISTRIBUTION**

SWITCHBOARD, MOTOR CONTROL CENTER OR DISTRIBUTION BOARD

277/480V, 3 PHASE, 4 WIRE PANELBOARD, UNO 120/208V. 3 PHASE, 4 WIRE PANELBOARD, UNO

120/240V, 1 PHASE, 3 WIRE PANELBOARD, UNO

Т TRANSFORMER

SPECIAL HEAVY DUTY RECEPTACLE - SIZE AS NOTED.

1/2 SWITCHED RECEPTACLE @ +18" UNLESS NOTED

FLUSH FLOOR BOX WITH TYPE INDICATED

→ SINGLE RECEPTACLE @ +18" UNLESS NOTED

DUPLEX RECEPTACLE INSTALLED ABOVE COUNTERTOP

GFCI-RATED DUPLEX RECEPTACLE

TAMPER RESISTANT RATED DUPLEX RECEPTACLE

DUPLEX RECEPTACLE WITH WEATHERPROOF COVERPLATE

JUNCTION BOX

COMBINATION FUSED STARTER DISCONNECT SWITCH FUSE SIZE AS INDICATED, STARTER SIZE '1'

<u>AUXILIARY SYSTEMS</u>

MECHANICAL EQUIP. CONNECTION, SEE SCHED. ON MECH. PLAN

DATA OUTLET @ +18" UNLESS NOTED

COMBINATION TELEPHONE/DATA OUTLET @ +18" UNLESS NOTED

TELEVISION OUTLET @ +60" UNLESS NOTED

SMOKE DETECTOR

DUCT SMOKE DETECTOR

REMOTE TEST STATION WITH INDICATING LIGHT. MOUNT AT 48" AFF UNO. AUXILIARY SYSTEM TERMINAL CABINET

HOMERUN TO PANELBOARD, INFORMATION AT ARROWS ARE CIRCUIT NUMBERS AND PANELBOARD

FOR TERMINATION, REFER TO ASSOCIATED NOTE FOR BRANCH CIRCUIT CONDUCTOR SIZES. 5 INDICATES 1/2" CONDUIT CONCEALED IN CEILING OR WALL WITH (3) CONDUCTORS. (1) PHASE, (1) NEUTRAL AND (1) GROUND WIRE. ALL ARE #12 AWG UNLESS NOTED OTHERWISE.

(E) OR ETR: DENOTES EXISTING ITEM/EQUIPMENT TO REMAIN

# **ELECTRICAL SPECIFICATIONS**

H. SERVICE ENTRANCE SECTION

. DISTRIBUTION PANELS

TERMINATIONS.

MAIN BUS.

. PANEL BOARDS

ACCEPTABLE.

K. LOAD CENTER

DRAWINGS.

DEGREES C.

O. GUARANTEE

INDICATED ON DRAWINGS.

THE SERVICE ENTRANCE EQUIPMENT SHALL BE AS INDICATED ON THE DRAWINGS. EQUIPMENT SHALL

SERVICE ENTRANCE EQUIPMENT SHALL BE PROVIDED WITH A FULLY RATED COPPER OR ALUMINUM BUS.

DISTRIBUTION PANELS SHALL BE PROVIDED WITH FULLY RATED COPPER OR ALUMINUM BUS. HORIZONTAL

FACTORY ASSEMBLED DEAD FRONT, METAL ENCLOSED, AND SELF-SUPPORTING SWITCH BOARD ASSEMBLY

CONFORMING T NEMA PB 2 AND UL 891, AND COMPLETE FROM INCOMING LINE TERMINALS TO LOAD SIDE

BUS CONNECTIONS: BOLTED. ACCESSIBLE FROM FRONT FOR MAINTENANCE. PROVIDE BELLEVILLE WASHERS

PROVIDE FULLY-RATED NEUTRAL BUS AND FULLY RATED GROUND BUS MATCHING MATERIAL USED FOR

FUTURE PROVISIONS: FULLY EQUIP SPACES FOR FUTURE DEVICES WITH BUSSING AND BUS CONNECTIONS

CIRCUIT BREAKER TYPE AS INDICATED ON DRAWINGS. UNLESS INDICATED OTHERWISE, ALL PANELS SHALL

THE CIRCUIT BREAKERS SHALL BE OPERABLE IN ANY POSITION AND BE REMOVABLE FROM THE FRONT OF

THE PANEL BOARD WITHOUT DISTURBING THE ADJACENT UNITS. BRANCH BREAKERS SHALL BE OF SUCH

ASSEMBLED ON THE SAME PANEL. EACH BRANCH CIRCUIT SHALL BE CLEARLY NUMBERED. BRANCH AND

DESIGN THAT COMBINATION OF SINGLE-POLE, DOUBLE-POLE, AND THREE-POLE BREAKERS CAN BE

MAN TERMINALS SHALL BE SOLDERLESS TYPE. HANDLE TIES TO FORM MULTI-POLE BREAKERS NOT

CIRCUIT BREAKER TYPE AS INDICATED ON DRAWINGS. MANUFACTURERS SHALL BE GENERAL ELECTRIC,

SQUARE D, SIEMENS, CUTLER-HAMMER/EATON WITH VOLTAGE, SIZES, AND RATINGS AS INDICATED ON

THE CIRCUIT BREAKERS SHALL BE OPERABLE IN ANY POSITION AND BE REMOVABLE FROM THE FRONT O

DESIGN THAT COMBINATION OF SINGLE-POLE AND DOUBLE-POLE BREAKERS CAN BE ASSEMBLED ON THE

SHALL BE OF THE SOLDERLESS TYPE. HANDLE TIES TO FORM MULTI-POLE BREAKERS NOT ACCEPTABLE.

WIRE TERMINATION FOR PANEL BOARDS AND CIRCUIT BREAKERS SHALL BE LISTED AS SUITABLE FOR 75

PROVIDE A TYPEWRITTEN CIRCUIT INDEX BEHIND CLEAR PLASTIC COVER ON INSIDE OF DOOR.

IDENTIFIED, INCLUDING SPARES. INDEX CARD FRAME SHALL BE METAL, SECURED TO DOOR.

5. PANEL BOARDS/LOAD CENTERS TO BE PROVIDED WITH COPPER BUSSIING ONLY.

SYSTEMS AS REQUIRED FOR LIGHTING CONTROLS INDICATED ON THE DRAWINGS.

PHOTOCELLS SHALL BE EQUAL TO TORK OR INTERMATIC WITH VOLTAGE AS INDICATED.

HEREUNDER. SHALL BE MADE GOOD AT NO EXPENSE TO THE OWNER.

AND BALLASTS TO MEET THE EXISTING CEILING CONDITION.

HAVE SIZE AND NUMBER OF POLES AS REQUIRED

N. TELEPHONE AND CABLE TELEVISION SYSTEMS

INFORMATION SHALL INCLUDE ROOM AND TYPE LOAD SERVED. ALL CIRCUIT BREAKERS SHALL BE

1. PROVIDE ALL LIGHTING FIXTURES, WIRED AND CONNECTED. THE DRAWINGS INDICATE THE FIXTURES FOR

FURNISH AND INSTALL TIME SWITCHES, PHOTOCELLS, CONTRACTORS AND FULL LIGHTING CONTROL

2. TIME SWITCHES SHALL BE EQUAL TO PARAGON, GENERAL ELECTRIC, TORK, OR INTERMATIC AND SHALL

TELEPHONE WALL OUTLETS SHALL CONSIST OF STANDARD BOXES MOUNTED 18" ABOVE THE FLOOR

UNLESS OTHERWISE INDICATED. PROVIDE A TERMINAL MOUNTING BOARD FOR THE INCOMING SERVICE

CABLE TELEVISION OUTLETS SHALL CONSIST OF STANDARD BOXES MOUNTED 18" ABOVE THE FLOOR

FROM DATE OF FINAL ACCEPTANCE OF WORK. ANY DEFECTS DEVELOPING WITHIN THIS PERIOD,

TRACEABLE TO MATERIAL FURNISHED AS A PART OF THIS SECTION OR WORKMANSHIP PERFORMED

UNLESS OTHERWISE INDICATED. PROVIDE A TERMINAL MOUNTING BOARD FOR THE INCOMING SERVICE

GUARANTEE ALL MATERIAL FURNISHED AND ALL WORKMANSHIP PERFORMED FOR A PERIOD OF ONE YEAR

MANUFACTURER. VERIFY CEILING CONSTRUCTION BEFORE ORDERING RECESSED UNITS. PROVIDE PLASTER

FRAMES AND HANGERS AS REQUIRED. CEILING CONSTRUCTION, ARCHITECTURAL ACCESSORIES, VOLTAGE,

EACH LOCATION. PROVIDE LAMPS FOR ALL FIXTURES. THE LAMPS SHALL BE BY THE SAME

SAME PANEL. EACH BRANCH CIRCUIT SHALL BE CLEARLY NUMBERED. BRANCH AND MAIN TERMINALS

THE PANEL BOARD WITHOUT DISTURBING THE ADJACENT UNITS. BRANCH BREAKERS SHALL BE OF SUCH

HAVE PANEL HAVE PANEL BOARD TYPE CONSTRUCTION WITH BOLT-ON CIRCUIT BREAKERS FOR 30

2. MANUFACTURERS SHALL BE GENERAL ELECTRIC, SQUARE D, SEIMENS, CUTLER-HAMMER WITH VOLTAGE,

SUITABLY INSULATED AND BRACED FOR SHORT CIRCUIT CURRENTS. CONTINUOUS CURRENT RATING AS

LINE AND LOAD TERMINATIONS: ACCESSIBLE FROM FRONT ONLY OF THE SWITCH BOARD. SUITABLE FOR

ACCEPTABLE MANUFACTURERS - CUTLER HAMMER, SEIMENS, SQUARE D OR GENERAL ELECTRIC

CARRY THE U.L. LABEL AND SHALL CONFORM TO THE POWER COMPANY REGULATIONS.

HORIZONTALLY TAPERED BUSSING SHALL NOT BE ALLOWED.

CONDUCTOR MATERIALS AND NUMBER OF CONDUCTORS USED.

APERED BUSSING SHALL NOT BE ALLOWED

FOR PROPERLY TORQUE ALL CONNECTIONS

8. ALL CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE.

SIZES. AND RATINGS AS INDICATED ON DRAWINGS.

A. CIRCUIT BREAKERS SHALL BE PLUG-IN TYPE

### PART I - GENERAL

# A. CONDITIONS

- FURNISH AND INSTALL A COMPLETELY WIRED AND OPERATIONAL ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO, THESE MAJOR ITEMS. A. LIGHTING FIXTURES AS INDICATED AND SPECIFIED ON THE PLANS. B. ELECTRICAL PANELS, SERVICE, CONDUIT, WIRING, ETC., FOR ALL OUTLETS AND EQUIPMENT.
- OBTAIN AND REVIEW ALL OTHER DRAWINGS INCLUDING REFLECTED CEILING PLAN, INTERIOR AND EXTERIOR ELEVATIONS, FURNITURE PLANS AND ALL MILL WORK DRAWINGS. COORDINATE INSTALLATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT PRIOR TO ROUGH-IN.
- OBTAIN SUBMITTAL AND SHOP DRAWINGS FROM OTHER TRADES AND EQUIPMENT TO COORDINATE INSTALLATION ACCORDINGLY.

C. TELEPHONE, TELEVISION, AND FIRE ALARM. OUTLETS AND CONDUIT AS INDICATED.

- 4. INSTALLATION SHALL COMPLY WITH ALL CURRENT APPLICABLE CODES AND GOVERNING AGENCIES HAVING JURISDICTION.
- FIRE ALARM SYSTEM, IF REQUIRED PER IBC, SHALL BE DESIGN-BUILD BY OWNER'S/GC'S FIRE ALARM CONTRACTOR. DESIGN SHALL BE IN ACCORDANCE WITH NFPA 72. FIRE ALARM CONTRACTOR SHALL SUBMIT STAMPED DRAWINGS TO AHJ FOR REVIEW AND APPROVAL. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR TESTING AND VERIFYING THAT THE AUDIBILITY OF THE FIRE ALARM SYSTEM MEETS A MINIMUM OF 15 DBA ABOVE AMBIENT NOISE LEVELS. ADD HORNS WHERE REQUIRED TO MAINTAIN MINIMUM
- PROVIDE FIRE STOP ON ALL PIPING THAT PENETRATES RATED WALLS. METHOD OF FIRE STOP SHALL MEET WALL RATING. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE RATED WALLS. THIS CONTRACTOR SHALL PROVIDE FIRE RATED ENCLOSURES AROUND ALL ROUGH-IN BOXES, PANELS, ETC. THAT ARE LOCATED IN FIRE RATED WALLS AND SHALL FIRE CAULK ALL OPENINGS IN RATED ASSEMBLIES.
- B. RELATED WORK BY OTHERS THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, TRENCH, AND BACKFILL FOR ELECTRICAL SERVICE ENTRANCE FROM THE MAIN SERVICE TO UTILITY POINT OF ELECTRICAL SERVICE. ELECTRICAL
- SERVING UTILITY COMPANY. THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, TRENCH, AND BACKFILL FOR PRIMARY PHONE AND CATV SERVICE FROM THE TELEPHONE TERMINAL BOARD OR CABINET TO THE PHONE COMPANY AND CATV COMPANY POINT OF SERVICE COORDINATE WITH LOCAL UTILITY COMPANIES.

CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE WITH

- CODES, REGULATIONS, AND STANDARDS THE INSTALLATION SHALL COMPLY WITH APPLICABLE LOCAL AND STATE CODES AND ORDINANCES, WITH THE REGULATIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE AND WITH THE REQUIREMENTS OF THE POWER, TELEPHONE, AND CATV COMPANIES FURNISHING SERVICES TO THIS
- INSTALLATION. THE LATEST EDITIONS OF THE FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS, AND CODES ARE
- MINIMUM REQUIREMENTS: A. THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION STANDARDS. B. THE NATIONAL ELECTRICAL CODE, INCLUDING LOCAL AMENDMENTS.

### E. INTERNATIONAL BUILDING CODE.

- D. INSPECTION OF SITE PRIOR TO SUBMITTING A BID FOR ELECTRICAL WORK, THE CONTRACTOR SHALL VISIT THE SITE OF THE PROPOSED CONSTRUCTION AND SHALL THOROUGHLY ACQUAINT HIMSELF WITH EXISTING UTILITIES, AND WORKING CONDITIONS TO BE ENCOUNTERED, ETC. ALLOWANCE WILL NOT BE MADE FOR NONCOMPLIANCE
- WITH THIS CONDITION AFTER BIDDING ELECTRICAL INSTALLATION SHALL MEET THE EXISTING CONDITIONS.

C. UNDERWRITER LABORATORIES INCORPORATED STANDARDS.

D. AMERICAN NATIONAL STANDARDS INSTITUTE.

# E. STORAGE AND HANDLING OF MATERIAL

- DELIVER MATERIALS AND EQUIPMENT TO THE PROJECT IN THE MANUFACTURER'S ORIGINAL, UNOPENED, LABELED CONTAINERS. PROTECT AGAINST MOISTURE, TAMPERING, OR DAMAGE FROM IMPROPER HANDLING OR STORAGE. CONTRACTOR SHALL PROTECT AND BE RESPONSIBLE FOR ANY DAMAGE TO WORK OR MATERIALS UNTIL FINAL ACCEPTANCE BY THE OWNER, AND SHALL MAKE GOOD WITHOUT COST TO THE OWNER, ANY DAMAGE OR LOSS THAT MAY OCCUR DURING THIS PERIOD.
- ARRANGE FOR TIMELY DELIVERY OF MATERIALS AND EQUIPMENT TO THE JOB SITE IN ORDER TO MINIMIZE THE LENGTH OF TIME BETWEEN DELIVERY AND INSTALLATION.
- COVER AND PROTECT ANY MATERIAL WHICH MAY BE AFFECTED BY THE WEATHER WHILE IN TRANSIT OR STORED AT THE PROJECT SITE. ANY MATERIAL FOUND DEFECTIVE OR NOT INSTALLED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS MAY BE REJECTED BY THE ENGINEER

KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS, OR RUBBISH CAUSED BY EMPLOYEES OR WORK UNDER THIS DIVISION OF THE SPECIFICATIONS. AT THE COMPLETION OF THE WORK REMOVE ALL SURPLUS MATERIALS, TOOLS, ETC., AND LEAVE THE PREMISES BROOM-CLEAN.

## G. EXCAVATION, CUTTING, AND FITTING

- PERFORM ALL EXCAVATION AND BACK FILLING REQUIRED FOR WORK PERFORMED UNDER THIS DIVISION OF THE SPECIFICATIONS. USE EXCAVATED MATERIALS FOR BACKFILL UNLESS OFF SITE MATERIALS ARE DEEMED NECESSARY.
- PERFORM THE EXCAVATION, CUTTING, FITTING, REPAIRING, AND FINISHING OF THE WORK NECESSARY FOR THE INSTALLATION OF THE EQUIPMENT OF THIS SECTION. HOWEVER, NO CUTTING OF THE WORK OF OTHER TRADES OR OF ANY STRUCTURAL MEMBERS SHALL BE DONE WITHOUT THE CONSENT OF THE

- THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT AND LOCATIONS OF THE ELECTRICAL WORK DATA PRESENTED ON THESE DRAWINGS ARE AS ACCURATE AS PLANNING CAN DETERMINE, BUT FIELD VERIFICATION OF ALL DIMENSIONS, LOCATIONS, LEVELS, ETC., TO SUIT FIELD CONDITIONS IS REQUIRED. REVIEW ALL ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS AND ADJUST ALL WORK TO MEET THE REQUIREMENTS OF CONDITIONS SHOWN. THE ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS. DISCREPANCIES BETWEEN DIFFERENT PLANS, OR BETWEEN DRAWINGS AND SPECIFICATIONS, OR REGULATIONS AND CODES GOVERNING THE INSTALLATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BEFORE THE DATE OF BID OPENING. IF DISCREPANCIES ARE NOT REPORTED, THE CONTRACTOR SHALL BID THE GREATER QUANTITY OR BETTER QUALITY, AND APPROPRIATE ADJUSTMENTS WILL BE MADE AFTER CONTRACT AWARD. CONTRACTOR SHALL BE RESPONSIBLE TO FIELD MEASURE AND CONFIRM MOUNTING HEIGHTS AND LOCATION OF ELECTRICAL EQUIPMENT WITH RESPECT TO COUNTERS, RADIATION, ETC. DO NOT SCALE DISTANCES OFF THE ELECTRICAL DRAWINGS, USE ACTUAL BUILDING DIMENSIONS.
- COOPERATION WITH OTHER CONTRACTORS COOPERATE WITH THE OTHER TRADES SO THAT THE INSTALLATION OF THE ELECTRICAL OUTLETS AND EQUIPMENT WILL BE PROPERLY COORDINATED. CONDUIT, LIGHTING FIXTURES, AND OTHER EQUIPMENT
- LOCATIONS SHALL BE VERIFIED WITH OTHER TRADES TO AVOID CONFLICT WITH THE PIPING, DUCTWORK, STEEL, BEAMS, OR OTHER OBSTRUCTIONS. CAREFULLY VERIFY THE LOCATIONS OF THE OUTLET BOXES AND DETERMINE THAT THEY HAVE NOT
- BEEN DISTURBED DURING THE INSTALLATION OF MATERIALS OF OTHER TRADES. COORDINATE THE LOCATION OF THE TRENCHES AND CONDUITS FOR ELECTRICAL AND TELEPHONE UTILITY SERVICES WITH THE GENERAL CONTRACTOR.
- COORDINATE HVAC AND PLUMBING EQUIPMENT CONNECTION REQUIREMENTS WITH HVAC AND PLUMBING CONTRACTORS.
- THE ELECTRICAL CONTRACTOR SHALL MAINTAIN A SET OF DRAWINGS AT THE JOB SITE FOR THE EXCLUSIVE PURPOSE OF MAINTAINING A RECORD OF ALL WORK INSTALLED AND TO SHOW ANY DEVIATIONS FROM THE WORK INDICATED ON THE DRAWINGS.

### AT THE COMPLETION OF THE PROJECT, ONE SET OF REPRODUCIBLE DRAWINGS, SHOWING ALL RECORD CONDITIONS, SHALL BE DELIVERED TO THE OWNER FOR ACCEPTANCE PRIOR TO FINAL PAYMENT.

# PART II - PRODUCTS AND EXECUTION

ALL MATERIALS SHALL BE NEW AND OF QUALITY AS SPECIFIED ON THE PLANS OR SPECIFICATIONS AND MUST CARRY THE UNDERWRITER'S LABORATORIES APPROVAL COVERING THE PURPOSE FOR WHICH THEY ARE USED, IN ADDITION TO MEETING ALL REQUIREMENTS OF THE CURRENT APPLICABLE CODES AND REGULATIONS.

B. SHOP DRAWINGS AND APPROVALS

- THE ITEMS SPECIFIED HEREIN AND ON DRAWINGS ARE USED AS A STANDARD OF QUALITY. ANY MATERIALS OF EQUAL QUALITY AND AESTHETIC VALUE WILL BE GIVEN CONSIDERATION AS A SUBSTITUTE FOR THE MATERIALS SPECIFIED. NO APPROVAL WILL BE GIVEN TO A SPECIFIC CATALOG NUMBER, MODEL, OR TYPE OF EQUIPMENT, PRIOR TO BIDDING. AFTER BIDDING, THE DECISION OF THE ARCHITECT AND/OR ENGINEER DETERMINING EQUAL MATERIALS WILL BE FINAL
- THE CONTRACTOR SHALL SUBMIT SEVEN (7) IDENTICAL BOUND SETS OF SHOP DRAWINGS ON THE FOLLOWING ITEMS: A. LIGHTING FIXTURE CUTS AND PERFORMANCE DATA.
- B. OUTLINE DRAWINGS AND DATA SHEETS OF EACH PANELBOARD, LOAD CENTERS, AND DISTRIBUTION PANELS. C. OUTLINE DRAWINGS OF ALL SWITCH GEAR COMPONENTS.
- ). WIRING DEVICES AND COVERPLATES. E. ALL CIRCUIT BREAKERS INSTALLED IN PANELBOARDS, LOAD CENTERS, AND DISTRIBUTION PANELS. SUBMIT ITEMS AT ONE TIME IN A NEAT AND ORDERLY MANNER WITHIN 15 DAYS OF AWARD OF CONTRACT. PARTIAL SUBMITTALS WILL NOT BE ACCEPTABLE.
- GROUNDING SHALL COMPLY WITH REQUIREMENTS OF ARTICLE 250. ALL EXPOSED NONCURRENT CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, METALLIC RACEWAY SYSTEMS, METALLIC CABLE ARMOR, GROUNDING CONDUCTOR OF NONMETALLIC SHEATHED CABLES, GROUNDING CONDUCTOR IN NONMETALLIC RACEWAYS, AND GROUNDED CONDUCTORS OF THE WIRING SYSTEM SHALL BE GROUNDED.
- GROUNDING CONDUCTOR (NEUTRAL) OF THE WIRING SYSTEM SHALL BE CONNECTED TO THE SYSTEM GROUNDING CONDUCTOR AT A SINGLE PLACE IN EACH SYSTEM BY REMOVABLE BONDING JUMPERS, SIZED ACCORDING TO THE APPLICABLE PROVISIONS OF THE NATIONAL ELECTRICAL CODE. THE GROUNDED CONDUCTOR (NEUTRAL) TO THE GROUNDING CONDUCTOR CONNECTION SHALL BE LOCATED IN THE ENCLOSURE FOR THE SYSTEM'S OVERCURRENT PROTECTION OR WHERE OTHERWISE INDICATED ON THE
- PLANS OR SPECIFICATIONS. A GROUND BUS SEPARATE FROM THE NEUTRAL BUS SHALL BE PROVIDED IN ALL DISTRIBUTION PANELS AND PANELBOARDS. PROPER TORQUE ON GROUND BUS SHALL BE VERIFIED, PER MANUFACTURER'S
- RECOMMENDATIONS, PRIOR TO ENERGIZING EQUIPMENT. GROUND BUSES AND NEUTRAL BUSES IN ALL DISTRIBUTION PANELS, LOAD CENTERS, PANELBOARDS, AND THOSE PROVIDED IN ANY EQUIPMENT SHALL BE ISOLATED EXCEPT WHERE REQUIRED TO BE CONNECTED AS SPECIFIED ABOVE FOR THE SERVICE ENTRANCE
- WHEN INDICATED ON THE DRAWINGS, EQUIPMENT GROUNDING CONDUCTORS SHALL BE EXTENDED FROM THE GROUND BUS IN THE DISTRIBUTION EQUIPMENT TO THE RECEPTACLE, FIXTURE OR DEVICE LUGS WHERE THEY ARE PROVIDED. WHERE LUGS ARE NOT PROVIDED, EQUIPMENT GROUNDING CONDUCTORS SHALL BE CONNECTED TO EQUIPMENT ENCLOSURES. THE CONNECTIONS SHALL BE ARRANGED SUCH THAT REMOVAL OF THE RECEPTACLE, EQUIPMENT GROUND CONDUCTORS, OR GROUND JUMPERS FROM GROUND
- BUSING SHALL NOT AFFECT THE GROUND SYSTEM. RACEWAYS MAY NOT BE USED AS A GROUNDING CONDUCTOR FOR POWER AND LIGHTING CIRCUITS. ALL CONDUIT SHALL HAVE SEPARATE CODE SIZED GREEN GROUND WIRE INSTALLED IN THE CONDUIT TO INSURE A CONTINUOUS GROUNDING PATH.
- IN INACCESSIBLE LOCATIONS, MAKE CONNECTIONS BY EXOTHERMIC WELD PROCESS. IN ACCESSIBLE LOCATIONS, CONNECTIONS SHALL BE MADE WITH BOLTED THROUGH, APPROVED SOLDERLESS BRONZE GROUNDING DEVICES.

- CONDUCTOR SIZES SHOWN ON THE DRAWINGS ARE BASED ON COPPER WIRE. UNLESS OTHERWISE SPECIFIED, ALL WIRE SHALL BE TYPE XHHW OR SE FOR FEEDERS OR BRANCH CIRCUITS LARGER THAN 4 AWG, TYPE THHN/THWN INSULATION FOR FEEDERS AND BRANCH CIRCUITS 4 AWG AND SMALLER. ALL BRANCH CIRCUIT WIRING SHALL BE COPPER.
- ALUMINUM CONDUCTORS MAY BE UTILIZED FOR SERVICE ENTRANCE AND PANEL FEEDERS. CONDUCTORS SHALL BE ALUMINUM ALLOW AA-8000 SERIES. THE WIRES SHALL BE MARKED WITH COLOR TO SIMPLIFY CIRCUIT IDENTIFICATION. UNLESS OTHERWISE REQUIRED BY LOCAL ORDINANCES GROUND WIRES SHALL BE GREEN, NEUTRAL WIRES SHALL BE 120V-WHITE, AND LIVE WIRES 208Y/120V AND 120/240 SHALL BE BLACK (PHASE A), RED (PHASE B),
- AND BLUE (PHASE C). CIRCUIT SHALL BE LABELED IN EACH J-BOX. ALL CONDUCTORS SHALL BE RATED 600 VOLT. SPLICES IN EXTERIOR PULL BOXES AND MANHOLES SHALL BE WEATHERPROOF USING "SCOTCHCAST"
- SPLICE KIT OR APPROVED EQUAL. SEAL ENDS OF CONDUITS AND DUCTS WITH "DUCTSEAL" OR APPROVED EQUAL. PROVIDE SOLID CONDUCTOR FOR 12 AWG AND SMALLER.
- NO WIRE SHALL BE INSTALLED IN THE CONDUIT SYSTEM UNTIL THE CONDUIT SYSTEM IS COMPLETE. USE MINERALAC NO. 100 OR EQUIVALENT AS A LUBRICANT TO FACILITATE THE INSTALLATION OF THE CONDUCTORS IN THE CONDUIT SYSTEM.

MC CABLE WITH COPPER CONDUCTORS AND GROUND WIRE MAY BE USED WHERE PERMITTED.

### E. CONDUIT ALL WIRING SHALL BE INSTALLED IN LISTED METALLIC CONDUIT EXCEPT AS PERMITTED IN OTHER SECTIONS. RGS. WITH A 20 MIL PVC COATING WILL BE USED WHEN IN CONTACT WITH EARTH. IMC MAY

ALL WIRING WITHIN RESIDENTIAL UNITS ONLY MAY BE TYPE NM CABLE.

- BE USED IN INDOOR LOCATIONS NOT IN CONTACT WITH THE EARTH. EMT MAY BE USED IN INDOOR LOCATIONS NOT IN CONTACT WITH EARTH, NOT IN CONCRETE SLABS OR WALLS AND NOT SUBJECT TO DAMAGE. PVC MAY BE USED IN OR BELOW CONCRETE AND DIRECT BURIED IN EARTH. FLEXIBLE STEEL CONDUIT SHALL BE USED FOR INDOOR FINAL CONNECTIONS TO EQUIPMENT IN LENGTHS NOT TO EXCEED 72". LIQUID-TIGHT FLEXIBLE STEEL CONDUIT SHALL BE FOR OUTDOOR FINAL CONNECTIONS TO EQUIPMENT NOT TO EXCEED 48".
- WHERE CONDUIT ENTERS OUTLET BOXES, FIXTURES OR CABINETS, FIRMLY FASTEN WITH STEEL SET SCREW, COMPRESSION CONNECTORS, OR DOUBLE LOCKNUTS FOR GRC. ALL CONNECTIONS SHALL HAVE BUSHINGS OR INSULATED THROAT CONNECTORS. FIRMLY FASTEN CONDUIT TO THE BUILDING CONSTRUCTION. RUN EXPOSED CONDUIT PARALLEL TO THE BUILDING LINES, SUPPORTED BY APPROPRIATE HANGERS (UNISTRUT, T & B OR APPLETON, OR EQUAL).
- COVER METALLIC CONDUIT IN CONTACT WITH EARTH WITH POLYETHYLENE TAPED SPIRAL WRAPPED, 1/2 LAPPED TO PROVIDE 20 MIL. THICKNESS. TAPE SHALL BE SCOTCH NO. 50 TAPE. CONDUIT AND DUCTS NOT UNDER BUILDINGS AND FEEDER DUCTS SHALL BE INSTALLED PER N.E.C. 300-5. MAKE JOINTS WITH COMPOUND TO BE WATERTIGHT. SCHEDULE 40 PVC CONDUIT SHALL BE PERMITTED UNDERGROUND WITH PROPER FITTINGS, ALL UL

APPROVED AND CEMENTED JOINTS. PENETRATIONS THROUGH FLOOR SLABS AND BENDS GREATER THAN

- 22° SHALL BE WRAPPED RIGID GALVANIZED STEEL ELBOWS. FITTINGS AND CONDUIT BODIES SHALL BE STEEL. DIECAST FITTINGS ARE NOT ACCEPTABLE. CONDUIT SIZES SHALL BE AS REQUIRED BY CODE AND AS INDICATED OR SPECIFIED. ALL EMPTY CONDUIT SYSTEMS SHALL HAVE A 200 LB. TEST NYLON PULL STRING TO FACILITATE
- INSTALLATION OF FUTURE WIRE. WIRING, CONDUITS, AND OUTLETS SHALL BE CONCEALED WITH THE BUILDING STRUCTURE, EXCEPT THAT CERTAIN MOTOR AND LIGHTING FEEDER CONDUITS MAY BE RUN EXPOSED IN CERTAIN AREAS AS INDICATED ON THE DRAWINGS.
- CONDUIT PENETRATION THROUGH ROOF SHALL HAVE ROOF FLASHING WITH CAULK TYPE COUNTER FLASHING SLEEVE. INSTALLATION SHALL BE WATERTIGHT. 10. CONDUITS SHALL BE ROUTED PARALLEL AND PERPENDICULAR TO THE STRUCTURE.

EQUAL TO TAYMAC SPECIFICATION GRADE.

- F. OUTLET, PULL, AND JUNCTION BOXES EACH SWITCH, LIGHT. RECEPTACLE OR OTHER OUTLET, INSTALLED IN RESIDENTIAL UNITS, SHALL BE PROVIDED WITH A CODE SIZED, PLASTIC OUTLET BOX. JUNCTION AND PULL BOXES SHALL BE CODE SIZED, PLASTIC OR METAL OUTLET BOX. ALL OTHER OUTLET BOXES SHALL BE STEEL
- BOXES INSTALLED IN POURED CEMENT FLOORS SHALL BE FLUSH TYPE CAST IRON OR STEEL WITH WATERTIGHT GASKETED COVERS. WHERE BOXES ARE INSTALLED IN FLOORS WITH TILE OR CARPET FLOOR COVERING, COVERS SHALL BE OF THE RECESSED TYPE TO ACCOMMODATE THE FLOOR COVERING.
- BOXES INSTALLED FOR THE ALARM, COMPUTER, AND SECURITY SYSTEM SHALL BE PROVIDED WITH APPROPRIATE COVER PLATES. BOXES FOR TELEPHONE, COMPUTER, T.V., FIRE ALARM, SECURITY, AND SIMILAR SYSTEMS SHALL BE MINIMUM 2-1/8" DEEP.

- **G WIRING DEVICES** WALL SWITCHES SHALL BE SPECIFICATION GRADE AC SILENT TYPE SWITCHES, 20A 120/277 VOLT. RECEPTACLES SHALL BE SPECIFICATION GRADE, DUPLEX TYPE. NEMA5-20R, 20 AMPERE, 120VOLT
- GROUND DOWN. 3. DEVICE PLATES SHALL BE EQUAL TO SIERRA SMOOTH-LINE PLASTIC WALL PLATES. COLOR SHALL BE

GROUNDED TYPE. SPECIAL APPLICATION RECEPTACLES SHALL BE INDICATED ON PLANS. MOUNT WITH THE

WHITE. UNLESS OTHERWISE NOTED. RECEPTACLES IN OUTDOOR AND WET LOCATIONS SHALL BE INSTALLED WITH A HINGED OUTLET COVER/ENCLOSURE CLEARLY MARKED AND U.L. LISTED SUITABLE FOR WET LOCATIONS WHILE IN USE,

NOTE: THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ETC,

LED FIXTURE (SEE LIGHTING FIXTURE SCHEDULE)

WALL MOUNTED FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT

OH WALL MOUNTED FIXTURE

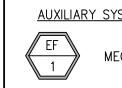
SINGLE FACE EXIT SIGN — UNIVERSAL MOUNTED

DOUBLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS -

COMBO DUAL HEADED EMERGENCY AND EXIT SIGN UNIT

- Sabc SWITCH BANK @ +48" UNLESS NOTED. LOWER CASE
- S4 4-WAY SWITCH @ +48" UNLESS NOTED DIMMER SWITCH - SIZE AS REQUIRED @ +48" UNLESS NOTED
- WALL SWITCH WITH OCCUPANCY SENSOR. DIGITAL LOW VOLTAGE WALL SWITCH. SWITCH @ +48" UNLESS NOTED.
- SLV TWO BUTTON DIGITAL LOW VOLTAGE WALL SWITCH. PROVIDES ON/OFF/0-10V DIMMING. SWITCH
- PHOTOCELL

- POWER DEVICES
- @ +18" UNLESS NOTED
- FIRE RATED POKE THRU WITH TYPE INDICATED
- DUPLEX RECEPTACLE @ +18" UNLESS NOTED DOUBLE DUPLEX RECEPTACLE @ +18" UNLESS NOTED
- ARC FAULT RATED DUPLEX RECEPTACLE
- @ 18" UNLESS NOTED
- THE DISCONNECT SWITCH SIZE AND TYPE NOTED



TELEPHONE OUTLET@ +18" UNLESS NOTED

HEAT DETECTOR

<u>GENERAL</u>

———— CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING ———— CONDUIT RUN BELOW FLOOR OR GRADE

RELEASED FOR CONSTRUCTION As Noted on Plans Review

**JSC** 

**ENGINEERS** 

MO COA NO. 2012006786 / KS COA NO. E-281

1925 CENTRAL ST. SUITE #201

KANSAS CITY, MO 64108

phone: (816) 272-5289

email: jsmothers@jscengineers.com

.R NTZUL

SMOTHERS

NUMBER

-2012003568

05-20-2022

Copyright 2021 ISSUED:

PERMIT

ELECTRICAL

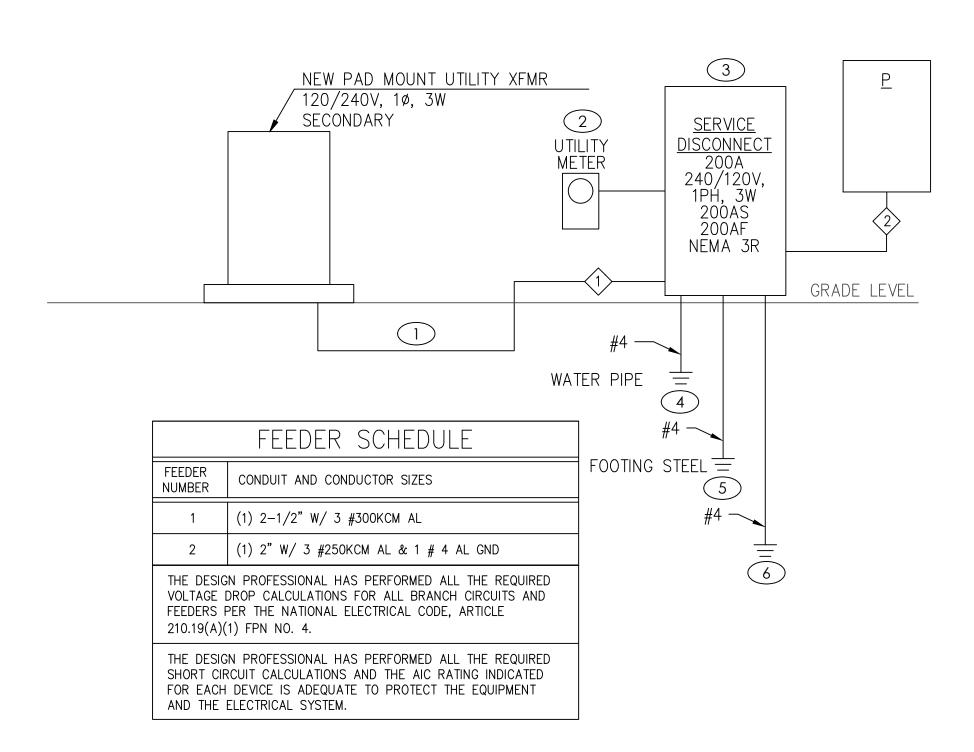
**SPECIFICATIONS** 

REVISIONS: DATE / DESCRIPTION

DATE: 05.20.2022 JOB NO.: 22-133

SHEET:

			ELECT	RICAL LIGHTIN	IG SCHEDULE		
FIXTURE TYPE	MANUF NAME	ACTURER  CATALOG NUMBER	VOLT AMPS	MOUNTING	LAMP TYPE	REMARKS	VOLT
А	LITHONIA	VAP-6000LM-FST-MD-MVOLT-40K-80CRI- VAPSMB-WLF-DL-STSL-MSI102L3VWL	50	SURFACE CEILING	INCLUDED LED 4000K	VANDAL RESISTANT LED 4' DAMP LOCATION STRIP LUMINAIRE	120
В	LITHONIA	LDN6-30/15-L06-LSS-MVOLT-30K	17.5	RECESSED CEILING	INCLUDED LED 3000K	6" LED RECESSED DOWNLIGHT - WET LOCATION LISTED	120
W	EXTERIOR SCONCE	OWNER SELECTED	60	WALL SURFACE	INCLUDED LED 3000K	WET LOCATION RATED SCONCE - MAX 60W/FIXTURE	120
	LITHONIA	WLTU LED	5	SURFACE CEILING	INCLUDED	LED COMBO EXIT SIGN EMERGENCY LUMINAIRE WITH 90 MIN BATT. PACK WET LOCATION	120
ØH	LITHONIA	ELA LED TWP M12	3	WALL	INCLUDED	OUTDOOR DOUBLE REMOTE HEAD EMERGENCY EGRESS LUMINAIRE	120



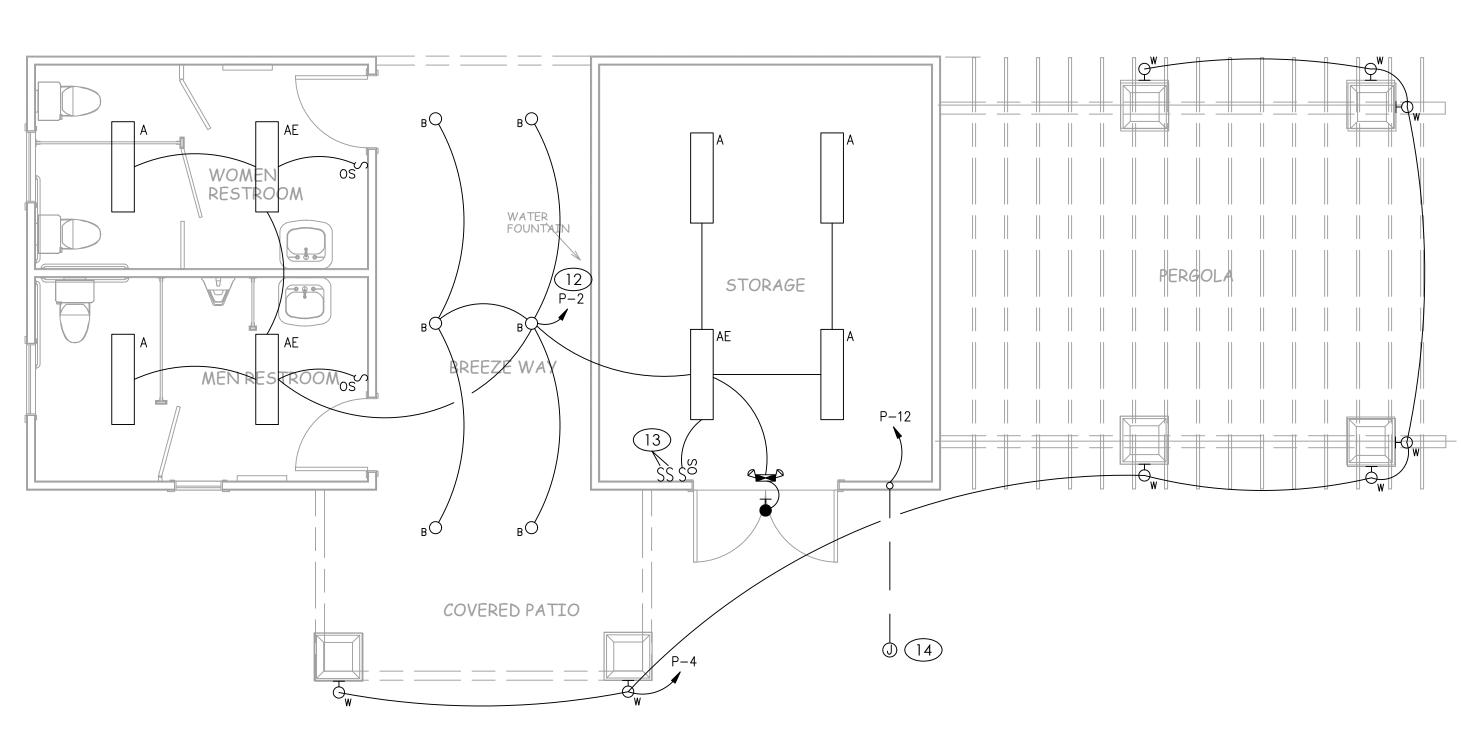
# SINGLE LINE DIAGRAM

SCALE: NO SCALE

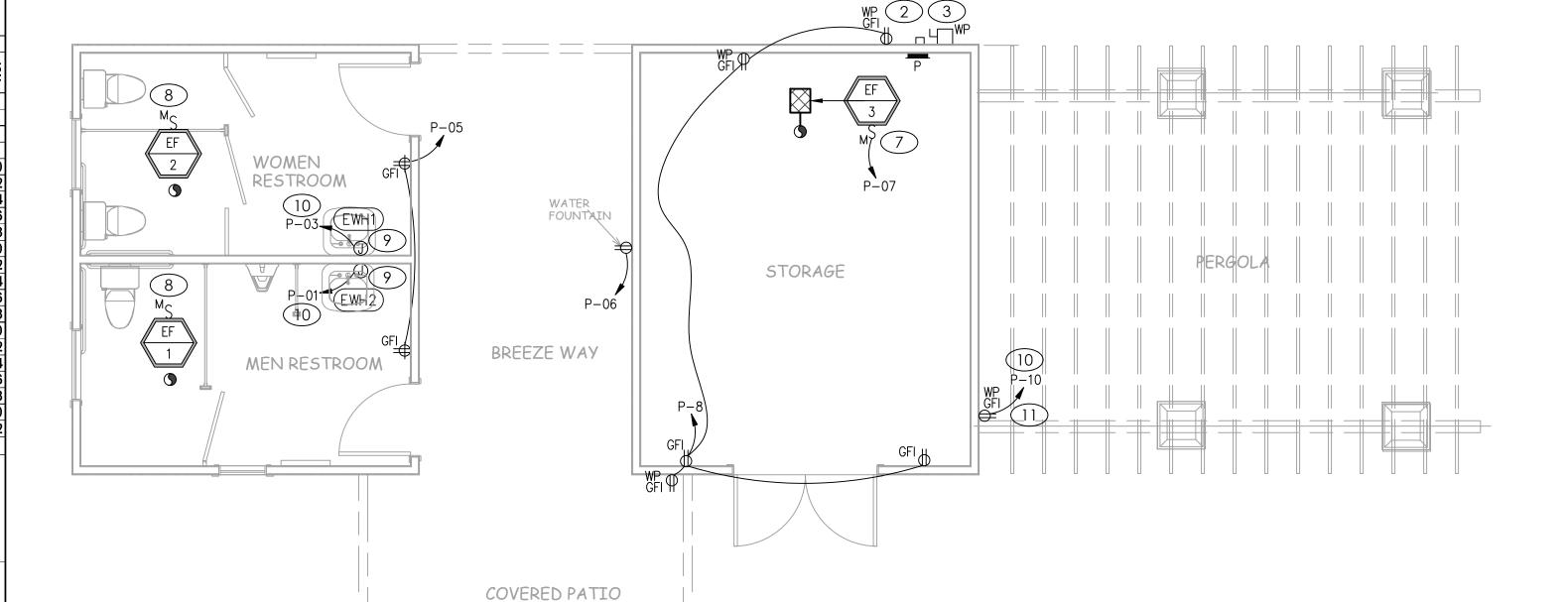
		EL:		P P P P P P P P P P P P P P P P P P P				VOLTA		240/120	_	1PI	H, 3\	W CIRCUIT CODES:				`AD	
		ΓΙΟΝ:		EQUIPMENT ROOM				BUS:		00 AMP					2=(NON-CONTIN		/S LU	Αυj	
		71 LIN						MAIN:		M.L.O					3=(RECEPTACLI	,	~F-\IT'	•	
		TING		42,000					TING: S			т—		LOAD DECK	4=(KITCHEN EQI				<del>.</del>
Ck		CE		LOAD DESIGNATION			<del>_</del> _'	LOAD	PHA	SES	LOAD	$\vdash$		LOAD DESIG	<u> </u>		СВ		KT
ġ 	NOTE	TRIP	POLE	DESCRIPTION	MISC	H 임		VA	Α	В	VA		REC	DESCR	RIPTION	POLE	TRIP	NOTE	2
1	2	30		EWH-1	Х			2400	2914	IIIIIIIII	514	X		INDOOR LIGHTING	/EXHAUST FANS	1	20	1	
3	2	30	1	EWH-2	Х			2400	111111111	2800	400	Х		OUTDOOR LIGHTIN	NG	1	20	1	
5	3	20	1	RESTROOM/BREEZWAY OUTLETS	$\top$	X	. 🖯	360	730	111111111	370		Х	"GF" RCPT - DRINK	(ING FOUNTAIN	1	20	1	1
7	1	15			X			72	111111111	612	540		X	EQUIPMENT ROOM		1	20	3	
9	$\neg$	1		SPACE					500	111111111	500		Х	RCPT - PERGOLA S		1	20	2	1
11	$\neg$	1		SPACE	$\top$	$\top$	$\top$		////////	500	500	X		PWR - SITE FIXTUR		1	20	2	Ţ
13	$\Box$	1		SPACE					0	111111111				SPARE		1	20	2	ı
15	$\Box$	1		SPACE					////////	0				SPACE		$\top$	, <del></del>	2	Ī
17	$\Box$	1		SPACE		1			0	111111111				SPACE		11	<del></del>	2	
19	$\neg$	1		SPACE	$\top$				111111111	0	'			SPACE		$\top$		2	1
21	$\Box$	1		SPACE					0	111111111	'			SPACE		$\top$	1	2	Ī
23	$\neg$	1		SPACE					////////	0	'			SPACE		$\top$		2	
25	$\Box$	1		SPACE					0	////////	<u> </u>			SPACE		$\top$	,	2	1
27	$\Box$	1		SPACE					111111111	0	'			SPACE		$\top$	1	2	1
29	$\neg$	1		SPACE	$\top$	$\top$	$\top$		0	111111111				SPACE		$\dagger \Box$	$\overline{}$	2	Ī
31	$\Box$	1		SPACE		1			////////	0				SPACE		11	<del></del>	2	
33	$\neg$	1		SPACE					0	111111111	'			SPACE		$\top$		2	1
35		1		SPACE					////////	0	<u> </u>			SPACE			1	2	
37	$\Box$	1		SPACE		†			0	111111111				SPACE				2	
39	$\Box$	1		SPACE					////////	0	<u> </u>			FUTURE POOL PAR	NEL		100	2	T
41	$\Box$	ı		SPACE					0	111111111	<u> </u>			/ (SHUNT TRIP TYP	E BREAKER)	2	1	2	
					1			TOTAL	4144	3912				CONNECTED KVA	,	8.1			_
NO.	TES	:دُ						_			1			CONN.KVA (CODE	1)	1.4			-
	-	•	"G	F" = GFCI TYPE BREAKER										CONN.KVA (CODE	•	5.8			
			-	- 51 51 11 2 2										CONN.KVA (CODE	•	0.9			
														CONN.KVA (CODE	•	0.0			
														COMMITTED CODE	*)	V			
JOE	3 N/	AME:		LSMO POOLHOUSE										FEEDER DEMAND I	KVA	8.4			-
SS	UE '	DATE	ے.	05.18.22										FEEDER DEMAND	AMPS	35.0	0		

# PANELBOARD SCHEDULES

SCALE: NO SCALE







# ELECTRICAL POWER PLAN SCALE: 1/4" = 1'-0"



# GENERAL NOTES

- A. REFER TO LIGHTING FIXTURE SCHEDULE FOR LIGHT FIXTURE TYPES AND REQUIREMENTS.
- B. CONNECT ALL EXIT SIGNS AND EMERGENCY LIGHTING UNITS TO THE INDICATED CIRCUIT WITH A SEPARATE AND UN-SWITCHED CONDUCTOR BYPASSING ALL CONTROLS AND CONTACTORS. REFER TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR PROPER INSTALLATION AND TESTING.
- C. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT COORDINATION AND CONFLICT ISSUES BE RESOLVED PRIOR TO INSTALLATION OF LIGHT
- D. ROUTE ALL EXPOSED, RIGID CONDUIT TIGHT TO STRUCTURE, PARALLEL TO BUILDING LINES AND IN UNISTRUT CABLE/PIPE TRAY WHERE POSSIBLE. COORDINATE CONDUIT ROUTING AND INSTALLATION WITH OTHER TRADES PRIOR TO ROUGH—IN. SUPPORT CONDUIT FROM STRUCTURE NOT ROOF DECK. MAINTAIN 2" MIN SPACING FROM BOTTOM OF ROOF DECK TO PREVENT ROOFING SCREWS FROM PENETRATING CONDUITS.
- E. THROUGH WIRING OF RECESSED LIGHT FIXTURES, IN SUSPENDED CEILINGS, IS NOT PERMITTED. CONNECT EACH LIGHT FIXTURE BY A WHIP TO A JUNCTION BOX. PROVIDE CABLE WHIPS OF SUFFICIENT LENGTH TO ALLOW FOR RELOCATING EACH LIGHT FIXTURE WITHIN A 5-FOOT RADIUS OF ITS INSTALLED LOCATION, BUT NOT EXCEEDING 6 FEET IN UNSUPPORTED LENGTH.
- F. ALL INTERNALLY ILLUMINATED SIGNS SHALL BE PROVIDED WITH AN ACCESSIBLE DISCONNECTION MEANS. VERIFY EACH SIGN IS FURNISHED WITH AN INTEGRAL DISCONNECT SWITCH. PROVIDE WEATHERPROOF DISCONNECT SWITCHES WITHIN SIGHT OF ALL SIGNS AS REQUIRED. MAKE FINAL CONNECTION AS REQUIRED.

## **# KEYED PLAN NOTES**

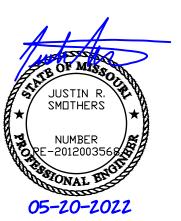
- 1. PROVIDE NEW CONDUCTORS TO UTILITY SOURCE. VERIFY EXACT LOCATION AND REQUIREMENTS WITH UTILITY PRIOR TO ROUGH—IN.
- 2. PROVIDE NEW UTILITY METER PER UTILITY REQUIREMENTS.
- 3. NEW DISCONNECT PER UTILITY REQUIREMENTS.
- 4. PROVIDE NEW GROUND PER NEC 250.52(A)(1).
- 5. PROVIDE NEW GROUND PER NEC 250.52(A)(2).
- 6. PROVIDE NEW GROUND PER NEC 250.52(A)(3).
- 7. PROVIDE MOTOR RATED SWITCH DESIGNED TO OPERATE CONTINUOUSLY.
- 8. PROVIDE MOTOR RATED SWITCH DESIGNED TO OPERATE CONTINUOUSLY. CONNECT TO LIGHTING CIRCUIT FOR SIMULTANEOUS OPERATION.
- 9. CONNECT TO INSTA-HOT PER MECHANICAL PLANS AND MANUFACTURER REQUIREMENTS.
- 10. (1) 1/2"C W/ 2 #10 & 1 #12 GND.
- 11. MOUNT RECEPTACLE TO PERGOLA STRUCTURE AND ROUTE CONDUIT IN DISCRETE MANNER FOR AVAILABILITY FOR PLUG—IN PERGOLA LIGHTING. COORDINATE EXACT MOUNTING LOCATION WITH ARCHITECT.
- 12. PROVIDE PHOTOCELL MOUNTED TO ROOF STRUCTURE AND POINTED NORTH. COORDINATE EXACT LOCATION WITH ARCHITECT. ROUTE CIRCUIT THROUGH PHOTOCELL EN ROUTE TO BREAKER TERMINATION.
- 13. NORMALLY-CLOSED OVERRIDE SWITCHES FOR EXTERIOR CANOPY LIGHTING (CKT P-4) AND PLUG-IN CANOPY LIGHTING (CKT P-10). ROUTE CIRCUITS THROUGH RESPECTIVE OVERRIDE SWITCHES EN ROUTE TO BREAKER
- 14. PROVIDE CONDUIT UNDERGROUND TO JUNCTION BOX FOR FUTURE SITE POLE BY OTHERS. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO CONSTRUCTION.

JSC
ENGINEERS

CONSTRUCTION
As Noted on Plans Review

MO COA NO. 2012006786 / KS COA NO. E-2818 1925 CENTRAL ST. SUITE #201 KANSAS CITY, MO 64108 phone: (816) 272-5289

email: jsmothers@jscengineers.com



POOL HOUSE STRUCTUF LEE'S SUMMIT, MO

REVISIONS: DATE / DESCRIPTION

1 2 3 4

UED:

PERMIT

ELECTRICAL PLANS

DATE: 05.20.2022

JOB NO.: 22-133

SHEET:

F1 1

### PROJECT INFORMATION

STATE: MISSOURI COUNTY: JACKSON CITY: LEE'S SUMMIT TYPE: INGROUND POOL CONSTRUCTION METHOD: CAST-IN-PLACE SANITATION: CHLORINE HEATHED: NO

### GENERAL NOTES

- ANY CHANGES IN CONSTRUCTION PLANS OR EQUIPMENT MUST BE APPROVED BY THE GOVERNING HEALTH DEPARTMENT, CHANGES MAY REQUIRE ADDITIONAL PLAN CHECK FEES AND RE-SUBMITTAL.
- POOL PLAN APPROVAL DOES NOT AUTHORIZE THE VIOLATION OF ANY LAW, ORDINANCE, OR REGULATION AND FINAL APPROVAL IS SUBJECT TO FIELD INSPECTION.
- ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
- ALL EQUIPMENT AND MATERIALS NOT SHOWN ON SPECIFIED ON THESE PLANS, BUT REQUIRED TO COMPLETE THIS PROJECT, SHALL BE SUPPLIED BY THE POOL CONTRACTOR AS PART OF THIS CONTRACT
- REINFORCING STILL OF ALL AQUATIC FEATURES SHALL BE BONDED WITH #8 COPPER WIRE, TIED BOND TO EACH MECHANICAL SYSTEM AND ALL RAIL ANCHORS AND METAL WITHIN 5 FT OF POOL EDGE
- CRUSHED ROCK BELOW POOL FLOOR TO BE 1/2" CLEAN MINIMUM OF 4" DEPTH
- ALL STEEL TO BE GRADE 40, \*4 BAR AND A MINIMUM OF 12" ON CENTER EACH WALL HORIZONTAL AND VERTICAL, BELOW 6" WATER DEPTH REBAR SHALL BE 6" EACH WALL IN THE WALL
- REINFORCING STEEL TO BE PLACED A MINIMUM OF 2" BELOW EXPOSED FACE OF CONCRETE

### LOCATION MAP



PROJECT LOCATION

### POOL DETA

PERIMETER: 160'-0" SURFACE AREA: 1500-SQFT APPROXIMATE VOLUME: 42200 GALLONS MINIMUM TURN OVER: 6-HOURS MINIMUM FLOW RATE: 116-GPM MAXIMUM FLOW RATE: 60-GPM MINIMUM DEPTH OF POOL: 1'-0" MAXIMUM DEPTH OF POOL: 5'-0"

### GENERAL AREAS

POOL 1500 SF/ POOL DECK 6225 SF/ COVERED CABANA 360 SF/ LAVATORIES 400 SF/ EQUIPMENT ROOM 240 SF/

POOL CLASSIFICATION, CLASS B PUBLIC POOL BATHER LOAD (PER 2018 ISPSC TABLE 403.1):

- WATER SURFACE AREA = 1500 SF
- BATHER LOAD 1500/10 = 150 PERSONS

POOL WATER MAINTAINED BY A LICENSED CPO/AFO OPERATOR.

TEST KIT MUST READ CHLORINE TO 10 ppm

### SHEET INDEX

POOL PLAN P2.0 EQUIPMENT SCHEDULE FLOW CALCULATIONS POOL PLUMBING LAYOUT EQUIPMENT ROOM LAYOUT DETAILS DETAILS

DETAILS P43 DETAILS P5Ø SAFETY PLAN P5.1 SIGN DETAILS

### CODE COMPLIANCE

- ANSI POOL AND SPA STANDARD TO PREVENT SUCTION ENTRAPMENT
- VIRGINIA GRAEME BAKER SAFETY ACT
- LEE'S SUMMIT BUIDING CODE
- BONDING SHALL BE PERFORMED IN ACCORDANCE WITH NEC

POO COVER SHEET



Associates, and Deurzen M

0

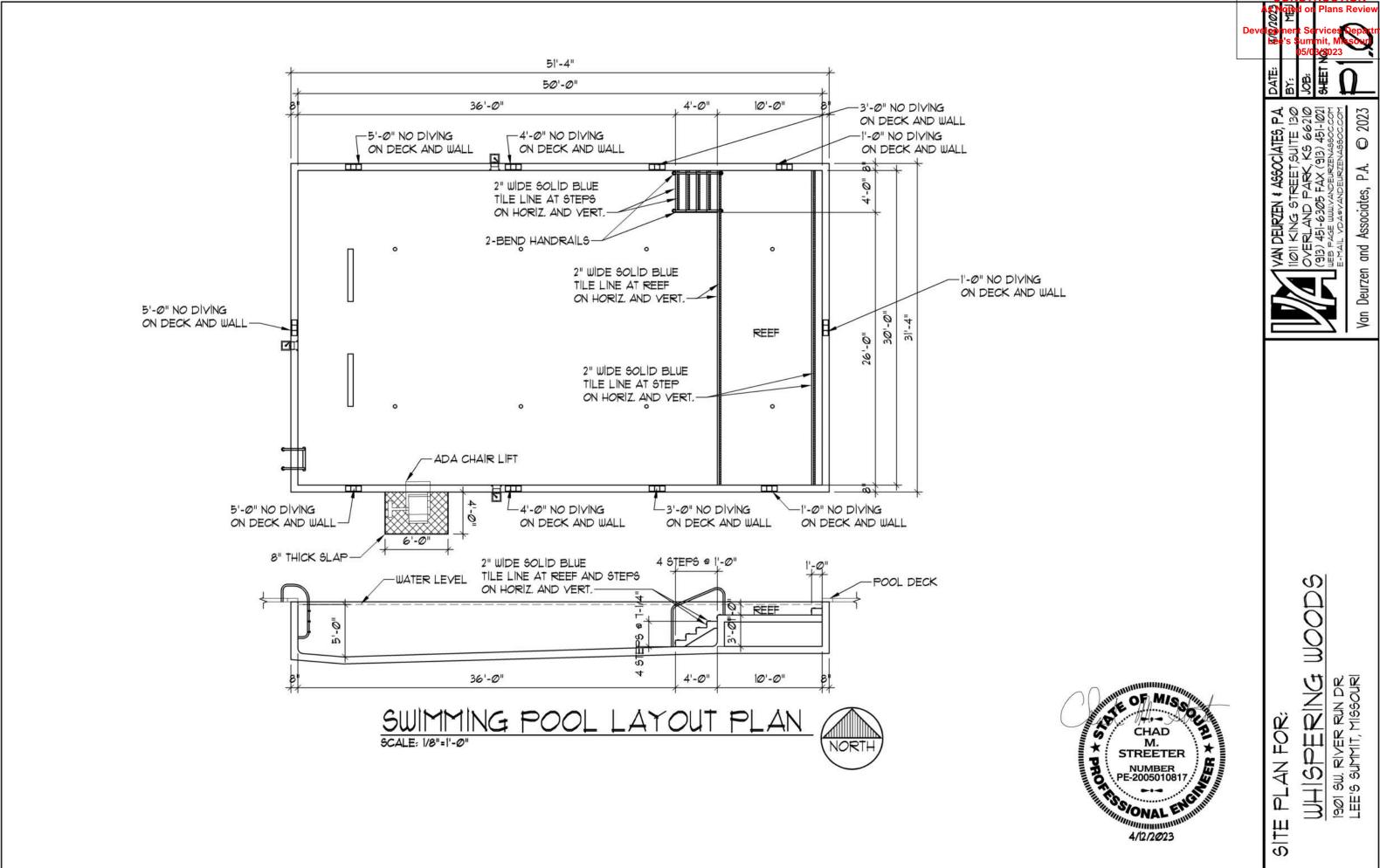
RELEASED FOR

Т. ОХ. P007 SWIMMING

S

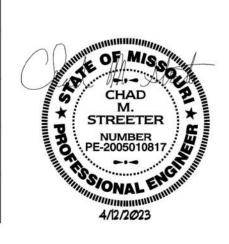
RUN DR. MISSOURI

SW.



RELEASED FOR
CONSTRUCTION
CONSTRUCTION
Plans Review

EQUIPMENT							
EQUIPMENT NAME	MANUFACTURER PART #	WAREHOUSE PART *	QTY.	POWER REQUIREMENTS	HOOP UP RESPONSIBILITY	NOTES	
BADU PRO UVS 4 HP PUMP	Øl5583		Ť	110/230 V	POOL CONTRACTOR-PLUMBING ELECTRICIAN-HIGH VOLTAGE	<b>‡</b>	
TRITON II SAND FILTER	TR 60 CP		1	NA	POOL CONTRACTOR		
FLOVIS FLOW GAUGE	FV-C		ī	NA	POOL CONTRACTOR		
SKIMMER	5P1Ø82		3	NA	POOL CONTRACTOR		
PENTAIR MICROBRITE LED WHITE LIGHT			8	15W 12Y	POOL CONTRACTOR		
300W TRANSFORMER	P×300		1	300W	POOL CONTRACTOR		
MAIN DRAIN SUCTION FITTING VGB APROVED	25506-320		1	NA	POOL CONTRACTOR		
STAINLESS STEEL ENTRY LADDER	SR SMITH PLF-245-4C-MG		1	NA	POOL CONTRACTOR		
HANDRAIL	SR SMITH 316 STAINLESS CUSTOM RAILING		2	NA	POOL CONTRACTOR		



VAN DEURZEN & ASSOCIATES, PA.
IIIØII KING STREET, SUITE 130
OVERLAND PARK, KS 662100
(913) 451-6305 FAX (913) 451-1021
WEB PAGE WWW.VANDEURZENASSOC.COM
E-MAIL VDA®VANDEURZENASSOC.COM
E-MAIL VDA®VANDEURZENASSOC.COM
Van Deurzen and Associates, P.A. © 2023

RELEASED FOR
CONSTRUCTION
Office or Plans Revie

EQUIPMENT SCHEDULE FOR: WHISPERING WOODS

1901 SW. RIVER RUN DR. LEE'S SUMMIT, MISSOURI

FLOW CAL	CULATIONS	
PUMP (6)	1	PENTAIR LINTELLIFLOW
POOL CAPACITY GALLONS	42,200	
REQUIRED TURN OVER (6 HOURS OR 4 TIMES PER DAY)	4	
REQUIRED GALLONS PER 24 HOURS	168,800	
REQUIRED GALLONS PER HOUR	TØ3Ø	
REQUIRED GALLONS PER MINUTE	דוו	
REQUIRED PER PUMP	60	
FILTER (6)	2	
FILTER SQ. FT. (EACH)	520	
FILTER RATE PER GALLON	13	
FILTER RATE AT MAX. PUMP (SQ. FT. PER GALLON)	8,66	
MAX, PUMP FLOW GPM	120	FROM PUMP CHART
MAX, PUMP VELOCITY SUCTION ALLOWED	6 FPS	
MAX. VELOCITY AT MAX. PUMP FLOW FEET PER SECOND (SUCTION)	5.74	
MAX. VELOCITY RETURN REQUIRED	8 FPS	
MAX. VELOCITY AT MAX. (RETURN)	5.74	
MINIMUM PIPE SIZE SUCTION	3"	
MINIMUM PIPE SIZE RETURN	2.5"	
MINIMUM PIPE SIZE SUCTION (AFTER FIRST TEE ON SUCTION)	2"	
MINIMUM PIPE SIZE RETURN (AFTER FIRST TEE ON RETURN)	2"	
MAX. FLOW REQUIREMENTS FOR MAIN DRAIN SPECIFIED	60	
FLOOR GALLONS PER MINUTE	3Ø9	
WALL GALLONS PER MINUTE	212	



VAN DEURZEN & ASSOCIATES, PA
II@II KING STREET, SUITE 13@
OVERLAND PARK, KS 6621@
(913) 451-63@5 FAX (913) 451-1021
WEB PAGE WWW.YANDEURZENASSOC.COM
E-MAIL VDA®VANDEURZENASSOC.COM
E-MAIL VDA®VANDEURZENASSOC.COM
Van Deurzen and Associates, P.A. © 2023

RELEASED FOR
CONSTRUCTION

ASNOTED OF Plans Review

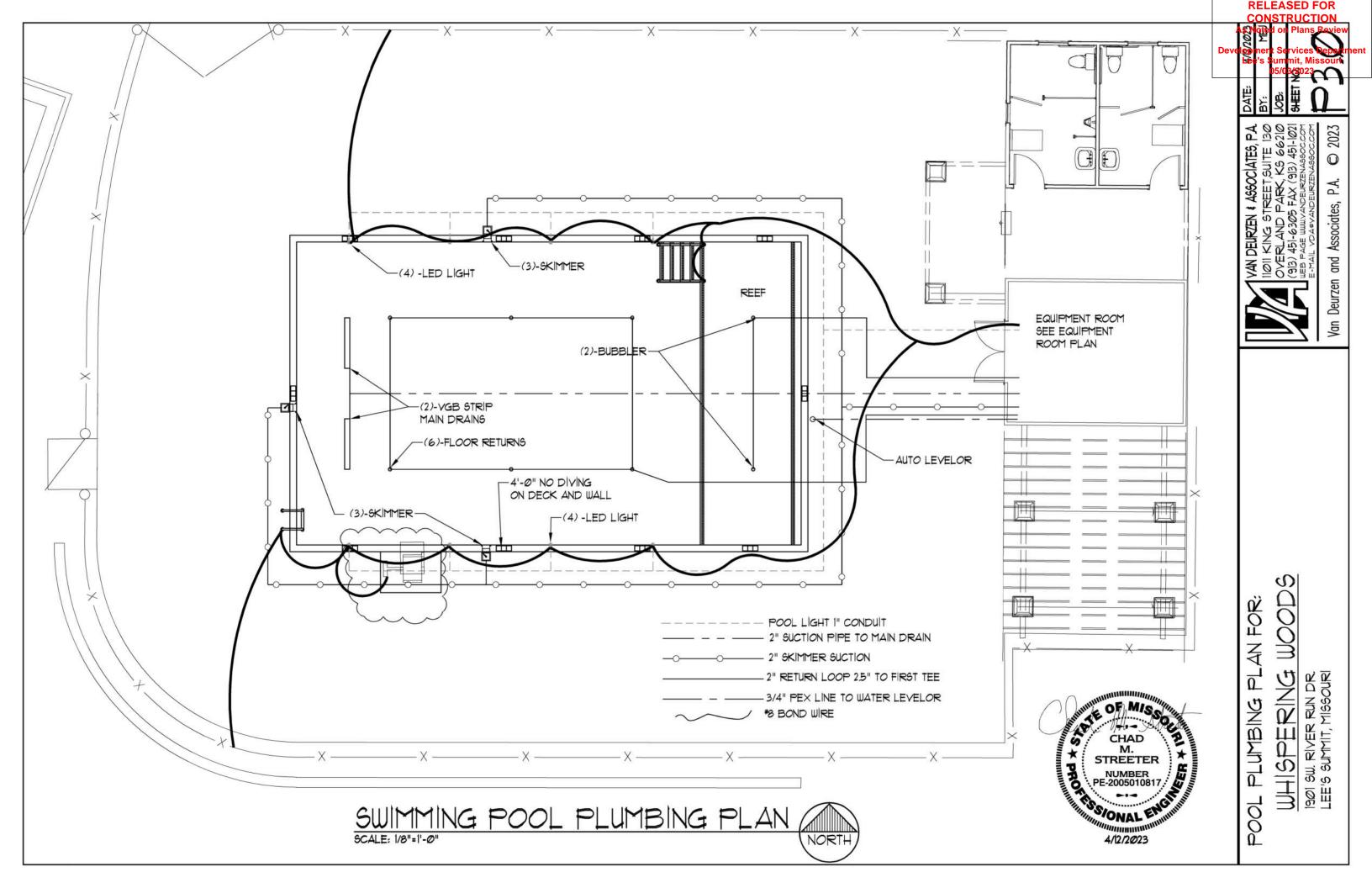
Floring House Services Departer

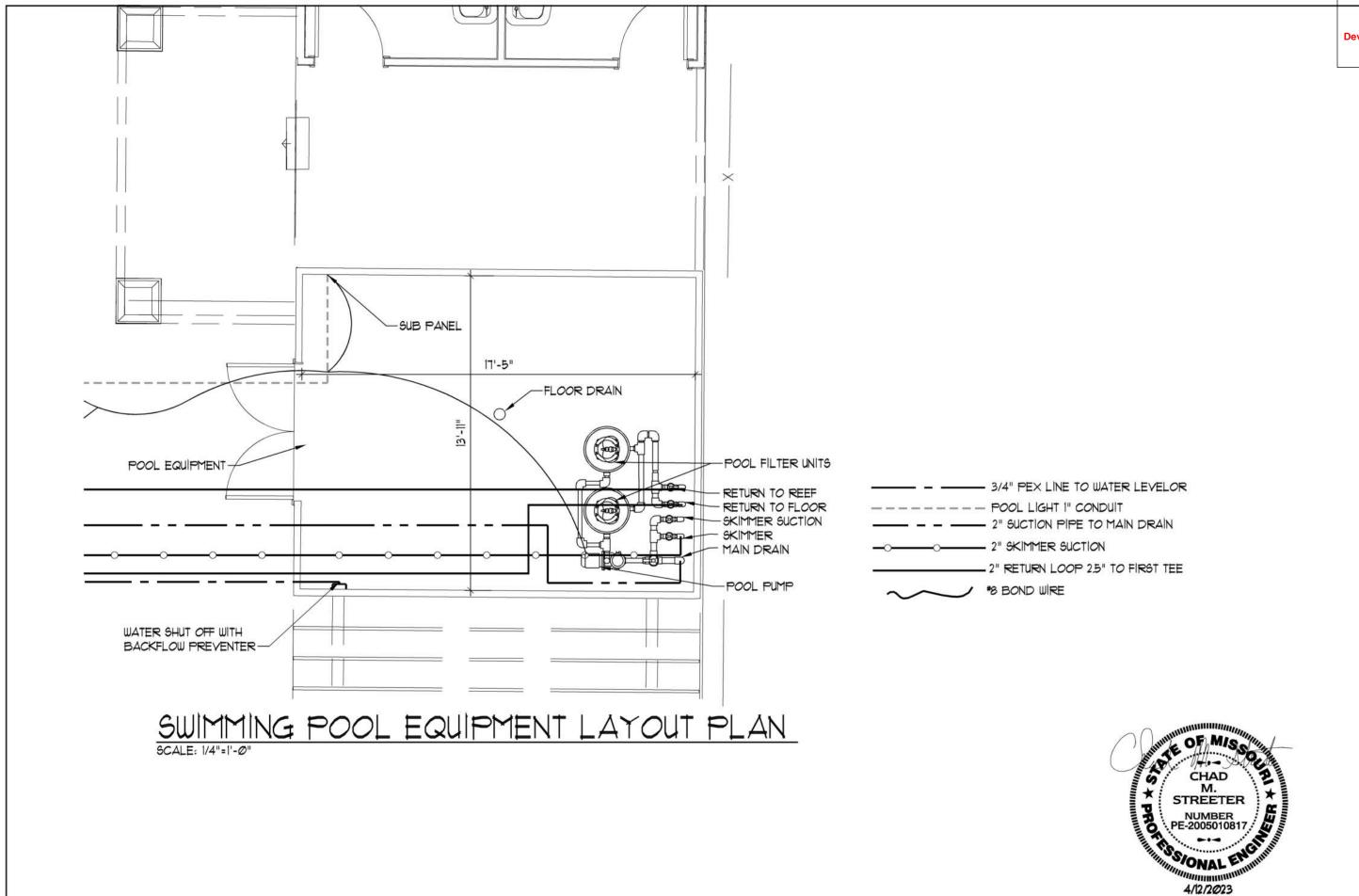
bee's Summit, Missouri

105/12/49033

FLOW CALCULATIONS FOR:
WHISPERING WOODS

1901 SW. RIVER RUN DR. LEE'S SUMMIT, MISSOURI





EQUIPMENT ROOM LAYOUT FOR: WHISPERING WOODS

RELEASED FOR
CONSTRUCTION
Plans Review

nent Services <u>Der</u> e's Summit, Misso 05/03/3023

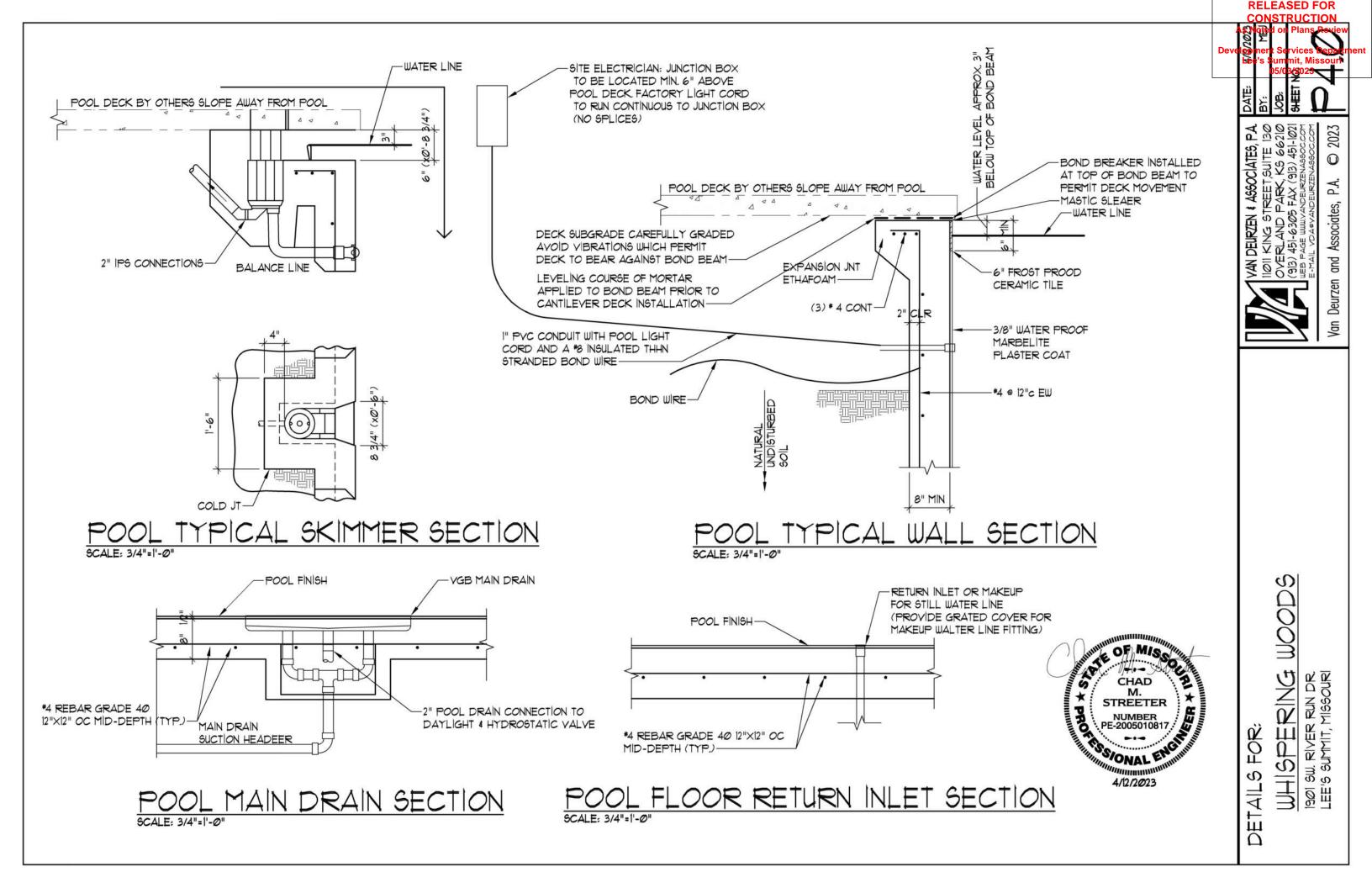
15/03/<u>30</u>227

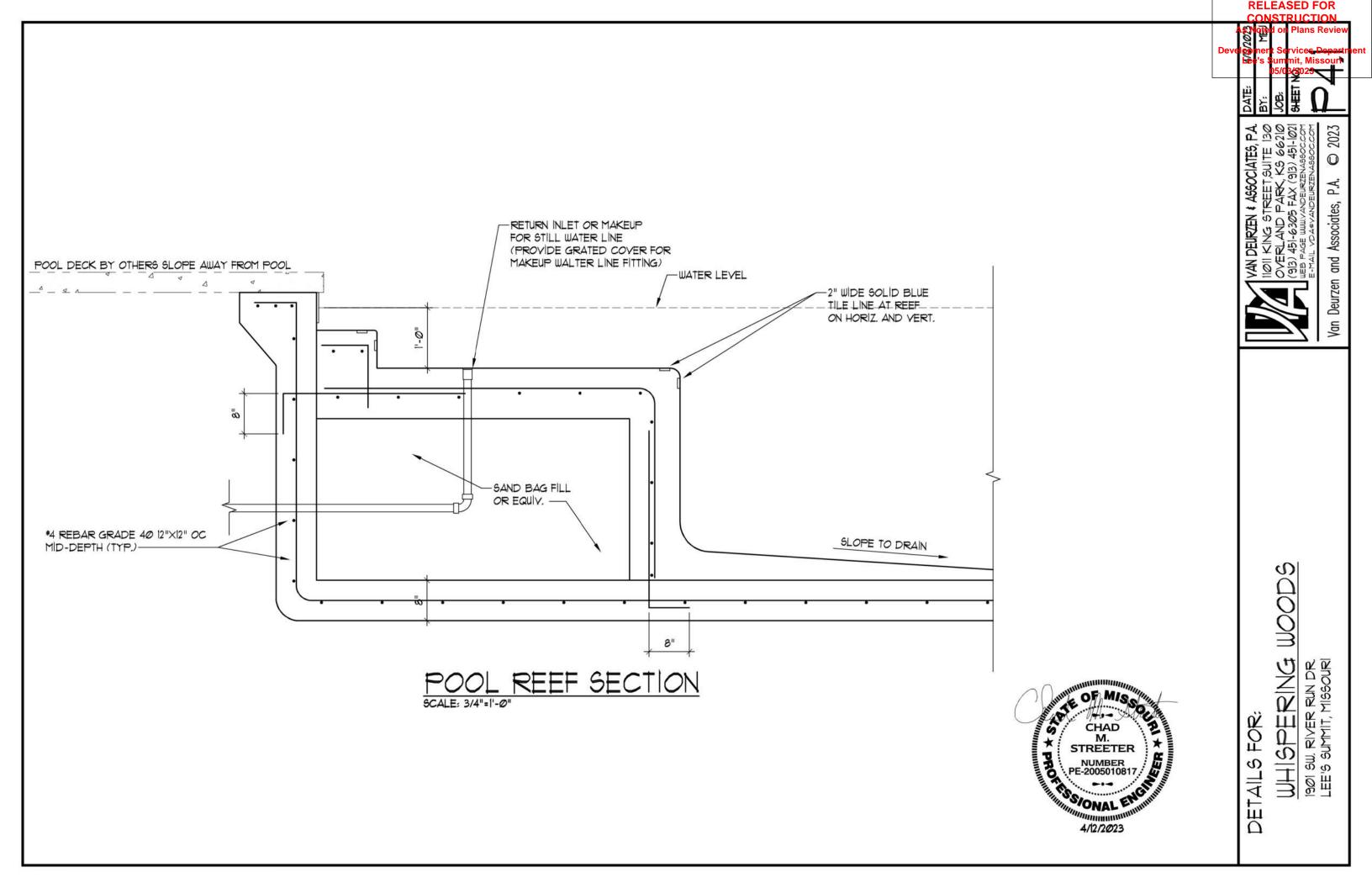
NG STREET, SUITE 136 AND PARK, KS 66216 -6305 FAX (913) 451-102 E WWYANDEURZENASSOC.COP DASYANDEURZENASSOC.COP

(913) 451-63@5 FAX (913) 451-63

Van Deurzen and Associates,

O 2023



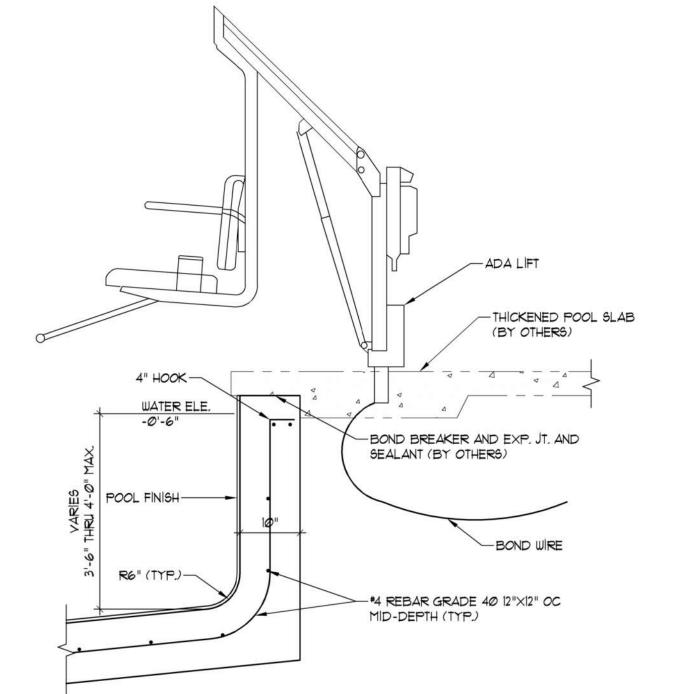


O 2023

and Associates, P.A.

Van Deurzen

VAN DEURZEN ¢ ASSOCIATES, P.A.
IIØII KING STREET, SUITE 13Ø
OVERLAND PARK, KS 6621Ø
(913) 451-63Ø5 FAX (913) 451-1Ø21
WEB PAGE WWWYANDEURZENASSOCCOM



POOL ADA LIFT SECTION



DETAILS FOR:

WHISPERING WOODS 1901 SW, RIVER RUN DR. LEE'S SUMMIT, MISSOURI

